



*National  
Hispanic  
Medical  
Association*



**CALIFORNIA LATINO  
LEGISLATIVE CAUCUS**

*and the*

**PRESENT**

**HISPANIC HEALTH  
STATE LEGISLATIVE DAY**

**CAPITOL HEARING ROOM 115  
SACRAMENTO, CALIFORNIA**

**MONDAY, JUNE 20, 2005  
1:00 – 5:00P.M.**

NATIONAL HISPANIC MEDICAL ASSOCIATION  
AND THE  
CALIFORNIA LATINO LEGISLATIVE CAUCUS

“HISPANIC HEALTH STATE LEGISLATIVE DAY”  
CAPITOL HEARING ROOM 115  
SACRAMENTO, CALIFORNIA  
MONDAY, JUNE 20, 2005  
1:00 – 5:00 P.M.

AGENDA

**I. Orientation to the Day (1:00 to 1:15)**

Elena Rios, MD, MSPH  
President and CEO, NHMA

Mark Diaz, MD and Dolores Leon, MD  
Members, Board of Directors

**II. Welcome from the California Latino Legislative Caucus (1:15 to 1:45)**

Senator Martha Escutia (invited)  
Chair, Latino Legislative Caucus  
Discussion of Health Priorities: Chronic Diseases and Obesity

Assemblymember Joe Coto  
Vice Chair, Latino Legislative Caucus  
Discussion of Health Priorities: Cultural and Linguistic Competency

**III. Key Issues for Latino Physicians (1:45 to 3:00)**

Senator Deborah V. Ortiz  
Chair, Senate Health Committee  
Policy Overview: Health Disparities, Chronic Diseases, and Workforce Shortages

Patty Diaz  
Policy Director, Latino Coalition for a Healthy California  
Current State of Latino Health and Health Access

Elia Gallardo  
Director of Government Affairs, California Primary Care Association  
Safety Net Issues, Special Populations, and Workforce Needs

Ana Gamiz  
Policy Analyst, National Council of La Raza  
Federal and State Priorities, Health and Education Policy Priorities

Mario Gutierrez  
Director, Agricultural Worker Health and Binational Programs  
California Endowment

Representative (invited)  
The California Wellness Foundation

Xochitl Castaneda (invited)  
University of California Office of the President  
U.S. – Mexico Binational Health

*- Short Break, time permitting -*

**IV. Access to Care and Coverage Issues/Budget Issues (3:00 to 3:30)**

Senator Denise Moreno Ducheny  
Chair, Senate Budget Subcommittee No. 3 on Health and Human Services

Assemblymember Hector De La Torre  
Chair, Assembly Budget Subcommittee No. 1 on Health and Human Services

**V. Presentations by Other Invited Members of the Legislature (3:30 to 4:20)**

Assemblymember Wilma Chan  
Chair, Assembly Health Committee

Assemblymember Judy Chu  
Chair, Asian Pacific Islander Legislative Caucus

Assemblymember Karen Bass  
Vice-Chair, Legislative Black Caucus

**VI. Appointments to Boards and Commission (4:20 to 4:45)**

Nettie Sabelhaus, Senate Rules Committee

Representative, Office of the Assembly Speaker (invited)

Michael Saragosa, Appointments Secretary, Office of the Governor

**VII. Wrap- Up and Next Steps (4:45 to 5:00)**

*☞ 6:30 p.m. Reception at Aioli Restaurant, 18<sup>th</sup> and L Streets ☞*

NATIONAL HISPANIC MEDICAL ASSOCIATION  
AND THE  
CALIFORNIA LATINO LEGISLATIVE CAUCUS

“HISPANIC HEALTH STATE LEGISLATIVE DAY”  
CAPITOL HEARING ROOM 115  
SACRAMENTO, CALIFORNIA  
JUNE 20, 2005

---

**PARTICIPANT LIST**

**Elena Rios, M.D., M.S.P.H.**

President & CEO  
National Hispanic Medical Association  
1411 K Street, NW, Suite 1100  
Washington, DC, 20005  
202-628-5895 Fax: 202-628-5895  
[nhma@nhmamd.org](mailto:nhma@nhmamd.org)

**Dolores Leon, M.D.**

Director, A Woman's Place  
151 No. Sunrise # 1009  
Roseville, CA 95661  
[dleonmd@cwnet.com](mailto:dleonmd@cwnet.com)

**Mark Diaz, M.D.**

Director, Alivio Medical Group  
3009 K Street, S. 202  
Sacramento, CA 95816  
[madiaz@ucdavis.edu](mailto:madiaz@ucdavis.edu)

**Katherine Flores, M.D.**

Director, Latino Center for Medical  
Educational Research,  
California Area Health Education Center  
& Health Education Training Center  
Assistant Dean,  
University of California, San Francisco  
School of Medicine  
550 E. Shaw Avenue, Suite 210  
Fresno, CA 93710-7702  
[kflores@ucsfresno.edu](mailto:kflores@ucsfresno.edu)

**Phyllis Preciado, M.D.**

Latino Center Fellow  
Latino Center for Medical Education  
and Research  
UCSF Fresno  
550 E. Shaw Avenue, Suite 210  
Fresno, CA 93710  
[phyllis.preciado@gmail.com](mailto:phyllis.preciado@gmail.com)

**Sandra Perez, M.D.**

Primary Care Practitioner  
Private Practice  
502 Euclid Avenue, Suite 202  
National City, CA 91950  
[dleonmd@cwnet.com](mailto:dleonmd@cwnet.com)

**Maria Puig-Llano, M.D.**

Private Practice  
276 Church Avenue, Suite E  
Chula Vista, CA 91910  
[drmariapuig@sbcglobal.net](mailto:drmariapuig@sbcglobal.net)

**Daniel B. Castro, M.D.**

Acting Chairman and Program Director  
Department of Family Medicine Harbor-  
UCLA Medical Center  
Family Health Center  
1403 W. Lomita Boulevard, Suite 102  
Harbor City, CA 90710  
(310) 534-6221 Fax: (310) 326-7205

**Ben Medina, M.D.**  
610 Euclid Ave., Suite 201  
National City, CA 91950  
619-472-2665 Fax: 619-479-9468  
bpmedina@msn.com

**Roberto Montoya, M.D.**

**Mario Vera**  
Medical Student  
University of California at Davis

**Carlos O'Bryan**  
Medical Student  
University of California at Davis

**Diana Sanchez, M.D.**

**Priscilla Gonzalez-Leiva**

**Emilio Morante, M.S.**  
Organizational Development Consultant

**Jim Grasolia, M.D.**

**Martha Zaragoza-Diaz**  
Advocacy

**Liz Chavez**  
Media





**Elena V. Rios, M.D., M.S.P.H.**  
**President & CEO, National Hispanic Medical Association**  
**President, National Hispanic Health Foundation**

Dr. Rios serves as President & CEO of the National Hispanic Medical Association, (NHMA), representing Hispanic physicians in the United States. The mission of the organization is to improve the health of Hispanics. Dr. Rios also serves as President of NHMA's National Hispanic Health Foundation affiliated with the Robert F. Wagner Graduate School of Public Service, New York University, to direct educational and research activities.

Dr. Rios also serves on the National Hispanic Leadership Agenda and the Partnerships for Prevention Boards of Directors, the American Medical Association Commission to End Health Disparities, and is Co-Chair for the Hispanic Health Coalition. Dr. Rios has lectured and published articles and has received several awards on health policy, including awards from the U.S. Department of Health and Human Services, the Congressional Black, Hispanic, Asian and Native American Caucuses, American Public Health Association Latino Caucus, Association of Hispanic Health Executives, Minority Health Month, Inc., and Hispanic Magazine.

Prior to her current positions, Dr. Rios served as the Advisor for Regional and Minority Women's Health for the U.S. Department of Health and Human Services Office on Women's Health from November 1994 to October 1998. In 1992, Dr. Rios worked for the State of California Office of Statewide Health Planning and Development as a policy researcher. In 1993, Dr. Rios was appointed to the National Health Care Reform Task Force as the Coordinator of Outreach Groups for the White House. Dr. Rios has also served as President, Chicano/Latino Medical Association of California, Advisor to the National Network of Latin American Medical Students, member of the California Department of Health Services Cultural Competency Task Force, Stanford Alumni Association and Women's Policy Inc. Boards of Directors, and the AMA's Minority Affairs Consortium Steering Committee.

Dr. Rios earned her BA in Human Biology/Public Administration at Stanford University in 1977, MSPH at the University of California School of Public Health in 1980, her MD at the UCLA School of Medicine in 1987, and completed her Internal Medicine residency at the Santa Clara Valley Medical Center in San Jose and the White Memorial Medical Center in East Los Angeles in 1990, and her NRSA Primary Care Research Fellowship at UCLA in 1992.

## **National Hispanic Medical Association**

Established in 1994, the National Hispanic Medical Association (NHMA) represents licensed Hispanic physicians in the United States. The mission of NHMA is to improve the health of Hispanics and other underserved. The Association's programs support physicians and advocate for quality health care at the national level.

Physician Support: In 1998, the NHMA Leadership Fellowship was developed in collaboration with the Robert F. Wagner Graduate School of Public Service, New York University with the support of the U.S. Department of Health and Human Services (HHS) to develop the leadership skills of member physicians selected from across the nation. NHMA also developed the NHMA Resident Leadership Program and the Medical Student Mentorship Program. NHMA developed media training, a media breakfast series with the Congressional Hispanic Caucus with support from the U.S. Department of Transportation and speakers' bureau for media interviews and conferences. NHMA developed its cultural competence project in NYC with focus groups of faculty, community organizations, and residents to determine future direction for community-based training in GME programs and the promotion of linkages to develop research in Hispanic communities, and a September 2004 meeting with HHS Office of Minority Health (OMH) with the USMLE, AAMC, JAHCO, NCQA, NQF on current evaluation of cultural competence training. NHMA also nominates our members to national committees in public and private sectors.

Advocacy: NHMA serves as a resource to the White House, HHS, Senator Frist and Senator Kennedy and the House minority caucuses. In 2002, NHMA, the CHC, HHS, Robert Wood Johnson Foundation convened the National Hispanic Health Leadership Summit with 175 participants nominated by HHS and Congress and partners. NHMA has been supported by the Commonwealth Fund for symposia with Congressmembers, State officials and health leaders to discuss strategies to increase insurance among Hispanics and by the California Endowment to convene "Hispanic Health Congressional Briefing Series" on cultural competence, health professions, community based research, US-Mexico binational insurance. NHMA also serves on the National Hispanic Leadership Agenda, with the largest 40 Hispanic organizations of the country and the AMA Disparities Commission.

NHMA's 9<sup>th</sup> Annual Conference will be Mar. 31 – Apr. 3, 2005 at the Millennium Biltmore Hotel, Los Angeles, California. Lastly, we are seeking articles for NHMA's Second Journal with the American Academy of Family Physicians, "Caring for the Hispanic Patient".

## **National Hispanic Health Foundation**

NHMA established the National Hispanic Medical Foundation in 1994 to provide research and educational activities focused on Hispanic health. In 2000, the name was changed to the National Hispanic Health Foundation (NHHF), and, in 2004, NHHF was officially affiliated with the Robert F. Wagner Graduate School of Public Service, New York University. A Congressional Earmark was awarded to develop the Hispanic Health Professional Leadership Network and a new list serve system as well as the strategic planning for the Foundation. The future programs include Policy Research and Research Training targeting Hispanic health, the Hispanic Health Professional Student Scholarship Program and Leadership development. Currently we are developing research on diversity in the health workforce for HHS OMH – both at the entry level, the HCOP program, and looking at executive leadership for Hispanics in major health care organizations.

**We hope you can help us develop by contributing to NHHF online at**

**[WWW.NHMAMD.ORG](http://WWW.NHMAMD.ORG)**

**We also encourage you to join NHMA online at same website and help build our organizations.**



# **National Hispanic Medical Association**

## **March 2005**

Established in 1994, in Washington, DC, the **National Hispanic Medical Association (NHMA)** represents licensed Hispanic physicians in the U.S. The mission of the organization is to improve the health of Hispanics.

### **NHMA Leadership Fellowship Program**

The NHMA Leadership Fellowship Program is a collaborative project with the Robert F. Wagner Graduate School of Public Service. The purpose of the program is to promote the development of leadership potential among members of the National Hispanic Medical Association. The emphasis is on the knowledge and skills necessary to take a leadership role in health policy development and advocacy at local, state and national levels on issues of importance to the health of the Hispanic community. The Health Resources and Services Administration, U.S. Department of Health and Human Services supported the program during the first three years. Amgen, Ortho Biotech, Pfizer and Aetna Foundation have also supported the program.

The program began October 1, 1998 and trains 20 mid-career Hispanic physicians per year with a one-day Orientation at the NHMA Annual Conference, a week-long NYU Institute, and a week-long Washington, DC Institute. The lectures, panel discussions, and case study discussions are presented by health experts from the federal and state governments, foundations, media, managed care, think tanks, and non-profit advocacy organizations.

NHMA has commissioned case studies on Hispanic health policy issues and will be publishing the first volume as a textbook for graduate level health policy analysis courses.

### **NHMA Resident Leadership Program**

Similar to the NHMA Leadership Fellowship Program, NHMA provides lectures about policy and academic leadership and career decision-making. Twenty Residents are selected each year for a one-day Orientation at the NHMA Annual Conference. Of the twenty Residents, ten gather in Sacramento, California and ten meet in Albany, New York for a three-day institute. The Health Resources and Services Administration and the U.S. Department of Health and Human Services has supported the first three years of the program.

### **NHMA Cultural Competence Project**

The purpose of the NHMA Cultural Competence Project is to develop recommendations for medical education curriculum on cultural competence and Hispanics. The project calls for developing a bibliography and summary of definitions as well as plenary sessions at the NHMA Annual Conference.

NHMA convened two plenary sessions at the Annual Conferences in 2001 and 2002 and a panel of experts on April 6, 2002, in Washington, DC to assess the current knowledge base on cultural competence training for medical education especially related to Hispanic cultural competence. The results of the meeting will be disseminated. The Office of Minority Health, U.S. Department of Health and Human Services, supports the project.

### **NHMA Cultural Competence Curriculum for New York City Graduate Medical Education**

NHMA convened three focus groups of community leaders from Mexican, Dominican and Puerto Rican neighborhoods, faculty from GME programs in NYC, and residents from GME programs in NYC to discuss the curriculum needs and research challenges in the area of Hispanic health. Meetings occurred at the Robert F. Wagner Graduate School of Public Service, New York University. Currently, NHMA is in its third year of a four-year project with a focus on Cultural Competence Curriculum Evaluation. A presentation was made by GME faculty at the NHMA 8<sup>th</sup> Annual Conference and a meeting of accreditation and board examiners will be convened in September. The Office of Minority Health, U.S. DHHS, is the supporter of the project.

### **NHMA –National Highway Traffic Safety Administration (NHTSA) Partnership**

The purpose of this project is to develop the discussions about Hispanic health, including traffic safety, and to develop relationships with media executives. NHMA convenes a media breakfast series with executives from TV stations and local media; this is done in collaboration with the Congressional Hispanic Caucus and other elected officials. In addition, the NHMA provides media training to member physicians for television and radio interviews. NHMA maintains a speaker's bureau of Hispanic physicians for NHTSA Regional Offices and national partners. At the 2002

NHMA Annual Conference, television management and physician reporters from CBS, ABC, NBC and UNIVISION made presentations at a plenary session. The National Highway Traffic Safety Administration, Department of Transportation, supports this project. Congresswoman Roybal-Allard, Congressman Rodriguez, Congressman Gutierrez, Congresswoman Velazquez, and Assemblyman Gil Cedillo have served as Co-chairs of the Media Breakfasts held in their districts. This year we support the "Impaired Driving Campaign" and developed an Alcohol Screening Kit in Spanish for our speakers bureau and partner organizations.

#### **NHMA Redes En Acción Project**

NHMA serves as a partner on the Executive Committee (Dr. Rios is a co-PI) of this project, funded by the Baylor College of Medicine and sponsored by the National Cancer Institute, NIH. The purpose of Redes is to raise awareness of cancer research and to encourage training in cancer research, which NHMA does through advocacy, the Annual Conference workshop, student poster sessions, mailings of the Redes newsletter, and developing NHMA physician profiles and articles for the newsletter. NHMA also participates in two annual meetings – one for NCI projects and the other for Redes National Steering Committee meeting in San Antonio, TX. This program was recently awarded its second 5 year grant from NCI.

#### **The Commonwealth Fund Project**

NHMA has collaborated with The Commonwealth Fund and Congressional members to plan and implement three regional health policy media briefings. The briefings introduced new reports on the Uninsured and Quality of Health Care, with foci on the Hispanic population, to community business and government leaders. The meetings served as forums to promote discussion on the challenges of the findings and strategic directions for health policy. State and Federal elected officials and the U.S. Surgeon General joined as speakers. The meetings were held July 1, 2003 in Los Angeles, October 1, 2003 in Atlanta, and December 4, 2003 in Washington, DC.

#### **NHMA 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> Annual Conferences**

The 7<sup>th</sup> Annual Conference was entitled, "Hispanic Health Model Programs: Prevention, Treatment, Training, and Research," and was held at the Hyatt Regency Capitol Hill on March 20-23, 2003. Plenary sessions included White House, DHHS, Congressional and Senate Speakers as well as Model Hispanic Health Program Speakers, including the Redes en Acción Program (research), Hispanic Centers of Excellence (training) and others.

"Hispanic Health Strategies Across the Nation" was the theme for last year's annual conference, held March 19-21, 2004 at the Hyatt Regency Capitol Hill Hotel, Washington, DC. This year, the NHMA will convene the conference at the Biltmore Hotel in Los Angeles on March 31- April 3, 2005 and the theme is "Medical Practice for the 21<sup>st</sup> Century: Enhancing Quality and Health Literacy". For interested speakers or sponsors, see the NHMA website.

#### **NHMA National Hispanic Health Leadership Summit**

In collaboration with the Congressional Hispanic Caucus, other invited Congressmen, the U.S. Department of Health and Human Services, the Robert Wood Johnson Foundation, the California Endowment, the Hispanic-Serving Health Professions Schools, Inc., Aventis, Amgen, GlaxoSmithKline, PhRMA, and several national Hispanic organizations, NHMA convened community leaders to build consensus on strategies to improve Hispanic health programs and policies at the national level. The meeting was held August 15-17, 2002 in San Antonio, Texas at the University of Texas San Antonio and at the Radisson Hotel. The purpose of the summit was to 1) share the strengths and weaknesses of current health care programs that impact Hispanics; 2) discuss strategies needed for future health care programs; and 3) build consensus on the Federal programs and policies that can be developed or enhanced to improve the quality of health care delivery to Hispanic in the United States over the next five years. Of note, the U.S. Surgeon presented his vision for a healthy America in one of his first public appearances. A report was issued and distributed nationwide. A summary was presented to both the Congressional Black Caucus and Congressional Hispanic Caucus at their annual policy conferences.

#### **OWH Lupus and Latinas Project**

The Office on Women's Health, U.S. Department of Health and Human Services sponsored a meeting of Hispanic physicians to discuss the management and treatment of Latina patients with Lupus and issues for future policy and research. The meeting was held on January 30, 2003.

### **NHMA Advocacy Infrastructure Development Project**

NHMA developed this arm of the organization to hold the NHMA Hispanic Health Congressional Briefing Series and regular Federal official meetings. NHMA has brought Board Members, Advisory Committee Members, Fellows, and others to discuss health issues that impact Hispanic physicians and their patients. The briefings have focused on Cultural Competence, Diversity in the Health Professions, and Community Based Research and Eliminating Racial/Ethnic Health Disparities. The California Endowment started funding the four-year project in 2003.

### **NHMA Training and Information Dissemination Project**

NHMA will develop plans for Training Institutes for senior managers from national and local Hispanic health professions organizations and Federal Government that focuses on using Hispanic data and developing policy analysis research on Hispanic health issues. Information on Hispanic health will be disseminated through a new portal, a membership services unit, and a targeted list serve to Hispanic medical societies across the nation, the NHMA Advisory Committee, Hispanic health interest groups and policy committees, as well as the National Hispanic Health Professionals Leadership Network at the NHMA Annual Conferences, beginning in March 2004.

### **NHMA Obesity Abatement Project**

NHMA will continue the Information and Dissemination effort and develop a national Hispanic Coalition, with a focus on Obesity Abatement this year and convene five regional meetings in Hispanic highly populated cities across the nation. This educational campaign is supported by the U.S. Department of Health and Human Services Office of Minority Health for 2 years.

### **NHMA and AAFP Journal**

NHMA entered into an agreement with the American Academy of Family Physicians in July 2003 to develop its first peer reviewed medical journal, "Caring for the Hispanic Patient" which was published in August 2004 as a summer issue. The second issue will be published for September 2005.

### **NHMA Press**

NHMA has started planning the publication unit and will publish the first Volume of the NHMA Leadership Fellowship Case Studies this year. Other publications planned include the History of NHMA, the 2<sup>nd</sup> Volume of the Fellowship Case Studies, and the Hispanic Curriculum Case Studies.

## **National Hispanic Health Foundation**

The National Hispanic Health Foundation (501c3), established in 1994 in Washington, DC as the National Hispanic Medical Foundation, is the philanthropic arm of the National Hispanic Medical Association. The mission of the Foundation is to support educational and charitable activities to improve the health of Hispanics. In 2003, the NHMA was awarded a Congressional Earmark to develop the Foundation, through the National Hispanic Medical Association, with the support of the Congressional Hispanic Caucus, Senator Arlen Specter and Congressman Regula. This year, NHHF has become affiliated with the Robert F. Wagner Graduate School of Public Service, New York University and is currently located with NHMA in Washington, DC. The programs of the NHHF include:

- ❑ **The Hispanic Health Professional Student Scholarship Program** – the first national scholarship program targeted at Hispanic students who are committed to careers in health care – medicine, nursing, dentistry, public health, health management and policy analysis, health research, and allied health. The first NHHF Scholarship GALA Dinner was convened at the Marriott Marquis Hotel, New York City, December 2, 2004. and the second Dinner will be held on December 1, 2005. Scholarship applications will be available on the NHMA Website in May.
- ❑ **National Hispanic Medical Association Leadership Fellowship** - The NHMA Leadership Fellowship Program is a collaborative project with the Robert F. Wagner Graduate School of Public Service. The purpose of the program is to promote the development of leadership potential among members of the National

Hispanic Medical Association. The emphasis is on the knowledge and skills necessary to take a leadership role in health policy development and advocacy at local, state and national levels on issues of importance to the health of the Hispanic community. The Health Resources and Services Administration, U.S. Department of Health and Human Services supported the program during the first three years. Amgen, Ortho Biotech, Pfizer, and Aetna Foundation have also supported the program.

The program began October 1, 1998 and trains 20 mid-career Hispanic physicians per year with a one-day Orientation at the NHMA Annual Conference, a week-long NYU Institute, and a week-long Washington, DC Institute. The lectures, panel discussions, and case study discussions are presented by health experts from the federal and state governments, foundations, media, managed care, think tanks, and non-profit advocacy organizations.

NHMA has commissioned case studies on Hispanic health policy issues and will be publishing the first volume as a textbook for graduate level health policy analysis courses.

- ❑ **Portal for Hispanic Health:** [www.HispanicHealth.info](http://www.HispanicHealth.info) –information in English and Spanish through the Internet for physicians and health providers is being developed.
- ❑ **Hispanic Health Research Training Program** – a training program to increase the knowledge about the use of datasets and surveys for Hispanic populations. This program will begin in Fall, 2005.

*1411 K Street, NW, S. 1100, Washington, DC 20005 (202) 628-5895 Fax (202) 628-5898 [nhma@nhmamd.org](mailto:nhma@nhmamd.org)*

## **News Release**

---

CONTACT: Liz Chavez  
Impact Media Communications  
(310) 721-4623  
[Lizchavez@Verizon.net](mailto:Lizchavez@Verizon.net)

FOR IMMEDIATE RELEASE

### **National Hispanic Medical Association, California Latino Legislative Caucus Embark on Joint Mission to Address and Improve Health Care for the Underserved** *Legislators to Brief Hispanic Physicians on Issues Impacting Hispanics*

**SACRAMENTO, CA** – Hispanic physicians from across California on Monday, June 20, will join the California Latino Legislative Caucus at the first “*Hispanic Health State Legislative Day*” to discuss California state policies to improve the health of Hispanics and address underserved communities.

At the request of Senate Health Committee Chair Senator Deborah Ortiz (D-Sacramento), the event was organized by the National Hispanic Medical Association (NHMA), a non-profit organization that represents Hispanic licensed physicians in the United States. Founded in 1994 in Washington, D.C., NHMA has coordinated similar briefings throughout the nation in an effort to improve health care for Hispanics and the underserved.

“NHMA looks forward to playing a major leadership and advocacy role in helping the Latino Legislative Caucus and other California lawmakers advance policies and efforts to improve health care for Hispanics and increase access to care in underserved communities,” stated Dr. Elena Rios, NHMA President and CEO.

**MORE**

**Page 2**

Ortiz, who earlier this year hosted two legislative hearings on admissions policies at California's public medical schools, said the state must do more to improve the number of minorities enrolled in public medical institutions.

"It is critical that our publicly-funded medical schools fulfill their mission of training health care professionals to provide services throughout the state," Ortiz said. "With our ethnic communities seeing increases in chronic diseases and reductions in access to care, we must train doctors and nurses who are willing to provide quality health care in rural and underserved communities."

The NHMA notes that, nationally, one-third of Latinos report difficulty in communicating with their doctors and understanding their medical situation because it was not explained to them in their native language. While African-American, Latinos, and Native Americans as a group make up nearly 25% of the U.S. population, these three groups account for less than 9% of nurses, 6% of physicians, and only 5% of dentists in the country.

The NHMA and the Latino Legislative Caucus will explore policies that will have long-term effects on Hispanic health care. Proposals that will be considered include requiring the University of California to formalize a strategy to increase diversity in medical school admissions (SB 780 by Ortiz), and requiring all continuing medical education courses to contain curriculum that addresses language and cultural differences (AB 1195 by Assemblymember Joe Coto, D-San Jose.)

More information about NHMA is available at [nhmamd.org](http://nhmamd.org).

###

LATINO LEGISLATIVE  
CAUCUS

**Latino Caucus  
Member Information**

<b>Legislator</b>	<b>Address</b>	<b>Phone</b>	<b>Fax</b>	<b>Email</b>	<b>Committees</b>
Senator Martha Escutia, Chair Latino Caucus	State Capitol Room 5080 Sacramento, CA 95814	(916) 651-4030	(916) 327-8755	<a href="mailto:senator.escutia@sen.ca.gov">senator.escutia@sen.ca.gov</a>	Energy, Utilities and Communication (Chair), Appropriations, Environmental Quality, Judiciary, Joint Committee on Rules
Assembly member Joe Coto, Vice Chair Latino Caucus	State Capitol P.O. Box 942849 Sacramento, CA 94249-0023	(916) 319-2023	(916) 319-2123	<a href="mailto:assemblymember.coto@assembly.ca.gov">assemblymember.coto@assembly.ca.gov</a>	Budget, Education, Governmental Organization, Human Services, Joint Committee on Rules Select Committee on Urban Education in California (Chair)
Senator Richard Alarcon	State Capitol Room 4035 Sacramento, CA 95814	(916) 651-4020	(916) 324-6645	<a href="mailto:senator.alarcon@sen.ca.gov">senator.alarcon@sen.ca.gov</a>	Labor and Industrial Relations (Chair), Appropriations, Energy, Utilities and Communications, Public Employment and Retirement
Senator Gill Cedillo	State Capitol Room 5100 Sacramento, CA 95814	(916) 651-4022	916) 327-8817	<a href="mailto:senator.cedillo@sen.ca.gov">senator.cedillo@sen.ca.gov</a>	Judiciary, Public Safety, Rules, Transportation and Housing
Senator Denise Moreno Ducheny	State Capitol, Room 4081 Sacramento, CA 95814	(916) 651-4040	(916) 327-3522	<a href="mailto:senator.ducheny@sen.ca.gov">senator.ducheny@sen.ca.gov</a>	Budget and Fiscal Review Subcommittee No. 3 on Health and Human Services (Chair), Agriculture (Vice-Chair), Budget and Fiscal Review, Government Modernization, Efficiency and Accountability, Transportation and Housing, Joint Legislative Budget
Senator Liz Figueroa	State Capitol, Room 4061 Sacramento, Ca 95814	(916) 651-4010	(916) 327-2433	<a href="mailto:senator.figueroa@sen.ca.gov">senator.figueroa@sen.ca.gov</a>	Business, Professions and Economic Development (Chair), Government Modernization, Efficiency and Accountability (Chair), Banking, Finance and Insurance, Environmental Quality, Health, Judiciary



**Latino Caucus  
Member Information**

<b>Legislator</b>	<b>Address</b>	<b>Phone</b>	<b>Fax</b>	<b>Email</b>	<b>Committees</b>
Senator Dean Florez	State Capitol, Room 5061 Sacramento, Ca 95814	(916) 651-4016	(916) 327-5989	<a href="mailto:senator.florez@sen.ca.gov">senator.florez@sen.ca.gov</a>	Governmental Organization (Chair), Agriculture, Appropriations, Business, Professions and Economic Development, Government Modernization, Efficiency and Accountability, Human Services
Senator Deborah Ortiz	State Capitol Room 5114 Sacramento, CA 95814	(916) 445-7807	(916) 323-2263	<a href="mailto:senator.ortiz@sen.ca.gov">senator.ortiz@sen.ca.gov</a>	Health (Chair), Appropriations, Banking Finance and Insurance, Agriculture, Joint Legislative Audit Committee
Senator Gloria Romero	State Capitol, Room 313 Sacramento, CA 95814	916) 651-4024	(916) 445-0485	<a href="mailto:senator.romero@sen.ca.gov">senator.romero@sen.ca.gov</a>	Budget and Fiscal Review Subcommittee No. 5 on Public Safety, Labor, and Veteran Affairs (Chair), Appropriations, Budget and Fiscal Review, Education, Elections, Reapportionment and Constitutional Amendments, Natural Resources and Water, Public Safety, Education Subcommittee on Higher Education
Senator Nell Soto	State Capitol, Room 313 Sacramento, CA 95814	(916) 651-4032	(916) 445-0128	<a href="mailto:senator.soto@sen.ca.gov">senator.soto@sen.ca.gov</a>	Public Employment and Retirement (Chair), Veterans Affairs (Vice-Chair), Education, Governmental Organization, Local Government, Transportation and Housing,
Assembly member Juan Arambula	State Capitol P.O. Box 942849 Sacramento, CA 94249-0031	(916) 319 - 2031	(916) 319 - 2131	<a href="mailto:assemblymember.arambula@assembly.ca.gov">assemblymember.arambula@assembly.ca.gov</a>	Jobs, Economic Development and the Economy (Chair), Budget, Budget Subcommittee 4: State Administration, Education, Human Services

**Latino Caucus  
Member Information**

<b>Legislator</b>	<b>Address</b>	<b>Phone</b>	<b>Fax</b>	<b>Email</b>	<b>Committees</b>
Assembly member Joe Baca, Jr	State Capitol P.O. Box 942849 Sacramento, CA 94249-0062	(916) 319-2062	(916) 319-2162	<a href="mailto:assemblymember.baca@assembly.ca.gov">assemblymember.baca@assembly.ca.gov</a>	Committee on Housing and Community Development, Committee on Jobs, Economic Development, and the Economy, Committee on Utilities and Commerce Committee on Water, Parks and Wildlife
Assembly member Rudy Bermúdez	State Capitol P.O. Box 942849 Sacramento, CA 94249-0056	(916) 319-2056	(916) 319-2156	<a href="mailto:assemblymember.bermudez@assembly.ca.gov">assemblymember.bermudez@assembly.ca.gov</a>	Budget Subcommittee #4: State Administration (Chair), Aging and Long-Term Care, Governmental Organization, Water, Parks and Wildlife
Assembly member Ronald Calderon	State Capitol P.O. Box 942849 Sacramento, CA 94249-0058	(916) 319-2058	(916) 319-2158	<a href="mailto:assemblymember.calderon@assembly.ca.gov">assemblymember.calderon@assembly.ca.gov</a>	Democratic Freshman Legislative Caucus (Chair), Appropriations, Banking and Finance, Insurance, Governmental Organizations, Rules, Utilities and Commerce
Assembly member Ed Chavez	State Capitol P.O. Box 942849 Sacramento, CA 94249-0057	(916) 319-2057	(916) 319-2157	<a href="mailto:assemblymember.chavez@assembly.ca.gov">assemblymember.chavez@assembly.ca.gov</a>	Arts, Entertainment, Sports, Tourism & Internet Media (Chair), Banking & Finance, Governmental Organization, Veterans Affairs
Assembly member Hector De La Torre	State Capitol P.O. Box 942849 Sacramento, CA 94249-0050	(916) 319-2050	(916) 319-2150	<a href="mailto:assemblymember.delatorre@assembly.ca.gov">assemblymember.delatorre@assembly.ca.gov</a>	Budget Subcommittee #1 Health and Human Services (Chair), Joint Committee on Legislative Budget, Utilities and Commerce, Committee on Environmental Safety and Toxic Materials, Local Government, Budget
Assembly member Dario Frommer	State Capitol P.O. Box 942849 Sacramento, CA 94249-0043	(916) 319-2043	(916) 319-2143	<a href="mailto:assemblymember.frommer@assembly.ca.gov">assemblymember.frommer@assembly.ca.gov</a>	Committee on Business and Professions, Committee on Health, Committee on Insurance

**Latino Caucus  
Member Information**

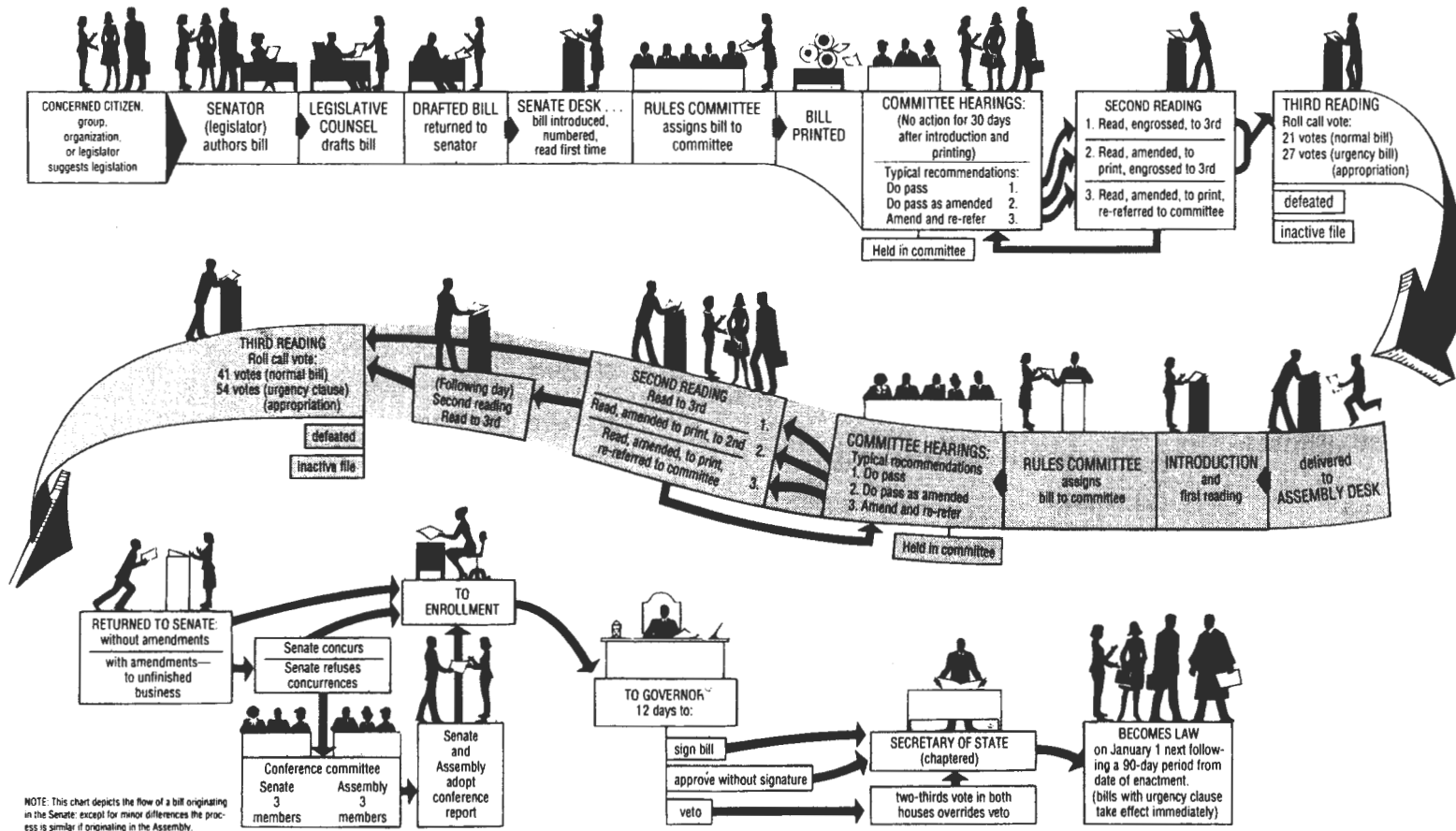
<b>Legislator</b>	<b>Address</b>	<b>Phone</b>	<b>Fax</b>	<b>Email</b>	<b>Committees</b>
Assembly member Cindy Montañez	State Capitol P.O. Box 942849 Sacramento, CA 94249-0039	(916) 319-2039	(916) 319-2139	<a href="mailto:assemblymember.montanez@assembly.ca.gov">assemblymember.montanez@assembly.ca.gov</a>	Rules (Chair), Health, Budget, Judiciary
Assembly member Gloria Negrete-McLeod	State Capitol P.O. Box 942849 Sacramento, CA 94249-0061	(916) 319-2061	(916) 319-2161	<a href="mailto:assemblymember.negretemcleod@assembly.ca.gov">assemblymember.negretemcleod@assembly.ca.gov</a>	Business and Professions (Chair), Health, Government Organization, Public Employees, Retirement and Social Security
Assembly member Pedro Nava	State Capitol P.O. Box 942849 Sacramento, CA 94249-0035	(916) 319-2035	(916) 319-2135	<a href="mailto:assemblymember.nava@assembly.ca.gov">assemblymember.nava@assembly.ca.gov</a>	Chair, Budget Subcommittee No. 5 on Information Technology/Transportation Budget, Higher Education, Insurance, Natural Resources, Joint Legislative Audit, Joint Legislative Budget
Assembly Speaker Fabian Nuñez	State Capitol P.O. Box 942849 Sacramento, CA 94249-0046	(916) 319-2046	(916) 319-2146	<a href="mailto:assemblymember.nunez@assembly.ca.gov">assemblymember.nunez@assembly.ca.gov</a>	
Assembly member Jenny Oropeza	State Capitol P.O. Box 942849 Sacramento, CA 94249-0055	(916) 319-2055	(916) 319-2155	<a href="mailto:assemblymember.oropeza@assembly.ca.gov">assemblymember.oropeza@assembly.ca.gov</a>	Transportation (Chair), Appropriations, Jobs Economic Development and the Economy, Veterans Affairs
Assembly member Nicole Parra	State Capitol P.O. Box 942849 Sacramento, CA 94249-0030	(916) 319-2030	(916) 319-2130	<a href="mailto:assemblymember.parra@assembly.ca.gov">assemblymember.parra@assembly.ca.gov</a>	Joint Legislative Audit Committee (Chair), Agriculture, Budget, Banking and Finance, Water, Parks and Wildlife
Assembly member Lori Saldaña	State Capitol P.O. Box 942849 Sacramento, CA 94249-0076	(916) 319-2076	(916) 319-2176	<a href="mailto:assemblymember.saldana@assembly.ca.gov">assemblymember.saldana@assembly.ca.gov</a>	Select Committee on Bioethics, Medicine and Technology (Chair), Appropriations, Natural Resources, Water, Parks and Wildlife, Veterans Affairs

**Latino Caucus  
Member Information**

<b>Legislator</b>	<b>Address</b>	<b>Phone</b>	<b>Fax</b>	<b>Email</b>	<b>Committees</b>
Assembly member Simón Salinas	State Capitol P.O. Box 942849 Sacramento, CA 94249-0028	(916) 319-2028	(916) 319-2128	<a href="mailto:assemblymember.salinas@assembly.ca.gov">assemblymember.salinas@assembly.ca.gov</a>	Local Government (Chair), Transportation, Housing and Community Development, Agriculture
Assembly member Alberto Torrico	State Capitol P.O. Box 942849 Sacramento, CA 94249-0020	(916) 319-2020	(916) 319-2120	<a href="mailto:assemblymember.torrico@assembly.ca.gov">assemblymember.torrico@assembly.ca.gov</a>	Public Employees, Retirement and Social Security (Chair), Transportation, Housing and Community Development, Governmental Organization
Assembly member Juan Vargas	State Capitol P.O. Box 942849 Sacramento, CA 94249-0079	(916) 319-2079	(916) 319-2179	<a href="mailto:assemblymember.vargas@assembly.ca.gov">assemblymember.vargas@assembly.ca.gov</a>	Insurance (Chair), Agriculture, Banking and Finance, Business and Professions
Lieutenant Governor Cruz Bustamante	State Capitol Room 1114 Sacramento, CA 95814	(916) 445-8994	(916) 323-4998		University of California Regent, California State University Trustee

# HOW A BILL BECOMES LAW

(A simplified chart showing the route a bill takes through the California Legislature)



NOTE: This chart depicts the flow of a bill originating in the Senate; except for minor differences the process is similar if originating in the Assembly.

# Glossary of Legislative Terms

## A

**ABBREVIATIONS** - The following abbreviations are commonly used by the California Legislature:

**AB** - Assembly Bill

**SB** - Senate Bill

**ACA** - Assembly Constitutional Amendment

**SCA** - Senate Constitutional Amendment

**AJR** - Assembly Joint Resolution

**SJR** - Senate Joint Resolution

**ACR** - Assembly Concurrent Resolution

**SCR** - Senate Concurrent Resolution

**HR** - House Resolution (Assembly)

**SR** - Senate Resolution

**ACT** - a bill passed by the Legislature

**ACROSS THE DESK** - official act of introducing a bill or resolution. The measure is given to the Chief Clerk at the Assembly Desk or the Secretary of the Senate at the Senate Desk. It then receives a number and becomes a public document available in the bill room.

**ADJOURNMENT** - a motion to end session for that day, with the hour and day of the next meeting being set prior to adjournment or by rule.

**ADJOURNMENT SINE DIE** - "Adjournment without day." The final termination of a regular or special legislative session.

## CALIFORNIA CHANNEL

Legislative floor sessions and committee hearings are carried on the California Channel week days from 9:00 a.m. to 3:45 p.m. During hectic times of the legislative calendar there are many committee hearings happening at the same time. Only one floor session or committee hearing can be aired. Conversely, when the Legislature is out of session, previous hearings or floor sessions may be shown.

To give citizens an opportunity to directly express an opinion on an issue, some committee hearings are conducted as interactive hearings. This format allows viewers to call in to the committee to ask questions and make

comments about the issue under discussion.

Another interactive meeting is the LegiSchool Project Town Hall Meeting. The LegiSchool Project is a bipartisan collaboration between the Legislature and California State University. The purpose is to develop an issues-oriented civics curriculum for high school students and teachers.

**2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY  
LATINO CAUCUS MEMBERS**

**SENATE BILLS**

**SENATOR RICHARD ALARCON**

**SB 57: Increasing Funding for Trauma and Emergency Care**

Problem—CA Trauma Centers and ER's have an estimated \$635 million shortfall...equaling in closures, delay in services, and dangerous conditions.

- SB 57 allows counties to increase their current penalty assessment on traffic violation and other crimes to specifically fund Emergency Medical Services (\$20 increase on the average \$340 ticket)
- SB 57 is estimated to raise as much as \$60million annually statewide
- SB 57 establishes a pediatric care allocation to ensure that pediatric centers receive 15% of new funding

Status: Assembly Rules

**SB 499: Public Health and Safety Report**

Problem—CA hospitals are closing at alarming rates. The current 60 day public hearing is still not enough to allow policymakers to come up with alternate solutions.

- SB 499 requires hospitals to provide a public health and safety report at the time the hospital notifies that it intends to close
- The report will contain vital information for the county, policymakers, and the public...including, data on diversion and economic impact

Status: Assembly Rules

**SB 452- Truth in Pricing**

Problem—Pharmaceutical prices continue to rise and DHS is unable to tell the Legislature if the state is getting the best price in its Medi-Cal drug program.

- SB 452 allows the Legislature (the Chair of Health, and Budget) to look at the Medi-Cal drug contracts to see if the state is getting the best price in its Medi-Cal drug program.

Status: HELD Senate Appropriations

**SB 100- Medi-Cal Reimbursement**

Problem—CA ranks 47th in terms of adequate Medi-Cal Reimbursement

- SB 100 seeks to improve Medi-Cal Reimbursement rates

Status: Senate Rules (2 year bill)

**SENATOR MARTHA ESCUTIA**

**SB 437: CALIFORNIA HEALTHY KIDS**

Background

Over the past few years, California has made great progress in making sure more children have insurance; now we can finish the job. Today nearly ONE MILLION California children lack coverage. Health insurance improves children's well-being and helps them reach their potential in school. Investing in comprehensive health insurance for children is cost-effective, promoting access to early, less costly, preventive care and treatment. It is time to finish the job and make sure all California children have health insurance.

## **2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY LATINO CAUCUS MEMBERS**

### **Objectives of SB 437**

- Create a strong private/public initiative in which all children living in California from birth to age 21 will have access to affordable health insurance coverage.
- Build upon what works in California's publicly-funded state insurance programs and reform what does not, including modernizing and simplifying how children get enrolled and stay enrolled in coverage.
- Create a statewide insurance system that leverages the lessons and successes of local children's health initiatives.
- Promote voluntary opportunities to strengthen employer participation in covering dependents.
- Develop sustainable financing that supports the system over the long term, including maximizing federal funding.
- Promote opportunities for children to access services under their health insurance coverage.
- Ensure a strong safety net as a vital component of access to care.
- Do no harm as these reforms are put in place.

### **SENATOR DEAN FLOREZ**

#### **SB 923: West Nile Virus**

This bill would require the Department of Health Services to allocate funds to the abatement and vector control districts to combat West Nile Virus and work towards preventing any potential outbreak of this fatal disease. This bill would also provide for the carryover to specified taxable years of specified losses sustained as a result of West Nile Virus. Currently set for hearing in Senate Revenue and Taxation Committee on June 22nd.

### **SENATOR DEBORAH ORTIZ**

#### **SCA 13: Prop. 71 Open Meetings, Conflict of Interest, and Patenting and Licensing**

SCA 13 would strengthen the public accountability provisions of Proposition 71, the Stem Cell Research and Cures initiative, by ensuring that principles of open government, protections against conflicts of interest, and the taxpayers' interest are fully incorporated in decision-making under the initiative.

In passing Proposition 71, voters have entrusted the state with managing \$3 billion in new funds for stem cell research. The cost of repaying bonds with interest will range up to \$6 billion.

While Proposition 71 contains provisions concerning open meetings, conflicts of interest, and handling of royalties and intellectual property rights, as drafted and as they are being implemented by the ICOC, they do not go far enough to fully protect the state's interest.

SCA addresses these problems by:

- Applying open meeting standards to all deliberations of the ICOC and its working groups, with exceptions as necessary to conduct scientific peer review and to protect proprietary or scientific prepublication information;



## **2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY LATINO CAUCUS MEMBERS**

- Allowing an opportunity for public comment on the basis for approval or denial of applications for funding before recommendations for funding are submitted to the ICOC;
- Requiring working group members to disclose to the ICOC relevant economic and property interests and to adhere to NIH economic conflict of interest standards, and requiring the State Auditor to periodically review the ICOC's monitoring and enforcement of conflict of interest provisions for working group members;
- Requiring the ICOC to seek to ensure, in negotiating intellectual property agreements, that therapies and treatments resulting from inventions and technologies developed with Prop. 71 funding are accessible and affordable to low-income residents, including those eligible for state and county-funded health care programs.

Proposition 71 gives California an opportunity to realize the enormous potential represented by stem cell research. SCA 13 simply ensures that Prop. 71 funding decisions are reached and carried out in a publicly accountable manner.

### **SB 24: Hospital Billing Fairness Act**

The Hospital Billing Fairness Act seeks to curb excessive billing and collections practices of hospitals against uninsured and underinsured patients.

According to recent studies, illnesses and medical costs are the cause of over half of all personal bankruptcies in the US. Despite this, uninsured and underinsured patients frequently find themselves facing aggressive collection actions by hospitals. SB 24 will provide fair, reasonable, and enforceable protections that will protect uninsured and underinsured patients from inappropriate hospital billing and collections practices.

### **SB 401: Pharmacy Marketing**

SB 401, sponsored by the California Public Interest Research Group (CALPIRG), will ensure that the information patients receive from their pharmacists remains reliable, objective, and free from paid advertising.

Current law requires drug manufacturers to provide, and pharmacists to distribute, written communications, commonly referred to as "patient drug information leaflets" or "patient package inserts" to consumers when they fill (or refill) a prescription. This information contains objective health information related to the appropriate dosage, potential side effects, drug interactions, and other information relevant to the prescribed medication. However, some pharmacists' written communications additionally include direct to consumer advertisements (DTC) that are paid for by drug manufacturers and promote competing drugs and treatment therapies. Studies have shown a direct link between aggressive DTC advertising and the increased utilization of newer, more expensive drugs even when those drugs represent no significant therapeutic advantage over existing treatments.

Consumers rely on their pharmacists for accurate, unbiased information. As such, information received from pharmacists should be objective and free from advertisements that are specifically designed to build name recognition. Injecting paid

## **2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY LATINO CAUCUS MEMBERS**

advertising or marketing within these communications is wholly inappropriate and can be mistaken as a tacit endorsement of a particular product or drug or an implicit veto of a physician's recommended course of treatment.

Physicians, not drug manufacturers, should continue to be a patient's best resource in determining the most appropriate and cost effective course of treatment to meet their health needs. SB 401 will ensure that pharmacy communications are not used as yet another vehicle to steer consumers to unnecessary and high-priced prescription drugs.

SB 401 **would not restrict** state or federal entities, such as the Food and Drug Administration, or private health organizations, such as the American Lung Association, from continuing to fund health messages for distribution with prescription medications.

The bill **would also not prohibit** sponsored messages from drug manufacturers that inform patients of useful health information **related to the drug being dispensed** such as dosage information, potential side effects and refill dates and reminders. The only "information" that would not be allowed under this measure are misleading DTC advertisements that mention the trade name or commercial slogan for alternative or competing drugs or treatments.

### **SB 417: Patient Billing Protections and Health Plan Provider Payment Practices**

Provides greater protections for insured patients who get caught in billing disputes between their health care providers and their health plans. SB 417 provides physicians and other health care providers with more effective remedies when health plans systematically engage in payment practices that result in underpayments to providers.

### **SB 454: Nutrition and Obesity Education for Beneficiaries of Medi-Cal and Healthy Families Programs**

SB 454 requires that the state through its Medi-Cal and Healthy Families programs ensure that beneficiaries have access to needed education about nutrition, obesity, physical activity and state and federal nutrition programs. The bill also requires that educational materials and outreach be culturally and linguistically appropriate to help ensure that low-income communities benefit from these resources.

### **SB 576: Smoking Cessation Benefits**

Requires comprehensive tobacco cessation benefits in all California health insurance products. Smokers can be successful in quitting if they have access to tobacco dependence treatments – medications and behavioral treatment programs.

### **SB 644: Duty to Dispense Prescribed Drugs and Devices**

Pharmacists provide an essential service to consumers who rely on their expertise to access medically necessary prescription medications and supplies. There is, however, no legal duty on a pharmacist to dispense medications and other prescription items to an individual with a lawful prescription. Presently, California's pharmacy law is silent on a pharmacist's duty to fill a prescription. Existing law simply authorizes persons with particular training and competency to dispense prescription drugs. As a consequence, a pharmacist can legally refuse to fill a legal prescription at his or her discretion.

## **2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY LATINO CAUCUS MEMBERS**

There have been a number of reports in the past year or so that retail pharmacists are refusing to fill lawful prescriptions (reported recently in the *Washington Post*), particularly prescriptions for contraception, including EC, based on individual pharmacists religious beliefs. While there is no intent in this legislation to override the religious beliefs of individuals, the purpose of the bill is to ensure that consumers are not abandoned by pharmacists and pharmacies, and will have timely access to necessary medications even where an individual pharmacist will not dispense the drug requested.

### **SB 780: UC Medical School Admissions**

This year, the Senate Health Committee held joint informational hearings on February 23<sup>rd</sup> and May 4<sup>th</sup> to explore the current admissions processes at UC medical schools and how these relate to the number of physicians who are available and willing to serve the state's underserved populations and areas. In light of the findings in these hearings, this bill asks for the creation of an institutional commitment for the UC in regards to diversity and workforce needs, which work to support existing smaller and campus-specific efforts taking place at some UC campuses.

SB 780 codifies a request to the UC Board of Regents on medical school admissions criteria and asks that two factors be considered by the University that are important for meeting California's workforce shortage: (1) consideration of the applicant's community and family background and (2) how this relates to the likelihood that the applicant will practice in a medically underserved area or health professional shortage area.

It is necessary to codify this recommendation for the UC to consider these specific factors in the admission of students to its medical schools due to the need in the California health care workforce for primary care physicians, particularly for underserved populations, AND due to the inconsistency and lack of formal inclusion of these factors in the admissions processes across the UC medical campuses.

The bill includes many key recommendations made in an Institute of Medicine report (that the UC contributed to) and this language served to more fully illustrate the principles behind this request to the UC.

Given the health disparities and chronic disease trends witnessed across California's ethnic minority communities, as well as the state of the health care workforce in underserved areas generally, publicly-supported medical schools should be held to a standard to ensure that they will effectively train future doctors who are likely to serve disadvantaged and diseased populations.

**2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY  
LATINO CAUCUS MEMBERS**

**ASSEMBLY BILLS**

**ASSEMBLY MEMBER JUAN ARAMBULA**

**AB 232: Nursing Shortage**

There is a great need for nurses with baccalaureate and master's degrees, both to teach in California nursing programs and to serve in care settings with increasingly specialized and acute health care needs. AB 232 requires the community college and CSU systems to work together to standardize pre-requisites to avoid unnecessary duplication for RNs wanting to go on to earn a baccalaureate degree.

**ASSEMBLY MEMBER JOE BACA, JR**

**AB 813: Women's Heart Health**

**Purpose**

To increase awareness and education of heart health risks among women and the general public, including health care providers.

The legislation would have two sections as described below.

- First section: Outlines the severity of the problem with heart disease and women, citing several specific examples illustrating the problem.
- Second section: Directs the Department of Health Services (DHS) to place priority on providing information to consumers, patients, and health care providers regarding women's heart health risks, as specified.

**ASSEMBLY MEMBER JOE COTO**

**AB 1195: Cultural and Linguistic Competency Training to Improve the Quality of Health Care in California**

**Purpose of Bill**

Cultural and linguistic competency skills are essential for providing quality health care to California's diverse patient population. Instruction in cultural and linguistic competency will help address the problems of racial, ethnic, linguistic, and gender-based disparities in medical treatment decisions.

AB 1195 requires all continuing medical education courses to contain curriculum pertaining to cultural and linguistic competency. This bill exempts continuing medical education courses that are dedicated solely to research of issues that do not involve direct patient care.

**Background**

A report by the Institute of Medicine, "What Healthcare Consumers Need to Know about Racial and Ethnic Disparities in Health Care," stated that minorities do not receive the same quality of medical care compared to nonminorities despite similar health plans. There are several reasons for these discrepancies among minority populations:

- Language barriers between limited-English-proficient patients and physicians. Research suggests that physician and patient communication is linked to patient satisfaction and health outcomes. Nationally, one-third of Latinos report difficulty communicating with their physicians and understanding their medical situation because it was not explained to them in their native language. Therefore, it is

## **2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY LATINO CAUCUS MEMBERS**

important for physicians to appreciate, explore, and understand that patient dissatisfaction can increase health disparities.

- Cultural differences between patients and physicians raise uncertainty on how to properly treat patients from diverse backgrounds with varied attitudes about health care.
- Racial and ethnic disparities have been documented to significantly impact the quality and access to health care; therefore, physicians need to learn and understand how to treat and address the medical needs of California's diverse population.

In 2003, the Task Force on Culturally and Linguistically Competent Physicians and Dentists reported that "because health care providers frequently do not understand unique cultural beliefs about health care that many consumers hold, and do not consider culture when developing a treatment plan, many consumers are given treatment regimes that they will not follow. As a result, it is more important than ever that health care providers possess a degree of cultural competency that they bring to interactions with their patients."

### **Existing Law**

Under current law, the Medical Practice Act provides for the licensure and regulation of physicians and surgeons by the Medical Board of California. Under the Act, physicians and surgeons are required to demonstrate satisfaction of continuing education requirements. The Act also creates a voluntary program for interested physicians and surgeons to learn a foreign language, along with varied cultural beliefs and practices that may impact patient health care practices. Currently, physicians and surgeons are required to take 100 hours of continuing education courses every four years.

### **AB 1593: Child nutrition**

Ensure that CA law is consistent with federal law by disallowing the practice of having WIC vendors disqualified for 3 years based on violations found during single monitoring visits. AB 1593 would also define when a pattern of violations exists, and would ensure that WIC vendors are afforded sufficient due process by requiring that notice be given to vendors for initial violations

## **ASSEMBLY MEMBER CINDY MONTAÑEZ**

### **AB 405: Pesticides in Schools**

AB 405 prohibits the use of experimental or new pesticide products without full chemical testing or product registration on schoolsites. This bill would prevent school children and teachers from being exposed to experimental and/or insufficiently tested pesticide products. California Medical Association is in support of this bill.

### **AB 624: Children's Health Insurance**

Children up to age 18 in families with income at or below 200% of the federal poverty level can immediately enroll for coverage over the Internet from a doctor's office or clinic using the state's Child Health and Disability Prevention (CHDP) Electronic Gateway. However, the child will automatically lose coverage in a maximum of two months if the family does not complete and submit a joint Medi-Cal/Healthy Families paper application before the child's temporary coverage expires. AB 624 requires the State

## **2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY LATINO CAUCUS MEMBERS**

Department of Health Services to condense the current "two-step" application process for the CHDP Gateway into one simple application. Eligible children could enroll into Medi-Cal and Healthy Families through the electronic CHDP Gateway system and maintain coverage until the county makes a final eligibility determination.

### **ASSEMBLY MEMBER JENNY OROPEZA**

Among more than two dozen measures Oropeza is pursuing this year are **Assembly Bills 1101 and 1407**, which would crack down on harmful diesel exhaust. Another is **AB 929**, which would increase public awareness of the possible cumulative harm of numerous medical x-rays.

### **ASSEMBLY MEMBER LORI SALDAÑA**

#### **AB 966: Dental amalgam separators**

Requires dental offices to install amalgam separators to reduce mercury waste. Provides exemptions for dentists serving low-income or predominantly Denti-Cal patients. Mercury is a potent toxic that can cause brain damage in fetuses and young children. It is also linked to heart disease in adults. Currently a two-year bill

#### **AB 1062: Medical experimentation: informed consent**

Provides that any subject of a scientific study be informed of the intended use of any specimen they provide and be provided access to the results of the study. Also requires that appropriate educational and background materials must be provided to the potential study participant at the time of recruitment, that informed consent for future use of specimen must be obtained at time of collection and that any participant shall be informed of any clinical implications and be provided a referral is such a case. In Senate.

#### **AB 1168: Drinking water standards**

Provides that the Department of Health Services shall ensure the reliability and security of any desalination treatment process as part of the Department's review of an application for a water system operating permit. This cost will be paid completely by the permit applicant. In Senate.

#### **AB 1667: Pupil health: individuals with exceptional needs: specialized physical health care services.**

Will allow school nurses to train unqualified school personnel to provide basic medical care to students. School nurses are responsible for providing health care to students enrolled in California's public schools. Unfortunately, due to reductions in school nurses across the State, unlicensed assistive personnel (UAP) are called upon to be trained to provide different levels of nursing care. AB 1667 will allow for proper training for non-health related personnel to ensure that the health needs of our children are safely met in our schools. In Senate.

**2005 HEALTH RELATED BILLS IN THE LEGISLATURE AUTHORED BY  
LATINO CAUCUS MEMBERS**

**ASSEMBLY MEMBER JUAN VARGAS**

**AB 121: Imported candy: maximum allowable lead levels**

- Expand the existing jurisdiction of the State Department of Health Services, Childhood Lead Poisoning Prevention Program to include the regulation and monitoring of imported candy as a source of lead poisoning.
- Requires the State Department of Health to establish an interim lead content standard of .05 ppm in all imported candy sold in California and complete a risk assessment study on the effects of lead contaminated candy. Upon completion of the risk assessment study, DHS will determine a scientific standard by January 2007 for maximum allowable lead content for candy. This standard can not be more than .05 ppm.
- Requires the Department to issue a county health advisory notice on the candy that has been found to be contaminated with lead. This advisory would further instruct local retail stores to cease the sale/distribution of the contaminated candy.
- Requires the Department to issue notice to the manufacturer and distributor telling them their product is contaminated and sale and distribution of their product in California will cease until the contamination has been corrected. Manufacturers and distributors will bear the cost of additional testing of their candy product.

# *California Latino Legislative Caucus*



## *Member Biographies*

*2005 – 2006 Legislative Session*

*Senator Martha Escutia, Chair  
Assembly Member Joe Coto, Vice Chair*



2005 – 2006 Legislative Session

Dear Friends,

*As members of the Latino Legislative Caucus, we hope that this biography book will be helpful in familiarizing you with the membership of our Caucus. Each member brings a unique background and contribution to the Latino Caucus ensuring success for the Caucus as a whole.*

*Our membership is comprised of 9 Senators and 18 Assemblymembers, many of whom hold leadership positions within their respective houses. This is the largest membership in the more than thirty year history of the Latino Caucus, evidencing the growing political clout and participation of Latinos in California. As a Caucus, we are committed to addressing issues that affect all Californians and those issues relevant to Latinos living, working, and studying in California. Our goals are not exclusive, since the Latino Caucus agenda reflects many common goals of all Americans and Californians. We are working to provide affordable housing, invest in our children, ensure that higher education is affordable and accessible, create well-paying jobs for working California families, and improve the quality of life for all Californians.*

*For additional information or questions, we urge you to contact our individual offices or log onto the Caucus web site at:*

*<http://democrats.assembly.ca.gov/LatinoCaucus/default.htm>*

*Sincerely,*

**SENATOR MARTHA ESCUTIA**

*Caucus Chair*

**ASSEMBLYMEMBER JOE COTO**

*Caucus Vice Chair*

**SENATOR MARTHA ESCUTIA**  
**Caucus Chair**  
**30<sup>th</sup> District – Montebello**



Martha M. Escutia was first elected to the California Legislature in November 1992 to represent the heavily Latino 50<sup>th</sup> Assembly District in southeast Los Angeles County. As an Assemblywoman, Escutia became the first woman to Chair the Assembly Judiciary Committee. In 1998 she was elected to the California Senate and now represents the 30<sup>th</sup> Senate District. As a freshman Senator, Escutia was honored to receive the Chairmanship of the Senate Health and Human Services Committee, and in 2000, she was the first Latina appointed as Chair of the Senate Judiciary Committee. Today, as Chair of the Energy, Utilities and Communications Committee, Senator Escutia focuses on safeguarding the economy, protecting the consumer and preserving the environment as she navigates through the complex energy issues challenging the state.

In recognition of her leadership, Senator Escutia became Chair of the California Legislative Women's Caucus in January 2002, serving in that capacity for one year. In concert with the Women's Caucus, the Senator highlighted the lack of quality child-care for the state's working poor and has worked to make the expansion of subsidized care a priority within the Legislature. In yet another of many firsts for her, Senator Escutia is the first Latina to be elected Chair of the Latino Caucus. She will lead the 27 member strong Latino Caucus through 2006.

Senator Escutia's varied accomplishments are highlighted by landmark legislation that protects health and the environment, improves opportunities for education, and protects the rights of consumers and workers. Along with state educators, Senator Escutia reduced class sizes and made Advanced Placement classes readily accessible for all students in California. In addition, she worked tirelessly to ensure that struggling students have access to high-quality remedial education programs. To reduce the incidence of childhood obesity, Senator Escutia has established nutritional standards for elementary and middle schools which she is now working to extend to the high schools. Her environmental protection efforts remove poisonous lead from our schools, establish the first-ever Children's Environmental Health Protection Act, and makes California the first state to initiate an environmental health tracking network. In the health arena, Senator Escutia is the creator of Healthy Families and is presently championing universal health care for all children.

Senator Escutia's outstanding public service and landmark legislation have earned her numerous awards. The California Labor Federation AFL-CIO named her "Legislator of the Year" for her advocacy on behalf of working men and women. Her outstanding work on environmental issues has generated recognition from the California League of Conservation Voters, the Sierra Club and the American Lung Association. The Los Angeles County Board of Supervisors has commemorated her "Commitment to the People of Los Angeles County". She was also awarded the Good Housekeeping Award for Women in Government for her work on the Children's Environmental Health Protection.

Senator Escutia is an honors graduate of the University of Southern California with a degree in Public Administration, and received her law degree from Georgetown University. She holds certificates in Advanced International Legal Studies of Trade and Tariffs from the World Court in The Hague, Netherlands, and in Foreign Investment from the National Autonomous University in Mexico City.

A native of East Los Angeles, she is married to Leo Briones and has two young sons, Andres and Diego.

Martha M. Escutia fue elegida por primera vez a la asamblea estatal en noviembre 1992 para representar el Distrito 50, un distrito mayormente latino en el sudeste del condado de Los Angeles. En 1998 fue elegida a representar el Distrito 30 del Senado. En su primer año como Senadora fue nombrada presidente del Comité de Salud y Servicios Humanos. En el 2000, fue la primer Latina designada como Presidente del Comité Judicial del Senado. Actualmente, como Presidente del Comité de Energía, Utilidades y Comunicaciones, la Senadora se enfoca en fomentar la economía, proteger el consumidor y preservar el ambiente mientras navega por los asuntos complejos de energía que desafían al estado.

En reconocimiento a su liderazgo en la Legislatura, la Senadora Escutia llegó a ser Presidente de la Asociación de Mujeres Legisladoras en enero 2002 en cuya capacidad sirvió un año. Conjunto con la Asociación, la Senadora destacó la falta de calidad en el cuidado de niños para las familias con bajos recursos y ha luchado para que sea una prioridad dentro de la Legislatura. A parte de todos sus logros, la Senadora Escutia es la primer Latina de ser elegida como Presidente del Asociación Latino y dirigirá al los 27 miembros del Comité Latino hasta el 2006.

Junto con los educadores del estado, la Senadora Escutia redujo el tamaño de la clase e incremento los cursos avanzadas para hacerlos mas accesibles para todos estudiantes en California. Además, trabajó incansablemente para asegurar que nuestros estudiantes tengan acceso a los recursos necesarios para ser exitosos en la escuela. Para reducir la obesidad en niños, la Senadora Escutia ha establecido los estándares nutricionales para la primaria y ahora trabaja para extenderlos a las preparatorias.

Su legislación ambiental incluye la protección en contra del plomo en nuestras escuelas, y estableció el Acto Ambiental de la Protección de la Salud de Niños para asegurar que los niños de California sean protegidos de los contaminantes en el medioambiente. En el área de la salud, la Senadora Escutia creó el programa de Healthy Families y actualmente defiende asistencia médica universal para los niños. Igual en el area de desarrollo, la Senadora Escutia ha trabajado para mejorar la economía local simultáneamente mejorando nuestra calidad de vida y medioambiente.

Por su excelente trabajo de servicio público, la Senadora Escutia se ha ganado numerosos premios. La Federación de Trabajo de California AFL-CIO la nombró “Legisladora del Año” por su apoyo a favor de los trabajadores. Su trabajo excepcional en asuntos del ambiente le han otorgado reconocimiento del *League of Conservation Voters*, *Sierra Club* y el *American Lung Association*. El Condado de Los Angeles ha conmemorado su “Compromiso a la Gente del Condado de Los Angeles”. También se le otorgó el Premio de *Good Housekeeping* para Mujeres en el Gobierno por su trabajo en la Protección de Salud Ambiental para Niños.

La Senadora Escutia se graduó con honores de *University of Southern California (USC)* con un diplomado en Administración Pública y recibió su título de la facultad de derecho de la Universidad de Georgetown. Cuenta con diplomas en Estudios Internacionales Legales Avanzados de Comercio y Tarifas de la Corte Mundial en la Haya, y en Inversiones Externas de la Universidad Nacional Autónoma de México.

La Senadora Escutia es oriunda del Este de Los Angeles; está casada con Leo Briones y tiene dos niños pequeños, Andrés y Diego

ASSEMBLY MEMBER JOE COTO  
Caucus Vice Chair  
23<sup>rd</sup> District – San Jose



Joe Coto is an educator whose primary commitment has always been to the advancement of all students and their families. He has spent half of his professional life as superintendent of schools in two of Northern California's most challenging districts, Oakland Unified School District and the East Side Union High School District in San Jose. In recognition of his contributions as superintendent of the East Side Union High School District, the Association of California School Administrators (ACSA) named him the 2003 "Superintendent of the Year".

Joe Coto began his career as a teacher in the Oakland Unified School District where he experienced first hand the influence of public policy on education. After serving on the Oakland City Council, he was asked to fill the position of Superintendent of the Oakland Unified School District. In 1998 he accepted the position of Superintendent of the East Side Union High School District in San Jose.

During his fourteen year tenure as Superintendent, Mr. Coto used his leadership and experience to craft policies that reached beyond the East Side Union High School District. Coto organized the East Side Consortium of districts which led to the approval of SB 1051, the Voluntary Integration Program. Since its inception, the program has brought over \$80 million for participating districts and contributed to increased diversity and integration in East San Jose schools. During his tenure in the East Side Union High School District, Mr. Coto was able to bring nearly half a billion dollars in grant moneys and improvement bonds East San Jose.

Joe Coto understands that schools are integrally woven into the tapestry of their communities and cannot be successful without the support of the residents and of the business community. In addition to his commitment to excellence in education, Mr. Coto has continued to serve the community by serving as Chair of the Mexican Plaza Cultural Arts Center in San Jose and as President of the Latino Democratic Forum. He has served on the boards of Joint Venture Silicon Valley and on the Catholic Council to investigate abuse within the Roman Catholic Church.

A healthy community is one that builds on the strengths of all its residents. Joe Coto has demonstrated through a life of service and commitment, that he will empower and defend the people to maintain the building blocks of a strong and healthy community; jobs, quality education and affordable housing.

Joe and his wife Camille, have been married for 33 years and have 2 daughters.

Joe Coto es un educador cuyo compromiso primario siempre ha estado al adelantamiento de todos estudiantes y sus familias. El ha gastado la mitad de su vida profesional como supervisor de escuelas en dos de California Septentrional LA MAYORIA de LOS ditricks DESAFIANTES, Oakland Unificó el Distrito de la Escuela y el Distrito Oriental de la Preparatoria de la Unión del Lado en San Jose. En el reconocimiento de sus contribuciones como supervisor del Distrito Oriental de la Preparatoria de la Unión del Lado, la Asociación de Administradores de Escuela de California (ACSA) le denominó el 2003 “Supervisor del Año”.

Joe Coto empezó su carrera como un maestro en el Oakland Unificó el Distrito de la Escuela donde él experimentó entrega primero la influencia de la política pública en la educación. Después que servir en el ayuntamiento de Oakland, él fue pedido llenar la posición de Supervisor del Oakland Unificó el Distrito de la Escuela. En 1998 él aceptó la posición de Supervisor del Distrito Oriental de la Preparatoria de la Unión del Lado en San Jose.

Durante su catorce ocupación de año como Supervisor, Sr. Coto utilizó su liderazgo y la experiencia para hacer a mano las políticas que alcanzaron más allá del Distrito Oriental de la Preparatoria de la Unión del Lado. Coto organizó el Consorcio Oriental del Lado de los distritos que llevaron a la aprobación de SB 1051, el Programa Voluntario de la Integración. Desde que su principio, el programa ha traído \$80 millones para participar los distritos y contribuido a la diversidad y la integración aumentadas en el Este San escuelas de Jose. Durante su ocupación en el Distrito Oriental de la Preparatoria de la Unión del Lado, Sr. Coto era capaz de traer casi medios un billones de dólares en dinero de beca y mejora vinculan el Este San Jose.

Joe Coto entiende que las escuelas se tejen integradamente en el tapiz de sus comunidades y no pueden tener éxito sin el apoyo de los residentes y de las esferas empresariales. Además de su compromiso a la excelencia en la educación, Sr. Coto ha continuado servir la comunidad sirviendo como Silla de la Plaza mexicana las Artes Culturales Centran en San Jose y como Presidente del Foro demócrata latina. El ha servido en las tablas de Silicon Valley de Empresa Conjunta y en el Concilio católico investigar el abuso dentro de la Iglesia Católica romana.

Una comunidad de la salud es uno que construye en las fuerzas de todos sus residentes. Joe Coto ha demostrado por una vida del servicio y el compromiso, que él autorizará y defenderá a las personas para mantener los componentes de una comunidad fuerte y sana; los trabajos, la educación de la calidad y la vivienda razonable.

Joe y su esposa Camille, se han casado durante 33 años y tienen a 2 hijas.

SENATOR RICHARD ALARCÓN  
20<sup>th</sup> District - Los Angeles



The Majority Whip of the California State Senate, Senator Richard Alarcón is a former teacher, community activist, and a champion for working families. In 1993, Richard Alarcón was elected to serve on the Los Angeles City Council representing the residents of the Northeast San Fernando Valley in the 7<sup>th</sup> District. Five years later, in 1998, he was elected to the California State Senate. Today, he is serving his second term in the State Senate representing nearly 1 million residents of the 20<sup>th</sup> Senate District in the heart of the San Fernando Valley.

In the Senate, he led the effort to obtain more than \$200 million in state funds to help recruit, train, and credential more than five thousand new public school teachers. He is a supporter of class-size reduction and is working to continue to improve the system. He also strongly supports modernization of our schools. Senator Alarcón obtained \$50 million to fix and expand 300 health clinics for low-income patients across our state. He convinced the Governor and the Legislature to allocate \$550 million for affordable housing programs and created the Cal Home program.

As Chairman of the Senate Committee on Labor and Industrial Relations he passed legislation to increase unemployment benefits in California - which had previously been among the lowest in the Nation. He successfully pushed for the creation of the Senate Select Committee on the Status of Ending Poverty in California to bring together a diverse group of Senators to create a master plan that will focus on addressing the severe poverty which millions of Californians face each and every day.

Education, community, health, safety, labor, poverty - these are the issues important to California's working families. And these are the issues Senator Richard Alarcón is working hard to improve.

\*\*\*\*\*

El Jefe Disciplinario de la Mayoría del Senado Estatal de California, el Senador Richard Alarcón es un antiguo profesor, activista de la comunidad y un defensor de las familias trabajadoras. En 1993, Richard Alarcón fue elegido para servir en el Gobierno Municipal de Los Ángeles representando a los residentes del Noroeste del Valle de San Fernando en el Distrito 7. Cinco años más tarde, en 1998, fue elegido al Senado Estatal de California. Hoy día, está sirviendo su segundo término en el Senado Estatal representando a casi a un millón de residentes del Distrito 20 del Senado en el corazón del Valle de San Fernando.

En el Senado, él condujo el esfuerzo para obtener más de \$200 millones en fondos estatales para ayudar a emplear, entrenar y permitir a más de cinco mil nuevos profesores de la escuela pública. Él es un partidario de la reducción de estudiantes en los salones de clases y está trabajando para continuar mejorando el sistema. Él también apoya enérgicamente la modernización de nuestras escuelas. El Senador Alarcón obtuvo \$50 millones para arreglar y ampliar 300 clínicas de salud para los pacientes de bajo ingreso por todo nuestro estado. Convenció al Gobernador y a la Legislatura asignar 550 millones para programas de viviendas económicas y creó el programa Cal Home.

Como Presidente del Comité del Senado sobre Trabajo y Relaciones Industriales él aprobó la legislación para aumentar los beneficios de desempleo en California - que previamente había estado entre los más bajos en la Nación. Con éxito insistió en la creación del Comité Selecto del Senado sobre el Estado para Terminar la Pobreza en California juntando a un grupo diverso de Senadores para crear un plan maestro que se concentrará en enfocar la pobreza severa que millones de Californianos afrontan todo y cada día.

Educación, comunidad, salud, seguridad, trabajo, pobreza - estos son los asuntos importantes para las familias trabajadoras en California. Y estos son los asuntos que el Senador Richard Alarcón está trabajando duro para mejorar.

SENATOR GILBERT CEDILLO  
22<sup>nd</sup> District – Los Angeles



Gilbert Cedillo was elected, unopposed, to the Senate in 2002. He is a member of the Senate Rules, Joint Legislative Audit, Public Safety, Revenue and Taxation, Transportation & Housing, and Judiciary Committees.

First elected to represent the 46<sup>th</sup> Assembly District in 1998, Gilbert Cedillo has emerged as a dedicated champion for California's working poor and disenfranchised communities. He has become a statewide leader for increasing and expanding access to health care, protecting the rights of working men and women, assimilating immigrants into California's social and economic fabric, and providing new economic development opportunities throughout the state and in his downtown Los Angeles District. While in the Assembly, Cedillo authored legislation to provide Filipino WWII Veterans with state assistance, develop the "Downtown Rebound" program to provide funding for housing opportunities in urban areas, protect state workers' rights by prohibiting the use of state money to discourage unionization, worked on legislation to prevent the abuse of elderly and dependent adults, and advocated for the conversion of a former Catholic Cathedral into a community and regional performing arts center.

In the Senate, Cedillo has been instrumental in providing leadership to address the current health care crisis in California. As Chair of the Budget Subcommittee on Health & Human Services, he expanded the Medi-Cal and Healthy Families programs and simplified the eligibility process. In addition, Gilbert has secured \$50 million for community clinic grants as well as additional state money for the California Cancer Registry. Most recently, he authored legislation to crack down on abusive tax shelters which generated \$1 billion for the state budget. Gilbert is also authoring legislation that will allow immigrants to apply for California driver's licenses. In sponsoring this public safety measure, he has created a diverse coalition of support.

Gilbert Cedillo grew up in Boyle Heights and is a lifelong resident of the 22<sup>nd</sup> Senatorial District. He attended local schools, graduated from UCLA and received his law degree from People's College of Law.

\*\*\*\*\*

Gilbert Cedillo fue elegido, sin oposición al Senado en el 2002. Es un miembro de de los Comités de Reglas del Senado, Auditoría Legislativa Unida, Seguridad Pública, Ingresos y Contribución de Impuestos, Transporte y Vivienda y Judicatura.

Elegido primero para representar al Distrito 46 de la Asamblea en 1998, Gilbert Cedillo ha emergido como un defensor dedicado para las personas trabajadores de California y comunidades privadas de derechos civiles. Él se convirtió en un líder estatal para aumentar y ampliar el acceso al cuidado médico, protegiendo los derechos de mujeres y hombres trabajadores, integrando inmigrantes dentro de la fábrica social y económica de California, y proporcionando nuevas oportunidades de desarrollo económico por todo el estado y en su centro del Distrito de Los Ángeles. Mientras se encuentra en la Asamblea, Cedillo creó la legislación para proveer a los Veteranos Filipinos de la II Guerra Mundial con asistencia del estado, desarrolla el programa de "Recuperación del Centro" para proporcionar financiamiento para las oportunidades de vivienda en áreas urbanas, proteger los derechos de los trabajadores estatales prohibiendo el uso del dinero estatal para desalentar la sindicalización, trabajó en la legislación para prevenir el abuso de los ancianos y de los adultos dependientes, y defender por la conversión de una antigua Catedral Católica en una comunidad y un centro regional de artes interpretativas.

En el Senado, Cedillo ha sido el instrumento para proporcionar el liderazgo para enfocar la crisis actual del cuidado médico en California. Como Presidente del Subcomité de Presupuesto sobre Salud y Servicios Humanos, él amplió los programas de Medical y Familias Saludables y simplificó el proceso de elegibilidad. Además, Gilbert ha asegurado los \$50 millones para las subvenciones de la clínica comunitaria así como también dinero adicional del estado para el Registro de Cáncer en California. Más recientemente, él creó la legislación para tomar medidas enérgicas contra los refugios de impuestos abusivos que generaron 1,000 millones para el presupuesto. Gilbert también está creando una legislación que permitirá a los inmigrantes aplicar por licencias de conducir en California. Patrocinando esta medida pública de seguridad, él ha creado una coalición diversa de apoyo.

Gilbert Cedillo, creció en Boyle Heights y es un residente de toda la vida del Distrito 22 del Senado. Asistió a las escuelas locales, graduado de UCLA y recibió su título de derecho de People's College of Law.

SENATOR DENISE MORENO DUCHENY  
40<sup>th</sup> District – San Diego



Denise Moreno Ducheny was elected to the California State Senate in November, 2002. She is Chair of the Senate Budget Subcommittee on Health & Human Services and serves on the Senate Committees on Agriculture, Budget & Fiscal Review, Transportation & Housing, and Government Modernization & Constitutional Amendments. She also Chairs the Senate Select Committees on California-Mexico Cooperation, and the Colorado River and serves on the Select Committees on California's Horse Racing Industry, Defense & Aerospace, Global Environment, and Mobile & Manufactured Homes. She is also a member of the Joint Legislative Budget Committee. Senator Ducheny served as Chair of the Senate Committee on Housing & Community Development from 2002-2004.

Prior to her election to the California State Senate, Senator Ducheny served in the State Assembly from 1994 - 2000. There, she served as Chair of the Assembly Budget Committee from 1997 - 2000, and as Vice Chair in 1996. She was the first Latina appointed to the post. She also served as Chair of the Select Committee on California-Mexico Affairs, as Co-Chair of the Special Committee on Welfare Reform, as Vice-Chair of the Joint Legislative Budget Committee, and as Vice-Chair of the Latino Legislative Caucus. While in the Assembly, Senator Ducheny authored landmark legislation including the CalWORKS Welfare Reform Act of 1997, the Reverse Mortgage bill, the CA Public School Library Act, the California development certificate to teach K-12 students, and legislation which enabled local government to rehabilitate vacant dwellings to improve the quality of life in their communities.

As a legislator in both houses, Senator Ducheny has worked diligently to improve California's bi-national relationship with the Republic of Mexico, including establishment of a permanent Office of Binational Border Health. She also spearheaded organization of the Border Legislative Forum, comprised of legislators from the ten U.S.-Mexico Border states, and the Legislative Forum of the Three Californias.

Denise Moreno Ducheny has been married to Al Ducheny, a political consultant and community activist in San Diego, since 1980.

\*\*\*\*\*

Denise Moreno Ducheny fue elegida al Senado Estatal de California en Noviembre del 2002. Ella es Presidenta del Subcomité de Presupuesto sobre Salud y Servicios Humanos del Senado y sirve en los Comités sobre Agricultura, Presupuesto y Revisión Fiscal, Transportación y Vivienda, y Enmiendas Constitucionales y Modernización del Gobierno. Ella también es Presidenta de los Comités Selectos del Senado sobre la Cooperación California-Méjico y el Río Colorado y sirve en los Comités Selecto sobre la Industria de Carreras de Caballos de California, Defensa y Aeroespacial, Medio Ambiente Global, y Hogares Móviles y Fabricados. Ella también es un miembro del Comité Unido del Presupuesto Legislativo. La Senadora Ducheny sirvió como Presidenta del Comité del Senado sobre Vivienda y Desarrollo Comunitario desde el 2002 al 2004.

Antes de su elección al Senado Estatal de California, la Senadora Ducheny sirvió en la Asamblea del Estado desde 1994 hasta el 2000. Allí sirvió como Presidenta del Comité de Presupuesto de la Asamblea desde 1997 – 2000, y como Vicepresidenta en 1996. Ella fue la primera Latina nombrada al puesto. Ella también sirvió como Presidenta del Comité Selecto sobre los Asuntos California-Méjico, como Copresidenta del Comité Especial sobre Reforma de Bienestar, como Vicepresidenta del Comité Unido del Presupuesto Legislativo, y como Vicepresidenta de la Camarilla Política Legislativa Latina. Mientras se encontraba en la Asamblea, la Senadora Ducheny creó la legislación importante que incluye el Acta de 1997 de Reforma de Bienestar Cal Works, el proyecto de ley de Reponer la Hipoteca, el Acta de Biblioteca Escolar Pública de California, certificado de desarrollo de California para enseñar a los estudiantes del K al 12, y la legislación que permite al gobierno local rehabilitar las vivienda vacantes para mejorar la calidad de vida en sus comunidades.

Como una legisladora en ambas cámara, la Senadora Ducheny ha trabajado diligentemente para mejorar la relación binacional de California con la República de México, incluyendo el establecimiento de una Oficina permanente de la Salud Binacional de la Frontera. Ella encabeza también la organización del Foro Legislativo en la Frontera, compuesta de Legisladores de los diez estados de la Frontera EU.-Méjico, y el Foro Legislativo de las Tres Californianas.

Dense Moreno Ducheny ha estado casado con Al Ducheny, un consultante político y activista comunitario en San Diego desde 1980.



SENATOR LIZ FIGUEROA  
10th District – Sunol



Liz Figueroa was elected to the California State Senate as a Democrat from the 10<sup>th</sup> District (Alameda and Santa Clara Counties) in 1998 and re-elected in 2002. Prior to her election to the State Senate, she served two terms in the California State Assembly from 1994-1998. Senator Figueroa is dedicated to improving access to and the quality of health care, while protecting citizens and their privacy.

Senator Figueroa has worked on landmark legislation in California and Washington D.C., that provides a two-day hospital stay for mothers and their newborns. She helped implement California's Healthy Families Program, and has been a leader in the fight to reform managed health care in California, authoring legislation giving patients the right to sue their HMO. Figueroa has been a leader in protecting consumers' privacy and helping victims of identity theft. Her Medical Records Privacy Act made California the nation's leader in guaranteeing that a patient's medical records are confidential. Her SB 27 opened up the multi-billion dollar business of buying and trading customer lists for direct marketing purposes. She authored two first-in-the-nation measures allowing Californians to obtain free credit reports, and imposing fines on credit bureaus that fail to place consumer-requested security alerts on credit reports. Her SB 771 created the "Do Not Call List" in California, prompting enactment of a national "Do Not Call" program.

Other significant efforts include work on behalf of women and human rights. She has spearheaded action on issues such as outlawing female genital mutilation, banning California's use of products made by slave labor, prohibiting insurance companies from discriminating against victims of domestic violence, and fast-tracking restraining orders for domestic violence victims. Figueroa worked tirelessly to secure funding for domestic violence shelters and restitution for victims of domestic violence.

Senator Figueroa serves as chair of the Government Modernization, Efficiency, & Accountability Committee, the Joint Committee on Boards, Commissions, & Consumer Protection, the Senate Committee on Business, Professions, & Economic Development and the Subcommittee on International Trade Policy & State Legislation. She is a member of the Senate Committees on Judiciary, Health, Banking, Finance & Insurance, Environmental Quality, and Labor & Industrial Relations. The Senator was born and raised in the San Francisco Bay Area and was the first Northern California Latina to be elected to the Legislature. Both of her parents are from El Salvador. She is the mother of AnaLisa Luippold and Aaron Bloom and the grandmother of Andrew and Cameron.

\*\*\*\*\*  
Liz Figueroa fue elegida al Senado estatal del Distrito 10 en 1998 y fue reelegida en 2002. Antes de su elección al Senado, sirvió dos términos en la Asamblea estatal de 1994-1998. Entre las prioridades de la Senadora Figueroa esta el mejoramiento al acceso y la calidad de asistencia médica, y proteger la privacidad de la población.

La Senadora Figueroa ha luchado para sacar adelante legislación clave en California y Washington D.C. que proporciona que madres y su recién nacido permanezcan al menos dos días en el hospital después de dar a luz. Ella ayudó a implementar el programa de *Healthy Families*, y ha sido un líder para reformar el cuidado médico de los *HMO's* y paso legislación dándole el derecho a los pacientes de demandar su Seguro Medico. Figueroa ha sido líder en proteger la privacidad de los consumidores y a las víctimas del robo de identidad. Su *Medical Records Privacy Act* hizo a California un líder de la nación en garantizar que los registros médicos del paciente sean confidenciales. También es autora de dos propuestas, primeras en la nación, permitiendo que los californianos obtengan informes gratuitos de su historial de crédito, e impuso multas en las oficinas de crédito que fallan en colocar alarmas de seguridad para el consumidor. Su SB 771 creó el "Do Not Call List" en California, incitando la promulgación del programa nacional "Do Not Call."

Otros esfuerzos significativos incluyen su trabajo a favor de mujeres y derechos humanos. Ella ha luchado para prohibir la mutilación genital femenina; prohibiendo el uso en California de productos hechos por mano de obra barata, y prohibiendo que las compañías de seguros discriminen en contra de víctimas de la violencia doméstica. Figueroa trabajó para asegurar el financiamiento de refugios y restitución para víctimas de la violencia doméstica.

La Senadora Figueroa sirve como Presidente del Comité sobre la Modernización, Eficiencia y Contabilidad del Gobierno; del Comité bicameral de Comisiones y Protección del Consumidor; el Comité de Negocios, las Profesiones, y el Desarrollo Económico y la Subcomisión de Comercio Internacional. Además, es miembro de los Comités del Senado en La Salud, Las Finanzas & el Seguro, la Calidad Ambiental, y Partido Laborista & las Relaciones Industriales. La Senadora Figueroa nació en San Francisco de padres salvadoreños. Figueroa es madre de AnaLisa Luippold y Aaron Florece y abuela de Andrew y Cameron.

SENATOR DEAN FLOREZ  
16th District - Shafter



Senator Dean Florez grew up in the heart of the Central Valley and began representing the Valley as a legislator in 1998. As a freshman Assemblyman, Florez passed landmark legislation requiring seatbelts and latched toolboxes on farm labor vehicles. He then went on to outlaw all wooden benches on farm labor vans. These efforts led to an enormous reduction in traffic deaths in the Valley that for too long had become associated with the harvest season.

In his first year in the California State Senate, Florez tackled the Valley's air pollution crisis. After taking on many powerful interests he won historic victories for asthmatic children and families throughout the Central Valley, with five new laws aimed at cleaning the air we breathe.

Florez is Chair of the Senate Governmental Organization Committee which has oversight of gaming, emergencies and disaster response, alcoholic beverages, the use of state-controlled lands and buildings, bonds, and other government services. Under the jurisdiction of the committee, Florez has already held hearings on gaming compacts, the state lottery and on how they are expected to impact local communities and the state's budget.

Florez began his political life working in the Legislature as a Senate Fellow and later as a fiscal consultant to the Senate Budget Committee. After attending Bakersfield College, Florez earned his bachelors degree in political science from the University of California at Los Angeles, where he served as student body president. He went on to receive his MBA from Harvard Business School. Florez lives in Shafter with his wife, Elsa, and their daughter Faith and son Sean.

\*\*\*\*\*

El Senador Dean Florez creció en el centro del Valle Central. En la sesión legislativa más reciente, Florez enfocó sus energías para encontrar soluciones laborables para la crisis de la contaminación del aire del Valle y fue premiado con una victoria histórica para los defensores de la salud pública y el aire puro, conforme el Gobernador Davis firmó en ley cinco medidas de Florez que toma un primer paso dramático hacia el aire más puro. Como el actual Presidente del Comité Selecto del Senado sobre la Calidad del Aire en el Valle Central, Florez tiene la intención de continuar trabajando en la legislación de sentido común que enfoca las varias causas de la contaminación del aire en el Valle, incluyendo desarrollos comerciales más grandes y locomotoras diesel.

La última Sesión, Florez pidió una revisión del registro de delincuentes sexuales del estado después que los medios publicitarios reportaron que tanto como 33,000 delincuentes requieren tener sus paraderos colocados en la base de datos de la Ley de Megan no estuvieron contados.

Flores actualmente Preside el Comité del Senado sobre la Banca, Comercio y Comercio Internacional, que ha explorado tales asuntos como la prioridad de compras federales de las leyes bancarias del estado, la realización del programa de Empresa Comercial de Veteranos Minusválidos del estado, y ha propuesto reglas federales que habrían permitido la formación de conglomerados de un promedio aún más grandes. Florez está sirviendo su primer término en el Senado del Estado, después de dos términos exitosos en la Asamblea. Mientras se encontraba en la Asamblea, Florez presentó la legislación para proporcionar un medio seguro del transporte para los campesinos, y la legislación aprobada para ordenar los cinturones de seguridad y las cajas de herramientas cerradas en los vehículos de trabajo en el campo, y declaró fuera de la ley reemplazar sitios instalados de fabricantes en bancos paralelos para aumentar el número de asientos.

Florez comenzó su vida política trabajando en la Legislatura como un consultante para el Comité de Presupuesto del Senado. Después de asistir al College de Bakersfield, él ganó su Grado de Bachillerato en Ciencias Políticas de UCLA, donde sirvió como presidente del cuerpo estudiantil. También recibió su MBA de la Escuela de Negocios de Harvard. Florez vive en Shafter con su esposa Elsa, y su hija Faith e hijo Sean.

SENATOR DEBORAH ORTIZ  
6<sup>th</sup> District – Sacramento



Deborah V. Ortiz was elected to the 6<sup>th</sup> Senate District in November of 1998 and re-elected in 2002. She is the Chair of the Senate Health Committee and also Chairs the Subcommittee on Stem Cell Research & Oversight, the Subcommittee on Medicine & Health Care, and the Select Committee on Capital Area Flood Protection. Senator Ortiz is a member of the Banking, Finance & Insurance, Appropriations, Joint Legislative Audit, and Joint Rules Committees.

Senator Ortiz is the author of the nationally recognized law protecting stem cell research in California and is also responsible for the state's landmark program guaranteeing college scholarships, Cal Grants, to students with good grades and financial need. Her work on childhood obesity prevention is seen as the model for the rest of the Nation.

An outspoken advocate for those facing catastrophic illness - as well as their families and caregivers - Senator Ortiz wrote legislation directing millions of dollars into ovarian, breast and prostate cancer research and awareness programs. She is currently authoring a bill to create a biomonitoring program to expand the limited research into human environmental exposures.

One of Senator Ortiz's legislative highlights is the Michelle Montoya School Safety Act, which prohibits schools from hiring anyone convicted of a serious or violent felony and requires criminal background checks to be completed before employees are hired. She continues to lead the effort to improve the State's low-performing schools, establish statewide universal pre-kindergarten programs, and expand successful after-school programs.

Born and raised in Sacramento, Senator Ortiz attended the University of California at Davis and graduated from McGeorge School of the Law.

\*\*\*\*\*

Deborah V. Ortiz fue elegido al Distrito 6 del Senado en Noviembre de 1998 y vuelta a elegir en el 2002. Ella es la Presidenta del Comité de Salud del Senado y también Preside el Subcomité sobre Investigación y Supervisión de las Células Madres, el Subcomité sobre Cuidado Médico y Medicina, y el Comité Selecto sobre Protección de la Inundación del Área Capital. La Senadora Ortiz es miembro de la Banca, Finanzas y Seguro, Asignaciones, Auditoria Conjunta Legislativa y Comités de Reglas Unidas.

La Senadora Ortiz es la autora de la ley nacionalmente reconocida que protege la investigación en California y es también responsable del programa histórico del estado que garantiza becas del colegio preparatorio para la universidad, Cal Grants, a estudiantes con buenas notas y necesidad financiera. Su trabajo sobre la prevención de obesidad en la niñez es visto como el modelo para el resto de la Nación.

Una defensora franca para aquellos que enfrentan enfermedades catastróficas – así como también sus familias y cuidadores – la Senadora Ortiz ha escrito una legislación dirigida a millones de dólares para programas de investigación y percepción de cáncer ovárico, seno, y próstata. Actualmente ella es creadora de un proyecto de ley para crear un programa de biomonitorización para ampliar la investigación limitada en las exposiciones humanas al medio ambiente.

Uno de los puntos legislativos más destacados es el Acta de Seguridad Escolar Michelle Montoya que prohíbe a las escuelas que empleen a cualquier convicto de una felonía violenta o seria y requiere una verificación de los antecedentes criminales que sean completados antes que los empleados sean contratados. Ella continúa conduciendo los esfuerzos para mejorar el bajo desempeño de las escuelas en el Estado, establece programas estatales universales antes de kindergarten, y amplía los programas exitosos después de la escuela.

Nació y se crió en Sacramento, la Senadora Ortiz asistió a la Universidad de California en Davis y es graduada de la Escuela de Derecho McGeorge.

SENATOR GLORIA ROMERO  
24<sup>th</sup> District – Los Angeles



As Senate Majority Leader, Senator Gloria Romero is the highest ranking woman in the California Legislature, and is the first woman to hold this leadership position. She is a legislator, an educator, a dedicated social activist, an aggressive prison reformer, and a forceful advocate for California's most disadvantaged citizens.

She currently serves on the Senate Committees on Budget & Fiscal Review, Education, Public Safety, Elections, Reapportionment & Constitutional Amendments, and Natural Resources & Water. One of her most crucial committee assignments is that of Chair of the Select Committee on the California Correctional System where she has taken on the formidable task of investigating and authoring reforms for the state's massive array of youth and adult correctional facilities. She has conducted hearings on employee contracts, treatment of juveniles, codes of silence among correctional officers, and inmate health care costs in her effort to bring fiscal accountability and reforms to the system.

Senator Romero was first elected to the State Assembly in 1998 and then to the Senate in a special election in March, 2001. In the Assembly, she was appointed Majority Whip during her first term in office. Senator Romero has taught at every level of the State's university system. She has received numerous awards from various faculty organizations, student associations, consumer groups, union locals, and law enforcement associations.

Senator Romero is a graduate of Barstow Community College and California State University Long Beach. She earned her Ph.D. in psychology from the University of California at Riverside. Senator Romero has one daughter who is attending UC Santa Barbara.

\*\*\*\*\*

Como Líder de la Mayoría del Senado, la Senadora Gloria Romero es la mujer de más alto rango en la Legislatura de California, y es la primera mujer en sostener la posición de liderazgo. Ella es una legisladora, una educadora, y una dedicada activista social, una reformadora agresiva de la prisión, y una defensora con carácter fuerte para los ciudadanos más perjudicados de California.

Actualmente sirve en los Comités del Senado sobre Presupuesto y Revisión Fiscal, Educación, Seguridad Pública, Elección, Repartición de Distritos Electorales y Enmiendas Constitucionales, Recursos Naturales y Agua. En una de sus asignaturas más cruciales del comité es esa de Presidenta del Comité Selecto sobre el Sistema Correccional de California donde ella ha tomado la tarea formidable de investigar y crear reformas para el despliegue masivo de las facilidades correccionales para adultos y jóvenes del estado. Ella ha conducido audiencias sobre contratos de empleados, tratamiento de menores, códigos de silencio entre los oficiales correccionales, y costos de cuidado médico para los presos en su esfuerzo de traer la responsabilidad fiscal y reformas al sistema.

La Senadora Romero fue elegida primero a la Asamblea del Estado en 1998 y después al Senado en una elección especial en Marzo del 2001. En la Asamblea, ella fue nombrada a Jefa Disciplinaria de la Mayoría durante su primer término en función. La Senadora Romero ha enseñado en todo nivel del sistema universitario del Estado. Ella ha recibido numerosos premios de varias organizaciones de la facultad, asociaciones estudiantiles, grupos del consumidor, uniones locales y las asociaciones de policía.

La Senadora Romero es una graduada del Colegio Comunitario Barstow y la Universidad del Estado de California, Long Beach. Ella obtuvo su Doctorado en psicología de la Universidad de California en Riverside. La Senadora Romero tiene una hija que está asistiendo a la Universidad de California, Santa Bárbara.

SENATOR NELL SOTO  
32<sup>nd</sup> District – Pomona



Nell Soto has devoted much of her adult life to community and public service. A sixth-generation resident of Pomona, she was elected to the State Senate in a special election in March of 2000, and then re-elected to a final four-year term in November of 2002.

In the Senate, Soto's focus is on issues that most directly improve the lives of her constituents. Her legislative priorities include such issues as education, child safety, health care, and infrastructure. Soto is constantly working to create high-paying jobs, and ensuring that communities are safe from crime and violence. Senator Soto is Chair of the Senate Public Employment & Retirement Committee. In addition, she serves on the Senate Transportation & Housing, Local Government, Governmental Organization, and Veteran's Affairs Committees. She also serves as Chair of the Select Committee on Urban Economic Development, and the Select Committee on Perchlorate Contamination. In June of 2002, Soto formed the Inland Empire Perchlorate Task Force to investigate the spread to the toxic contaminant in the region's water supply.

Prior to her arrival in the State Senate, Soto served as the Assemblywoman for the 61<sup>st</sup> Assembly District. In the Assembly, Soto authored several pieces of legislation such as Safe Routes to School, the Parental Involvement Act, Education Technology, and HMO reform. Soto also spearheaded the Select Committee on the Alameda Corridor East, a rail corridor project spanning from Long Beach to San Bernardino County. She worked to secure over \$5 million from the state budget for various parks and community centers throughout the cities in her Assembly District.

With her election to the Assembly in 1998, Soto became the first woman elected to represent the Inland Empire in the Legislature. She is the mother of six, grandmother of eleven, and great-grandmother of three. Her late husband, Philip, served two terms in the State Assembly from 1962 - 1966.

\*\*\*\*\*

Nell Soto se ha dedicado mucha de su vida adulta a al servicio público y la comunidad. Una residente de la sexta generación de Pomona, fue elegida al Senado del Estado en una elección especial en Marzo del 2000 y después vuelta a elegir para un término final de cuatro años en Noviembre del 2002.

En el Senado, la Senadora Soto se concentra en asuntos que más directamente mejoran las vidas de sus constituyentes. Sus prioridades legislativas incluyen tales asuntos como educación, seguridad al niño, cuidado médico e infraestructura. La Senadora Soto constantemente está trabajando para crear sueldos más altos, y asegurando que las comunidades sean seguras de crímenes y violencia. La Senadora Soto es la Presidenta del Comité de Jubilación y Empleos Públicos. Además, ella sirve en el Comité de Transporte y Vivienda del Senado, Gobierno Local, Organización Gubernamental, y Comités de Asuntos para los Veteranos. También sirve como Presidenta del Comité Selecto sobre Desarrollo Económico Urbano, y el Comité Selecto sobre Contaminación del Perclorato. En Junio del 2002, Soto formó el Destacamento de Fuerzas del Perclorato de Inland Empire para investigar la extensión del contaminante tóxico en el abastecimiento de agua de la región.

Antes de su llegado al Senado del Estado, Soto sirvió como Asambleísta para el Distrito 61 de la Asamblea. En la Asamblea, Soto creó varias piezas de legislación tales como Rutas Seguras a las Escuelas, el Acta de Participación de los Padres, Educación y Tecnología y reforma de HMO. Soto también encabezó el Comité Selecto sobre el Corredor Este de Alameda, y el proyecto ferroviario que atraviesa de Long Beach al Condado de San Bernardino. Ella trabajó para asegurar más de 5 millones de dólares del presupuesto estatal para varios centros comunitarios y parques en todas las ciudades en su Distrito de la Asamblea.

Con su elección a la Asamblea en 1998, Soto se convirtió en la primera mujer elegida para representar el Inland Empire en la Legislatura. Ella es madre de seis, abuela de once, y bisabuela de tres. Su difunto esposo, Philip, sirvió dos términos en la Asamblea del Estado desde 1962 a 1966.

ASSEMBLY MEMBER JUAN ARAMBULA  
31<sup>st</sup> District – Fresno



Assembly Member Juan Arambula was elected to the State Assembly in November of 2004. Arambula is Chair of the Jobs, Economic Development & the Economy Committee and is a member of the Assembly Budget, Budget Subcommittee No. 4 – State Administration, Education, and Human Services Committees.

Prior to his election to the Assembly, Arambula served as a member of the Fresno County Board of Supervisors from 1997 to November 2004, where he worked to diversify the Central Valley’s economy and create jobs, improve access to quality health care, and reduce youth violence.

From 1987 to 1996, he served two terms on the Fresno Unified School Board, where he worked to meet the needs of a diverse student population while maintaining financial stability during lean budget years. He also served as president of the Fresno County Trustees Association, and as a member of the Board of Directors of the California School Boards Association and the California State Association of Counties.

Arambula graduated with honors from Harvard University, earning a B.A. degree in Comparative Literature in 1975. In 1978, he earned a Master’s Degree in Educational Administration and Policy Analysis from Stanford University. In 1981, he earned his law degree from Boalt Hall School of Law at the University of California, Berkeley.

Arambula is the son of immigrant farm workers and the fifth of seven children.

\*\*\*\*\*

El asambleísta Juan Arambula fue elegido a la asamblea estatal en noviembre de 2004. Arambula es presidente del comité de Trabajos, Desarrollo Económico y la Economía y es miembro de los comités Presupuesto, subcomité No. 4- Administración del Estado, Educación, y Servicios Humanos.

Antes de su elección a la asamblea, Arambula sirvió como miembro de la junta de supervisores del condado de Fresno de 1997 a noviembre de 2004, donde luchó para diversificar la economía del Valle Central y crear fuentes de trabajos, mejorar la calidad y el acceso al cuidado médico, y reducir la violencia juvenil.

De 1987 a 1996, sirvió en la mesa directiva escolar de Fresno donde luchó para resolver las necesidades de una población diversa estudiantil mientras mantenía la estabilidad financiera durante años de presupuesto limitado. También sirvió como presidente de la asociación de los administradores del condado de Fresno, y fue miembro de la junta directiva escolar de California y la asociación de condados del estado de California.

En 1975 Arambula se graduó con honores de la universidad de Harvard con su licenciatura en literatura comparativa. En 1978, Arambula terminó su maestría en administración y análisis político de la universidad de Stanford. En 1981, Arambula completó sus estudios en la facultad de derecho en la Universidad de California, Berkeley.

Arambula es el quinto de siete hijos de padres inmigrantes agricultores.

ASSEMBLY MEMBER JOE BACA, JR.  
62<sup>nd</sup> District – Rialto



Assemblyman Joe Baca was elected to the State Assembly in November of 2004. Among his highest legislative priorities are education, health care, safe drinking water, public safety, economic development, transportation, and improving the overall quality of life of his constituents.

He currently Chairs the Assembly Select Committee on Perchlorate Contamination and serves on the Assembly Rules Committee as well as the Assembly Jobs & Economic Development, Housing & Community Development, Utilities & Commerce, and Water, Parks & Wildlife Committees.

Assemblyman Baca has a deep commitment to improving opportunities for youth. In 2002, Assemblyman Baca established an annual free baseball clinic for local youth, exposing them to recreational opportunities available in the community. He is also a volunteer member of the San Bernardino Youth Accountability Board to help keep at-risk youth from getting into crime.

Assemblyman Baca has a long record of public service in the Inland Empire. After completing college, he became a correctional officer for the California Department of Corrections and went on to work as a probation officer, hoping to influence young people who were starting to get into trouble as juveniles. He decided that helping young people get a good education was the best way to give them options and keep them out of trouble and so subsequently he taught students at Inland Empire Area schools including Rialto High School.

Assemblyman Joe Baca, Jr., was born in Barstow and graduated from Eisenhower High School in Rialto. He earned an A.A. degree from San Bernardino Valley College and a B.S. degree from Cal State San Bernardino. He also earned a Master's Degree in Public Administration from Cal State San Bernardino. Assemblyman Baca and his wife, Jennifer, live in Rialto. He has one daughter, Kaylie, age 13.

\*\*\*\*\*

El asambleísta Joe Baca fue elegido a la asamblea estatal en noviembre de 2004. Entre sus prioridades legislativas están la educación, el cuidado médico, el agua potable, la seguridad pública, el desarrollo económico, el transporte, y mejorar la calidad de la vida total de sus constituyentes.

Baca es miembro del comité de Reglas de la Asamblea y los comités de Trabajos y Desarrollo Económico; Vivienda y Desarrollo Comunitario; Servicios Públicos y Comercio; y Agua, los Parques y la Naturaleza.

El asambleísta Baca tiene un compromiso personal de mejorar las oportunidades de la juventud. En 2002, el asambleísta Baca estableció una organización anual de béisbol para la juventud local, exponiéndolos a las oportunidades recreacionales disponibles en la comunidad. Baca también es miembro voluntario de la junta Responsabilidad Juvenil de San Bernardino para que la juventud se mantenga libre de la criminalidad y otros peligros.

El asambleísta Baca tiene una historia extensa de servicio público en el *Inland Empire*. Después de terminar la universidad, trabajó como oficial para el Departamento de Correcciones y después como oficial del departamento de libertad condicional. Allí trabajaba con el objetivo de influenciar a la juventud para que llegarán a tener una vida mejor y libre de violencia. Baca concluyó que la juventud podría salir adelante teniendo más oportunidades educativas y dándoles el apoyo necesario. A raíz, Baca decidió ser maestro en escuelas en el *Inland Empire*, incluyendo la secundaria de Rialto.

El asambleísta Joe Baca, Jr., nació en Barstow y se graduó de la escuela secundaria de Eisenhower en Rialto. Baca completo un grado de A.A. de San Bernardino Valley Collage y un B.S. de la universidad estatal de San Bernardino. Baca completo su maestría en administración pública de la universidad estatal de San Bernardino. El asambleísta y su esposa, Jennifer, residen en Rialto. El tiene una hija, Kaylie, de 13 años.

ASSEMBLY MEMBER RUDY BERMÚDEZ  
District 56 – Norwalk



For more than 20 years, Assembly Member Rudy Bermúdez has served the people of California by promoting public safety, improving education, and championing the rights of working men and women. A law enforcement officer by profession, Bermúdez was first elected to the State Assembly in November of 2002. Assembly Member Bermúdez, now in his second term in office, currently serves as Chair of the Assembly Budget Subcommittee #4 on State Administration, and on the Assembly Committees on Aging, Governmental Organization, and Water, Parks & Wildlife.

In his first term in office, Bermúdez authored and secured passage of legislation that ensured the most egregious sexual predators would never be able to practice medicine in California and legislation that allows school districts to begin implementation of full day kindergarten.

Before being elected to the State Assembly, Bermúdez was an active Council Member in the City of Norwalk, the fifteenth largest city in Los Angeles County. As a City Council Member, he worked to attract new businesses and retain existing ones, promote strong fiscal policies, eliminate the utility user tax and encourage development to strengthen the city's economy. He strengthened law enforcement by enacting community-based policing and helped enhance senior and youth community services. Before joining the Norwalk City Council, Bermúdez served eight years as a member of the Norwalk-La Mirada Board of Education.

Assembly Member Bermúdez graduated from UCLA in 1983, with a Bachelor's degree in sociology. He received a Master's degree in public administration from California State University at Long Beach. Bermúdez and his wife, Nancy, live in Norwalk and have two sons, Rudy and Nicolas.

\*\*\*\*\*

Por más de 20 años, el asambleísta Rudy Bermúdez ha servido a la gente de California promoviendo seguridad pública, mejorando la educación, y defendiendo los derechos del trabajador. Bermúdez, un policía por profesión, fue elegido a la asamblea estatal en Noviembre de 2002. Bermúdez, ahora en su segundo término en oficina, actualmente sirve como presidente del subcomité #4 de Administración del Estado, del comité del presupuesto. Además, es miembro de los comités de la asamblea sobre el Envejecimiento; Organización Gubernamental; y Agua, Parques y Naturaleza.

En su primer término, Bermúdez fue autor de la legislación que aseguró que los depredadores sexuales más notorios nunca podrán practicar como médicos en California. También fue autor de legislación que permite que los distritos escolares comiencen ofrecer *kindergarten* gratuito el día completo.

Antes de ser elegido a la asamblea, Bermúdez era concejal de la ciudad de Norwalk, la quinta ciudad más grande del condado de Los Ángeles. Como concejal, trabajó para atraer y conservar el comercio, promover un presupuesto municipal responsable, eliminar el impuesto del usuario y para mejorar el desarrollo económico de la ciudad. Bermúdez reforzó el departamento policial y exigió que la policía se involucrara más en la comunidad. Al mismo tiempo, ayudó a realzar servicios para la juventud y personas de la tercera edad. Antes de hacerse concejal de Norwalk, Bermúdez sirvió 8 años como miembro de la mesa directiva escolar del distrito unificado de Norwalk-La Mirada.

El asambleísta Bermúdez se graduó de Universidad de California Los Ángeles (UCLA) en 1983, con una licenciatura en sociología. Bermúdez completó su maestría en administración pública en la universidad estatal de Long Beach. Bermúdez y su esposa, Nancy, viven en Norwalk y tienen dos hijos, Rudy y Nicolas.



ASSEMBLY MEMBER RON CALDERÓN  
58<sup>th</sup> District – Montebello



Assemblyman Ron Calderón was elected to the State Assembly in November of 2002 and re-elected to serve his second term in November of 2004. Assemblyman Calderón was born and raised in Montebello and is a graduate of Montebello High School. He received a Bachelor of Arts degree in psychology from UCLA and attended Western State University of Law.

Along with a history of strong community involvement, Assemblyman Calderón has substantial experience in business and finance, giving him the background necessary to ensure California's economy continues to rebound. He has served as a manager in the manufacturing industry and as a mortgage banker and a real estate agent. He also owned a small financial services sales and marketing firm for several years.

Assemblyman Calderón's legislative package demonstrated his dedication to developing an honest and balanced state budget, promoting economic development through retention and growth opportunities for all businesses, strengthening state and local infrastructure, and protecting the rights of consumers.

Assemblyman Calderón served as the Assistant Majority Leader during his first term and was appointed Chair of the Banking & Finance Committee by Speaker Fabian Núñez in January of 2005.

Assembly Ronald S. Calderón lives in Montebello with Ana, his wife of 24 years, and their two children Jessica and Zachary.

\*\*\*\*\*

El asambleísta Ron Calderón fue elegido a la asamblea del estado en noviembre de 2002 y fue reelegido para servir su segundo término en noviembre de 2004. El asambleísta Calderón se graduó de la secundaria de Montebello, su ciudad natal. Recibió su licenciatura en psicología de UCLA y acudió a la universidad Western State University of Law.

Junto con un historial de participación comunitaria, el asambleísta Calderón tiene experiencia substancial en comercio y las finanzas, dándole el conocimiento necesario para asegurar que la economía de California continúe a desarrollar. Ha servido como gerente en fabricas, como un banquero de hipoteca y como agente de bienes y raíces. Calderón también inició un negocio de servicios financieros y marketing por varios años.

El paquete legislativo del asambleísta Calderón ha demostrado su dedicación para desarrollar un presupuesto de estado honesto y equilibrado, promoviendo el desarrollo económico por medio de la retención y del crecimiento del desarrollo económico para todos los negocios, consolidando la infraestructura local y estatal, y protegiendo los derechos del consumidor.

El asambleísta Calderón sirvió como el líder auxiliar de la mayoría durante su primer término y fue designado presidente del comité de finanzas y asuntos bancarios por el portavoz de la asamblea, Fabián Núñez, en enero de 2005.

El asambleísta Ronald S. Calderón vive en Montebello con su esposa de 24 años, Ana, y sus 2 hijos Jessica y Zachary.

ASSEMBLY MEMBER ED CHAVEZ  
57<sup>th</sup> District – La Puente



Assemblyman Ed Chavez was born and raised in La Puente, the youngest of seven children. His father was a steelworker at Bethlehem Steel. His mother was also a union worker, holding a job with McDonnell Douglas' Machinist Union.

He graduated from Bassett High School in 1981 and later received his A.A. degree in General Education from Rio Hondo College in 1985. He received a Bachelor of Arts degree in Political Science from UCLA in 1989 and later earned a Long Term Single Subject Credential from Claremont Graduate University and a Designated Subjects Adult Education Teaching Credential from the California State University at Los Angeles.

Assemblyman Chavez was first elected to public office in 1987, earning a seat on the Board of Education for Bassett Unified School District. In 1990, he ran for and won a seat on the La Puente City Council where he ultimately served as Mayor Pro Tem then Mayor.

In the State Assembly, his legislative priorities have focused on public safety, education, economic development, and transportation. During his first term in office he established the San Gabriel Valley Legislative Caucus, working across party lines to bring together representatives from across the San Gabriel Valley to address issues of regional concern. He continues to serve as Chair of the bicameral, bipartisan caucus.

Assemblyman Chavez currently serves as Chair of the Assembly Arts, Entertainment, Sports, Tourism & Internet Media Committee, as well as a member of the Banking & Finance, Governmental Organization, and Veteran's Affairs Committees.

\*\*\*\*\*

El asambleísta Ed Chávez nació y fue criado en La Puente, California. Es el más joven de siete hijos. Su padre era un trabajador para la compañía *Bethlehem Steel*, un fabricante de acero. Su madre trabajaba para el sindicato de maquinistas de *McDonnell Douglas*.

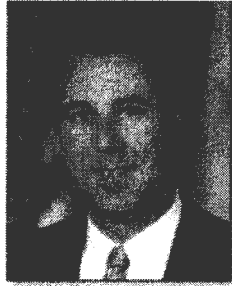
Chávez se graduó de la secundaria de Bassett en 1981 y más adelante recibió su grado de A.A. en educación general de Río Hondo College en 1985. Recibió su licenciatura en ciencia política de UCLA en 1989 y completo estudios posgrados en la Universidad de Claremont y en la Universidad Estatal de Los Angeles donde recibió sus credenciales de maestro. .

En 1987 el asambleísta Chávez fue elegido por primera vez a cargo público cuando lo eligieron miembro de la mesa directiva del Distrito Escolar Unificado de Bassett. En 1990, Chávez fue elegido como concejal de La Puente donde sirvió en última instancia como alcalde.

En la asamblea estatal, sus prioridades legislativas se han enfocado en la seguridad pública, la educación, el desarrollo económico, y el transporte. Durante su primer término Chávez estableció el comité legislativo del Valle de San Gabriel, y trabajó con ambos partidos políticos para reunir representantes a través del Valle de San Gabriel para resolver problemas regionales. Chávez continúa sirviendo como líder del comité bicameral.

El asambleísta Chávez sirve actualmente como presidente del comité asambleísta de los Artes, el Entretenimiento, los Deportes, el Turismo y los Medios del Internet. También es miembro de los comités de actividades Bancarias y las Finanzas, Organización Gubernamental, y el comité de Veteranos.

ASSEMBLY MEMBER HECTOR DE LA TORRE  
50<sup>th</sup> District – South Gate



Assembly Member Hector De La Torre was elected to the State Assembly in November of 2004. He currently serves as the Chair of the Budget Subcommittee on Health & Human Services and he serves on the Assembly Budget, Environmental Safety & Toxic Materials, Local Government, and Utilities & Commerce Committees. Additionally, he is one of two first-term members to serve on the Joint Legislative Budget Committee. He was also appointed to serve on the California Cultural and Historical Endowment.

De La Torre served nearly 8 years on the City Council of his native City of South Gate, including two years as mayor. As a city councilmember, Assembly Member De La Torre worked to enhance the quality of life in South Gate by building new parks, investing in local infrastructure, attracting economic development, and improving communications between the police and the community. In order to alleviate overcrowding, De La Torre fought for new and better school facilities.

In the Assembly, De La Torre aims to bring health care solutions to the residents of the 50<sup>th</sup> Assembly District and is honored to serve on the Select Committee on the Los Angeles Health Care Crisis. Assembly Member De La Torre majored in Diplomacy and World Affairs at Occidental College in Los Angeles and attended graduate school at the George Washington University in Washington, D.C. While in Washington, he was appointed the Assistant to the Deputy Secretary of Labor in the Clinton Administration.

Assemblymember De La Torre and his wife, Christine, live in South Gate with their children Elinor, Henrik, and Emilia.

\*\*\*\*\*

El asambleísta Hector De La Torre fue elegido a la asamblea en Noviembre de 2004. De La Torre actualmente sirve como presidente del subcomité del presupuesto en Salud y Servicios Humanos y también es miembro de los comités del presupuesto; la seguridad ambiental y los materiales tóxicos; el gobierno local; y las utilidades y el comercio. Además, De La Torre es uno de dos asambleístas en sus primeros términos que sirve en el comité legislativo común sobre el presupuesto. También, fue nombrado a la Fundación Cultural e Histórica de California.

De La Torre sirvió casi 8 años como concejal de su ciudad natal de South Gate, incluyendo dos años como alcalde. Como concejal, De La Torre luchó para mejorar la calidad de vida en South Gate construyendo parques, invirtiendo en la infraestructura local, atrayendo desarrollo económico, y mejorando comunicaciones entre la policía y la comunidad. Para mejorar las circunstancias bajo cual aprendían los estudiantes, De La Torre luchó para las nuevas y mejores instalaciones de las escuelas.

Unos de los objetivos del asambleísta De La Torre es traer cuidado médico a los residentes del distrito 50 y fue se honra en formar parte del comité selecto sobre la crisis del cuidado médico de Los Ángeles. El asambleísta De La Torre se graduó en relaciones exteriores y la diplomacia de la Universidad Occidental en Los Ángeles y hizo sus estudios posgraduados en George Washington University en Washington, D.C. Mientras vivió en Washington era asistente al subsecretario de trabajo en la administración de Clinton.

El asambleísta Hector De La Torre y su esposa, Christine, viven en South Gate con sus hijos Elinor, Henrik, y Emilia.

ASSEMBLY MEMBER DARIO FROMMER  
43<sup>rd</sup> District – Glendale



Assembly Majority Leader Dario Frommer was first elected to the State Assembly in 2000. In February, 2004, he was appointed Majority Leader of the California State Assembly.

During his tenure in the Assembly, Frommer has introduced key legislation addressing California's ailing health care system – including bills to expand health care coverage to working Californians, reigning in runaway health care costs, and increasing Californians' access to affordable, lifesaving prescription drugs. He has also authored bills to reduce teen smoking, stop runaway film production, ban the sale of cigarettes to children over the Internet, ensure working mothers have proper accommodations for expressing breast milk, and prevent the release of MTBE and other harmful contaminants in our drinking water systems.

In addition, Frommer authored the Urban Parks Act of 2001, the state's first permanent program to assist local communities to acquire and build new neighborhood parks and recreation areas and secured a critical \$12 million from the state to help the city of Glendale preserve 244 acres of open space through the Oakmont Hillside V property.

Frommer received his Juris Doctorate from the University of California, Davis after receiving a Bachelor of Arts degree in International Relations from Colgate University. As an active member in his community, Frommer serves on the Governing Board of the YMCA Model Legislature and Court Program. He is also a member of the Los Feliz Improvement Association, the Glendale Rose Parade Float Committee, the Glendale and Burbank Chambers of Commerce, and the American Federation of Teachers Glendale College Guild Local 2276.

\*\*\*\*\*

El líder mayoritario de la asamblea, Dario Frommer, fue elegido por primera vez a la asamblea en el año 2000. En febrero, 2004, fue designado líder mayoritario de la Asamblea del Estado de California.

En la asamblea, Frommer ha introducido legislación clave que se dirige a mejorar el sistema de salud médica de California – incluyendo legislación para que gente de bajos recursos tengan a su alcance asistencia médica y acceso a medicamentos. Frommer ha introducido legislación para prevenir que fuman los jóvenes; para prevenir la pérdida de producción cinematográfica en California; prohibir la venta de cigarrillos a niños por el Internet; asegurar que madres que trabajan tengan alojamientos apropiados para el amamantamiento; y prevenir la emanación de contaminantes perjudiciales en nuestros sistemas de agua potable.

Además, Frommer escribió el Acto Urbano de Parques de 2001, el primer programa permanente del estado para ayudar comunidades locales adquirir y construir parques y campos deportivos. Aseguro \$12 millones del estado para ayudar que la ciudad de Glendale conserva 244 acres de naturaleza para Oakmont Hillside.

Frommer se recibió de abogado en la Universidad de California, Davis después de recibir una licenciatura en Relaciones Internacionales de la Universidad de Colgate. Como miembro activo de su comunidad, Frommer es miembro de la mesa directiva del Modelo Legislativo y Programa Tribunal del YMCA. Modelo. Frommer es miembro de la Asociación Para el Mejoramiento de Los Feliz, , el Comité del desfile de Glendale, la Cámara de Comercio de Glendale y Burbank, y la Federación Americana de Maestros de Glendale College Guiad, Local 2276.

ASSEMBLY MEMBER CINDY MONTAÑEZ  
39<sup>th</sup> District – San Fernando



Cindy Montañez and her five brothers and sisters were raised by their immigrant parents, Manuel and Margarita Montañez, in the Northeast San Fernando Valley. Cindy's experience in public service has been diverse. Her experience as a community advocate for battered women, her internship with then Los Angeles City Councilman Richard Alarcón, and her appointment to the San Fernando Cultural Arts Commission, helped Cindy develop a firm grounding for her future as an elected official.

In 1999, Assembly Member Montañez became the youngest person ever elected to the San Fernando City Council. She became the city's Mayor in 2001 and created a strong resume of accomplishments in the City during her tenure including building a new Library, expanding a Community Center and developing a new plan for commercial business development. In 2002, she was elected to the California State Assembly at age 28, where she is the youngest woman ever elected to the California Legislature.

Cindy's legislative work has focused on issues most important to her working class district. Her areas of focus are education, the environment, health care, and consumer/worker protection. Enacted bills include statues to improve the management of urban landfills, brownfields redevelopment, recycling, a law to protect children from a sexually abusive parent, and laws to ensure the safety of temporary construction workers. In addition, Cindy was the author of several bills on education to ensure healthier students and to reduce school overcrowding.

Cindy was appointed Chair of the Assembly Rules Committee in February of 2004 by Assembly Speaker Fabian Núñez. At 30 years old, Montañez is the youngest woman, the first Democratic woman, and the first Latina to serve as Chair of the powerful committee.

\*\*\*\*\*

Cindy Montañez y sus cinco hermanos y hermanas fueron criados por sus padres inmigrantes, Manuel y Margarita Montañez, en el Noreste Valle de San Fernando. La experiencia de Cindy en el servicio a la comunidad ha sido diversa. Su experiencia como una abogada de comunidad para mujeres azotadas, sus puestos de interno con entonces Concejal de Ciudad de Los Angeles Richard Alarcon, y su cita al Comisión de San Fernando de los Artes Culturales, ayudaron a que Cindy desarrolle su experiencia para su futuro como un funcionario elegido.

En 1999, la asambleísta Montañez llegó a ser la persona más joven elegida al ayuntamiento de San Fernando. Además, ella llegó a ser el Alcalde de la ciudad en 2001 y creó un fuerte currículo de logros en la ciudad incluyendo la construcción de una Biblioteca, expandiendo un centro comunitario y desarrollando un nuevo plan para el desarrollo comercial. En 2002, ella fue elegida a la Asamblea del Estado de California a los 28 años, haciéndola la mujer más joven elegida a la Legislatura de California.

El trabajo legislativo de Cindy se ha enfocado en asuntos muy importantes para su distrito que consiste con gran mayoría de la clase obrera. Sus áreas de enfoque son: la educación, el medio ambiente, la asistencia médica, y protección del consumidor/trabajador. Su legislación incluye el mejoramiento de la administración de vertederos urbanos, una ley para proteger a niños de abuso sexual de parte de un padre, y legislación para asegurar la seguridad de trabajadores temporarios de construcción. Además, Cindy fue la autora de varias propuestas legislativas para la educación con el objetivo de asegurar la salud de estudiantes.

Cindy fue nombrada presidente del Comité de Reglas de Asamblea en febrero de 2004 por el portavoz de Asamblea, Fabián Nuñez. A los 30 años de edad, Montañez es la mujer más joven, la primera mujer demócrata, y la primer Latina de servir como líder de este poderoso comité.

ASSEMBLY MEMBER GLORIA NEGRETE McLEOD  
61<sup>st</sup> District – Montclair



Assembly Member Gloria Negrete McLeod was first elected to represent the 61<sup>st</sup> Assembly District in November of 2002. She was re-elected and sworn into office on December 6, 2004 to serve her third term.

Assembly Member Negrete McLeod is the Chair of the Assembly Committee on Business & Professions, which serves to protect California consumers, along with serving as Co-Chair of the Assembly Ethics Committee and as Vice-Chair of the Joint Committee on Boards, Commissions & Consumer protection.

In addition, she serves on the Assembly Government Organization, Health, and Public Employees, Retirement & Social Security Committees, is a member of the Women's Caucus and the State of California Commission on the Status of Women.

As a 35-year resident of a community that encompasses the West End, Assembly Member Negrete McLeod is actively involved in the clean-up of groundwater contamination. One of the top legislative priorities is to improve the quality of California's current water supply and to ensure that there is a reliable plan in place that will adequately provide for the State's growing water needs.

Improving the affordability of and access to higher education, enhancing the quality of health care, improving our current transportation system to reduce traffic congestion, and promoting the growth of quality employment opportunities for Californians are also among her highest legislative priorities.

Assembly Member Negrete McLeod has been an active member in her community for more than 30 years. Prior to being elected to the State Assembly, she served as President of the Chaffey Community College Board and was a Chaffey Board member for five years total. She and her husband, Gilbert L. McLeod, a retired police lieutenant, have ten children, 27 grandchildren, and 9 great-grandchildren.

\*\*\*\*\*

La asambleísta Gloria Negrete McLeod fue elegida por primera vez para representar el Distrito 61 de la Asamblea en noviembre de 2002. Ella fue reelegida para servir, el 6 de diciembre de 2004 en su tercer término.

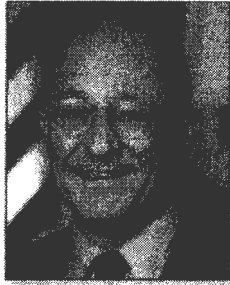
La asambleísta Negrete McLeod es presidente del Comité de la Asamblea de Comercio & Profesiones, donde protege los consumidores de California. Además, es co-presidente del Comité de Ética de la Asamblea y es vicepresidente del Comité Conjunto de Mesas, Comisiones & el Comité de Protección al Consumidor.

Además, ella es miembro del la Organización del Gobierno de la Asamblea, de la Salud, y Empleados Públicos, la Jubilación & los Comités de Seguro Social. Negrete McLeod es miembro del Asociación de Mujeres Legisladores y la Comisión del estado de California en la Posición de Mujeres.

Como residente de 35 años de una comunidad que abarca el *West End*, la asambleísta Negrete McLeod es muy activa en los proyectos de decontaminación de agua subterránea potable. Unas de las prioridades legislativas es mejorar la calidad de abastecimiento de agua actual en California y para asegurar un plan que proporcionará adecuadamente para las necesidades crecientes de agua del Estado. Mejorando el precio y el acceso a la educación superior, aumentando la calidad de cuidado médico, mejorando nuestro sistema actual del transporte para reducir la congestión del tráfico, y promover el crecimiento de oportunidades de empleo para los californianos son sus prioridades legislativas.

La asambleísta Negrete McLeod ha sido miembro activo en su comunidad por más de 30 años. Antes de ser elegida a la Asamblea del Estado, ella sirvió como Presidente de la Mesa Directiva de Chaffey Community College y era un miembro de la Mesa Directiva de Chaffey por cinco años. Ella y su marido, Gilbert L. McLeod, un teniente jubilado policial, tienen diez niños, 27 nietos, y 9 bisnietos.

**ASSEMBLY MEMBER PEDRO NAVA**  
**35th District – Santa Barbara/Ventura/Oxnard**



Assembly Member Nava grew up and attended public schools in Southern California. He is a strong supporter of public education. He studied at San Bernardino Community College, graduated from San Bernardino State University, and obtained his law degree from the University of California, Davis, Martin Luther King, Jr. Hall, School of Law.

After graduation from law school, he worked in job training programs for the economically disadvantaged in Fresno. He later became a Deputy District Attorney in Fresno County and was involved in targeted narcotics prosecution, the county-wide drug crime task force, was a board member of the Fresno Rape Crisis Center, and President of the Fresno Community College President's EOP&SS Advisory Committee. In 1985 he joined the Santa Barbara District Attorney's Office and in 1987 moved into private practice as a civil litigator.

In 1997, Nava was appointed by now-Lt. Governor Cruz Bustamante to the California Coastal Commission and has received many awards for his coastal protection efforts. He has a long history of community involvement, having served as President of the Board of Trustees of the Santa Barbara & Ventura Colleges of Law, President of the Santa Barbara Hispanic Chamber of Commerce, Board Member of the Santa Barbara Women Lawyers, Trustee of the Santa Barbara Museum of Art, and a long time member of the Santa Barbara Jewish Roundtable.

Nava was elected to the California State Assembly in November of 2004 and currently serves as Chair of the Assembly Budget Subcommittee Number 5 on Information Technology/Transportation. He also serves on the Assembly Budget, Higher Education, Insurance, Natural Resources, Joint Legislative Audit and Budget Committees and the Select Committee on Wine.

Pedro is married to Susan Jordan, co-founder of the California Coastal Protection Network, and Vote the Coast. They are parents to a 17-year old Dos Pueblos High School student, Jedd.

\*\*\*\*\*

Pedro creció y asistió a escuelas del sur de California. El es un gran partidario de la educación pública. Estudio en el San Bernardino Community College, y es graduado del San Bernardino State y obtuvo el título de abogado de la Escuela de Leyes Martin Luther King Jr. de la Universidad de California, Davis.

Después de graduarse de la escuela de leyes, trabajo en programas de entrenamientos de empleo para las personas de bajos recursos en Fresno. Mas tarde, Pedro fue nombrado como Segundo de a bordo del Procurador del Distrito en la oficina del Procurador General del Condado de Fresno, el cual involucra los Procesos sobre Objetivos especificos del Narcótico, encabezando la Fuerza de Tarea Conjunta contra el Crimen de Drogas de todo el condado, fue miembro de la Junta del Centro de Crisis de Violaciones de Fresno y presidente del Comité de Asesor del EOP&S del presidente del Fresno Community College. En 1985, se integro a la oficina del Procurador de Santa Barbara donde por un tiempo, fue asignado a la sección de leyes del Consumidor/Comercio.

En 1997, Pedro fue nombrado por el actualmente vicegovernador Cruz Bustamante a la Comisión Costera de California y ha recibido varios reconocimientos por sus esfuerzos en la Comisión Costera. Pedro tiene una larga historia de participación en la comunidad, prestando servicios como presidente de la Junta de Administración de las Universidades de Leyes de Santa Barbara y Ventura, presidente de la Cámara de Comercio Hispana de Santa Barbara, miembro del directorio de las Mujeres Abogadas de Santa Barbara, miembro del Museo de Arte de Santa Barbara y miembro antiguo de la Mesa Redonda Judío-Latino de Santa Barbara. Pedro recibió el primer premio del "Hombre de la Equidad" de parte del grupo de Mujeres Empresarias.

Pedro fue elegido a la Asamblea Estatal el 2 de noviembre del 2004. Actualmente sirve comó presidente del subcomité #5 del presupuesto de la Asamblea en Información Tecnológica y Transporte. Pedro también presta servicios en el Comité de Presupuesto, Educación Superior, Seguros, Recursos Naturales, y en el Comité Conjunto de Auditoria de la Legislatura.

Pedro esta casado con Susan Jordan, una de las fundadoras de la Red de Protección Costera de California (CCPN) y Vote por la Costa. Son los padres de Jedd, un estudiante de 17 años de la secundaria Dos Pueblos High School

ASSEMBLY SPEAKER FABIÁN NÚÑEZ  
46<sup>TH</sup> District – Los Angeles



Speaker Fabián Núñez was elected to the State Assembly in 2002 and sworn in as the State's 66<sup>th</sup> Speaker on February 9, 2004. He has laid out clear legislative goals including providing affordable prescription drugs, protecting jobs and wages for working families, and keeping the doors of the state's public universities open to all qualified students.

During his first year in office, Núñez scored several legislative victories, including measures providing greater rights to renters when nuisances or substandard conditions are not corrected and ensuring school bathrooms are given funding priority when maintenance funds are spent. This past Session, Núñez authored bills to curb pollution, aid small businesses, discourage predatory lending, improve working conditions for hotel attendants, and offer solutions to California's long-term energy needs. His deep commitment to improving our State's business climate is reflected in his efforts last Session to implement critical energy reforms and his successful overhaul of the State's beleaguered Workers' Compensation System.

In his February, 2004, inaugural speech, Speaker Núñez called on members of the Assembly to commit to passing a fiscally and socially responsible budget. In addition, he is committed to using his post to continue efforts to protect and improve education in our State. He believes that ensuring a quality education for all Californians is not only good for business, it is essential to leveling the playing field and building a state in which every child, no matter their background, can gain the skills necessary to make their own dreams into reality.

Prior to being elected to the Assembly, Núñez served as government affairs director for the Los Angeles Unified School District from 2000-2002. In this capacity he tackled a broad range of education issues and secured millions in funding for school construction projects, children's health insurance, and low-performing schools. From 1996 – 2000 he served as political director for the Los Angeles County Federation of Labor. Speaker Núñez, 37, earned a Bachelor of Arts degrees in Political Science and Education from Pitzer College in Claremont. He resides in downtown Los Angeles and has three children.

\*\*\*\*\*

El presidente de la Asamblea Fabián Núñez fue elegido a la Asamblea Estatal en 2002 y fue proclamado como el 66avo. Presidente de la Asamblea el 9 de febrero del 2004. El ha declarado sus metas legislativas claramente que incluyen el encontrar soluciones al costo de las medicinas, proteger trabajos y sueldos para familias trabajadoras y abrir las puertas de las universidades publicas del estado para todos aquellos que califiquen

Durante su primer año como Legislador, Núñez gana varias victorias legislativas, inclusive medidas hechas ley que proporcionan mayores derechos para los inquilinos cuando problemas o condiciones inferiros no son corregidas y asegurando que los distritos escolares usen fondos de mantenimiento del estado para mejorar las condiciones de los baños en las escuelas. Esta sesión pasada Núñez fue autor de legislación que limita la contaminación, ofrecer ayuda a los pequeños empresarios, desanimar los prestamos predadores, mejorar las condiciones de trabajo para los trabajadores hoteleros y ofrecer soluciones a las necesidades energéticas de largo plazo en California. Su compromiso profundo para mejorar el clima comercial de nuestro Estado es reflejado en sus esfuerzos de la última sesión para poner en práctica las reformas críticas de energía y su revisión exitosa del Sistema de Compensación para los trabajadores atribulados del Estado

En su discurso inaugural en febrero del 2004, el presidente Núñez pidió a miembros de la Asamblea que se comprometieran a pasar un presupuesto balanceado y a tiempo. También esta comprometido a utilizar su puesto para continuar los esfuerzos de proteger y mejorar el sistema de educación en nuestro estado. El cree que asegurando una buena educación para todo californiano no es solo bueno para el clima comercial de nuestro Estado, también es esencial para nivelar el campo de juego y la construcción de un estado en el cual cada niño, sin importar sus antecedentes, puede obtener las habilidades necesarias para hacer sus propios sueños una realidad.

Antes de ser elegido a la Asamblea, Nuñez era el director de asuntos gubernamentales para el distrito escolar unificado en los ángeles (LAUSD) del 2000- 2002. En esta capacidad aseguro millones de dólares para asuntos de educación, proyectos de construcción escolar, seguro medico para los niños, y para las escuelas de bajo desempeño. Anteriormente, del año 1999 al 2000, sirvió como director político para la federación de trabajadores del condado de Los Ángeles. El presidente de la asamblea Nuñez tiene 37 años y obtuvo su licenciatura en Ciencias Políticas y Educación de la universidad Pitzer en la ciudad de Claremont en California. El reside en el centro Los Ángeles y tiene a tres hijos.



ASSEMBLY MEMBER JENNY OROPEZA  
55th District – Long Beach



In November of 2004, Jenny Oropeza won re-election to her third and final term representing the 55<sup>th</sup> Assembly District, capping a lifetime of civic involvement, local government leadership and commitment to improving education, air quality, transportation and gender and minority issues. She began elected service in 1988 by winning a seat on the Long Beach Board of Education, serving two terms. In 1994 she won the first of two four-year terms on the Long Beach City Council, becoming the first Latina member.

Assembly Member Oropeza also represented southeast Los Angeles County cities while a member of the Metropolitan Transportation Authority from 1996 – 2000, serving on the Planning & Programming and Construction committees. She later chaired the Goods Movement Committee of the Southern California Association of Governments. She tirelessly championed transportation issues, including infrastructure improvements, grade-crossing safety and solving several long-standing transportation problems in the Long Beach region.

In the Assembly, Oropeza chairs the Assembly Transportation Committee and expects to lead the way to improve highway and transit funding policies. She supports Proposition 42 and has introduced legislation to ensure transportation tax dollars reach communities. She also serves on the Assembly Appropriations, Jobs, Economic Development & the Economy and Veterans Affairs committees.

Oropeza and her husband, Tom Mullins, married in 1977 and live in a 1930s-era Craftsman bungalow in Long Beach that showcases impressionistic oil paintings by her late father, the son of Mexican immigrants. The oldest of three children, she enjoys reading political biographies. In early 2005, at the age of 47, she successfully recovered from cancer surgery.

\*\*\*\*\*

En noviembre de 2004, Jenny Oropeza ganó la reelección a su tercer y último término representando al Distrito 55 de la Asamblea. Ella se ha dedicado a la participación cívica, liderazgo local de gobierno y su compromiso a la educación, calidad aérea, transporte, y asuntos del género y la minoría. Ella empezó su carrera política en 1988 cuando fue elegida al distrito escolar unificado de la ciudad de Long Beach, sirviendo dos términos. En 1994 ella fue elegida al consejo de la ciudad de Long Beach convirtiéndose en el primer miembro Latino.

La asambleísta Oropeza también sirvió en la Tabla de MTA de 1996 – 2000 donde ella sirvió en los Comités de Planificación y Programación. Ella también sirvió como presidenta del Comité del Movimiento de Bienes de la Asociación Meridional de California de Gobiernos. Ella utilizó estas posiciones para defender asuntos de transporte incluyendo mejoría de infraestructura, y la resolución de problemas antiguos de transporte específicos a la región de Long Beach.

En la Asamblea, Oropeza es la presidenta del Comité de Transporte de la Asamblea y se espera que ella mejore las autopistas y los reglamentos del financiamiento de tránsito. Ella ha sido una partidaria constante de la Proposición 42 y ha introducido legislación para asegurar que dólares de impuesto de transporte alcancen las comunidades más necesitadas de dólares. Ella también sirve en el Comité de Agricultura; el Comité de Nombres; el Comité sobre Organización Gubernamental y el Comité sobre Trabajos, Desarrollo Económico y la Economía.

Oropeza y su marido, Tom Mullins, se casaron en 1997. Ellos viven en una que fue construida en 1930 en Long Beach, California donde expone pinturas al óleo hechas por su padre fallecido, el hijo de inmigrantes mexicanos. Ella es la mayor de tres hijos, y goza la lectura y compartiendo tiempo con su marido.

ASSEMBLY MEMBER NICOLE PARRA  
30th District – Hanford



Assemblywoman Nicole M. Parra was first elected to the State Assembly in November of 2002. She currently serves as Chair of the Joint Legislative Audit Committee, which ensures the efficient expenditure of taxpayers' money through oversight of public officials and institutions. In addition, she currently serves on the Assembly Agriculture, Banking & Finance, and Water, Parks & Wildlife Committees and is an Assistant Majority Whip. She previously Chaired the Select Committee on Megan's Law & Sex Offender Registration, and authored several key bills aimed at strengthening and expanding Megan's Law in California.

Parra has focused her legislative career on efforts to accelerate economic development and secure more jobs for struggling communities in the state, and has authored and co-authored several measures regarding military personnel, their families, and military veterans as well as issues specific to disabled veterans. She has been a leader in efforts to eliminate poverty in the Central Valley and arranged a safe drinking water supply for the small town of Alpaugh.

A resident of Hanford, Assemblywoman Parra was born in Bakersfield and attended Highland High School where her brother, Peter, now teaches. She studied Economics at the University of California, Berkeley, and completed law school in Washington, D.C. After completing law school, she returned to the Central Valley to work as District Director for Congressman Cal Dooley. Assemblywoman Parra follows her family's long tradition of public service. Her father, Pete Parra, was a Kern County Supervisor and is a former school board member; her mother, Yolanda, works for Bakersfield Adult School.

\*\*\*\*\*

La asambleísta Nicole M. Parra fue primer elegida a la Asamblea del Estado en noviembre de 2002. Ella actualmente sirve como presidente del comité legislativo de Auditoría, que asegura el gasto eficiente de dinero de contribuyentes de funcionarios e instituciones públicos... Además, ella sirve actualmente en los Comités de Agricultura, Banca y Finanzas, y Agua, Parques y Vida Silvestre y es una Jefa Disciplinaria de la Mayoría. Ella previamente sirvió como presidente del comité selecto de la Ley de Megan.

Parra ha enfocado su carrera legislativa en esfuerzos para acelerar el desarrollo económico y asegurar más trabajos para aquellas comunidades en el estado que están luchando, y ha escrito y apoyado varias medidas con respecto al personal militar, sus familias, y veteranos militares así como asuntos específicos a veteranos incapacitados.. Ella ha sido un líder en el esfuerzo para eliminar la pobreza en el Valle Central y arregló un abastecimiento de agua potable seguro para el pueblo pequeño de Alpaugh.

Un residente de Hanford, la asambleísta Parra nació en Bakersfield y atendió la Preparatoria Highland donde su hermano, Peter, ahora enseña. Ella estudió Economía en la Universidad de California, de Berkeley, y terminó sus estudios de leyes en Washington, D.C. Después de completar sus estudios de leyes, ella volvió al Valle Central a trabajar como Directora del Distrito para el Congresista Cal Dooley. La asambleísta Parra sigue la tradición larga de su familia del servicio a la comunidad. El padre, Pete Parra, era un Supervisor del Condado de Kern y es un miembro anterior de la junta escolar, su madre, Yolanda, trabaja para la Escuela Adulta en Bakersfield.

ASSEMBLY MEMBER LORI SALDAÑA  
76<sup>th</sup> District – Clairemont



Lori Saldaña was born in San Diego, the third of four daughters. She attended San Diego public schools, graduating from Clairemont’s Madison High School. She went on to earn a Bachelor of Arts Degree in Physical Education and a Master of Arts Degree in Education, both from San Diego State University. She began her career as an educator coaching field hockey at Clairemont and Madison High Schools and women’s basketball at San Diego City College.

Throughout her life, she has been active in public causes at the local, state, national and international levels. Believing in the importance of a skilled and educated workforce to San Diego’s economy, Ms. Saldaña has devoted much of her 20-year career as an educator in San Diego for workforce development and programs providing educational, vocational, and public service opportunities for at-risk youth. Additionally, she has spent a majority of her career in education as a professor of Business Information Technology throughout the San Diego Community College District. In 2002, Ms. Saldaña was named Associate Dean, Director of Service Learning Program, at San Diego Mesa College. This successful program provides students with experience working in local volunteer organizations while earning college credit.

Since being elected to the California State Assembly in November of 2004, Assemblymember Saldaña was appointed to Leadership as the Assistant Majority Whip and has been assigned to the Assembly Appropriations, Natural Resources, Veterans Affairs, and Water, Parks & Wildlife Committees. These assignments reflect her life long passions for protecting the environment and improving water quality in California.

San Diegans may remember Lori’s father, Frank Saldaña, from his post-military career as a reporter for the San Diego Tribune.

\*\*\*\*\*

Lori Saldaña nació en San Diego, la tercera de cuatro hijas. Asistió las escuelas públicas de San Diego, graduándose de Clairemont Madison High School. Recibió su licenciatura en Educación Física y una maestría en Educación, de la Universidad Estatal de San Diego. Empezó su carrera entrenando estudiantes en hockey en Clairemont and Madison High Schools y el baloncesto en San Diego City College.

A través de su vida, ella ha sido activa en causas públicas a niveles locales, estatales, nacionales e internacionales. Creyendo en la importancia de una población hábil y educada para mejorar la economía de San Diego, la Sra. Saldaña ha dedicado gran parte de su carrera de 20 años a ser profesora en San Diego para el desarrollo de trabajos y programas que proporcionan oportunidades educativas, vocacionales, y servicio público para la juventud en riesgo de cometer actos violentos. Adicionalmente, ha pasado la mayor parte de su carrera como profesora de Business Information Technology en el Community College District de San Diego. En 2002, la Sra. Saldaña la denominaron como Decano Asociado, Directora del Programa de Servicio de Aprendizaje, en San Diego Mesa College. Este programa exitoso proporciona a los estudiantes con trabajos voluntarios en organizaciones locales a cambio de crédito universitario.

Desde que fue elegida a la Asamblea Estatal en noviembre de 2004, la asambleísta Saldaña fue designada al liderazgo como Asistente Mayoritaria y ha sido asignada a Apropiaciones de la Asamblea, Recursos Naturales, Asuntos de Veteranos, y al Agua, Parques & Comités de Fauna. Estas responsabilidades reflejan su dedicación para proteger el medio ambiente y mejorar la calidad de agua en California.

Los residentes de San Diego recuerdan al papá de Lori, Frank Saldaña, por su carrera pos-militar como periodista para la Tribuna de San Diego.

**ASSEMBLY MEMBER SIMON SALINAS**  
**28<sup>th</sup> District – Salinas**



Assemblymember Salinas was born in Slayton, Texas, and is one of 12 children of migrant farm workers. He graduated from Watsonville High School and went on to Claremont McKenna College where he received a Bachelor of Arts Degree in Political Science and Latin American Studies. He subsequently earned a Bilingual Teaching Credential from San Jose State University and graduated with a Jurisprudence Doctorate from Santa Clara Law School.

After earning his law degree, Assemblymember Salinas put his Teaching Credential to good work as a 6<sup>th</sup> grade teacher. He later expanded his academic career as a professor at Hartnell Community College from 1989 – 1993.

Assemblymember Salinas began his public service career in June of 1989 when he was elected as the first Mexican-American to serve on the Salinas City Council. During his tenure with the City of Salinas, he served as Mayor Pro-Tem. Assemblymember Salinas was elected to the Monterey County Board of Supervisors in 1993 and again in 1997. During his second term, he was elected Chair of the Board and was the first Mexican-American to serve on the Board in more than 100 years.

During his first term, Assemblymember Salinas authored legislation that addressed issues including education, agriculture, housing, health care, and transportation. He currently Chairs the Assembly Local Government Committee. Reflecting the most pressing needs of the 28<sup>th</sup> District, his Committee assignments also include the Transportation, Agriculture, and Housing & Community Development Committees.

Assemblymember Salinas has lived most of his life in the Salinas area, growing up around agri-business and on the farm. He has one son and, like many other parents, enjoys watching soccer games on the weekends.

\*\*\*\*\*

El Asambleísta Salinas nació en Slayton, Tejas, y es uno de 12 hijos de padres inmigrantes y trabajadores agrícolas. Salinas se graduó de Watsonville High School y recibió su licenciatura de Claremont McKenna College en Ciencia Política y Estudios Latinoamericanos. El sacó un Credencial de Enseñanza Bilingüe de la Universidad Estatal de San José y finalizó sus estudios de la facultad de derecho de Santa Clara Law School.

Después que sacar su licenciatura de la facultad de derecho, el Asambleísta Salinas trabajó como maestro del sexto grado. De 1989-1993 fue profesor en Hartnell Community College.

El asambleísta Salinas empezó su carrera de servicio público en junio, 1989 cuando fue elegido como el primer mexicano-americano a servir en el ayuntamiento de Salinas. Como concejal de Salinas, sirvió como Pro –Tem al Alcaldé. El Asambleísta Salinas fue elegido a la Mesa de Supervisores del Condado de Monterrey en 1993 y nuevamente en 1997. Durante su segundo término, fue elegido como Presidente de la Mesa siendo el primer mexicano-americano de servir en más de 100 años.

Durante su primer término, el asambleísta Salinas introdujo legislación en las áreas de educación, agricultura, vivienda, asistencia médica, y el transporte. Actualmente sirve como Presidente del Comité de Gobierno Local de la Asamblea. Reflejando las necesidades más importantes del Distrito 28, sus responsabilidades del Comité incluyen el Transporte, la Agricultura, y el Desarrollo Comunitario y la Vivienda.

El asambleísta Salinas ha vivido la mayor parte de su vida en Salinas. El tiene un hijo y, como muchos otros padres, goza de los partidos de fútbol los fines de semana.

ASSEMBLY MEMBER ALBERTO TORRICO  
20<sup>th</sup> District – Newark



Alberto Torrico was elected to the State Assembly in November of 2004. He Chairs the Assembly Committee on Public Employees, Retirement & Social Security and serves on the Assembly Committees on Transportation, Housing & Community Development, and Governmental Organization. He was also selected by Assembly Speaker Fabian Núñez to act as Assistant Majority Whip.

Before his election to the Assembly, he was Vice Mayor of the City of Newark and served four years as an elected member of the Newark City Council. In that role, he worked to keep the city budget balanced during tough economic times while still fighting for his top priorities. He championed the creation of affordable housing and the development of regional solutions to the area's traffic problems. Assemblymember Torrico is proudest of his work to expand a city-sponsored educational program that gives teens a chance to "drop-in" instead of dropping out.

After graduating from Irvington High School in Fremont, he graduated from Santa Clara University and went on to earn a law degree from the University of California's Hastings Law School in San Francisco. After law school, he worked as an attorney, helping people throughout the state improve their lives on the job and in the community.

Assembly Member Torrico began his public service career as a policy aide for former Santa Clara County Supervisor Ron Gonzales, focusing on criminal justice and transportation issues. He has worked on efforts to extend BART from Fremont to San Jose since 1992. In 2000, he began work as an Assistant General Counsel with the Santa Clara Valley Transportation Authority. Assemblymember Torrico continues to serve on a number of community boards, including Second Chance and Kidango, and the advisory boards of Justice for New Americans and the Alameda County Hispanic Chamber of Commerce. He is the first Legislator to belong to both the Latino and Asian Pacific Islander caucuses.

Torrigo lives in Newark with his wife, Raquel, and their 4-year-old-son Mateo and baby daughter Amy-Elyzabeth.

\*\*\*\*\*

Alberto Torrico fue elegido a la Asamblea Estatal en noviembre de 2004. El sirve como Presidente del Comité de la Asamblea de Empleados Públicos, la Jubilación & el Seguro Social y sirve en los Comités de la Asamblea de Transporte, Desarrollo Comunitario y Vivienda, y la Organización Gubernamental. También, fue escogido por el portavoz de la Asamblea, Fabián Núñez para actuar como el Asistente Mayoritario.

Antes de su elección a la Asamblea, Torrico fue co-Alcalde de la Ciudad de Newark y sirvió cuatro años como concejal de Newark. Torrico trabajó para mantener un presupuesto balanceado durante tiempos económicos difíciles mientras luchaba por sus prioridades. El defendió la creación de la vivienda razonable y el desarrollo de soluciones regionales a los problemas del tráfico. Torrico está más orgulloso de su trabajo de expandir el programa educativo que les da a los jóvenes una oportunidad de mantenerse en el sistema escolar.

Después de graduarse de Irvington High School en Fremont, se graduó de la Universidad de Santa Clara y recibió su licenciatura de la facultad de derecho en Hastings de la Universidad de California en San Francisco. Después, trabajó como abogado ayudando a personas mejorar sus vidas en el trabajo y la comunidad.

El asambleísta Torrico empezó su carrera de servicio a la comunidad como ayudante para el Supervisor del Condado de Santa Clara Ron Gonzáles, enfocándose en asuntos de justicia criminal y el transporte. El ha trabajado para extender BART de Fremont a San Jose desde 1992. En 2000, empezó su trabajo como Ayudante Concejal General con la Agencia del Transporte del Valle de Santa Clara. Torrico continúa sirviendo en varias Mesas de la comunidad, incluyendo la Segunda Oportunidad y Kidango, y las juntas consultivas de Justicia Para Nuevos Americanos y la Cámara de Comercio Hispano del Condado de Alameda. El es el primer legislador que pertenece a los dos Comités de Latinos y Asiáticos.

Torrigo vive en Newark con su esposa, Raquel, su hijo Mateo de cuatro años y su hija Amy-Elyzabeth de 6 meses.

ASSEMBLY MEMBER JUAN VARGAS  
79<sup>th</sup> District – San Diego



Juan was born the third son of ten children in National City, California. His parents moved to the US from Mexico in the 1940's and raised their children on an egg ranch. Juan graduated from the University of San Diego with a BA in Political Science and subsequently earned a Master's in Humanities from Fordham University and a Juris Doctorate from Harvard.

Juan entered the Jesuits, a Catholic religious order, where he worked with many disadvantaged communities, including orphaned children and internally displaced people in El Salvador. He eventually left the Jesuits to pursue a family life and married Adrienne D'Ascoli. He was elected to the San Diego County City Council in February of 1993 where he assumed a leadership role in planning, funding, and advocating for public safety, municipal infrastructure, and improving schools.

He was first elected to the State Assembly in November of 2000. During his first term he was appointed Assistant Majority Leader, using the position to expand on his work with children's issues including a bill to ban smoking in and around playgrounds. He also introduced legislation aimed at protecting young children from graphic sex and violence in arcade games and worked on bills to expand before- and after-school programs. During the energy crisis he was named to the Energy Oversight Committee and was instrumental in forcing utility companies to divulge tax irregularities and in reducing energy prices and prevent further blackouts.

During his second term, he assumed the position of Chair of the Assembly Insurance Committee, which he still holds, as well as currently serving on the Agriculture, Banking & Finance, and Business & Professions Committees. He is Chair of the Select Committee on California Latin American Affairs.

Juan and Adrienne have two daughters, Rosa Celina and Helena Jeanne. They live in the San Diego community of Golden Hill where they are restoring their craftsman home.

\*\*\*\*\*

Juan nació, el tercer de diez niños en National City, California. Sus padres se mudaron a EEUU de México en los años 40 y crearon a sus hijos en una hacienda. Juan se graduó de la Universidad de San Diego y recibió su licenciatura en Ciencia Política y terminó su maestría en la Universidad de Fordham y su licenciatura de la facultad de derecho en la Universidad de Harvard.

Juan entró a los Jesuitas, una orden religiosa católica, donde trabajó con comunidades de bajos recursos, inclusive niños huérfanos y personas desplazadas de El Salvador. Eventualmente dejó los Jesuitas para seguir una vida familiar y se casó con Adrienne D'Ascoli. Fue elegido como concejal del condado de San Diego en febrero de 1993 donde asumió un papel de liderazgo en la planificación, la financiación, y abocando por la seguridad pública, la infraestructura municipal, y para mejorar las escuelas.

Fue elegido a la Asamblea Estatal en noviembre del 2000. Durante su primer término fue designado Asistente Líder Mayoritario, usando su posición para seguir trabajando con asuntos de niños inclusive una propuesta para prohibir el fumar en alrededor de campos de juegos. El también introdujo la legislación para proteger a niños jóvenes de juegos gráficos del sexo y la violencia y trabajó para expandir y los programas antes y después de-escuela. Durante la crisis energética, fue denominado al Comité del Descuido de la Energía y fue instrumental en forzar las empresas de servicio público divulgar las irregularidades de impuesto y en reducir los precios de energía y prevenir los apagones adicionales.

Durante su segundo término, asumió la posición de Presidente del Comité del Seguro de la Asamblea, y sirve actualmente en el Comité de Agricultura; Banco y Finanzas; y el Comité de Comercio y Profesiones. Es Presidente del Comité Selecto en la Revitalización Urbana, el Copresidente de Idioma & Acceso al Gobierno, y un miembro de las Comisiones de Investigación de **California Latin American Affairs**.

Juan y Adrienne tienen dos hijas, Rosa Celina y Helena Jeanne y viven en San Diego en la comunidad de Golden Hill.



## **Latino Health Alliance Members**

### **1. California Immigrant Welfare Collaborative (CIWC)**

Jeannette Zanipatin  
Statewide Policy Analyst  
CA Immigrant Welfare Collaborative  
926 J Street, Suite 701  
Sacramento, CA 95814  
Tel: (916) 448-6762  
Fax: (916) 448-6774  
zanipatin@nilc.org

### **2. Latino Coalition for a Healthy California (LCHC)**

Lupe Alonzo-Diaz  
Executive Director  
Latino Coalition for a Healthy California  
1225 Eighth Street, Suite 500  
Sacramento, CA 95814  
Tel: (916) 448-3234  
Fax: (916) 448-3248  
www.lchc.org

### **3. California Primary Care Association (CPCA)**

Elia Gallardo  
Director of Governmental Affairs  
CA Primary Care Association  
1215 K Street, Suite 700  
Sacramento, CA 95814  
Tel: (916) 440-8170 x202  
Fax: (916) 440-8172  
www.cPCA.org

### **4. National Association of Latino Elected Officials (NALEO)**

Arturo Vargas  
Executive Director  
National Association of Latino Elected Officials  
National Office  
1122 W. Washington Blvd, Third Floor  
Los Angeles, CA 90015  
Tel: (213) 747-7606



Fax: (213) 747-7664  
[www.naleo.org](http://www.naleo.org)

**5. National Council of La Raza (NCLR)**

Ana Gamiz  
California Policy Analyst  
National Council of La Raza  
926 J Street, Suite 701  
Sacramento, CA 95814  
Tel: (916) 448-9852 x206  
Fax: (916) 448-9823  
[www.nclr.org](http://www.nclr.org)

**6. Mexican American Legal Defense and Educational Fund (MALDEF)**

Francisco Estrada  
Director of Public Policy  
Mexican American Legal Defense and Educational Fund  
926 'J' Street #422  
Sacramento, CA 95814  
Tel: (916) 443-7531  
Fax: (916) 443-1541  
[www.maldef.org](http://www.maldef.org)

**7. Latino Issues Forum (LIF)**

Luis Arteaga  
Executive Director  
Latino Issues Forum  
160 Pine Street, Suite 700  
San Francisco, CA 94111  
Tel: (415) 284-7228  
Fax: (415) 284-7222  
[www.lif.org](http://www.lif.org)

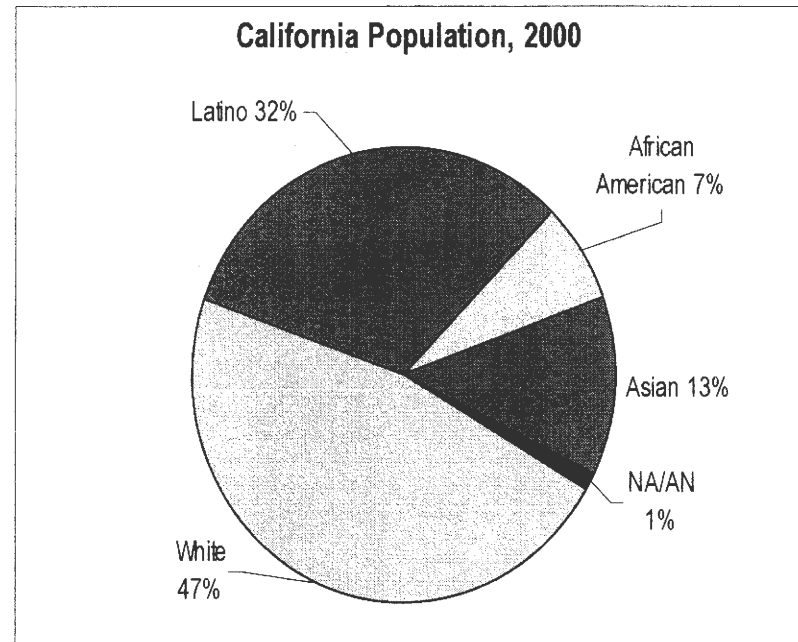
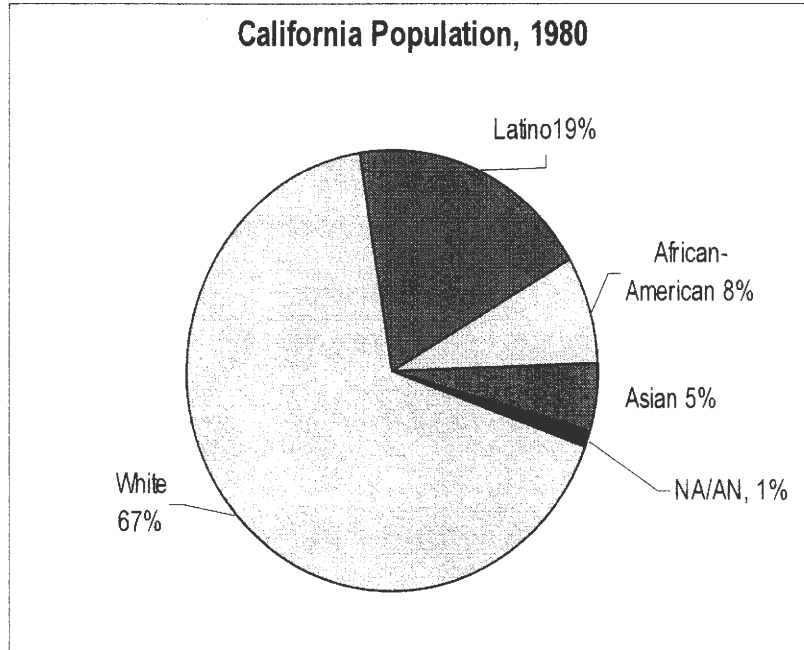


# The California Latino



Latino Health Alliance  
May 26, 2005 Briefing

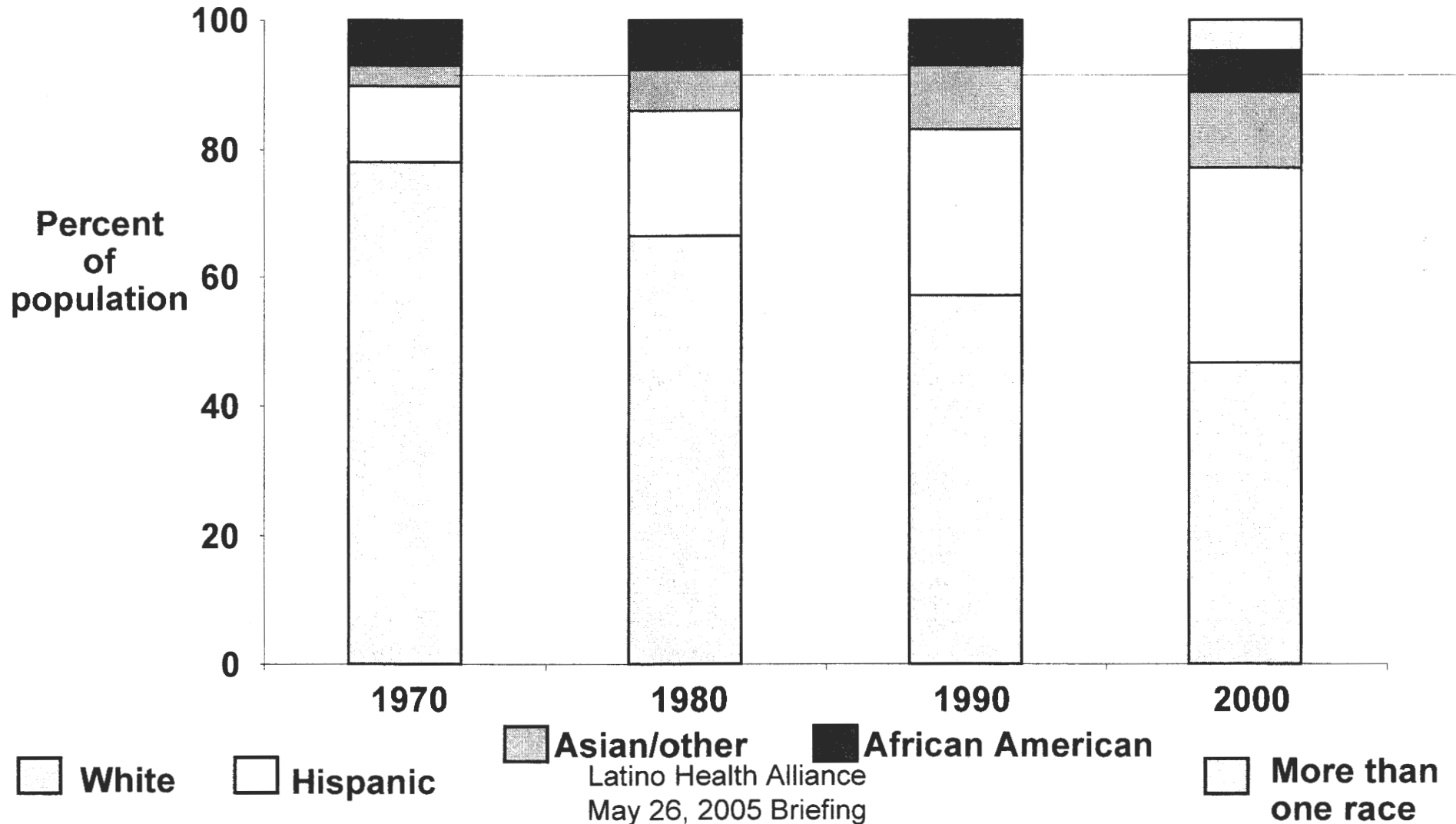
# California Population, 1980 & 2000



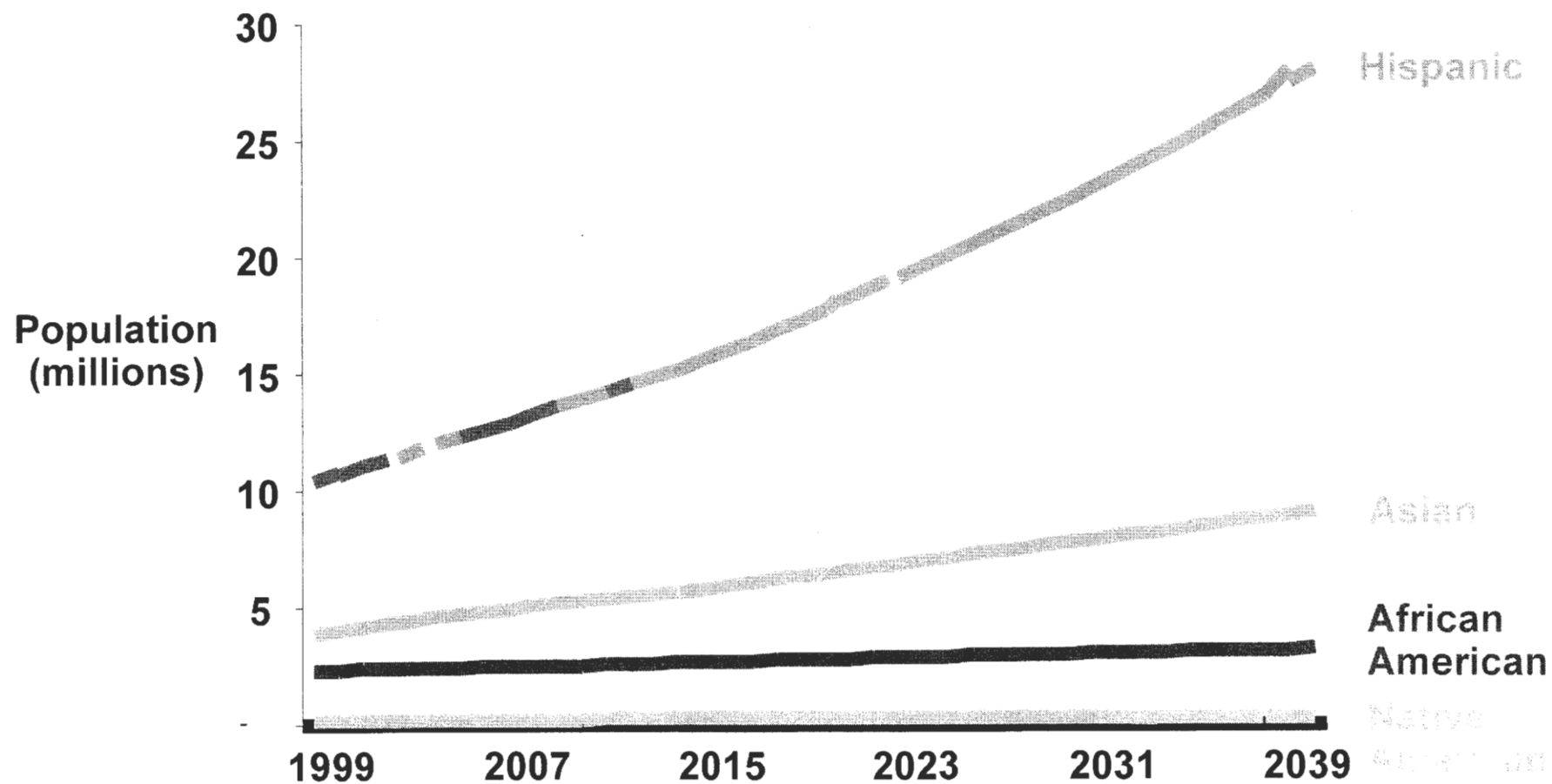
Source: US. Census Bureau 2000; California Statistical Abstract, 1999

Latino Health Alliance  
May 26, 2005 Briefing

# Whites No Longer Comprise Majority of Population in California

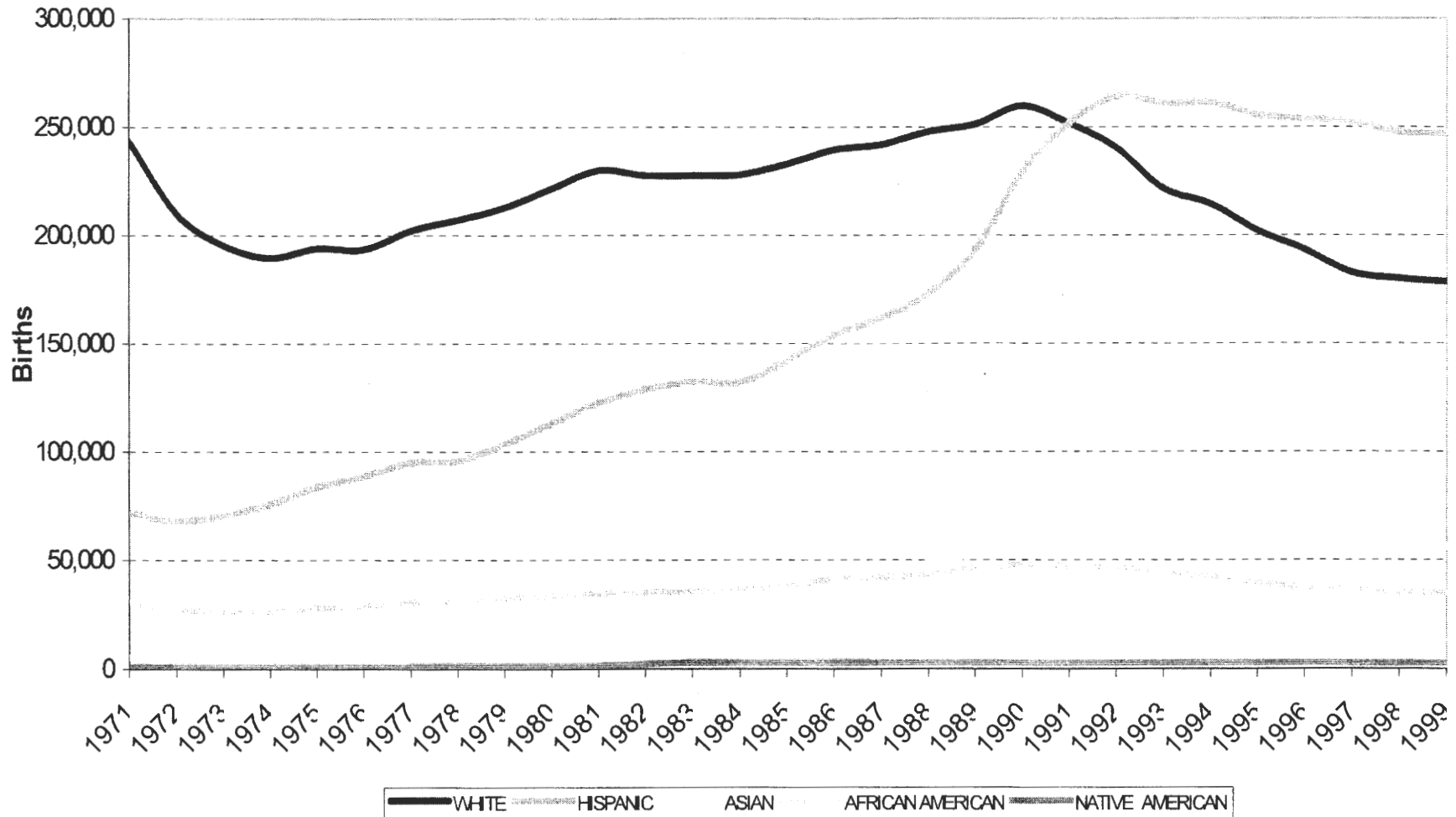


# Latinos Projected To Be Largest Ethnic Group in State By 2021



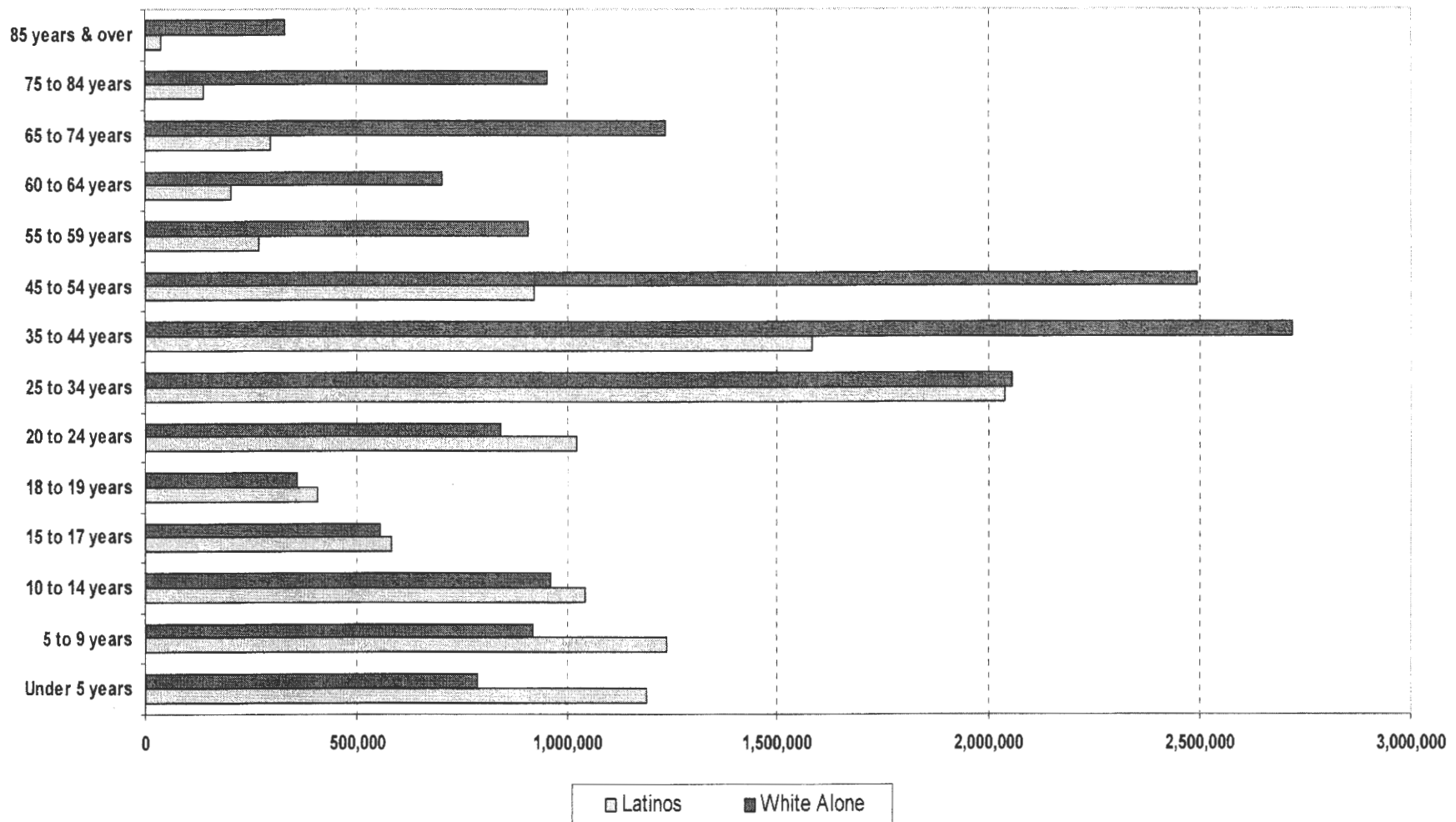
Latino Health Alliance  
May 26, 2005 Briefing

# More Latino Children Born in California than White Children



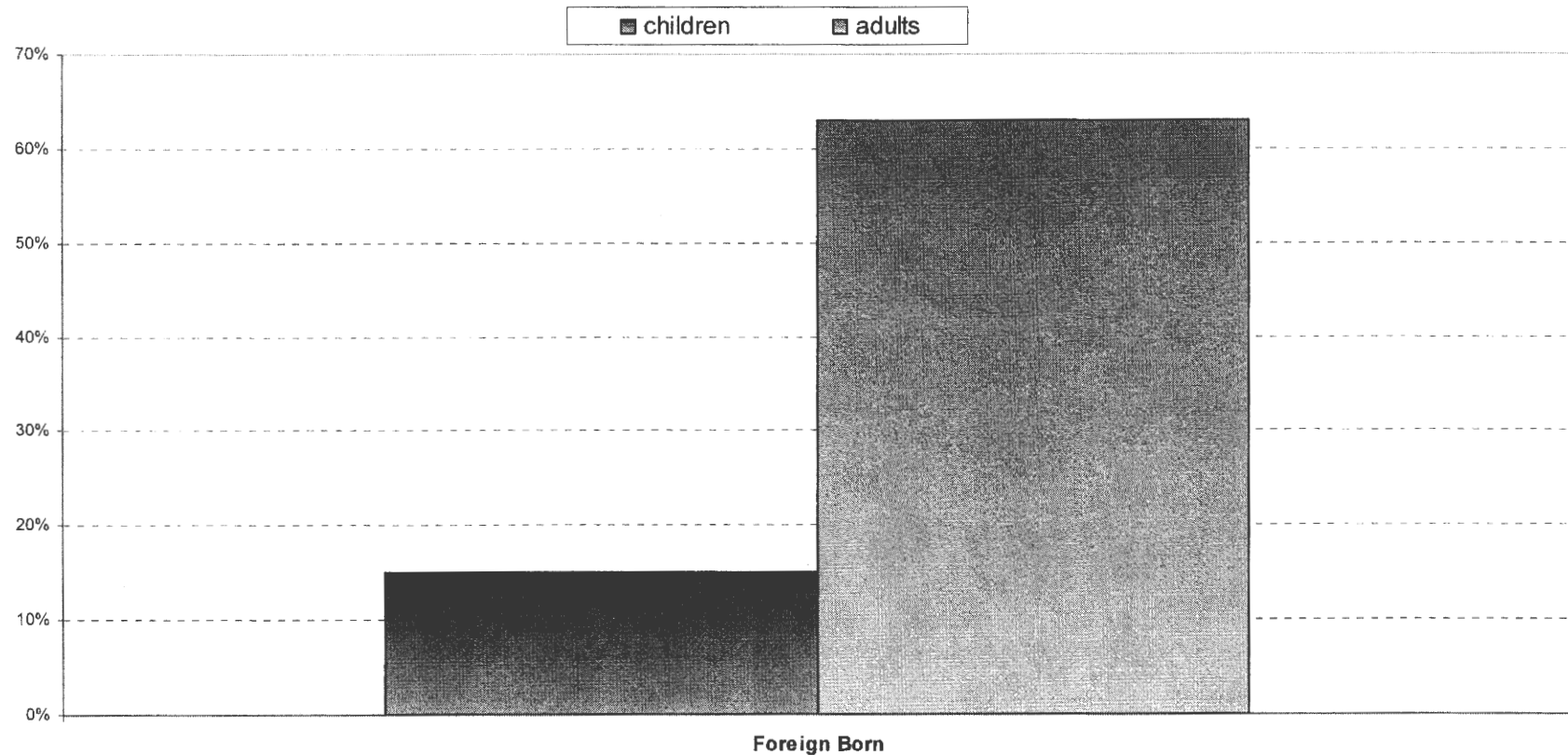
Latino Health Alliance  
May 26, 2005 Briefing

# Latinos Outnumber Whites for People Younger than 25 Years Old



Latino Health Alliance  
May 26, 2005 Briefing

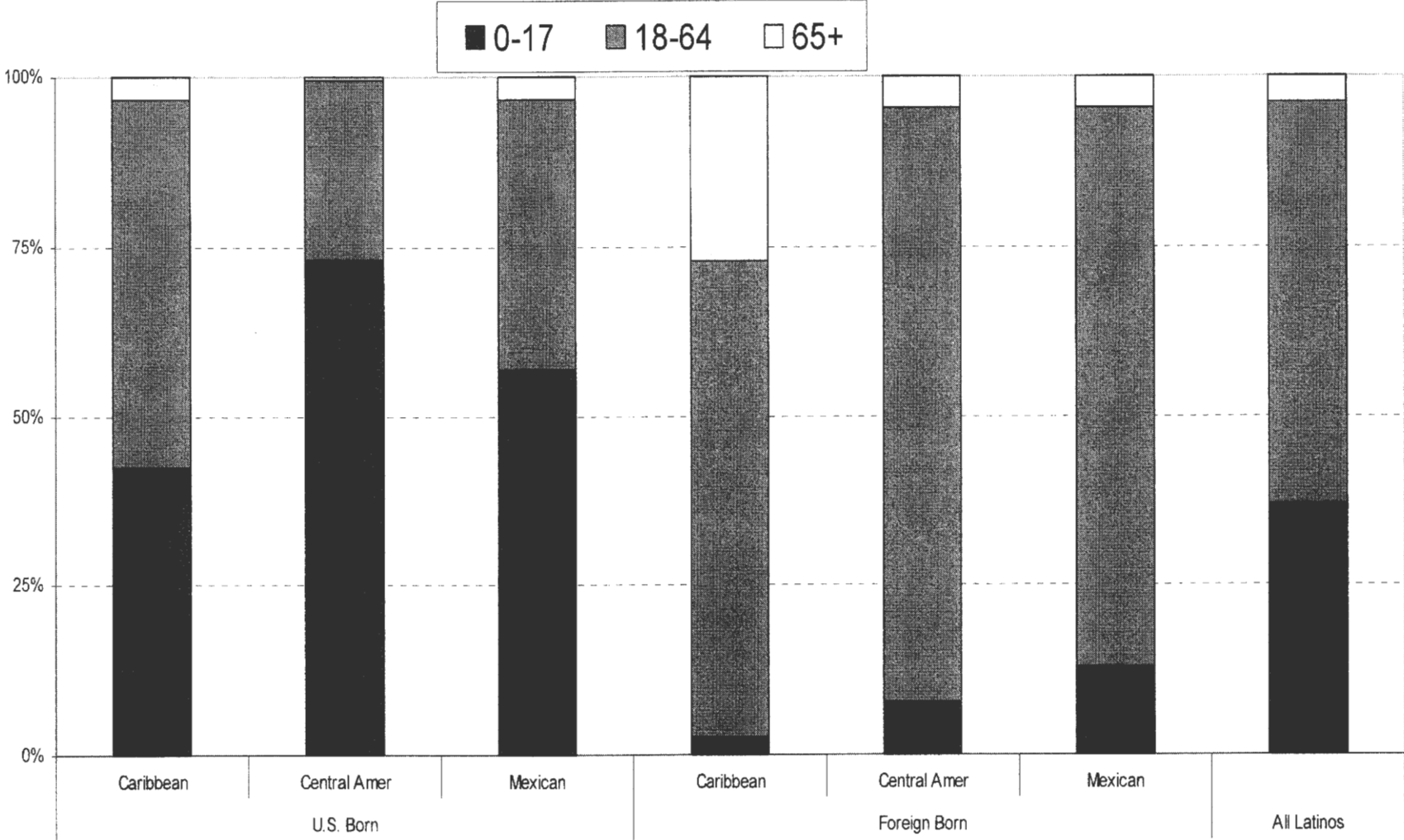
# Most Children are Born in the U.S. and Most Adults are Foreign Born



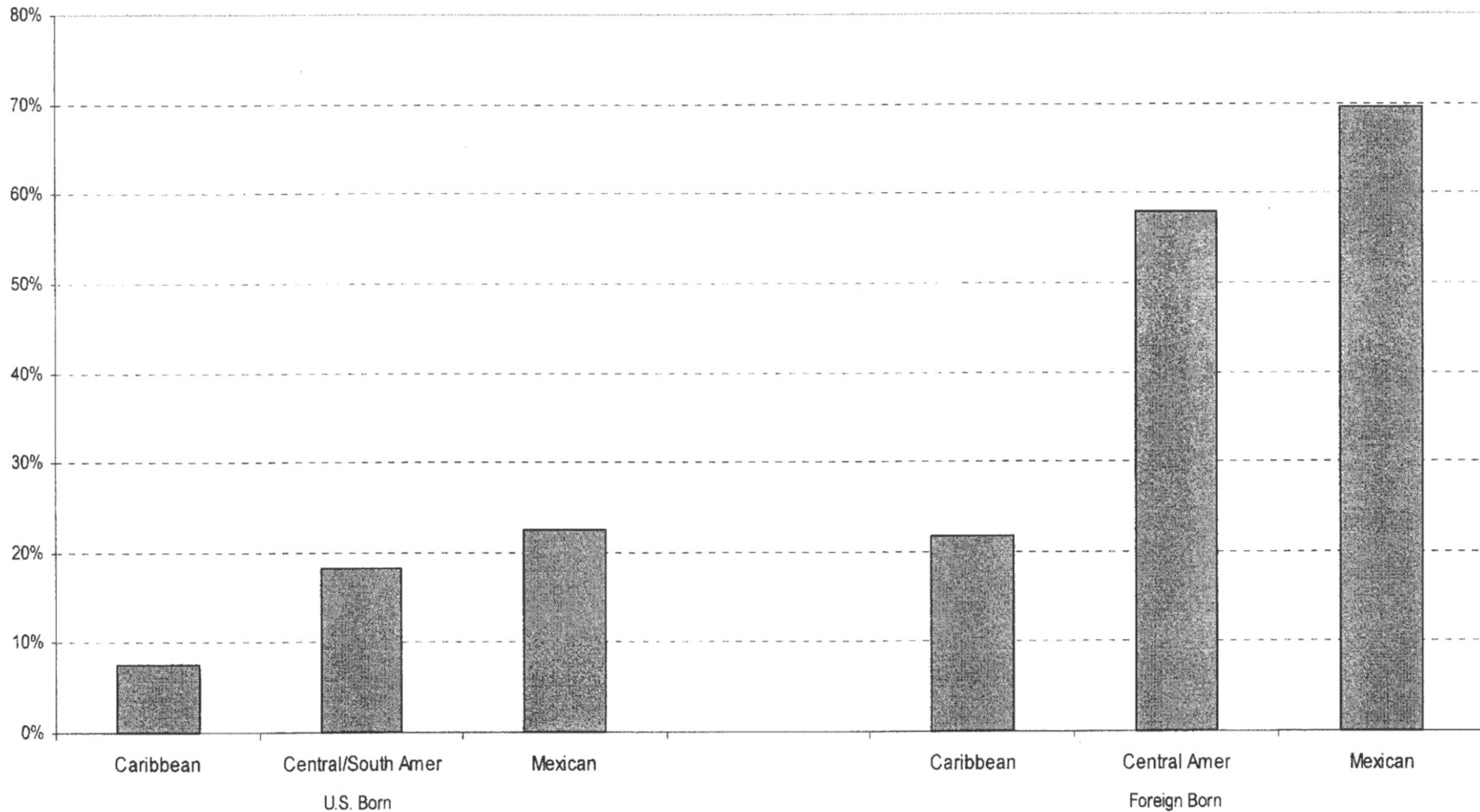
Latino Health Alliance  
May 26, 2005 Briefing



# Latinos are a Young Population

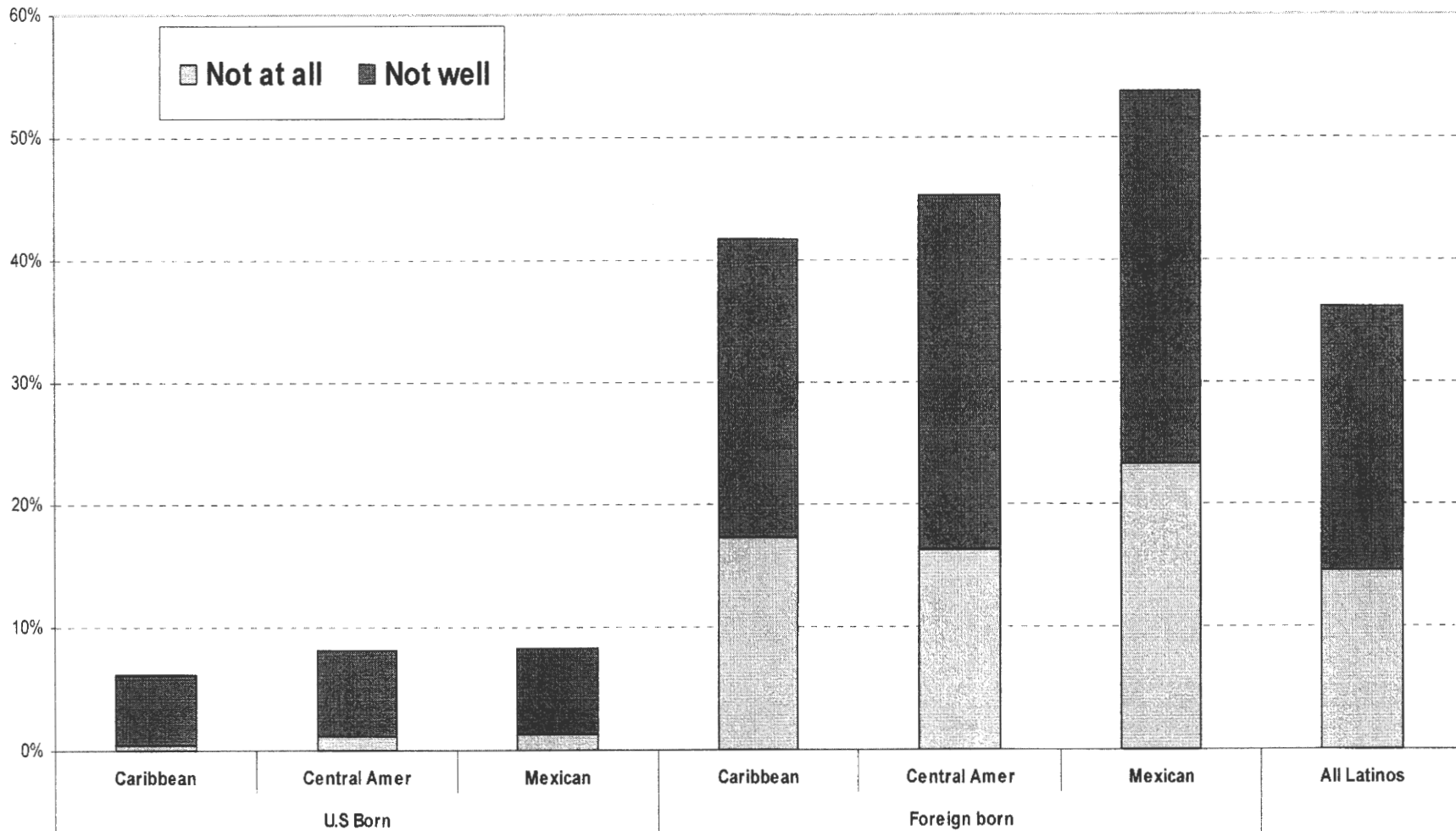


# Half of Latino Adults had less than a High School Education



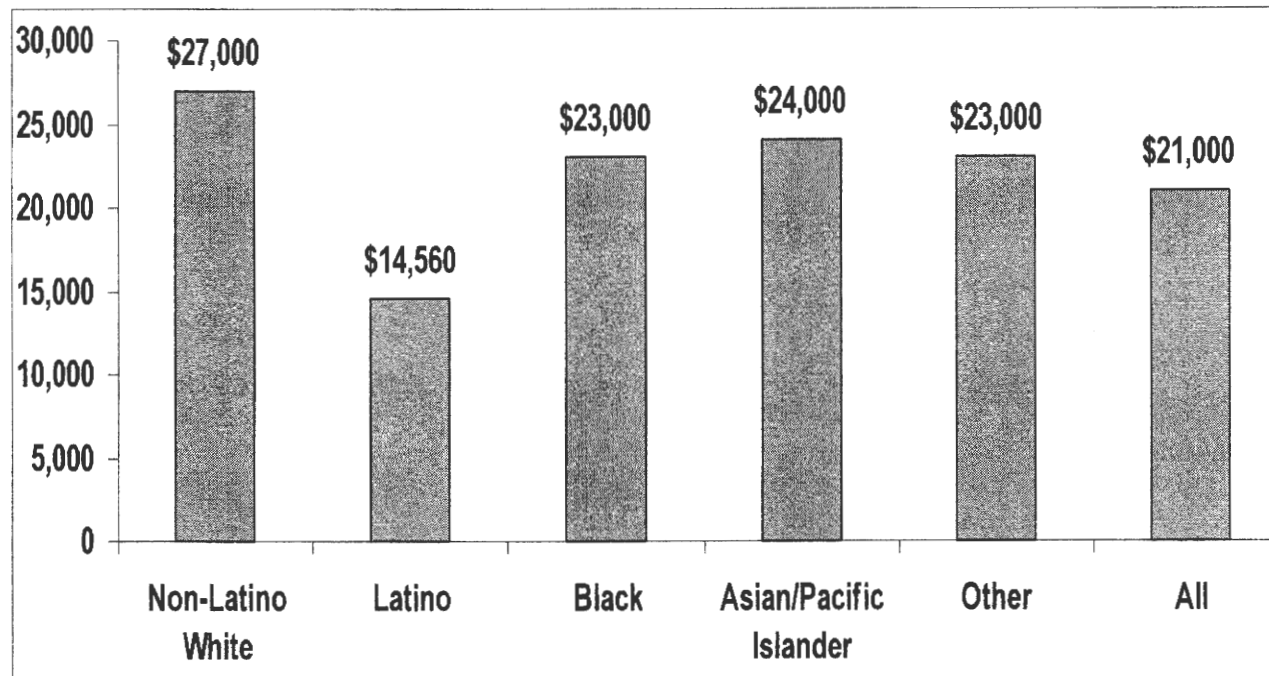
Latino Health Alliance  
May 26, 2005 Briefing

# Over Half of Mexican Immigrants do not Speak English well



Latino Health Alliance  
May 26, 2005 Briefing

# Median Wage: Latinos earn 54 cents tp the \$1 of Non-Latino Whites



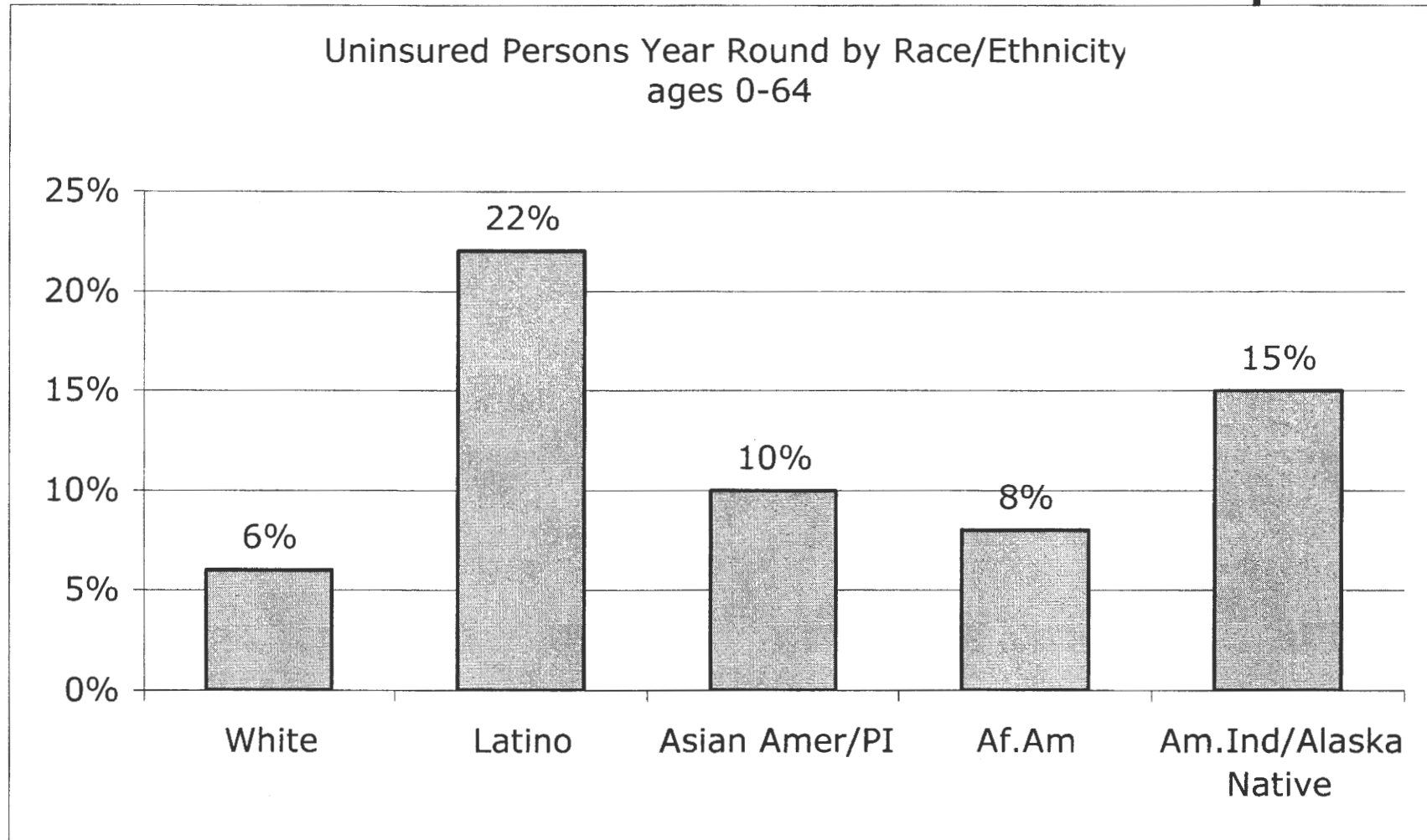
Source: California Research Bureau. 2000

Latino Health Alliance  
May 26, 2005 Briefing

# Many Latino Families are in Financial Difficulties

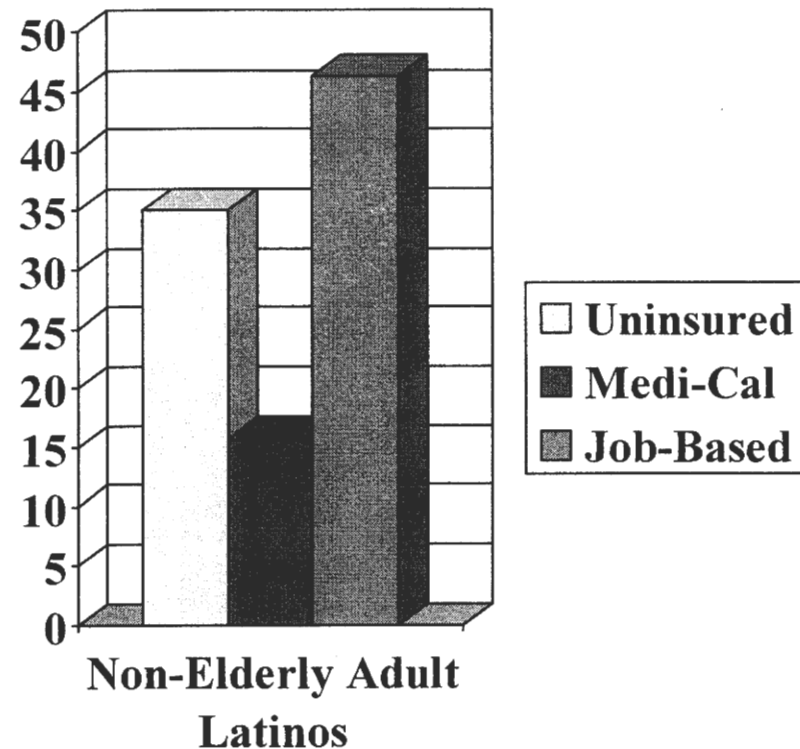
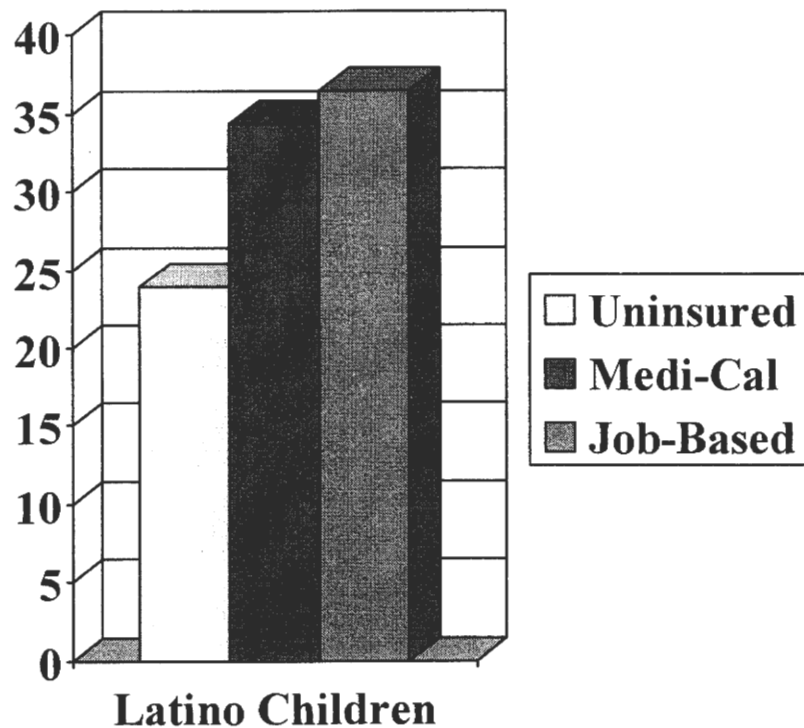
- ❖ One of every five Latinos in California were poor in 2000
- ❖ For Latino immigrants, one of every four were poor
- ❖ And for Latino Children, one of every three Latino children was in a poor household
- ❖ A greater proportion of Latinos are poor than any of the major racial and ethnic group in California

# Latinos More Likely to Be Uninsured than other Racial/Ethnic Groups



Latino Health Alliance  
May 26, 2005 Briefing

# Many Latino Children and Adults do not have Health Coverage



# Access to Health Care

- More than one in four Latinos ages 0-64 in California are uninsured (28% of Latinos compared to 9% of whites).
- Latinos high uninsured rate is largely due to the very low rate of health insurance provided by their employers, 43% compared with 76% for whites.
- Almost two-thirds of the uninsured Latino children (ages 0-17) were eligible for one of the state's two public health insurance programs – Medi-Cal or Healthy Families.
- Community and hospital clinics are the usual source of care for half of Latino children in households below 100% FPL.
- Less than 4% of physicians in California are Latino and only 5% of the state's medical residents were Latino in 2000.



# In Conclusion

- Latinos are a critical population for the state of California
- They have specific characteristics:
  - Most Latinos children were born in the U.S., but most Latino adults were born abroad
  - Young population
  - Low Level of Education
  - Limited English Proficiency
- Important Policy Issues:
  - Health Care Access – healthy children are most likely to succeed in schools
  - Family Support and Poverty Reduction
  - Improvements on Educational Attainment

# Sources

- Edwin Rivera, *The California Latino: A detailed Political and Financial Portrait*, Policy Director, LCHC, May 2003.
- Belinda Reyes, *California's Latino Population: Demographics and Policy Presentation*, Public Policy Institute of California & UC Merced, May 2004.
- Latino Coalition for a Healthy California Health Fact Sheet, January 2005.

Prepared by the Latino Coalition for a Healthy California



FACT SHEET  
JANUARY 2005

---

## Latino Health in California

### Uninsured Rate

- California has approximately 6.3 million uninsured individuals or 20% of the statewide population.
- 54% of the uninsured are Latino.
- More than one in four Latinos ages 0-64 in California are uninsured (28% of Latinos compared to 9% of whites).
- Latinos high uninsured rate is largely due to the very low rate of health insurance provided by their employers, 43% compared with 76% for whites.
- Uninsured individuals rely on the safety net-community clinics, hospitals, and private physicians who deliver care without respect for ability to pay.
- 85% of the uninsured population, 41% of the Medi-Cal population, and 27% of the Healthy Families population often or almost always experience problems obtaining specialty care compared to 2% of those with private insurance.

### Uninsured Children

- The uninsured rate for Latino children between the ages of 0 to 17 is 38%.
- Latino adolescents (ages 12-17) have the highest uninsured prevalence of all groups, 22.5% compared with 4.4% for Whites.
- Latino children (ages 0-11) have the highest uninsured prevalence of all groups, 15.5% compared with 4.3% for Whites.
- Almost two-thirds of the uninsured Latino children (ages 0-17) were eligible for one of the state's two public health insurance programs – Medi-Cal or Healthy Families.
- Legislative districts with the highest rates of children uninsured-and-eligible for public health insurance were primarily located in Los Angeles County and in the greater Southern California region.
- Among children, with a non-citizen father, 21% had no health insurance, 12% did not visit a doctor in the last year, 12% had no usual place of care, and 45% of those with a usual place of care went to a clinic or a community hospital for care.
- Community and hospital clinics are the usual source of care for 50.1% of Latino children in households below 100% FPL and only 9.4% in households at 300% FPL and above.

### Farmworkers

- 96% of farmworkers are Latino of which 34 to 42% are undocumented.
- 95% of California's migrant agricultural workers use Spanish as their primary language.
- 61% of migrant families are impoverished; often they are not paid the minimum wage and the State lacks enough inspectors to enforce existing regulations.
- Approximately 70% of migrant agricultural workers lack public or private health insurance.
- Over 16% of farmworkers say their employer offers health insurance but 1/3 of these workers did not participate due to high premiums or inability to afford the co-payments.
- 11% of farmworkers receive insurance through their employer, 7% participate in public insurance, and less than 5% purchase personal private insurance.

- 56% of migrant Latino children 6 and under experienced cavities.
- Approximately 40% of women farmworkers surveyed had had a medical visit in the prior 5 months, but 44% had never been to a dentist.
- In 1999, the California Agricultural Worker Health Survey found that nearly 1/3 of male agricultural workers had never been to a doctor or clinic in their lives; half had never been to a dentist, and 2/3 had never had an eye care visit.

### **Cultural/Linguistic Access and Competence**

- In California, 40% of its population speaks a language other than English at home.
- Less than 4% of physicians in California are Latino and only 5% of the state's medical residents were Latino in 2000.
- While the population-to-physician ratio is 335:1, the Latino population-to-physician is almost 3000:1.
- Latino physicians are two to three times more likely to practice in underserved areas, such as migrant health centers and free county safety net clinics, than their non-Latino white counterparts.
- A study in the journal Pediatrics found an average of 31 errors per visit for Spanish-speaking patients using interpreters at pediatric clinics.
- Almost 2/3 of the errors had clinical consequences which included wrong instructions on dose and duration of prescribed drugs and omission of important information about patient drug allergies or medical history.
- A poll by New California Media found that:
  - a majority of all California immigrants are unaware that they have a right to ask for an interpreter when seeking medical care;
  - more than one out of three Hispanics say they have problems understanding a medical situation when it's not explained to them in their language;
  - over half of Hispanics are confused by instructions when discharged from hospitals; and
  - over half of Hispanics report problems over how to use their prescription medicine.

### **Medi-Cal**

- Medi-Cal serves one in six Californians or about six million residents.
- 47% or 2.9 million of the Medi-Cal beneficiaries are Latino.
- Medi-Cal or Healthy Families outreach could extend coverage to uninsured Latino children, more than 460,000 in all.
- California has 90,000 licensed physicians, but only about 26,000 physicians and physician groups are certified to care for Medi-Cal patients.
- At least 10,500 medical doctors statewide who want to treat the poor find their applications still being processed, sometimes a year or more after being submitted. If this backlog were alleviated, the state's poor would have about 40% more physicians from whom to choose.
- Outstationing eligibility workers in the community is associated with lower odds of Medi-Cal enrollment. For every additional outstation per 1,000 eligible children in the community, the odds of enrollment decreased by 2/3.
- Children who lived in counties with county-sponsored expansion program had three times the odds of being enrolled in Medi-Cal compared with children from a county without an expansion program.

## **Healthy Families**

- Of the 650,000 children enrolled in Healthy Families, 57.8% are Latino children.
- 61.2% of the total Healthy Families program enrollment are in Los Angeles, Orange, San Diego, San Bernardino, and Riverside Counties which have a high Latino population.
- Almost 40% of the Healthy Families applications received were from Spanish-speaking applicants.
- Outreach money is associated with increased enrollment in both Healthy Families and Medi-Cal. Every additional dollar spent on outreach per eligible child in the county increases the odds of enrollment by 6% in Medi-Cal and 7% in Healthy Families.
- Outreach money spent on media is associated with decreased enrollment in Healthy Families. For every \$1 increase in media per 1,000 eligible children the odds of enrollment decreased by 11%.

## **Diabetes**

- Nearly one out of five Latino adults over the age of 50 (19.7%) report they have diabetes, which is twice the rate for Whites (10.1%) and among the highest for all racial/ethnic groups.
- In California, only 67.5% of Latinos with diabetes report that they are taking medications for their condition, compared to 78.2% of Whites.
- Only one out of three Latinos with diabetes (35.6%) report being uninsured all year compared to less than one out of ten Whites (6.4%).
- Among adults with diabetes, Latinos are nearly four times more likely to have no usual source of care than Whites (12.3% vs. 3.4%)
- Insured Latinos with diabetes are significantly more likely to report medication use (72.5% vs. 48.9%) and daily glucose monitoring (39.4% vs. 21.7%) compared to uninsured Latinos.
- Among Latinos with diabetes, nearly one out of three is primarily a Spanish speaker (31.3%), more than one out of three are non-citizens (39.7%), and nearly three out of four (68.6%) have incomes below 200% of the Federal Poverty Level.

## **Cancer**

- Latina women suffer the highest rate of invasive cervical cancer in California.
- Latina women are twice as likely as white women to develop cervical cancer and along with African American and Asian Pacific Islander women, are far more likely to die from cervical cancer than Whites.
- The proportion of Latinas who have never had a Pap test, 10%, is more than double that of Whites.
- Only one in three (33%) Latina women report having a recent colorectal cancer screening test.
- More than 60% Latino men aged 50 and older have never been screened for prostate cancer.
- Within family incomes below 200% FPL, only 67% Latina women older than the age of 40 have had a mammogram compared to Whites (72%).
- 92% among Latinas with Medi-Cal vs. 80% of uninsured Latinas received a PAP test within the last three years.

**Sources:**

- Insure the Uninsured Project, Who is Uninsured in California, June 2003.*
- Aguayo, J. et. al, Important Health Care Issues for California Latinos: Health Insurance and Health Status, January 2003.*
- Felt-Lisk, S. et. al, Examining Access to Specialty Care for California's Uninsured, June 2004.*
- Holtby, S., et. al, Health of California's Adults, Adolescents, and Children: Findings from CHIS 2001, May 2004.*
- Mendez-Luck, C., et. al, Many Uninsured Children Qualify for Medi-Cal or Healthy Families, June 2004.*
- Reyes, B., California's Latino Population: Demographics and Policy Presentation, May 2004.*
- UCLA Center for Healthy Children, Families, and Communities, et. al, The Health of Young Children in California, July 2003.*
- Wallace, S., et. al, Mexican Immigrant are Generally Healthier, but Have Less Access to Needed Health Care, October 2003.*
- Pourat, N., et. al, Demographics, Health and Access to Care of Immigrant Children in California: Identifying Barriers to Staying Healthy, March 2003.*
- Rodriguez, M., et. al, Health of Migrant Farmworkers in California, March 2003.*
- The California Endowment, Improving Access to Health Care for Limited English Proficient Health Care Consumers, April 2003.*
- Grantmakers in Health Issue Dialogue, Addressing Language and Culture in Providing Health Care, August 2003.*
- Perkins, J., et. al, Ensuring Linguistic Access in Health Care Settings: Legal Rights and Responsibilities, August 2003.*
- Santa Cruz Sentinel, Health care for Spanish speakers lags due to slips of the tongue, January 10, 2003.*
- New California Media Poll, [www.ncmonline.com/polls/](http://www.ncmonline.com/polls/)*
- California HealthCare Foundation, MediCal Fact and Figures. January 2004.*
- Governor's Budget, January 2004.*
- Aguayo, J. et. al, Important Health Care Issues for California Latinos: Health Insurance and Health Status, January 2003.*  
*[www.kff.org/statepolicy/7086/sec5.cfm](http://www.kff.org/statepolicy/7086/sec5.cfm).*
- Orange County Register, Application Frustration, March 10, 2004.*
- Kinchelow, J. & Brown, R., The Effect of County "Outreach Environments" on Family Participation in Medi-Cal and Healthy Families, August 2004.*
- MRMIB, Healthy Families Summary, Retrieved from [www.mrmib.ca.gov](http://www.mrmib.ca.gov) September 2004.*
- Kinchelow, J. & Brown, R., The Effect of County "Outreach Environments" on Family Participation in Medi-Cal and Healthy Families, August 2004.*
- Chawla, N., et. al, Diabetes among Latinos in California: Disparities in Access and Management, September 2003.*
- The California Endowment, Unequal Treatment – Unequal Health: What Data Tell Us About Health Gaps in California, 2002.*
- Babey, S., et. al, Cancer Screening in California: Racial and Ethnic Disparities Persist, September 2003.*



RESEARCH BRIEF  
JANUARY 2005

---

## Latino Health in California

### Introduction

California's eleven million Latino residents are destined to have a unique impact on the future of the state's economy and public health. Their disparate demographics and phenomenal population growth exacerbates a basic flaw in societal infrastructure: the failure to provide for the socio-economic, educational and environmental well-being of all persons. As a major population group, Latinos are a critical component of the fulfillment of the vision for a healthy California. It is critical to improve the health of Latinos and thereby the health of all Californians. The health and economic prowess of the state depends on the health of all its residents.

### Demographics

The U.S. Latino immigrant population is growing in unprecedented proportions. In two generations, the United States will be second only to Mexico in the size of its Latino population. In California between 1970 and 2000, the Latino population ballooned from 12% to over 30%. Currently, one of every two children is Latino, one in every three Californians is Latino, and 45% of California Latinos are immigrants. By 2020, a majority of children entering high school, workers entering the workforce and newly-eligible voters will be Latino.

Despite Latinos' contribution to the state and national wealth, more than one in three Latinos, or 3.2 million, live below the federal poverty level. This is a greater proportion than any of the major racial and ethnic groups in California.

### Uninsured Rate

Latinos are disproportionately represented in the uninsured population. Although Latinos represent 32% of the state's population, they account for 54% of the uninsured. More than one in four Latinos ages 0-64 in California are uninsured, 28% of Latinos compared to 9% of whites. Latinos high uninsured rate is largely due to the very low rate of health insurance provided by their employers, 43% compared with 76% for whites.

The uninsured rate for Latino children is disturbingly higher. The uninsured rate for Latino children between the ages of 0 to 17 is 38%. Latino adolescents between the ages of 12 and 17 have the highest uninsured frequency of all groups, 22.5% compared with 4.4% for Whites. For Latino children between the ages of 0 to 11, they have the highest uninsured occurrence of all groups, 15.5% compared with 2.6% for African-American children, 3.9% for Asian children, and 4.3% for White children. In fact, of the children eligible-yet-not enrolled into public health programs, two-thirds are Latinos.

### Immigrants

Forty-five percent of the Latino population is immigrant. The health status of Latino immigrants is a paradox. While Latino immigrants tend to be younger and healthier, environmental, economic and social factors result in a worsening health condition. In addition, Latino immigrants are more likely than U.S.-born Latinos to be uninsured. Mexican immigrants are less likely to have a usual source of care, 53.5% compared to 24.1% for U.S. born Mexican ancestry and 15.2% for U.S.-born Non-Latino White. Further,

about one in five children of undocumented parents are in fair or poor health, and one in four undocumented children of undocumented parents are without a usual source of care.

### **Farmworkers**

For more than 50 years, California has been ranked the major agricultural producer in the United States providing more than 50% of the nation's fruit, nuts, and vegetables, and more than 90% of its grapes. California leads the nation in agricultural exports with almost 20% of its production going to feed the world.

Ninety-six percent of the farmworkers are Latino of which 34% to 42% are undocumented. A majority (61%) of the farmworkers who toil in the fields are impoverished – often not being paid the minimum wage, living in substandard housing and lacking a usual source of health care. In fact, approximately 70% lack public or private health insurance. A dismal 16% of farmworkers say their employer offers health insurance but one-third are unable to participate due to expensive premiums or co-payments. Low parental education, transportation problems, long wait times in community clinics, decreased preventive screening, language and cultural differences, and lack of a regular source of care impact farmworker's access to health.

### **Health Disparities**

Health disparities are the inequities in social, economic, and environmental conditions that increase risk of illness and injury, and reduce opportunities for good health. Social injustice leads to unequal treatment and unequal access.

The percentage of Latinos applying to, matriculating in, and completing medical or dental schools in California has been and remains low. In 2000, approximately 10% of medical school degrees recipients, less than 8% of dentistry degree recipients, and fewer than 5% of physicians actively practicing in California were Latino. There is currently just one Latino physician for every 2,893 Latinos in California, compared to one non-Latino doctor for every 334 non-Latinos.

### **Community Health**

Community health encompasses the aggregate physical, emotional, environmental conditions in communities that lead to either well-being, or to disease/dysfunction of a population and includes health promotion and/or health risk factors in the environment.

Latinos are disproportionately affected among preventable diseases, such as diabetes, cervical cancer, and AIDS/HIV. Nearly one in five Latino adults over the age of 50 (19.7%) report they have diabetes, which is twice the rate for Whites (10.1%) and among the highest for all racial and ethnic groups. Latina women suffer the highest rate of invasive cervical cancer and are far more likely to die from cervical cancer than Whites. Furthermore, the proportion of Latinas who have never had a Pap test, 10%, is more than double that of Whites. As of December 2003, the cumulative number of reported AIDS cases by race/ethnicity and age showed that 41% of the adult/adolescent cases and 72% of the pediatric cases occurred in people of color. For Latinos, they represented 21% of adult/adolescent cases and 38% of pediatric cases, a greater proportion among other major ethnic and racial groups.



The Latino Coalition for a Healthy California (LCHC) is a non-profit public policy and advocacy organization dedicated to impacting Latino health improvements through enhanced information, policy development and community involvement. LCHC's mission of developing and supporting policies, services, and conditions that improve the health of Latinos is accomplished by operating research, public policy advocacy, and community education programs to establish and improve policies and practices that promote the health status of Latinos.

**Sources:**

Reyes, B., California's Latino Population: Demographics and Policy Presentation, May 2004.  
Aguayo, J. et. al, Important Health Care Issues for California Latinos: Health Insurance and Health Status, January 2003.  
Holtby, S., et. al, Health of California's Adults, Adolescents, and Children: Findings from CHIS 2001, May 2004.  
Wallace, S., et. al, Mexican Immigrant are Generally Healthier, but Have Less Access to Needed Health Care, October 2003.  
Pourat, N., et. al, Demographics, Health and Access to Care of Immigrant Children in California: Identifying Barriers to Staying Healthy, March 2003.  
Rodriguez, M., et. al, Health of Migrant Farmworkers in California, March 2003.  
Chawla, N., et. al, Diabetes among Latinos in California: Disparities in Access and Management, September 2003. The California Endowment, Unequal Treatment – Unequal Health: What Data Tell Us About Health Gaps in California, 2002.  
The California Campaign to Eliminate Racial and Ethnic Disparities in Health, Health for All: California's Strategic Approach to Eliminating Racial and Ethnic Health Disparities, November 2003.  
Department of Health Services, Office of AIDS, HIV/AIDS Statistics, <http://www.dhs.ca.gov/ps/ooa/Default.htm>.

April 2005

## One out of Three Latino Adolescents Overweight or At Risk

Michael A. Rodríguez, Marlena Kane, Lupe Alonzo-Díaz, and George R. Flores

The number of overweight adolescents has reached epidemic proportions—both nationwide and in California. More than one out of three Latino adolescents in California are overweight or at risk for overweight. Overweight adolescents are at increased risk for becoming obese adults and for developing chronic, serious and costly medical problems, such as diabetes, heart disease and certain cancers. The annual cost of obesity in California is more than \$6.4 billion.<sup>1</sup>

### Latino Adolescents Demonstrate Highest Prevalence of Overweight

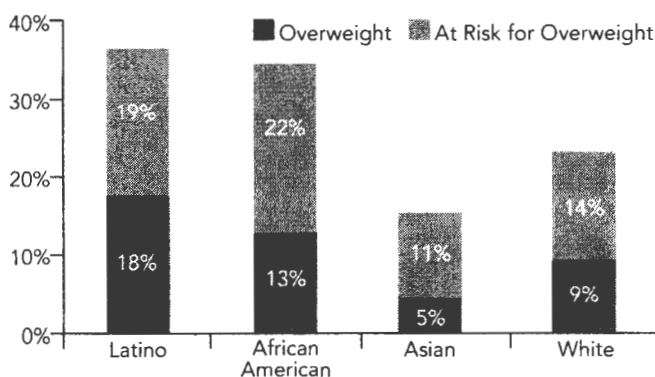
Among California adolescents, certain groups are more likely to be overweight or at risk for overweight. Latino adolescents were the most likely to be overweight and more likely to be at risk for overweight than Asian or white adolescents, leading to higher risks for overweight in adulthood (Exhibit 1).

Among Latino adolescents, the prevalence of overweight was twice as high in males as females (23% and 12% respectively; Exhibit 2). In addition, the prevalence of overweight among Latino adolescents who are U.S. born (20%) was nearly twice as high as among non U.S.-born Latino adolescents (11%). Other studies have shown that among U.S. immigrants, the number of years in this country is associated with an increase in overweight.<sup>2</sup>

### Risk Factors for Overweight Among Latino Adolescents

Regular physical activity and a healthy diet are important to maintain healthy weight. An imbalance between these two factors contributes to overweight. Many Latino adolescents do not consume a healthy diet and do not get enough physical activity, which are behaviors that increase their risk for overweight and poor health.

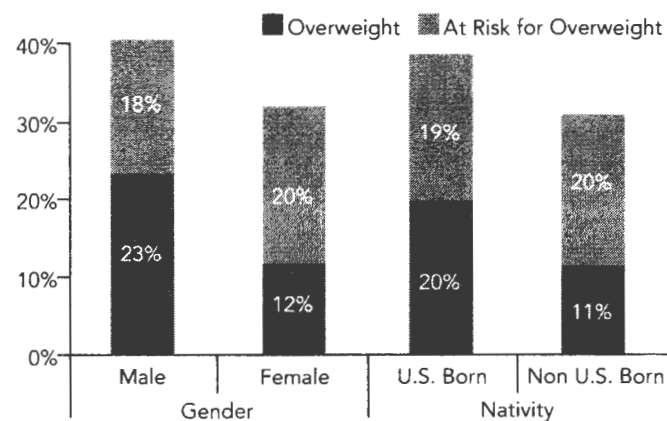
**Exhibit 1: Prevalence of Overweight and At Risk for Overweight by Race/Ethnicity, Adolescents (Ages 12-17), California 2003**



Note: Race/ethnicity is based on single race or the race/ethnicity with which the respondent most identifies. Body mass index (BMI) was calculated based on respondent reports of weight and height. A gender appropriate growth chart was used to compare reported BMI for age. Adolescents in the 85th-94th percentile are considered at risk for being overweight and adolescents in the 95th percentile and higher are considered overweight.

Source: 2003 California Health Interview Survey

**Exhibit 2: Prevalence of Overweight and At Risk for Overweight by Gender and Nativity, Latino Adolescents (Ages 12-17), California 2003**



Source: 2003 California Health Interview Survey



In California, three out of four Latino adolescents (76%) drank at least one soda every day, compared with just over half of white adolescents (57%). Sodas are one example of drinks popular among adolescents that are high in calories and low in nutritional value. Among Latino adolescents, 81% of males and 71% of females consumed at least one soda per day.

In addition, one in ten Latino adolescents (10%) reported engaging in no physical activity at all; with Latina girls (13%) being twice as likely to not participate in physical activity compared with Latino boys (6%).<sup>3</sup> Of even greater concern is the disparity in the proportion of Latino adolescents (10%) who get no physical activity at all, which was more than twice that of white adolescents (4%).

#### Discussion

Overweight disproportionately affects Latino adolescents, and is a serious threat to the health and well-being of Latino communities—and consequently to California. Unhealthy eating and inactivity are behaviors that are influenced by conditions in the home, school, neighborhood and in the media. Latino adolescents are not alone in the obesity epidemic. Families, schools, communities, health professionals and policymakers throughout California need to become engaged in efforts to change the conditions that foster unhealthy eating and inactivity. Latino adolescents especially need to be involved as peer educators, thought leaders and advocates for practices, programs and policies that promote healthy eating and regular physical activity.

Policy solutions to the obesity epidemic must be considerate of the unique social, cultural and environmental circumstances that face Latinos. More research is needed to uncover the impact of immigration, social and environmental inequities, and cultural experiences on behaviors contributing to obesity; as well as to uncover the most effective means to prevent overweight among Latino youth. Policymakers should consider the following recommendations to reverse these alarming trends:

1) **Educate and require** schools to provide healthier food choices for children and adolescents; for example, replacing sugary snacks and sodas available in vending

machines with more nutritious snacks and healthier drinks.

2) **Ensure** that children are receiving physical education programs in all schools and after school programs.

3) **Encourage** the availability of affordable fresh fruits, vegetables and healthy food choices by locating grocery stores rather than liquor stores in all neighborhoods, and addressing the large presence of fast food restaurants in communities of color and low-income neighborhoods.

#### Author Information

Michael A. Rodriguez, MD, MPH, Associate Professor, UCLA Department of Family Medicine; Marlena Kane, MSWc, MPHc, UCLA Center for Health Policy Research; Lupe Alonzo-Diaz, MPAff, Executive Director of the Latino Coalition for a Healthy California; and George R. Flores, MD, MPH, Senior Program Officer, The California Endowment.

The Latino Coalition for a Healthy California (LCHC) is forming strategic alliances to address issues related to overweight and obesity, and suggests supportive sites such as The Strategic Alliance ([www.eatbettermovemore.org](http://www.eatbettermovemore.org)) and the California Latino 5 a Day Campaign ([www.dhs.ca.gov/ps/cdic/cpns/lat5aday/default.htm](http://www.dhs.ca.gov/ps/cdic/cpns/lat5aday/default.htm)).

#### Data Source

Based on data from the 2003 California Health Interview Survey (CHIS 2003), this fact sheet examines overweight among Latino adolescents. CHIS 2003 provides the most recent information available on overweight among Californians. For more information on the California Health Interview Survey, please visit [www.chis.ucla.edu](http://www.chis.ucla.edu).

#### Funders

The Latino Coalition for a Healthy California, The California Endowment and The California Wellness Foundation funded the research and development of this fact sheet.

1 *The Economic Costs of Physical Inactivity, Obesity, and Overweight in California Adults*. California Department of Health Services, 2005.

2 Goel MS, McCarthy EP, Phillips RS, Wee CC. Obesity among U.S. immigrant subgroups by duration of residence. *JAMA*. 2004; 292: 2860-2867.

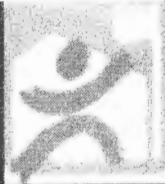
3 Engaging in "no physical activity" was defined as performing no vigorous activity (activity that made the respondent swear or breathe hard) and no moderate activity (such as walking or bicycling) on any of the seven days prior to the survey.

FS2005-1



UCLA Center for Health Policy Research  
10911 Weyburn Avenue, Suite 300  
Los Angeles, California

Phone 310.794.0909  
Fax 310.794.2686  
Email [chpr@ucla.edu](mailto:chpr@ucla.edu)



Respond to topic

↳ Write to us

Archives

↳ View more issues

Readers Respond

↳ Read comments

Communications

↳ E-Journal

↳ News alerts

InFocus Home

CHHCS Home

To our readers,

As part of our commitment to keep you up to date on legislation, federal programs, court decisions and private sector actions that affect your work with children, we publish InFocus, an in-depth look at emerging issues in school-based health and health care. Written by long-time ejournal editor Virginia Robinson, issues of InFocus explore current topics in school health. We invite you to contribute your own thoughts and look forward to hearing from you.

Julia Graham Lear  
Director, Center for Health and Health Care in Schools

---

February 25, 2005

## Children in Immigrant Families

Noting that one in five children in the United States lives in an immigrant family, a panel of experts convened by the Brookings Institution and the Woodrow Wilson School of Public and International Affairs has pointed out that most children of immigrants will be lifelong U.S. residents and their presence will affect basic institutions, including the health system, that currently are not well equipped to handle their special circumstances.

“Children of immigrants face several difficulties that children of native-born parents do not, including adapting to cultural norms that may differ from those of their parents and learning a language that may not be spoken at home,” said the Brookings Institution’s Ron Haskins. “The poverty rate of children in immigrant families is 21 percent, as against 14 percent for children in native-born families. Nearly half of children in immigrant families have family incomes below 200 percent of poverty, compared with only 34 percent of native children. They are more likely to be in families worried about or encountering difficulties paying for food. They are nearly twice as likely to lack health insurance, and they are more than four times as likely to live in crowded housing.”

Though children in immigrant families experience higher poverty and hardship rates, they are less likely to receive public assistance, including Medicaid, than other low-income children—children of immigrants are about half as likely to participate in Medicaid, a gap that has widened in recent years. Changes in federal welfare law in 1996 made most noncitizens ineligible for Temporary Assistance to Needy Families (TANF) and Medicaid during their first five years in the United States and also restricted their eligibility for food stamps. Although these restrictions do not apply to children who were born in the United States to immigrant parents—those children are citizens entitled to all benefits enjoyed by other citizens—but the restrictions on parents have had a chilling effect on families’ participation in the programs. An Urban Institute report also indicates that young children of immigrants are less likely to be in center-based child care, potentially limiting their preparation for schooling.

A report on immigrant children prepared in 2004 by the David and Lucile Packard Foundation for the *Future of Children* series summarized strengths and challenges that set immigrant families apart from the mainstream. Authors Margie Shields and Richard Behrman noted that:

- ∞ Compared with children of U.S.-born parents, children of immigrants are more likely to be born healthier and to live with both parents. The percentage of immigrant children living in single-parent households is only about 16 percent, compared with 26 percent for children of U.S.-born families.
- ∞ Immigrant children are more likely to be living in poverty and to be without health insurance.
- ∞ Immigrants from Mexico, Asia, Central America, and the Caribbean, who make up the largest part of current immigrant populations, tend to be poorly educated, have limited English skills, and have poor job prospects. The fact that many are undocumented may subject their children to hardships greater than those experienced by children from other poor families.
- ∞ Immigrant families generally come to America eager to work hard, and they expect their children to do the same. “Children of immigrants typically are imbued with a strong sense of family obligation and ethnic pride, and with the importance of education,” and they tend to do better in school, at least through middle school, though by adolescence they may become disillusioned and their attitudes toward teachers and scholastic achievement can turn negative.
- ∞ Immigrant families tend to settle in communities with others from their same country of origin, which may give children a cohesive and culturally consonant community that can buffer some of the negative influences of mainstream society, but that may also make acquisition of a new language more difficult. Seventy-two percent of children in immigrant families speak a language other than English at home, and 26 percent live in linguistically isolated households where no one over the age of 14 has a strong command of the English language.

“Regardless of how one might feel about our nation’s immigration policies, there is no turning back the clock on the children of immigrants already living here,” and the implications of those populations for all aspects of our lives, including health care, the authors pointed out.

### **The Futures of Immigrant Children**

Both the *Future of Children* report and the Brookings panelists suggested steps that might be taken to improve the health and well-being of children in immigrant families.

- ∞ *Birth to age eight.* Early learning experiences, extended into kindergarten and the early elementary grades, and special education might benefit many immigrant children, though children in immigrant families tend not to participate in any of these activities.
- ∞ *Middle childhood.* During middle childhood, it is critical to understand how experiences with racism and discrimination and perceptions of diminished life opportunities can influence the paths of immigrant children. Maintaining respect for parents and preserving connections to their cultural heritages seem very important in these years.
- ∞ *Adolescence.* Finishing school, acquiring work skills, postponing parenthood, and being physically and mentally healthy can help immigrant children negotiate the difficult passage to adulthood. Barriers include lack of health insurance and access to health care.

But not all children in immigrant families are the same. The *Future of Children* report describes the circumstances and needs of two groups, in particular—Latinos and Southeast Asians.

### ***Latino Children***

“One of the most profound demographic shifts in the United States during the past two decades has been the dramatic increase in the Hispanic population, driven both by high birth rates relative to other racial and ethnic groups, and by immigration,” writes Sonia Perez of the National Council of La Raza. Two characteristics of the Latino population are especially noteworthy, she points out. For one, it is a very young—more than one-third of Latinos in this country are under 18 years of age, and almost half are under 25. And second, while many of the children were born in the United States, they are likely to live in households that include immigrants and in which Spanish is the language most often spoken.

In school, Latinos now make up the second-largest population group, after non-Hispanic whites. Under the Bush administration’s No Child Left Behind education law, these children, even if they have limited proficiency in English, are expected to meet the same academic benchmarks as English-proficient students.

In another part of their lives—health—young Latinos also face significant challenges, Perez notes. They have disproportionately high rates of diabetes, asthma, and HIV/AIDS and the highest teen birth rate in the nation. These conditions result in part from, or are exacerbated by, widespread lack of health insurance. Latino young people are less likely to receive coverage through their parents’ jobs, which are often in industries such as construction, agriculture, and service, in which there are low wages and no benefits; and the 1996 federal welfare reforms bar many immigrants from federally funded health programs.

The *Future of Children* report points to one particular group of Latinos—immigrants from Mexico—as examples of both the strengths and the litany of challenges faced by all immigrants. Currently, it’s estimated that more than 5.1 million children in this country are children of Mexican immigrants, both documented and undocumented, who have come to the United States in search of economic opportunity. The level of parental education tends to be very low, and many work only part-time or seasonally. Mexican-Americans must contend with a long history of what the authors describe as “stigmatization, economic exploitation, and racial exclusion.” But children of Mexican immigrants also exemplify some of the strengths of immigrant groups in general—children are more likely to be living in intact families with one or more working parents and to be part of well-established and supportive communities.

### ***Southeast Asian Children***

Policymakers tend to look at Asian Americans as one large, undifferentiated group that is on the whole doing quite well in American society, and they are often cited as a “model minority.” But large numbers of children who emigrated, or whose parents emigrated, from Southeast Asia—Cambodia, Laos, and Vietnam—have problems with language, access to health care, and utilization of federal benefits that are very similar to those of Latino children, according to Ka Ying Yang, a former director of the Southeast Asia Resource Action Center.

Nearly three decades after the beginning of the refugee flight from Southeast Asia, many children in these immigrant families continue to struggle with formal education, due to

factors that include limited English language skills; discrimination; miscommunication between children and parents and between families and schools; and feelings of alienation from mainstream schools.

And as with Latinos, many Southeast Asian immigrant children are without health insurance or a usual source of health care. That may be particularly true of mental health care, where surveys indicate that Asian American youth are less than half as likely as white youths to receive counseling.

Authors Shields and Behrman conclude: "Implementing programs that promote the healthy development of children in immigrant families and that provide them with opportunities for achievement more equal to those of children in U.S.-born families clearly places an added financial burden on society. However, failure to implement such programs will also place a financial burden on society, a burden that will grow over time as these children enter adulthood and their lifetime earnings and tax contributions are less than they might have been had they received more supports earlier in life. To assure a cohesive society, a prosperous economy, and a strong safety net for the elderly, poor, and disabled into the next century, more attention must be paid to the developmental needs of the large numbers of children in immigrant families living in this country, especially those who are at greatest risk of failure."

*The Future of Children* report, "Children of Immigrant Families," is online at [www.futureofchildren.org/pubs-info2825/pubs-info.htm?doc\\_id=240166](http://www.futureofchildren.org/pubs-info2825/pubs-info.htm?doc_id=240166). "The Health and Well-Being of Young Children of Immigrants", a research report by the Urban Institute, is online at [www.urban.org/url.cfm?ID=311139](http://www.urban.org/url.cfm?ID=311139). Also see: "Caring Across Cultures: Achieving Cultural Competence in Health Programs at School: Survey Results" at [www.healthinschools.org/sh/cultresults.asp](http://www.healthinschools.org/sh/cultresults.asp).



Maximizing Societal Contributions  
of Latino Adults by Investing in  
Latino Children's Health Care

April 2005

M. Iya Kahramanian, M.P.H.  
Erin Richardson, M.S.  
Cristina Gamboa  
Jabar Abdullah Akbar, M.P.H.  
David E. Hayes-Bautista, Ph.D.





This report was funded by The California Endowment. Cover California's Kids is a program of The California Endowment. The views in this report are those of the authors and not The California Endowment.

**M. Iya Kahramanian, M.P.H.**

Research Analyst  
Department of Medicine  
David Geffen School of Medicine, University of California, Los Angeles  
Center for the Study of Latino Health and Culture

**Erin Richardson, M.S.**

Doctorate Student  
Department of Health Services  
University of California, Los Angeles, School of Public Health

**Cristina Gamboa**

Research Associate  
Department of Medicine  
David Geffen School of Medicine, University of California, Los Angeles  
Center for the Study of Latino Health and Culture

**Jabar Abdullah Akbar, M.P.H.**

Doctorate Student  
Department of Health Services  
University of California, Los Angeles, School of Public Health

**David E. Hayes-Bautista, Ph.D.**

Professor of Medicine  
Department of Medicine  
David Geffen School of Medicine, University of California, Los Angeles  
Director, Center for the Study of Latino Health and Culture

Please direct correspondence to M. Iya Kahramanian, Center for the Study of Latino Health and Culture, University of California, Los Angeles, 924 Westwood Blvd., Suite 730, Los Angeles, CA 90024; 310-794-0663 phone; 310-794-2862 fax; [cesla@ucla.edu](mailto:cesla@ucla.edu).

## Introduction

With health care costs on the rise, population increase, and growing state and federal deficits, paying for insurance has become as difficult for individuals and families as it is for the federal government. While Congress debates how to pay for Medicare and Social Security for the elderly, more and more younger workers are striking for better health coverage, and stories about individuals paying the lion's share of their income for health insurance fill the news. We know what the costs of health insurance are, but equal attention needs to be devoted to the costs of *not* having health insurance. A regular type of health care promotes continuity of care and makes possible the major cost-effective approach to health care: preventive care. Without some form of insurance, either public or private, individuals are unlikely to receive preventive care, which leads them to wait until they are seriously ill and then to seek expensive, episodic emergency room care. It is well-documented that children who receive necessary preventive services are generally in better health than children who do not. It is our contention that the lack of health insurance has far-reaching social consequences. In this study, we propose to look at those consequences by focusing on Latino children, their lack of insurance coverage, how this lack of coverage affects their health and school performance, and how these phenomena impact their ability to contribute as adults to the state's economy and society.

To establish the relationship that health care coverage and access to care have on long-term positive societal contributions, our analysis used publicly available data sources and an extensive literature review. No primary data source, to date has sufficient data elements to make a direct link between health care coverage and long-term societal contributions.

## Health Insurance and Access to Care

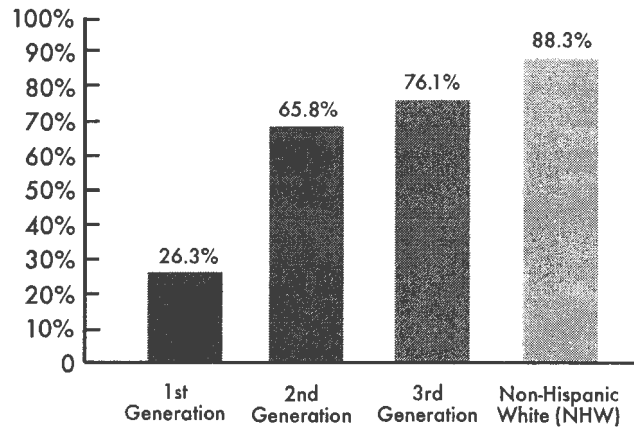
Disparities between Latinos and the non-Hispanic white population are seen in every measure of health insurance status. Overall, a lower percentage of Latinos than whites have some form of insurance. In California, 24 percent of all Latino children, whether they are first-, second- or third-generation\*, are uninsured.<sup>1</sup> Focusing on children of Mexican-American descent, data from the 1999-2000 and 2001-2002 National Health and Nutrition Examination Surveys (NHANES) show patterns of health insurance and access for first- to third-generation children. The data from NHANES reveal that:

---

\* First generation means the child and at least one parent was born in a foreign country; second generation means that the child is U.S.-born but at least one parent was born in a foreign country; third generation means that the child and both parents are U.S.-born.

**Lower percentage of Latinos are insured:** 26 percent of first-generation Latino children have health insurance, compared to 88 percent of non-Hispanic white children. (Figure 1).

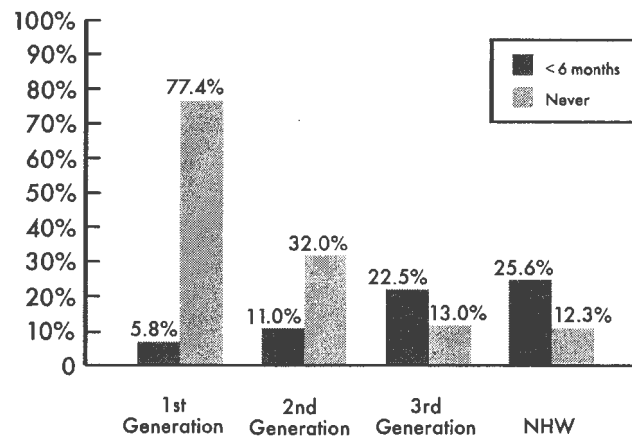
**FIGURE 1:**  
Percentage insured, by generational status



Source: 1999-2000 and 2001-2002 National Health and Nutrition Examination Survey.

**Latinos are more likely never to have been insured:** 77 percent of first-generation Latino children have never been insured, compared to 12 percent of non-Hispanic white children. (Figure 2).

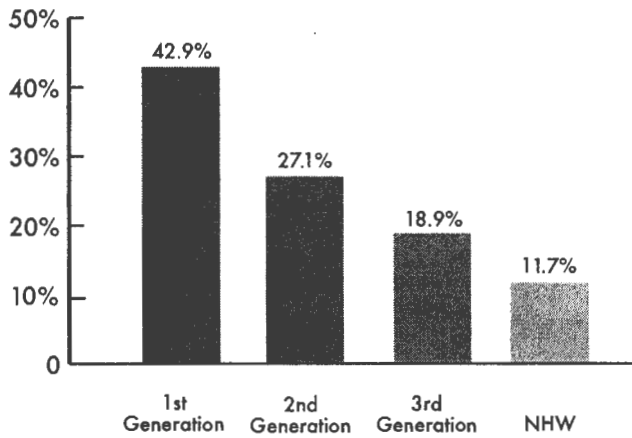
**FIGURE 2:**  
Length of time since last insured, by generational status



Source: 1999-2000 and 2001-2002 National Health and Nutrition Examination Survey.

**Latinos are more likely not to have received care in the last 12 months:** 43 percent of first-generation Latino children did not receive care in the last year, compared to 12 percent of non-Hispanic white children. (Figure 3).

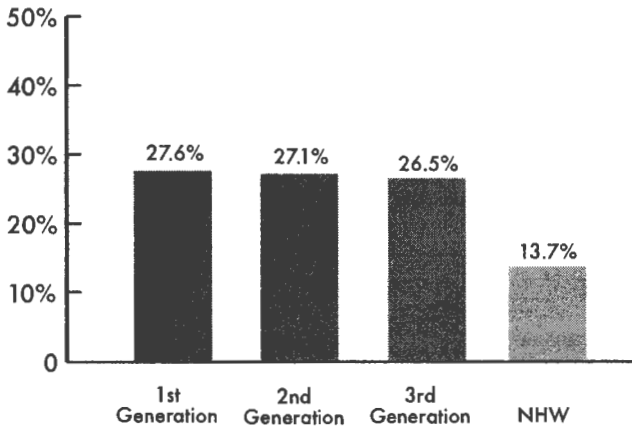
**FIGURE 3:**  
Not receive care in last 12 months



Source: 1999-2000 and 2001-2002 National Health and Nutrition Examination Survey.

**Latinos are more likely not to have received care in more than three years:** 28 percent of first-generation Latino children have gone more than three years since their last health care visit, compared to 14 percent of non-Hispanic white children. (Figure 4).

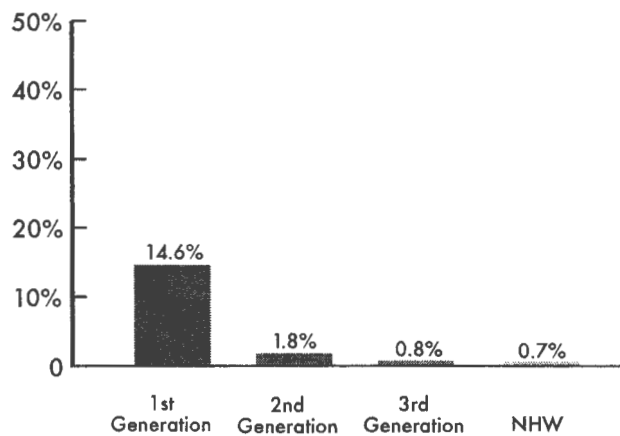
**FIGURE 4:**  
Time since last health care visit: 3+ years



Source: 1999-2000 and 2001-2002 National Health and Nutrition Examination Survey.

**Latinos are more likely to have never received care:** 15 percent of first-generation Latino children have never received medical care compared to 1 percent of non-Hispanic white children. (Figure 5).

**FIGURE 5:**  
Time since last health care visit: Never



Source: 1999-2000 and 2001-2002 National Health and Nutrition Examination Survey.

The American Academy of Pediatrics (AAP) recommends that a child should receive 11 well-baby visits by the time she is 24 months old, assuming that the child has no illnesses during this time (a child with an illness should receive more visits). Between the ages of 2 and 21, the AAP recommends 17 additional well-child visits, again assuming no other illnesses.<sup>2</sup> This is a total of 28 regular checkups that a number of Mexican-American children never have. If a child were to have an illness, the number of well-care visits would greatly exceed the 28 regular checkups recommended for a child without illness.

### Childhood Illnesses and Chronic Conditions Disproportionately Affect Latino Children

In general, Latino children miss more days of school than do their non-Hispanic white counterparts, and they suffer from vaccine-preventable childhood illnesses in staggering numbers. Access to preventive care and timely reception of immunizations can eliminate absences due to common vaccine-preventable illnesses. If a child has not been immunized and contracts a childhood disease, but has access to medical care, she will lose an average of 16 days of school per year. However, an un-immunized child without access to treatment will lose an average of 24 days, for illnesses that could have been prevented.\*

The chronic conditions that affect school attendance so heavily are also disproportionately present in Latino children:

**Cancer:** Analysis of California Hospital Discharge data revealed that Latino children are more than twice as likely to be hospitalized for a cancer-related diagnosis than non-Hispanic whites. Latino children generated 48 hospitalizations per 100,000 compared to 21 for non-Hispanic white children.<sup>3</sup>

\* Loss of school days is associated with incidence of hepatitis A and pertussis. Twenty-six days are lost per incidence of hepatitis A. Twenty-one days are lost per incidence of pertussis for those with no access to treatment. With access to treatment for pertussis, a child loses only five days. Data from: [http://www.health.vic.gov.au/ideas/diseases/gr\\_vacc.htm](http://www.health.vic.gov.au/ideas/diseases/gr_vacc.htm)

**Diabetes:** Data from the 2001 California Health Interview Survey indicated that when children aged 12-21 years were asked if they had been diagnosed with diabetes, 44 percent of Latinos said yes, compared to 31 percent of non-Hispanic whites.<sup>4</sup> The American Diabetes Association warns that recent clinic-based reports and regional studies indicate that Type 2 diabetes is becoming more common among Native American/American Indian, African-American, and Hispanic and Latino children and adolescents.<sup>5</sup>



**Asthma:** One study, which controlled for the effect of insurance by examining only children in managed Medicaid plans, found that although Latino children and non-Hispanic whites had equivalent scores on the AAP's Children's Health Survey for Asthma, Latinos had missed more school days in the previous two weeks.<sup>6</sup> Study results revealed that Latino children were 42 percent less likely to be using anti-inflammatory medications to prevent attacks. The study also revealed that Latinos had fewer outpatient visits than non-Hispanic whites, again indicating that their asthma was not being managed as well and that preventive care was not being administered. Lieu, *et al.*, concluded that the asthma status for Latino children was worse and that they were less likely to be engaged in preventive care.

Additional developmental conditions, such as dental, vision and hearing problems, attention deficit and hyperactivity disorder, also affect Latino children disproportionately and may affect both school attendance and school performance.

**Dental:** Data from the 2002 National Health Interview Survey (NHIS) commissioned by the National Center for Health Statistics (NCHS) show that 8 percent of Mexican-American children aged 2-17 years had unmet dental needs in the past 12 months, compared to 5 percent of non-Hispanic white children.<sup>7</sup> The percentage of Mexican-American children going between two and five years without dental contact was almost triple that of non-Hispanic white children (6 percent and 2 percent, respectively). On a national scale, the Dental Health Foundation found that tooth decay is the single most common chronic childhood disease, which greatly affects school absenteeism. Children lose more than 51 million school hours each year to dental-related illness.<sup>8</sup>

**Vision:** According to a study using data from the 1982-1984 Hispanic Health and Nutrition Examination Survey (HHANES), which was also commissioned by NCHS, the prevalence of uncorrected binocular distance visual impairment is 15 percent for Mexican-American children aged 6 to 19 years.<sup>9</sup> One study found that having uncorrected vision was significantly associated with below-average IQ scores, which was significantly associated with school performance.<sup>10</sup>

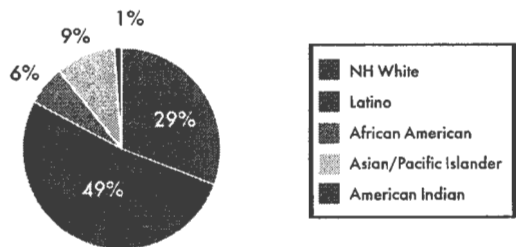
**Hearing:** In a study estimating the prevalence of sensorineural hearing loss (SNHL) and the rate of cochlear implantation among children with SNHL, it was found that while non-Hispanic white children comprised 51 percent of the study population, they comprised 73 percent of those being given cochlear implants.<sup>11</sup> On the other hand, Mexican-American children comprised 27 percent of the population of children with SNHL, and only 9.0 percent of those who received cochlear implants. Cochlear implants help children with understanding their environment and speech. It is clear that Mexican-American children are being implanted at far lower rates than non-Hispanic white children, again contributing to disparately unmet needs in the Mexican-American population.

**Attention Deficit and Hyperactivity Disorder (ADHD):** There are great disparities concerning attention deficit and hyperactivity disorder (ADHD). A study by Stevens, *et al.*, involving children aged 3-18 found that Latino children were less likely to receive a diagnosis of ADHD and less likely to receive a stimulant prescription than non-Hispanic white children. After adjusting for both insurance status and region, Latino children still were nearly 75 percent less likely to receive an ADHD diagnosis during an outpatient visit to a primary care provider, and nearly 75 percent less likely to receive a stimulant prescription, compared with white children in the same setting.<sup>12</sup>

### California Children in the 21st Century

The Department of Finance population data project found that in the fall of 2006, 1,522,221 children, aged 4-6 years,<sup>13</sup> will be eligible to enroll in the state's kindergarten classrooms. This group of children, born at the dawn of the 21st century, will complete their education and enter the work force by 2026. The goal now is to prepare these children so that they will maximize their contributions to the state's economy and society, be productive employees, establish self-sustaining families and become active civic participants. About half of these children (741,997) will be Latino. This demographic fact has the potential to influence the productivity of the state's 21st century work force and citizens to a great extent. (Figure 6).

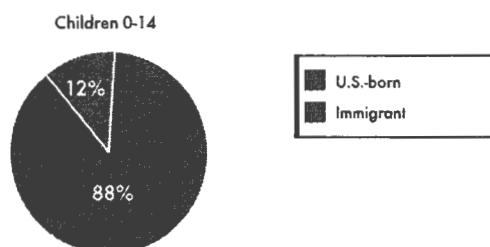
**FIGURE 6:**  
Ethnic composition of children age 4 to 6 years, California, 2006



Source: California Department of Finance, California Projections.

According to the 2000 U.S. Census, 88 percent of Latino children in California, ages 0-14 years, are U.S. born citizens.<sup>14</sup> (Figure 7). U.S.-born and immigrant children are usually siblings in a single family, and both will live their adult lives in California.

**FIGURE 7:**  
Latino children by nativity, California, 2000



Source: U.S. Census 2000.

### School Absence Affects Achievement

Many studies show that healthy children are more likely to succeed in school, largely because they avoid many illness-caused absences. One researcher estimates that students who miss even as few as 10 days of school a semester have difficulty staying at grade level.<sup>15</sup> In a report titled "The Influence of Health on School Outcomes," Wolfe found an association between absenteeism and lower school achievement.<sup>16</sup> Students with chronic health conditions missed significantly more days than students without them.<sup>17</sup> In her study, Wolfe also found that children who had absences due to chronic illness had even lower school achievement, compared to children who were absent for other non-chronic illness reasons.<sup>18</sup>

“Many studies show that healthy children are more likely to succeed in school, largely because they avoid many illness-caused absences.”

An ethnic breakdown of Los Angeles Unified School District (LAUSD) students demonstrated that in 2000-2004 enrollments, on average 72 percent of students were Latino, 12 percent African-American and 9 percent non-Hispanic white.<sup>19</sup> Clearly, Latinos are the largest population in the LAUSD school population. In the Los Angeles Unified School District, students had an average attendance rate of 85 percent, or less in 1999-2000.<sup>20</sup> This means that in a 180-day school year, students on average missed at least 27 days (15 percent of all days missed) during the school year.

Currently, no formal studies link health insurance directly with school performance. Yet, researchers have begun to look at the connection between insurance, regular access to health care and school performance. In one study, Judith Lave and her research team found that after 12 months of enrollment in a health plan, 99 percent of previously uninsured



children had a regular source of medical care and 85 percent had a regular dentist.<sup>21</sup> The percentage of children with unmet needs or delayed care decreased from 57 percent to 16 percent. In addition, Lave reported that the grades of children suffering from headaches and visual impairment improved after insurance paid for glasses.

A study conducted by Keane, *et al*, examined the effect of enrollment in a health insurance program among different age groups of children. Before obtaining health insurance, older children (11-19 years) were more likely than younger children (0-5 years) to: a) have had unmet or delayed care, b) have not received health care, c) have low access, and d) have had activities limited by their parents.<sup>22</sup> Health insurance coverage eliminated low usage, low access and limited activities in the older age groups. Additionally, after year one of enrollment, unmet needs and delayed care were practically nonexistent in all groups.

A study conducted by the Managed Risk Medical Insurance Board (MRMIB), funded by the David and Lucile Packard Foundation, examined the positive effects of being enrolled in the Healthy Families Program (HFP), California's S-CHIP program. MRMIB completed a longitudinal survey of families whose children were newly enrolled in HFP in 2001 to measure changes in health over two years of enrollment in the Healthy Families Program. The report demonstrated that after one year of enrollment, there was a dramatic increase in the quality of life and improvements in school performance for children who are in the poorest health.<sup>23</sup> The authors reported that the greatest increases that occurred within school performance were related to paying attention in class and keeping up with school activities. The most significant improvement in health status and school performance occurred in the first year of enrollment, with most of the gains sustained through the second year of enrollment.

### Prepared Adult Latinos Contribute More

By failing to receive adequate, regular access to health care, Latino children are, quite simply, failing to achieve their potential in school. As a result of this failure, Latino children are not being prepared to maximize the contributions they will make as adults. Analysis

“ By failing to receive adequate, regular access to health care, Latino children are, quite simply, failing to achieve their potential in school. ”

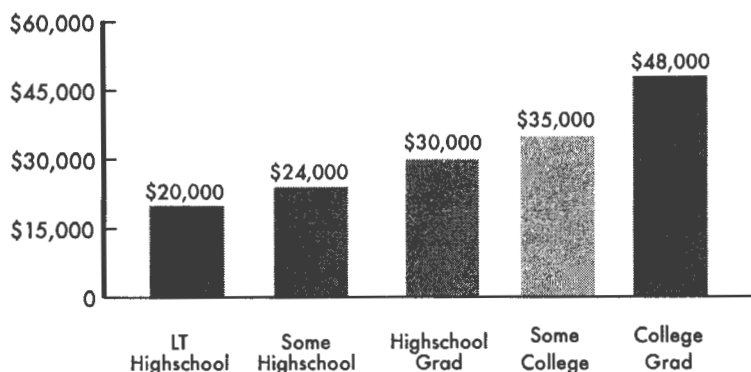
of educational attainment across major racial and ethnic groups in California demonstrates tremendous disparity. Among Californians aged 25 and older, U.S.-born Latinos were more likely to have less than a high school education (9 percent) than non-Hispanic whites (3 percent). In a similar fashion, college completion is substantially lower for U.S.-born Latinos (13 percent), compared to non-Hispanic whites (34 percent).<sup>24</sup> Under current policy and with current population composition – nearly 50 percent Latino – such sub-optimization of Latino children will affect everyone, not just Latinos themselves.

Analysis of the 2000 U.S. Census for societal contributions demonstrates that a Latino adult with more education in general makes more contributions to society than a Latino adult with less

education. We have created surrogate measures to examine societal contributions that include indicators such as income,\* family sustainability,\* home ownership and voting.\*\*

**Income:** U.S.-born Latino college graduates earn 140 percent more than U.S.-born Latinos with less than a high school education. (Figure 8).

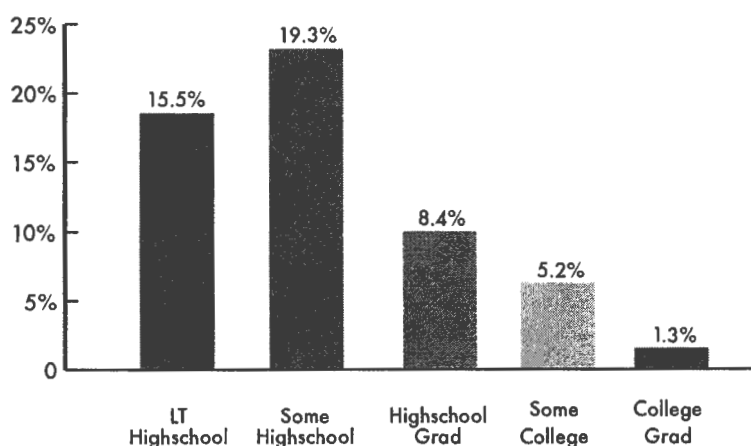
**FIGURE 8:**  
U.S.-born Latino median income by educational attainment (Age 25+), California, 2000



Source: U.S. Census 2000.

**Family Sustainability:** Children raised in better-educated families are less likely to grow up relying on public assistance. U.S.-born Latino college graduates rely 92 percent less on public assistance than U.S.-born Latinos with less than a high school education. (Figure 9).

**FIGURE 9:**  
U.S.-born Latino family sustainability by educational attainment (Age 25+), California, 2000



Source: U.S. Census 2000.

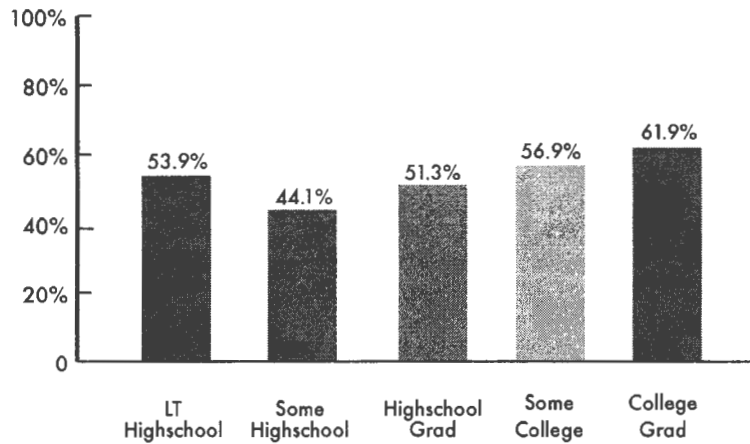
\* Income is defined as: earned income year round, of a full-time worker working 32+ hours and employed 52 weeks.

\* Family sustainability is defined as: one that did not need to rely on public assistance for any part of its income.

\*\* Voting data from 2000 U.S. Census, Voting and Registration Supplement.

**Home ownership:** U.S.-born Latinos with a college degree are 15 percent more likely to own a home than U.S.-born Latinos with less than a high school education. (Figure 10).

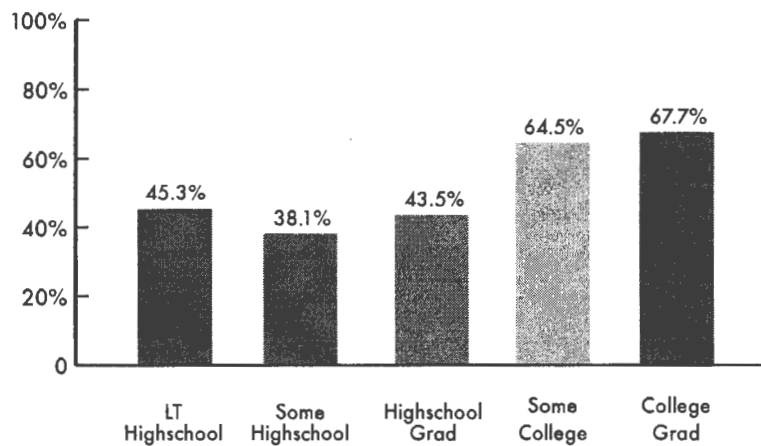
**FIGURE 10:**  
U.S.-born Latino homeowners by educational attainment (Age 25+), California, 2000



Source: U.S. Census 2000.

**Voting:** U.S.-born Latinos with a college degree are 50 percent more likely to vote than U.S.-born Latinos with less than a high school education. (Figure 11).

**FIGURE 11:**  
U.S.-born Latino voter participation by educational attainment (Age 25+), California, 2000



Source: U.S. Census 2000.


Under current policy, Latino children are not receiving the necessary investments to maximize the contributions they will make as adults. However, if these same Latino children were to receive better preparation and increased opportunities as a direct result of providing increased access to health care, societal contributions would greatly increase and could result in great strides towards economic parity.

### Citations

- <sup>1</sup> Brown, R.E., Ponce, N., Rice, T., et al. The State of Health Insurance in California: Findings from the 2001 California Health Interview Survey. UCLA Center for Health Policy Research June 2002: 22.
- <sup>2</sup> American Academy of Pediatrics. Recommendations for Preventive Pediatric Health Care (RE9535). <http://aappolicy.aappublications.org/cgi/content/full/pediatrics;105/3/645> Accessed: 03.15.2005.
- <sup>3</sup> Office of Statewide Health Planning and Development. Hospital Discharge Summary 2000.
- <sup>4</sup> UCLA Center for Health Policy Research. California Health Interview Survey 2001. <http://www.chis.ucla.edu>. Accessed: 03.11.2005.
- <sup>5</sup> American Diabetes Association. National Diabetes Fact Sheet. <http://www.diabetes.org/diabetes-statistics/national-diabetes-fact-sheet.jsp>. Accessed on 2/24/2005.
- <sup>6</sup> Lieu T.A., Lozano P., Finkelstein J.A., et al. Racial/ethnic variation in asthma status and management practices among children in managed Medicaid. *Pediatrics* 2002; 109(5): 857-865.
- <sup>7</sup> U.S. Department of Health and Human Services. Summary Health Statistics for U.S. Children: National Health Interview Survey, 2002. Vital and Health Statistics, Series 10, Number 221. March 2004.
- <sup>8</sup> Community Partnership for Healthy Children-A Sierra Health Foundation Initiative – Spotlight: Dental Health Update –Aug 2000: 6.
- <sup>9</sup> Ma F., Lam B.L., Lee D.J., Gomez-Marin O. Uncorrected binocular distance visual impairment in U.S. Hispanic children and adolescents. *Ophthalmic Epidemiology* 2001; 8(1): 57-64.
- <sup>10</sup> Özmert E.N., Yurdakök K., Soysal fi. Relationship between physical, environmental and sociodemographic factors and school performance in primary schoolchildren. *Journal of Tropical Pediatrics* 2005; 51(1): 25-32.
- <sup>11</sup> Stern R.E., Yueh B., Lewis C., Norton S., Sie, K.C.Y. Recent epidemiology of pediatric cochlear implantation in the United States: disparity among children of different ethnicity and socioeconomic status. *The Laryngoscope* 2005; 115: 125-131.
- <sup>12</sup> Stevens J., Harman J.S., Kelleher K.J. Ethnic and regional differences in primary care visits for attention-deficit hyperactivity disorder. *Developmental and Behavioral Pediatrics* 2004; 25: 318-325.

- <sup>13</sup>California Department of Finance. Demographic Research Unit. Race/Ethnic Population Projections. 2004.
- <sup>14</sup>U.S. Census Bureau, 2000 Census of Population and Housing, Public Use Microdata Sample.
- <sup>15</sup>Klerman, L.V., School Absence – A Health Perspective, *Pediatric Clinics of North America* 1988; 35: 1254.
- <sup>16</sup>Wolfe, B.L., The Influence of Health on School Outcomes, *Medical Care* 1985; 23(10): 1127-1138.
- <sup>17</sup>Klerman, 1257.
- <sup>18</sup>Wolfe, 1127-1138.
- <sup>19</sup>Los Angeles Unified School District. School Information Branch Site Map. School Demographics.  
[http://www.lausd.k12.ca.us/lausd/offices/bulletins/5\\_yr\\_review.html](http://www.lausd.k12.ca.us/lausd/offices/bulletins/5_yr_review.html). Accessed on 2/22/2005.
- <sup>20</sup>Hoachlander, G., Dykman, A., Godowsky, S., Commentary: Attending to Attendance. *Education Week Magazine* 2001; 20(36): 40-42.
- <sup>21</sup>Lave, J.R., Keane, C.J., Lin, C.J., et al. Impact of a Children's Health Insurance Program on Newly Enrolled Children. *J Am Medical Association* 1998; 279:1820.
- <sup>22</sup>Keane, C.R., Lave, J.R., Ricci, E.M., et al. The Impact of a Children's Health Insurance Program by Age. *Pediatrics* 1999; 104(5): 1051-1058.
- <sup>23</sup>Managed Risk Medical Insurance Board. *The Healthy Families Program Health Status Assessment (PedsQL™) Final Report*. September 2004.
- <sup>24</sup>U.S. Census Bureau, 2000 Census of Population and Housing, Public Use Microdata Sample.

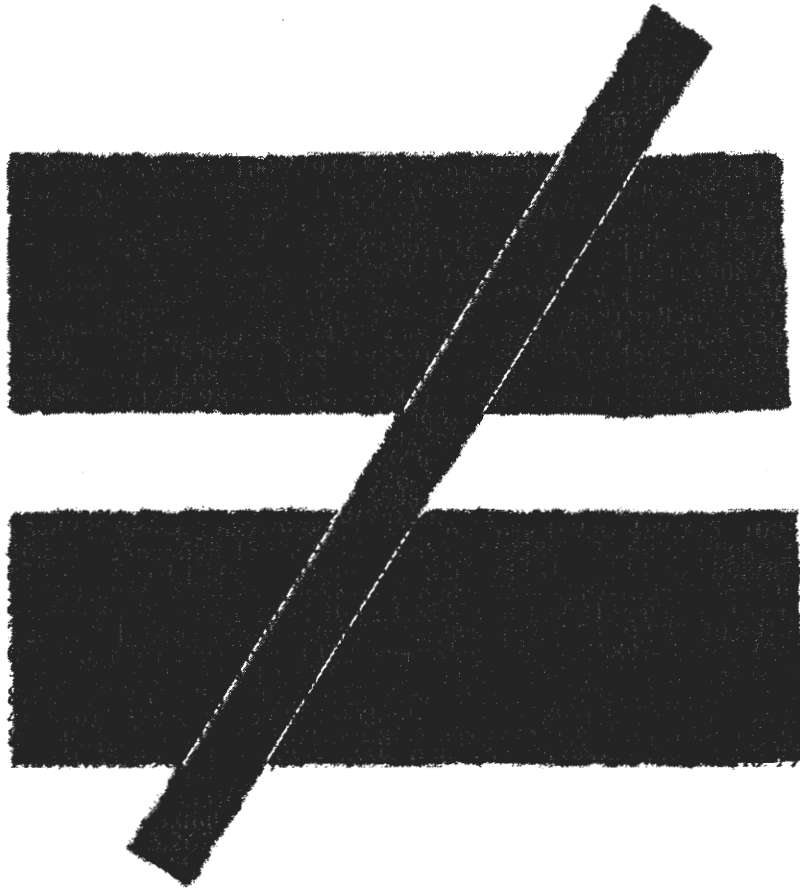




Over the  
California  
Months

The California Endowment  
21650 Oxnard Street, Suite 1200  
Woodland Hills, CA 91367  
1.800.449.4149  
[www.calendow.org](http://www.calendow.org)





unequal  
**TREATMENT.**  
**UNEQUAL**  
health.

WHAT DATA TELL US ABOUT  
HEALTH GAPS IN CALIFORNIA



THE CALIFORNIA ENDOWMENT



---

## ABOUT THIS PUBLICATION

This publication is a joint effort by the National Academy of Science's Institute of Medicine, Cause Communications and The California Endowment. The publication highlights findings from a study requested by Congress entitled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*, published in 2002 by the Institute of Medicine (IOM). This national study was the largest of its kind ever undertaken and was based on published research from more than 100 studies nationwide.

The IOM Committee included leading academicians and researchers from such institutions as Johns Hopkins University, Georgetown University, Harvard School of Public Health, Harvard Medical School, UCLA School of Public Health, UCLA School of Medicine and Emory University.

Also included in this publication are findings from studies by the California Cancer Registry, the Union of Pan Asian Communities, and the California Health Interview Survey, among others. Data from the U.S. Census Bureau, the National Institutes of Health, The Henry J. Kaiser Family Foundation, Centers for Disease Control and Prevention and the U.S. Department of Health and Human Services are also included.

---

**unequal**  
**TREATMENT.**  
**UNEQUAL**  
**health.**

WHAT DATA TELL US ABOUT  
HEALTH GAPS IN CALIFORNIA

---

Consider these statistics:

*The infant mortality rate for African Americans is more than twice as high as that of whites.*

- California Department of Health Services, 2000

*Asian American/Pacific Islanders have the highest rate of liver cancer among all populations, five times that of their white counterparts. Cambodian, Hmong and Laotian men are especially at risk.*

- California Cancer Registry, 2000

*Hispanic women suffer the highest rate of invasive cervical cancer in California.*

- California Cancer Registry, 2000

*African Americans living in Los Angeles County have a 78% higher death rate from heart disease than that of the overall population.*

- Los Angeles County Department of Health Services, 2000

*African Americans, Hispanics and Native Americans have a much higher rate of death and illness from diabetes.*

- California Health Interview Survey (CHIS), 2001

*“Disparities in the  
healthcare delivered  
to racial and ethnic  
minorities are real  
and are associated  
with worse outcomes  
in many cases, which  
is unacceptable.”*

– Alan Nelson, M.D., Chair, Institute of Medicine Committee  
on Understanding and Eliminating Racial and Ethnic  
Disparities in Health Care, former president of the American  
Medical Association, March 2002

## **THE PROBLEM**

### **Unequal Treatment and Unequal Health**

Inequalities in health reflect some of our nation’s greatest challenges – poverty, lack of access to health insurance, language barriers, cultural isolation and racial prejudice. The result is ethnic and racial minorities do not enjoy the same level of health as whites. These complex societal issues also play into a healthcare system that fails to treat everyone equally.

Ethnically diverse populations do not receive the same kinds of tests, treatments or pain medications as whites suffering from the same diseases. Evidence suggests these disparities in healthcare are associated with higher death rates from such illnesses as heart disease, cancer and HIV infection. On the next page are just a few examples of studies included in the Institute of Medicine report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*.

*Continued*



---

UNEQUAL TREATMENT. UNEQUAL HEALTH.

---

In a study of 139 patients at UCLA Medical Center's emergency room, 55% of Hispanic patients received no pain medication for long bone fractures compared to 26% of white patients.

*Journal of the American Medical Association*  
Todd, Samaroo and Hoffman, 1993

---

A national study involving 500 hospitals found African Americans treated for colorectal cancer have a 59% to 98% greater chance of dying than whites.

*Medical Care*  
Ball and Elixhauser, 1996

---

A study of 1,392 patients in Southern California, Alabama, Michigan, and Mid-Atlantic States found that African American patients were much less likely than white patients to have been referred to a transplant center for evaluation, to have been placed on a waiting list, or to have received a transplant within 18 months after starting dialysis.

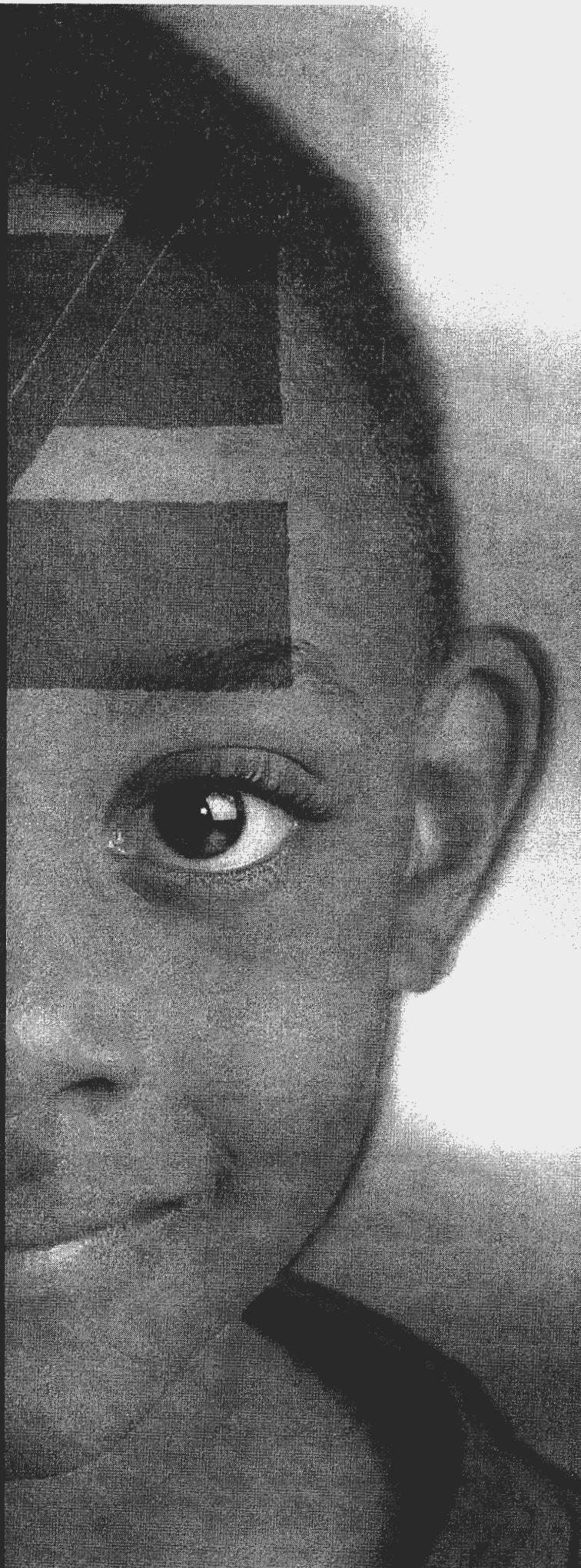
*The New England Journal of Medicine*  
Ayanian, Cleary, Weissman and Epstein, 1999

---

In a study of over 19,000 Medicare patients who underwent amputation or leg-sparing surgery, among those with diabetes, African Americans were 58% more likely than whites to undergo above-the-knee amputation.

*The Archives of Surgery*  
Guadagnoli, Ayanian, Gibbons, McNeil and LoGerfo, 1995

---



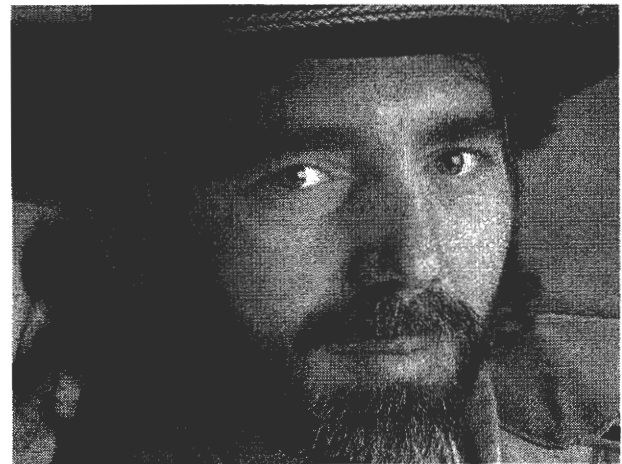
## THE PROBLEM

*Continued*

These inequalities in health status and treatment are found across most racial groups and diseases. It doesn't matter where you live, what age you are, how much money you make or what your insurance covers.

What does this mean for communities of color? Their health status is lower, their death rates higher. In a country founded on the belief that we are all created equal, we have a healthcare system that is not equal or fair for all.

*“Racial and ethnic minorities in the United States face higher rates of illness, greater amounts of disability, higher mortality rates and shorter life spans than the white majority. These groups have poorer access to healthcare providers, are more likely to be uninsured or underinsured and are more likely than whites to face cultural and linguistic barriers in attempting to access healthcare.”*



– Dr. Harvey Fineberg, President, Institute of Medicine  
Remarks from Institute of Medicine/The National Academies  
Symposium on *Unequal Treatment – One Year Later*,  
March 19, 2003

---

## HEALTH GAPS: PAIN

Lack of pain management within ethnic and racially diverse populations was one of the Institute of Medicine's most compelling findings. A recent study found that 65% of African Americans and Hispanics reported a lack of adequate pain medication. Below are some additional findings from the report that show how people of color are not given the same level of pain medication as their white counterparts.

---

74%

Percentage of **whites** in an Atlanta emergency department who received pain medication.

*Annals of Emergency Medicine*  
Todd, Deaton, D'Admao, and Goe, 2000

---

57%

Percentage of **African Americans** in the same Atlanta emergency department who received pain medication.

*Annals of Emergency Medicine*  
Todd, Deaton, D'Admao, and Goe, 2000

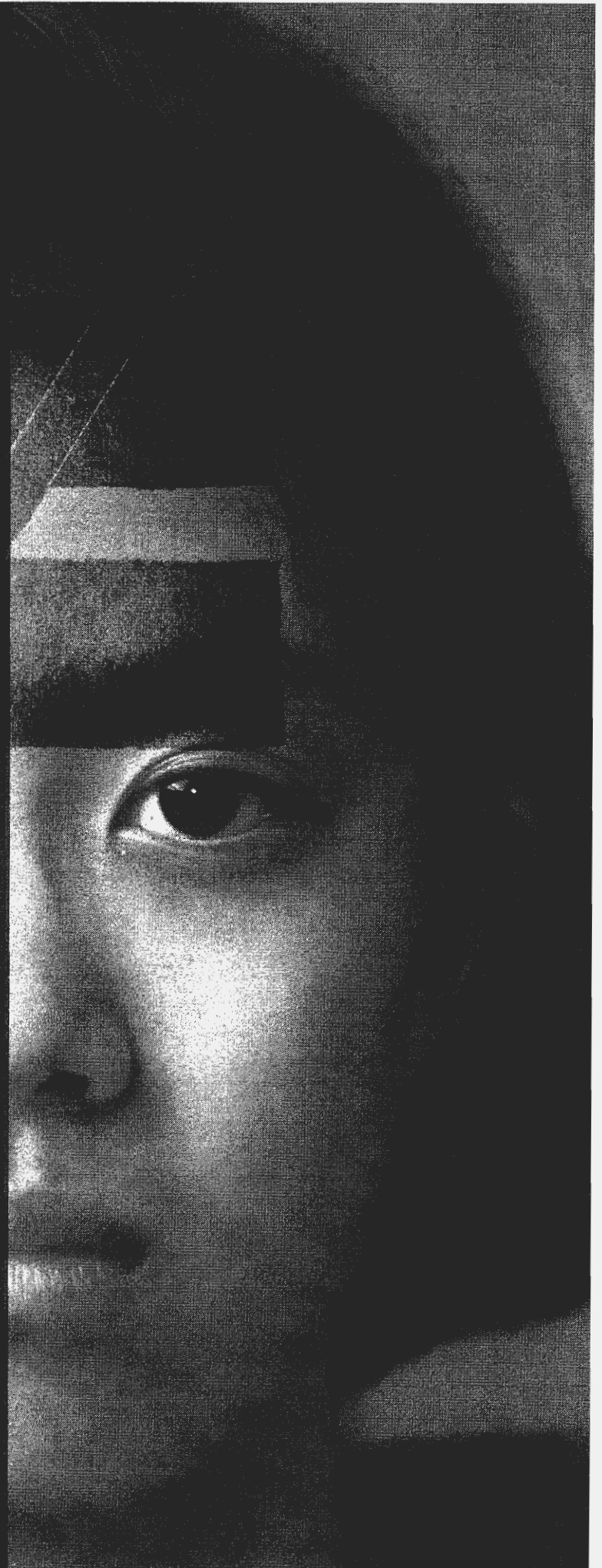
---

63%

The probability – relative to **whites** – that **African American** cancer patients would not receive pain medication upon being discharged from a hospital to a Medicare certified nursing home (from a study of 13,625 cancer patients in five states).

*Journal of the American Medical Association*  
Bernabei, Gambassi and Lapane, 1998

---



*Most Americans believe that minorities receive the same quality of care as white Americans.*

— Results of national survey by  
The Henry J. Kaiser Family Foundation, 2003



## HOW DO WE KNOW DISPARITIES IN HEALTH EXIST?

### *The Importance of Data*

While the perception by most Americans is that everyone receives quality healthcare, the reality is quite different for ethnic and racial minorities. One of the most important factors in being able to achieve balanced healthcare is becoming aware that these inequalities exist. We use data to help us identify and address otherwise hidden health problems. The findings contained in this publication, and the issues they reveal, are only possible because of data collection.

Listening to the accounts of real patients, and becoming sensitive to the obstacles healthcare professionals face, will help solve the problems we now know are real. Why these disparities exist brings to light a host of very complex questions. Data can help move us toward the answers that help reduce disparities.

Knowledge becomes a benchmark for a foundation of positive progress and change. Collecting data is not an issue of race or privacy. It's about gathering facts to give people a voice and help work toward a system that is beneficial and fair to all.

---

## HEALTH GAPS: DIABETES

Approximately 17 million people in the United States have diabetes, and this rate is expected to double in the next 25 years. The disease is poorly managed among ethnically diverse populations, and minorities have a much higher rate of death and illness from diabetes.

*In a study of nearly 1,400 Medicare patients, diabetic African Americans were less likely than whites to receive key diagnostic tests.*

— *Diabetes Care*  
Chiu, Zhang, and Merrell, 1998

*Rates for African Americans and Latinos over the age of 65 having diabetes are double the rate for whites.*

— *California Health Interview Survey, 2001*

---

**6%**

Percentage of general population with diabetes.

*American Diabetes Association, 2003*

---

**10%**

Percentage of Hispanics with diabetes.

*American Diabetes Association, 2003*

---

**13%**

Percentage of African Americans who have diabetes.

*American Diabetes Association, 2003*

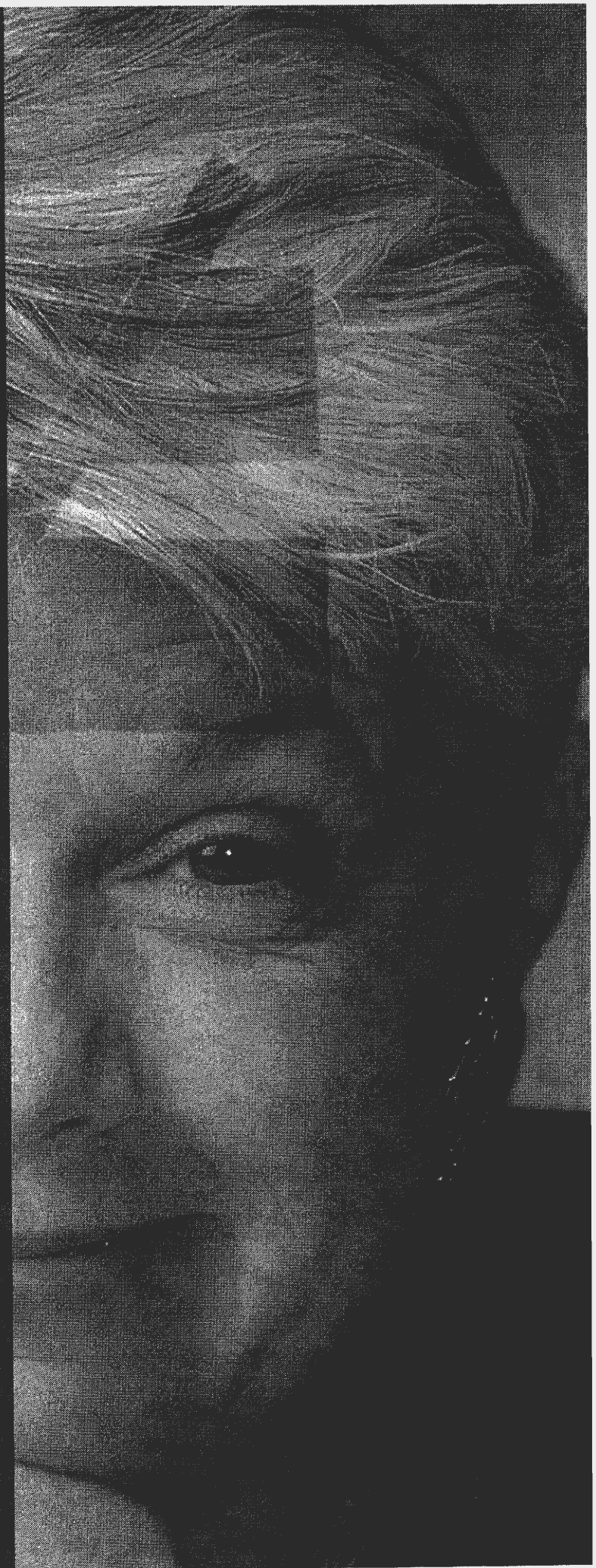
---

**15%**

Percentage of Native Americans and Alaska Natives receiving care from Indian Health Services (IHS) who have diabetes.

*American Diabetes Association, 2003*

---





*"The real challenge lies not in debating whether disparities exist, because the evidence is overwhelming, but in developing and implementing strategies to reduce and eliminate them."*

— Alan Nelson, M.D., Chair, Institute of Medicine Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, former president of the American Medical Association, March 2002

## WHO WE ARE NOW

### The Changing Face of California

Taken together, ethnic and racial minorities now comprise more than 50% of California's population, according to the latest U.S. Census Bureau estimates. And it's expected that the number of racial and ethnically diverse populations will continue to climb here in California and across the nation. California is a place where more than 100 languages are spoken and where one out of four people is foreign-born. The problem of unequal health and unequal healthcare treatment isn't a problem for the few; it places the majority of people living here in California at risk.

### THE CHANGING FACE OF CALIFORNIA

According to Census Bureau estimates, whites comprise 49.9% of the state's 33.1 million residents, followed by Latinos at 31.5%, Asians at 11.4%, African Americans at 6.7% and American Indians at less than 1%.

*U.S. Census Bureau, 2000*



HEALTH GAPS: CANCER

Cancer is the number one cause of death for Asian/Pacific Islanders in the United States. It's the second leading cause of death for every other racial and ethnic group. And if you're an African American who is diagnosed with cancer, your chances of dying from the disease are greater than any other group. Yet, communities of color are not provided with the screening, test, medication and treatment opportunities that whites receive. As early detection and treatment is a key factor in surviving cancer, this may be one reason for the higher incidence of the disease, as well as higher death rates, for ethnically diverse populations.

*Hispanic women are twice as likely as white women to develop cervical cancer. African American, Asian Pacific Islanders and Hispanic women are far more likely to die from cervical cancer than whites.*

— California Health Interview Survey, 2001

*While the rate of breast cancer among African American women is not as high as that among white women, African Americans are more likely to die from the disease.*

— California Cancer Registry, 2000

*Hispanic women are far less likely to receive a pap smear than white women.*

— California Health Interview Survey, 2001

*In a study of over three million women in 10 states across the country, African American women had mammography less often than whites, even across different income levels.*

— Journal of the American Medical Association  
Burns, McCarthy and Colleagues, 1996

*White men are twice as likely to be screened for cancer as Asian men.*

— California Health Interview Survey, 2001



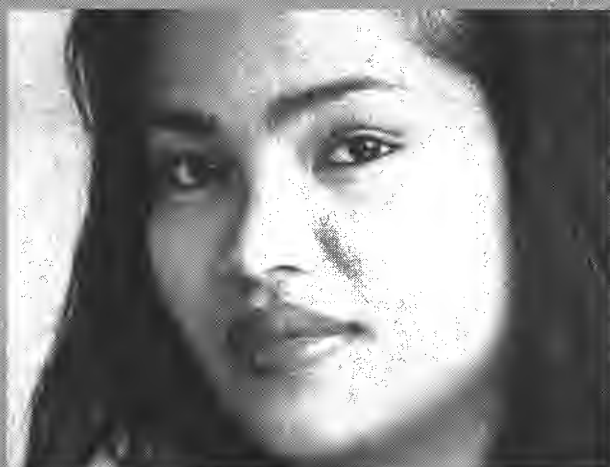
UNEQUAL TREATMENT. UNEQUAL HEALTH: FACTS

*African Americans have the highest rates of mortality from heart disease, cancer, cerebrovascular disease and HIV/AIDS than any other racial group.*

— Annals of the New York Academy of Sciences  
Williams, 1999

*An investigation of 7,249 hospital discharges in California between 1989 and 1990 revealed that white patients were more likely to receive kidney transplantation and heart procedures (coronary artery bypass graft and angioplasty) than African Americans and Hispanics.*

— Archives of Internal Medicine  
Giacomini, 1996



*Hispanic and African American physicians make up less than 5% of California's physician mix, yet these groups comprise 32% and 7% of the state's population, respectively.*

- California Health Index Survey, 2001

*Hispanic Americans are almost twice as likely as non-Hispanic whites to die from diabetes.*

- Annals of New York Academy of Sciences  
Williams, 1999

*36% of Asian women have never had a mammogram, compared to 21% whites.*

- California Health Interview Survey, 2001

*In a study of 13,000 Medicaid patients, 44% of whites received antidepressant treatment within 30 days of the 1st indicator of depression as compared to 27% of African Americans.*

- Journal of Clinical Psychiatry  
Melli, Croghan, Hanna and Roblison, 2000



*Tuberculosis rates are disproportionately high in Asian American/Pacific Islanders. Tuberculosis affects 14 per 100,000 Asian American/Pacific Islanders as opposed to only 2 per 100,000 whites.*

- California Department of Health Science, August 2001

*In a study of 164 African American and white patients admitted to a hospital, African Americans had a shorter length of stay. In addition, among high socio-economic status patients, African Americans were 3.5 times more likely to receive urine drug screens, regardless of diagnosis.*

- Psychiatric Services  
Chung, Mahler, and Kakuma, 1995

---

## HEALTH GAPS: MATERNAL AND CHILD HEALTH

Infant mortality rates, one of the most sensitive indicators of the health and well-being of a population, are higher among African American and American Indian/Alaska Natives than any other racial and ethnic groups. This is true even when comparing women of similar socioeconomic conditions.

*In 2000, overall infant mortality rate was 5.4 deaths per 1000 live births; for African Americans: 12.8 deaths per 1000 live births.*

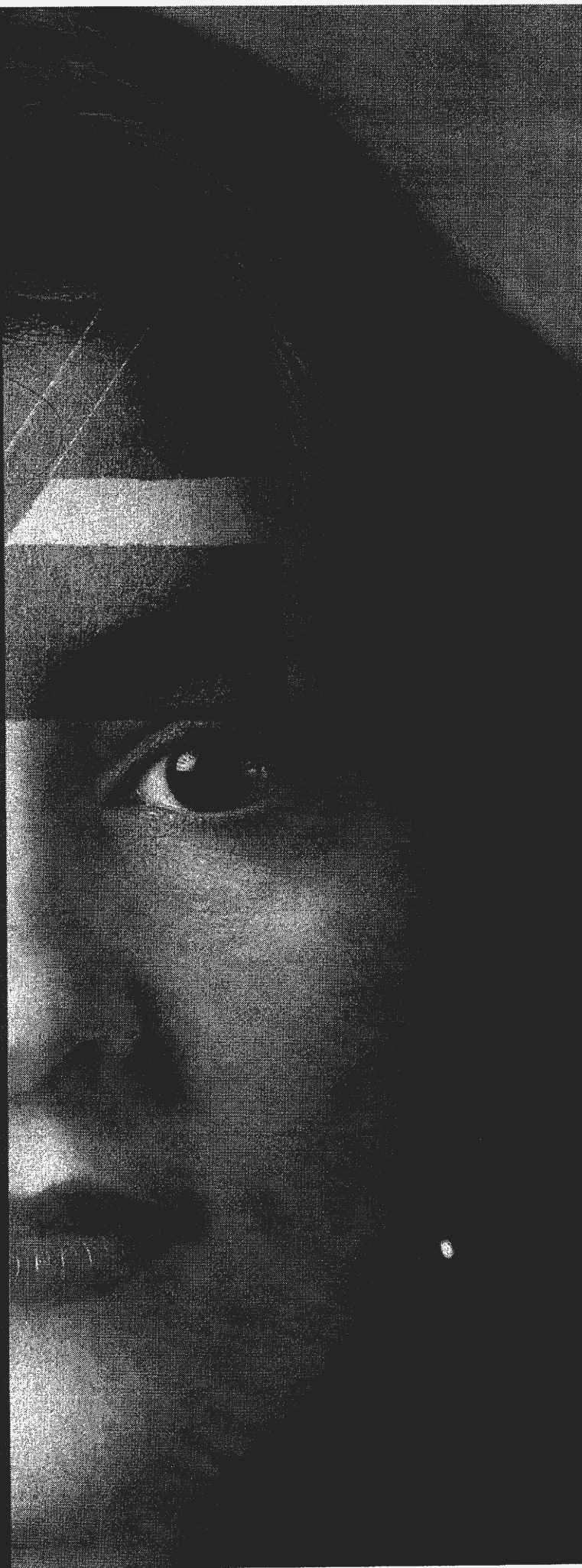
*— California Department of Health Services, 2000*

*Nationally, Hispanics, African Americans and American Indian/Alaska Natives are two times as likely to receive late or no prenatal care when compared to whites or Asian/Pacific Islanders.*

*— The Henry J. Kaiser Family Foundation, Key Facts on Race, Ethnicity and Medical Care, 2003*

*A study of 217,461 singleton first live births among women in California found that African American and U.S.-born Latinas were more likely to undergo Cesarean deliveries.*

*— American Journal of Public Health  
Bravemen, Egarter, Edmonston, and Verdon, 1995*





## **HOW DID THIS HAPPEN?**

### **Racial and Ethnic Disparities in Healthcare**

Why do people of color receive a lower level of healthcare? It's true, minorities are more likely to be uninsured, and a lack of adequate health insurance means patients are less likely to receive adequate, timely care. But the Institute of Medicine report found that profound differences exist for people of color even among those who have health insurance.

Evidence suggests that at least two sources contribute to the healthcare gap – the way the healthcare system operates, and the way patients and healthcare providers interact with one another within that system.

#### **The Healthcare System**

Data show people of color have access to fewer doctors, fewer hospitals and fewer healthcare centers than their white counterparts. Since fewer resources are available, and transportation is a greater issue, the facilities that do exist are stretched thin. For example, in a study on the availability of opioids (a common pain medication), it was found only 25% of pharmacies in predominantly minority neighborhoods carried sufficient supplies, compared to 72% of pharmacies in predominantly white neighborhoods.

Compounding a lack of health providers, immigrants also have fewer providers who speak their language. Language barriers are a problem for patients and providers in systems that do not have the resources or knowledge to provide interpretation and translation services. This is especially a problem in California where more than 100 languages are spoken statewide. Approximately one out of five Californians – six million people – does not speak English well.

Findings from data indicate poor communication between patient and provider is linked to lower patient satisfaction, lower rates of appropriate follow-up, lower access to specialty care, poorer adherence to treatment plans and a higher likelihood of medical errors. And even for patients who speak English, cultural barriers – such as a lack of familiarity with Western medicine treatment protocols – may also contribute to lower quality of healthcare.

#### **The People in the System: Patients and Providers**

Changes in the way healthcare services are paid for and delivered may also pose greater barriers to care for racial and ethnic minorities. In today's health systems, providers often find themselves with high patient caseloads and

*Continued*

---

## HEALTH GAPS: HIV/AIDS

AIDS is the number one killer of African Americans between the ages of 25 and 44. Yet minorities with HIV infection are less likely to receive antiretroviral therapy and other leading-edge treatments that can forestall the onset of AIDS. Below are data presented in the Institute of Medicine report.

Research shows that lack of quality care is associated with lower survival rates of minorities suffering from HIV/AIDS.

---

A study of 838 patients from an urban HIV clinic found that 65% of eligible whites, compared to only 48% of eligible African Americans, received antiretroviral therapy. There were no differences in the stage of HIV disease among these patients.

*The New England Journal of Medicine*  
Moore, Stanton, Gopalan, and Chaisson, 1994

---

In this same study, 82% of eligible whites received PCP prophylaxis, as compared to 58% of African Americans.

*The New England Journal of Medicine*  
Moore, Stanton, Gopalan, and Chaisson, 1994

---





## HOW DID THIS HAPPEN?

*Continued*

pressures to contain costs. Consultations are rushed, often limited to a few minutes. The need to contain costs sometimes limits providers' ability to order diagnostic tests or prescribe more expensive – yet potentially more effective – treatments. Providers not familiar with the culture or language of patients face even greater challenges when trying to treat those patients.

These time pressure and resource constraints are some of the major factors that lead individuals in the healthcare field – even the well intended – to resort to generalizations, or stereotypes, of racial and ethnic minority groups.

While more research must be done to better understand how stereotypes and biases affect the clinical encounter, research has demonstrated that healthcare providers' diagnostic and treatment decisions, as well as their feelings about patients, are influenced by a patient's race or ethnicity. In a 1999 study that involved black and white actors playing patients, physicians were significantly less likely to recommend cardiac catheterization for African American females/males than for white females/males.

Another contributing factor in discrimination is the lack of representation of people of color in the healthcare professions. In California, Latinos and African Americans represent 5% of all state physicians, although these groups comprise 32% and 7%, respectively, of the population.

Discrimination against minorities is not something that the vast majority of doctors, nurses, and other health system professionals want to see in healthcare. In fact, racial discrimination is strongly contrary to the professional values and ethics of healthcare providers. But, unfortunately, healthcare does not occur in a vacuum – it is delivered in the context of a society where African Americans, Latinos, American Indians, and other groups receive poorer treatment than non-minorities in many aspects of life. Healthcare's challenge is to rise above these dismaying – and unacceptable – attitudes and behaviors.

Such factors create problems that are as hard to solve as they are to identify. There is an ongoing need to collect information to monitor the progress being made and the challenges that must still be addressed. But regardless, the result is clear: equal health and equal care does not exist for all Californians.

---

## HEALTH GAPS: CARDIOVASCULAR

Heart disease is the leading cause of death for every racial group in the United States, except Asian/Pacific Islanders. Racial and ethnic disparities in healthcare are most evident in cardiovascular care.

*African American women are twice as likely as white women to suffer heart disease, yet are less likely to be given certain standard drugs. (Based on a national study of 2,699 women at 20 medical centers nationwide.)*

— American Heart Association, 2003

*A study of 1,261 patients in New York who received angiography who would have benefited from coronary artery bypass graft surgery, found that African American and Hispanic patients were less likely to undergo the procedure than non-Hispanic white patients.*

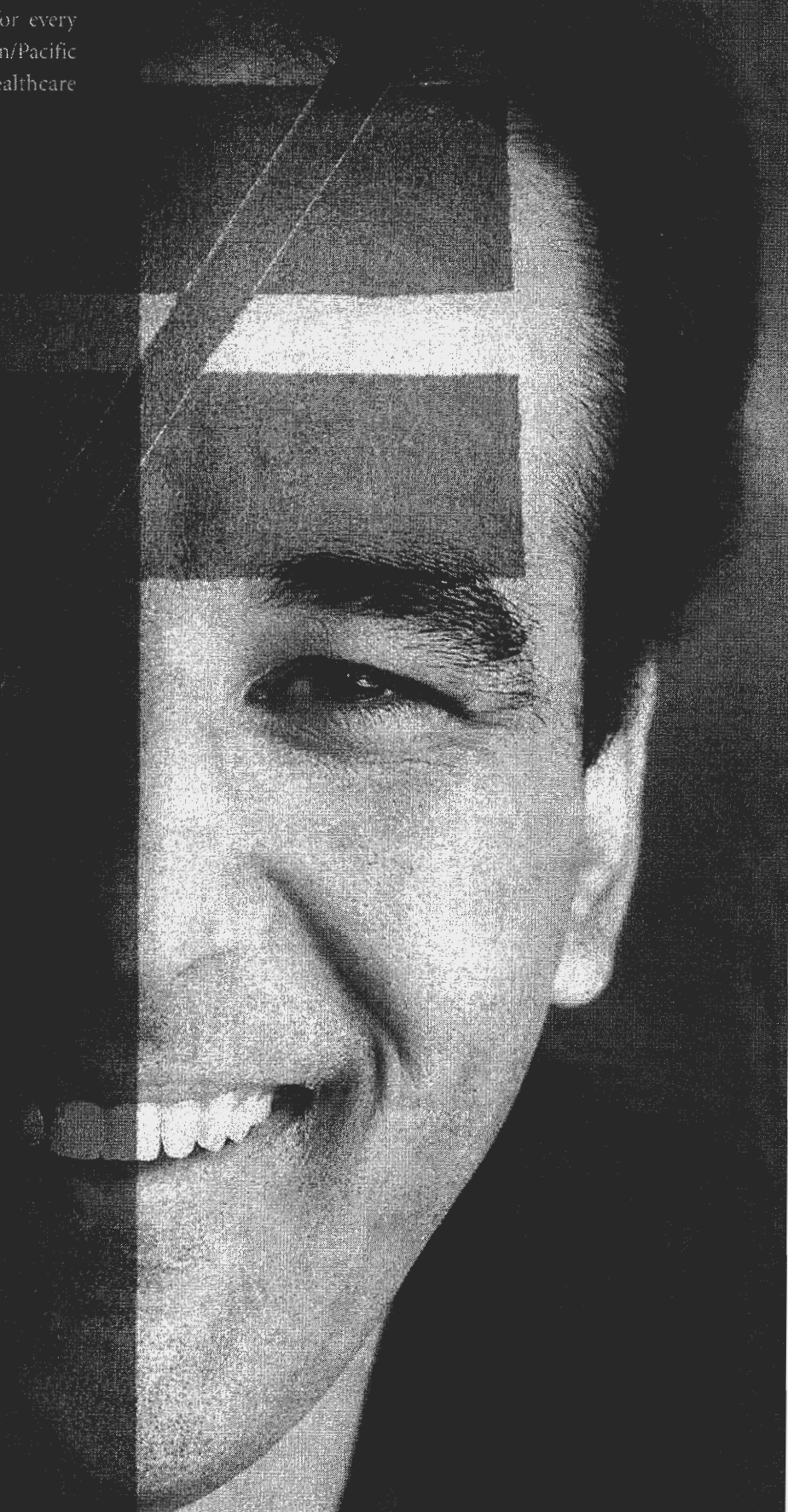
— Medical Care

Hannan, van Ryn, Burke, Stone, Kumar, Arani, Pierce, Rafi, Sanborn, Slater, De Buono, 1999

*In a study of 131,408 patients discharged from L.A. County hospitals, African Americans were less likely than whites to receive bypass graft and angioplasty. Latinos were less likely to receive angiography.*

— American Journal of Public Health

Carlise, Leake and Shapiro, 1995





*“Effective data collection is the linchpin of any comprehensive strategy to eliminate racial and ethnic disparities in health.”*

– Tom Perez, Director and Assistant Professor of Law, University of Maryland School of Law, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*, March 2002



## WHAT MUST BE DONE?

Before any problem can be solved, it must first be understood. While there may have been general indicators of inequalities in healthcare, collecting and then analyzing data showed conclusively that such disparities were real. The findings of the Institute of Medicine report began to address why these inequalities exist. The report also indicated that much more information is needed to determine the best ways to correct the problems revealed.

Based on the evidence and further analysis conducted by the IOM Committee, the *Unequal Treatment* report made 21 recommendations for action. Six of the 21 recommendations – more than one quarter – pertain to data collection, monitoring and research.

Data can show what changes in current practices must be made, what new programs should be introduced and how to improve the care members of racial and ethnic minority groups receive.

Moreover, it is virtually impossible to know if progress is being made, if the interventions are making a difference, or if health outcomes are improving unless data are collected at the appropriate points in time and in the appropriate way.

Unfortunately, current data collection efforts are inadequate and lack standardization. There are a variety of federal, state and private data sources that collect data using different assumptions and methods. In California, these data include the California Health Interview Survey and the California Cancer Registry, as well as birth and death records. In order to ensure more consistent and regular data collection, the Institute of Medicine recommended that government provide the leadership to spearhead data collection efforts.

*Continued*

## WHAT MUST BE DONE?

*Continued*

The Institute of Medicine also recognized the challenges and concerns related to the collection of racial and ethnic data. In the past, such data were used to discriminate against minorities, and some distrust persists. In addition, many people – across all racial and ethnic groups – are concerned that their medical information remains confidential and not be used against them in employment or insurance, for example.

Clearly, privacy must be protected and safeguards must be put into place. With such safeguards, data collection and research efforts should be expanded and improved to better understand the various reasons why racial and ethnic disparities occur in healthcare. Both the public sector and the private sector, including health plans, hospitals and other health care institutions, must provide critical leadership in this effort.

The groundbreaking work of the Institute of Medicine report, coupled with other seminal research from numerous respected sources, has helped establish an important baseline of information about the healthcare gaps that exist among ethnic and racial minorities. Clearly, there is a long road ahead before there is equal access to quality healthcare for all. Thus, it is critically important that there are data collection efforts in place so that it is understood how healthcare disparities occur and whether progress is being made to change a system that is neither fair nor equal. Only then will everyone receive the highest quality of healthcare this nation has to offer.

*“There’s no way in the world that the country can track its progress in eliminating disparities if we don’t have the data to find out what’s happening...”*

– Alan Nelson, M.D., Chair, Institute of Medicine Committee  
Remarks from Institute of Medicine/The National Academies  
Symposium on *Unequal Treatment – One Year Later*,  
March 19, 2003

# unequal TREATMENT. UNEQUAL health.

WHAT DATA TELL US ABOUT  
HEALTH GAPS IN CALIFORNIA

Consider these statistics:

*The infant mortality rate for African Americans is more than twice as high as that of whites.*

— California Department of Health Services, 2000

*Asian American/Pacific Islanders have the highest rate of liver cancer among all populations, five times that of their white counterparts. Cambodian, Hmong and Laotian men are especially at risk.*

— California Cancer Registry, 2000

*African Americans living in Los Angeles County have a 78% higher death rate from heart disease than that of the overall population.*

— Los Angeles County Department of Health Services, 2000

These inequalities reflect some of our nation's greatest challenges — poverty, lack of access to health insurance, language barriers, cultural isolation and racial prejudice. The result is ethnic and racial minorities do not enjoy the same level of health as whites. These complex societal issues also play into a healthcare system that fails to treat everyone equally.

Ethnically diverse populations do not receive the same kinds of tests, treatments or pain medications as whites suffering from the same diseases. Evidence suggests these disparities in healthcare are associated with higher death rates from such illnesses as heart disease, cancer and HIV infection.

What does this mean for communities of color? Their health status is lower, their death rates higher. In a country founded in the belief that we are all created equal, we have a healthcare system that is not equal or fair for all.

## HOW DO WE KNOW DISPARITIES IN HEALTH EXIST?

One of the most important factors in being able to achieve balanced healthcare is becoming aware that inequalities exist.

Listening to the accounts of real patients and becoming sensitive to the obstacles healthcare professionals face will help solve the problems we now know are real. Why these disparities exist brings to light a host of very complex questions. Data can help move us toward the answers that help reduce disparities. Collecting data is not an issue of race or privacy. It's about gathering facts that give people a voice and help work toward a system that is beneficial and fair to all.

## HOW DID THIS HAPPEN?

### Racial and Ethnic Disparities in Healthcare

Data show people of color have access to fewer doctors, fewer hospitals and fewer healthcare centers than the communities of their white counterparts. Language barriers are also a problem in a system that does not always have interpretation and translation services. This is especially a problem in California where more than 100 languages are spoken statewide. Approximately one out of five Californians — six million people — does not speak English well.

Patients and providers find themselves in a system with high patient caseloads and pressures to contain costs. These time pressure and resource constraints are some of the major factors that lead individuals in the healthcare field — even the well-intended — to resort to generalizations or stereotypes of racial and ethnic minority groups.

## WHAT CAN BE DONE?

While there may have been general indicators of inequalities in healthcare, collecting and then analyzing data showed conclusively that such disparities were real. Based on the evidence and further analysis conducted by the WIM Committee, the *Unequal Treatment* report made 21 recommendations for action. Six of the 21 recommendations — more than one quarter — pertain to data collection, monitoring and research.

Data can show what changes in current practices must be made, what new programs should be introduced and ways to improve the care members of racial and ethnic minority groups receive. Moreover, it is virtually impossible to know if progress is being made, if the interventions are making a difference, or if health outcomes improve unless data are collected at the appropriate points in time and at the appropriate way.

It is critically important that there are data collection efforts in place so it is understood how health disparities occur. By monitoring progress now, a system that is neither fair nor equal can change. Only then will everyone receive, regardless of who they are or where they come from, the highest quality of healthcare that this nation has to offer.

## ABOUT THE FINDINGS

This publication is a joint effort by the National Academy of Science's Institute of Medicine, Cause Communications and The California Endowment. It highlights findings from a study requested by Congress titled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*, published in 2002 by the Institute of Medicine. This national study was the largest of its kind ever undertaken and was based on published research from more than 100 studies nationwide.

Data from the U.S. Census Bureau, National Institutes of Health, The Henry J. Kaiser Family Foundation, the Centers for Disease Control and Prevention, and the U.S. Department Health and Human Services, among others, are also included.



71690 Grand Street, Suite 1200, Woodland Hills, CA 91367

(818) 703-3311 ext. (818) 703-4191 fax

[www.calendow.org](http://www.calendow.org)

---

#### INSTITUTE OF MEDICINE

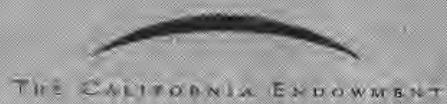
The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education. [www.national-academies.org](http://www.national-academies.org)

#### THE CALIFORNIA ENDOWMENT

The mission of The California Endowment is to expand access to affordable, quality healthcare for underserved individuals and communities, and to promote fundamental improvements in the health status of all Californians. [www.calendow.org](http://www.calendow.org)

#### CAUSE COMMUNICATIONS

Cause Communications is a nonprofit communications firm that advances the important work of foundations and nonprofits through communications that reach, inspire and motivate. [www.causecommunications.org](http://www.causecommunications.org)



21650 Oxnard Street, Suite 1200  
Woodland Hills, California 91367  
(818) 703-3311 tel (818) 703-4193 fax  
[www.ctlendow.org](http://www.ctlendow.org)



# MISSING PERSONS: MINORITIES IN THE HEALTH PROFESSIONS

---

A REPORT OF THE SULLIVAN COMMISSION ON  
DIVERSITY IN THE HEALTHCARE WORKFORCE



THE SULLIVAN COMMISSION

## Contents

About the Sullivan Commission	i
Acknowledgments	iii
Preface	iv
Executive Summary	1
Chapter 1: Rationale for Increasing Diversity in Today's Health Workforce	13
Chapter 2: The Historical Roots of Today's Disparities	32
Chapter 3: State of Diversity in Today's Health Professions Schools and Workforce	48
Chapter 4: The Pipeline to the Health Care Professions	72
Chapter 5: Financing Education in the Health Care Professions	92
Chapter 6: Accountability	102
Glossary	118
Appendices	
a. Commissioned Paper: "Increasing Workforce Diversity and Addressing Health Disparities: Strategies for Hospitals in Health Professions Educational Practice Partnerships"	119
b. Commissioned Paper: "Diversity of Students and Faculty: An Assessment of Health Profession Schools"	158
c. The Charge to the Sullivan Commission on Diversity in the Healthcare Workforce	179
d. W.K. Kellogg Foundation Health Professions Grant Program	182
e. Sullivan Commission Field Hearings	184
f. Diversity Resources	193



## ABOUT THE SULLIVAN COMMISSION

The Sullivan Commission on Diversity in the Healthcare Workforce is an outgrowth of a grant from the W.K. Kellogg Foundation to Duke University School of Medicine. Named for former U.S. Secretary of Health and Human Services, Louis W. Sullivan, M.D., the Commission is composed of 16 health, business, higher education and legal experts and other leaders. Former U.S. Senate Majority Leader Robert Dole and former U.S. Congressman and Congressional Health Subcommittee Chairman Paul Rogers serve as Honorary Co-Chairs. Established in April 2003, the Sullivan Commission will make policy recommendations to bring about systemic change that will address the scarcity of minorities in our health professions.

The work of the Commission comes at a time when enrollment of racial and ethnic minorities in nursing, medicine, and dentistry has stagnated despite America's growing diversity. While African Americans, Hispanic Americans, and American Indians, as a group, constitute nearly 25 percent of the U.S. population, these three groups account for less than 9 percent of nurses, 6 percent of physicians, and only 5 percent of dentists. A study by the Institute of Medicine recommends increasing the number of minority health professionals as a key strategy to eliminate health disparities. Examining the education and training environment in which health professionals learn and develop is critical to efforts to increase the number of health care providers who can, and will, address the health care needs of our nation.

The lack of minority health professionals is compounding the nation's persistent racial and ethnic health disparities. From cancer, heart disease, and HIV/AIDS to diabetes and mental health, African Americans, Hispanic Americans, and American Indians tend to receive less and lower quality health care than whites, resulting in higher mortality rates. The consequences of health disparities are grave and will only be remedied through sustained efforts and a national commitment.

In a series of field hearings across the country, the Sullivan Commission gathered testimonies from health, education, religion and business leaders; community and civil rights advocates; health care practitioners; and students. Drawing upon the expertise and experience of the Commissioners, and the witnesses who provided valuable testimony, the Commission's report, *Missing Persons: Minorities in the Health Professions*, provides the nation with a blueprint for achieving diversity in the health professions.

For more information, visit: [www.sullivancommission.org](http://www.sullivancommission.org).

**The Sullivan Commission on Diversity  
in the Healthcare Workforce**

**Chair:**

Louis W. Sullivan, M.D.  
*U.S. Secretary of Health and Human Services,  
1989-1993  
President Emeritus  
Morehouse School of Medicine*

**Commissioners:**

Geraldine Bednash, Ph.D., R.N., F.A.A.N.  
*Executive Director  
American Association of Colleges of Nursing*

Regina M. Benjamin, M.D., M.B.A.  
*Founder and Chief Executive Officer  
Bayou La Batre Rural Health Clinic*

Helen Darling  
*President  
The Washington Business Group on Health*

Patricia A. Gabow, M.D.  
*Chief Executive Officer and Medical Director  
Denver Health*

Eric H. Holder, Jr.  
*Partner  
Covington & Burling*

Ben Muneta, M.D.  
*Past-President  
Association of American Indian Physicians*

Thomas E. Perez, J.D., M.P.P.  
*Assistant Professor of Law  
University of Maryland School of Law*

Joan Y. Reede, M.D., M.P.H., M.S.  
*Dean, Office for Diversity and Community  
Partnership  
Harvard Medical School*

John Rich, M.D.  
*Medical Director  
City of Boston Public Health Commission*

Elena Rios, M.D., M.S.P.H.  
*President and Chief Executive Officer  
National Hispanic Medical Association*

John Rowe, M.D.  
*Chairman and Chief Executive Officer  
Aetna, Inc.*

Jeanne C. Sinkford, D.D.S., Ph.D.  
*Associate Executive Director  
Director, Center for Equity and Diversity  
American Dental Education Association*

The Honorable Louis Stokes  
*Senior Counsel  
Squire, Sanders & Dempsey, L.L.P.*

George Strait  
*Associate Vice Chancellor for Public Affairs  
University of California, Berkeley*

William Weldon  
*Chairman and Chief Executive Officer  
Johnson & Johnson*

**Commission Administration:**

Brenda Armstrong, M.D.  
*Associate Dean and Director of Admissions  
Duke University School of Medicine*

Maureen Cullins  
*Director, Multicultural Resource Center  
Duke University School of Medicine*

Sandra Dockery  
*Executive Assistant  
The Sullivan Commission*

Pearline Moody  
*Staff Assistant  
The Sullivan Commission*

John Sankofa  
*Senior Editor/Health Writer  
The Sullivan Commission*

**Hyde Park Communications:**

Cecilia Arradaza

James Briggs

Paul DelPonte

B. Denise Hawkins

Scott Kaplan

## ACKNOWLEDGMENTS

Many individuals and organizations made invaluable contributions to the Sullivan Commission's work and to this report. A large part of the Commission's work focused on the field hearings conducted to gather information and identify solutions on how to diversify the health professions. The Commission extends its gratitude to each individual and organization that provided vital testimony for this report.

The Commission thanks the six institutions that graciously hosted its field hearings: The Morehouse School of Medicine, Atlanta, GA; Denver Health, Denver, CO; Harlem Hospital Center, New York, NY; John H. Stroger, Jr. Hospital of Cook County, Chicago, IL; Francisco Bravo Medical Magnet High School, Los Angeles, CA; and MD Anderson Cancer Center, Houston, TX. The Commission also wishes to thank the University of Colorado Health Sciences Center and The California Endowment for receiving the Commission at the Denver and Los Angeles hearings, respectively, as well as the R. David Thomas Center at Duke University for hosting the first Commission meeting, and the staff at Covington & Burling, Washington, D.C., for their support in facilitating the Commission's working group sessions.

In addition, the Commission thanks Howard University Public Television for collaborating to produce a special edition of the program, "On Health with George Strait," that focused on diversity in the health professions, further elevating public awareness and discussion of the issues.

The Commission gratefully acknowledges the authors of the commissioned studies which helped inform and shape the report. Paul Hattis, M.D., J.D., M.P.H. and Kevin Barnett, Dr. P.H., M.C.P. for the study "Increasing Workforce Diversity and Addressing Health Disparities: Strategies for Hospitals in Health Professions Educational Practice Partnerships"; and Kevin Schulman, M.D., M.B.A.; Joelle Friedman, M.P.A.; and Michaela Dinan for the study "Diversity of Students and Faculty: An Assessment of Health Professions Schools."

The Commission also recognizes the hard work and dedication of the staff at Duke University School of Medicine: Sandra Dockery; Brenda Armstrong, M.D.; Maureen Cullins; and Pearline Moody.

For support with key writing, research, review, and/or report production efforts, the Commission thanks Commissioner John Rich, M.D., John Sankofa, Lilian Liou, Cindy Sutherland, Barbara Lynch, Nikia Sankofa, Samruddhi Thaker, Chad Roberts, Phillip Gonzalez of Community Catalyst, Bob Rosseter of American Association of Colleges of Nursing, and Sonja Harrison of American Dental Education Association.

The Commission also extends its appreciation to Paul DelPonte, Cecilia O. Arradaza, and other staff of Hyde Parke Communications, Washington, D.C., for their public relations and media communications expertise.

Finally, the Commission thanks the W.K. Kellogg Foundation. The Commission was convened by Duke University School of Medicine as part of the Kellogg Foundation's national initiative, which includes the Institute of Medicine of the National Academy of Sciences and Community Catalyst. The Commission extends its special thanks to Robert A. DeVries, who served as Project Officer for this grant, and Henrie M. Treadwell, Ph.D., for helping establish this effort while at the Kellogg Foundation.

## PREFACE

There is an imbalance in the makeup of the nation's physicians, dentists, and nurses. This imbalance contributes to the gap in health status and the impaired access to health care experienced by a significant portion of our population. The Sullivan Commission on Diversity in the Healthcare Workforce finds that African Americans, Hispanics, American Indians, and certain segments of the nation's Asian/Pacific Islander population are not present in significant numbers. Rather, they are missing! While some outstanding physicians, dentists, and nurses are minorities, access to a health professions career remains largely separate and unequal. This report, *Missing Persons: Minorities in the Health Professions*, examines the root causes of this challenge and provides detailed recommendations on how to increase the representation of minorities in the nation's medical, dental, and nursing workforce.

Our nation has made tremendous progress in the health sciences. Today, we stand apart from the rest of world with our many advances in the biomedical sciences. Mapping and sequencing the Human Genome is essentially complete, putting us at the threshold of a new era of discovery and therapeutic promise. However, that promise will not be fully realized if we fail to make similar progress in opening wide the doors of the health professions to all of our citizens.

In 2003, the Institute of Medicine (IOM) warned of the "unequal treatment" minorities face when encountering the health system. The data in that report are compelling and alarming. Cultural differences, a lack of access to health care, combined with high rates of poverty and unemployment, contribute to the substantial ethnic and racial disparities in health status and health outcomes. Health services research has shown that minority health professionals are more likely to serve minority and medically underserved populations. Despite this fact, there is a severe underrepresentation of minorities in our health professions. The IOM recommends increasing the number of minority health professionals as a key strategy to eliminating health disparities.

The path to diversity in the health professions is a long and complicated one. Working with the W.K. Kellogg Foundation and Duke University School of Medicine, I have the honor and challenge of chairing a commission that aims to shorten that path by breaking down the barriers that confront minority students who aspire to become health professionals.

The Commission, composed of 16 leaders in health, business, higher education, law, and other fields, accepted the charge from the W.K. Kellogg Foundation to serve as the focus for strategies to increase diversity in the health professions through a multidimensional approach and to advance national efforts to eliminate disparities in health status and access to health care among the nation's racial and ethnic minority populations.

The time is right, and our citizens are anxious for solutions and action. There have been many reports, studies, and initiatives that have examined the problem. We understand the dimensions of the problem. Our goals are designed for action.

Our work is part of an evolution in the health system. The nation is in a state of unprecedented demographic transformation. We are getting older and growing more diverse. Therefore, our health needs are changing dramatically. The choices we make and the actions we take today will determine the makeup of the health professions we will have for generations to come. The health professions must keep pace with the changing demographics of our nation.

In January 2004, the Commission completed the last of six national hearings designed to bring forward vital testimony on key challenges and proposed solutions. The Commission traveled the country to gather evidence, learn from previous attempts, and move beyond what has been tried, to develop new approaches, and a new model for making the health professions workforce more diverse.

The report that has emerged from this process integrates findings from testimony, health sciences literature, and two commissioned studies, and draws upon the expertise and experience of the members of the Commission. In all, the Commission puts forth 37 recommendations for multiple actions to address the root causes of underrepresentation of minorities in the health professions. Developed to attract broad public support and to encourage academic and professional leadership to share the Commission's vision for a health system that focuses on excellence, equal opportunity, and ensures delivery of high-quality care for the entire population, the Sullivan Commission's recommendations are based upon three overarching principles: 1) To increase diversity in the health professions, the culture of health professions schools must change; 2) New and nontraditional paths to the health professions should be explored; and 3) Commitments must be at the highest levels of our government and in the private sector.

We call upon leaders in the public and private sectors in our country, including key stakeholders in the health and education systems, to act on these recommendations and to solve this crisis by utilizing the strategy of inclusion in crafting solutions. It is time to correct the imbalance in our health professions. If we fail to do so, we risk catastrophe in view of the rapid demographic changes occurring in our society. We must work hard and we must dream again!

Louis W. Sullivan, M.D.

*Chair, The Sullivan Commission on Diversity in the Healthcare Workforce*

*U.S. Secretary of Health and Human Services, 1989-1993*

*President Emeritus, Morehouse School of Medicine*

*Atlanta, GA*

*September 2004*

## EXECUTIVE SUMMARY

By many measures, America has an exceptional health care system. Tremendous advances have made the U.S. health system the most technologically advanced in the world. Yet that system is in trouble. Basic quality care is beyond the reach of far too many Americans. As the population has become increasingly diverse, glaring disparities in the quality of care, especially for racial and ethnic minorities, have led to thousands of premature deaths each year and incalculable hours of lost productivity, pain, and suffering.

Many complex factors are at play. One is rooted in economics and a system that leaves far too many Americans lacking adequate, if any, health insurance. For many reasons—not the least of which is cost—a record 44 million Americans now have no health insurance and untold millions more have inadequate or limited coverage. Those numbers are growing.

The fact that the nation's health professions have not kept pace with changing demographics may be an even greater cause of disparities in health access and outcomes than the persistent lack of health insurance for tens of millions of Americans. Today's physicians, nurses, and dentists have too little resemblance to the diverse populations they serve, leaving many Americans feeling excluded by a system that seems distant and uncaring. In future years, our health professionals will have even less resemblance to the general population if minority enrollments in schools of medicine, dentistry, and nursing continue to decline and if health professions education remains mired in the past and—despite some improvements—inherently unequal and increasingly isolated from the demographic realities of mainstream America. Failure to reverse these trends could place the health of at least one-third of the nation's citizens at risk.

Recognizing the crisis, and continuing its national effort to counter the lack of diversity in medicine, nursing, and dentistry, in 2003 the W.K. Kellogg Foundation issued a grant to Duke University School of Medicine to plan and convene the Sullivan Commission on Diversity in the Healthcare Workforce. Composed of 16 health, education, legal, and business leaders and headed by former U.S. Health and Human Services Secretary Dr. Louis W. Sullivan, this Commission was given the formidable, and unique, task of identifying and understanding the barriers to achieving diversity in the health professions and then to finding solutions.

Working without the constraints often confronting government or quasi-government panels, Commission members examined existing research, commissioned studies, and traveled the country to gather information. The Commission held six field hearings and a nationally broadcast town hall meeting, and heard from more than 140 witnesses in order to bring the problems into clearer focus and to identify existing models and workable solutions.

This report, *Missing Persons: Minorities in the Health Professions*, emphasizes the need for leadership, commitment, and accountability at the highest levels in institutions of learning and professional organizations, and at the national level in the form of legislation and a Presidential task force to give urgency and focus to the problem. A number of strategies are identified to make education and training in the health professions more attainable and affordable for minority students, including shifting from student loans to scholarships; reducing dependency on standardized tests for admission to schools of medicine, nursing, and dentistry; and enhancing the role of two-year colleges. In all, 37 separate recommendations are put forward to remedy the lack of diversity among health professionals, warning that failure to act quickly will only exacerbate the current disconnect between health care providers and the populations they serve.

Statistics reviewed by this Commission highlighted the diversity gap. Together, African Americans, Hispanic Americans, and American Indians make up more than 25 percent of the U.S. population but only 9 percent of the nation's nurses, 6 percent of its physicians, and 5 percent of dentists. Similar disparities show up in the faculties of health professional schools. For example, minorities make up less than 10 percent of baccalaureate nursing faculties, 8.6 percent of dental school faculties, and only 4.2 percent of medical school faculties.

If the trends continue, the health workforce of the future will resemble the population even less than it does today. Viewed in the context of demographic projections showing that no racial or ethnic group will comprise a majority by the year 2050, that decline could be catastrophic.

Support for a direct link between poorer health outcomes for minorities and the shortage of minority health care providers came from the Institute of Medicine's landmark study, *Unequal Treatment*. That study documented the lower quality of health care and higher rates of illness, disability, and premature deaths among minority populations.

The evidence this Commission reviewed and the testimony heard led its members to conclude that the condition of the nation's health professions workforce is critical and demands swift, large-scale change to protect the future health of the nation. Transforming the system will require changing the face of the American health care system.

The conclusions provide a new vision of health care for America, one that focuses on excellence and that ensures true equality of high-quality care for the entire population. Diversity is a key to excellence in health care. To achieve that new vision, care must be provided by a well-trained, qualified, and culturally competent health professions workforce that mirrors the diversity of the population it serves.

The Sullivan Commission's recommendations were developed to attract broad public support and to encourage academic and professional leadership to share the Commission's vision for a health system modeled on excellence, access, and quality for all people. Three overlying principles are essential to fulfilling that vision.

- 1.) **To increase diversity in the health professions, the culture of health professions schools must change.** Our society is experiencing a significant and rapid demographic shift. The culture of our nation is changing. So too must the culture of our health institutions. As colleges, universities, health systems, and others examine these recommendations, they must also examine the practices of their own institutions.
- 2.) **New and nontraditional paths to the health professions should be explored.** In some health professions, it takes between 10 and 12 years to fully educate and train a provider. This Commission calls for major improvements in the K-12 educational system, with the realization that the degree of diversity in health professions schools cannot remain stagnant while these improvements take shape.
- 3.) **Commitments must be at the highest levels.** Change can happen when institutional leaders support the change. In 1966, Duke University School of Medicine was one of the last two medical schools in the South to admit a black student. Today, Duke University School of Medicine has become a model of diversity and has used its leadership to bring other institutions along a new and inclusive path toward excellence.

In brief, the following summarizes the Commission's specific findings and recommendations:

### **Chapter 1: Rationale for Increasing Diversity in Today's Health Workforce**

The rationale for increasing diversity in the health workforce is evident: increased diversity will improve the overall health of the nation. This is true not only for members of racial and ethnic minority groups, but also for an entire population that will benefit from a health workforce that is culturally sensitive and focused on patient care.

Diversity in the health workforce will strengthen cultural competence throughout the health system. Cultural competence profoundly influences how health professionals deliver health care. Language is a critical component, with two out of ten Americans speaking a language at home other than English. The cultural challenges posed by a shifting patient demographic can best be addressed by health professionals educated and trained in a culturally dynamic environment.



The business community has long recognized that workforce diversity is essential to success and maintaining competitiveness in the marketplace. Corporate executives as well as local chambers of commerce describe the economic benefits of developing a workforce that reflects the customer base. Business support for diversity was demonstrated in the unprecedented number of amicus curiae briefs filed with the Supreme Court in support of the University of Michigan's affirmative action admissions policies. Business leaders find diversity in higher education necessary to the development of skills required to compete in a global economy, skills such as the ability to understand, work, and build consensus with individuals of different ethnic and cultural backgrounds.

Some business benefits from diversity are specific to the health care sector. Poor health outcomes for members of racial and ethnic minorities, attributable to a lack of diversity in the health workforce, translate to a loss of productivity, unnecessary absenteeism, and increased health care costs. The business community recognizes that promoting diversity in the health workforce, as well as in the general workforce, is essential to a strong economy.

## **Chapter 2: The Historical Roots of Today's Disparities**

Many people living today remember a time when admission to college and to professional schools was systematically limited by race, sex, national origin, and religion. The civil rights movement of the 1960s eventually ended the more visible racial and ethnic barriers, but it did not eliminate entrenched patterns of inequality in health care, which remain the unfinished business of the civil rights movement.

Historically, racial and ethnic minorities have always been underrepresented in the health professions in America (Smith, 1999; Byrd & Clayton, 2002), just as members of these populations have always been more likely to receive a lower quality of care, experience higher rates of illness and disability, and die at earlier ages than members of the white population (IOM, 2003; PHR, 2003).

Schools of medicine, dentistry, and nursing have been among the last to integrate their classrooms, and their professional organizations have been equally slow in recruiting minorities into their ranks. Significant improvements have been made. In many health professions, including some medical specialties, women have achieved parity and due recognition. Further, some of the most accomplished and highly respected people in the health professions are members of minority groups who overcame the barriers of a once-segregated medical establishment.

Today, talented minority students are among the most sought-after applicants at some leading universities and professional schools. Strong steps must be taken to expedite inclusion of underrepresented minority groups among the various health professions. The Commission recommends:

- 2.1 The complementary strategies of increasing diversity and ensuring cultural competence at all levels of the health workforce should be endorsed by all in our society, with leadership from the key stakeholders in the health care system.
- 2.2 There should be increased recognition of underrepresented minority health professionals as a unique resource for the design, implementation, and evaluation of cultural competence programs, curriculums, and initiatives.
- 2.3 Public and private funding entities, including U.S. Public Health Service agencies, foundations, and corporations, should increase funding for research about racial disparities in health care and health status, including, but not limited to: research on culturally competent care, how to measure and eliminate racial bias and stereotyping, and strategies for increasing positive health behaviors among racial and ethnic groups.
- 2.4 Health systems should set measurable goals for having multilingual staff and should provide incentives for improving the language skills of all health care providers.
- 2.5 Health professions schools should work to increase the number of multilingual students, and health systems should provide language training to health professionals.
- 2.6 Key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers.

### **Chapter 3: State of Diversity in Today's Health Professions Schools and Workforce**

The ghosts of segregation continue to haunt the health professions. Appropriately, the Commission began its field hearings in Atlanta, a key landmark of the civil rights movement. Testimony there highlighted the problems confronting efforts to improve diversity among the health professions workforce. For example, in 1997, the incoming class at the state-sponsored Medical College of Georgia included only one black student, even though approximately 30 percent of the citizens of Georgia are black. The problem in Georgia is not unique. The nation's upcoming medical school graduating classes for 2007 include only 2,197 black, Hispanic, and Native Americans out of a total of more than 16,000 students. The picture in nursing and dentistry is similar.

Enrollment of minority students in health professions schools increased slightly during the 1960s, 1970s, and 1980s. However, the numbers have failed to keep up with the growth of minority populations, particularly in medicine where minority enrollment is now declining. This situation makes it more difficult for students at many of the nation's leading health professions institutions to share different socioeconomic and cultural experiences so essential to the training of health professionals destined to work with an increasingly diverse population.

Excellence in health professions education is difficult to achieve in a culturally limited environment. Missing the experience of cultural diversity diminishes the overall quality of health professions education and adversely affects the health status of minority populations.

The limited pool of leaders and mentors in the health professions needs to be addressed. Currently, underrepresented minorities account for only 4.2 percent of medical school faculties in the United States, less than 10 percent of the baccalaureate and graduate nursing school faculties, and 8.6 percent of dental faculties. This lack of leadership and sparse representation among faculties sends a chilling message to current and potential minority students.

#### **Chapter 4: The Pipeline to the Health Care Professions**

Collectively, the nation's medical, nursing, and dental schools have not succeeded in their efforts to achieve greater diversity among their students and, in turn, to develop a health professions workforce with the skills and diversity needed to maintain the nation's position as a world leader in health care. Few models of successful minority student development and recruitment efforts exist despite the frequent, and loudly voiced, agreement that this is a problem that can, and must, be solved.

The problem is seen at the beginning of the pipeline where primary and secondary schools are failing too many students. On average, when compared with white students, racial and ethnic minority students receive a K-12 education of measurably lower quality, score lower on standardized tests, and are less likely to complete high school. Those who do graduate from high school are far less likely to graduate from a four-year college than white students. Approximately 30 percent of white students graduate with a four-year degree, compared with 17 percent of African American, and 11 percent of Hispanic students (U.S. Census Bureau, 2003).

Even talented minority students who do succeed at primary, secondary, and collegiate levels, and who are committed to pursuing a career in one of the health professions, often find it difficult to gain admission to a health professions school. The barriers they encounter include an over-reliance on standardized testing in the admissions process, unsupportive institutional cultures, insufficient funding sources, and leadership without a demonstrated commitment to diversity.

A number of strategies to broaden the health professions pipeline were identified, including efforts to provide extra support for disadvantaged and minority students through strategies such as mentoring, counseling and training in test-taking and interviewing skills, and efforts to include more students from two-year colleges and allied health professionals seeking second careers. The Commission recommends:

- 4.1 Health professions schools, hospitals, and other organizations should partner with businesses, communities, and public school systems to: a) provide students with classroom and other learning opportunities for academic enrichment in the sciences; and b) promote opportunities for parents and families to increase their participation in the education and learning experiences of their children.
- 4.2 The U.S. Public Health Service, state health departments, colleges, and health professions schools should provide public awareness campaigns to encourage underrepresented minorities to pursue a career in one of the health professions. Such a campaign should have a significant budget, comparable to other major public health campaigns.
- 4.3 For underrepresented minorities who decide to pursue a health profession as a second career, health professions schools should provide opportunities through innovative programs.
- 4.4 Baccalaureate colleges and health professions schools should provide and support “bridging programs” that enable graduates of two-year colleges to succeed in the transition to four-year colleges. Graduates of two-year community college nursing programs should be encouraged (and supported) to enroll in baccalaureate degree-granting nursing programs.
- 4.5 Key stakeholders in the health system should work to increase leadership development opportunities in nursing in order to prepare minority nurses with graduate degrees for roles as scholars, faculty, and leaders in the profession.
- 4.6 Key stakeholders in the health system should work to increase leadership training and opportunities for underrepresented minority physicians and dentists.
- 4.7 Colleges, universities, and health professions schools should support socio-economically disadvantaged college students who express an interest in the health professions, and provide these students with an array of support services, including mentoring, test-taking skills, counseling on application procedures, and interviewing skills.
- 4.8 The Association of American Medical Colleges, the American Association of Colleges of Nursing, the American Dental Education Association, and the Association of

- Academic Health Centers should promote the review and enhancement of health professions schools admissions policies and procedures to: a) enable more holistic, individualized screening processes; b) ensure a diverse student body with enhanced language competency and cultural competency for all students; and c) develop strategies to enhance and increase the pool of minority applicants.
- 4.9 Dental and medical schools should reduce their dependence upon standardized tests in the admissions process, the Dental Admissions Test and the Medical College Admissions Test should be utilized, along with other criteria in the admissions process as diagnostic tools to identify areas where qualified health professions applicants may need academic enrichment and support.
- 4.10 Diversity should be a core value in the health professions. Health professions schools should ensure that their mission statements reflect a social contract with the community and a commitment to diversity among their students, faculty, staff, and administration.
- 4.11 Health systems and health professions schools should use departmental evaluations as opportunities for measuring success in achieving diversity, including appropriate incentives.
- 4.12 Health systems and health professions schools should have senior program managers who oversee: a) diversity policies and practices; b) assist in the design, implementation, and evaluation of recruitment, admissions, retention, and professional development programs and initiatives; c) assess the institutional environment for diversity; and d) provide regular training for students, faculty, and staff on key principles of diversity and cultural competence.
- 4.13 Health professions schools should increase the representation of minority faculty on major institutional committees, including governance boards and advisory councils. Institutional leaders should regularly assess committee/board composition to ensure the participation of underrepresented minority professionals.

## **Chapter 5: Financing Education in the Health Professions**

The burden of financing an education in the health professions has put the dream of becoming a health professional beyond the reach of far too many qualified, underrepresented minority students. Many of these students come from families with significantly lower incomes and fewer financial assets than their white counterparts. In 2001, the median income for white families was 40 percent higher than that of blacks and 39 percent higher than that of Hispanics. Even the most talented students from these minority families tend to view the cost of professional educa-

tion as overwhelming and insurmountable. Financial realities mean many low-income students who do graduate from high school do not plan to attend a four-year college or take the necessary qualifying exams and apply to a health professions school. Those who do pursue their dream for a health professions education experience high unmet financial needs, coupled with excessive loan and work burdens.

The situation demands creative responses to increase funding to support diversity programs and eliminate the financial barriers that discourage so many minority students. Failure to address the cost problem increases the growing diversity gap between the health professions and the populations they serve.

The Commission recommends:

- 5.1 Congress should substantially increase funding to support diversity programs within the National Health Service Corps, and Titles VII and VIII of the Public Health Service Act. Such funding should also provide for collection of data on diversity.
- 5.2 To reduce the debt burden of underrepresented minority students, public and private funding organizations for health professions students should provide scholarships, loan forgiveness programs, and tuition reimbursement strategies to students and institutions, in preference to loans.
- 5.3 Public and private entities should significantly increase their support to those health professions schools with a sustained commitment to educating and training underrepresented minority students.
- 5.4 Businesses, foundations, and other private organizations should be encouraged to support health professions schools and programs to increase financial resources needed to implement the recommendations of the Sullivan Commission.
- 5.5 The President and Congress should increase the funding for the National Institutes of Health's National Center for Minority Health and Health Disparities Loan Repayment Programs, with a special emphasis on programs for underrepresented minority students.
- 5.6 The National Institutes of Health should develop a Centers of Excellence program for schools of nursing.

## **Chapter 6: Accountability**

From field hearings and witnesses, the commission learned the essential value of leadership. Often, the commitment of a university president, chancellor, or dean has been instrumental in developing and implementing new policies and procedures and, at the same time, has changed the cultures and attitudes that blocked diversity.

Strong leadership is required to ensure that goals and commitments to achieve diversity are met. That, in turn, demands accountability. For health professions schools, that accountability must address four key principles: quality care, measurement of progress, benefit to the community, and institutional commitment.

Leadership beyond the institutional level is essential. Professional organizations, and federal and state agencies need to promulgate guidelines, set standards and regulations, and develop other devices for promoting cultural competence and diversity within the health professions. To ensure success, federal and state legislation is needed to strengthen the institutions that serve underrepresented populations, and a Presidential interagency task force should develop and implement a comprehensive strategy to improve diversity in the health workforce.

- 6.1 Health systems and health professions schools should gather data to assess institutional progress in achieving racial and ethnic diversity among students, faculty, administration, and health services providers, as well as monitor the career patterns of graduates.
- 6.2 Health professions schools and health systems should have strategic plans that outline specific goals, standards, policies, and accountability mechanisms to ensure institutional diversity and cultural competence.
- 6.3 Health professions organizations and accrediting bodies for health professions education and health care programs should promote the development and adoption of measurable standards for cultural competency for health professions faculty and health care providers.
- 6.4 Accrediting bodies for programs in medicine and the other health professions should embrace diversity and cultural competence as requirements for accreditation.
- 6.5 State licensure boards for nurses, physicians, and dentists should determine the value of having continuing education in cultural competence as a condition of licensure.
- 6.6 Community and civil rights organizations should collaborate with health care organizations and health professions schools to advance institutional diversity and cultural competence goals, including community needs assessment and evaluation.

- 6.7 Federal and state regulatory agencies should monitor and enforce health care institutions' fulfillment of community-benefit obligations pertaining to diversity and cultural competence. Data collected should be readily available to the public.
- 6.8 The Department of Health and Human Services should establish and report national standards and measurements for diversity and cultural competence in the health workforce and health professions schools in the Agency for Healthcare Research and Quality's National Health Care Disparities Report.
- 6.9 The Department of Education should work with the appropriate accrediting bodies to ensure that health professions education institutions promulgate, monitor, and implement standards for diversity and cultural competence for students, faculty, staff, and administration.
- 6.10 The Department of Labor and the Department of Health and Human Services should ensure that the appropriate accrediting bodies hold medical residency and health professional training programs accountable for promulgating and implementing standards for diversity and cultural competence.
- 6.11 The Commission recommends the passage and funding of comprehensive state and federal legislation that will: 1) ensure the development of a diverse and culturally competent workforce; and 2) strengthen health care institutions that serve minority and underserved populations.
- 6.12 The President should appoint an advisory council or interagency task force on health workforce diversity to develop and implement a more effective national response to the shortage of minorities in the health professions.

The Commission believes its vision for American health care can be achieved within the next two decades. In that time, a new generation of physicians, dentists, nurses, and other health professionals will have been trained to care for a population where the terms "majority" and "minority" have become obsolete.

The health professions have reached a crossroads, a point where dramatic change is required and wise decisions must be made. Either health professions training will remain entrenched in the status quo and become increasingly out of touch with the demographic realities and health needs of the nation, or the professions can choose to change, and lead to a new era of excellence in health care.



From the streets of Harlem to the barrios of East Los Angeles, the Commission saw shining examples of young students and professionals who can lead to this new era. Many share a dream of returning to their communities as physicians, dentists, and nurses to provide care for friends, neighbors, and relatives. They face huge financial obstacles, but new financing mechanisms can put a health professions education within their reach. Further reducing the debt burden will broaden access to a health professions education.

“I had incredible support that allowed me to pursue my dreams and fight to get my education,” testified Claribel Sanchez, a University of California, Berkeley, student born and raised in East Los Angeles, a neighborhood that has seen more than its share of crime and violence. “Even if I’m here on loans, I’m not letting money become an issue. It’s the only way I can get through and I’m not going to give up.”

With change, new role models will provide hope to medically underserved communities which currently see health care as a luxury, not a reality. New ways for providing quality care to those who now receive little will be discovered.

Tracy Brewington, a nursing student at Howard University, told the Commission: “I’m looking forward to going back home to Philadelphia, to the inner city, where I will have the opportunity to give back to my community. I feel like even if just one person could do something to try to eliminate these health disparities, it could be me. I’m here to make a difference.”

The goal of the Commission is to increase diversity in the health professions. By its very nature, diversity allows more people from different backgrounds to look at the same problem and to explore different approaches and different solutions. To the goal of diversity, the Commission added the goal of excellence in order to achieve a health care system where no American would feel excluded and all would experience the same high level of quality care. The Commission believes the task of transforming the health system to achieve that level of excellence requires a strong commitment from all in our society, with particular leadership from the generation that was born into the post-Civil Rights Era, and is committed to seeing the “dream” truly fulfilled. In the ever-cogent words of the Rev. Dr. Martin Luther King, Jr., “The time is always right to do what is right.”

# IN THE NATION'S COMPELLING INTEREST

## Ensuring Diversity in the Health-Care Workforce

Committee on Institutional and Policy-Level Strategies for Increasing the  
Diversity of the U.S. Health Care Workforce

Board on Health Sciences Policy

Brian D. Smedley, Adrienne Stith Butler, Lonnie R. Bristow, *Editors*

INSTITUTE OF MEDICINE  
OF THE NATIONAL ACADEMIES

THE NATIONAL ACADEMIES PRESS  
Washington, D.C.  
[www.nap.edu](http://www.nap.edu)

# Executive Summary

## HEALTH CARE'S COMPELLING INTEREST: ENSURING DIVERSITY IN THE HEALTH-CARE WORKFORCE

### ABSTRACT

*The United States is rapidly becoming a more diverse nation, as demonstrated by the fact that nonwhite racial and ethnic groups will constitute a majority of the American population later in this century. The representation of many of these groups (e.g., African Americans, Hispanics, and Native Americans) within health professions, however, is far below their representation in the general population. Increasing racial and ethnic diversity among health professionals is important because evidence indicates that diversity is associated with improved access to care for racial and ethnic minority patients, greater patient choice and satisfaction, and better educational experiences for health professions students, among many other benefits.*

*Many groups—including health professions educational institutions (HPEIs), private foundations, and state and federal government agencies—have worked to increase the preparation and motivation of underrepresented minority (URM) students to enter health professions careers. Less attention, however, has been focused on*

*strategies to reduce institutional- and policy-level barriers to URM participation in health professions training.*

*HPEIs can improve admissions policies and reduce barriers to URM admission by developing a clear statement of mission that recognizes the value of diversity in health professions education. Admissions policies should be based on a comprehensive review of each applicant, including an assessment of applicants' attributes that best support the mission of the institution (e.g., background, experience, multilingual abilities). Admissions models should balance quantitative data (i.e., prior grades and standardized test scores) with these qualitative characteristics.*

*The federal Health Resources and Services Administration (HRSA) is a major funder of health professions training that seeks to improve the quality and availability of diverse health professionals through an array of programs. These health professions programs should be evaluated to assess their effectiveness in increasing the numbers of URM students enrolling and graduating from HPEIs, and Congress should provide increased funding for programs shown to be effective in enhancing diversity. State and local entities should increase support for diversity efforts through programs such as loan forgiveness, tuition reimbursement, loan repayment, and other efforts. In addition, private entities should be encouraged to collaborate through business partnerships with HPEIs to support the goal of developing a more diverse health-care workforce.*

*The U.S. Department of Education should strongly encourage accreditation bodies to be more aggressive in formulating and enforcing standards that result in a critical mass of URM students throughout the health professions. In addition, health professions education accreditation bodies should develop explicit policies articulating the value and importance of diversity among health professionals, and monitor the progress of member institutions toward achieving these goals.*

*HPEIs should develop and regularly evaluate comprehensive strategies to improve the institutional climate for diversity. As part of this process, HPEIs should proactively and regularly engage and train students, house staff, and faculty regarding institutional diversity-related policies and expectations and the importance of diversity to the long-term institutional mission.*

*HPEI governing bodies should develop institutional objectives consistent with community benefit principles that support the goal of increasing health-care workforce diversity, including efforts to ease financial and nonfinancial obstacles to URM participation,*

*increase involvement of diverse local stakeholders in key decision-making processes, and undertake initiatives that are responsive to local, regional and societal imperatives. These objectives are best assessed and enforced via the accreditation process.*

## EXECUTIVE SUMMARY

In a landmark decision that resolved over 5 years of litigation—and an even longer period of contentious national debate—the U.S. Supreme Court ruled in *Grutter v. Bollinger et al.* that the University of Michigan Law School's consideration of race and ethnicity as one of many factors in the admissions process was lawful, because the practice was “narrowly tailored” and did not violate the constitutional rights of nonminority applicants. Perhaps more importantly, the Court declared that the university's position that achieving a “critical mass” of racial and ethnic diversity in its law school was a compelling interest of the law school and the nation, a rationale that will have far-reaching implications, not just for URM students<sup>1</sup> but also for the nation as a whole.

Few professional fields will feel the impact of the decision in the *Grutter* case—and the potential influence of greater levels of racial and ethnic diversity—as profoundly as the health professions. Health professions disciplines are grappling with the impact of major demographic changes in the United States population, including a rapid increase in the proportions of Americans who are nonwhite, who speak primary languages other than English, and who hold a diverse range of cultural values and beliefs regarding health and health care. Efforts to increase the proportions of URM in health professions fields, however, have met with limited success. To a great extent, efforts to diversify health professions fields have been hampered by gross inequalities in educational opportunity for students of different racial and ethnic groups. Primary and secondary education for URM students is, on average, far below the quality of education for non-URM

---

<sup>1</sup>For purposes of this report, the study committee defines “underrepresented minorities” as those racial and ethnic groups that are underrepresented in the health professions relative to their numbers in the general population. This definition allows individual institutions to define which populations are underrepresented in its area of interest. The definition is consistent with the definition of “underrepresented minorities in medicine” recently adopted by the Association of American Medical Colleges (AAMC); previously, AAMC's definition was limited to historically disadvantaged groups (e.g., African Americans, some Hispanic/Latino groups, and Native Americans). The new definition takes into account the fact that many other groups, such as subpopulations of Asian Americans, Pacific Islanders, and Latinos, are also poorly represented among health professionals, and many in these communities face barriers to accessing appropriate health care.

students. The “supply” of URM students who are well-prepared for higher education and advanced study in health professions fields has therefore suffered.

Equally important, however, are efforts to reduce policy-level barriers to URM participation in health professions training, and to increase the institutional “demand” for URM students. For example, several events—including public referenda (i.e., the California Civil Rights Initiative [Proposition 209] and Initiative 200 in Washington state), judicial decisions (e.g., the Fifth District Court of Appeals finding in *Hopwood v. Texas*), and lawsuits challenging affirmative action policies in 1995, 1996, and 1997—forced many higher education institutions to abandon the use of race and ethnicity as factors in admissions decisions (in some cases temporarily, in light of the Supreme Court decision in *Grutter*), and to curtail race- and ethnicity-based financial aid.

Given these problems—an increasing need for URM health professionals, policy challenges to affirmative action, and little progress toward enhancing the numbers of URM students prepared to enter health professions careers—the W.K. Kellogg Foundation requested a study by the Institute of Medicine (IOM) to assess institutional and policy-level strategies for achieving greater diversity among health-care professionals. Specifically, the IOM was asked to:

- assess and describe potential benefits of greater racial and ethnic diversity among health professionals;
- assess institutional and policy-level strategies that may increase diversity within the health professions, including:
  - modifying HPEIs’ admissions practices,
  - reducing financial barriers to health professions training among minority and lower-income students,
  - increasing the emphasis on diversity goals in HPEI program accreditation,
  - improving the HPEI campus “climate” for diversity, and
  - considering the application of community benefit principles to improve the accountability of nonprofit, tax exempt institutions (e.g., medical schools and teaching hospitals) to the diverse racial and ethnic communities they serve; and
- identify mechanisms to garner broad support among health professions leaders, community members, and other key stakeholders to implement these strategies.

This Executive Summary presents a shortened version of the study committee’s full report, with summaries of the analysis, findings, and rec-

ommendations.<sup>2</sup> The reader is referred to the full report for a more detailed discussion of the committee's findings and recommendations.

### Why Is Racial and Ethnic Diversity Important in Health Professions Fields?

A preponderance of scientific evidence supports the importance of increasing racial and ethnic diversity among health professionals. This evidence (some of which is summarized below) demonstrates that greater diversity among health professionals is associated with improved access to care for racial and ethnic minority patients, greater patient choice and satisfaction, better patient-provider communication, and better educational experiences for *all* students while in training.

#### *Racial and Ethnic Diversity Among Health Professionals and Access to Health Care for Minority Patients*

Racial and ethnic minority health care professionals are significantly more likely than their white peers to serve minority and medically underserved communities, thereby helping to improve problems of limited minority access to care. For example, URM physicians are more likely to treat patients of color (Komaromy et al., 1996), indigent patients, and patients that are sicker (Moy and Bartman, 1995; Cantor et al., 1996) than non-URM physicians. Racial and ethnic minority dentists (Solomon et al., 2001) and psychologists (Turner and Turner, 1996) are also more likely than their white peers to practice in racial and ethnic minority communities.

#### *Diversity and Minority Patient Choice and Satisfaction*

Minority patients who have a choice are more likely to select health-care professionals of their own racial or ethnic background (Saha et al., 2000; LaVeist and Nuru-Jeter, 2002). Moreover, racial and ethnic minority patients are generally more satisfied with the care that they receive from minority professionals (Saha et al., 1999; LaVeist and Nuru-Jeter, 2002), and minority patients' ratings of the quality of their health care are generally higher in racially concordant than in racially discordant settings (Cooper-Patrick et al., 1999).

---

<sup>2</sup>Recommendations in this Executive Summary are presented in the order in which they appear and as they are designated in the full report. Enumeration is based on the chapter in which the recommendations are presented. Enumeration begins with recommendations presented in Chapter 2, which are designated as 2-1, 2-2, and so on.

### *Diversity and Quality of Training for Health Professionals*

Diversity in health professions training settings may assist in efforts to improve the cross-cultural training and cultural competencies of *all* trainees. Interaction among students from diverse backgrounds in training settings may help students to challenge assumptions and broaden perspectives regarding racial, ethnic, and cultural differences (Cohen, 2003; Whitla et al., 2003). In addition, there is growing evidence, primarily from studies of college students' undergraduate experiences, that campus diversity experiences are associated with gains in *all* students' learning outcomes and community involvement (e.g., Gurin et al., 2002; Antonio et al., in press; Whitla et al., 2003).

Despite the importance of diversity in health professions, African Americans, American Indians and Alaska Natives, many Hispanic/Latino populations, and some Asian American (e.g., Hmong and other Southeast Asians) and Pacific Islander groups (e.g., Native Hawaiians) are grossly underrepresented among the nation's health professionals. A range of institutional and policy-level strategies to increase the presence of URMs in the health professions are discussed below.

### **Reconceptualizing Admissions Policies and Practices**

Although admissions practices vary by institution and discipline, admission into many HPEIs remains a highly competitive process, in which many talented applicants compete for a limited number of slots. For a range of reasons, including efficiency in sorting through a large number of applicants, and to attain a reasonable expectation of how applicants can be expected to perform in HPEIs, many admissions committees rely heavily on quantitative information, such as applicants' prior grades and standardized test scores, in identifying those applicants that will receive serious consideration.

Standardized test scores are generally good predictors of subsequent academic performance but have been used—in some cases inappropriately—as a barometer of applicants' academic “merit,” often to the detriment of URM students. Some higher education institutions, as well as many among the general public, cling to the belief that admissions tests measure a “compelling distillation of academic merit” (National Research Council, 1999). Yet standardized admissions tests do not measure the full range of abilities that are needed to succeed in higher education (Sternberg and Williams, 1997), nor were they designed to. In addition, test scores are malleable, and are not indicative of fine distinctions between individual applicants. Admissions tests, whether they measure aptitude or achievement, are therefore best viewed as imprecise estimates of how students might be expected to



perform in specific educational contexts, and are best used to sort applicants into broad categories (National Research Council, 1999).

URM students typically score lower than their white or Asian American peers on a range of standardized tests, including the SAT, GRE, and MCAT. This disparity occurs for a variety of reasons, but principally because of poorer educational opportunities afforded to African American, Latino, and American Indian/Alaska Native students. These students are more likely than non-URM students to attend schools that are racially and economically segregated, poorly funded, offer few (if any) advanced placement and college preparatory classes, have fewer credentialed teachers, and suffer from a climate of low expectations (American Sociological Association, 2003; Camara and Schmidt, 1999). Moreover, even among those URM students who are invested in high academic performance, social and psychological factors—such as the pressure to perform above levels suggested by stereotypes of low minority academic ability—may serve to suppress their test performance (Steele, 1997; Steele and Aronson, 1995).

When quantitative variables such as standardized test scores are weighted heavily in the admissions process, URM applicants, because of their generally poorer academic preparation and test performance, are less successful in gaining admission than non-URM applicants. Absent admissions practices that allow applicants' race or ethnicity to be considered along with other personal characteristics of applicants, URM student participation in health professions education is likely to decline sharply. States that have implemented "percent solution" admissions strategies (i.e., where a top percentage of high school graduates are guaranteed admission to the state university system) have found that URM admissions have generally not increased (Tienda et al., 2003; Horn and Flores, 2003; Marin and Lee, 2003). In addition, an analysis by the Association of American Medical Colleges of the likely impact of "race-neutral" admissions policies in medical schools reveals that 70 percent fewer URM students would gain admission under such conditions (Cohen, 2003).

These barriers to URM admission have led some HPEIs to reconceptualize their admissions policies and practices to place greater weight on applicants' qualitative attributes, such as leadership, commitment to service, community orientation, experience with diverse groups, and other factors. This shift of emphasis to professional and "humanistic" factors is also consistent with a growing recognition in health professions fields that these attributes must receive greater attention in the admissions process to maintain professional quality, to ensure that future health professionals are prepared to address societal needs, and to maintain the public's trust in the integrity and skill of health professionals (Edwards et al., 2001). Anecdotally, evidence suggests that this shift may also reduce barriers to admission of qualified URM applicants, thereby achieving the dual goals of improving

both the quality and diversity of health professions students (Garcia et al., 2003; Maldonado, 2001). Several HPEIs have adopted admissions policies that:

- Encourage admissions procedures to closely follow the institutions' stated mission with regard to teaching, research, and service—particularly if the needs of medically underserved communities are a part of the institutional mission;
- Encourage a comprehensive review of applicants' files, to understand how students' personal, community, and professional backgrounds may influence students' prior academic performance and contribute to the learning environment;
- Require admissions committee members to receive training aimed at improving their ability to assess underrepresented applicants and sharpening interviewing skills;
- De-emphasize standardized test data in the admissions equation, after a diverse group of academically qualified candidates are identified; and
- Include representatives from groups affected by the institution's admissions decisions on admissions committees and increase incentives for faculty participation on admissions committees.

**Recommendation 2-1:** HPEIs<sup>3</sup> should develop, disseminate, and utilize a clear statement of mission that recognizes the value of diversity in enhancing its mission and that of the relevant health-care professions.

**Recommendation 2-2:** HPEIs should establish explicit policies regarding the value and importance the institution places on the teaching and provision of culturally competent care and the role of institutional diversity in achieving this goal.

**Recommendation 2-3:** Admissions should be based on a comprehensive review of each applicant, including an assessment of applicants' attributes that best support the mission of the institution (e.g., race/ethnicity, background, experience, multilingual abilities). Admissions models should balance quantitative data (i.e., prior grades and standardized test scores) with these qualitative characteristics.

**Recommendation 2-4:** Admissions committees should include voting representation from underrepresented groups. In addition, HPEIs

---

<sup>3</sup>Recommendations regarding admissions policies and practices are intended to apply to HPEIs, whether free-standing or affiliated with a university or embedded in another institution.

should provide special incentives to faculty for participation on admissions committees (e.g., by providing additional weight or consideration for service during promotion review) and provide training for committee members on the importance of diversity efforts and means to improve diversity within the committee purview.

### **Reducing Financial Barriers to URM Participation in Health Professions Education**

The costs associated with health professions training pose a significant barrier for many URM students, whose economic resources are lower, on average, than non-URM students. In recent years, financial barriers to both undergraduate and graduate education have risen sharply due to shifts in policies and priorities at the federal, state, and institutional levels. Tuition and other educational costs have climbed steadily, while at the same time sources of grant aid have decreased (Advisory Committee on Student Financial Assistance, 2002). The trends toward increased tuition costs and decreased need-based aid have resulted in higher levels of unmet need for lower-income students. The impact of high unmet need can be considerable on low-income students, even those who are academically prepared for the challenges of higher education. Low-income students with high unmet need are significantly less likely to expect to finish college; plan to attend a 4-year college after graduating from high school; take entrance exams; and apply, enroll, and persist to degree completion than high-income students with low unmet need (Advisory Committee on Student Financial Assistance, 2002; College Board, 2003; U.S. Department of Education, 2003).

Student financial assistance for health professions education is provided by a number of federal, state, and private sources. At the federal level, the Health Resources and Services Administration (HRSA) is the primary funder for health professions programs that either target or in some way include URM students, practitioners, and/or faculty. HRSA is charged with administering Title VII and Title VIII of the Public Health Service Act. These titles authorize funding, through a variety of programs for students and institutions, in order to increase the quality of the education and training of the primary care provider workforce, with special attention to the geographic, racial, and ethnic diversity of the United States health-care workforce. Title VII applies to medicine and dentistry (and in many cases mental health), while Title VIII pertains to nursing. These programs have provided support for many URM health professions students, yet Congressional appropriations for these programs have fluctuated as a result of budget pressures.

Among private sources of funding for URM health professions students, several organizations have contributed significantly toward scholar-

ships, loan repayment, and stipend programs, in addition to mentoring and other support programs to enhance URM representation in health professions. These include the National Medical Fellowships, The California Endowment, the California Wellness Foundation, the W.K. Kellogg Foundation, the Ford Foundation, and the Robert Wood Johnson Foundation.

The large variety and scope of public and private efforts for funding URM in health profession education make it difficult to assess if and how well these programs work together and complement one another in their efforts. While there are many programs targeting URM students who are entering graduate education, many of these same programs, as well as a host of others, also engage in pipeline efforts. The result is “a discontinuity of interventions across regions and across stages of the educational pipeline, making it difficult to sustain gains from one educational stage to the next” (Grumbach et al., 2002). Coordination and communication among various programs will help allow programs to better plan their own efforts and determine additional needs.

**Recommendation 3-1: HRSA’s health professions programs should be evaluated to assess their effectiveness in increasing the numbers of URM students enrolling and graduating from HPEIs to ensure that they maximize URM participation.**

**Recommendation 3-2: Congress should increase funding for Public Health Service Act Titles VII and VIII programs shown to be effective in increasing diversity, and should develop other financial mechanisms to enhance the diversity of the health-care workforce.**

Some public and private entities have developed innovative collaborations to provide student financial support and institutional diversity efforts in ways that may increase the number of URM students in health professions programs. For example, the University of Colorado Health Sciences School of Dentistry has partnered with the Orthodontic Education Company (OEC) to establish a new dental center that they hope will address the shortage of orthodontists, provide low-cost care to children in underserved areas, and attract individuals from these communities to dental careers. The OEC provides scholarships and stipends in exchange for service in OEC private or group practices following graduation. The University of Colorado will establish and administer the program, supported by an investment of almost \$100 million by the OEC. In other efforts, New York State has initiated the Minority Participation in Medical Education Grant Program, which provides funds to institutions to enhance minority recruitment and retention, develop minority student mentoring programs, develop medical career pathways for minority students, and develop minority faculty role models. A second program initiated by the state, the Graduate Medical Education (GME) Reform Incentive Pool, seeks to increase the representa-

tion of minorities in graduate medical education, increase the number of residents in primary care, and promote practice in underserved areas, among other goals. The program provides funds to hospitals and groups of training institutions.

**Recommendation 3-3:** State and local entities, working where appropriate with HPEIs, should increase support for diversity efforts through programs such as loan forgiveness, tuition reimbursement, loan repayment, GME, and supportive affiliations with community-based providers.

**Recommendation 3-4:** Private entities should be encouraged to collaborate through business partnerships and other entrepreneurial relationships with HPEIs to support the common goal of developing a more diverse health-care workforce.

### **Accreditation as a Key to Increase Diversity in Health Professions**

Accreditation is the process by which nongovernmental organizations set standards for and monitor the quality of educational programs provided by member institutions. Accreditation is a voluntary process of institutional self-regulation, often conducted within the broad framework of standards established by the U.S. Department of Education and the Council for Higher Education Accreditation (CHEA). By setting standards for educational programs and methods for institutional peer review, accrediting bodies advance academic quality, ensure accountability to the public, encourage institutional progress and improvement, and provide a mechanism for continual assessment of broad educational goals for higher education. As such, accreditation is an important vehicle for institutional change, and a potential means to enhance diversity in health professions.

The increasing diversity of the United States population requires that accreditation bodies be responsive to demographic changes and develop and enforce standards that ensure that health professionals are prepared to serve diverse segments of the population. As one accreditation official noted during a public workshop hosted by the study committee, "Our role is to serve the public." Given that almost all accreditation bodies view public service and accountability as central to their mission, establishing and monitoring goals related to diversity among health-care professions can be unambiguously viewed as an important aspect of this effort.

Accreditation bodies may take varying approaches in efforts to accomplish these goals. The standards and practices adopted by the American Psychological Association (APA), however, are instructive and offer several approaches for accreditation standards to address diversity concerns (APA Committee on Accreditation, 2002):

1. Develop a plan to achieve diversity, consistent with the institutional mission, and demonstrate efforts to reach diversity goals.
2. Develop standards that encourage the development and infusion of diversity-related curricula throughout the training program.
3. Regularly monitor and evaluate the efforts of accredited institutions in achieving their diversity goals.
4. Apply graduated sanctions and reinforcement from the accrediting body to "shape" appropriate diversity efforts.
5. Seek community representation on standard-setting bodies.
6. Seek diverse representation on peer review teams.

APA's accreditation standards have contributed to an increased level of attention and effort among psychology education and training institutions in addressing diversity concerns (Zlotlow, 2003). Some of these programs, for example, have developed new websites devoted to promoting and enhancing diversity-related institutional policies and curriculums, and accreditation standards have promoted greater sharing among training programs regarding strategies to improve minority recruitment and retention efforts (Zlotlow, 2003).

**Recommendation 4-1:** The U.S. Department of Education should strongly encourage accreditation bodies to be more aggressive in formulating and enforcing standards that result in a critical mass of URM students throughout the health professions.

**Recommendations 4-2:** Health professions education accreditation bodies should develop explicit policies articulating the value and importance of providing culturally competent health care and the role it sees for racial and ethnic diversity among health professionals in achieving this goal.

**Recommendation 4-3:** Health professions education accreditation bodies should develop standards and criteria that more effectively encourage health professions schools to recruit URM students and faculty, to develop cultural competence curricula, and to develop an institutional climate that encourages and sustains the development of a critical mass of diversity.

**Recommendation 4-4:** Accreditation standards should include criteria to assess the number and percentage of URM candidates, students admitted and graduated, time to degree, and number and level of URM faculty.

**Recommendation 4-5:** Accreditation-related advisory boards and accreditation bodies should include URM students and other individuals with expertise in diversity and cultural competence.

**Recommendation 4-6:** If diversity-related standards are not met, the institution should be required to declare formally what steps will be put in place to address the deficiencies. Repeated deficiencies should result in accreditation-related sanctions.

### Transforming the Institutional Climate to Enhance Diversity

The institutional climate for diversity—defined as the perceptions, attitudes, and values that define the institution, particularly as seen from the perspectives of individuals of different racial or ethnic backgrounds—can exert a profound influence on diversity efforts. Diversity is most often viewed as the proportion and number of individuals from groups underrepresented among students, faculty, administrators, and staff (i.e., structural diversity). Diversity, however, can also be conceptualized as the *diversity of interactions* that take place on campus (e.g., the quality and quantity of interactions across diverse groups and the exchange of diverse ideas), as well as *campus diversity-related initiatives and pedagogy* (e.g., the range and quality of curricula and programming pertaining to diversity, such as cultural activities and cultural awareness workshops; Hurtado et al., 1999). Each of these elements of diversity must be carefully considered as institutions assess their diversity goals.

The institutional climate for diversity is influenced by several elements of the institutional context, including the degree of structural diversity, the historical legacy of inclusion or exclusion of students and faculty of color, the psychological climate (i.e., perceptions of the degree of racial tension and discrimination on campus), and the behavioral dimension (i.e., the quality and quantity of interactions across diverse groups and diversity-related pedagogy; Hurtado et al., 1999). Each of the dimensions of the institutional climate may influence diversity efforts, in both positive and negative ways. More importantly, the institutional climate is malleable and can be altered through interventions aimed at each element of the institutional context.

#### *How Can Health Professions Education Institutions Enhance the Institutional Climate for Diversity?*

Building on this research and theory, Hurtado et al. (1999) outline 12 strategies for helping institutions to achieve an improved climate for diversity and to maximize the benefits of diversity. The first four principles (i.e., affirm the value of diversity, systematically assess the climate, develop a plan of action, and institute on-going evaluation of the plan) are “core” to any institutional efforts for change, while the remaining eight offer guidance for the development of new programs and policies. Hurtado and

colleagues stress that these principles represent a comprehensive, "holistic" approach to institutional change and require that institutions possess strong leadership, adequate resources to support change efforts, strong planning and evaluation, and a long-term commitment to diversity goals.

### *Recruitment, Hiring, and Retention of Underrepresented Minority Faculty*

Enhancing the racial and ethnic diversity of health professions education faculty can provide support for URM students in the form of role models and mentors, lead to important pedagogical changes, and "bring new kinds of scholarship to an institution, educate students on issues of growing importance to society, and offer links to communities not often connected to our campuses" (Smith, 2000, p. 51). HPEIs can take several steps to improve their efforts to recruit minority faculty. To begin, institutions should carefully examine their mission statement and assess how faculty diversity assists the institution to meet its goals. Identifying and recruiting qualified URM faculty candidates can be improved by utilizing active search processes that go beyond simply posting positions and recruiting through networks that are familiar to the faculty. Search committees should be diverse, to help in assessing and evaluating candidates of different backgrounds, and should have a close working relationship with the university administration to ensure the success of the search process. Finally, post-hiring support is critical for many URM faculty members to address the challenges of earning tenure, balancing teaching and research, and other faculty concerns (Smith, 2000).

### *Minority Student Recruitment and Retention*

Several HPEIs have implemented successful URM student recruitment and retention programs. Some elements of successful recruitment efforts include developing academic and educational partnerships with minority-serving institutions, addressing financial barriers, targeting outreach to URM students, and engaging pre-health advisors. As significantly, institutions should develop comprehensive strategies to retain URM students, by instituting a range of academic and social supports, including faculty and peer mentoring, tutoring and academic skills assessment, and teaching study skills. Institutions may increase opportunities for URM students to integrate themselves into the campus community (and take advantage of support programs) through both ethnic- and racial-group interest organizations, as well as general campus programs, such as orientation programs that clearly outline the institutions' expectations regarding diversity-related policies and goals, and sensitivity training programs that increase aware-



ness and understanding of diversity in the campus context. A confidential ombudsman program may assist efforts to improve the campus climate for diversity by providing an informal mediation process to gather information about complaints, advise individuals about how to resolve disputes informally, mediate disputes, seek “win-win” resolution of problems, and advise individuals about more formal grievance procedures should informal efforts fail (Steinhardt and Connell, 2002).

**Recommendation 5-1:** HPEIs should develop and regularly evaluate comprehensive strategies to improve the institutional climate for diversity. These strategies should attend not only to the structural dimensions of diversity, but also to the range of other dimensions (e.g., psychological and behavioral) that affect the success of institutional diversity efforts.

**Recommendation 5-2:** HPEIs should proactively and regularly engage and train students, house staff, and faculty regarding institutional diversity-related policies and expectations, the principles that underlie these policies, and the importance of diversity to the long-term institutional mission. Faculty should be able to demonstrate specific progress toward achieving institutional diversity goals as part of the promotion and merit process.

**Recommendation 5-3:** HPEIs should establish an informal, confidential mediation process for students and faculty who experience barriers to institutional diversity goals (e.g., experiences of discrimination, harassment).

**Recommendation 5-4:** HPEIs should be encouraged to affiliate with community-based health-care facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

### **Community Benefit Principles and Diversity**

Community benefit is a legal term that applies to charitable activities that benefit the community as a whole. For over 100 years, federal tax law has recognized the significant role of charitable trusts (nonprofits that serve “religious, charitable, scientific, literary, or educational purposes) in furthering governmental and social goals, providing for income tax exemption for qualifying organizations. The framework of charitable trust has been adopted and maintained in every update of the tax code since the original ruling. Historically, this framework has expanded beyond early “relief of poverty” criteria for hospitals to qualify for tax exemption as 501(c)(3) nonprofit organizations, to more recent IRS rulings that removed the re-

quirement to provide services for the poor, and identified the promotion of health (i.e., community benefit) as a charitable purpose.

Since then, some states have established formal guidelines for non-profit hospitals and nursing homes. States such as New York have required the development and implementation of "community service plans" by nonprofit hospitals. Requirements include an annual review of the hospital mission statement, publication of hospital assets and liabilities, an assessment of community needs and hospital strategies to address them, and the solicitation of input from community stakeholders. The Utah State Tax Commission issued a set of formal guidelines for nonprofit hospitals and nursing homes that included a requirement for a minimum financial threshold of contributions that exceed the annual property tax liability of each facility. The legal requirements New York and Utah placed upon nonprofit health-care providers reflect two alternative approaches that have marked subsequent state actions in this arena: a general reporting requirement (NY) and the establishment of a minimum financial threshold (UT).

Between 1990 and 2001, a total of eleven states implemented some form of legal mechanism to increase the accountability of nonprofit health-care providers. Eight of the eleven took the general reporting requirement approach; three took the minimum financial threshold approach. In addition, states are requiring such activities as:

- community assessments to identify local unmet needs,
- solicitation of community input in the development of community benefit plans, and
- review of organizational mission statements to reflect a commitment to address community health needs.

These efforts have yielded mixed results, primarily because of inconsistencies in the application of community benefit regulations and inadequate administrative resources for states to provide oversight regarding compliance. States with reporting requirements, for example, find that there are numerous examples of promising programs, but substantial variability in the quality and specificity of reporting make it impossible to conduct a reliable comparative analysis of performance. Many states lack uniform guidelines for reporting. In addition, many nonprofit hospitals lack the infrastructure and competencies to design, implement, and monitor community benefit activities.

A central question of this study is to what extent community benefit principles can assist policy efforts to enhance diversity in health professions. Though community benefit principles offer an attractive framework

for holding health professional training programs and their institutional sponsors accountable for advancing goals tied to racial and ethnic diversity of their students and trainees, from a legal perspective, it is important that the principles be applied in the most effective venue. In that regard, while community benefit laws and associated public expectations have evolved out of a tax exemption context, the most practical application of concepts for increased institutional accountability are outside of the tax exemption arena, and are best applied in the accreditation world.

Community benefit principles provide insights for the public expectations of both nonprofit health-care providers and institutions that train these providers. Just as nonprofit hospitals are expected to play a role in addressing priority unmet needs in local communities, HPEIs can appropriately be expected to play a direct role in responding to priority unmet health needs at the local and/or societal level. Furthermore, for publicly sponsored colleges and universities, community benefit concepts might also link governmental subsidies for these public institutions of higher education to performance measures related to student and trainee diversity goals. Community benefit principles should therefore form a conceptual cornerstone by which health professions education accreditation organizations and state governments can set expectations for the advancement of societal goals tied to racial and ethnic diversity of the health-care workforce.

**Recommendation 6-1:** HPEI governing bodies should develop institutional objectives consistent with community benefit principles that support the goal of increasing health-care workforce diversity including, but not limited to efforts to ease financial and nonfinancial obstacles to URM participation, increase involvement of diverse local stakeholders in key decision-making processes, and undertake initiatives that are responsive to local, regional, and societal imperatives (see Recommendation 5-4).

**Recommendation 6-2:** Health professions accreditation institutions should explore the development of new standards that acknowledge and reinforce efforts by HPEIs to implement community benefit principles as they relate to increasing health-care workforce diversity.

**Recommendation 6-3:** HPEIs should develop a mechanism to inform the public of progress toward and outcomes of efforts to provide equal health care to minorities, reduce health disparities, and increase the diversity of the health-care workforce.

**Recommendation 6-4:** Private and public (e.g., federal, state, and local governments) entities should convene major community benefit stake-

holders (e.g., community advocates, academic institutions, health-care providers), to inform them about community benefit standards and to build awareness that placing a priority on diversity and cultural competency programs is a societal expectation of all institutions that receive any form of public funding.

### **Mechanisms to Garner Support for Diversity Efforts**

Several mechanisms offer promise to increase the general public and key stakeholders' understanding of the need for and benefits of greater diversity among health professionals. This kind of understanding is necessary in order to effectively develop and implement institutional and policy-level strategies to increase diversity among health professionals. Implementation of these strategies should begin with efforts to collect data and conduct additional research to assess diversity among health professionals and in health professions education and to further identify the benefits of diversity for health care service delivery. Educational initiatives should begin with health professionals, HPEIs, and the communities that they serve. Other stakeholders—including business and corporate leaders, community and grassroots groups, organized labor, policy makers, and elected representatives, among many others—should also be involved in diversity efforts, specifically by forming broad coalitions to advocate for policies to enhance diversity. Several innovative examples of such efforts are underway nationwide, and should be expanded.

**Recommendation 7-1:** Additional data collection and research are needed to more thoroughly characterize URM participation in the health professions and in health professions education and to further assess the benefits of diversity among health professionals, particularly with regard to the potential economic benefits of diversity.

**Recommendation 7-2:** Local and national efforts must be undertaken to increase broad stakeholders' understanding of and consensus regarding steps that should be taken to enhance diversity among health professionals.

**Recommendation 7-3:** Broad coalitions should advocate to vigorously encourage HPEIs, their accreditation bodies, and federal and state sources of health professions student financial aid to adopt policies to enhance diversity among health professionals.

### BOX ES-1 Summary of Recommendations

#### IMPROVING ADMISSIONS POLICIES AND PRACTICES: HPEIs should

- Develop, disseminate, and utilize a clear statement of mission that recognizes the value of diversity.

- Establish recruitment policies regarding the value and importance of culturally competent care and the role of institutional diversity in achieving this goal.

- Base admissions decisions on a combination of relevant standardized and holistic information, including quantitative and qualitative criteria.

- Invite various professionals from underrepresented groups on admissions committees and appoint special coordinators to recruit underrepresented

#### REMOVING FINANCIAL BARRIERS TO HEALTH PROFESSIONS TRAINING:

- HPEIs' health professions training programs should be evaluated for an ability to maximize financial aid.

- Financial aid should be used to fund public health service academies and other programs that work to create and increase diversity.

- Create a national coalition to address health care workforce diversity through a variety of strategies, including:
  - Improvements in financial aid and scholarship programs
  - Recruitment and supportive efforts with community-based organizations and health-related educational institutions to recruit and train diverse students and health care workers

#### ENCOURAGING DIVERSITY EFFORTS THROUGH ACOSS AND OTHER MEDIATION METHODS:

- Formulate and implement diversity-related standards.

- Develop explicit policies articulating the value and importance of culturally competent health care and the role of racial and ethnic diversity in achieving this goal.

- Develop standards and criteria that encourage and support URM student and faculty participation.

- Implement annual and semi-annual assessments of diversity efforts.

- Include deans and other individuals with expertise in cultural competence and diversity in accreditation bodies and advisory groups, and

- Apply sanctions if diversity-related standards are not met.

#### IMPROVING THE INSTITUTIONAL CLIMATE FOR DIVERSITY: HPEIs should

- Develop and regularly reevaluate comprehensive strategies to improve the institutional climate for diversity.

- Proactively and regularly engage and train students, house staff, and faculty regarding institutional diversity-related policies and expectations and the importance of diversity.

- Establish an informal, confidential mediation process for students and faculty who experience barriers to institutional diversity goals and

- Affiliate with community-based health care facilities in order to attract and train a more diverse and culturally competent workforce and to increase access to health care.

Continued

**BOX ES-1 Continued**

**APPLYING COMMUNITY BENEFIT PRINCIPLES TO DIVERSITY EFFORTS.** HPEIs and relevant public and private groups should:

- Develop institutional objectives consistent with community benefit principles that support the goal of increasing health-care workforce diversity, and reinforce these efforts through program accreditation;
- Explore the development of new standards that acknowledge and reinforce efforts to implement community benefit principles as they relate to increasing health-care workforce diversity;
- Develop a mechanism to inform the public of progress toward diversity efforts; and
- Convene major community benefit stakeholders to inform them about community benefit standards and their relationship to diversity.

**MECHANISMS TO ENCOURAGE SUPPORT FOR DIVERSITY EFFORTS** include:

- Additional research and data collection on diversity and its benefits;
- Efforts to increase broad stakeholders' understanding of and consensus regarding steps that should be taken to enhance diversity among health professionals; and
- The development of broad coalitions to encourage HPEIs, their accreditation bodies, and federal and state sources of health professions student financial aid to adopt policies to enhance diversity among health professionals.

**REFERENCES**

- Advisory Committee on Student Financial Assistance. 2002. *Empty Promises. The Myth of College Access in America*. Washington, DC: U.S. Department of Education.
- American Psychological Association (APA) Committee on Accreditation. 2002. *Guidelines and Principles for Accreditation of Programs in Professional Psychology*. Washington, DC: American Psychological Association.
- American Sociological Association. 2003. *Brief of the American Sociological Association et al., as Amicus Curiae in Support of Respondents*. Merritt DJ, Lee BL, Attorneys for Amici Curiae. Washington, DC: American Sociological Association.
- Antonio AL, Chang MJ, Hakuta K, Kenny DA, Levin SL, Milem JF. In press. Effects of racial diversity on complex thinking in college students. *Psychological Science*.
- Camara WJ, Schmidt AE. 1999. *Group Differences in Standardized Testing and Social Stratification*. College Board Report No. 99-5. New York: College Board Publications. Pp. 1-18.
- Cantor JC, Miles EL, Baker LC, Barker DC. 1996. Physician service to the underserved: Implications for affirmative action in medical education. *Inquiry* 33:167-181.
- Cohen JJ. 2003. The consequences of premature abandonment of affirmative action in medical school admissions. *Journal of the American Medical Association* 289(9):1143-1149.
- College Board. 2003. *Trends in College Pricing*. Washington, DC: College Board.
- Cooper-Patrick L, Gallo JJ, Gonzales JJ, Vu HT, Powe NR, Nelson C, Ford DE. 1999. Race, gender, and partnership in the patient-physician relationship. *Journal of the American Medical Association* 282(6):583-589.

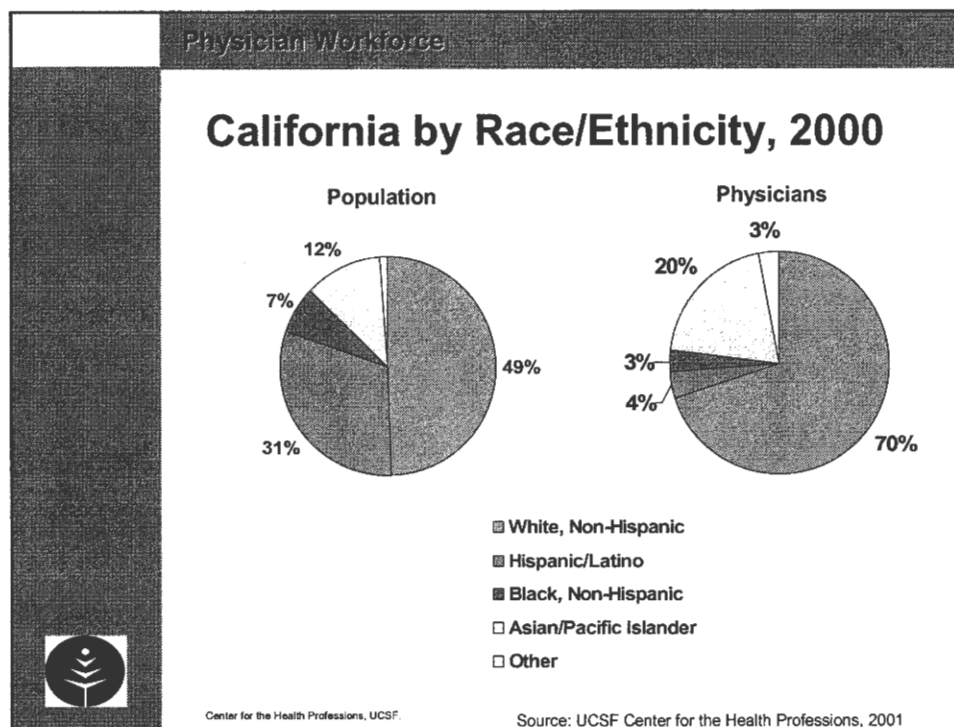

- Edwards JC, Elam CL, Wagoner NE. 2001. An admission model for medical schools. *Academic Medicine* 76(12):1207–1212.
- Garcia JA, Paterniti DA, Romano PS, Kravitz RL. 2003. Patient preferences for physician characteristics in university-based primary clinics. *Ethnicity & Disease* 13:259–267.
- Grumbach K, Coffman J, Munoz C, Rosenoff E. 2002. *Strategies for Improving the Diversity of the Health Professions*. University of California, San Francisco: Center for California Health Workforce Studies.
- Gurin P, Dey EL, Hurtado S, Gurin G. 2002. Diversity and higher education: Theory and impact on educational outcomes. *Harvard Education Review* 72(3):330–366.
- Horn CL, Flores SM. 2003. *Percent Plans in College Admissions: A Comparison of Three States' Experiences*. Cambridge, MA: The Civil Rights Project, Harvard University.
- Hurtado S, Milem J, Clayton-Peterson A, Allen W. 1999. *Enacting Diverse Environments: Improving the Climate for Racial/Ethnic Diversity in Higher Education*. ASHE-ERIC Higher Education Report Volume 26, No. 8. Washington, DC: George Washington University, Graduate School of Education and Human Development.
- Komaromy M, Grumbach K, Drake M, Vranizan K, Lurie N, Keane D, Bindman AB. 1996. The role of black and Hispanic physicians in providing health care for underserved populations. *New England Journal of Medicine* 334(20):1305–1310.
- LaVeist TA, Nuru-Jeter A. 2002. Is doctor–patient race concordance associated with greater satisfaction with care? *Journal of Health and Social Behavior* 43(3):296–306.
- Maldonado F. 2001. Rethinking the admissions process: Evaluation techniques that promote inclusiveness in admissions decisions. In: Smedley BD, Stith AY, Colburn L, Evans CH, eds. *The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in Health Professions*. Washington, DC: National Academy Press.
- Marin P, Lee EK. 2003. Appearance and reality in the sunshine state: The Talented 20 Program in Florida. Cambridge, MA: The Civil Rights Project, Harvard University.
- Moy E, Bartman A. 1995. Physician race and care of minority and medically indigent patients. *Journal of the American Medical Association* 273(19):1515–1520.
- National Research Council. 1999. *Myths and Tradeoffs: The Role of Tests in Undergraduate Admissions*. Beatty A, Greenwood MRC, Linn RL, eds. Washington, DC: National Academy Press.
- Saha S, Komaromy M, Koepsell TD, Bindman AB. 1999. Patient–physician racial concordance and the perceived quality and use of health care. *Archives of Internal Medicine* 159:997–1004.
- Saha S, Taggart S, Komaromy K, Bindman AB. 2000. Do patients choose physicians of their own race? *Health Affairs* 19(4):76–83.
- Smith D. 2000. How to diversify the faculty. *Academe* 86(5):48–52.
- Solomon ES, Williams CR, Sinkford JC. 2001. Practice location characteristics of black dentists in Texas. *Journal of Dental Education* 65(6):571–574.
- Steele CM. 1997. A threat in the air. How stereotypes shape intellectual identity and performance. *American Psychologist* 52(6):613–629.
- Steele CM, Aronson J. 1995. Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology* 69(5):797–811.
- Steinhardt R, Connell M. 2002. Reporting of wrongdoing and resolving disputes: The value of ombudsmen and hotlines in the corporation. In: Banks TL, Banks FZ, eds. *Corporate Legal Compliance Handbook*. New York: Aspen Publishers.
- Sternberg, RJ, Williams WM. 1997. Does the *Graduate Record Examination* predict meaningful success in the graduate training of psychologists? A case study. *American Psychologist* 52(6):630–641.

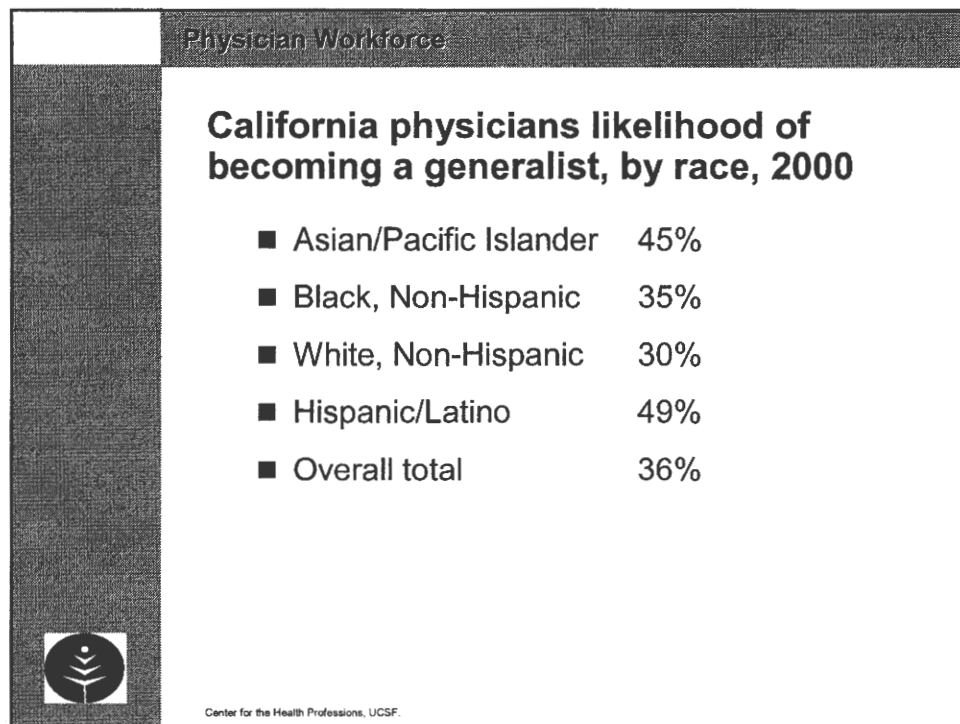
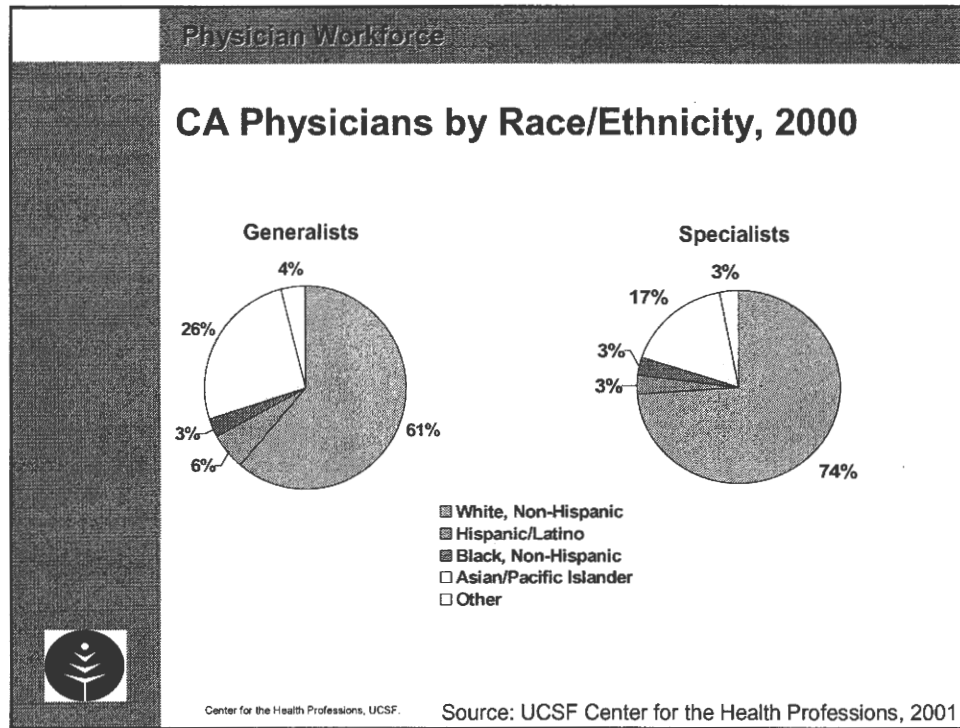
- Tedesco L. 2001. The role of diversity in the training of health professionals. In: Smedley BD, Stith AY, Colburn L, Evans CH, eds. *The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in Health Professions*. Washington, DC: National Academy Press.
- Tienda M, Leicht KT, Sullivan T, Maltese M, Lloyd K. 2003. *Closing the Gap?: Admissions & Enrollments at the Texas Public Flagship Before and After Affirmative Action*. [Online]. Available: <http://www.texastop10.princeton.edu/publications/tienda012103.pdf> [accessed January 15, 2004].
- Turner CB, Turner BF. 1996. Who treats minorities? *Cultural Diversity in Mental Health* 2(3):175-182.
- U.S. Bureau of the Census. 2003. Hispanic population reaches all-time high of 38.8 million, new Census Bureau estimates show. Press release. [Online]. Available: [www.census.gov/press-release/www/2003/cb03-100.html](http://www.census.gov/press-release/www/2003/cb03-100.html) [accessed June 18, 2003].
- U.S. Department of Education, National Center for Education Statistics. 2003. *How Families of Low- and Middle-Income Undergraduates Pay for College: Full-Time Dependent Students in 1999-2000*. NCES report # 2003-162. Washington, DC: U.S. Department of Education.
- Whitla DK, Orfield G, Silen W, Teperow C, Howard C, Reede J. 2003. Educational benefits of diversity in medical school: A survey of students. *Academic Medicine* 78(5):460-466.
- Zlotlow S. 2003. Presentation to the IOM Committee on Institutional and Policy-Level Strategies to Increase the Diversity of the U.S. Health Care Workforce. April 9, 2003, Washington, DC.

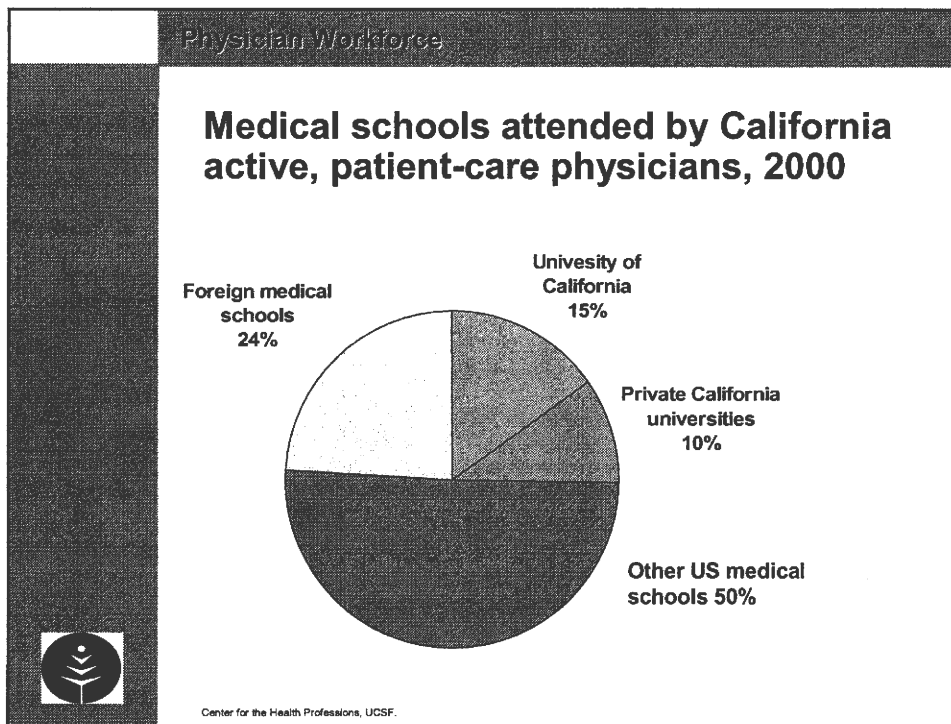
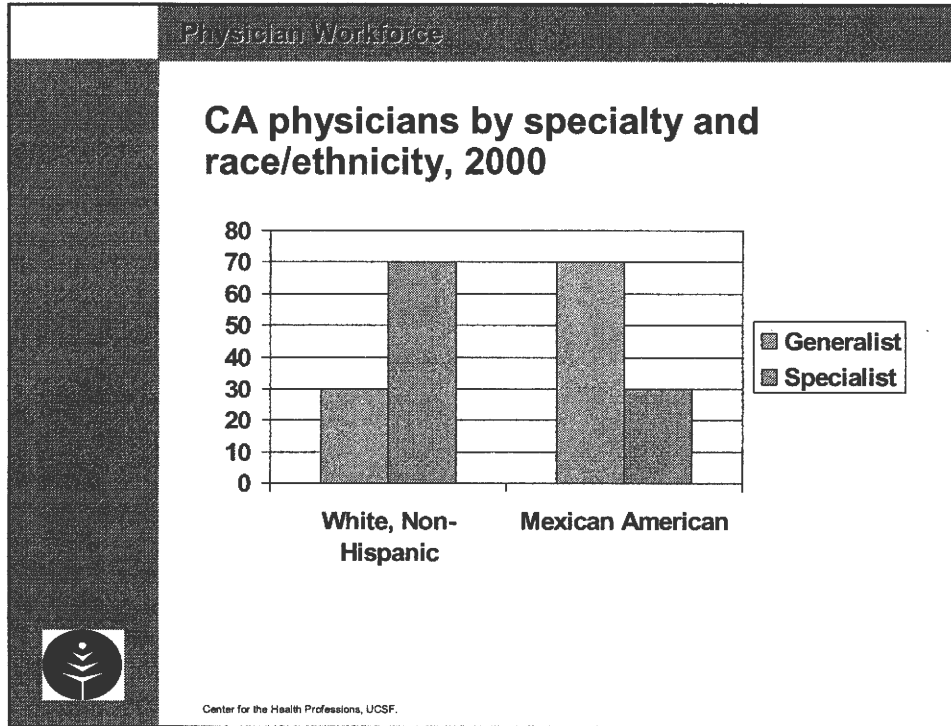


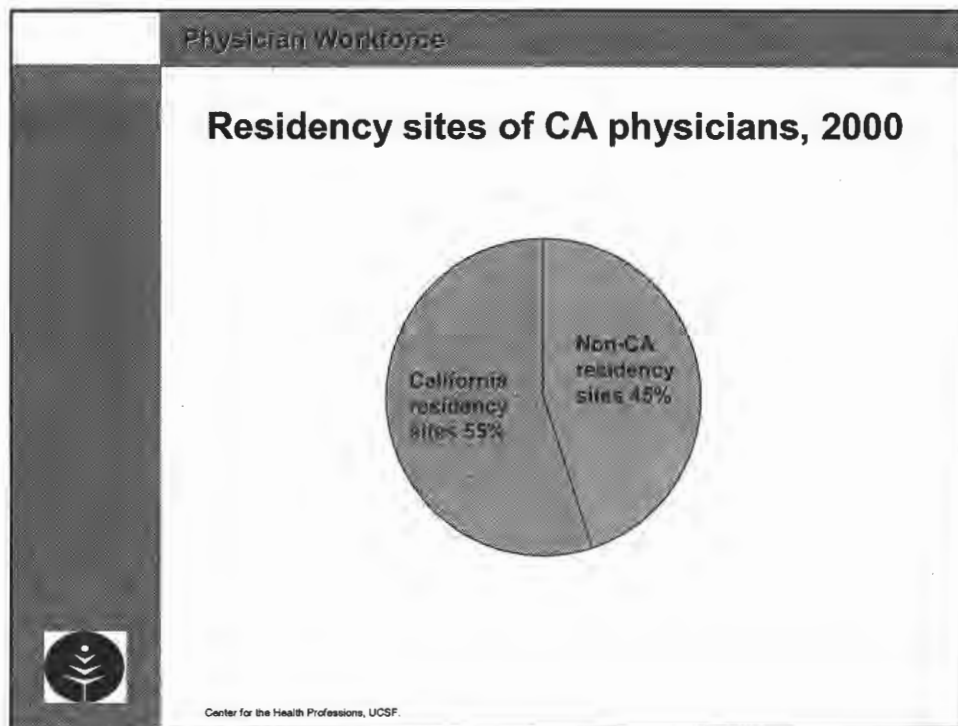
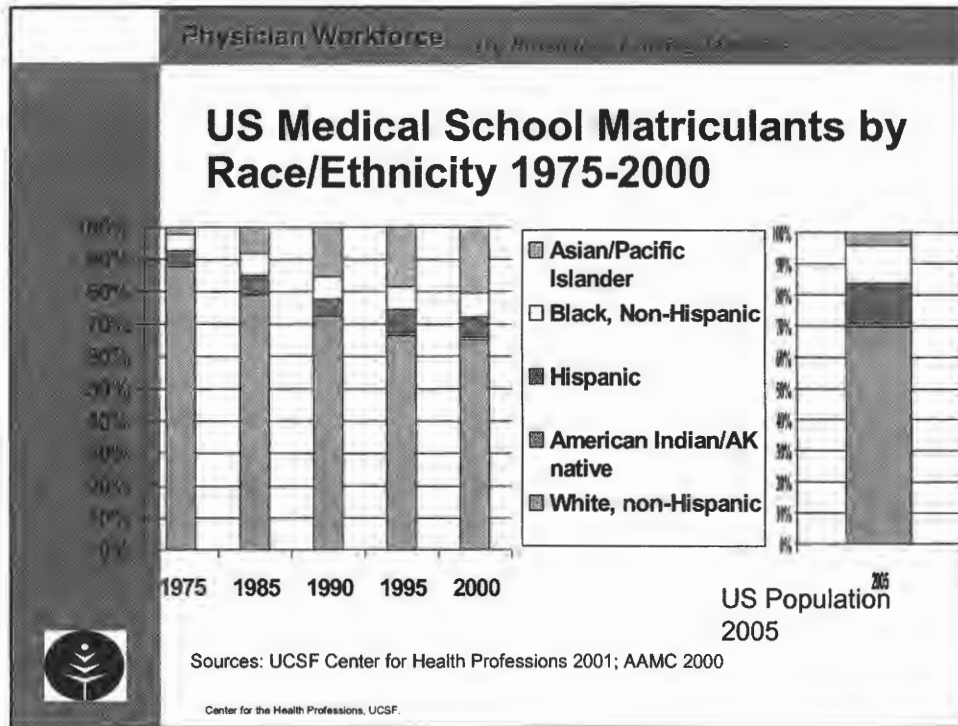
# Racial Diversity in the Health Professions in California

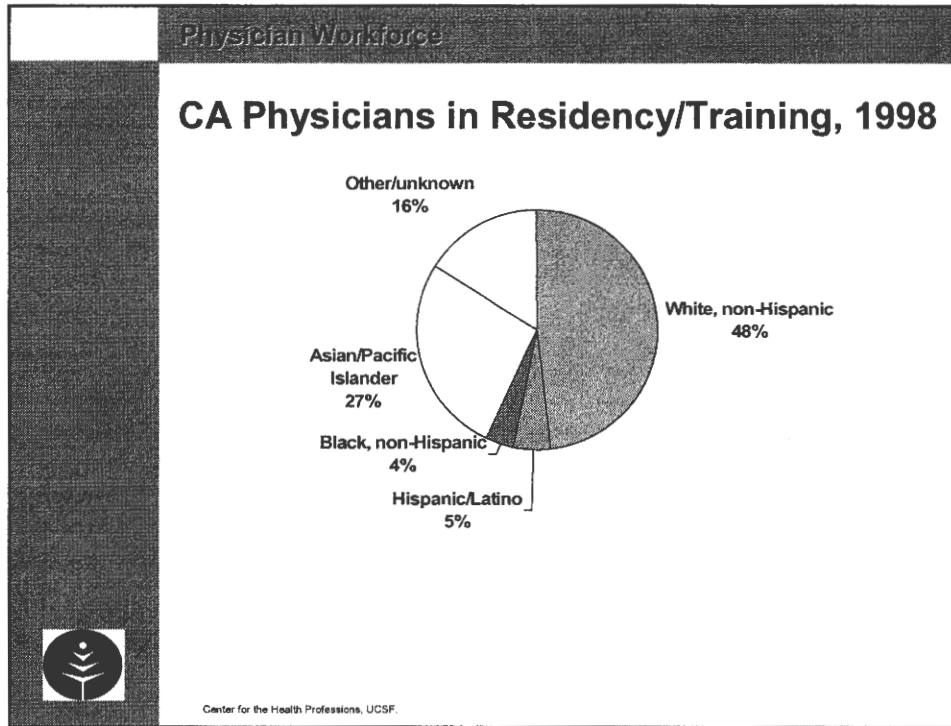
Catherine Dower, JD  
Center for the Health Professions,  
University of California, San Francisco













- Physician Workforce
- ### Mitigating Factors
- Other professions
    - ◆ Significant proportions of NPs, PAs and CNMs practice in federally designated underserved areas
  - Fluency in Spanish, 2001
    - ◆ 28% of primary care physicians
    - ◆ 17% of specialists
- 
- Center for the Health Professions, UCSF

Physician Workforce

### Exacerbating factors

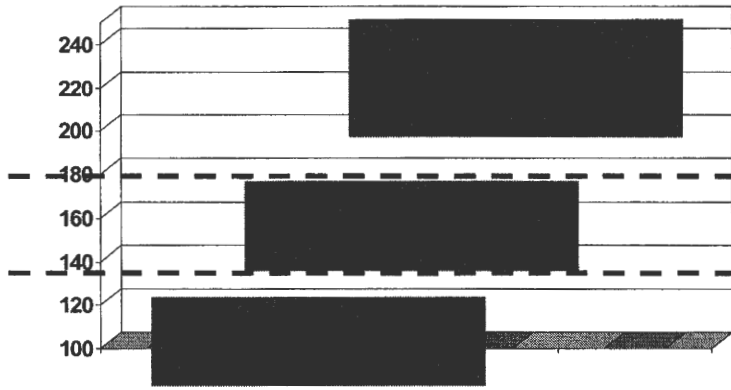
- Other professions' racial/ethnic diversity
- Geographic practice area
- New patient enrollment



Center for the Health Professions, UCSF.


Physician Workforce *How are practice patterns changing?*

### California Supply of Physicians per 100,000 population

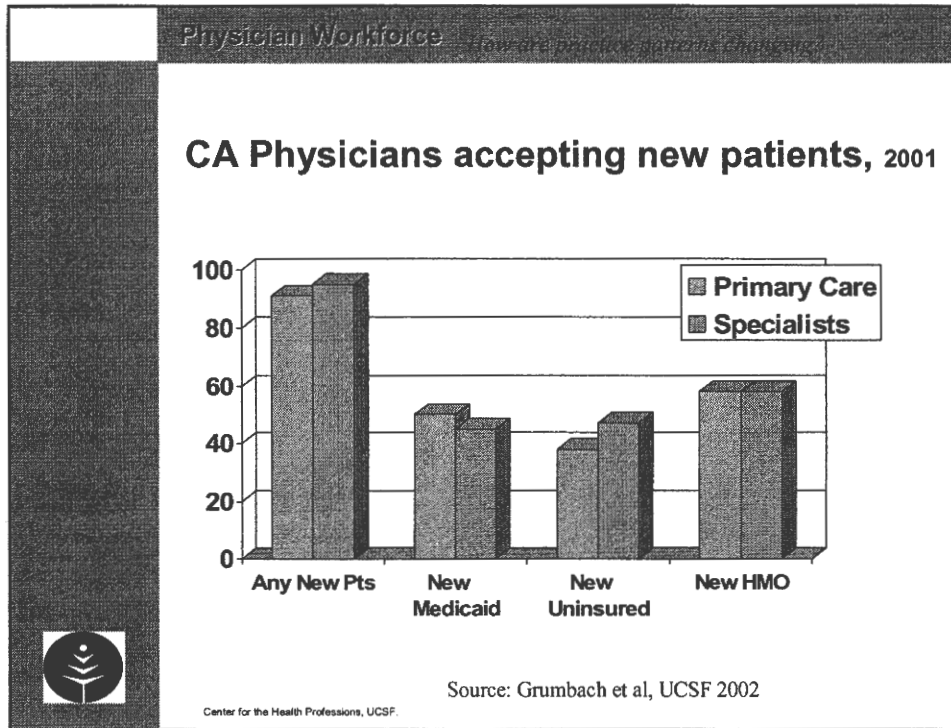


Supply Category	Approximate Value (MDs/100,000 population)
Top Bar	210
Middle Bar	175
Bottom Bar	115

COGME Range: 145-185 MDs/100,000 population



Center for the Health Professions, UCSF.



http://futurehealth.ucsf.edu

The Center for the Health Professions - Home - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites

Address http://futurehealth.ucsf.edu/ Go Google

**THE CENTER**  
FOR THE HEALTH PROFESSIONS  
*University of California, San Francisco*

PROGRAMS PUBLICATIONS RESOURCES IN THE NEWS FOCUS AREAS ABOUT US HOME

**What's new**

The Center for the Health Professions and Department of Social and Behavioral Sciences, UCSF School of Nursing, are pleased to announce a new project, contracted by the National Highway Traffic and Safety Administration (NHTSA), to study the Emergency Medical Services (EMS) pre-hospital workforce.

**From the director**

**“Centering On...Time for some market reality?”**

New political realities in California may challenge conventional notions of how to regulate health care professions and the care they provide. Should we continue to resist fundamental structural change? Or, is it time to embrace today's market realities?

To read this essay, click [here](#).

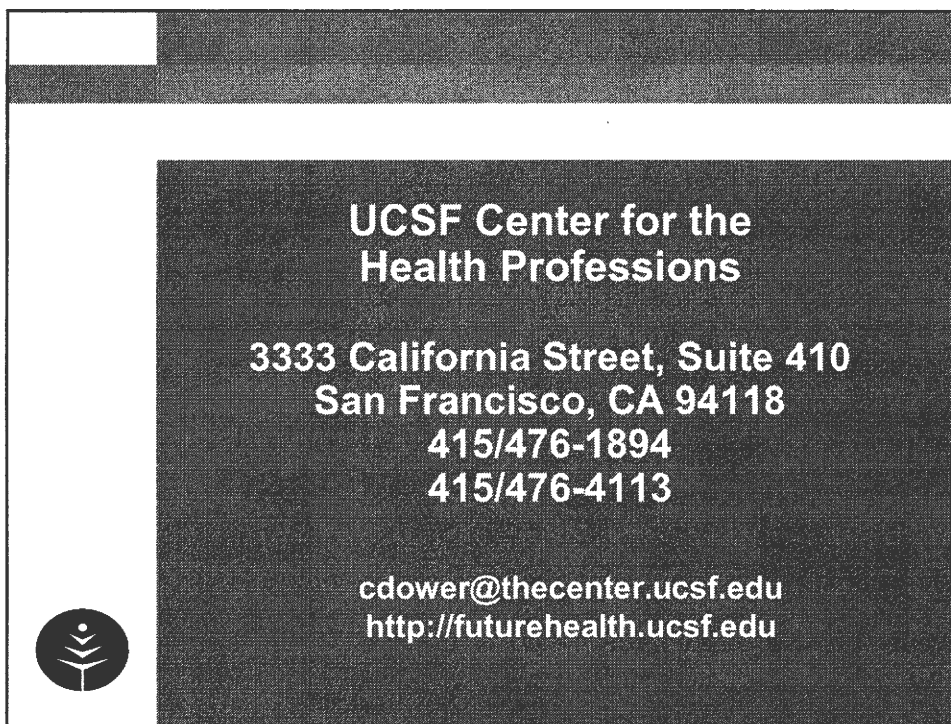
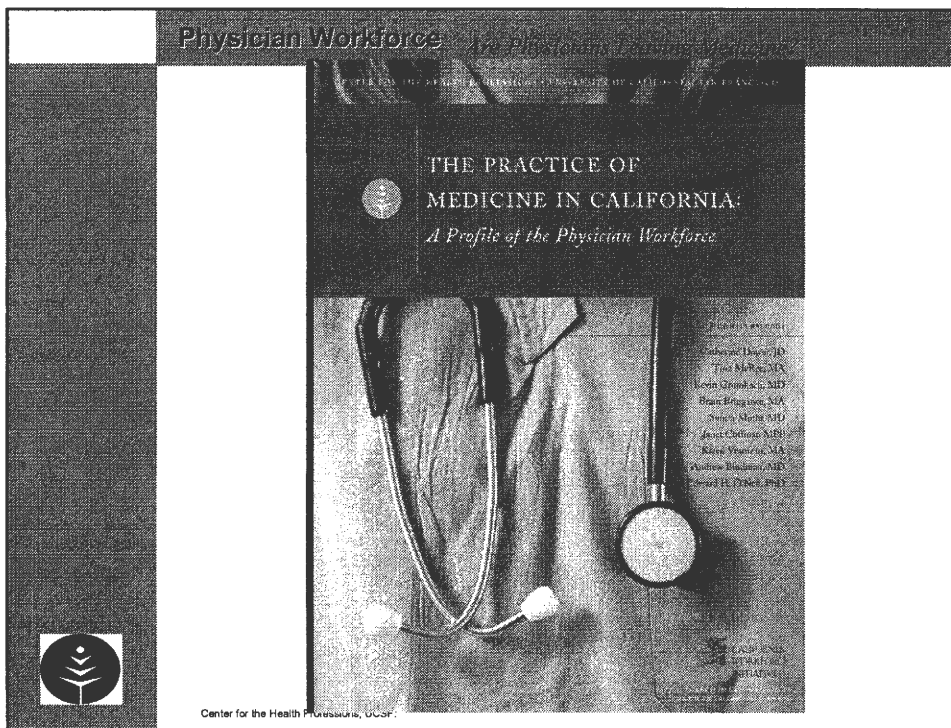
SEARCH OUR SITE

Got a minute?  
Register for monthly Center News and Program Announcements

FYI  
Applications for the 2006-2007

Coming in

Center





# ***Background Paper***

## ***The University of California's Compliance with the 1994 Memorandum of Understanding to Increase the Number of Primary Care Physicians Trained in California***

*Prepared by: Marlene Garcia*

**Senate Office of Research  
Donald Moulds, Director  
1020 N Street, Room 200  
Sacramento, CA 95814  
(916) 651-1500  
[www.sen.ca.gov](http://www.sen.ca.gov)**



## **Executive Summary**

Over the past 15 years, California has suffered a severe shortage of primary care physicians. In the early 1990s there was a push throughout the nation to achieve a 50/50 balance between training primary care and non-primary care physicians. In 1994 the University of California (UC) and the state of California entered into a Memorandum of Understanding (MOU) to address this problem.

The primary goal of the MOU was to establish by 2001 at least a 50/50 primary care to non-primary care distribution of resident physicians, and to substantially increase the number of family practice positions "toward a goal of approximately 20 percent" of all UC residents. UC projected it would achieve by 2001 a ratio of 55/45 primary care to non-primary care physicians based on its internal calculation of proposed changes. The goal of the MOU was not to increase the overall number of residency positions, but rather to redistribute them. This required a reduction in the number of non-primary care residents and an increase in primary care residents. In other words, it was a zero-sum game. The prevailing wisdom in 1994 was that there was an over-supply of physicians and it was unnecessary to increase the overall number of physicians. (See attachment).

Along with the MOU, the Legislature also approved Supplemental Report Language as part of the 1994 budget, requiring UC to submit annual reports to the governor and the Legislature on the progress the university was making to increase the number and proportion of primary care and family practice physicians trained by UC through 2001.<sup>1</sup>

Throughout the period of the MOU, UC reported that it made steady progress in increasing the numbers of primary care and family practice residents. Overall, the university shifted the primary care to non-primary care resident ratio from 45/55 in 1992-93 to 52/48 in 2001. This exceeded the MOU goal of achieving at least a 50/50 ratio, but fell short of its projected goal of 55/45.

By 2000-01, UC reported that family practice residents at UC accounted for 17 percent of all residency positions, 3 percentage points below the MOU goal. This represented an increase of 43 percent from 1992-93 to 2000-01. Most of this growth, however, resulted from UC's affiliations with outside community-based hospitals and other health organizations and not from any major increases in state-funded, UC-based residents.<sup>2</sup>

Furthermore, the university fell short of its goal, by more than one-third, of reducing the number of non-primary care physicians. The university did not shift as many of these positions as expected, arguing that further reductions would have caused the university to artificially cap and limit the growth of

emerging new subspecialties, such as pain management and medical genetics and high demand specialties, such as child psychiatry.

### **Legislative Background**

In 1992 legislation (AB 3593, Isenberg) was introduced that would have required the university to allocate at least 50 percent of its total residency positions to programs in primary care. Primary care was defined as family practice, internal medicine, pediatrics, obstetrics and gynecology. The bill also required that at least 20 percent of all UC residents be reserved for family practice. Failure to comply with these requirements would result in reducing the university's medical school budgets by up to \$8 million annually. While the governor ultimately vetoed this bill, the university agreed to conduct a study reviewing issues related to the state's need for primary care physicians and the university's role in addressing this need.

A virtually identical bill (AB 1855, Isenberg) was introduced the following year. At the same time, the university was nearing completion of a systemwide planning process that required each medical school campus to develop specific plans for increasing the number of primary care physicians trained on their respective campuses. The governor again vetoed the legislation, but this time stating he took this action because the university had entered into an MOU with the state specifying how it would increase primary care physician training.<sup>3</sup>

As part of the Budget Act, the Legislature adopted Supplemental Report Language in 1994 calling for the university to provide an update on its primary care expansion efforts beginning February 1995 and annually thereafter through 2000-01.

### **The Provisions of the MOU**

The basic framework of the MOU was derived from 1) legislative efforts, 2) a 1993 UC report entitled "Changing Directions in Medical Education: A Systemwide Plan for Increasing the Training of Generalists" and 3) a 1994 update to the 1993 UC report issued at the urging of the governor to accelerate timetables and increase the commitment to expanding family practice residency positions.

The 1994 MOU specified that:<sup>4</sup>

*General goals:*

- By 2000-01, achieve a ratio of at least 50/50 primary care to non-primary care resident physicians. UC projected it would achieve a

primary care to non-primary care resident ratio of 55/45 based on its internal calculations of proposed changes.

- By 2000-01, increase family practice residents “toward a goal of approximately 20 percent.”

*Numerical targets:*

- Between 1992-93 and 2000-01, UC projected it would increase the total number of primary care residency positions by 445 for a total of 2,379 primary care residents (55 percent of all UC residents).
- Of the total increase of primary care positions, UC projected it would add 364 new family practice positions for a total of 885 family practice residents (20 percent of all UC residents).
- Between 1993 and 2001, UC projected it would reduce non-primary care residency positions by 452 for a total of 1,953 non-primary care residents (45 percent of all UC residents).
- UC was to report annually to the Governor, Legislature and the Office of Statewide Health Planning and Development (OSHPD) on the progress it was making to achieve the goals established in the MOU through 2000-01.

The university Office of the President and medical schools committed to allocating existing funds to support the increase in primary care positions and graduate medical educational opportunities established in the MOU. Each of the five medical schools were directed to develop plans for increasing the number of primary care physicians by reviewing and making changes to their organizational structures, admissions policies, undergraduate curricula, graduate medical school training, primary care faculty development and outreach programs.

The governor directed OSHPD to review and monitor the university’s progress in meeting the goals and timetables for increasing primary care training, strengthening and expanding family practice programs and decreasing the number of subspecialists trained.

**University of California Compliance with the Memo of Understanding<sup>5</sup>**

Between 1994 and 2001 the university took steps to meet the terms of the MOU and reported the following:

*General goals:*

- UC exceeded the MOU goal of achieving at least a 50/50 primary care to non-primary care ratio. By 2000-01 UC achieved a primary care to non-primary care resident ratio of 52/48, but fell short of achieving its projected goal of a 55/45 ratio. The primary care to non-primary care resident ratio in 1992-93 was 45/55 percent.
- By 2000-01 UC increased the number of family practice residents it trains to 17 percent of all UC residents, 3 percentage points under the projected goal of 20 percent.

*Numerical targets:*

- Between 1992-93 and 2000-01, UC increased its total number of primary care residents by 357 positions, or an 18.5 percent increase. The total number of primary care physicians increased to 2,291.
- Of the total increase of primary care resident physicians, UC added 224 family practice positions. This increase fell short of the MOU's "approximate" goal by 140 positions. The total number of family practice residents was 745, an increase of 43 percent.
- The university reduced the overall number of non-primary care positions by 282, or 11.7 percent, since 1992-93. This reduction fell short of the 452 positions proposed in the MOU by 170 positions. By 2000-01 UC maintained 2,123 non-resident positions reflecting 45 percent of the total resident physician pool at UC.
- UC met the reporting requirements of the MOU and the Supplemental Report Language, although several of the reports were submitted late. The university submitted seven reports to the governor, Legislature and OSHPD, providing updates on the university's progress in meeting the goals of the MOU. They also provided useful definitions and summaries of campus-specific and university-wide activities undertaken to strengthen and expand primary care educational opportunities for medical students and resident physicians.

In September 2002, OSHPD confirmed that UC "complied with the terms and conditions of its MOU with OSHPD."<sup>6</sup> However, OSHPD never issued a final report specifically evaluating UC's compliance with the MOU.

## **Remaining Issues with the Memo of Understanding**

### 1. Ongoing Commitment to Goals of the MOU

The university issued its last report required by the MOU in July 2002. Since then, it is not clear what progress the university has made in increasing the number of primary care and family practice positions, or whether the university continues to reduce the number of non-primary care physicians as agreed to in the MOU. Is UC maintaining the MOU ratios reported in 2002 and is it continuing to make improvements in the areas where it fell short?

### 2. Growth in UC-Affiliates

The university reported significant increases in the number of family practice residents it trained during the period covered in the MOU. Much of this growth is attributed to increases in the number of UC-affiliate residents.

UC reported that the number of family practice residents it trained increased from 521 in 1992-93 to 745 in 2000-01, a 43 percent increase. Of the 745 residents trained in 2000-01, UC-affiliates trained 588 residents, while UC hospital-based programs trained only 157. In other words, three-fourths of the family practice growth came from UC-affiliates. It is unclear whether the expectation in 1994 was that UC would add new state-funded, UC hospital-based family practice residents, or that it would substantially increase its UC-affiliate family practice positions. The state may want to clarify how it wants to calculate family practice residents in the future and whether UC-affiliate family practice residents should be disaggregated from the overall UC resident count in the future.

### 3. UC Role with Affiliates

In the 1990s there was large growth in the number of UC-affiliations with outside health care providers. At the same time, these affiliates were developing new family practice residency programs and expanding the number of residency positions they offered. These UC-affiliates included entities such as counties, Veterans Administration, and private hospitals and community-based patient care facilities throughout the state. All agreements between UC and UC-affiliate programs must meet specified criteria, including a requirement that "the affiliated UC Medical School provides the affiliated program with educational resource support."

Because of the large role UC-affiliates play in training the majority of family practice residents, it is important to assess the relationship between UC and its affiliates and whether this is where future growth should continue to

occur. If the future growth in family practice residents is within UC-affiliate programs, should the state understand more about this type of training versus training at UC-based hospitals? Does UC provide sufficient resource support to the affiliate programs? What type of support is provided and which efforts are most valuable? Does UC support contribute to the growth in the number of residency positions within UC-affiliate programs? These issues require further exploration.

#### 4. How to Report Internal Medicine

When the MOU was developed, significant discussion centered on how to count and report primary care residents specializing in internal medicine. A large percentage of internal medicine residents pursue subspecialty training after completing their three years of primary care training. While estimates suggest that up to 50 percent or more of these residents do not end up practicing in primary care, UC reports all internal medicine residents as primary care physicians. Instead, it has been suggested that only 50 percent of these residents be counted as primary care physicians.

Internal medicine is one of the larger programs, so resolving this issue is important for gaining a more accurate count of the number of physicians going into primary care. The issue was never resolved in the MOU, and UC continues to report all its internal medicine residents in the primary care category. This question warrants clarification for determining future primary care physician needs.

#### 5. Lack of Details to Evaluate Campus Efforts

Each of the MOU reports provided significant detail about the progress made in increasing the number and proportion of primary care and family practice residency training positions at the campus level and systemwide. However, the MOU reports did not provide any detail about funds allocated (including redirection of funds) to expand primary care programs.

In addition the reports provided general summaries of what each campus was doing to improve medical educational opportunities. While this was helpful, it lacked sufficient detail about the number of students served, effectiveness of various initiatives or funding allocated for these purposes. As a result, it was difficult to gain a sense of the overall scale and effectiveness of these efforts.

#### 6. Balance Between Primary Care and Non-Primary Care Physicians

When developing the MOU, the prevailing wisdom at the time was that there was an overall surplus of physicians, but a severe shortage of primary care doctors. Thus, the MOU focused on shifting the number of non-primary care

resident positions to primary care slots, without increasing the overall number of residency positions.

In today's market there is growing evidence that California's population growth, coupled with virtually no growth in medical school enrollment or physician residency positions for the past twenty-five years, has created a serious shortage of many classifications of physicians, including primary care and some subspecialty areas. If the state were to fund increases in medical school capacity and physician resident positions, the challenge would be to increase this capacity strategically and with economic incentives to direct a portion of this growth to address shortage areas. This is a complex issue that requires further exploration.

### **The Physician Workforce Shortage**

California continues to face a severe physician workforce shortage, especially in specific regions of the state. This shortage is brought on by a number of factors, including continued population growth, increasing racial and ethnic diversity, an aging population with growing health needs and an aging physician workforce.

#### *A Distribution Issue*

This problem is compounded by the uneven geographic distribution of physicians, causing inadequate access to medical care in many of the state's rural areas, inner cities and poor communities. While California's overall physician to population ratio currently is 265 per 100,000 people, close to the national average, the ratio drops significantly in many regions.<sup>7</sup> For example, the central valley ratio is 131 per 100,000 people. In addition, more than 48 California counties have at least one area that qualifies as a federally designated Health Professions Shortage Area (HPSA).<sup>8</sup>

The average ratio of primary care physicians to the population in California is currently 77 per 100,000 residents, as compared to the average ratio of non-primary care or subspecialists to population in California, at about 114 per 100,000.<sup>9</sup>

Although the number and proportion of primary care physicians in the state has grown significantly in the past ten to twelve years, the shortage remains particularly acute in certain regions of the state. For example, the supply of primary care physicians dips to 54 physicians per 100,000 people in the Inland Empire and 59 physicians per 100,000 people in the southern end of the central valley.<sup>10</sup> However, in some regions of the state the ratio of subspecialty physicians to a population of 100,000 can also be quite low, such as in places like Tulare County.



The proper balance between primary care and non-primary care physicians serving an area is complicated. Some argue that there are growing shortages of non-primary care specialists, such as cardiologists, psychiatrists and anesthesiologists, most notably in poor and rural communities. Others argue that while there is a shortage of subspecialty doctors in some rural communities, the shortage is not as acute as the shortage of primary care physicians. The current challenge may not be to simply shift the ratio of primary care to non-primary care physicians trained in the state, but rather to assess the total number and proper balance of primary care to non-primary care physicians needed on a regional basis.

### *The Training Capacity Problem*

The overriding problem is the university's limited capacity to train an increasing number of physicians to keep pace with the state's health care needs. The state has not increased UC state-funded medical school enrollment or residency positions for the past twenty-five years. While the California population grew 14 percent between 1992 and 2002, the number of students enrolled at the five UC medical schools remained virtually unchanged. As a result, UC medical schools have not been able to accommodate the growing number of qualified California students who wish to attend medical school. With applications far exceeding the available entering class enrollment, California now leads the nation in sending more medical students out-of-state than it trains in state.<sup>11</sup>

California medical school enrollment lags behind most of the country. In 2002 there were only 15.6 enrolled medical students for each 100,000 people living in the state compared to 27.1 per 100,000 in the United States as a whole. New York has the highest medical student enrollment with 42.5 per 100,000 people, while Texas has a ratio of 24 medical students to 100,000 people.<sup>12</sup>

### *Future Physician Workforce Needs*

It is critical for the state to monitor future trends in access to primary care and subspecialty care areas, along with reviewing the various factors that may exacerbate the balance between the supply of physicians and the demand for health care.

The Center for Health Workforce Studies, in a December 2004 report, forecasts that between 2002 and 2015 the growth in physician demand in California will outpace the production of physicians by between 5 percent and 16 percent.<sup>13</sup> Many of the regions with the most severe shortages today are the areas of the state projected to have the most dramatic population growth between 2000 and 2015.<sup>14</sup> This trend is likely to further strain the health care system in the most underserved regions.

There is also a critical need to attract medical students and residents from diverse backgrounds who are culturally and linguistically competent and more inclined to practice in primary care specialties and in medically underserved communities. The state's physician workforce currently does not reflect the racial and ethnic diversity of the population it serves. The majority of California physicians are white (66 percent), followed by Asian/Pacific Islander (22 percent), Hispanic/Latino (4.4 percent) and African American (3 percent).<sup>15</sup>

### **Where Do We Go From Here?**

As California faces ever-increasing health care needs and increased shortages in many areas of medical practice, there are essential issues that must be addressed.

What is the proper role for state government? State government does not generally attempt to directly influence the private sector labor market supply and demand. Precedent exists, however, for intervention in areas that affect the public good, such as the shortage of teachers and nurses.

Government needs accurate information for targeted and appropriate intervention. State government, therefore, must have the ability to obtain precise data on physician supply and demand. The capability to forecast needs in order to keep pace with changing demographics and health care advances is also essential.

There are policy choices, should state government choose to influence the supply and distribution of physicians. Incentives, such as increased funding, can be given to the university and its affiliates to expand physician training capacity to meet high demand priorities. Fiscal incentives can be provided to individuals who enter into medical practice in high demand fields of practice or underserved communities.

Oversight is necessary to review new investments and outcomes. Continuous assessment of goals within the changing marketplace also is critical.

Ultimately, the university must be a strategic partner with the state in addressing the overall supply of physicians, the appropriate mix between primary care and subspecialties and the geographic distribution of physicians in order to meet California's long-term health care needs.

## ENDNOTES

- 
- <sup>1</sup> Primary care programs are defined as family practice, internal medicine, pediatrics, and obstetrics and gynecology programs. "Changing Directions in Medical Education," Update on Systemwide Efforts to Increase the Training of Generalists, Seventh Report, University of California, Office of the President, July 2002.
  - <sup>2</sup> The University defines UC-affiliate resident training programs as an Accreditation Council for Graduate Medical Education-accredited residency training program that fulfills all the following criteria:
    - (1) the purpose, terms and conditions of the affiliation arrangement are specified in an approved UC-affiliation agreement;
    - (2) the program director and core physicians responsible for supervising residents in the affiliate program hold UC faculty appointments;
    - (3) all graduating residents in the program receive a UC certificate;
    - (4) the affiliated UC medical school provides the affiliated program with educational resource support that:
      - a) appropriately supports the academic goals of the residency program;
      - b) reflects consideration of each program's size, needs, goals and resources in comparison to those of other UC-based programs and other state-supported affiliated programs; and
      - c) is discussed and/or negotiated on an annual basis. "Changing Directions in Medical Education," Update on Systemwide Efforts to Increase the Training of Generalists, Second Report, University of California, Office of the President, June 1994, 8.
  - <sup>3</sup> The Governor's Veto Message, September 3, 1994, stated in pertinent part: *The University recently signed a memorandum of understanding with the state to increase the number of primary care physicians trained in California. The memorandum establishes a goal of 20 percent of all residency positions in family practice throughout the University system by 2001. In addition, the agreement will increase the number of primary care physicians trained in UC colleges to 56 percent by 1998 and 70 percent in 2001.* The 56 percent and 70 percent figures reflect growth rather than the percent of overall UC residency population. The percentages in the MOU reflect the percentage of all UC residents. The percentages in this veto message are consistent with the goals of the MOU and are just reported differently.
  - <sup>4</sup> "Changing Directions in Medical Education," Update on Systemwide Efforts to Increase the Training of Generalists, Second Report, University of California, Office of the President, June 1994, 2-3.
  - <sup>5</sup> "Changing Directions in Medical Education," Update on Systemwide Efforts to Increase the Training of Generalists, Seventh Report, University of California, Office of the President, June 1994, 9.
  - <sup>6</sup> Memorandum of Understanding, Office of Statewide Health Planning and Development, Bud Lee, Chief Deputy Director to Keith Berger, Senior Negotiator, California Medical Assistance Commission, September 26, 2002.
  - <sup>7</sup> "Medical Education and the University of California," Final Report of the Health Sciences Committee, University of California, December 2004, 2.
  - <sup>8</sup> Ibid. 6.
  - <sup>9</sup> Ibid. 5.
  - <sup>10</sup> Ibid. 5.
  - <sup>11</sup> "California Physician Workforce, Supply and Demand through 2015," Center for Health Workforce Studies, University at Albany, State University of New York, December 2004, ES 4.
  - <sup>12</sup> Ibid. ES 4.
  - <sup>13</sup> "California Physician Workforce Supply and Demand through 2015," Center for Health Workforce Studies, University at Albany, State University of New York, December 2004, ES 2.

- 
- <sup>14</sup> "Physician Supply and Distribution in California, 2002," Center for Health Workforce Studies, University at Albany, State University of New York, 16.
- <sup>15</sup> "Medical Education and the University of California," Final Report of the Health Sciences Committee, University of California, December 2004, 2.

# *1994 MOU Regarding Primary Care Physician Training by the University of California*

Wednesday, May 4, 2005

Upon adjournment of the 1:30 PM Health Committee Bill Hearing  
State Capitol Building, John L. Burton Hearing Room (4203)

## *KEY ISSUES AND QUESTIONS*

---

### *MOU Terms and Compliance.*

- What are the lessons that can be learned from the MOU experience?
- Is the MOU still in place?
- What have been and what are the current numbers and ratios since the end of the MOU reporting requirements?
- What are reasonable goals to set, if needed, in a new MOU and what new reporting requirements that would serve this discussion?
- How can the definitions and categories be corrected, e.g. the definition of internal medical residencies, for more transparent and accurate reporting?
- What is the role of affiliates and can we take a closer look at the role they play?

### *Need for growth of medical school capacity.*

- What is the vision for the two new medical schools?
- What can be done to support the pipeline that fits into this vision?
- Can the UC develop a better assessment of students currently served and measures of effectiveness for current and prospective pipeline programs?

### *Workforce planning.*

- How can the UC take an institutional, formal position on serving primary care needs of the underserved?
- Can a strategic plan on supply and distribution be commissioned, perhaps with a report to the Legislature?
- Should a task force, reporting to the Legislature, be created to oversee this work?

MEDICAL SCHOOL  
ADMISSIONS

GEORGE RUNNER  
VICE CHAIR

SAM AANASTAD  
ELAINE ALQUIST  
WESLEY CHESBRO  
DAVE COX  
LIZ FIGUEROA  
SHEILA KUEHL  
ABEL MALDONADO  
GLORIA ROMERO  
EDWARD VINCENT

# California Legislature

## SENATE COMMITTEE ON HEALTH

DEBORAH V. ORTIZ  
CHAIR

STATE CAPITOL, ROOM 2191  
SACRAMENTO, CA 95814  
(916) 445-5965  
(916) 324-0384 FAX

STAFF DIRECTOR  
PETER HANSEL

COMMITTEE ASSISTANT  
AMOFIA (MOE) KATSIMBRAS



### ***University of California Medical School Admissions and Shortages in the California Health Care Workforce***

**Wednesday, February 23, 2005**

**1:30 to 4:00 PM**

**State Capitol Building, John L. Burton Hearing Room (4203)**

#### **BACKGROUND PAPER**

##### **Focus of Hearing**

This informational hearing will explore the current admissions processes at the University of California (UC) medical schools and how these relate to the number of physicians who are available and willing to serve the state's underserved populations and areas. Specifically, the Committees and Caucuses are inviting key representatives from three UC medical schools, including Davis, Irvine, and San Diego, which have experienced declining rates of diversity in the medical student population over the course of the past several years and since the passage of Proposition 209.

Given the health disparities and chronic disease trends witnessed across California's ethnic minority communities, as well as the state of the health care workforce in underserved areas, publicly-supported medical schools will be discussed vis-à-vis their ability to effectively train future doctors who are likely to serve disadvantaged and diseased populations. The hearing will ask university officials, researchers, and advocates to discuss what strategies are currently taking place or could take place to not only attract, but admit and enroll students who are qualified and likely to practice in California's communities in need of health care.

This hearing may be but a first step in investigating the admissions processes, outreach programs, and infrastructure that support diversity and supply for California's health care workforce through graduate and professional publicly-supported institutions.

##### **Key Questions**

- How can the UC's medical schools meet the needs of an increasingly dire workforce shortage, particularly in underserved, low-income, and racial and ethnic minority communities?



- What are the reasons for the low numbers of underrepresented minorities (URMs) being admitted to select UC medical schools?
- How can the mission of service and diversity penetrate the subjective and institutionally-reliant process of admissions?
- What are some tangible, policy-oriented reforms that the UC can engage in in order to increase the state's supply of primary care physicians who are devoted to serve in underserved communities that are experiencing health professional shortages?

### **Health Disparities**

In 2003, the Institute of Medicine (IOM) warned of the “unequal treatment” minorities face when encountering the health system. Cultural differences and a lack of access to health care combined with high rates of poverty and unemployment contribute to the substantial ethnic and racial disparities in health status and outcomes. Given the research that demonstrates the strong likelihood that minority health professionals are more likely to serve minority and medically underserved populations and the severe underrepresentation of minorities in the health professions, the IOM recommends an increase in the supply of minority health professionals as a key strategy to eliminating health disparities.

Some statistics from the report include (available at <http://www.calendow.org/reference/publications/pdf/disparities/UNEQUALTREATMENT9-03.pdf>):

- The infant mortality rate for African Americans is more than twice as high as that of whites. [California Department of Health Services, 2000]
- Asian American/Pacific Islanders have the highest rate of liver cancer among all populations, five times that of their white counterparts. Cambodian, Hmong and Laotian men are especially at risk. [California Cancer Registry, 2000]
- Hispanic women suffer the highest rate of invasive cervical cancer in California. [California Cancer Registry, 2000]
- African Americans living in Los Angeles County have a 78% higher death rate from heart disease than that of the overall population. [Los Angeles County Department of Health Services, 2000]
- African Americans, Hispanics and Native Americans have a much higher rate of death and illness from diabetes. [California Health Interview Survey (CHIS), 2001]



## **Workforce Shortages and Need**

By the year 2020, it is estimated that the State's population will grow to a total of nearly 49 million, more than half of which will be non-white. While African Americans, Latinos, and Native Americans, as a group, constitute nearly 25 percent of the U.S. population, these three groups account for less than 9 percent of nurses, 6 percent of physicians, and only 5 percent of dentists. These disparities bear out further in the faculties of health professional schools. For example, minorities make up less than 10 percent of baccalaureate nursing facilities, 8.6 percent of dental school faculties, and only 4.2 percent of medical school faculties.

Examining the education and training institutions and environment in which health professionals are cultivated is inextricably connected with efforts to increase the number of health care providers who are able to meet the health care needs within California. Evidence supports the value of increasing racial and ethnic diversity in the health professions. The evidence demonstrates the strong correlation between greater diversity among health professionals and enhanced access to care for racial and ethnic minority patients, expanded patient choice and satisfaction, better patient-provider communication, and better educational experiences for all students in the medical school setting. *In the Nation's Compelling Interest*, a 2003 publication by the Institute of Medicine, states that racial and ethnic minority health care professionals are significantly more likely than their white peers to serve minority and medically underserved communities, thereby helping to improve problems of limited minority access to care. Key recommendations included in the IOM book are included in the executive summary being made available to the Committee.

## ***Missing Persons: Minorities in the Health Professions, A Report of the Sullivan Commission on Diversity in the Healthcare Workforce***

The Sullivan Commission on Diversity in the Healthcare Workforce is an outgrowth of a grant from the W.K. Kellogg Foundation to Duke University School of Medicine. Established in April 2003, the Commission was charged with the formulation of policy recommendations to bring about systemic changes to address the scarcity of minorities in the health professions. The Commission released its report in September 2004 and put forth 37 recommendations for multiple actions to address the root causes of underrepresentation of minorities in the health professions focusing on "excellence, equal opportunity, and [ensuring] delivery of high-quality care for the entire population."

These recommendations, listed in the included executive summary of the Commission's report, are based on three overarching principles: (1) To increase the diversity in the health professions, the culture of health professions schools must change; (2) New and nontraditional paths to the health professions should be explored; and (3) Commitment must be at the highest levels of our government and in the private sector. Highlights of these recommendations, included in the attached executive summary from the report, are:

- Diversity should be a core value in the health professions. Health professions schools should ensure that their mission statements reflect a social contract with

the community and a commitment to diversity among their students, faculty, staff, and administration.

- Health professions schools should increase the representation of minority faculty on major institutional committees, including governance boards and advisory councils. Institutional leaders should regularly assess community/board composition to ensure the participation of URM professionals.
- Health professions schools and health systems should have strategic plans that outline specific goals, standards, policies, and accountability mechanisms to ensure institutional diversity and cultural competence.

### **Medical Student Diversity Task Force**

According to a November 2000 report prepared for the UC by the Medical Student Diversity Task Force entitled "Special Report on Medical Student Diversity," the URM medical student applicant pool is small and declining in proportion to population demographics that show that California is the most racially and ethnically diverse State in the nation. The report also noted that California is the leading exporter of medical students. During the years 1974 to 1999, the number of California residents accepted to any U.S. medical school ranged from a low of 1,183 students in 1974 to a high of 2,423 students in 1991. For URM students, these numbers range from a low of 157 students in 1974 to a high of 339 students in 1994. Among California URM residents accepted to California schools, this decline totaled nearly 40 percent.

The Task Force forwarded a set of key findings, including:

- Major disparities in health status exist between the angle population and minority groups.
- Race-based disparities in health are in part attributable to inadequate workforce diversity.
- Efforts by U.S. medical schools to increase diversity have had periodic successes.
- Until the early 1990s California medical schools were among the leaders in these efforts.
- Admission to medical school depends on far more than grades.
- The overwhelming majority of applicants to California schools cannot be accommodated.
- UC is often unable to match the financial packages offered by other medical schools.
- Outreach program play a vital and essential role in building the educational pipeline.
- The perceived institutional culture of a medical school plays a role in student choice.

- Mentors and student leaders are special resources that are often overlooked.
- Continuity, commitment, and oversight will be essential for long-term success.

The Task Force also forwarded a list of recommendations that covered (1) pre-medical educational, advising, and outreach, (2) medical school admissions and financial aid, (3) medical school curriculum and climate, and (4) continuity and leadership for the future. A copy of this section of the report is attached for the Committee's review.

### **UC Medical School Admission Process in Brief**

The UC Davis Medical School has provided information on its admissions cycle and each representative from the medical schools invited to the hearing have been asked to discuss their individual admissions process. The Davis process begins with the receipt of applications, a faculty screening, a secondary offering and receiving, a second screening and scoring, interviews with the applicants, and the final evaluation of the entire packet. After this entire process, an applicant is either admitted, held, or rejected.

Requests for supplemental materials to the application may include additional questions about applicants' interests and/or background, school-specific questions, and letters of reference from individuals or premedical advisors or advisory committees. Most schools rely on more than one committee, working in parallel, with admissions office staff. Most committees include faculty members from the basic and clinical sciences, medical students, and others. Overall selection criteria include:

- Academic record;
- Extracurricular activities;
- Clinical experience;
- Service to others;
- Research experience;
- Obstacles overcome; and
- Personal qualities.

### **Post Baccalaureate Program and PRIME LC**

The Post Baccalaureate Reapplicant Program at UC Davis concentrates on reapplicant students who are likely to return to designated medically underserved communities and/or who are educationally or financially disadvantaged. The program consists of ten weeks of intensive summer study and testing-skills preparation and three quarters of upper-division science course work, all taking place at UC Davis. Students accepted to the program receive extensive guidance and counseling regarding establishing a competitive academic record. They are also given instruction and support in retaking the MCAT, writing an effective personal statement, completing the American Medical College Application Service (AMCAS) application, selecting appropriate medical schools, and preparing medical school secondary applications.

UC plans to launch an innovative series of new programs at each of its five medical schools to train physician-leaders to meet the needs of California's increasingly diverse population. The programs, known collectively as Programs In Medical Education (PRIME), will focus on medically underserved groups and communities throughout the state, and will include emphasis on disparities in health status, cultural competence, and clinical clerkships in settings serving patients from diverse backgrounds. UC Irvine's PRIME-LC launched in 2004, is the pilot program for this systemwide initiative, focusing on the needs of the Latino/Hispanic community in Southern California. A handout included in the hearing materials from the UC further summarizes this effort.

### **Proposition 209**

In the mid-1990s, several events challenged the use of affirmative action in medical school admissions. The first occurred in July 1995 when the UC Board of Regents approved a new policy prohibiting the use of "race, religion, sex, color, ethnicity, or national origin as criteria for either admission to the University or to any program of study." At the same time, the Board set a goal for a "UC population that reflects this State's diversity" and authorized a task force to provide further guidance in regards to this stated goal.

In the midst of court rulings that affected the consideration of minority status in the admissions process in other states, in the November 1996 State general election, California voters passed Proposition 209. Prop. 209 provided that the State, including the UC, "...shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting."

### **Graduates in Primary Care Specialty from UC**

Concerns about physician shortages have centered on three principle issues: the growing overall physician-to-population ratio, the lack and decreasing numbers of generalist physicians, and the geographic imbalance of physicians in service. A prominent legislative attempt to control and enhance the supply of primary care physicians occurred in 1994, with the legislative passage of the Isenberg bill (AB 1855), which was subsequently vetoed. The legislation aimed at regulating the percentage of residents who graduate in primary care specialties from UC-sponsored training programs and although failed to become law, affected the Regent's independent actions in this area.

The veto message noted that the University recently signed a memorandum of understanding with the state to increase the number of primary care physicians trained in California. The memorandum established a goal of 20% of all residency positions in family practice throughout the University system by 2001. In addition, the agreement sought to increase the number of primary care physicians trained in UC colleges to 56% by 1998 and 70% in 2001. The UC and administration have been asked to provide information to the Committee on the MOU, information that was collected by the UC and the Office of Statewide Health Planning and Development, and any summaries of outcomes and impact as a result of the internal policy.

### **Prior Legislative Hearings**

In 2002, Senator Alarcon's Select Committee on College and University Admissions and Outreach released its report on findings and recommendations subsequent to a series of five hearings it held on the subject of its jurisdiction. This report titled *Increasing Access and Promoting Excellence: Diversity in California Public Higher Education* discussed the social and economic value of diversity. It asserted that state policy-makers have not focused much policy attention on the institutional practices that position colleges and universities to maximize the benefits of diversity. It also stated that the UC is both the most selective and the least diverse of California's three systems of public higher education and noted the decreased numbers of underrepresented minorities at UC campuses over the course of the late 1990s.

The report indicated that, "As a bottom line, perhaps the most important goal to emerge from the Select Committee's five hearings was a need to ensure that California's colleges and universities internalize a commitment to diversity as a core institutional value."

## **QUESTIONS FOR UNIVERSITY OF CALIFORNIA REPRESENTATIVES FOR THE FEBRUARY 23, 2005 INFORMATIONAL HEARING**

### **Pre-Admissions**

- How do you recruit?
- How many full time outreach staff do you have now? What programs do they commit most of their time to? What role do students play?
- How have your outreach and recruitment strategies changed over the past ten years and particularly within the context of Prop. 209?
- Are your outreach and recruitment strategies affected by data on workforce needs in the state or surrounding communities?
- How do you collect data on workforce needs?
- What kinds of standards do you have for “targeted” groups or the kind of applicant candidate you would like to attract?
- How are you actively supporting students who are currently applying or are within a few years of applying?

### **Admissions**

- What specific programs do you have in place to help students committed to serving their communities matriculate to medical school? How do you know if these programs are successful?
- Please discuss the number of students interviewed versus the number of admission offers you make for the different ethnic groups.
- What are the recent changes in your applicant/acceptance pool in regard to URM's?
- How formalized is consideration of community service, family background, and propensity to practice in underserved areas in the admissions process?
- How do you select your admissions committees? How does it vary between the five medical schools?
- To what extent do admissions panels include family practitioners from different communities? Are panels made up of faculty only in any case? If so, why?
- What measures are you taking to add diversity to your admissions committees?

- What role does BOARS play in the establishment of system-wide admissions policies for medical schools? What policies have they set regarding diversity goals and workforce needs in underserved areas?
- How do the admissions policies at medical schools differ from undergraduate admissions policies (14-point criteria recently adopted for undergrad admissions)?
- What is the role of a closed or open (blinded) file in regards to the interviewing process?
- How many students are admitted at your medical schools from the post-baccalaureate programs?

### **Post-Admission**

- When you offer admission, to what extent do you do personal outreach to try to attract and enroll students?
- What kind of special financial aid incentives do you offer to admitted students, particularly to those from a low-income background who are likely to serve in the state post-training?
- Can and do you offer supplemental financial aid to secure matriculation of targeted students?

# **University of California Medical School Admissions and Shortages in the California Health Care Workforce**

Wednesday, February 23, 2005

## **FACT SHEET ON ADMISSIONS STATISTICS (SOURCE: UC)**

### **Some Basic Statistics:**

- **Numbers at UC San Diego, Irvine, and Davis** all dropped from numbers ranging from 13 to 31 URMs prior to and after 1996 (Prop. 209).
- **San Diego URM enrollment rates:** They went from 22 in 1994 down to 12 in 1996, 2 in 1997, and then remained in the single digits (7, 4, 7 for the late 90s), and then went up to 11 in 2001 and have remained steady for the past few years.
  - **Numbers for African Americans** have been consistently low – with one or two enrolled each year until last year when the number went to 4.
  - **Numbers for Latinos** have been around the 10 per year figure, with a drop to 7 in the current class that was enrolled as of Fall 2004.
- **Davis URM enrollment rates:** They went from 31 in 1993 down to 9 in 1994, with the numbers in single digits for the entire late 90s, with the exception of one year – with 13 in 1998. The numbers overall have risen slightly over the past few years, to 14 in 2002, 12 in 2003, and 15 in 2004.
  - **Numbers for African Americans** have been consistently low – with between 2 and 4 students enrolled in the last four years.
  - **Numbers for Latinos** have been at 10 for the past two years, rising from 4 in 2001 and 8 in 2002.
- **Irvine URM enrollment rates:** This school's figures have been consistently low overall. They went from 14 in 1994 to between 2 and 7 for the subsequent seven years.
  - **Numbers for African Americans** have been consistently low – with one or two enrolled each year.
  - **Numbers for Latinos** have been around 7-8 per year figure for the past four years.



UNIVERSITY OF CALIFORNIA  
**HEALTH SCIENCES EDUCATION**

---

**WORKFORCE NEEDS AND ENROLLMENT PLANNING**

Submitted by the Universitywide Health Sciences Committee



Office of Health Affairs  
University of California  
April 2005

## TABLE OF CONTENTS

<b>I. EXECUTIVE SUMMARY</b> .....	1
Overall Health Workforce Findings .....	1
Profession-Specific Findings .....	1
Health Sciences Committee Recommendations .....	2
<b>II. INTRODUCTION</b> .....	3
Background and Charge to the Health Sciences Committee .....	3
<b>III. CONTEXT FOR PLANNING IN THE HEALTH SCIENCES</b> .....	4
Demographic and Economic Trends .....	4
Access to Care and Health Disparities .....	6
Financing and Delivery of Health Services .....	6
<b>IV. THE UC HEALTH SCIENCES INSTRUCTIONAL PROGRAM</b> .....	8
Selected Achievements .....	9
Current Challenges .....	9
<b>V. PROFESSION-SPECIFIC FACT SHEETS</b> .....	11
Dentistry .....	12
Medicine .....	14
Nursing .....	16
Optometry .....	18
Pharmacy .....	20
Public Health .....	22
Veterinary Medicine .....	24
<b>VI. FINDINGS</b> .....	26
California Health Workforce Needs .....	26
California Workforce Findings for Seven Major Health Professions .....	26
The University of California Health Sciences Instructional Programs .....	28
<b>VII. RECOMMENDATIONS</b> .....	30
Increasing Health Sciences Enrollments .....	30
Meeting the Needs of the Underserved .....	32
Increasing Student and Faculty Diversity .....	32
Developing New Curricula and Teaching Methods .....	33
Recruiting and Retaining Faculty .....	33
Expanding Graduate, Postgraduate, and Continuing Education .....	34
Addressing Capital and Infrastructure Needs .....	34
Planning and Coordination .....	34
<b>VIII. APPENDICES</b> .....	36
Appendix A — Universitywide Health Sciences Committee .....	36
Appendix B — Universitywide Health Sciences Committee Subcommittee on Nursing .....	37
Appendix C — Universitywide Health Sciences Committee Subcommittee on Public Health .....	38
Appendix D — Acknowledgements .....	39
Appendix E — References .....	40
<b>NOTES</b> .....	48

# UNIVERSITY OF CALIFORNIA HEALTH SCIENCES EDUCATION

Workforce Needs and Enrollment Planning April 2005

## EXECUTIVE SUMMARY

The University of California (UC) operates the largest health sciences instructional program in the nation, annually enrolling more than 13,000 students in fifteen schools, located on seven UC health sciences campuses. These include five schools of medicine and four smaller medical education programs; two schools each of dentistry, nursing, pharmacy and public health; and one school each of optometry and veterinary medicine. Through these programs, UC plays a critically important role in training future health professionals.

To inform decision making and help guide health sciences enrollment planning over the coming decade, former UC President Richard C. Atkinson asked Vice President for Health Affairs, Dr. Michael V. Drake, to oversee a comprehensive assessment of California's health workforce needs in each of the above professions. In turn, Vice President Drake directed the University's systemwide Health Sciences Committee (HSC), a long-standing subcommittee of the Academic Planning Council, to undertake this task. As part of this work, the HSC was asked to assess current UC health sciences programs; review recent achievements and current challenges in each profession; and make recommendations regarding the University's role and capacity to respond to current and future state needs.

The following findings and recommendations summarize the outcome of the HSC's analysis and review of California's health workforce needs as these relate to enrollment planning for UC health sciences programs.

### **Overall Health Workforce Findings**

- The California population is growing, aging, and increasing in diversity. Already the most populous state in the nation, California is expected to grow at nearly twice the national average by 2025. California's elderly population will grow at more than twice the rate of the state's total population within the same period. By 2015, over half of the state's population will be of Hispanic or Asian descent.
- Statewide shortages of health providers currently exist in several major health professions. Looming shortages exist in others. Regional shortages of health providers that exist currently will become more serious without effective intervention.
- The demand for culturally and linguistically competent health providers is growing, fueled by increasing need and growing demand to improve access to care, reduce disparities in health status, and improve health outcomes in the most diverse state in the nation.
- California's health workforce does not reflect the ethnic diversity of its citizens. Latinos, African Americans, and Native Americans are significantly underrepresented among UC health sciences students and faculty and among clinically active health providers statewide.

### **Profession-Specific Findings**

- The state will face a shortfall of up to 17,000 physicians (equivalent to a 15.9% shortage) by 2015. This shortage is expected as a result of rapid population growth, aging of the current physician workforce, and lack of growth in medical education programs in California – including virtually no growth within UC for more than two decades.
- California's nursing workforce crisis is serious and growing. The state currently ranks 49th in the nation in the number of nurses per capita, and predictions forecast a shortfall of 60,000 registered nurses by 2020. Significant shortages of nursing faculty are a major barrier for increasing nursing school enrollments in California's baccalaureate degree programs (offered primarily by California State University campuses and private institutions).
- In the face of increasing demand, due in part to new and emerging public health threats, recent studies have found that the public health workforce – in California and nationally – is seriously deficient in training, preparation, and size.
- California presently ranks 48th in the nation in the number of pharmacists per capita. As the population grows and ages, and as the number of prescriptions written and dispensed continues to climb, the demand for pharmacists will continue to far outweigh supply.
- Statewide demand for veterinary services is increasing rapidly, yet the rate of growth of new veterinarians is not keeping pace, ranking California 49th in the nation. Needs are increasing across the state, with unmet demand for services currently greatest in southern California.

- While no shortages of dentists or optometrists are projected over the coming decade, California will have a steady need for these professionals in order to meet ongoing demands and for new graduates (including new faculty) to replace those who are leaving practice to retire or pursue other activities.
- Reviewing health workforce needs on a regular and systematic basis as part of the University's ongoing planning and coordination in the health sciences.

In addition to findings regarding California's health workforce, this report describes achievements and major challenges in health professions education, ranging from insufficient diversity of faculty and staff, to changing requirements in teaching and patient care, to the need for new strategies and funding to address current infrastructure and capital needs.

The HSC report offers specific recommendations in each of these and other areas. In managing current programs and developing new ones, UC must continue to ensure that high quality standards are established and maintained. The Committee recognizes that although growth in UC health sciences programs will not be sufficient to meet all (or even most) state needs, an absence of growth in UC programs would severely limit options in California.

### ***Health Sciences Committee Recommendations***

To meet the growing needs of the state, California's health workforce must change in size, distribution, and preparation. As the largest health sciences instructional program in the nation, UC should continue to play a major role in training health professionals to meet societal needs. Within this context, the HSC report offers a variety of recommendations, which include:

- Increasing enrollment at existing UC schools of medicine, nursing, pharmacy, public health, and veterinary medicine, and maintaining current enrollments in UC schools of dentistry and optometry;
- Initiating planning for one or more new comprehensive educational program(s) in medicine and nursing and for a new program in veterinary medicine;
- Expanding efforts to address the needs of California's underserved groups and communities through a variety of strategies, including increased recruitment of students with a record of service and commitment to caring for the underserved and improved training to prepare students for such service;
- Increasing student and faculty diversity in the health sciences;
- Developing new curricula and teaching methods reflecting innovative educational practices and state-of-the-art clinical services in a variety of patient care settings;
- Improving efforts to recruit and retain health sciences faculty;
- Identifying new plans and alternatives for funding capital and infrastructure needs; and

## INTRODUCTION

This report is submitted to University of California (UC) Vice President for Health Affairs, Dr. Michael V. Drake, by the Universitywide Health Sciences Committee (HSC) in response to his request that the committee conduct a comprehensive assessment of California's current and future health workforce needs in each of the seven major health professions in which UC offers education and training. These include dentistry, medicine, nursing, pharmacy, public health, optometry and veterinary medicine. As part of this analysis, the committee was asked to summarize major findings and identify specific recommendations that the University might consider with respect to the future size and scope of UC health professions programs.

### ***Background and Charge to the Health Sciences Committee***

In response to a request from former UC President Richard C. Atkinson, Dr. Michael V. Drake, Vice President for Health Affairs, initiated an assessment of California's health workforce needs, to help guide health sciences enrollment planning and decision making over the coming decade. Vice President Drake in turn directed the University's Health Sciences Committee (HSC), a long-standing subcommittee of the Academic Planning Council, to assess current UC health sciences programs in dentistry, medicine, nursing, pharmacy, public health, optometry and veterinary medicine; review recent achievements and current challenges in each profession; and make recommendations regarding the University's role and capacity to respond to current and future state needs.

With guidance and staff support from the Office of the President's Division of Health Affairs, the HSC produced: (1) seven profession-specific white papers containing findings and recommendations relevant to state health needs and the University's health sciences programs in dentistry, medicine, nursing, pharmacy, public health, optometry and veterinary medicine; (2) an analysis and assessment of current nursing educational costs; (3) a comprehensive analysis of California's supply and projected demand for physicians, by region, through the year 2015 (conducted by the Center for Health Workforce Studies, University at Albany, State University of New York); and (4) this final HSC report, which summarizes the major findings and recommendations resulting from this comprehensive effort.

During the course of its study, the HSC reviewed current literature regarding state and national health workforce trends in each profession and analyzed enrollment and other program-specific data. The committee reviewed state and federal demographic projections, as well as data concerning the health professions in general, and health professional shortage areas in particular, collected data from a variety of

professional associations, and consulted broadly with UC health sciences faculty and senior administrators about current issues and challenges pertinent to UC programs. As part of its deliberations, the HSC considered and discussed the University's role in public health sciences education, reviewed information regarding the role of other (non-UC) California programs in training California health professionals, and discussed the growth of (and current planning efforts involving) non-UC health professions programs that have occurred in recent years. The committee engaged outside expert consultants in nursing and in medicine, and utilized profession-specific subcommittees to facilitate review of issues in nursing and public health. In completing this project, the HSC met quarterly for half-day meetings, held numerous conference calls, and benefited greatly from the contributions of committee members and others who were willing to share their time, knowledge, and expertise (see Acknowledgments).

It is important to emphasize that this project encompasses the most comprehensive health sciences review and planning effort undertaken within UC in more than two decades. The project would not have been possible without the generous support of The California Endowment, a private statewide foundation whose mission is to expand access to affordable, quality health care for underserved individuals and communities, and to promote fundamental improvements in the health status of all Californians. In completing this task, the HSC expresses its hope that this work will be useful in policy discussions and decision-making about the future size and scope of UC health professions programs and the valuable role they should continue to play in meeting the health needs of the people of California.

## CONTEXT FOR PLANNING IN THE HEALTH SCIENCES

California's health workforce is vital to the health and well being of the state's 35 million residents. While advances in science and clinical care offer great promise, rapidly increasing health needs and the demands of patient care have created new challenges that are putting the state's health workforce to the test. The population is aging and increasing in diversity. State and national expenditures on health care are skyrocketing, yet millions of Californians lack health insurance and even greater numbers lack adequate access to care. Increasing levels of chronic illness and other health conditions are leading to new models of care; innovations in science and technology offer new ways to improve health outcomes; and continuing advances in health care appear limitless. Despite these gains, California health professionals face steep challenges as they work to address compelling state needs, among them:

- More than 1.5 million, or 1 in 7 adults, have diabetes.
- Nearly 3.9 million, or 1 in 8 adults and children, are living with asthma.
- 3.4 million Californians have disabilities that limit daily activities and create a variety of health needs.
- A reported 134,000 cumulative AIDS cases in 2003 ranked California second only to New York in the number of people affected by this disease.
- Twenty-three percent of California adults are obese; 30% of California children are overweight and 40% are physically unfit.
- An estimated 1.9 million students 12 years and older use illicit drugs.
- In 2003, 23% of Californians between the ages of 19 and 65 lacked any form of health insurance.
- 18.5% of California children live below the federal poverty line (\$18,850 annual income for a family of four); 14 % of children under age 18 have no health insurance.

To meet these and other needs, the state's health workforce must be adequate in size, diversity, and preparation. As UC health sciences programs work to address priority health issues in the state – and as they plan for the future – a number of factors and trends affecting the state's future supply and demand for health providers must be considered. Among these are statewide and regional demographic trends; California's budget and economy; long-standing challenges in improving access to care in California's inner cities and rural areas; and growing concerns about the rising costs of health services. This section provides a brief overview of these factors as background and context for the HSC's review and planning efforts.

### Demographic and Economic Trends

**Population growth.** One in eight Americans lives in California, making it the most populous state in the nation. By 2015, the U.S. population is expected to increase by 13.4%. California, by contrast, is expected to see 22.3% growth, varying considerably by region – from nearly 10% growth in Los Angeles County to an estimated 40% increase in the Inland Empire.

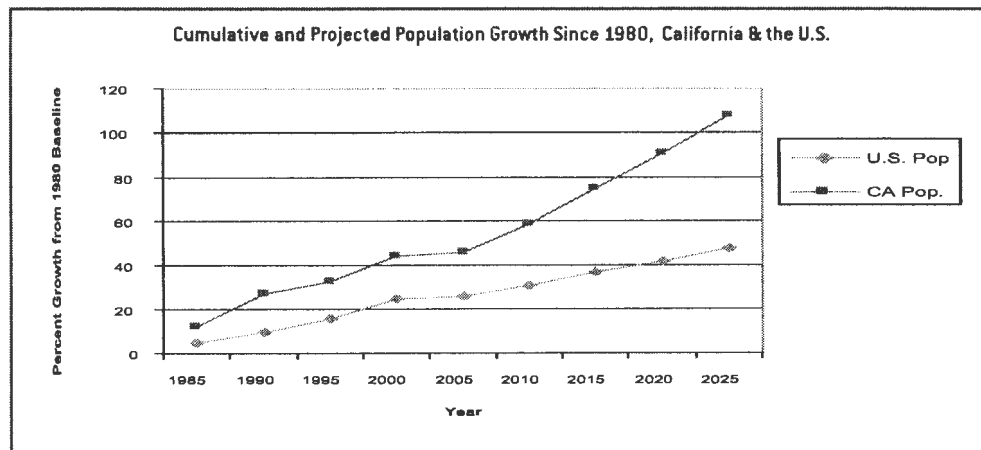


Figure 1: Population growth projections in California and the U.S.

Source: U.S. Census Bureau

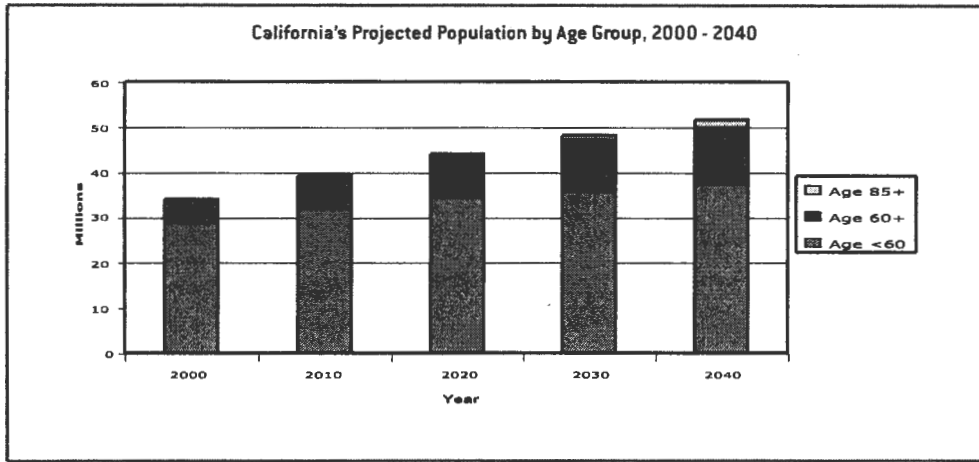


Figure 2: California population growth projections by age  
 Source: U.S. Census Bureau

**Aging.** The number of Californians aged 65 and over is already greater than any other state in the nation, and this number is expected to grow at more than twice the rate of the state's total population between now and 2020. By 2025, California is projected to have a 58% increase in people 65-74 years old, and a 49% increase in those 85 years and older. Because health needs typically increase as people age, California's growing elderly population will significantly increase the demand for health professionals to manage and provide their care.

**Increasing diversity.** California's population is racially and culturally more diverse than any other state in the nation, with more than 1 in 4 Californians born outside the United States – more than twice the national average of 1 in 10. Currently, the majority of Californians are non-Hispanic whites. By 2015, however, nearly 37% of the population will be of Hispanic/Latino origin, nearly 14% will be of Asian or Pacific Islander heritage, and 6% will be African American. Increasing the diversity and cultural and linguistic competence of the health workforce will thus remain a priority for meeting California's changing health needs.

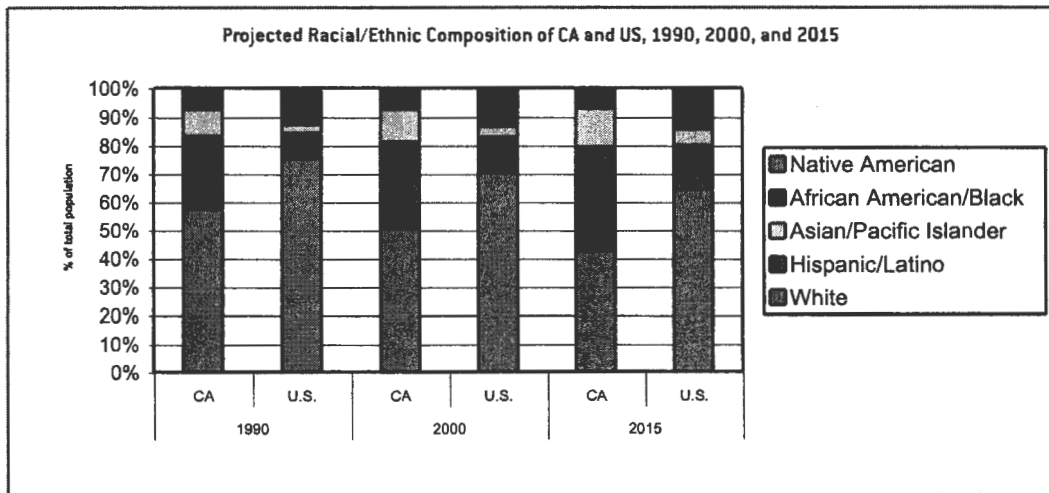


Figure 3: Race/ethnicity projections for California and the U.S.  
 Source: Center for Health Workforce Studies, University at Albany, State University of New York

### California Demographic Trends

- The California population will grow 22.3% by 2015, much faster than the 13.4% rate of growth for the U.S.
- The elderly population will grow at twice the state's overall growth rate
- Increasing racial and cultural diversity will result in no majority group by 2015

### Access to Care and Health Disparities

The leading causes of death in California mirror those of the nation as a whole (e.g., cancer, heart disease, and stroke). However, as the state's population increases, ages and diversifies, California faces unique and formidable challenges in maintaining and improving the health of its people. Over the coming decade these challenges will grow substantially unless effective strategies to improve access to health services are adopted.

**Access to care.** Gaps in access to care and in health outcomes are widening. Among Californians aged 19-64, 23% lack any form of health insurance, and 18.5% of California's children live below the federal poverty line (\$18,850 annual income for a family of four). Disparities in health status between California's various ethnic groups are well documented. Rates of death from diabetes are 151% higher among African Americans and 113% higher among Hispanics than among whites. Latina women have the highest risk of developing cervical cancer, accounting for one third of all invasive cervical cancers diagnosed each year. To help reduce disparities in health status, California's health workforce will require improved training and preparation for addressing the specific needs of its people.

**Health professional shortage areas.** California has some of the nation's largest urban areas. By 2015, more than 23 million Californians will reside in Los Angeles County, San Diego County and the San Francisco Bay Area. Many neighborhoods in these regions and most of the state's rural communities already have major difficulties in recruiting and retaining adequate numbers of health care personnel to meet current needs. 51 of California's 58 counties have at least one federally-designated Health Professional Shortage Area; two California counties have no physicians in residence and many lack sufficient numbers of other health care providers. These difficulties are expected to increase as the population grows and ages.

**Burden of disease.** California has high incidence rates of infectious disease and faces new and emerging health threats. Despite recent public focus on unusual threats like severe acute respiratory syndrome

(SARS), bovine spongiform encephalopathy ("mad cow" disease), and potential bioterrorism, it is the growing number of chronic conditions such as diabetes, asthma, and mental illness which impose a far greater burden on the state and its health resources. Increasing numbers of Californians are reporting poor mental health status and growing numbers are suffering from other chronic conditions. Racial and ethnic minorities collectively experience a greater burden from these illnesses, due in large part to poorer access to care. California's need for preventive health services is known to be large and unmet, and failure to make improvements will lead to higher disease rates in the future.

**Health behaviors and risk factors.** In all age groups, California must reverse trends in behaviors that are detrimental to good health. An estimated 1.9 million students 12 years and older use illicit drugs, and 40% of the state's children are officially labeled as physically "unfit". Obesity is rising at an alarming rate, from 9.8% to 23.2% of the total population between 1990 and 2003, increasing by 20.8% between 2002 and 2003 alone.

### California Health Facts

- 23% of Californians aged 19-64 have no health insurance
- Health disparities among ethnic groups are well-documented
- 51 of 58 counties have at least one federally-designated Health Professional Shortage Area
- 23% of California adults are obese and rates of obesity are climbing
- An estimated 40% of children are physically "unfit"
- Chronic illnesses such as asthma and diabetes are widespread, especially among ethnic minorities
- 18.5% of children live in poverty
- Roughly 7% of Californians have a severe mental illness and 41% report poor mental health status

### Financing and Delivery of Health Services

Rapid and constant change in the organization, delivery, and financing of health care in California profoundly affects the preparation of the health workforce. California's economy is the sixth largest in the world and the largest of any state, producing 13% of total U.S. Gross Domestic Product (GDP). Despite recent improvements, California has faced high levels of unemployment, consistently ranking in the top ten among states; millions of Californians do not have health insurance; and the costs of living in most parts of California are among the highest in the nation. These and other factors add to the complexity of financing and providing



health services, and directly affect the number and types of health providers needed in coming years.

**Rising costs of health care.** The costs of providing health care continue to increase rapidly nationwide. California ranks 44th in the nation in state spending on health care services as a percentage of its Gross State Product (GSP) and 38th in per capita personal health expenditures (public and private spending combined). Insurance coverage affects access to and utilization of care. Despite growing concern about the number of Californians who are uninsured – and evidence showing that uninsured patients delay treatment that often requires more costly emergency room care – overall health insurance coverage has been declining. Unrelated to patient care, but contributing to rising health care expenditures are the costs of compliance with new state and national regulatory requirements such as those mandated by the Health Insurance Portability and Accountability Act (HIPAA), and others required by law or that are necessary to meet accreditation and facility licensure requirements.

**Technologic innovation in health care.** As the pace of technological innovation increases, educational programs must continuously modify their curricula to teach students about new pharmaceuticals, developing technologies and recommended changes in clinical practices. As new technologies and treatment options become available, consumer demand for them increases. Meeting this demand requires recruiting and training sufficient numbers of health care providers and ensuring appropriate workforce development and continuing education. In addition, it is increasingly important to balance growth in diagnostic and treatment modalities with informed ethical discussions about the appropriateness of their use (e.g., criteria for organ transplantation). These discussions require improved training of health care professionals who are knowledgeable, sensitive and prepared to address complex ethical issues and dilemmas.

**Supply of and demand for health professionals and changing scope of practice.** The prevalence of managed care has led to changing needs for different numbers and types of providers. Expansion of the scope of practice, and related changes in billing and payment rights create, for some providers, (e.g., optometrists, pharmacists, nurse practitioners, physician assistants, and dental hygienists), opportunities to redefine the boundaries between professions that deliver similar services and to train an interdisciplinary workforce. The effective size of the health care workforce fluctuates over time and contributions are often difficult to quantify as providers age and as growing numbers engage in non-patient care activities. Despite this challenge, it is known that in many professions (medicine, nursing, dentistry, public health, and veterinary medicine), the number of California practitioners expected to retire within the next 15 years will outpace the number entering the workforce.

**Linking teaching and training to future practice.** The settings in which students are traditionally trained (i.e., academic health centers) increasingly do not reflect those in which they will eventually practice (e.g., outpatient, and managed care settings). Institutions of higher education in the state have revised their curricula and continue to expand programs to adapt to ongoing changes in the organization and delivery of health services. As UC and other programs respond, constraints imposed by affiliated (non-UC) health facilities, staffing requirements, and infrastructure issues must also be addressed.

**The changing nature of health sciences education.** As an enterprise, health sciences education has undergone fundamental adaptive change over the past decade to prepare health professionals to meet changing patient needs and expectations, and to practice more effectively within changing health care systems. Case-based learning, small group instruction, ongoing curricular change, and use of technology and informatics prepare students to work in a variety of settings using various integrative, interdisciplinary disease management models. The move away from lecture halls to small group instruction and ambulatory care settings, however, requires greater numbers of faculty and new and improved facilities for teaching.

#### Changes in Health Care Delivery

- California's economy is sixth largest in the world; total state expenditures on health are rising, yet 23% of Californians age 19-64 lack any form of health insurance
- Health services are increasingly delivered in outpatient and managed care settings, but most medical and nursing education occurs in inpatient settings (i.e., academic health centers)
- Managed care has increased demand for primary care doctors, yet shortages of specialists are also emerging

## THE UC HEALTH SCIENCES INSTRUCTIONAL PROGRAM

The University of California plays a critically important role in training health professionals to meet state needs. UC operates the largest health sciences instructional program in the nation, annually enrolling more than 13,000 students in fifteen schools, located on seven UC health sciences campuses. These include five schools of medicine and

four smaller medical education programs (located in Berkeley, Fresno, Riverside, and at the Charles R. Drew University of Medicine and Science); two schools each of dentistry, nursing, pharmacy, and public health; and one school each of optometry and veterinary medicine.

Field	Schools	1st Year Professional Students	Total Budgeted Enrollment for Professional Students	Total Budgeted Residency Positions	Total		State- Supported FTE [faculty]
					Budgeted Graduate Student Positions	Total Budgeted Enrollment	
Dentistry	UCLA	88 (DDS)	352 (DDS)	50	34	436	86.33
	UCSF	80 (DDS)	320 (DDS)	31	77	428	102.42
Medicine*	UCD	93 (MD)	372 (MD)	516	115	1,003	191.62
	UCI	92 (MD)	368 (MD)	581	93	1,040	186.63
	UCLA	165 (MD)	732 (MD)	1500	220	2,452	444.28
	UCSD	122 (MD)	488 (MD)	402	226	1,116	211.28
	UCSF	153 (MD)	612 (MD)	1,000	495	2,115	364.50
Nursing	UCLA	—	—	—	265	265	33.10
	UCSF	—	—	—	598	598	75.42
Optometry	UCB	65 (OD)	255 (OD)	11	23	289	22.96
Pharmacy**	UCSD	25 (PharmD)	50 (PharmD)	10	10	70	3.74
	UCSF	117 (PharmD)	456 (PharmD)	34	77	567	55.81
Public Health	UCB	129 (MPH)	259 (MPH)	8	149	416	50.08
	UCLA	168 (MPH)	337 (MPH)	16	211	564	64.87
Veterinary Medicine	UCD	131 (DVM)	524 (DVM)	90	181	795	132.50
<b>Totals</b>	15	1,428	5,125	4,249	2,774	12,154	2,025.54

Figure 4 UC Health Sciences Schools – Enrollment Overview (2003-2004 Academic Year)

NOTE: This table excludes a small number of budgeted enrollments and related faculty in non-professional, non-degree programs that receive state support.

\* Enrollment figures for UCLA include 24 medical students per year in the joint UCLA-Drew program; 24 medical students per year in the joint UCLA-UCR program; and 170 total budgeted Drew medical residents. Enrollment figures for UCSF include 12 medical students per year in the joint UCSF-UCB program; and 130 total budgeted residents for the UCSF-Fresno medical education program.

\*\* Enrollment figures for UCSD reflect the fact that the school admitted its first class of 25 students in fall of 2002; UCSD's first-year and total enrollments will increase to 60 first-year students per year by fall of 2005, resulting in a total enrollment of 240 students by fall 2008.

**Selected Achievements**

UC makes significant contributions to California and to health sciences education, attracting top students and providing state-of-the-art education and training. The UC system is a nationwide leader in providing interdisciplinary opportunities for clinical and research experience, and in the preparation of both future faculty and future leaders in research, industry, and public service. The UC system consistently attracts high levels of federal and private research funding. The work of UC researchers has led to advances in the understanding and treatment of disease, the development of new technologies and industries, and to national and international recognition, including awards from the National Institutes of Health and the Nobel Foundation.

UC Health Sciences Schools Ranked in the Top 15 in NIH Funding Received, 2002		
Profession	Campus	National Rank
Dentistry	UCSF	1
	UCLA	13
Medicine	UCSF	4
	UCLA	9
	UCSD	15
Nursing	UCSF	2
	UCLA	12
Optometry	UCB	1
Pharmacy	UCSF	1
Public Health	UCB	10
	UCLA	14
Veterinary Medicine	UCD	1

Figure 5 Nationwide ranking of UC health sciences schools in NIH funding  
 Source: National Institutes of Health

**Current Challenges**

In California and nationally, health sciences education as an enterprise faces ongoing challenges. Among those most relevant to UC are: the

consequences of major, multi-year budget reductions; rising student fees; current and looming faculty shortages; and ongoing challenges in keeping pace with the volume and complexity of health sciences knowledge and changes within the health care delivery system. Health care provider roles are increasingly complex, and patients approach health care issues armed with heightened expectations regarding drugs and treatment options. The California population is increasingly diverse, requiring improved cultural and linguistic competence on the part of all providers. Changes such as these require that health sciences education cut across traditional, discipline-specific boundaries and increasingly emphasize interdisciplinary, patient-centered care.

**Multi-year budget cuts.** By the 2004-2005 fiscal year, the University will have sustained nearly \$490 million in base budget reductions; another \$420 million in cuts will have been offset with student fee increases, and an additional \$550 million gap reflects the absence of funding for cost-of-living adjustments, non-salary price increases, employee health benefit increases, and other expenses. With the exception of nursing (exempted by the Governor and Legislature from budget cuts in 2004-05), UC health sciences schools have experienced multi-year, permanent cuts – including an approximately 25% permanent reduction in state support for instruction in 2004-05 alone. As UC schools manage these cuts, they face increasing demands for faculty productivity in clinical settings; near-term shortages of faculty; and new challenges in balancing time for teaching and research.

**Faculty productivity and shortages.** Collectively and individually, UC health professions training programs have achieved top national rankings in the breadth of their research portfolios, their success in competing for research grants, the quality of their faculty, and their ability to attract outstanding students. Despite these achievements, shortages of health sciences faculty are anticipated within the next few years. Factors affecting the supply of teachers and researchers include: large numbers of retirements; UC's inability to offer and maintain competitive salaries; growing demands for both clinical and research productivity that result in less time for teaching; and expectations that faculty will continually incorporate new and complex knowledge and technologies into teaching methods and curricula.

**Accreditation and licensure requirements.** UC has a unique role as a public institution with obligations to train and provide care to Californians. UC operates the fifth-largest health care delivery system in California, with more than 18,000 health care professionals on staff who annually provide \$3 billion in patient care services (FY 2002-2003). A major provider to uninsured and underinsured patients in Sacramento, San Diego and Orange Counties, the UC system has current educational affiliation arrangements with more than 100 county, Veterans Affairs, and community-based health facilities throughout California.

To maintain quality and ensure competitiveness, clinical education at UC must respond to shifting societal expectations, continuing advances in science and clinical care, and changing educational accreditation and professional licensure standards. Meeting these standards requires rigorous documentation, creative curriculum development, and identification of cost-effective strategies for reducing work hours and enhancing education. These activities are mandated by accrediting bodies and/or state and federal regulations, but are not funded or reimbursed, placing still greater demands on faculty time. Pressure to enhance productivity by shortening patient visit times and to contain costs by performing more medical procedures in outpatient settings frequently reduces the time available for teaching and learning.

**Limited enrollment capacity.** Reflecting national trends, applications to UC health sciences schools have risen significantly in three of the health professions (nursing, pharmacy, and public health). In dentistry and optometry, applications have recently increased slightly. In medicine and veterinary medicine, UC health sciences schools consistently receive far more applications from qualified candidates than can be accommodated. UC medical schools, for example, receive between 4000 and 6000 applications (per school) to fill an entering class of 100 to 150 students. The UC Davis School of Veterinary Medicine also receives a high number of applications, averaging 900-1000 applications for a class of 131. The absence of enrollment growth in most all UC health sciences programs limits the University's ability to meet increasing state needs and to accommodate growing numbers of highly qualified California students.

**To Meet Existing Challenges,  
UC Health Sciences Schools Must:**

- Adopt new strategies to recruit and retain faculty
- Maintain high quality teaching, research and patient care programs while managing multi-year permanent budget cuts
- Continue to develop new teaching methods for use in changing clinical settings
- Identify new strategies for meeting capital and infrastructure needs

**PROFESSION-SPECIFIC FACT SHEETS**

*This section provides two-page profession-specific overviews of workforce issues, educational programs, and the strengths of — and challenges faced by — UC's health sciences programs.*

## DENTAL EDUCATION

### Oral Health Infrastructure

The oral health system includes teams of dentists, dental hygienists, and dental assistants who deliver services in independent practices and clinics. Their efforts focus on the diagnosis, prevention, and treatment of oral diseases.

Approximately 93% of professionally active dentists work in private practices. Public health clinics, dental and dental hygiene schools, hospitals, nursing homes, and mobile van and school-based programs also serve as primary sources of care for many who would otherwise have no access to care. The current dental practice model is structured to serve insured patients or those who are able to pay cash for care they receive. Since 1960, these two sources have financed more than 90% of all dental expenditures. It is estimated that 40% of Californians have no form of dental coverage.

### Dental Workforce and Projections

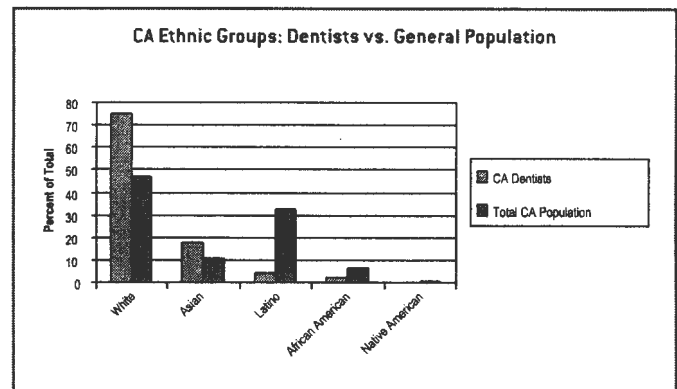
There are approximately 165,000 professionally active dentists in the United States. The number of dentists has been increasing for the past 20 years, however, it has not kept pace with overall population growth, resulting in a declining dentist-to-population ratio. This ratio is expected to drop from 60.4 to 53.7 per 100,000 over the next 15 years, due to the increasing rates of retirement of older dentists and the absence of an increase in graduates entering the workforce to replace them.

In 1999, approximately 23,000 dentists were licensed to practice in California. This total was equivalent to 68.3 dentists per 100,000 population, which exceeds the 1999 national average of 60.4 per 100,000. Nearly 60% of licensed dental practitioners in California received their dental degree at one of the five dental schools in California. California's five dental schools train more dentists than most other states and the supply appears to be adequate. However, the challenges linked to maldistribution of dentists remain unsolved. By federal standards, 20% of California communities have a shortage of dentists. More troubling still are the 32 Medical Service Study Areas in the state with no dentist at all.

### Demographic Profile of Dentists

The average age of a practicing dentist in California is 48 years. Although women represent only 11% of California dentists over age 40, they now account for 34% of dentists under age 40, reflecting the growing number of female graduates in recent years.

The dental workforce is among the least diverse of the health professions. An estimated 13% of dentists nationwide are non-white compared with 29% of the U.S. population. Among dental practitioners, only 6.8% are underrepresented minorities compared with 24.8% of the U.S. population.



Ethnic Profile of Dentists in CA [2001]

### Factors Affecting Demand for Dental Services

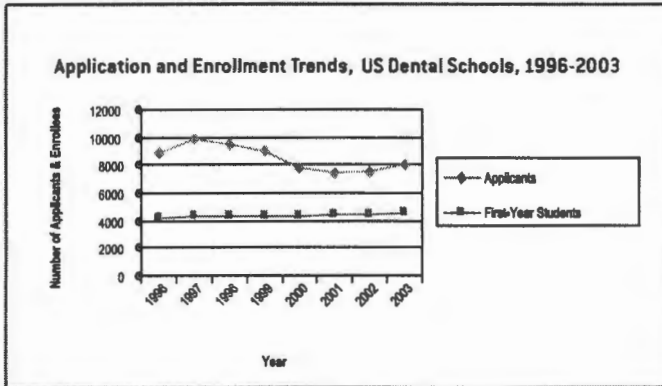
- Growth of the aging population
- Growth of the pediatric population
- Geographic maldistribution of oral health providers across the state
- Few California communities have fluoridated water supplies
- Rise in popularity of cosmetic dental procedures and new technologies

### Factors Affecting Supply of Dentists

- Financial considerations such as high training costs, increased debt loads, lack of dental insurance among various population groups, and high operational costs of dental practice
- Aging of the dental workforce
- Increasing shortages of dental school faculty
- Expanded use of allied professionals

**Dental Education**

Currently, 56 accredited dental schools in the U.S. enroll approximately 17,800 pre-doctoral Doctor of Dental Sciences (DDS) students across a four-year educational period.



Five dental schools in California enroll approximately 2,200 students annually. The number of applications consistently exceeds the capacity of California's training programs.

**Dental Education "Fast Facts"- California**

School of Dentistry	UCLA	UCSF	UOP	USC	LLU
<b>Applications</b>	1191	1231	1764	1622	1110
<b>URM Applications</b>	107	103	122	116	77
<b>First-Year Enrollees</b>	88	80	155	144	104
<b>URM First-Year Enrollees</b>	4	12	10	4	7
<b>Total Enrollment</b>	366	351	444	625	395
<b>Total URM Enrollment</b>	20	39	25	24	36
<b>DDS Graduates</b>	86	100	150	174	103
<b>URM Graduates</b>	1	15	6	2	5
<b>First-Year Residents</b>	45	26	18	35	20
<b>Total Residents</b>	79	72	25	97	46
<b>Total Faculty</b>	185	207	210	N/A	390
<b>Total URM Faculty</b>	1	15	6	2	5
<b>Degrees Offered</b>	DDS	DDS	DDS	DDS	DDS
	MS	MS		MS	MS
	PhD	PhD		MBA	PhD
	MBA				

**Strengths of UC Dental Schools**

**Excellence In Training.** The UC dental schools are recognized for their depth, breadth, and caliber of educational programs, the range of interdisciplinary degree offerings, achievements of faculty, and quality of clinical services provided.

**Leadership in Dental and Craniofacial Research.** UC dental schools are highly regarded internationally for the breadth of their federal, state, and privately funded dental and health sciences research activities in areas such as oral cancer, oral biology, AIDS, and biotechnology, and through collaborative programs with UC schools of pharmacy, nursing and medicine.

**Dental School Curricular Reform.** UC schools are revising their curricula to facilitate an evidence based, patient-centered learning environment, inclusive of diverse patient groups.

**Focus on Diversity.** With the goal of increasing the number of underrepresented minorities enrolled in UC's dental schools, both programs have implemented "pipeline" initiatives to expand their community training and clinical care programs and to improve efforts to recruit disadvantaged students. They have also developed successful post-baccalaureate pre-dental programs.

**Challenges for UC Dental Schools**

**Student and Faculty Diversity.** The dental workforce includes few dentists, educators, and researchers from groups traditionally underrepresented in the health sciences and is not adequately prepared to meet the oral health needs of California's diverse communities.

**Recruiting, Training, and Inspiring Future Practitioners.** The state's budget crisis has resulted in multi-year permanent budget cuts and corresponding fee increases for health sciences students. Rising educational costs and increasing student debt threaten the University's efforts to recruit and train a diverse group of professionals who will work in California's many underserved communities.

**Shortages of Dental School Faculty.** Retirement of dental school faculty age 60 years and older alone is estimated to result in nearly 900 faculty vacancies in U.S. dental schools by the next decade. Other factors include lower salaries compared to those offered in the private sector, pressure to generate income, level of indebtedness, time required to pursue academic careers, and a diminished interest in teaching among students.

## MEDICAL EDUCATION

### Medical Practice and Health Care Delivery

Physicians are medical practitioners, researchers, teachers, and administrators. In these roles, they have been part of dramatic changes in the organization, financing and delivery of health services that have occurred over the last decade. New knowledge, technologies, and models of care developed that allow physicians to better respond to the changing health needs of Americans throughout their lives.

Fundamental changes are reflected in the shift from solo and small-group practices and problem-focused care to practices in a variety of clinical settings (e.g., ambulatory/outpatient, hospitalist, and "boutique") and increasing use of integrative, interdisciplinary disease management models.

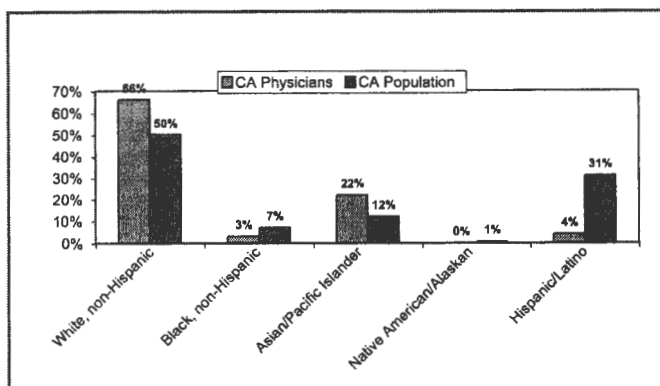
### The Physician Workforce

There are approximately 780,000 professionally active physicians in the United States. In 2002, 105,000 physicians (including both those who were active and those who were retired) were licensed to practice in California.

Of the state's active patient care physicians, 75% attended medical school outside of California. Of the 25% who attended a California medical school, 62% graduated from a UC school. Nearly 60% of California's physicians completed their residency training in their principal specialty within the U.S.

### Demographic Profile of Physicians

Of the 93,000 active patient care physicians in California, the median age is 48 (42 for women, 51 for men). Close to 70% are men aged 45 years and older. Of those younger than age 35 years, 46% are women.



The majority of California's physicians (66%) are white, followed by Asian/Pacific Islander (22%), Hispanic (4.4%), African American (3%), and other races (3.9%). Compared with the California population, the ethnicity of the state's physician workforce differs significantly from that of the people it serves.

### Workforce Projections

State workforce studies predict that demand for physician services will continue to outpace the supply of physicians over the next 15 years. As a result, California will face a shortfall of up to 17,000 physicians by 2015.

### Factors Affecting Demand for Physician Services

- Growth, aging, and increasing diversity of the California population
- Rising incidence and prevalence of chronic illnesses and comorbidities
- Need for culturally and linguistically competent physicians to serve diverse groups and communities
- Access to physician services based on practice location and patients' insurance status
- Increasing public expectations about topics such as screening, prevention, wellness, and end-of-life and palliative care

### Factors Affecting Supply of Physicians

- Aging of California's physician workforce
- Absence of growth in educational opportunities for medical students and residents including virtually no growth in UC programs in more than 25 years
- Choice of professional activity (research, teaching, patient care) and discipline (generalist vs. specialist)
- In-migration of physicians trained outside of California and the U.S. and increasing shortages of physicians nationally

### Medical Education

In the U.S., 126 accredited allopathic medical schools enroll 17,000 first-year students annually in 4-year programs leading to the M.D. (Doctor of Medicine) degree. Twenty colleges of osteopathic medicine enroll a total of 2,534 first year students in 4-year programs leading to the D.O. (Doctor of Osteopathy) degree.



**Medical Students.** California's 10 medical schools annually admit 1,342 first-year students and maintain a total enrollment of 5,487. UC enrolls 629 first-year students, with a total enrollment of 2,540. The majority of UC students are Californians and are non-Hispanic whites or Asian Americans. Men and women are equally represented.

State medical student enrollment figures have changed only slightly in 20 years (<6%), most of which is the result of doubling enrollment in California's two colleges of osteopathic medicine. UC schools have seen no growth in state-funded enrollment in more than 25 years. In 2002, California had 15 medical school slots per 100,000 population, significantly below the U.S. average of 27.

Because of increasing numbers of applicants and limited enrollment capacity at California's medical schools, less than 5% of all applicants to any given UC medical school ultimately enroll there. Because UC and other California medical schools cannot accommodate growing numbers of Californians applying for training, more California students seek educational opportunities out of state than are trained in state.

**Residency Training.** An estimated 67 institutions in California sponsor more than 700 accredited residency programs. Through some 300 specialty-specific programs, UC trains medical residents in UC-based health care facilities and a network of over 100 UC-affiliated hospitals and clinics across the state. At these sites, UC faculty and residents provide much-needed health services for California's under- and uninsured patients.

Annually, UC enrolls approximately 1,000 first-year residents in residency programs from 3 to 7 years in duration. On average, about half of UC residents are enrolled in primary care training programs. The majority of residents are white (61%) or Asian/Pacific Islander (25%). A disproportionately low number are Hispanic, African American, or Native American. In surgical specialties and medical and surgical subspecialties, the majority of residents are men; primary care specialties enroll higher numbers of women.

Upon completion of residency training, an estimated 70% of UC residents remain in California to practice. In-state retention rates are affected by specialty, job availability, cost of living, and plans for further professional training.

### **Strengths of UC Medical Schools**

**Excellence and Innovation in Education.** Using an updated, integrative, problem-based curriculum, UC's nationally recognized faculty enable UC schools to provide a full range of high-caliber advanced degree programs and interdisciplinary research opportunities in such fields as AIDS, cancer, and aging.

**Leadership in Research and Development.** UC leads the nation in NIH grant funding for medical and bioscience research. Advances in understanding and treating diseases and development of new technologies and industries have helped UC researchers gain worldwide recognition.

**Comprehensive Training and Clinical Care.** UC's medical centers, hospitals, and clinics, principal training sites for two thirds of California's medical students and half of its medical residents, represent the fifth largest health care delivery system and second largest Medi-Cal provider in California.

**Outreach to Diverse Communities.** Committed to providing medical education to diverse populations of students, UC offers a wide variety of outreach, enrichment, mentoring, and post-baccalaureate programs. New educational initiatives with specialized curricula are designed to attract students interested in practicing in underserved communities.

### **Challenges for UC Medical Schools**

**Limited Educational Opportunities.** Absence of growth in medical student and resident enrollments limits UC's ability to respond to growing educational demand and increasing societal demand for physician services.

**Balancing Budget Cuts.** Reduced state support for instruction (25% in 2004-2005 alone) results in rising student fees and increasing student indebtedness, greater demands for faculty productivity in clinical settings, and increasing reliance on volunteer faculty to fill teaching roles in expanding clinical settings.

**Incorporating New Models of Teaching.** Small-group, case-based instruction; expanded curricula; and new technologies require new uses of old facilities and place demands on faculty to respond to new educational paradigms while meeting increasing expectations for clinical productivity.

**Recruiting and Retaining Faculty.** Higher salaries offered by other employers; increasing demands to teach, conduct research, and practice; and California's high cost of living pose increasing challenges in recruiting and retaining health science faculty.

**Increasing Student and Faculty Diversity.** Rising student fees, California's high cost of living, small applicant pools, and competition from other U.S. medical schools hinder UC's efforts to attract students and faculty traditionally underrepresented in the health sciences.

## NURSING EDUCATION

### Nursing Licensure and Practice

"Licensed nurses constitute the single largest occupation in the healthcare industry. The majority of licensed nurses work in hospitals; others work in homes, schools, clinics, physicians' offices, long-term care facilities, and public health agencies. Nurses play a critical role in the provision of health care because their scope of practice places them in direct contact with patients in most health care environments. Patients rely on licensed nurses to assess, treat, and monitor their diseases and conditions, and to educate them about maintaining health and managing chronic illness."

- UCSF January 2004

Registered nurses (RNs) take their licensure exam after completing a diploma nursing program, an associate degree, or a baccalaureate degree. Ten percent of the 2.7 million registered nurses in the United States hold masters and/or doctoral degrees. Graduate degrees prepare nurses to be nurse educators, administrators, researchers, or clinicians in advanced practice. Advanced practice nurses become certified as nurse practitioners, anesthetists, midwives and clinical nurse specialists, often caring for underserved and disadvantaged populations.

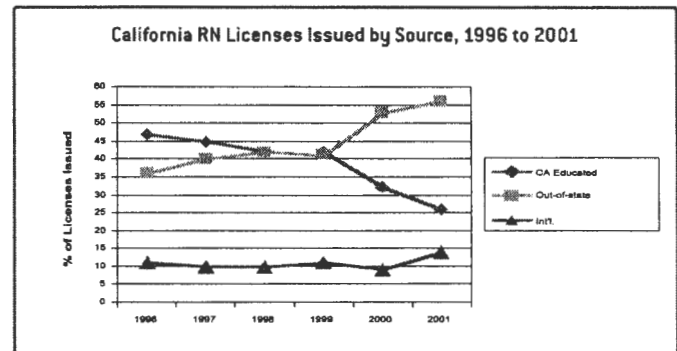
### Nursing Workforce and Projections

The most recent national statistics show California to be 49th among the states in nurses per capita: in 2000, California had 542 nurses per 100,000 population, versus the U.S. average of 780 per 100,000. State statistics indicate that 293,493 registered nurses are currently in active practice, and – despite steady growth of the RN population since the early 1990's - studies predict California will need over 60,000 additional nurses to meet demand in 2020.

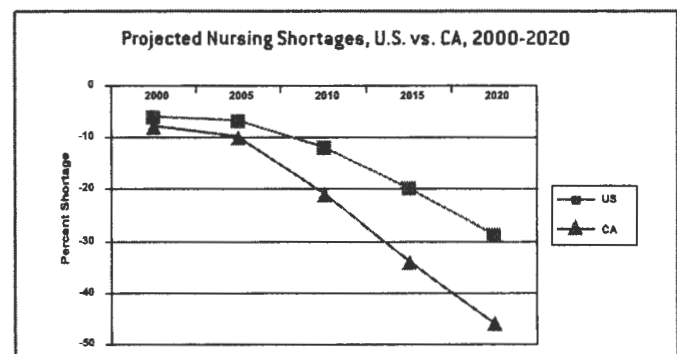
California's 100 nursing programs educate approximately half of the RNs needed to meet the state's demand. In recent years, the proportion of newly-licensed nurses in California who were educated out-of-state has been increasing. The percent of new licenses issued to internationally educated nurses has increased in response to the current nursing shortage.

### Demographic Profile of Nurses

93 percent of California's nurses are women (slightly lower than the national average of 95 percent); 75 percent are white; 11 percent are Asian; 4 percent are African American, and another 3.6 percent are Hispanic – a racial and ethnic demographic profile which differs greatly



Source: California Board of Registered Nursing



Source: U.S. Bureau of Health Professions

from the state's population overall. Less than 25 percent of California's RNs are under 40 years of age, and 13 percent are older than 60. A wave of retirements is anticipated over the next decade, which will further increase the nursing shortage in the state.

### Factors Affecting Demand

- Overall population growth and increased proportion of persons over age 65, many with chronic illnesses
- New nurse staffing ratios proposed for CA hospitals
- Geographic maldistribution
- New national accreditation standards limiting the number of hours medical residents can work

### Factors Affecting Supply

- Aging of the nursing workforce
- Faculty shortages limiting enrollment growth and the number of qualified applicants who can be accepted into California nursing programs
- Enrollment caps related to budget concerns

- Minimal federal funding for RN education
- Reliance on diminishing in-migration
- Multiple paths to RN certification
- No opportunity for undergraduate nursing preparation within the UC system

**Nursing Education**

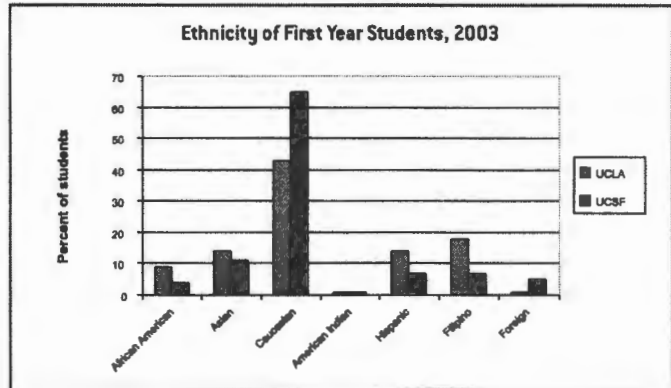
RN educational programs are categorized as either pre-licensure or post-licensure. California has 100 pre-licensure programs, 23 of which offer the baccalaureate of science in nursing (BSN), and five that offer an entry-level master's (ELM) degree where students who already have a bachelors degree can meet the requirements to take the RN examination and earn a master of science degree in 3 to 4 years. 15 entry-level RN programs are offered by private colleges; the overwhelming majority of others are offered by community colleges, the California State University system, and the UC system. Publicly-funded institutions educate 86% of the state's RN graduates. Each program has its own prerequisites, graduation requirements and curricula, although the community college nursing programs are currently attempting to standardize prerequisites.

In the 2001-2002 academic year, 14,260 students were enrolled in pre-licensure programs (63% in Associate Degree programs; 34% in BSN programs; and 3% in entry-level masters programs). Roughly 5000 of these will be expected to graduate each year. The number of students enrolled in RN programs has remained relatively steady over the past ten years, but did begin to increase slightly beginning in 1999. Enrollment growth is limited by a major statewide shortage of nursing faculty, enrollment caps, and budget concerns regarding the costs of developing new programs. Approximately 26% of RNs in California receive additional educational degrees after completing their primary nursing education.

UC's two schools of nursing offer pre- and post-licensure RN education (UCSF offers pre- and post-; UCLA offers post- only). Both are ranked among the nation's top nursing schools.

	UCLA	UCSF
<b>Students</b>	315	598
<b>State-Funded Faculty</b>	39.8	75.42
<b>Extramural funding</b>	\$26.6 million	\$33.4 million (top nursing school in NIH funding)
	(top ten nursing school in NIH funding)	
<b>Other strengths</b>	US News ranking "Top Ten in the U.S."	US News ranking top two in U.S.

Although more diverse than other health professions, the ethnicity of UC nursing students does not reflect the ethnicity of California's population.



**Strengths of UC Nursing Schools**

**Excellence in Training.** The UC nursing schools play a central role in preparing future faculty for California nursing programs as well as advanced practice nurses.

**Excellence in Research.** UC nursing faculty generate important translational research in the areas of disease prevention and symptom management. In 2003-04, UCSF was ranked as the top U.S. nursing school and received the highest amount of NIH funding among all schools of nursing in the U.S..

**Excellence in Clinical Practice.** UC schools own/manage nurse-managed clinical practices designed to bring care to the medically underserved and homeless.

**Challenges for UC Nursing Schools**

**Absence of an undergraduate (B.S.N.) nursing program.**

**Limited enrollment capacity.**

**Recruiting of educationally and financially disadvantaged students.**

**Lack of scholarship support for students.**

**Lack of financial support for necessary program growth in critically needed areas (e.g. vulnerable populations, genomics, gerontology, informatics).**

**Difficulty recruiting and retaining faculty.** Both Los Angeles and San Francisco have high costs of living and compare unfavorably to other U.S. cities where UC faculty are heavily recruited.

## OPTOMETRY EDUCATION

### Optometry Infrastructure

Optometrists provide an estimated 70% of eye care for Americans, and serve as the “primary care” providers of vision care nationwide, providing diagnosis, prevention, and treatment of vision diseases and disorders to millions of Americans.

Optometrists are independent primary health care providers who examine, diagnose, treat, and manage diseases and disorders of the visual system, the eye and associated structures as well as diagnose related systemic conditions. Optometrists examine the internal and external structures of the eye, to diagnose diseases such as glaucoma, cataracts and retinal disorders; systemic diseases including hypertension and diabetes; and vision conditions like nearsightedness, farsightedness, astigmatism and presbyopia. They prescribe vision aids, vision therapy and medicines to treat eye diseases.

Doctors of Optometry (DOs) work independently as well as with surgical and non-surgical subspecialists to deliver eye care to patients of all ages.

### Optometry Workforce and Projections

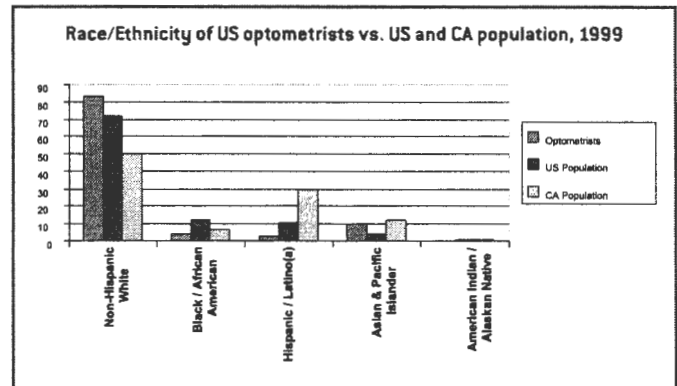
More than 31,000 optometrists practice in the U.S. Of these, approximately 4,000 practice in California. Two-thirds of optometrists are in private practice, working either as solo practitioners or in partnership with other optometrists, ophthalmologists, or other health professionals. The remainder practice in a variety of settings, including hospitals, clinics, and community health centers; health maintenance organizations; commercial settings such as those affiliated with retail optical stores; military, public health, or other governmental facilities; industry (e.g., industrial safety programs, insurance companies, and contact lens and ophthalmic product manufacturers), and academic institutions. Some optometrists specialize in areas such as primary care optometry, family practice, infant/toddler/child care, elder care, low vision, sports vision, contact lenses, vision therapy, or vision in the workplace.

California currently exceeds the national average of optometrists per capita, ranking 9th among states, with 11.1 optometrists per 100,000 population by contrast to the U.S. average of 8.7 optometrists per 100,000 population. As in most health professions, there are challenges involving geographic distribution of optometrists, with insufficient numbers practicing in rural and urban underserved areas across the state.

Projections made by the U.S. Department of Labor indicate that employment of optometrists will grow by 10 to 20% between 2002 and 2012, or “as fast as the average for all occupations,” and that workforce needs will vary by census region. Pediatric and geriatric optometry are predicted to be the specialty areas of greatest need. Geographically, rural areas will continue to need more optometrists than urban areas, reflecting general trends involving shortages of health professionals.

### Demographic Profile of Optometrists

As is the case in other health professions, the ethnicity of the optometry workforce does not reflect that of the state or U.S. population.



### Factors Affecting Demand and Supply

- Increased patient volume, due to the aging population, increased computer use, and underlying need for preventive services
- Wider scope of practice and greater market share within managed care
- Expanded vision insurance coverage
- Increased need for teaching and research faculty nationwide
- Increasing rates of entry into practice
- Increased use of allied professionals
- Increased development and use of new technologies, including laser vision surgery

## Optometry Education

There are 17 accredited schools and colleges of optometry in the U.S. and Puerto Rico. They offer three degrees, the most common of which is the Doctor of Optometry (OD). Two schools offer optometry education in California: the University of California Berkeley School of Optometry (UCB) and the (private) Southern California College of Optometry. Beyond training MS and PhD students, UCB trains approximately 15 postdoctoral fellows and an average of four residents each year.

Approximately 69% of UCB applicants – and 80% of first year students - are California residents. The majority of applications come from graduates of UC schools, most often the Berkeley, Davis, Irvine, Los Angeles, and San Diego campuses.

Nationwide, approximately 15 to 20% of new optometrists choose to complete a residency, which is typically a year-long program. Residency training at UCB is an important element of the school's teaching, research, and clinical service programs. Each UCB resident specializes in one of six clinical "tracks" – primary care, pediatrics, cornea/contact lenses, low vision/geriatric care, binocular vision, or ocular disease. Following residency training, most UCB graduates seek part-time or full-time teaching positions. As faculty shortages materialize at many U.S. optometry schools, ODs with specialized residency training will be in high demand to fill clinical faculty vacancies.

UCB's highly competitive residency program attracts an average of 4.5 applicants for each position compared to a national average of 1.2 applicants per slot.

## Strengths of UC Optometry Schools

**Top students and educational opportunities.** The average scores of UCB students on the Optometric Admissions Test (OAT) are consistently among the highest of all programs in the nation. For many years, close to 100% of graduates pass licensure examinations. UCB is also recognized for innovation in education. Students gain in-depth clinical experience in both the school's state-of-the-art eye center and during their three required 10-week rotations at various externship sites. Students also participate in research activities through the school's Lions International Club Foundation Clinical Research Center.

**Research productivity and research funding.** UCB leads the nation in research grants from the National Eye Institute/National Institutes of Health, ranking first among optometry schools, and first for all optometry and ophthalmology departments in the UC system for both the number of

faculty that receive NIH funding and the research dollars awarded. Since 2000, the school has received \$52 million in NIH support.

**Preparation of future faculty.** UCB graduates are a major resource for academic optometry programs nationwide. Faculty at all but two of the nation's schools of optometry include one or more UCB graduates. A small number serve as faculty at optometry schools overseas or teach in related fields such as ophthalmology or other sciences. At least 64 of UCB's current faculty, in both clinical and basic sciences, are graduates of the school.

## Challenges for UC Optometry Schools

**Supporting residency training.** UCB's residency programs attract many of the best and brightest new graduates in the field. Residency training is a vital part of UCB's teaching and clinical mission, but the fact that the program lacks state support for salary and benefits for its residents and is limited to only four or five residents per year keeps the school from benefiting from many teaching and clinical care activities that a larger program would allow. These include expanded patient care services and increased preparation of specialists and new faculty.

**Diversifying the student and faculty bodies.** Since 1995, the ethnicity of the UCB student body has been predominantly Asian (average of 55%). The next largest ethnic group has been white (34%), followed by "foreign nationals," "other," Hispanic Americans, and African Americans. Among the faculty, the largest ethnic group is white (n = 51, or 67%), followed by Asian/Pacific Islander (n = 19, or 25%). The numbers of faculty who are Middle Eastern, Hispanic American, and African American are much smaller (n = 3, 2 and 1, respectively). Although the lack of diversity in the health professions is longstanding and national in scope, this profile clearly does not reflect the state's overall ethnic diversity.

**Recruiting and retaining faculty.** Although faculty recruitment has not yet been a challenge for UCB, a nationwide shortage of optometry faculty is predicted. As shortages develop – and as costs of living increase and UC salaries lag behind those of comparison institutions – faculty recruitment and retention will become greater challenges. Increasing demands on faculty time for teaching and patient care, together with the fact that funding formulas have not kept pace with increasing basic science and clinical teaching requirements, add further challenges for the school.

## PHARMACY EDUCATION

### *The Practice of Pharmacy*

Licensed pharmacists play active roles in the health care system and in the biotechnology and pharmaceutical industries. In hospitals, clinics, and community retail pharmacies, Doctors of Pharmacy (PharmDs) dispense medication prescribed by doctors and dentists, participate actively in drug monitoring and disease management, and advise patients and prescribers about potential drug/drug and drug/disease interactions and changes in the management of chronic and acute illnesses. As researchers, PharmDs enhance drug discovery and development, develop therapeutic formularies to improve outcomes, and evaluate drug efficacy by conducting clinical trials.

### *The Pharmacy Workforce*

Pharmacists represent the third largest health professional group in the nation. In 2000, there were 196,000 working pharmacists in the U.S., which corresponds to a national average of 65.9 pharmacists per 100,000 population. The Health Resources and Services Administration (HRSA) predicts the total number of pharmacists will increase by 28,500 (14%) to meet growing demand for services in all sectors.

In 1998, 16,770 pharmacists served 32 million Californians, which corresponds to a ratio of 51.3 pharmacists to 100,000 population. With this ratio, California ranks 48th among all states in the nation. Critical pharmacy workforce shortages in the state are expected to continue. According to the Aggregate Demand Index-Pharmacy Manpower Project, California is one of five states with the greatest unmet demand (highest number of unfilled positions) for licensed pharmacists.

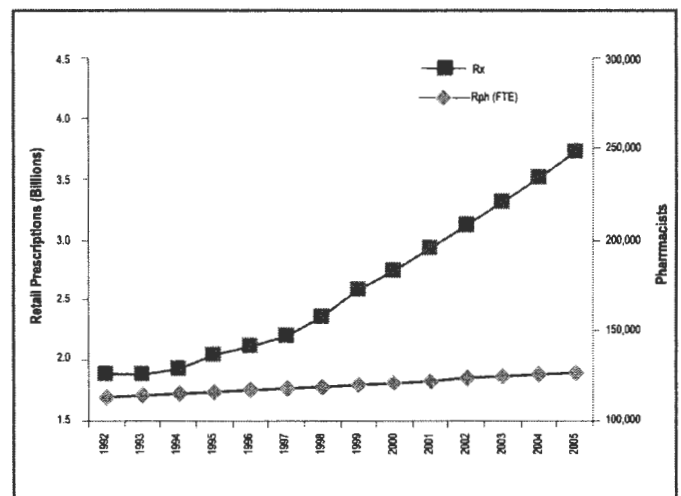
### *Demographic Profile of Pharmacists*

Nationwide and in California, the majority of pharmacists are men in their mid-40s. Although women represent less than half of all California pharmacists, the majority of the state's enrolled pharmacy students and recent pharmacy graduates are women.

The ethnic profile of California's pharmacy workforce differs from that of the state's residents. Whereas the majority of Californians are white (47%) followed by Hispanic/Latino (32%), the majority of pharmacy graduates in 2002 were Asian-Pacific Islander (63%) and non-Hispanic white (26%).

### *Factors Affecting Demand for Pharmacy Services*

- Growth and aging of California's population
- Widening scope of pharmacy practice in clinical and research settings
- Expanding career opportunities in biotechnology and pharmaceutical industries
- Growing need for culturally and linguistically competent pharmacists to serve California's diverse communities
- Steady and dramatic increases in prescriptions written and dispensed



### *Factors Affecting Supply of Pharmacy Services*

- Revised educational requirements and standards for pharmacy licensure
- Historic requirement of a California-specific pharmacist licensure examination
- Limited educational opportunities for pharmacy students and residents
- Expanding career options for licensed pharmacists (e.g., practice vs. research)
- Changing work habits and interests by some professionals in working fewer hours and retiring at earlier ages
- Growing availability of pharmacy technicians to work in a variety of new settings

**Pharmacy Education**

Currently, 87 accredited schools of pharmacy in the US enroll approximately 42,000 students in a 4-year program leading to the PharmD degree. Of these, 66 also offer other graduate programs in the pharmaceutical sciences, enrolling close to 480 master's and 385 PhD degree candidates. From 2002 to 2003, total enrollment in first-professional degree programs in US pharmacy schools increased by 10.7%.

The number of applications for admission to PharmD programs at U.S. schools of pharmacy rose rapidly between 2000 and 2003: a 9.1% increase between 2000 and 2001, a 24.6% increase in 2002, and a 41.7% increase in 2003. In 2002-2003, the submission of more than 47,000 applications to all US schools is equivalent to 4.8 applications for each entering student.

The majority of applicants in 2003 were white (48%) or Asian/Pacific Islander (28%); women represent 65% of the applicant pool.

Reflecting national trends, the number of applicants to California's six PharmD programs continues to rise steadily. Each year, the number of qualified applicants exceeds the number of available first-year positions.

Applicants to California PharmD Programs in 2003 and 2004

	Loma Linda	UCSF	UCSD	USC	Western Univ	U of Pacific
<b>Positions</b>	55	122	30	185	120	200
<b>Apps 2003</b>	235	854	496	737	647	1277
<b>Apps 2004</b>	475	1236	1071	1300	1053	1875

Total enrollment in California's PharmD programs is approximately 2,400 students. With plans to increase enrollment at Loma Linda University and the UCSD campus, and to maintain current enrollment at other schools, California will add approximately 4,500 new graduates to the pharmacy workforce by 2010. Despite this gain, the total number of pharmacists in California still falls short of the national average and of projected need based on population growth and health care utilization trends.

In both UC schools, the majority of PharmD enrollees are women. The percentage of all enrolled students from underrepresented minority groups in California (including African American, American Indian/Alaskan Native, and Mexican Americans) is less than 10% (43 of 477) at UCSF and less than 4% (2 of 51) at UCSD.

**Strengths of UC Pharmacy Schools**

**Comprehensive Interdisciplinary Curriculum.**

In response to scientific advances and expanding professional standards, UC pharmacy schools have increased academic and degree offerings in interdisciplinary fields and developed new areas of study to address changes in pharmacy practice.

**Preparation of Pharmacy Faculty.** UC's advanced-level training – including residency and fellowship programs – are critical for ensuring an adequate supply of future pharmacy faculty in California and nationally.

**Advanced-Level Clinical Training.** Completion of residency training is required for inpatient pharmacy practice and leadership positions in academic health centers. Only UC and USC offer residency and fellowship programs in California that prepare pharmacists to fill these critical workforce roles.

**Equipping Future Leaders in Research and Industry.** With its broad-based pharmacy curriculum, advanced degree programs, and proximity to the state's growing pharmaceutical and biotechnology sectors, UC prepares both clinical pharmacists and pharmaceutical scientists and researchers.

**Challenges for UC Pharmacy Schools**

**Required Resources for PharmD Training.** Levels of funding for PharmD education and residency/fellowship training, unchanged since 1970, neither adequately support a dramatically changed educational paradigm nor recognize broadened professional training and licensure requirements. Combined with the inability to cross-subsidize, limited resources prevent UC from increasing pharmacy educational opportunities.

**Limited Advanced Level Training Positions.** The numbers of residency and fellowship opportunities are not adequate to meet employment needs or to accommodate the growing pool of qualified applicants.

**Recruiting and Retaining Faculty.** The small pool from which to draw new faculty, higher salaries in the private sector, California's high cost of living, increasing academic demands, and insufficient resources to support quality teaching and research programs makes successful recruitment and retention difficult.

## PUBLIC HEALTH EDUCATION

### Public Health Infrastructure

Public health has been defined as the science and art of promoting health, preventing disease, prolonging life, and improving quality of life for the general population. The success of the U.S. public health system depends on well-trained public health professionals that come from a variety of disciplines, work in a variety of settings, and engage in a variety of activities. The principal areas of focus of the public health system are health surveillance, protection, and promotion; policy development and regulation; and the organization, delivery, and evaluation of health services delivered to individuals and populations.

### Public Health Workforce

The public health workforce includes clinicians (physicians, nurses, dentists); occupational and environmental health specialists; epidemiologists and biostatisticians; health program administrators and health educators; and health economists, planners, and policy analysts. Public health professionals are specifically defined as individuals holding advanced degrees in public health or a related field. Much of the workforce, however, has no formal public health training. Overall, the public health workforce is said to include workers in:

- Governmental public health agencies (federal, state, county and local health departments)
- Non-governmental public health organizations (community-based social service organizations and advocacy groups)
- Health care financing and delivery systems (hospitals, health plans, and medical groups)
- Academic and research institutions
- Private organizations (disease management, information technology, and biotechnology firms)

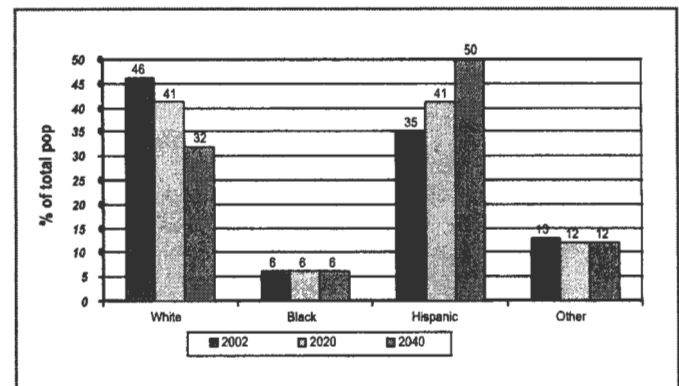
### Workforce Estimates and Needs

Estimating the size, demographics, and competencies of the public health workforce is complicated by limited data accounting for all workforce sectors and lack of a verifiable number or formula defining an adequate public health workforce. Frequently cited estimates put the national public health workforce at nearly 450,000 paid, full-time workers, with an estimated 45% employed in governmental settings.

Nationwide, the greatest demand among professional occupations is for public health nurses, environmental scientists, health educators, epidemiologists, and administrators. In California, particularly in rural counties, the greatest staffing need is for clinicians, microbiologists, program administrators, and dieticians, with or without formal public health training. When public health degrees are required, shortages exist for epidemiologists, health educators, and environmental health scientists.

### Factors Affecting Demand

- New diseases and public health challenges
- Widened scope of professional activities to include biological, environmental, and social and behavioral factors
- Growth and aging of the overall population
- Increasing diversity of California's population



Ethnicity in California to 2040 (CA Dept. of Finance)

### Factors Affecting Supply

- Aging of the public health workforce in California and nationally
- Educational opportunities to accommodate growing numbers of prospective public health professionals
- Shortages of professionals in other health disciplines
- Lack of formal training of existing public health workforce
- Choice of professional activity (governmental vs. non-governmental agency or organization)



**Public Health Education**

Nationwide, 36 accredited schools of public health at 10 private and 26 public universities offer master's (MPH), doctoral (DrPH, ScD) degrees, and joint degree (MPH with MD, MSW, MBA, JD, etc.) programs. The MPH is the most common professional degree. In 2003, student enrollment totaled 19,000 nationwide, an increase of 6% from 2002 and of 31% since 1993. Most students are white women. Enrollment of underrepresented minority students increased by 8%, however, from 2002 to 2003.

The number of applications for admission to public health schools has risen steadily over the last decade (48% since 1992). Principal areas of interest are epidemiology, health services administration, health education/behavior science, international health, and biostatistics.

Applications to California's four schools and six accredited programs in public health show similar upward trends. Where UC schools of public health differ from the national statistics, however, is the virtual lack of growth in enrollment over the last 10 years. Limits to growth include the number of faculty FTE and space constraints. In 2002, UC schools, among the most selective in the country, enrolled 462 students in 2002 from a combined pool of 1838 applicants. The majority of applicants and enrollees were women; 9.5% of students at UCB and 18.5% of UCLA students were from underrepresented minority groups.

Among the nation's top ten schools of public health, UCB is the smallest and UCLA is the third smallest in total enrollment. In California, however, they are the largest, training more than 65% of masters' and 80% of doctoral candidates enrolled in schools and programs of public health in the state.

Students	UC Berkeley	UCLA	Loma Linda	SDSU
<b>Total</b>	474	709*	306	336
<b>Masters'</b>	319	460	246	304
<b>Doctoral</b>	155	249	60	32

Accredited public health programs at USC and five California State University campuses offer MPH degrees with most focusing on environmental and occupational health, health administration, and community health education and promotion. New advanced degree programs within the UC Davis Schools of Medicine and Veterinary Medicine and also at UC Irvine within the School of Social Ecology will increase opportunities for interdisciplinary training within the public health field.

**Strengths of UC Schools of Public Health**

**Interdisciplinary Learning and Research.** The research and teaching strength of UC faculty are well recognized. Opportunities for collaborative research and learning across disciplines, and joint degree offerings with medicine, business, public policy, law, social welfare, and social studies, yield graduates who are well equipped to enter and contribute significantly to a variety of workplace settings.

**Preparing and Training Future Leaders.** Graduates of UC programs consistently are recruited to assume leadership positions in governmental agencies, nongovernmental organizations, health care delivery systems, and academic institutions across the nation.

**Innovation In Education.** UC has responded to the need for expanded education and training opportunities for the current and future public health workforce by developing an executive MPH program, minor and major courses of study in public health for undergraduate students, and "pipeline" programs to promote undergraduate student interest in the field.

**Interaction Between Academia and Practice.** Through training centers and course offerings, UC students have opportunities to gain valuable work experience in local, state, and national agencies; performing community health assessments; and participating in activities to increase public health awareness and meet community health needs.

**Challenges for UC Schools of Public Health**

**Meeting Growing Demand for Training.** Located in densely populated urban areas, UC schools face major constraints with regard to classroom, office, and laboratory space.

**Diversifying the Public Health Workforce.** At UC, and across the nation, the number of minority faculty and students is low relative to the population future professionals will serve. Increasing diversity and improving cultural competency are identified by future employers as priority objectives.

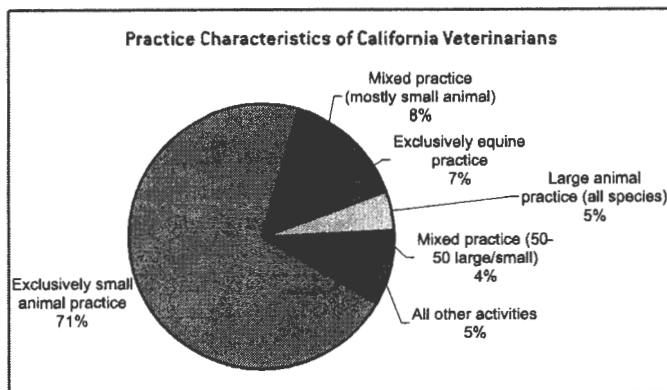
**Assessing Responses to Workforce Needs.** Better systems to collect and analyze graduate and workforce data are needed to guide future educational planning so UC can effectively respond to the needs of California's public health system.

## VETERINARY MEDICAL EDUCATION

### *Veterinary Health Infrastructure*

The veterinary health system includes teams of veterinarians, veterinary technicians, veterinary assistants, adoption and grief counselors, kennel workers, and volunteers. Their efforts focus on protecting the health and welfare of animals and people.

Approximately 75% of all U.S. veterinarians work in private practices. Of those, about 58% are engaged exclusively in small animal practice; nearly 18% limit their practice to the care of farm animals or horses. Another 19% of veterinarians work in mixed animal practices that provide care to all types of pets, horses, and livestock. Approximately 94% of the members of the California Veterinary Medical Association (CVMA) are engaged in private practice.



### *Veterinary Workforce and Projections*

There are 76,291 professionally active veterinarians in the U.S. and approximately 5,860 working in California. The national average veterinarian-to-population ratio is currently 27 veterinarians per 100,000 population. By contrast, the average ratio in California is 17:100,000. Twenty counties in California, almost half, are at or below this level. Currently the UC Davis School of Veterinary Medicine graduates 122 new veterinarians each year. Since 1995, an average of approximately 230 veterinarians trained outside of the state are licensed each year to practice in California. If the state were to meet the current national average, an additional 3,367 California veterinarians would be needed.

Relative growth in the number of California veterinarians (about 1% per annum) ranks the state 49th in the nation as evidenced by significant regional shortages identified in some areas of the state. Since only 27 states in the U.S. offer veterinary education to fulfill the veterinary

healthcare needs of the nation, their responsibility extends beyond state and regional boundaries. To address the need for veterinarians to meet national demand, and acknowledging an estimated retirement rate of 2.8% per year, an additional 725 new veterinarians in California would be needed each year.

### *Demographic Profile of Veterinarians*

The average age of a practicing veterinarian in the U.S. is 45 years (49 for men; 40 for women). Since the mid-1970's, the number of women accepted to veterinary schools has steadily increased. By 2005-2006, the number of practicing women veterinarians in the profession is expected to outnumber men.

The veterinary workforce is among the least diverse of the health professions. Efforts within the profession and veterinary schools to increase diversity have produced modest results, but at a slower pace than desired. Approximately 90% of students enrolled in veterinary colleges are white. Only 3% are Asian, 3% are Latino, and 2% are African American.

### *Factors Affecting Demand for Veterinary Services*

- Growth of the California population
- Growth in the total number of pets per household
- Increased demand for veterinary livestock services to ensure agricultural and food safety
- Increased demand for security against emerging diseases and bioterrorism/agroterrorism
- Greater demand for more sophisticated diagnoses and treatments

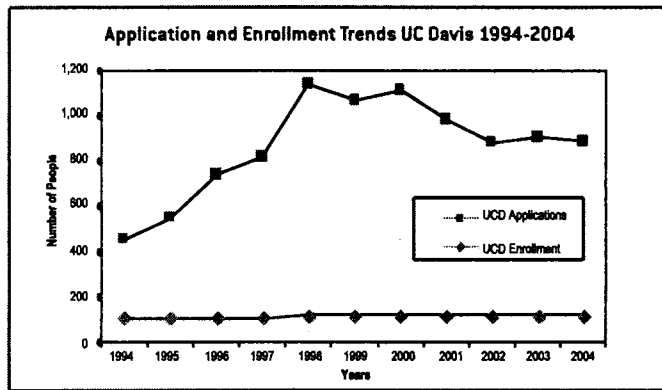
### *Factors Affecting Supply of Veterinarians*

- Downward shifts in productivity due in part to desired lifestyle changes (e.g., voluntary reduction in work hours)
- Aging of the veterinary workforce
- Faculty shortages
- Limited educational opportunities available in veterinary medicine

### *Veterinary Medical Education*

Currently, 28 accredited schools of veterinary medicine in the U.S. enroll approximately 9,600 Doctor of Veterinary Medicine (DVM) students across a four-year curricular period. Approximately 2,400 of these students graduate each year.

Two veterinary medical schools in California, the University of California Davis (UCD) and the Western University of Health Sciences (WUHS), enroll approximately 570 DVM students annually. The number of applications consistently exceeds the capacity of California's training programs.



**Enrollment Capacity of California Schools**

The UCD School of Veterinary Medicine (SVM) received a permanent annual budget augmentation of \$2.5 million, beginning in fiscal year 1998-1999, which was used to fund a modest level of enrollment expansion. This expansion was to be phased in over the last several years. As planned, this augmentation was used to support:

- an increase in the enrollment of DVM students by a total of 23 students per class per year, to a total class size of 131 students per year;
- an increase in the enrollment of DVM specialty residents by an additional 30 trainees, for a total resident enrollment of 90 trainees across all years of training; and
- administrative and technical needs to establish a veterinary presence in southern California.

When this expansion is achieved and the DVM programs are fully enrolled, student fees will have increased, facilities will be in place and new faculty members will have been recruited to accommodate a larger class size in the fall of 2006.

At full operation, the WUHS proposed a class size of approximately 90 students per year. The school admitted its Charter class of 85 students in the fall of 2003.

**Strengths of the UC School of Veterinary Medicine**

**Leadership in Veterinary Research.** UC SVM has the largest graduate academic program among all of the veterinary schools and colleges

nationwide and consistently ranks as one of the top two U.S. veterinary schools in training future faculty.

**Animal Health and Care.** As the primary animal health resource for the state, the school's responsibilities to protect animal health and improve animal care are paramount.

**Food Safety and Public Health.** The SVM is the main source of information and health services for animals in production units, the inspectors in processing plants, and the public health officials for inspection of food preparation operations in California.

**Development of Advanced Clinical Specialists.** UCD has led the development of emerging specialty disciplines and continues to work at the cutting edge to recognize the need, develop the discipline, define the standard, and train the specialists.

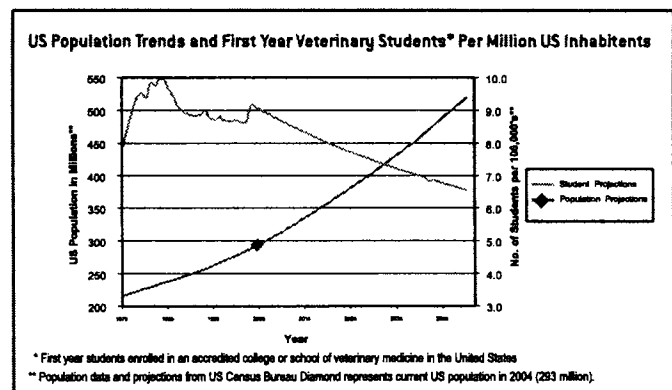
**Challenges of the UC School of Veterinary Medicine**

**Demand for Veterinary Service Is Increasing.** California's current supply of veterinarians is only 63% of the national average, which underscores the need to increase the supply of veterinarians.

**Demand for Specialty Services Is Increasing.** In California, only 15% of veterinarians are trained as specialists, despite growing demand for services.

**Recruitment of Faculty and Researchers Is Difficult.** The veterinary profession is growing into new areas and disciplines at a rapid rate; at the same time a significant proportion (an estimated 38%) of the veterinary faculty nationwide is expected to retire within the next 10 years.

**Access to Veterinary Education in California Is Severely Limited**



## FINDINGS

### ***California Health Workforce Needs***

#### ***1. California's population is growing, aging and increasingly diverse.***

The California population – already the largest of any state in the country – will grow at close to twice the national average by 2025, and its elderly population will grow at more than twice the rate of the total population within the same time frame. By 2015, over half of all California residents (50.6%) will be of Hispanic or Asian descent. To meet the needs of the state, changes in the size, distribution, and preparation of its health workforce are required.

#### ***2. Statewide shortages of health providers exist in several major health professions; looming shortages exist in others; and current regional shortages of health providers will become more serious without effective intervention.***

Research on the state and national health care workforce often focuses on the total supply of professionals, rather than on the adequacy of their distribution. Recent studies, however, show that although the total number of providers in some professions is adequate, there is a geographic maldistribution of health professionals that poses a major barrier to health access for individuals and communities throughout the state. Many of California's rural and inner-city areas have long-standing shortages of health professionals, with minority and low-income urban areas recognized as disproportionately underserved. As new statewide shortages emerge, areas already designated as health professional shortage areas will face even greater needs.

#### ***3. The demand for culturally and linguistically competent providers is growing.***

Disparities in health status and the increased ethnic diversity of the population require providers to develop improved cultural and linguistic competence in order to effectively and efficiently deliver high quality health services. Underrepresented minority groups are disproportionately affected by widening disparities in health status. To improve health outcomes, health professionals must be trained to understand the biologic, social, behavioral, and cultural causes of illness and health disparities, and to communicate effectively with patients from a variety of diverse backgrounds.

#### ***4. The health workforce does not reflect the ethnic diversity of the state.***

California is home to the largest and most diverse population in the nation, yet this diversity is not reflected in its health professions workforce.

Latinos, African Americans, and Native Americans are significantly underrepresented among students, faculty and clinically active providers in the state. Improving the diversity of the health workforce is an important strategy for improving health outcomes across the state.

### ***California Workforce Findings for Seven Major Health Professions***

*The findings outlined in this section are intended to inform decision-making and enrollment planning for the seven major health professions programs in which UC offers training. It is important to note, however, that allied health professionals in a wide range of other fields are also essential for meeting California's needs. Although beyond the scope of this review, the HSC recognizes that analysis of changing needs for other health professionals will help inform decision-making for programs and institutions offering training in those fields. Within this context, the following profession-specific findings are listed with consideration to both the urgency of state needs and the University's role in meeting them.*

#### ***5. California will face a shortage of physicians by 2015.***

As a result of rapid population growth, aging of the physician workforce, and lack of growth in medical education programs in California, the state will face a shortfall of up to 17,000 physicians (equivalent to a 15.9% shortage) by the year 2015. UC medical schools train two-thirds of all California medical students enrolled in programs leading to the MD degree and nearly half of all California medical residents pursuing specialty-specific clinical training. The absence of medical school enrollment growth for more than 25 years has limited the University's ability to respond to changing workforce needs and to accommodate the growing number of qualified students who must leave the state each year to attend medical school. Although California imports more than half of its physician workforce from other states and countries, projected national shortages of U.S. physicians within a decade underscore the need for new California strategies, including growth in UC programs.

#### ***6. California's nursing workforce crisis is serious and growing.***

The growth and aging of the California population and increased prevalence of chronic disease are among the factors driving California's unprecedented need for new nurses. The state currently ranks 49th in the nation in the number of nurses per capita and predictions indicate a shortfall of 60,000 RNs by 2020. The demand for baccalaureate-prepared nurses is particularly high in all health care sectors, yet UC offers no pre-licensure undergraduate nursing program. Enrollment in

the baccalaureate program at UCLA's School of Nursing was suspended in the early 1990s due to budget cuts, and UCLA now offers a Bachelor of Science (BSN) degree as part of the Master of Science in Nursing (MSN) completion program for RNs with an Associate (AA) degree. Insufficient capacity in the state's nursing educational system and insufficient faculty to support recommended enrollment increases, pose major barriers to responding to the deepening shortage. New nurse staffing ratios in California hospitals, if implemented, will result in still greater demand. UC's role in preparing graduate nurses and future faculty is critically important for responding to the need for new faculty across the state, including that of California State University campuses and private institutions offering baccalaureate nursing programs.

**7. The public health workforce is seriously deficient in training, preparation, and size.**

It is estimated that only 20% of the state's public health workforce has received formal training in public health. Recent studies have highlighted the threat that this poses as the Centers for Disease Control (CDC) work to increase the nation's bioterrorism preparedness, and as ongoing diseases (e.g., tuberculosis and HIV/AIDS) require continued public health efforts. California's public health agencies cite particular shortages of epidemiologists, environmental health scientists, and health educators. The private sector needs professionals trained in health services administration and management. Public health expertise has broadened to include cultural competence, genomics, informatics, and other skills; however, many public health workers lack formal training or advanced degrees in these and other specialized areas. UC's two Schools of Public Health, widely recognized for excellence in teaching and research, are an essential resource for strengthening the public health infrastructure in California and across the nation. Enrollment growth has not kept pace with increasing workforce demands, however, which limits UC's ability to respond to growing societal and professional needs.

**8. California's demand for pharmacists will continue to far outpace its supply.**

California presently ranks 48th in the nation in the number of pharmacists per capita. Rapid growth in the number of prescriptions written and dispensed; growing needs for pharmacists within the pharmaceutical and biotechnology industries; increases in the number of new drugs and pharmacies; and a widening scope of practice will further increase demand for pharmacy services. California pharmacists are assuming new roles as advisors for patients with chronic diseases; as industry experts on a wide spectrum of topics and in a variety of settings; and as central advisors in the development and assessment of new drugs. UC's advanced level training programs at UCSD and UCSF yield qualified graduates who are in strong demand to fill critical roles in the state's pharmacy workforce.

**9. California's veterinary workforce is unable to meet growing demand for veterinary services.**

The rate of relative growth in the number of veterinarians (about 1% per annum) places California 49th among all states in the nation. Demand for the broad range of highly sophisticated veterinary services is rising at an unprecedented pace as pets are increasingly regarded as family members by their owners. The demand for public practice veterinarians to ensure the health of food animals and safety of food, and to collaborate with public health systems in the event of an accidental or intentional animal disease outbreak is also growing too rapidly for current educational programs to meet. Veterinary faculty retirements nationwide are expected to deplete the supply of veterinary educators by 38% by the year 2014. UCD, home to the only School of Veterinary Medicine in the UC system, plays a critical role in meeting California's veterinary workforce needs with an estimated 75% of its graduates annually electing to practice in the state.

**10. There is a maldistribution of dentists and a growing shortage of dental school faculty.**

In California, the dentist-to-population ratio exceeds the national average. The challenges linked to maldistribution of dentists, however, remain unsolved. By federal standards, 20% of California communities containing 12% of the state's population, have shortages of dentists. A steady number of new graduates are needed to replace dentists who are leaving practice to retire, and to address current and predicted shortages of dental school faculty. The UCLA and UCSF Schools of Dentistry are nationally recognized for the depth, breadth, and caliber of their programs, the range of interdisciplinary degree offerings, the strength of their faculties, and the quality of the clinical services provided.

**11. There is a steady need for practicing optometrists and an increasing shortage of faculty.**

Studies predict that more optometrists are expected to enter practice than will be leaving it, leading one recent study to conclude that the supply of optometrists will increase steadily through 2030. Others argue that this growth will be offset by a number of factors, including the increased presence of managed care, the expanded scope of optometry practice, increases in vision insurance coverage, and greater numbers of optometrists practicing less than full time. These variables suggest that although no growth in enrollment is needed, there will be a steady need for new graduates over the next 10 years to replace those who are retiring or leaving clinical practice to pursue other activities. The UCB School of Optometry, ranked at the top of its field nationally and internationally, is highly selective and attracts growing numbers of talented students. Many of the brightest new graduates in the field apply

to UCB for residency training. However, because of the lack of stable support for salary and benefits for UC optometry residents, the school is able to support only 4 of 12 approved residency training positions. In contrast to residency training in medicine, dentistry, pharmacy, and veterinary medicine, which receive state support for a portion of the salary stipends for residents based at UC-operated hospitals and clinics, the School of Optometry receives no state or core university funding for this purpose. This budget limitation keeps the school from benefiting from many teaching and clinical care activities that a larger residency program would allow, such as expanded patient care services and increased preparation of specialists and new faculty.

### ***The University of California Health Sciences Instructional Programs***

#### ***12. UC health sciences programs are leaders in teaching, clinical care, and research.***

**Excellence in teaching:** UC health professions schools are in the top tier of education programs in medicine, dentistry, nursing, public health, pharmacy, optometry, and veterinary medicine. Competition for admission to these highly selective schools is intense and increasing steadily, with far more qualified applicants than can be accommodated. UC students bring diverse educational backgrounds and exceptional records of personal and academic achievement to these programs. The University's nationally recognized health sciences faculty design and deliver an updated, interdisciplinary curriculum that prepares students and residents as future health care providers. The breadth and depth of academic resources within the system also provide UC students and residents opportunities to participate in a variety of high-quality, advanced-degree programs and interdisciplinary research opportunities. UC's health sciences faculty comprise outstanding teachers and researchers, including seven Nobel laureates.

**Major statewide provider of clinical care:** UC medical centers, hospitals and clinics, and the faculty, students, and staff who learn and work in them, represent the fifth largest health delivery system in California, providing an estimated 3.6 million outpatient visits; 239,000 emergency room visits; and 135,000 inpatient admissions each year. As the second largest Medi-Cal provider in the state, the UC system makes major contributions toward meeting the needs of insured, underinsured, and uninsured Californians through a wide range of programs and state-of-the-art health services.

**Leader in health sciences research:** UC health sciences programs are highly regarded nationally and internationally for the breadth and depth of their federal, state, and privately funded biomedical and health science research activities. The research conducted at UC health

sciences schools was funded with over \$1 billion in grants from the NIH in fiscal year 2003 alone, ranking UC faculty and programs in the top tier nationally with respect to total research funding.

#### ***13. UC health sciences programs face major challenges.***

For the 2004-2005 fiscal year, the University will have sustained nearly \$490 million in base budget reductions; another \$420 million in cuts will have been offset with student fee increases, and an additional \$550 million "gap" reflects the absence of funding for cost-of-living adjustments, non-salary price increases, employee health benefit increases, and other expenses. With the exception of a one-year exemption for nursing, UC health sciences schools have taken proportional multi-year cuts, including an unprecedented 25% reduction in state support (offset by corresponding fee increases) in 2004 – 2005.

**Sustaining quality:** As UC health sciences schools absorb unprecedented budget cuts, they face increasing demands for faculty productivity in clinical settings; near-term shortages of faculty; and new challenges in balancing time for teaching research. As a result, UC health sciences schools are increasingly calling upon volunteer clinical faculty to help fulfill teaching responsibilities. Many teaching, research, and clinical facilities are aging and no longer meet current standards for teaching and/or clinical purposes. While commitment to quality remains the highest priority, the University's ability to maintain quality and access to education will be seriously jeopardized if further budget cuts occur.

**Maintaining access:** Recent multi-year fee increases for health sciences students will have immediate and long-term negative effects for both students and the communities they will serve. Fee increases and heavier debt loads will discourage many students from educationally and financially disadvantaged backgrounds from pursuing careers in the health sciences. The University's efforts to improve the diversity of its health professions classes will face greater challenges as a result. Increasing educational costs and student indebtedness will also create growing disincentives for graduates to consider careers and practice locations in medically underserved areas, which will hinder efforts to improve access to care in California's many health professional shortage areas.

**Meeting demands for education:** With the exception of the new UCSD School of Pharmacy which admitted its first class of 25 students in Fall 2001, educational opportunities in most of the health professional programs offered at UC have not increased for more than 25 years. California now leads the nation in the number of medical students who must leave the state to attend medical school. Because opportunities for medical education in California are roughly half of the national average (15.6 California medical students/100,000 population vs. 27.1 U.S. medical students/100,000), more California students now enroll

in medical schools outside of the state than in it. Opportunities for a veterinary education in California are among the lowest in the nation. And, since enrollment in UCLA's baccalaureate nursing degree program was suspended in 1995, college-bound high school graduates have not had an available option for pursuing an undergraduate degree in nursing anywhere in the UC system.

**Improving diversity among students and faculty:** The recruitment of underrepresented educators and researchers continues to be a major challenge in developing successful strategies for addressing disparities in health status and the needs of medically underserved communities. As health sciences programs engage in curricular reform and work to address the needs of all Californians, UC will need faculty who are able to care for patients and teach students from diverse backgrounds, to teach and demonstrate the importance of cultural and linguistic competence, to act as mentors and role models, and to encourage underrepresented minority students to consider health sciences careers in general, and academic and research careers in particular.

**Addressing faculty shortages:** An adequate supply of qualified faculty is essential for meeting the state's health workforce needs and for maintaining high standards in education, research, and patient care. The number of health professionals interested in faculty careers appears to be declining and shortages are expected to increase as faculty retirement rates continue to exceed the number of new graduates available to replace them. In recent years, the recruitment of faculty in veterinary medicine, dentistry, nursing, optometry, and pharmacy has become increasingly difficult due to limits in post graduate training opportunities, small candidate pools, salary limitations, and rising costs of living in California.

**Improving faculty morale:** The role of health sciences faculty is multifaceted. Faculty are expected to be fiscally productive in both the clinical and research arenas, and to advance within the academic system when they do so. Increasing demands for productivity mean less time for teaching in both inpatient and outpatient settings. These present-day realities offer reduced incentives for teaching, which is often unrewarded (i.e., not reimbursed or used for academic promotion). Schools are increasingly calling upon volunteer clinicians to help fulfill clinical teaching responsibilities. Challenges in meeting the growing demands of various public and regulatory bodies add to overall workloads, and require faculty time and expertise, but frequently this occurs without sufficient "release time" from teaching, patient care and research responsibilities.

**Meeting infrastructure and capital needs and developing new educational paradigms:** Many UC teaching, research, and clinical facilities are aging or no longer meet current standards ranging from seismic safety to suitability for current programmatic purposes. New

resources and strategies are needed to meet capital and infrastructure needs. UC health sciences schools have undergone major changes to better prepare providers to meet changing patient needs and to practice more effectively within changing health systems. Evidence-based learning, small group instruction, and use of technology and informatics are among the educational resources that faculty use to prepare students to provide care in a variety of settings using integrative, interdisciplinary, disease management models. New areas of curricular emphasis emerge on an ongoing basis, requiring that faculty learn and develop new expertise and teaching techniques. Investment in educational technologies and faculty development programs is essential for ensuring that UC programs meet current standards in education and patient care.

***14. Growth in UC health professions programs is necessary for meeting state needs.***

The University has a central role in educating and training both health care professionals and faculty for the state and the nation. While the growth recommended by the HSC in five of UC's health professions programs will not be sufficient for meeting all (or even most) state needs, an absence of growth in these programs will severely limit options in California.

***15. Planning and review of statewide health workforce data and the contributions of UC-trained health professionals is needed on an ongoing basis and is essential for state and regional planning.***

Reviewing data regarding California's health professions workforce, including periodic assessments of the supply and demand for health services within the context of state population needs, provides useful information for assessing the number of health care providers that California will need in the future. Workforce studies and new forecasting models are useful in planning and guiding policies to improve the supply and distribution of health professionals. The underdevelopment of the alumni databases for UC health sciences schools limits UC's ability to determine how and where its graduates are employed and how they contribute to the workforce. More information is needed to categorize the jobs and the sectors in which UC alumni work and to learn more about their educational and professional achievements and activities. Ongoing planning and coordination of these and other activities are needed to ensure that UC health science programs are poised and prepared to respond to California's needs.

## RECOMMENDATIONS

To meet the growing health workforce needs of the state, changes in the size, distribution and preparation of the California health workforce are required (see Findings in Section VI). As the largest health sciences instructional program in the nation and as the state's designated public research university, UC should continue to play a major role in training health professionals to meet the needs of Californians. As part of these efforts, UC should regularly review and respond to statewide and regional shortages for those health professions (and specialties and subspecialties) in which UC offers education and clinical training. For UC, these needs should be monitored in light of population, economic, and disease burden trends and should be addressed within the context of the University's overall mission and unique role in each profession.

To address California's current and future needs, growth in several UC health professions programs is required. In planning for such growth, UC must ensure that new programs and proposed enrollment increases meet and maintain high standards of quality in teaching, research, and patient care programs. In the wake of multi-year budget cuts and corresponding fee increases for students, maintaining the quality of UC training programs will require renewed efforts to restore competitive salaries for faculty and staff and adequate funding to meet current and projected capital needs. It will also require re-examination of the ramifications of fee increases for educational access and student indebtedness, and of the consequences of these changes as they relate to the career and practice choices of UC health sciences graduates. Although growth in UC programs will not be sufficient for meeting all (or even most) state needs, an absence of growth in UC programs would severely limit options in California. Within this context, and based upon the in-depth review undertaken as part of this systemwide planning effort, the HSC offers the following recommendations:

### ***Increasing Health Sciences Enrollments***

***1. UC should increase health sciences enrollments in professions and areas of compelling state need. New programs and recommended enrollment increases must meet high quality standards and should reflect consideration of both state needs and the University's role in meeting them. Within this context, profession-specific recommendations include:***

**MEDICINE:** UC should begin immediately to increase medical student enrollment growth at existing campuses; to increase resident enrollment in UC programs; and to plan for development of one or more comprehensive new medical education programs that should enroll new medical students by (or before) 2020. Specifically:

- UC medical schools should increase enrollment by 10% (a total of 65 new first-year medical students systemwide) by no later than 2008. Increases should begin as soon as possible. Campus-specific increases should reflect consideration of local priorities and/or constraints (e.g., space, current class size, etc).
- UC should increase enrollment in residency training programs by at least 15-20% (approximately 150-200 new first year residents systemwide), beginning as soon as possible.
- The University should begin immediately to assess the feasibility of developing one or more comprehensive new medical student education programs by (or before) 2020, provided that growth in existing programs is achieved and adequately funded. Appropriate sites for new programs should include regions of California that are medically underserved and/or projected to experience significant physician shortages in the future (e.g., the Inland Empire and the Central and South Valley).
- Planning for new programs at UC sites should anticipate an ultimate need for an increase of up to 200 additional UC medical students, in one or more new locations, phased in over time. A variety of approaches should be considered for achieving these goals, including adopting or designing innovative educational programs that involve new sites. This growth, together with growth at existing campuses, would result in up to 265 new medical school graduates annually.

**NURSING:** UC should participate actively in addressing California's nursing shortage by increasing enrollment in graduate education programs to meet the statewide demand for new nursing faculty. UC should re-establish a baccalaureate-level nursing program to offer UC-eligible students at least one option for pursuing undergraduate nursing training at UC and to increase the number of nursing school graduates who go on to graduate school. Specifically:

- The UCSF School of Nursing should add 32 new students per year to their three-year Master's Entry Program in Nursing (MEPN) at a proposed satellite site in an area of state need (e.g., Fresno or Sacramento). The existing UCSF-based MEPN program taps the pool of college graduates as a qualified group for entry level and advanced practice programs in nursing. Students enter the MEPN program with a commitment to full-time, intensive study for the first year of the three-year program, after which they are eligible to take the RN licensure exam. Students then work as RNs full- or part-time while completing coursework for the master's degree.



- The UCLA School of Nursing should expand access for community college graduates by increasing enrollment by 24 students (8 per year for 3 years) in its existing Associate Degree/Bachelor of Science/Master of Science in Nursing (AD/BS/MSN) program.
- To address the state's critical shortage of baccalaureate-prepared nurses, the UCLA School of Nursing previously proposed (in March 2002) re-establishment of the undergraduate nursing program with admission of 50 students per year as upper division nursing majors. This proposal should be reactivated, or others developed and considered.
- At the graduate level, the UCLA School of Nursing is now considering the implementation of a new Entry Clinical Nurse Leader Program with an enrollment of 50 students per year. This program would prepare those with a baccalaureate degree in other disciplines (biology, psychology, sociology, etc.) for professional bedside nursing.
- UC should expand graduate programs to prepare increasing numbers of graduate students for future careers as faculty or advanced practice nurses. To help meet the urgent need for new faculty, UCSF has proposed offering a specialty in nursing education for 12 students per year as a new major within the existing master's program. By placing emphasis on the teaching role (rather than on a clinical specialty) it is expected that a majority of these students would pursue faculty careers.

**PUBLIC HEALTH:** To respond to serious and growing deficiencies in the state and national public health workforce, UC should expand opportunities for preparing future public health professionals to work in settings and disciplines of greatest need.

- UC Schools of Public Health should increase enrollments in their master's degree programs by 25% by 2010, and by an additional 25% between 2010 and 2015. As part of this growth, particular attention should be given to fields that are responsive to workforce and community needs.
- Increased enrollments in public health, like those in other professions, will in some cases require capital improvements. Although two UC health sciences campuses that do not currently have public health schools are developing public health programs (UC Davis and UC Irvine), existing schools should be given consideration and priority with respect to initial enrollment increases.

**PHARMACY:** To meet growing demands for pharmacists in all disciplines and to better serve all Californians, UC should expand educational opportunities at both Schools of Pharmacy to prepare culturally and

linguistically competent pharmacists to care for California's growing and aging population. The expanding scope of pharmacy practice requires broad-based learning and learning tools that will fully prepare future pharmacy professionals.

- As soon as the planned phase-in of pharmacy student enrollment growth is complete at UCSD's new school of pharmacy (current plans call for growth from 25 first-year students in 2000 to 60 students in fall 2006), UC pharmacy schools should plan to increase enrollment by approximately 35 first-year students per year (from 60 to 70 first-year students per year at UCSD; and from 117 to approximately 140 first-year students per year at UCSF).
- The Schools of Pharmacy should concurrently plan to increase the number of first-year residency training and fellowship opportunities by as much as 50% of current enrollments at both campuses.

**VETERINARY MEDICINE:** To meet the rapid increase in demand for veterinary services, UC should initiate plans for sufficient growth to ensure that California's veterinary workforce remains nationally competitive in both number and quality. For the School to continue to successfully compete for new faculty and to maintain its leadership position within the profession, more graduate academic training positions for veterinarians must be created. Specifically:

- Once the new veterinary medicine educational facilities at UCD are complete (scheduled for 2006), the School of Veterinary Medicine (SVM) should increase enrollment by 29 students per year (increasing class size from 131 to 160 first year students); UCD residency positions should increase from 30 first-year positions to a total of 50 per year; and the number of graduate student positions should increase from 34 first-year graduate students to a total of 55 first-year graduate students.
- UC should begin immediately to assess the feasibility of establishing a second comprehensive new veterinary medicine program or school. One option for meeting the growing demands for veterinary services exists through the UC Veterinary Medicine Center-San Diego, a joint initiative between the UCD SVM and UCSD. Independent of site, however, workforce projections support the need for a comprehensive program to address anticipated shortfalls of approximately 200 veterinarians annually. If UC were to meet only half of this need, funding to support facilities and faculty to train an additional 400 DVM students (i.e., 100 students per year in each of four years) would be required. To fulfill the University's long-standing role in preparing future faculty, an additional enrollment of 90 residents (30 students per year) and 120 graduate students (30 students per year) would be appropriate.

**DENTISTRY:** Although no shortage of practicing dentists is predicted over the coming decade, faculty shortages exist in California and nationally. These shortages are expected to grow over the next 10 years as retirement rates increase. The state currently needs and will continue to require a steady number of new graduates who are committed to faculty careers, and to replace those who leave the field to retire or pursue other activities.

- The UCLA and UCSF Schools of Dentistry should maintain enrollments for dental students and dental residents at current levels.
- Both UC Schools of Dentistry should develop and support new initiatives to address statewide and national shortages of dental school faculty.

**OPTOMETRY:** No shortage of practicing optometrists is predicted in California or nationally. Like dentistry, however, the state will need a steady number of new graduates to replace those who leave the field to retire or pursue other activities. Unlike residents enrolled in UC medicine, dentistry, pharmacy, and veterinary medicine programs, UC Berkeley receives no state funding to help support stipends for its residents. As the top-ranked school in the nation, stable support for this small residency program is needed to train graduates who are committed to faculty careers and to replace those who leave the field to pursue activities other than patient care.

- The School of Optometry should seek approval for stable funding of stipends and benefits for its residency training program. Although the UCB Graduate Division has approved 12 slots, the School is able to fund only 4 of its 12 residency positions.
- To ensure an adequate critical mass for teaching and program quality, and to address corresponding accreditation concerns about the small size of the residency program, UCB should plan to increase first-year residency slots at UCB from 4 students per year (in 2004) to 15 by 2007, and to 20 by 2010.

### **Meeting the Needs of the Underserved**

**2. While many Californians benefit by access to state-of-the-art health services, millions lack adequate access to care. To help meet these needs, UC health sciences schools should: increase recruitment of students who possess a record of service or expressed commitment to caring for the underserved; develop focused curricula and training opportunities to prepare students for such service; collaborate and share resources with agencies serving those in need; and work to increase funding for and access to state, federal, and regional programs that provide incentives to recruit and retain clinicians in health professions shortage areas.**

### **Increasing Student and Faculty Diversity**

**3. UC should intensify efforts to increase student and faculty diversity by identifying best practices and developing model programs applicable for the health sciences and by developing and implementing comprehensive strategies that include: academic preparation, outreach, pre-college and college health sciences advising, improved access to scholarships and financial aid, and improved recruitment of students from medically underserved communities. New incentives should also be identified to improve the recruitment and retention of graduate students and faculty from groups who are underrepresented in the health professions.**

**ACADEMIC PREPARATION, OUTREACH, AND ADVISING:** To increase diversity of the student body, and ultimately that of the faculty, new and continuing efforts are needed. UC schools should develop and participate in academic enrichment programs designed to improve the preparation of high school and undergraduate students for health sciences careers and to increase awareness about educational opportunities in the health professions. UC should also create mentoring programs designed to encourage students from medically underserved communities to consider a health sciences career and to support those interests over time. Dedicated support for pre-college and college advising and for outreach activities should be stabilized; and continuing efforts should be made to improve the quality and consistency of health sciences advising.

**FINANCIAL AID AND SCHOLARSHIP SUPPORT:** Financial aid and scholarship support should be increased, including dedicated efforts and resources to meet the needs of financially and/or educationally disadvantaged students. This need has never been greater for UC health professions students who have experienced huge, multi-year fee increases in recent years and are graduating with unprecedented debt. In medicine, for example, educational costs and living expenses now total approximately \$45,000 annually (or approximately \$180,000 over 4 years) resulting in an average debt burden of \$120,000. This debt is expected to grow steadily as the near 25% fee increases imposed in fall 2004 take effect for all UC medical students. The magnitude of these recent changes is such that UC students graduate with substantially more educational debt than medical school graduates of private schools that are able to offer generous scholarship packages.

**ADMISSIONS AND RECRUITMENT:** Continuing efforts should be made within all UC health professions schools to review and adopt best practices to identify and recruit qualified students from educationally disadvantaged backgrounds and/or from medically underserved groups and communities throughout the state. UC health sciences schools should develop and/or maintain "pipeline" efforts to improve preclinical

sciences education; mentoring and preceptorship initiatives; and new and effective partnerships to recruit students from California Community College and California State University campuses.

**POST-BACCALAUREATE PROGRAMS:** UC post-baccalaureate programs in medicine and dentistry provide up to a year of training for students who are either applying to school for the first time or who have previously applied but failed to gain admission. These programs are targeted to meet the individual needs of students in areas ranging from improved academic preparation to review and assistance with the application process. UC post-baccalaureate programs have outstanding track records, as measured by the success of graduates in gaining admission to schools at UC or elsewhere, yet several were recently reduced in size as a result of state budget cuts. These programs should be continued with stable funding and expanded where possible.

### ***Developing New Curricula and Teaching Methods***

***4. UC health sciences programs should take leadership roles in developing and implementing curricular changes that are responsive to changing population health needs, student learning needs, public expectations, and applicable requirements for patient care and health professions education. UC should identify, develop and disseminate best practices for teaching and model programs for learning. Current areas of focus include but are not limited to:***

**INNOVATIVE TEACHING STRATEGIES:** UC schools should build on their successes in developing teaching methods that help students merge knowledge across subject boundaries and gain the integrative skills needed to care for patients in professional practice. This will require changes in faculty FTEs and support for changes in infrastructure.

**HEALTH DISPARITIES:** Significant disparities in health status and health outcomes exist between whites and other racial and ethnic groups. For many, race and ethnicity-based disparities in health status are a result of limited access to health services, lack of adequate insurance, and inadequate availability of health care professionals. Many state and national policy initiatives are driven by the need to improve access to care, reduce health disparities, and respond more effectively to population-based needs. To improve health outcomes for Californians, health professionals, faculty, and researchers will need a greater understanding of the disparities that exist between racial and ethnic groups. UC schools should assume leadership roles in this area, linking research and teaching to improved patient care.

**CULTURAL AND LINGUISTIC COMPETENCE:** UC schools should ensure that health professions graduates are prepared to work and provide health services in a culturally and linguistically diverse world. Enhanced

education in these areas should occur through a variety of mechanisms, including collaboration with culture-focused academic programs (e.g., sociology, ethnic studies); partnerships with community organizations that address cultural issues; and/or focused curricula within the overall instructional program. UC schools should develop and maintain efforts to increase cultural and linguistic competence by seeking to instill values of multiculturalism, tolerance, and professionalism and by developing new curricula that are responsive to changing societal health needs.

**NEW AND/OR EXPANDED DEGREE PROGRAMS:** UC schools should develop and expand innovative mechanisms for interaction and collaboration in teaching, research, and clinical care across the health professions. Such efforts should include inter- and trans-disciplinary training opportunities between health professions schools on the same campuses; development of new joint/combined degree programs; and use of clinical training sites that foster collaboration among professionals and promote interdisciplinary models of care.

### ***Recruiting and Retaining Faculty***

***5. UC schools should develop and support new and existing initiatives to improve competitiveness in the recruitment and retention of faculty; to improve faculty productivity and morale; and to preserve and sustain the University's role and record of achievement in preparing new faculty for UC, the state, and the nation.***

**RECRUITMENT AND RETENTION:** To retain current faculty and restore UC's competitiveness in the recruitment of new faculty, renewed efforts should be made to provide competitive salaries, which presently lag behind comparison universities by approximately 10%. Periodic review of benefits and clinical compensation plans to ensure competitiveness is also needed. Those health professions that do not presently utilize clinical compensation plans should consider the advantages and disadvantages of creating them. Innovative programs are also needed to assist new faculty in relocating and finding affordable housing near UC campuses.

**PROFESSIONAL DEVELOPMENT:** UC schools should provide professional development strategies that enable faculty to carry out teaching responsibilities, pursue scholarly activities, and develop and maintain focused research programs. Faculty development opportunities and rewards should be created to maximize acceptance and implementation of new curricula and teaching methods, and to support interdisciplinary collaboration in teaching, research, and clinical care.

**PREPARATION OF NEW FACULTY:** UC health sciences schools play important roles in preparing and training future faculty and utilize a variety of recruitment and development strategies in doing so. Faculty

shortages (at UC and nationally) currently exist in many of the health professions and will grow over the coming decade. UC schools should continue their leadership roles in preparing and training new faculty and should actively recruit students interested in future faculty careers. Provision of grants and opportunities to repay financial obligations through teaching should be increased; programs involving mentorship, specialty and teacher training, and other development efforts should be offered to help prepare graduate students for faculty careers; and adequate support (funds, staff, and time) to allow junior faculty to create research agendas should be provided.

### ***Expanding Graduate, Postgraduate, and Continuing Education***

While this report focuses primarily on the need for growth in health professions programs that produce graduates who are trained to provide direct patient care, it is important to emphasize that graduate, postgraduate, and continuing education programs are critical elements of all UC health sciences programs. These include academic and public service programs that prepare advanced-level practitioners, faculty, researchers, policy makers, and future leaders.

***6. Although beyond the scope of this report, UC health sciences schools should review and consider the need for growth in other health sciences graduate, postgraduate, and continuing professional education programs. New and creative programs should be developed that promote distance learning, enhance executive education, encourage life-long learning, and facilitate continuing health professions education. Such programs should be expanded into new formats and locations, enabling practitioners throughout the state to participate. In public health, for example, new programs could increase both the number and qualifications of those working in the field.***

### ***Addressing Capital and Infrastructure Needs***

***7. UC health sciences schools should develop new plans and strategies for meeting and funding capital, infrastructure, and technology needs.***

As UC health sciences schools grapple with budget cuts, deferred maintenance, delays in capital projects, and plans for growth, new strategies will be necessary for addressing and funding these needs. Upgrades in many teaching, research and clinical facilities are currently needed, and other changes will be required as health sciences education and clinical training move away from lecture-based to small-group instruction and, in many cases, from inpatient academic health centers to a variety of outpatient, ambulatory care, and other settings. Investments in new technologies for teaching and providing patient care are also

needed to meet current educational and professional standards, to improve clinical instruction and patient care, and to increase productivity and efficiency in all sectors of the health sciences enterprise.

### ***Planning and Coordination***

***8. UC should ensure that ongoing coordination, review, and planning continues with respect to proposed changes in UC health professions programs, and that health sciences schools remain informed and participate actively in these efforts.***

UC health sciences enrollments have not increased appreciably in size for nearly a quarter of a century. As consideration is given to the recommendations outlined in this report, ongoing coordination, review, and planning will be needed. Systemwide coordination involving proposed health sciences enrollment growth over the next decade should be paired with a continuing commitment to monitor state and national health and health workforce needs and to identify recommended changes. Improved tracking of UC health sciences alumni and their career and practice activities would also be a valuable resource as part of the University's ongoing planning efforts. The HSC is prepared to assist with these efforts as directed.

**Appendix A*****Universitywide Health Sciences Committee*****NEIL H. PARKER, MD (Chair)**

Senior Associate Dean  
 Graduate Medical Education/Student Affairs  
 School of Medicine  
 University of California, Los Angeles

**ANTHONY J. ADAMS, OD, Ph.D**  
 Professor—School of Optometry  
 University of California, Berkeley

**PHILIP J. DISAIA, MD**  
 Professor, Obstetrics & Gynecology  
 School of Medicine  
 University of California, Irvine

**KATHLEEN A. DRACUP, RN, DNS**  
 Dean, School of Nursing  
 University of California, San Francisco

**KATHERINE FLORES, MD**  
 Director, Latino Center for Medical Education  
 and Research  
 Fresno Medical Education Program  
 University of California, San Francisco

**EDWARD H. HOLMES, MD**  
 Vice Chancellor  
 Dean, School of Medicine  
 University of California, San Diego

**CATHRYN L. NATION, MD**  
 Executive Director, Academic Health Sciences  
 Office of Health Affairs  
 University of California

**BENNIE I. OSBURN, DVM, Ph.D.**  
 Dean, School of Veterinary Medicine  
 University of California, Davis

**LAWRENCE H. PITTS, MD**  
 Professor, Neurosurgery  
 School of Medicine  
 University of California, San Francisco

**LINDA SARNA, RN, DNSc, FAAN**  
 Professor  
 School of Nursing  
 University of California, Los Angeles

**STEPHEN SHORTELL, Ph.D.**  
 Dean, School of Public Health  
 University of California, Berkeley

**PALMER TAYLOR, Ph.D**  
 Professor/Chair, Pharmacology  
 School of Pharmacy  
 University of California, San Diego

**MICHAEL E. WINTER, Pharm.D**  
 Professor of Clinical Pharmacy  
 School of Pharmacy  
 University of California, San Francisco

**MICHAEL V. DRAKE, MD**  
 [Ex Officio]  
 Vice President--Health Affairs  
 Office of the President  
 University of California

**STAFF****GWEN ALLAMBY**

Administrative Specialist  
Office of the President  
University of California

**DENA L. BULLARD, MHS**

Senior Analyst  
Office of the President  
University of California

**ANDREA GERSTENBERGER, Sc.D.**

Principal Policy Analyst  
Office of the President  
University of California

**CATHERINE NANCARROW**

Health Sciences/AGRP Administrator  
Office of the President  
University of California

## Appendix B

### *Universitywide Health Sciences Committee Subcommittee on Nursing*

#### **Cathryn L. Nation, MD (Chair)**

Executive Director, Academic Health Sciences  
Office of Health Affairs  
University of California

#### **Katherine G. Baker**

Associate Dean of Student Affairs  
School of Nursing  
University of California, Los Angeles

#### **Ruth M. Coveil**

Associate Dean  
School of Medicine  
University of California, San Diego

#### **Kathleen Dracup, RN, Ph.D.**

Dean  
School of Nursing  
University of California, San Francisco

#### **Dorrie Fontaine, Ph.D.**

Associate Dean for Academic Programs  
School of Nursing  
University of California, San Francisco

#### **Betty Ingell**

Director, Family Nurse Practitioner  
Special Programs  
UC Davis Medical Center  
University of California, Davis

#### **Ellen M. Lewis**

Director Student Training Center  
School of Medicine - Nursing Advancement  
University of California, Irvine

#### **Karen R. Sechrist**

Consultant  
CSPCN Project Investigator  
University of California, Irvine

#### **STAFF**

#### **Gwen Allamby**

Administrative Specialist  
Office of the President  
University of California

#### **Ellen Grassi Brown**

Senior Analyst  
Office of the President  
University of California

## Appendix C

### *Universitywide Health Sciences Committee Subcommittee on Public Health*

#### **Cathryn L. Nation, MD (Chair)**

Executive Director, Academic Health Sciences  
Office of Health Affairs  
University of California

#### **Janet M. Coffman, MPP**

Doctoral Student  
Program in Health Services & Policy Analysis  
School of Public Health  
University of California, Berkeley

#### **Stephen Shortell, Ph.D.**

Dean, School of Public Health  
University of California, Berkeley

#### **Gerald Kominski, PhD**

Associate Dean of Academic Programs  
School of Public Health  
University of California, Los Angeles

#### **STAFF**

#### **Gwen Allamby**

Administrative Specialist  
Office of the President  
University of California

#### **Jeffrey S. Oxendine, MBA, MPH**

Executive Director  
Center for Public Health Practices  
School of Public Health  
University of California, Berkeley

#### **Catherine Nancarrow**

Health Sciences/AGRP Administrator  
Office of the President  
University of California

#### **Richard M. Scheffler, PhD**

Professor, Health Economics & Public Policy  
School of Public Health  
University of California, Berkeley

#### **Sohail Yousufi, MPH**

Intern, School of Public Health  
University of California, Berkeley



## Appendix D

### Acknowledgements

The Health Sciences Committee wishes to thank the many individuals who made important contributions to the Committee's work and to this Report. To begin, the Committee would like to acknowledge the generous grant support provided for this project by The California Endowment, a private statewide foundation whose mission is to *expand access to affordable, quality health care for underserved individuals and communities, and to promote fundamental improvements in the health status of all Californians*. The Committee extends its special thanks to the Endowment's President, Dr. Robert Ross, for his ongoing support of the University of California's efforts to train a health workforce that meets the needs of this state. We thank our former Program Officer, Ms. Jai Lee Wong, our Program Associate, Mr. George Zamora, and our Program Assistant, Ms. Frida Hatami for their guidance and feedback.

The Committee is grateful for the information and perspectives provided by individuals throughout the University of California's health sciences system. These contributions were valuable in helping us understand both profession-specific and workforce policy issues, and in developing recommendations that the University might consider as it plans for the future. For their added assistance with the profession-specific studies, the Committee thanks Charles Bertolami, DDS, DMedSc, Dean; Julian Ponce, C.PA./J.D., MBA, Dean of Administration; and Troy Daniels, DDS, MS, Dean of Academic Affairs, all of the UCSF School of Dentistry; Dennis M. Levi, OD, PhD, FAAD, Dean; and Michael Harris, OD, JD, MS, FAOD, Director of Policy and Planning, of the UCB School of Optometry; Linda Ybarra, Executive Officer, Office of the Dean, UCD School of Veterinary Medicine; and Beth Mertz, MPA, Project Director, UCSF Center for the Health Professions.

The Committee also wishes to thank Edward Salsberg, M.P.A., former Director of the Center for Workforce Studies, State University of New York, Albany; his project leader, Gaetano Forte, and their staff for their work conducting a comprehensive assessment of physician workforce needs for the state, by region, through the year 2020. This work was commissioned by our committee and funded by the grant from The

California Endowment. We add our appreciation to Richard Scheffler, Ph.D. Director, and his staff of researchers at the Nicholas C. Petris Center, UC Berkeley, who presented the findings of their June 2004 report, [Is There A Doctor in the House: An Examination of the Physician Workforce in California](#) to the committee as part of its deliberations regarding the physician workforce.

The Committee also thanks the members of its two subcommittees, the **Subcommittee on Nursing**: Kay Baker, R.N., M.N., Associate Dean of Student Affairs, School of Nursing, UCLA; Ruth M. Covell, M.D., Associate Dean for Programs and Policy, School of Medicine, UCSF; Kathleen Dracup, RN, FNP, DNSc, FAAN, Dean, School of Nursing, UCSF; Betty Ingell, Director, Family Nurse Practitioner Program, UCD; Ellen M. Lewis, Director, Student Training Center, School of Medicine, UCI; and Karen R. Sechrist, Ph.D., R.N., CSPCN Project Investigator, UCI; and the **Subcommittee on Public Health**: Janet M. Coffman, MPP, Research Associate, School of Public Health, UCB; Gerald Kominski, PhD, Associate Director, Center for Health Policy Research, UCLA; Jeffery S. Oxendine, MBA, MPH, Executive Director, Center for Public Health Practice, School of Public Health, UCB; Richard M. Scheffler, PhD, Director, Nicholas C. Petris Center, School of Public Health, UCB; and Stephen Shortell, Ph.D., M.P.H., Dean, School of Public Health, UCB.

The Committee gratefully acknowledges the contributions and guidance provided by the University of California Vice President for Health Affairs, Michael V. Drake, MD. We express our gratitude and special appreciation to Cathryn Nation, MD, Executive Director, Academic Health Sciences, who served as both a member of the committee and the senior manager for the project within the Office of Health Affairs from the start of this effort to its completion. And finally, we offer our sincere thanks and appreciation to our bright and dedicated staff: Dena Bullard, MHS, Senior Analyst; Andrea Gerstenberger, ScD, Principal Policy Analyst; Catherine Nancarrow, Health Sciences Specialist; and Gwen Allamby, Administrative Specialist. This project could not have been completed without their patience, hard work and enthusiasm.

## Appendix E

### REFERENCES

#### Dentistry

- A. Noonan and C. Evans, "The Need for Diversity in the Health Professions." *Journal of Dental Education* 67 no. 9 (2003): 1030-1033.
- American Dental Association (ADA), Survey Center, Distribution of Dentists; AMA, Physician Characteristics and Distribution in the U.S.; and U.S. Bureau of the Census, "Resident Population Estimates of the United States by Sex, Race, and Hispanic Origin: April 1, 1990 to July 1999, with Short-Term Projection to November 1, 2000." Available from: [eire.census.gov/popest/archives/national/nation3/intfile3-1.txt](http://eire.census.gov/popest/archives/national/nation3/intfile3-1.txt). [cited 2002 May 8].
- ADA, Survey Center, *Survey of Dental Practice, 1996*. Chicago: American Dental Association; 1997.
- American Dental Association, Survey Center. Distribution of Dentists in the United States by region and State, 1998 and 1999. U.S. Bureau of the Census. Statistical Abstract of the United States, 2001.
- ADA. Dentistry Definitions. Available at: <http://www.ada.org/prof/ed/specialties/definitions.asp>. [cited 2004, May 23].
- B. Bloom et al., "Dental Services and Oral Health: United States, 1989," *Vital Health Stat* 10, no. 183 (1992): 1-95.
- B.A. Waldman, "The Manpower Issue in Pediatric Dental Education: Our Job is not Finished!" *Pediatric Dentistry* 19 (1997): 185-188
- Bureau of Labor Statistics. 1999 Occupational Employment and Wage Estimates, Feb. 2002. Available at: [http://www.bls.gov/oes/1999/oes\\_29He.htm](http://www.bls.gov/oes/1999/oes_29He.htm). [cited 2002 May 9].
- C. Manuel-Barkin and E. Mertz, et al., *Distribution of Medicaid Dental Services in California*. San Francisco: Center for California Health Workforce Studies, Center for the Health Professions, Oct. 2000.
- D. Krause et al., "Maximizing the Dental Workforce: Implications for a Rural State." *The Journal of Dental Hygiene* 77 no. IV (2003): 253-261.
- Delta Dental. Dental is Different from Medical. Available at: [http://www.deltadentalca.org/tre/tre\\_dandm.html](http://www.deltadentalca.org/tre/tre_dandm.html). [cited 2000, Mar 10].
- E. Mertz and E. O'Neil, "The Growing Challenge of Providing Oral Health Care Services to All Americans", *Health Affairs* 21, no. 5 (2002): 65-77.
- E. Mertz et al., *Geographic Distribution of Dentists in California*. San Francisco: Center for California Health Workforce Studies, Jan. 2000.
- E. Salsberg et al., *California Physician Workforce Supply and Demand through 2015 (draft)*. Albany: The Center for Health Workforce Studies. 2004.
- E.A. Mertz and K. Grumbach, "Identifying Communities with Low Dentist Supply in California," *Journal of Public Health Dentistry* 61, no. 3 (2001): 172-177.
- E.A. Mertz et al., *Improving Oral Health Systems in California: A Report of the California Dental Access Project*. San Francisco: UCSF Center for the Health Professions, 2000.
- H. Gift et al., "The State of the Nation's Oral Health: Mid-Decade Assessment of Healthy People 2000," *Journal of Public Health Dentistry* 56 no. 2, (1996): 84-91.
- H. Livingston et al., "The Aging and Diminishing Dental Faculty." *Journal of Dental Education* (2004): 345-354.
- Health Resources and Services Administration (HRSA). Bureau of Health Professions, Office of Research and Planning. Dental Supply Model, 1999. Available at: <http://www.hrsa.dhhs.gov/bhpr/healthworkforce/factbook.htm>. [cited 2004 April 15].
- Institute of Medicine. *Dental Education at the Crossroads: Challenges and Change*. M.J. Field, ed. Washington, DC: National Academy Press, 1995.
- Institute of Medicine. *In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce*. Washington, DC: National Academy Press, 2004.

M. Hurlbutt, *Charting a Course for the Future*. California Dental Hygienists Association. Available at: <http://www.cdha.org/docs/hurl.htm>. [cited 2000 Aug. 3]

N.K. Haden et al. *Improving the Oral Health Status of All Americans: Roles and Responsibilities of Academic Dental Institutions. The Report of the ADEA President's Commission*, March 2003.

N.K. Haden et al., "Dental School Faculty Shortages Increase: an update on future dental school faculty." *Journal of Dental Education* 64 no. 9 (2000): 657-673.

N.K. Haden et al., "Meeting the Demand for Future Dental School Faculty: Trends, Challenges, and Responses." *Journal of Dental Education* 66 no. 9 (2002): 1102-13.

U.S. Department of Health and Human Services (DHHS). *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.

U.S. Department of Health and Human Services. *A National Call to Action to Promote Oral Health*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention and the National Institutes of Health, National Institute of Dental and Craniofacial Research. NIH Publication No. 03-5303, May 2003.

U.S. General Accounting Office. *Oral Health in Low-Income Populations*. GAO/HEHS-00-72. 2000 Apr.

### Medicine

2005-2006 Budget Draft, University of California Office of the President, October 2004.

ACP's Comments on the Council on Graduate Medical Education's (CoGME) draft report entitled *Reassessing Physician Workforce Policy Guidelines for the U.S. 2000-2020*. May 25, 2004. Available at: <http://www.acponline.org/hpp/CoGME.htm>.

Alliance for Academic Internal Medicine (AAIM), Medical Education Regulatory and Legislative Information Network (Merlin). *COGME Draft Report Finds Likely Shortage of Physicians; AAIM Solicits Member Comments*. May 7, 2004.

American Association of Medical Colleges, "Applicants to U.S. Medical Schools Increase." Press release, November 4, 2003. Available at: <http://www.aamc.org/newsroom/pressrel/2003/031104.htm>.

American Association of Medical Colleges. *CoGME Recommends Expansion of Physician Workforce*. Available at: <http://www.aamc.org/advocacy/library/washhigh/2004/080604/start.htm>

Barzansky B and Etzel SI, "Educational Programs in U.S. Medical Schools, 2003-2004." *JAMA* 2004;292:1025-1031.

Brotherton SE, Rockey PH, and Etzel SI, "U.S. Graduate Medical Education, 2002-2003." *JAMA* 2003;290:1197-1202.

Brotherton SE, Rockey PH, and Etzel SI, "U.S. Graduate Medical Education, 2003-2004." *JAMA* 2004;292:1032-1037.

Families USA. *Californians without Health Insurance*, June 2004.

Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion: *Chronic Diseases, Risk Factors, and Preventive Services: Burden of Chronic Diseases, 2001*. Available: <http://apps.nccd.cdc.gov/BurdenBook/>.

Coffman J, Quinn B, Brown, T, et al. *Is There a Doctor in the House? An Examination of the Physician Workforce in California over the Past 25 Years*. Nicholas C. Petris Center on Health Care Markets and Consumer Welfare, University of California, Berkeley, June 2004.

Cooper RA, "Medical Schools and Their Applicants: An Analysis." *Health Affairs* 2003;22:71-84.

Council on Graduate Medical Education. *Eighth Report: Patient Care Physician Supply Requirements*. November, 1996.

Elliott VS, "Physician Shortage Predicted to Spread." *Amednews.com*, January 5, 2004. Available at: <http://www.ama-assn.org/amednews/2004/01/05/pr120105.htm>.

Escarce JJ, Polsky D, Wozniak, GD, and Kletke PR, "HMO growth and the geographical redistribution of generalist and specialist physicians, 1987-1997." *Health Serv Res* 2000;34:825-848.

Greene J, "Physician retire earlier in HMO-saturated markets." *AMNews* April 23/30, 2001.

Hallock JA, Seeling SS, and Norcini JJ, "The International Medical Graduate Pipeline." *Health Affairs* 2003;22:94-96.

Health Sciences Education Institute Report. Division of Health Affairs, University of California Office of the President, June 2004.

McMahon GT, "Coming to America – International Medical Graduates in the United States." *N Engl J Med* 2004;350:24.

National Resident Matching Program, 2004 Match Data. Available: [http://www.nrmp.org/res\\_match/tables/table6\\_04.pdf](http://www.nrmp.org/res_match/tables/table6_04.pdf); [http://www.nrmp.org/res\\_match/tables/table2\\_04.pdf](http://www.nrmp.org/res_match/tables/table2_04.pdf)

Newton DA and Grayson MS, "Trends in Career Choice by U.S. Medical School Graduates." *JAMA* 2003;290:1179-1182.

Salsberg E and the Center for Health Workforce Studies. *California Physician Workforce: Supply and Demand through 2015*. University at Albany, State University of New York, August 2004.

Salsberg E and the Center for Health Workforce Studies. *Residency Training Outcomes by Specialty in 2002 for California: A Summary of Responses to the 2000-2002 CA Resident Exit Surveys*. University at Albany, State University of New York, March 2003.

Salsberg ES and Forte Gaetano J, "Trends in the Physician Workforce, 1980-2000." *Health Affairs* 2002; 21:165-173.

Terry K, "Jobs 2004: Primary Care Outlook." *Medical Economics*, May 2004. Available at: <http://www.memag.com/memag/article/articleDetail.jsp?id=108927>.

U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Analysis: *Changing Demographics and the Implications for Physicians, Nurses, and Other Health Professionals*, Spring 2003.

U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions: *State Health Workforce Profiles: California*. Available at: <ftp://ftp.hrsa.gov/bhpr/workforceprofiles/california.pdf>.

University of California Health Professions and Outreach. *An Overview of Outreach and Service Programs Sponsored by the University's Schools of Medicine, Dentistry, and Optometry*. Division of Health Affairs, University of California, Office of the President, March 2003.

## **Nursing**

American Association of Colleges of Nursing, "AACN endorses Nurse Employment and Education Development Act aimed at addressing the nation's nursing shortage." Available at: <http://www.aacn.nche.edu/Media/NewsReleases/needact.htm>. (cited 2001, June 15).

American Association of Colleges of Nursing. AACN supports the Nurse Reinvestment Act aimed at addressing the nation's nursing shortage. Press Release. Available at: <http://www.aacn.nche.edu/Media/NewsReleases/reinvestment.htm>. (cited 2001, June 15).

American Hospital Association. AHA Workforce Survey Results. Workforce Data Fact Sheet. Available at: <http://www.aha.org/workforce/resources/FactSheet80605.asp>. (cited 2001, June 15).

American Organization of Nursing Executives. *Perspectives on the Nursing Shortage: A Blueprint for Action*. Washington, DC. Author. (2000).

Anderson, C.A., "Academic nursing: a desirable career?" *Nursing Outlook*, 46, 5-6. (1998).

Bachelor of Science in Nursing, statewide distance BSN program in partnership with Kaiser Permanente. Program overview available at: <http://nursing.fullerton.edu/Program/BSNDistance.html>

Barnes, C and Sutherland, S. Survey of Registered Nurses in California, 1997. Sacramento, CA: California Department of Consumer Affairs, Board of Registered Nursing. (1999).

Berlin, L.E., Bednash, G.D., and Stennet, J. 2000-2001 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing. Washington, DC: American Association of Colleges of Nursing. (2001).

Berlin, L.E., Bednash, G.D., and Stennet, J. 2000-2001 Salaries of Instructional and Administrative Nursing Faculty in Baccalaureate and Graduate Programs in Nursing. Washington, DC: American Association of Colleges of Nursing. (2001).

Board of Registered Nursing. 2000-01 List of Approved Schools [EDP-1-05]. Sacramento: Author. (2000, September).

Buerhaus, P.I., Staiger, D.O., and Auerbach, D.I., "Implications of an aging registered nurse workforce." *JAMA*, 283(22),2985-2987. (2000).

Bureau of Labor Statistics. Registered Nurse Occupation. National Industry-Occupation Employment Matrix. [1999, November 30]. Available at: <http://stats.bls.gov/asp/oepl/niuem/empiohm.asp>. [cited 2001, June 15].

California Healthcare Association, "Legislative Proposal to Increase RN Graduates Wins Approval of Key State Senate Committee - SB 317 Provides \$120 Million to Address Severe Nurse Shortage." Press Release. [2001, April 25]. Available at: [http://www.calhealth.org/adv\\_media.pr2001\\_0425a.htm](http://www.calhealth.org/adv_media.pr2001_0425a.htm). [cited 2001, June 8].

California Healthcare Association, "California hospitals sponsor legislative package to address nurse shortage." Press Release. [2001, February]. Available at: [http://www.calhealth.org/adv\\_media.pr2k10227.htm](http://www.calhealth.org/adv_media.pr2k10227.htm). [cited 2001, June 15].

California Strategic Planning Committee for Nursing. Additional RN Pre-Licensure Slots Needed. Issue Summary. [2000, May]. Available at: <http://www.ucihs.uci.edu/cspcn>.

California Strategic Planning Committee for Nursing. Survey of Nursing Program Deans and Directors Regarding Faculty Vacancies. Unpublished. [2001, June].

The California State University, The California Community Colleges, The University of California, Association of Independent California Colleges and Universities. [June 2000]. *Educating California's Future Work Force Report*. AB Scott, 655. Sacramento, CA: CSU, CCC, UC, and AICCU.

Campbell, P. Population projections: States, 1995-2025. Current Population Reports, P25-1131. U.S. Bureau of the Census, Population Division, May, 1997.

Coffman, J., and Spetz, J., "Maintaining an adequate supply of RNs in California." *Image: The Journal of Nursing Scholarship*, 31(4), 389-393. [1999].

Coffman, J., Spetz, J., Seago, J.A., Rosenoff, E., and O'Neil, E. *Nursing in California: A Workforce Crisis*. San Francisco: UCSF Center for the Health Professions. [2001]. Available at: <http://www.futurehealth.ucsf.edu/CWL/nursecrisis.pdf>

Department of Veterans Affairs. VA commits \$50 million to new national nursing initiative. Press Release. [1998, December 18]. Available at: <http://www.va.gov/pressrel/98nni.htm>. [cited 2001, June 22].

Division of Nursing, Bureau of Health Professions, Department of Health and Human Services. *Preliminary Findings from the National Sample Survey of Registered Nurses, 2000*. [February, 2001]. Washington, DC: Author. Available at: <http://bhpr.hrsa.gov/>

Dower, C., McRee, T., Briggance, B., and O'Neil, E. *Diversifying the Nursing Workforce: A California Imperative*. San Francisco: UCSF Center for the Health Professions. [2001] Available at: [http://www.futurehealth.ucsf.edu/pdf\\_files/NDiv.pdf](http://www.futurehealth.ucsf.edu/pdf_files/NDiv.pdf)

"Eight local hospitals on board SDSU Nurses Now Program: \$1.6 million program to train 150 additional nurses within four years." [May, 2001]. Press Release. Available at: <http://advancement.sdsu.edu/marcomm/Spring2000News/ReleasesONLY/NursesNow.html>. [cited 2001, June 16].

Fox, S., Walker, P., and Bream, T. *California's Framework for Competency-based Role Differentiation in Nursing*. Sacramento, CA: Association of California Nurse Leaders. [1999].

Frase-Blunt, M. *Faculty Shortages Intensify Nation's Nursing Deficit*. AACN Issues Bulletin. [1999]. Available at: <http://www.aacn.nche.edu/Publications/issues/IB499WB.htm>. [cited 2001, May 15].

Freudenheim, M., Villarosa, L. [New York Times], "Dire Predictions on Nursing Shortage Across Nation, Patient Care in Peril," Report Says. San Francisco Chronicle. [2001, April 8]. Available at: <http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2001/04/08/MN182004.DTL>. [cited 2001, June 8].

Gupta, S. [CNN Medical News], "Special Report: U.S. nursing shortage 'going into crisis.'" CNN.com. [2001, May 7]. Available at: <http://www.cnn.com/2001/Health/05/07/nursing.shortage/index.html>. [cited 2001, June 8].

Hinshaw, A.S., "A continuing challenge: the shortage of educationally prepared nursing faculty." *Online Journal of Nursing Issues*, 6(1, Manuscript #3). [2001]. Available at: [http://www.nursingworld.org/ojin/topic14/tpc14\\_3.htm](http://www.nursingworld.org/ojin/topic14/tpc14_3.htm).

Moses, E.B. *The Registered Nurse Population, March 1996: Findings from the National Sample Survey of Registered Nurses*. Washington, DC: Health Resources & Services Administration, Bureau of Health Professions, Division of Nursing. [1997].

Panel on the Future of the Health Care Labor Force in a Graying Society. *Who will care for each of us? Panel Report*. Chicago: University of Illinois, College of Nursing, Nursing Institute. (2001, May). Available at: [http://www.uic.edu/nursing/nursinginstitute/policy/final\\_report.htm](http://www.uic.edu/nursing/nursinginstitute/policy/final_report.htm). (cited 2001, June 15).

Personal Communication. K. Baker, Associate Dean for Student Affairs, School of Nursing, UCLA. (2001, June).

Personal communication. M. Fritz, Nursing Data and Analysis Staff, Division of Nursing, Bureau of the Health Professions, HRSA. (2001, January).

Personal communication. R. Terry, Executive Officer, California Board of Registered Nursing. (2001, February).

Peterson, C., "Nursing shortage: not a simple problem - no easy answers." *Online Journal of Nursing Issues*, 6(1, Manuscript #1). (2001). Available at: [http://www.nursingworld.org/ojin/topic14/tpc14\\_1.htm](http://www.nursingworld.org/ojin/topic14/tpc14_1.htm).

Sechrist, K.R., Lewis, E.M., and Rutledge, D.N. *Planning for California's Nursing Work Force: Phase II Final Report*. Sacramento, CA: Association of California Nurse Leaders. (1999). Available at: <http://www.ucihs.uci.edu/cspcn>.

Sechrist, K.R., Lewis, E.M. and the California Strategic Planning Committee for Nursing. *Planning for California's Nursing Work Force: Final Report of the Nursing Work Force and Education Forecasting Initiative*. Sacramento, CA: ONE-California, 1996.

Sixth National Sample Survey of Registered Nurses: 1996 [Survey findings on compact disk, PB97-503437]. Bethesda, MD: Department of Health and Human Services, Division of Nursing, Nursing Data and Analysis. (1996).

Staiger, D.O., Auerbach D.I., and Buerhause, P.I., "Expanding career opportunities for women and the declining interest in nursing as a career." *Nursing Economics*, 18(25), 230-236. (2000).

State of California, Department of Consumer Affairs, Board of Registered Nursing. License Data, 1990-2001. Unpublished Reports.

State of California, Department of Consumer Affairs, Board of Registered Nursing. Annual School Reports, 1994-2000. Unpublished Reports.

State of California, Employment Development Department, Labor Market Information Division. *Employment Projections by Occupation*. Sacramento: Author. (1998, July).

Stringer, Heather, "Frozen assets." *Nurseweek*. (2001, June 4). Available at: <http://www.nurseweek.com/news/features/01-06/salaries.html>. (cited 2001, June 15).

University of California. *Health Sciences Planning: The Context and the Issues*. Oakland, CA: University of California, Office of Health Affairs. (1989).

Williams, S., "Split decision: Nursing profession ranks low in desirability despite public's high regard for nurses." *Nurseweek*. (2001, April 16). Available at: <http://www.nurseweek.com/news/features/01-04/splitdecision.asp>. (cited 2001, June 15).

## **Optometry**

American Optometric Association ([www.aoa.org](http://www.aoa.org))

Dillehay S. *A Program for Improving Faculty Retention in Optometric Education with Implications for Faculty Recruitment Efforts*. Doctoral dissertation, 2003.

*Healthy People 2010*, National Institutes of Health, U.S. Department of Health and Human Services, 2000.

National Institutes of Health

Optometry (The Journal of the American Optometric Association) May 2000

U.S. Bureau of Labor Statistics

U.S. Center for Health Statistics (cited on AOA webpage w/no details)

Vision Service Plan, Inc., personal communication.

White AJ, Doksum T, and White C. *Workforce Projections for Optometry*. *Optometry* (The Journal of the American Optometric Association), May 2000.

## **Pharmacy**

American Association of Colleges of Pharmacy. (J Patton, Personal communication, June 5, 2002)

American Association of Colleges of Pharmacy: *Pharmacy's Vital Statistics*. Pharmacy Student Facts, 2002.

American Association of Colleges of Pharmacy. *Final Report of the AACP Ad Hoc Committee on Affirmative Action and Diversity*. October, 2000.

AB 2165. California Assembly Committee on Appropriations. Available at: [http://www.leginfo.ca.gov/pub/bill/asm/ab\\_2151-2200/ab\\_2165\\_cfa\\_20020513\\_124957\\_asm\\_comm.html](http://www.leginfo.ca.gov/pub/bill/asm/ab_2151-2200/ab_2165_cfa_20020513_124957_asm_comm.html). [cited 2002, May 17].

AB 2935. California Assembly Committee on Appropriations. Available at: <http://www.leginfo.ca.gov>. [cited 2002, May 17].

California Department of Consumer Affairs. Board of Pharmacy. 2003 Lawbook for Pharmacy. Available at: <http://www.pharmacy.ca.gov/>. [cited 2002, April 4].

Center for Health Workforce Studies, School of Public Health, University of Albany, SUNY. [M. Dell, Personal communication, June 4, 2002]

Center for Pharmacy Practice Research & Development. Western University of Health Sciences. [K Knapp, Personal communication, May 23 and 29, 2002]

Health Resources and Services Administration. *The Pharmacist Workforce: A Study of the Supply and Demand for Pharmacists*. Rockville, MD: Health Resources and Services Administration, U.S. Department of Health and Human Services; 2000.

Knapp K, "Studies Help Define New Directions in Pharmacy Workforce Research." *J Am Pharm Assoc*. 2001; 41:654-55

Knapp K, Livesey J, "The Aggregate Demand Index: Measuring the Balance Between Pharmacist Supply and Demand, 1999-2001." *J Am Pharm Assoc*. 2002; 42:391-398.

Knapp K, Gershon S, and Cultice J, "How Many Pharmacists Are in Our Future? The Bureau of Health Professions Projects Supply to 2020" *J Am Pharm Assoc* 2000; 40:757-764.

Mott DA, Sorofman BA, Kreling DH, et al., "A four-state summary of the pharmacy workforce." *J Am Pharm Assoc* 2001; 41:693-692.

Pharmacy Manpower Project 2000. PMP Aggregate Demand Index. Available at: <http://www.pharmacymanpower.com/>. [cited 2002, May 18].

Pharmacy Technician Certification Board. Board Certification Statistics by State as of May 2002. Available at: <http://www.ptcb.org>. [cited, June 4].

Tucker J, "Drug Stores in State Hurt by Lack of Pharmacists." *Oakland Tribune*. Sunday May 26, 2002.

### **Public Health**

Association of Schools of Public Health. 2002 Annual Data Report. Available at: <http://www.asph.org/uploads/adr2002.pdf>.

California Department of Aging. Statistics and Demographics: Facts About California's Elderly. Available at: <http://www.aging.state.ca.us/html/stats/demographics.html>.

Centers for Disease Control and Prevention. 2004. Office of Workforce Policy and Planning. The Public Health Workforce Development Initiative.

Centers for Disease Control. *Ten Leading Causes of Death in the United States*. Atlanta, GA: U.S. Public Health Service, 1994.

Institute of Medicine, 1988. *The Future of Public Health*. National Academy Press, Washington D.C.

Institute of Medicine, 2002. *The Future of Public Health in the 21<sup>st</sup> Century*. National Academy Press, Washington D.C.

Institute of Medicine, 2003. *Who Will Keep The Public Healthy? Educating Public Health Professionals for the 21<sup>st</sup> Century*. National Academy Press, Washington D.C.

Institute of Medicine, 2003. *Who Will Keep The Public Healthy? Workshop Summary*. National Academy Press, Washington D.C.

Lurie N. *Assessing Public Health Infrastructures*. RAND Center for Domestic and International Health Security 2003.

Mertz, E. Personal communication re: preliminary results of UCSF Center for California Health Workforce Studies study of public health workforce needs in California. January 2004.

Mertz, E. Personal communication. July 8, 2003.

National Association of City and County Health Officials (NACCHO). Local Public Health Agency Infrastructure: A Chartbook. Available at: <http://www.naccho.org/GENERAL428.cfm>.

NIH Office of Extramural Research. Total NIH Awards to Health Professional Components, Fiscal Year 2002. Available at: <http://grants1.nih.gov/grants/award/trends/dhepubh02.htm>.

Partnership for Public Service. *Homeland Insecurity: Building the Expertise to Defend America from Bioterrorism*. Washington, D.C., p. 18. 2003.

Partnership for Public Service. *Public Health Jobs: Using Your Skills to Ensure the Nation's Health*. Washington, D.C. 2003.

U.S. Census Bureau. Population Division, Population Projections Branch. *National Population Projections*. 2002.

U.S. Department of Health and Human Services, Health Resources and Services Administration, (2000a). *The Public Health Workforce: Enumeration 2000*. Washington, D.C.

U.S. DHHS. PHS, HRSA, Bureau of Health Professions. Sixth Report to the President and Congress on the Status of Health Personnel in the United States. DHS No. HRS-P-0D-88-1. Washington, D.C., U.S. DHHS, June 1988.

U.S. News and World Report. 2004. *America's Best Graduate Schools 2004*. Public Health Rankings.

### **Veterinary Medicine**

American Veterinary Medical Association (AVMA), "Vet Med Today; Facts and Figures: Employment and Age of Male and Female AVMA Members, 2003," *JAVMA* 225, no. 6 (2004): 876- 877.

AVMA. Roles of Veterinarians in Human and Animal Health. Available at: <http://www.avma.org/careforanimals/animatedjourneys/aboutvets/roles.asp> [cited: 2004, July 9].

AVMA. What is a Veterinarian? Available at: <http://www.avma.org/careforanimals/animatedjourneys/aboutvets/aboutvets.asp>. [cited: 2004, July 9].

AVMA. The Veterinary Health Care Team. Available at: [http://www.avma.org/communications/brochures/health\\_care/health\\_carefaq.asp](http://www.avma.org/communications/brochures/health_care/health_carefaq.asp) [cited: 2004, July 9].

AVMA. Veterinary Education: Veterinary Colleges Accredited by the AVMA. Available at: <http://www.avma.org/careforanimals/animatedjourneys/aboutvets/vetschools.asp>. [cited: 2004, July 9].

AVMA. Employment Outlook. Available at: <http://www.avma.org/careforanimals/animatedjourneys/aboutvets/employment.asp>. [cited: 2004, July 9].

AVMA. JAVMA News. The Face of the Veterinary Profession. May 15, 2003. Available at: <http://www.avma.org/onlnews/javma/may03/030515e.asp>. [cited: 2004, Aug. 25].

AVMA. JAVMA News. Town Hall Meeting Surveys Diversity in the Profession. May 1, 2004. Available at: <http://www.avma.org/onlnews/javma/may04/040501e.asp>. [cited: 2004, Aug. 25].

AVMA. Veterinary Education: School Statistics. Available at: <http://www.avma.org/careforanimals/animatedjourneys/aboutvets/education.asp>. [cited: 2004, July 9].

Western University College of Veterinary Medicine. About the College. Available at: <http://www.westernu.edu/veterinary/about.xml> [cited: 2004, July 9].

AVMA Council on Education, Accreditation Policies and Procedures. August 1996.

AVMA Directory. Schaumburg, Illinois: American Veterinary Medical Association, 1998.

Center for Information Management, American Veterinary Medical Association, *The U.S. Livestock Market for Veterinary Medical Services and Products*. Schaumburg, Illinois: American Veterinary Medical Association, 1995.

Center for Information Management, American Veterinary Medical Association, *U.S. Pet Ownership and Demographics Source Book*. Schaumburg, Illinois: American Veterinary Medical Association, 1997.

Center for Information Management, American Veterinary Medical Association, *Veterinary Demographic Annual Reports, Volume 5, Part 1: Demographic Distribution and Employment Trends in the U.S. Veterinary Medical Profession*. Schaumburg, Illinois: American Veterinary Medical Association, 1996.

Center for Information Management, American Veterinary Medical Association, *Veterinary Demographic Annual Reports, Volume 5, Part 2: Demographic Distribution and Employment Trends in the U.S. Veterinary Medical Profession by Primary Employment*. Schaumburg, Illinois: American Veterinary Medical Association, 1996.

Center for Information Management, American Veterinary Medical Association, *Veterinary Demographic Annual Reports, Volume 5, Part 4: Demographic Distribution and Employment Trends in the U.S. Veterinary Medical Profession by State*. Schaumburg, Illinois: American Veterinary Medical Association, 1996.



Kass, Philip A. *Veterinary Medicine in California: Demographics, Trends and Educational Opportunities*, UC Davis, 1998.

The Pew National Veterinary Education Program, *Future Directions for Veterinary Medicine*. December 1988.

Pritchard and Stone. *Healthy America: Practitioners for 2005. A Beginning Dialogue for U.S. Schools of Veterinary Medicine. A report of the Pew Health Professions Commission*. 1991.

State of California, California Agriculture Resource Directory, 1997.

State of California, Consumer Affairs Information Services: California Board of Veterinary Medical Examiners, 1997.

State of California, Projected Total Population of California Counties: 1990 to 2040, Report 93.

P-3. Sacramento, California, May 1993.

State of California, Department of Education, A Master Plan for Higher Education in California 1960-1975. Sacramento, 1960.

State of California, Department of Finance, Interim County Population Projections: Estimated July 1, 1996 and Projections for 2000, 2010, and 2020. Sacramento, 1997.

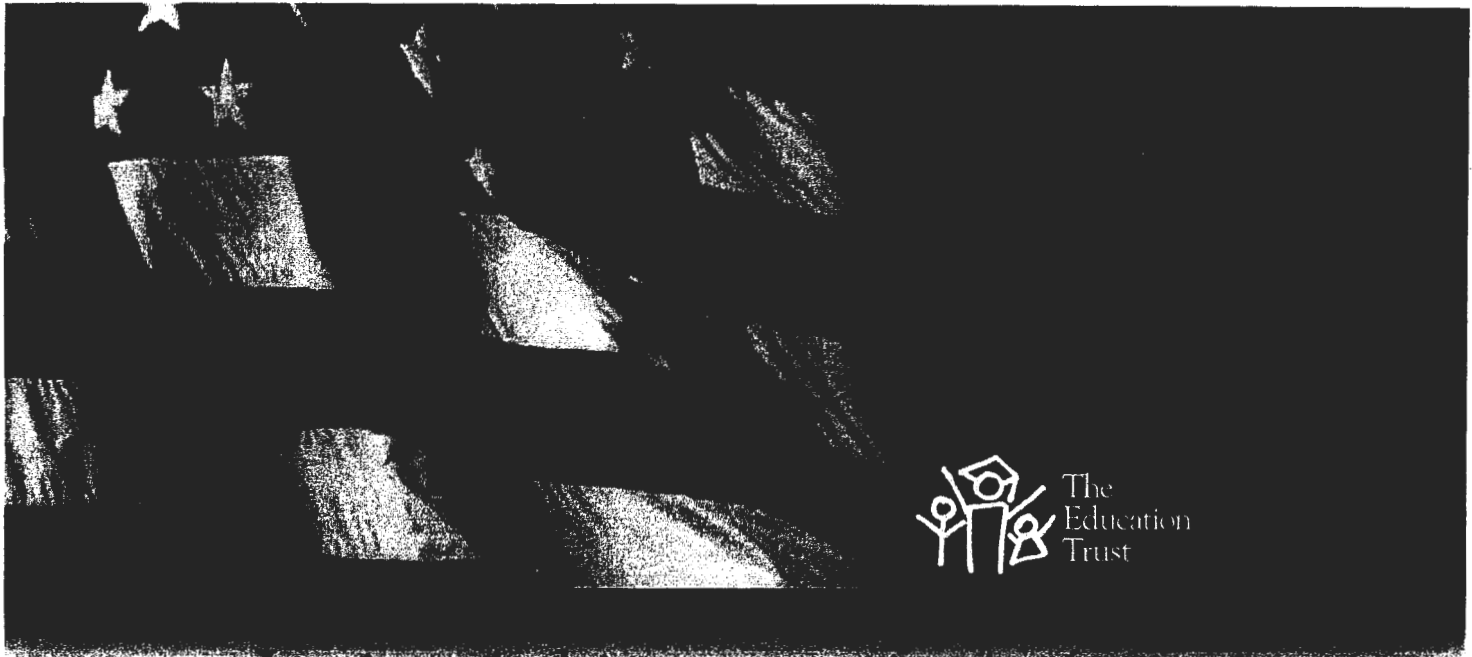
United States Census Bureau, State Rankings, Doctors Per 100,000 Civilian Population, in 1996 Statistical Abstract of the United States, 1998.

United States Census Bureau, State Resident Population, in USA Statistics in Brief, 1998.

Western Dairyman, April 1998, and California Milk Advisory Board (personal communication)

Western University of Health Sciences, Veterinary Medicine Task Force Report. 1997.

ACHIEVEMENT GAP  
FOR LATINOS

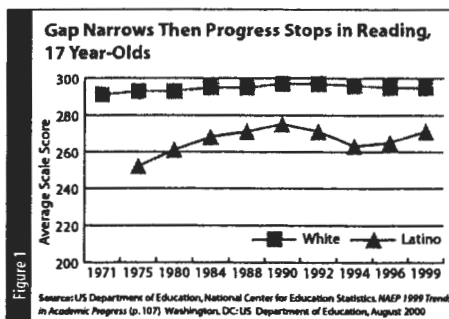


# Latino Achievement in America

Achievement gaps between groups of students can tell us a lot about which students are given the preparation they need to succeed in college and work, and which ones continue to be left out.

## How far have we come?

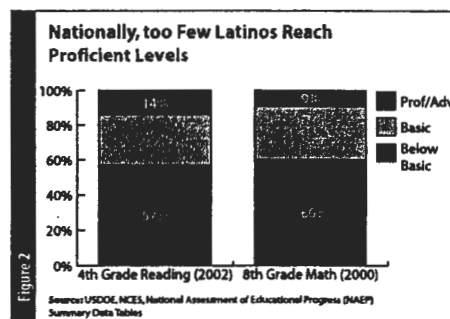
Reading achievement among Latinos climbed substantially throughout the '70s and '80s, but progress stopped during the next decade. The pattern for mathematics achievement is similar.



## Where are we now?

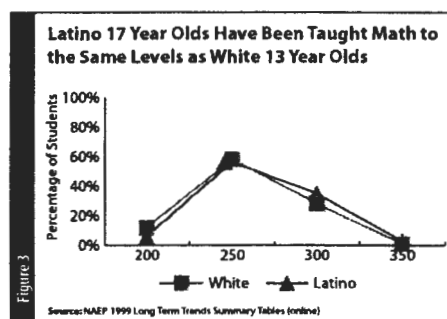
Nationally, too few Latinos read or do math at proficient levels. In reading, for instance, a mere 14% of Latino 4th graders reach proficient or advanced levels, while a heartbreaking 57% have not been taught even the basic level. And, the story is worse in math. Only 9% of Latino 8th

graders reach the proficient level or above on NAEP, but 60% perform below basic.



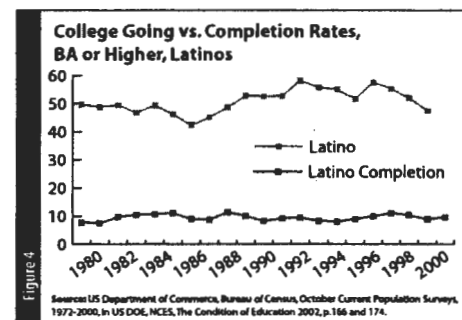
## Results by the end of high school

What does this all mean? By the end of high school, Latino students have math and reading skills that are virtually the same as those of White middle-schoolers.



## The gap's consequences reach beyond high school

Neither the college enrollment nor completion rates of Latinos have increased over the last 20 years. About half of Latino young people enroll in college, but few finish. If these rates don't change, out of every 100 Latino kindergartners, only 11 will obtain at least a bachelor's degree.



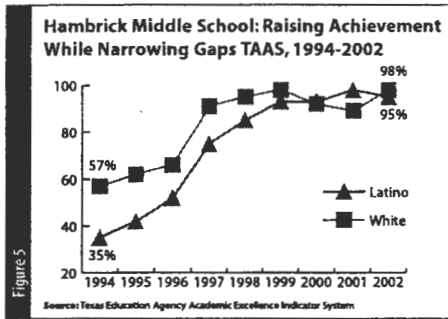
## But it doesn't have to be this way. . .

There are some schools, districts, and even whole states where Latino students excel.

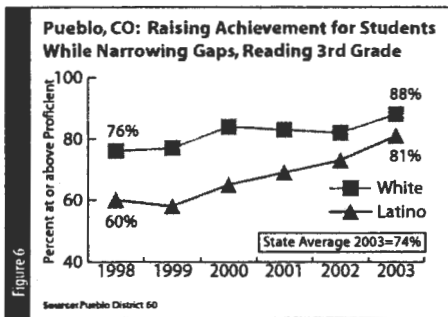
Hambrick Middle School in Aldine is 71% Latino and 85% poor. Hambrick's students score in the top fifth of all Texas middle schools in both reading and math, in both



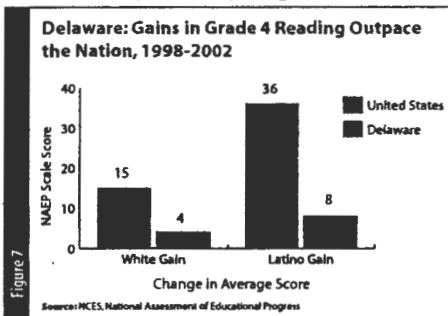
7th and 8th grades, and have done so over a 3-year period. (For high performing schools in your state, please visit *Dispelling the Myth Online* at [www.edtrust.org](http://www.edtrust.org))



Additionally, Pueblo, Colorado, has had tremendous success in reducing the Latino-White gap while simultaneously raising achievement levels for all groups of children.



There are whole states where Latinos excel. For example, Delaware outpaces the nation in reading gains for both Latino and White 4th graders, and the greatest strides have been made by Latino youngsters.



## What do we know about places that get results?

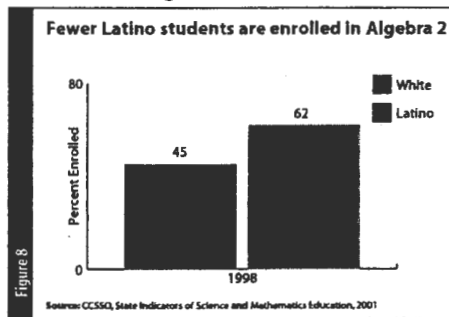
They have clear goals: the role of standards

Clear and public standards for what students should learn at benchmark grade levels are an invaluable tool for raising achievement

and closing gaps. They are a guide—for teachers, administrators, parents and students themselves—to the knowledge and skills students need to master. Standards represent a contract between schools and their communities that these skills are the expectation for all their students.

They provide all students challenging curriculums aligned with standards

New standards and assessments won't make much of a difference if they are not accompanied by a rigorous curriculum lined up with those standards. Yet in too many places, some students are taught rich and challenging subject matter, while others are relegated to a low-level curriculum—one that is better aligned with the assembly-line jobs that are disappearing than with today's job market or college entry requirements. For example, fewer than half of Latino high-schoolers take Algebra 2 compared to nearly two-thirds of their White peers. Similar patterns occur in Chemistry. (For more information on the importance of a challenging curriculum, please see "A New Core Curriculum for All" available at [www.edtrust.org](http://www.edtrust.org))



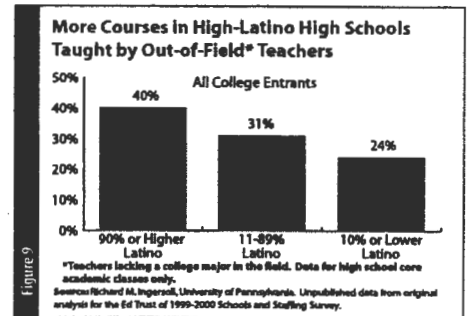
They provide extra instruction to students when they need it

There is now ample evidence that all children can achieve at high levels if they are taught at high levels. Indeed, the simple act of putting students in more rigorous, college preparatory courses *will* improve achievement; the data are clear on that. But it is equally clear that for some students, passing the course or examination will require extra time and support.

They provide teachers who are well-prepared to teach the subject

Students need teachers who know their subjects and how to teach them. Yet large

numbers of students, especially those who are Latino, are taught by teachers who lack sufficient background in the subjects they are teaching. Across the country, we are giving the least qualified teachers to the kids with the greatest need for good teachers. (For more information on teacher quality, please see "Good Teaching Matters" and "Interpret with Caution" both available on [www.edtrust.org](http://www.edtrust.org))



## How can we pay for all this?

In most states, school districts that educate the greatest number of minority students receive substantially less state and local money per student than districts with the fewest low-income and minority students.

At a time when schools, districts and states are rightly focusing on closing the achievement gap, states can and must do more to close these funding gaps. (For state data on Funding Gaps, visit *EdWatch* online or the *Funding Gap* report both available at [www.edtrust.org](http://www.edtrust.org))

## What would happen if we had the courage to change these patterns?

It only takes one school to teach Latino kids at high levels to prove that it can be done. Well, all around the nation, there are hundreds of schools that are doing just that. Underachievement among Latinos is a crisis, but as these communities show, raising Latino achievement is not an insurmountable task. We have listed steps that states, districts, schools and communities can follow to replicate their success. What are we waiting for to make sure that all Latino children receive the education they need and deserve, and close the achievement gap once and for all?





## CONFRONTING THE GRADUATION RATE CRISIS IN CALIFORNIA

MARCH 24, 2005

### Executive Summary

Every year, across the country, a dangerously high percentage of students—disproportionately poor and minority—disappear from the educational pipeline before graduating from high school. Nationally, only about 68% of all students who enter 9<sup>th</sup> grade will graduate “on time” with regular diplomas in 12<sup>th</sup> grade.<sup>1</sup> While the graduation rate for white students is 75%, only approximately half of Black, Latino, and Native American students earn regular diplomas alongside their classmates. Graduation rates are even lower for Black, Latino and Native American males. Yet, because of misleading and inaccurate reporting of dropout and graduation rates, the public remains largely unaware of this educational and civil rights crisis.

This crisis may be even less apparent in California because, officially, the state reports a robust overall graduation rate of 87%. However, this rate is based upon a flawed National Center for Education Statistics (NCES) formula that dramatically underestimates the actual numbers of dropouts. When the more accurate Cumulative Promotion Index (CPI—see next section) is used, the overall graduation rate is 71% for 2002, which is slightly above the national average. In fact, according to a recent study released by ETS, California is one of only seven states in the country where the overall graduation rate has improved from 1992 to 2002 (from 64% to 71%).<sup>2</sup>

Nonetheless, graduation rates in individual districts and schools—particularly those with high minority concentrations—remain at crisis level proportions. Only 64% of all students in central city districts graduate with regular diplomas. In racially segregated districts, only 65% of all students graduate, and only 58%

---

<sup>1</sup> Throughout this report, the term “graduation rates” refers to the percentage of 9<sup>th</sup> grade students who graduate with a regular diploma with their 12<sup>th</sup> grade class.

<sup>2</sup> *One Third of the Nation: Rising Dropout Rates and Declining Opportunities*, Report Released by ETS, available online at: [www.ets.org/research](http://www.ets.org/research).

graduate in socio-economically segregated districts. According to Professor Robert Balfanz of Johns Hopkins University, Black and Latino students are 3 times more likely than White students to attend a high school where graduation is not the norm and where less than 60% of ninth graders obtain diplomas four years later. Another independent study by Dr. Julie Mendoza of the University of California All Campus Consortium on Research for Diversity (UC/ACCORD) finds that in the state's largest district, Los Angeles, only 48% of Black and Latino students who start 9<sup>th</sup> grade complete grade 12 four years later. The exodus of Los Angeles youth from school is especially pronounced between grades 9 and 10, which means that they are leaving school ill prepared for all but the most menial jobs. And, even among the Black and Latino youth who complete high school in Los Angeles Unified School District (LAUSD), only one in five have met the curriculum requirements to qualify for admission to a four-year public university in California.

California's failure to graduate so many of its students is a tragic story of wasted human potential and tremendous economic loss. When high numbers of youth leave school ill-prepared to contribute to our labor force and to civic life, our economy and our democracy suffer. Life opportunities for these youth and for their offspring are dramatically curtailed. According to Russell Rumberger, Professor at the University of California at Santa Barbara, the 66,657 students who were reported as dropouts from the California public schools in the 2002-03 will cost the state \$14 billion in lost wages. These costs rise significantly when one considers that the actual number of students who leave school without diplomas is much higher than the estimates provided by the state. Since the greatest economic benefits of earning a high school diploma are realized in the next generation, the most significant loss is to their—and our— future.<sup>3</sup>

---

<sup>3</sup> See Lance Lochner & Enrico Moretti, *The Social Savings from Reducing Crime through Education*, (Joint Center for Poverty Research 2001), available at [www.jcpr.org/policybriefs/vol4\\_num5.html](http://www.jcpr.org/policybriefs/vol4_num5.html); Arthur Blakemore & Dennis Hoffman, *The Economics of Dropouts: The Complexities of Uncovering the Real Costs of the Loss of "Human Capital"* (paper presented at the Southwest Conference on Enhancing School Completion, Arizona State University, Tempe, Arizona, Nov. 7, 2003) (unpublished manuscript on file with Daniel J. Losen).



## CONFRONTING THE GRADUATION RATE CRISIS IN CALIFORNIA

### *National Context*

Every year, across the country, a dangerously high percentage of students—disproportionately poor and minority—disappear from the educational pipeline before graduating from high school. Nationally, only about 68% of all students who enter 9<sup>th</sup> grade will graduate “on time” with regular diplomas in 12<sup>th</sup> grade.<sup>4</sup> While the graduation rate for White students is 75%, only approximately half of Black, Latino, and Native American students earn regular diplomas alongside their classmates. Graduation rates are even lower for Black, Latino and Native American males. Yet, because of misleading and inaccurate reporting of dropout and graduation rates, the public remains largely unaware of this educational and civil rights crisis.

### *Dropouts in California: Achieving a More Accurate Portrait*

Officially, California reports a robust graduation rate of 87%. Yet this rate is based upon a flawed National Center for Education Statistics (NCES) formula that dramatically underestimates the actual numbers of dropouts. This formula relies heavily on underestimated dropout data. As a result, it significantly overestimates graduation rates compared to other methods.<sup>5</sup> For example, schools often report students who never receive diplomas as successfully transferring to some other school. Moreover, because data on dropouts are often unavailable, the NCES calculations are based on only about half of the districts nationally, and therefore represent far fewer students than measures that avoid using dropout data.

The most accurate method for tracking high school graduation rates would be to provide each student with a single lifetime school identification number that would follow him or her throughout his or her entire school career. Until states decide to implement and carefully monitor such a system, we will never know

---

<sup>4</sup> Throughout this report, the term “graduation rates” refers to the percentage of 9<sup>th</sup> grade students who graduate with a regular diploma with their 12<sup>th</sup> grade class.

<sup>5</sup> The coverage varies from state to state. For detailed reporting including coverage statistics see Christopher B. Swanson (2003.) *Keeping Count and Losing Count. Calculating Graduation Rates for All Students Under NCLB Accountability*. Washington DC: The Urban Institute.

exactly what happens to all students. The good news is that in 2002 California's legislature passed a law to require such identifiers be developed for use throughout the state.<sup>6</sup> Unfortunately, the current state government has refused to fund the measure.

We believe that the most useful and accurate estimates of high school graduation rates currently available are those that are based on the actual enrollment data that each district provides annually to the nation's Common Core of Data. Using the Common Core's enrollment and diploma data, Dr. Christopher Swanson of The Urban Institute developed the Cumulative Promotion Index (CPI), which is considered among the most accurate methods for estimating graduation rates.<sup>7</sup>

Using this calculation, California actually graduated only 71% of its students in 2002, just slightly above the national average. Graduation rates for minority students for that year were substantially lower: 57% for Blacks, 60% for Latinos,

---

<sup>6</sup> See CAL. ED. CODE § 60900 (Deering 2005). To enable California to meet the federal requirements, this section codified Senate Bill 1453 (SB 1453) in September 2002 to require (1) the assignment of individual, yet non-personally identifiable student identifiers to all K-12 students enrolled in California public schools; and (2) the establishment of the California Longitudinal Pupil Achievement System (CALPADS) that includes statewide assessment data, enrollment data, and other demographic elements required to meet federal NCLB reporting requirements. The assignment of student identifiers is the responsibility of the California School Information Services (CSIS) program; the SB 1453 grant program, and the establishment of the longitudinal data system is the responsibility of the California Department of Education (CDE). The release of funds for this program is contingent on approval of an expenditure plan by the Department of Finance. *Id.* at § 60900(j). Because of California's budget crisis, this system has not yet been adequately funded. On February 22, 2005, a Bill was introduced in the California Assembly that would repeal the requirement that the release of funds is contingent on approval of an expenditure plan. On March 10, 2005, this proposed Bill went to the Assembly Committee of Education. A.B. 1213, 2005 Assem., Reg. Sess. (Cal. 2005).

<sup>7</sup> The CPI method is based on the combined average success of groups of students moving from ninth grade to tenth grade, from tenth grade to the eleventh grade, from eleventh grade to twelfth grade, and from twelfth grade to graduation, at the district and state level. This method allows comparisons across years, districts, and states. It is very useful for determining which subgroups experience the greatest difficulty graduating from high school and whether progress in improving high school completion rates is being achieved. Some critics assert that estimates based on enrollment data do not adjust sufficiently for the large, statistical 9<sup>th</sup> grade enrollment "bubble" that is likely caused when 9<sup>th</sup> grade students are retained in grade. When simulations were run to test the accuracy of commonly used methods, including the NCES based estimate currently used by most states, the CPI graduation rate estimate was the least susceptible to bias caused by the 9<sup>th</sup> grade enrollment bulge. However, it should be noted that an enrollment bulge caused the CPI and all other measures examined to overestimate, not underestimate, the actual graduation rate. This suggests that all measures are currently overestimating graduation rates, and actual rates would likely prove even lower.



and 52% for Native Americans. In contrast, Whites graduated at a rate of 78%. When we consider graduation rates for minority males, the figures become even more alarming: 50.2% for Blacks, 54% for Latinos, and 46% for Native Americans.<sup>8</sup>

California Graduation Rates By Race and Gender

	All Students	Female	Male
California report using modified NCES	86.9		
California Students CPI	71.3	74.7	66.8
By Race/Ethnicity			
<i>American Indian / AK Nat.</i>	52.2	n/a	n/a
<i>Asian/Pacific Islander</i>	83.5	86.8	79.6
<i>Latino</i>	60.3	64.9	54.4
<i>Black</i>	56.6	60.2	50.2
<i>White</i>	77.8	80.2	74.6

Source: Christopher Swanson, Urban Institute

*Dropouts in California at the District and School-Levels:*

Although California's overall graduation rate has risen modestly since 1992, the rates remain quite low and the racial gaps pronounced. At the state level, a graduation gap of 30 percentage points separates the highest and lowest performing groups. Even larger gaps are found at the district and school levels. California's central city districts consistently graduated lower percentages than rural and suburban districts. This is consistent with research that shows that segregation and the percentage of minority students in a district has a strong relationship with low graduation rates.<sup>9</sup> Fewer than 2/3 of all students graduate from high school in central city districts and in communities that suffer from high levels of racial and socioeconomic segregation. The following chart documents graduation rates for all racial subgroups in the ten largest districts.<sup>10</sup>

<sup>8</sup> See EPC Policy Bulletin: Who Graduates in California, Christopher Swanson, March 2005

<sup>9</sup> Christopher B. Swanson (2004.) *Who Graduates? Who Doesn't? A Statistical Portrait of Public High School Graduation. Class of 2001.* Washington, DC: The Urban Institute.  
<http://www.urban.org/url.cfm?ID=410934>

<sup>10</sup> Chris Swanson, Urban Institute "Who Graduates in California", March 2005.

### California's Ten Largest Districts

District	Enrollment	Largest R/E Group	% Minority	% FRL	CPI Graduation Rates					
					Total	Nat. Am.	Asian	Hisp.	Black.	White.
Los Angeles Usd	735,058	Latino	90.4	72.8	45.3	39.7	76.7	39.1	46.5	66.7
San Diego City Usd	141,599	Latino	73.4	61.4	63.8	60.0	81.2	49.2	52.0	77.5
Long Beach Usd	96,488	Latino	82.7	66.9	69.1	61.1	82.7	62.6	59.4	78.7
Fresno Usd	81,058	Latino	80.8	73.7	56.9	59.0	76.6	47.4	46.3	66.1
Santa Ana Usd	61,909	Latino	96.3	73.4	72.5	68.6	79.8	72.6	70.5	65.8
San Francisco Usd	58,566	Asian/PI	89.5	54.5	70.9	---	82.4	55.9	47.1	74.3
Oakland Usd	53,545	Black	94.3	51.5	47.8	33.8	67.5	42.8	42.0	52.1
Sacramento City Usd	53,418	Latino	76.6	63.1	52.6	48.3	73.5	41.3	38.2	55.0
San Bernardino City Usd	54,166	Latino	81.1	78.2	50.6	42.2	82.4	48.5	49.4	51.8
San Juan Usd	51,383	White	26.1	27.2	93.9	--	--	---	-	97.9

### *Calculating A School's Promotion Power*

Researchers at Johns Hopkins University have developed a method for analyzing data on individual schools that brings the stark reality for children in underperforming high poverty districts into even sharper focus. Without even looking at diplomas, The Hopkins researchers, led by Professor Robert Balfanz, have developed a rubric for identifying high and low performing schools. Their analysis, like Swanson's, is based on enrollment data, but uses school level data to analyze the rate at which students are able to meet the requirements and pass from grade to grade. Schools with high percentages of successful passage are labeled as having "high promoting power." Conversely, schools that struggle to keep minority students in attendance and experience high rates of student attrition are deemed to have low promoting power. This research pinpoints California's "dropout factories" as well as schools that appear to be beating the odds of socio-economic and racial isolation by successfully promoting most of its students from 9<sup>th</sup> to 12<sup>th</sup> grade.

Some of the key findings based on Professor Balfanz's analysis include:

1. In California, Black and Latino students are 3 times more likely than White students to attend a high school where graduation is not the norm (i.e. promoting power of 60% or less). Overall 32% of Black and 31% of Latino students in California attend one of these high schools compared to only 8% of White students.
2. Black and Latino students are also only half as likely as White students to attend a high school where graduation is nearly a given (i.e. high schools with 90% promoting power). Overall only 10% of Black and 7% of Latino students attend these schools, compared to 20% of White students (and 25% of Asian).
3. Two-thirds of the high schools in California where graduation is not the norm (60% or less promoting power) have 40% or more of their students eligible for free or reduced price lunch. Yet, less than half of these schools receive Title 1 funding.
4. Eighty percent of the high schools in which graduation is nearly a given (90% or more promoting power) have fewer than 20% of their students eligible for free or reduced price lunches.
5. Racial isolation appears to increase the odds that minority children will attend a "dropout factory" for high school. Schools that are exclusively attended by minority students (90% or more minority) make up about half the high schools in which dropping out is the norm.

#### *Schools That Beat The Odds*

Nonetheless, there are schools that are beating the odds by graduating a higher than expected percentage of its students. The following table lists 15 schools in California where at least 40% of students qualify for free lunch, where 25% or more of students are Black or Latino, and where the average promoting power, averaged over three years (2000--2002), is at least 80%.

<u>School Name:</u>	<u>Average Promoting Power</u>
Polytechnic High – Long Beach	104%
Calexico High – Calexico Unified	95%
Alhambra High – Alhambra City High	94%
Northview High – Covina Valley Unified	91%
Gabrielino High – San Gabriel Unified	90%

32 <sup>nd</sup> St USC Performing Arts – LA Unified	88%
Holtville High – Holtville Unified	87%
Bassett Senior High – Bassett Unified	87%
Southwest Senior High – Sweetwater Union High	86%
Jordan High – Long Beach	85%
Lincoln Senior High – San Diego Unified	85%
Jurupa Valley High – Jurupa Unified	85%
Southwest High – Central Union High	83%
Glenn High – Norwalk – La Mirada Unified	82%
El Rancho High – El Rancho Unified	81%

*Los Angeles: Overall Graduation Rate of Under 50%*

Los Angeles Unified School District (LAUSD) is the state's largest school district, with an overall enrollment of 735,000, of which 90% are minority. Dr. Julie Mendoza of UC/ACCORD analyzed Los Angeles school level data and calculated graduation rates based on enrollment. To simplify the comparison, Dr. Mendoza combined Latino, Native American and Black students into one category. Her research reveals that only 48% of the minority students enrolled in 9<sup>th</sup> grade in the Fall of 1998 successfully completed high school in the district four years later. In a subsequent analysis, using LAUSD student identifier data, she found that most of the students who do not finish leave between grade 9 and grade 10. In LAUSD, where 71% of all students are Latino, the Latino attrition rates are particularly alarming. Just 41% of the district's 9<sup>th</sup> grade Latino students stay in school long enough to reach grade 12.

<b>Top 15 LAUSD high schools ranked in descending order by GRAD COR for Latino, African American and American Indian students</b>			
<b>RANK</b>	<b>HS NAME</b>	<b>COR</b>	<b>GRADUATES</b>
1	Los Angeles Center for Enriched Studies	100:79:71	79
2	Sherman Oaks	100:77:26	77
3	Eagle Rock	100:71:41	71
4	Bravo Medical Magnet	100:70:19	70
5	King/Drew Medical	100:70:70	70
6	Foshay Learning Center	100:68:64	68
7	Downtown Business	100:66:38	66
8	Marshall	100:65:16	65
9	Thirty-Second St. USC Performing Arts	100:64:64	64
10	Sylmar	100:62:28	62
11	Kennedy	100:60:15	60
12	Elizabeth Learning Center	100:59:23	59
13	Carson	100:58:29	58
14	Westchester	100:58:16	58
15	El Camino Real	100:58:16	58
<b>Bottom 15 LAUSD high schools ranked in descending order by GRAD COR for Latino, African American and American Indian students</b>			
44	Van Nuys	100:37:9	37
45	Franklin	100:37:12	37
46	Los Angeles	100:37:16	37
47	Canoga Park	100:38:8	36
48	Jordan	100:35:10	35
49	Locke	100:34:10	34
50	Garfield	100:34:16	34
51	Banning	100:33:6	33
52	Belmont	100:33:3	33
53	Fremont	100:32:18	32
54	Manual Arts	100:32:9	32
55	Lincoln	100:31:9	31
56	Jefferson	100:31:12	31
57	Verdugo Hills	100:29:11	29
58	Hollywood	100:26:3	26
Data Source: Analysis based on UC/ACCORD's 2002 College Opportunity Ratio (COR) www.ucaccord.org			

The chart above shows the schools in LAUSD with the highest and lowest graduation rates for Black, Latino, and Native American students.

These estimates are based on California's Department of Education enrollment and school completion data. It is worth noting that for all the schools listed there are quite a few in the top twenty with high graduation rates but where few students have successfully completed the requirements to enroll in any of the state's four year public universities (the indicator is the last number in the series of three presented in the first column). It is important to note that none of the schools on the list have been studied or reviewed, and that none were asked to explain their numbers.

*Only 1 in 5 Black or Latino students in LAUSD meet the state's four year public college bound criteria*

Dr. Mendoza's research also examines LAUSD's students' readiness for college. Unfortunately, her findings are not encouraging. When the number of LAUSD Black and Latino youth who pass the "college preparatory curriculum" are examined, the data show that only 20% of the entering high school freshmen complete high school with the academic credentials needed to qualify for admissions to both the University of California and California State University systems. The economic implications of not being prepared for college are devastating.

#### *Economic Implications of Dropping Out*

The U.S. Census estimates that high school dropouts will earn \$270,000 less than high school graduates over their working lives.<sup>11</sup> Census data also shows that the earning gap between high school graduates and dropouts has grown over the last two decades—in 1975, high school dropouts earned 90% as much as high school graduates; in 1999, high school dropouts earned only 70% as much.<sup>12</sup>

The negative impact of not graduating may be more severe for some minority groups. A 2002 Census Bureau report shows that the mean earnings of young adult Latinos who finish high school are 36% higher than those who drop out.<sup>13</sup> A 2003 report on the Chicago job market shows that more than half of young adult male African American dropouts in that city have no job at all.<sup>14</sup>

Professor Russell Rumberger, of the University of California at Santa Barbara, has estimated that the 66,657 students the State reported as dropouts from the California public schools in the 2002-03 will cost the state \$14 billion in lost wages. The following chart below reflects the economic costs based on the official and understated dropout numbers provided by the State, which suggests that the actual costs may be much higher.

---

<sup>11</sup> Jennifer Cheeseman Day and Eric C. Newburger. *The big payoff: Educational attainment and synthetic estimates of work-life earnings* (Washington, D.C.: U.S. Census Bureau, 2002), Table 2.

<sup>12</sup> Ibid, p. 3.

<sup>13</sup> Ibid, Table 3.

<sup>14</sup> Center for Labor Market Studies, Northeastern University, *Youth Labor Market and Education Indicators for the State of Illinois* (Chicago: Alternative Schools Network, October 2003).

Social costs from one year's dropouts in California	
Number of dropouts (2002-03)	66,657
Reduced national and state income	\$1.4 billion
Additional state prisoners	1,225
Incarceration costs	\$73 million

Source: Dr. Russell Rumberger

Dropouts also cost the state in other ways – through higher crime and incarceration rates, increased welfare, and more dependence on public health care. Sixty-eight percent of all state prison inmates, for example, have not graduated high school. As Professor Rumberger's chart above indicates, when incarceration costs are considered, California's failure to graduate more students adds millions of dollars to the state's expenditures. Rumberger's estimates are based on a study conducted by a team of economists who found that, on average, high school graduation lowers the subsequent probability of incarceration for Whites by 0.76 percentage points, and for Blacks by 3.4 percentage points.<sup>15</sup> Declines hold true across all types of crime examined. Based on these crime reduction rates, the economists estimate that a 1% increase in the high school graduation rates would save the nation as much as \$1.4 billion dollars each year in crime-related costs.<sup>16</sup>

#### *Strengthening California's Educational Accountability Systems*

Despite the tremendous costs that coincide with high dropout rates, current educational policies, such as high stakes tests for students and test-driven accountability for schools, appear to create unintended incentives for school officials to push out low achieving students. It is worth noting that the recent report by ETS showed graduation rates increasing in California and six other states while they declined in all other states. In the period for which the data

<sup>15</sup> Lance Lochner and Enrico Moretti, "The effect of education on crime: Evidence from prison, arrests, and self-reports," *American Economic Review* (2004) 94: 155-189, p. 173. Rumberger estimates that the reduction in Hispanic incarceration rates would be 2.0 percentage points, based on national estimates that show lifetime probabilities of incarceration at 3.4% for Whites, 10% for Hispanics, and 18.6% for Blacks. See: Thomas P. Bonczar. *Prevalence of Imprisonment in the U.S. Population, 1974-2001*. (Washington, D.C.: U.S. Department of Justice, 2003), Table 9.

<sup>16</sup> Ibid, Table 13.

was collected (1990-2000) and analyzed, none of the seven states showing improvement, like California, required that students pass an exit exam to receive a diploma.<sup>17</sup>

Congress took a first step in recognizing the national dropout crisis in 2001 by inserting graduation rate accountability into the *No Child Left Behind* (NCLB) Legislation, in part out of concern that the focus on testing alone could have unintended negative consequences. Unfortunately, the U.S. Department of Education has been lax about enforcing NCLB's reporting and accountability measures regarding graduation rates, while rigidly enforcing its testing accountability measures. An overemphasis on test-driven accountability, without the balance that graduation rate accountability provides, creates perverse incentives for school officials to "push out" low-performing students, and thus is likely to worsen the dropout crisis.

The concern about lax graduation rate accountability should be discussed within the context of the central element of the adequate-yearly-progress (AYP) provisions of NCLB. Under the law, states must demonstrate that, in every school and district, students are on track toward achieving 100% proficiency in reading and mathematics within twelve years (by 2014). To ensure that this goal will be met, states must monitor the progress of the districts, and districts their schools, on interim benchmarks.<sup>18</sup> If the school or district in question does not improve enough, and if mandated technical assistance does not help, further intervention is mandatory and includes a host of progressively severe sanctions and consequences.<sup>19</sup>

NCLB requires that racial and ethnic minorities, English-language learners, students with disabilities, and students from low-income families make adequate yearly progress as defined in the statute. If any of these groups does not meet the state's standards, the educational agency in question will not make adequate yearly progress and will face more severe sanctions. Although benefits should accrue from a sound multi-measure system of subgroup accountability for academic achievement, students in these groups, which are disproportionately

---

<sup>17</sup> *One Third of the Nation: Rising Dropout Rates and Declining Opportunities*, Report Released by ETS, available online at: [www.ets.org/research](http://www.ets.org/research).

<sup>18</sup> If a school or district fails to make adequate yearly progress (AYP) for two years in a row, it is flagged for technical assistance and "identified for improvement." See 20 U.S.C. § 6311(b)(1) (2002).

<sup>19</sup> See *id.* §§ 6311, 6317.



low achieving, are more likely to be pressured to leave when predetermined proficiency benchmarks, calibrated to meet the goal of 100% proficiency in twelve years, determine whether schools and districts are sanctioned.

*California's "500 Year" Plan Does Very Little to Account for Low Graduation Rates:*

California's apparently high 82.8% graduation rate standard is an illusion. For accountability, California is among the weakest of 39 "soft" states that set a graduation rate goal under requirements of the NCLB, but give an accountability "pass" to any school or district that falls below the goal, if they show "any improvement." In January of 2004, California reported that their goal for accountability was a 100% graduation rate. When a state official was asked to explain the system, he said that a school or district had to show any improvement from whatever its current graduation rate happened to be. In California, "any improvement" is defined as including even 1/10<sup>th</sup> of 1% growth over the prior year for accountability. When the official was told that it could take more than 500 years for a district like Los Angeles, (overall graduation rate of 45%) to meet the state's goal of 100% he replied, "In California, we're patient."

Since that time California has modified its goal to 82.8% and modified its system, but only slightly. As of February 2004, the new accountability system as explained on the State's website requires either a 1/10<sup>th</sup> of 1% increase, or an average of two tenths of 1% improvement over two years.<sup>20</sup> This change means little. Furthermore, California considers only the aggregate graduation rate for accountability purposes when determining AYP. This means that it does not consider the low graduation rates of any subgroup.<sup>21</sup> For example, African Americans in Sacramento could have their extremely low graduation rate (38.2%) slip to below 30%; it could remain there; and the district would never be deemed "needing improvement" so long as the rates of Latinos and other groups improved. Under California's accountability system, the unusually low graduation rates of minority groups can be ignored completely wherever the aggregate rate shows even 2/10<sup>th</sup> of 1% improvement over the prior two years.

---

<sup>20</sup> <http://www.cde.ca.gov/ta/ac/ay/documents/implement.ppt>

<sup>21</sup> There is a "safe harbor" where meeting the graduation rate goal for a minority subgroup can mitigate failing to make AYP based on missing the proficiency test score goal for that subgroup.

### *Many Californian Districts Would Fail AYP If They Employed the CPI Method*

If a true floor of 66% (using CPI) were established for graduation rates, then only four of California's ten largest districts (Long Beach, Santa Ana, San Francisco, and San Juan) would make AYP if this floor was used in the aggregate. If this measure was required for all racial and ethnic subgroups, it appears that just one of the state's districts (Santa Ana) would make AYP with San Juan a question mark because of insufficient data. In contrast, under California's current system, it is estimated that fewer than 1% of all California's districts would fail to make AYP because of graduation rates that were too low.

### *Recommendations Regarding NCLB and Accountability*

California should not settle for "any improvement" when looking at graduation rates. The absurdly low threshold required for schools and districts to achieve a second change, based on calculations that inflate the graduation rate, suggests that California is not serious about graduation rate accountability.

Until the single identifier system is functioning in California, the state should use CPI for both reporting and accountability purposes. For accountability purposes the state should set a clear floor and the floor should be calculated for major racial groups, not just students in the aggregate. Schools and districts should be given rewards for schools or districts falling below the floor but that make substantial and steady progress over a number of years toward the goal. The state should provide substantial technical assistance to struggling schools and districts, especially toward improving the rates for Latinos, Blacks and Native Americans. AYP sanctions should be reserved only for districts that consistently make little or no progress toward the goal.

**FUNDING CALIFORNIA'S SCHOOLS:  
HOW DO WE ASSURE AN ADEQUATE EDUCATION FOR ALL?**

**Prepared for  
Policy Analysis For California Education  
Legislative Briefing  
February 3, 2005**

**Prepared by  
Lawrence O. Picus  
USC Rossier School of Education  
Waite Phillips Hall 904C  
University of Southern California  
Los Angeles, CA 90089  
213 740-2175  
[lpicus@usc.edu](mailto:lpicus@usc.edu)**

# FUNDING CALIFORNIA'S SCHOOLS: HOW DO WE ASSURE AN ADEQUATE EDUCATION FOR ALL?

Lawrence O. Picus  
USC Rossier School of Education

## INTRODUCTION

In January 2003, at the annual superintendents' meeting of the Association of California School Administrators (ACSA), I asked the 250 or so superintendents attending my lecture to indicate whether or not their school districts had a strategic plan describing what they planned to do to ensure that all – or almost all – of the children in their districts would be able to meet California's student performance standards in the next decade. I chose this time frame because it coincided almost perfectly with the requirement of the Federal No Child Left Behind (NCLB) law that all students must meet their state's performance standards by the year 2014. Despite the obvious need for such a plan, not one single superintendent indicated his or her district had such a strategic plan.

When I asked why such plans did not exist, the most common answers centered on the lack of stability in state and consequently school district revenues, and the difficulties of negotiating with teachers organizations. Yet it seems obvious that absent a plan detailing the resources needed to achieve this demanding goal, the only thing that is certain is failure.

Today, California's schools rank 44<sup>th</sup> in the nation in education spending. According to Education Week (Quality Counts, 2005), per pupil spending for education in California amounted to \$6,659 in fiscal year 2001-02 when adjusted for regional cost differences across the states. This figure represented 86.1 percent of the national average of \$7,734 per pupil. Worse, only six-tenths of one percent of school children went to school in districts that spent more than the national average. Looking at these figures another way, California only spent 3.5 percent of total taxable resources on education, ranking 39<sup>th</sup> out of the 51 states and the District of Columbia.

Since the 2001-02 fiscal year, things have only deteriorated for school district funding. The recession of the early part of this decade resulted in dramatic budget deficits for

the state and substantial reductions to the expected level of school funding. Following his election as governor, Arnold Schwarzenegger reached an agreement with the education community to suspend the constitutional educational funding guarantees of Proposition 98 for 2004-05 in exchange for a promise to pay back those funds in 2005-06. In his budget message of January 10, 2005, Governor Schwarzenegger indicated that to balance the 2005-06 budget, repayment of those funds would not be possible. Moreover, he threatened to seek voter approval of a constitutional amendment that would weaken the Proposition 98 guarantees if the education community was not willing to go along with these further reductions.

Missing from this discussion is the question of how much money our schools need if they are to succeed in meeting the goal of having all – or almost all – of California's school children meet our state's educational proficiency standards. The purpose of this paper is to provide some background on how California's school funding system wound up in this predicament, and offer some suggestions regarding how the problem can be resolved and what kind of effort will be required.

The answer to the question of how much we need is grounded in a new concept of school finance known as adequacy. Adequacy seeks to estimate the costs of providing an educational program that will enable all – or almost all – children to meet the state's high proficiency standards. In his budget address in January, Governor Schwarzenegger referred repeatedly to the \$50 billion we spend on education. Absent from his rhetoric was any sense of how much we really need to insure that the students of California receive the education they deserve. Adequacy offers a way to estimate what that need is, and with that estimate would enable our state's policy makers to develop a system to raise and distribute the funds our schools require. In addition to the need to estimate an adequate level of education spending, this paper provides some thoughts on

how the state might approach funding all services for children, and makes recommendations for finding the additional resources needed to adequately fund our schools.

#### THE HISTORY OF SCHOOL FINANCE: FOCUS ON CALIFORNIA

The history of school finance in the United States during the 20<sup>th</sup> century can be thought of as having three distinct foci. The first, which represents most of the century, is equity, the second productivity and the third and most recent adequacy. Each is described below, with a discussion of where California falls in terms of each concept.

##### Equity

The history of California school finance follows that of the country generally. For the bulk of the century, the primary goal was equity which requires the design of state funding systems that mitigate the impact of differential property wealth per pupil across school districts. Designing school finance mechanisms that provide state aid in inverse relationship to the property wealth of school districts helped level the playing field and enabled property poor districts to have more money than would otherwise be available.

In California, the *Serrano* lawsuit, filed in 1968 and litigated into the 1970s, was the first step in transforming the school finance structure. *Serrano* required that all wealth related spending differences between school districts be eliminated, or reduced to no more than \$100 per pupil.<sup>1</sup> Today, approximately 97 percent of all California public school children reside in school districts that fall within this narrow spending band when the size and type of district are accounted for.<sup>2</sup> However, in the three decades since this system was put in place, a growing proportion of state funding for education has

<sup>1</sup> This figure has been adjusted for inflation and today is just over \$300 per pupil.

<sup>2</sup> California school districts are organized into elementary (K-8), high school (9-12) and unified (K-12 districts, and further divided into small (less than 101 students for elementary, less than 301 for high school and less than 1,501 students for unified districts) and large districts. The assessment of *Serrano* compliance is determined in these six groups of districts.

been provided through categorical programs which are outside of the *Serrano* requirement to reduce wealth related spending differences. Today, something on the order of one-third of state revenues for schools is distributed through these categorical programs. There is considerable evidence that this approach has led to a different, but equally detrimental, set of spending differences. Sonstelie, Brunner and Ardon (2000) showed that this funding system has resulted in substantial inequities in the level of resources available to children across school districts. Further Betts, Ruben and Danenberg (2000) show there are considerable variations in the resources (e.g. teachers, instructional materials, etc.) available to children across the state as well. The result today is a confusing system where there is often little relationship between identified student needs and the targeting of revenues. While it is becoming clear that alternatives to the current system are needed, to date, little has happened in California.

##### Productivity

In the 1990s considerable emphasis was placed on understanding the relationship between money and student performance. Unfortunately, economists and statisticians have not been able to consistently identify the nature of that relationship and quantify it that make it possible for policy makers to appropriate funds in ways that will insure improved student learning. The reasons for this are as complex as the equations used to estimate the relationship, but boil down to a lack of clarity about the goals of education and insufficient precision in the data and tools available.

While today most would agree that the goals of school are to improve student performance, measuring that solely through standardized tests is controversial. Today's tests don't always do a good job of measuring student reasoning and problem solving skills, and the multiple choice nature of most tests makes it difficult to assess how well children can communicate. Attempts to quantify these more complex schooling outcomes have not been very successful. Moreover, measures of self esteem and good citizenship (also potentially important outcomes of schooling) are harder to measure at the individual student level.

Moreover, 28 states (California included) only collect finance data at the school

district level. While the other 21 collect school level finance data, I have argued elsewhere that until we are able to sort out expenditures on an individual student basis, it is unlikely that we will be able to measure the impact of additional resources on student performance (Picus and Robillard, 2000). Even then the ability to make accurate estimates of the effect of money on performance may be limited by the fact that we generally spend more money on those children with the greatest educational need. Careful controls for previous ability and for the characteristics of individual children will be needed to understand the productivity issue. However, with the emergence of adequacy, alternative approaches to determining how much money is needed have been developed.

### Adequacy

Another school finance strategy emerged in the 1990s. School finance adequacy became the most effective approach for challenging state school funding systems following the Kentucky Supreme Court's ruling in 1989 that the Kentucky funding system (and the entire education system) was unconstitutional. The Kentucky court ruled that all children should be able to meet certain minimum standards, and that inadequate resources were available to ensure that was possible. In response, the State Legislature appropriated an additional one billion dollars a year for education and established one of the nation's most extensive testing systems. Widely studied, results suggest that the work in Kentucky has led to improved student performance in the last decade.

The adequacy movement asks a simple question – how much money is needed to ensure that all children – or almost all children – can meet a state's performance standards? The problem is in determining what that amount of money is. Today, there are four approaches for estimating school finance adequacy. They are:

- *Successful districts:* This approach finds school districts that currently meet state standards and uses their costs as an estimate of adequacy.
- *Cost Functions:* Using advanced statistical techniques, analysts estimate the resources required for students to reach a given performance level on a standardized test,

controlling for student characteristics such as family income and home language.

- *Professional Judgment:* Panels of educators are brought together to describe the resources they would need in a school to have some assurance that all children could meet the state's performance standards. Once specified, the costs of these resources are estimated to arrive at an estimate of the costs of adequacy.
- *Evidence Based:* This approach relies on current educational research on what works in schools to estimate the resources needed to reach state performance standards and then estimates the costs of those resources.

Estimates of how much is needed to provide the children of a state with an adequate education are estimated through so called adequacy studies. Studies of this type have been conducted in thirty states, and are summarized in the January 2005 Quality Counts issue of *Education Week* (Education Week, 2005). In every instance, the studies have found that current funding levels are inadequate to enable all children to meet the state's educational standards.

Adequacy has been used as the basis for legal challenges to the school funding system in many states, and in all instances has been successful in getting the courts to rule that current funding levels are inadequate. California has its own adequacy law suit, *Williams v. California*. The suit in California was unique in that it seemed to focus mostly on the lack of decent school facilities for many school children, and sought more state oversight into the management of school districts. California is also the only state where the defendants (the state) counter sued claiming that the problem was not inadequate funding, but rather mismanagement by local district management who had access to the same level of funding as other, more successful school districts.

The Williams suit was settled in 2004, with an agreement by the state to spend something on the order of one billion dollars to improve school facilities in the districts with the most severe facility problems, and to provide additional funding in some settings. While this appears on the surface to be a great deal of money, it compares poorly to New York where

adequacy studies have recommended spending increases of six to nine billion dollars. These increases are recommended for a state with half as many children as California and one that currently spends nearly 50 percent more per pupil. In reality, the settlement agreed to in the Williams case is nothing short of selling out our children. Adequacy studies in other states have recommended funding increases from ten percent to over 35 percent, making the one billion in California (amounting to approximately two percent of the roughly 50 billion we currently spend) seem paltry.

While California has not conducted an adequacy study, the structure for doing so has been in place for two-and-a-half years. Based on the recommendations of the Task Force on a Master Plan for Education, legislation was passed in 2002 to establish the California Quality Education Commission which was charged with determining what an adequate level of funding for California's schools should be. Members of the Commission were never appointed and nothing has been done to estimate adequacy in California. In his budget the Governor has proposed elimination of the Quality Education Commission.

## **CALIFORNIA SCHOOL FINANCE TODAY**

### **Resources for Schools**

In announcing his proposed budget for 2005-06, Governor Schwarzenegger's initial recommendations left the state in a deficit position, and stepped back from his promise to replace some \$2.2 billion in funding for education to fully fund the Proposition 98 funding guarantee. To balance the 2004-05 state budget, the governor asked public schools to accept, for the first time ever, a suspension of the Proposition 98 funding guarantee in exchange for a promise to make it up the next year. As this is written, he has proposed a budget that does not make up that funding and continues to leave the schools with fewer dollars than provided by Proposition 98. And, Schwarzenegger has said that if his proposals are challenged, he will seek voter approval of constitutional amendments that will enable him to make "across the board" cuts in state spending when there is a deficit, and that will weaken the Proposition 98 guarantee in the future.

The heart of the problem for California school finance today is we don't have a clear picture of how much money we need. While the Governor and other policy makers are understandably reluctant to determine what the number is – since it is undoubtedly considerably more than we currently spend – absent a target to strive for, the level of school funding will continue to be determined through political compromises emerging from an increasingly unstable and under funded state revenue system. This problem can only be solved by determining how much we need to adequately fund California's schools. Clearly that figure will be substantially higher than the \$52.4 billion proposed in the 2005-06 budget.<sup>3</sup>

The question is how do we get there? NCLB recognized that states needed a dozen or more years to establish systems to enable all children to meet performance standards, there is no reason to expect we can find all the money we need in one year. But it is essential to know what we need and have a plan to get there. Even with that, it is likely that state revenues will fluctuate over time, so the plan for funding needs to accommodate the long term growth and provide for dips and spikes in revenues overtime. Figure 1 provides a simplified "cash flow" analysis of how the state could manage its resources toward the goal of adequate funding. In years when revenues exceed needs, it would be wise to bank funds for future years when state revenues are below identified needs. Similar to many state's "rainy day funds," this concept probably requires substantially more restraint on the part of the Legislature to not spend or return tax receipts to taxpayers in good years than they have exhibited in the past, and requires the education community to similarly allow the funds to be banked, rather than divert them to uses not part of a long term strategic plan. It requires a dramatically different approach to the allocation and use of tax revenues than we have seen in California in recent history.

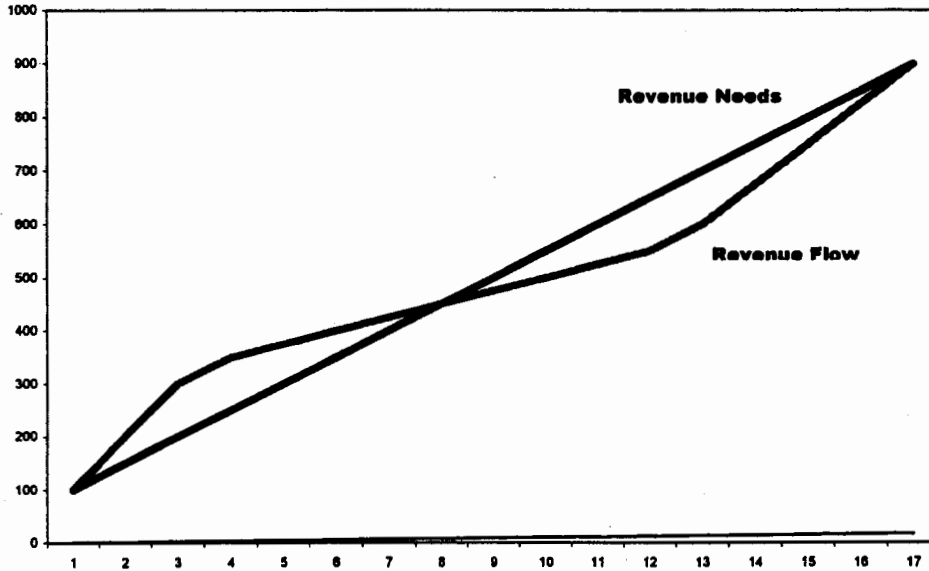
But where does that money come from? California is one of the wealthiest states in the

---

<sup>3</sup> The governor's 2005-06 budget identifies \$61.1 billion in total K-12 education funding. In addition to the 52.4 billion in Proposition 98 funding, other state resources, and local miscellaneous revenues, the higher figure includes Federal funds and school district debt service payments.

nation. Our average per capita income exceeds the nation's by nearly 7 percent and ranks 12<sup>th</sup> among the states. Yet our spending on education is similar to states near the bottom of the income

rankings. The question is who should pay for our schools. There are two options, neither popular, but both with the potential to resolve this funding issue.



**Figure 1: Managing the Flow of Resources over Time**

The first is to increase income taxes on Californians in the two highest tax brackets. It is estimated that these citizens (with California taxable incomes exceeding \$200,000 for individual returns and over \$400,000 for joint returns) will receive nearly \$12 billion in tax breaks from the Federal tax cuts. Tapping these tax benefits could go a long way toward funding our schools without increasing the total tax payments of our wealthiest citizens.

Another option is to review and modify Proposition 13. Although even less popular than the previous suggestion, Proposition 13 has hamstrung state and local government for years reducing the revenue potential of all governments. Moreover it has created substantial inequities, not only between homeowners in similar homes, but across classes of property with more of the tax burden being shifted to residential property. While some argue that Proposition 13 is needed to protect our businesses, in reality it only protects existing business, and makes it hard for new firms to build the production facilities they need and to compete with existing firms. Under those circumstances not only does governmental revenue suffer, but the lack of competition hurts

all consumers. Finding a fair and reasonable way to increase the revenue potential of property taxes, while insuring state residents don't get taxed out of their homes or businesses is possible – if we are willing to make the sacrifices Governor Schwarzenegger has called for.

**Other Options**

There are other options for ensuring an adequate education as well. Analyses of adequacy often point out that children have needs that go beyond the public school system's capabilities and responsibilities. Access to good prenatal care, high quality medical and dental facilities, and good preschools can lead to improved school performance for many children, particularly those from low income homes. A recent analysis of the public, and non-profit services available for children and their families in the area surrounding the University of Southern California discovered that there is as much as \$12,500 per child available. Combined with a similar amount through the public schools



in that area,<sup>4</sup> there is nearly \$25,000 per child to provide educational and other social services. It is making sure that these resources reach their intended target, and that the agencies responsible for providing those services coordinate their efforts that is often the problem.

While schools have typically been organized from the "bottom-up" and most other social services from the "top-down," California's highly state controlled school funding system may be an ideal place to begin breaking down the barriers between agencies toward the creation of coordinated educational and social services for all children. This could be accomplished for little or no additional cost.

#### SUMMARY

Despite the improving economy in California, the state budget remains mired in a deficit. The result of this deficit is lower than expected revenues for public schools. A commitment to turn this funding shortfall around requires better knowledge of how much is really needed. The California Quality Education Commission is the ideal vehicle for making that determination, yet today it seems more likely to be eliminated as part of the governor's efforts to make government more efficient.

It would make more sense to let the Commission determine how much money is required to provide all California school children with an adequate education, and then develop a plan for reaching that goal. Doing so will require the kind of sacrifices Governor Schwarzenegger has called for, but possibly by different groups of citizens.

#### REFERENCES

Betts, J.R., Rueben, K.S. and Danenberg, A. (2000). *Equal Resources, Equal Outcomes? The Distribution of School Resources and Student Achievement in California*. San Francisco, CA: Public Policy Institute of California.

Education Week (2005). *Quality Counts: No Small Change, Targeting Money toward*

*Student Performance*. Bethesda, MD: Editorial Projects in Education.

Picus, L.O. and Robillard, E. (2000). "The Collection and Use of Student Level Data: Implications for School Finance Research." *Educational Considerations*. XXVIII(1), Fall 2000. pp. 26-31.

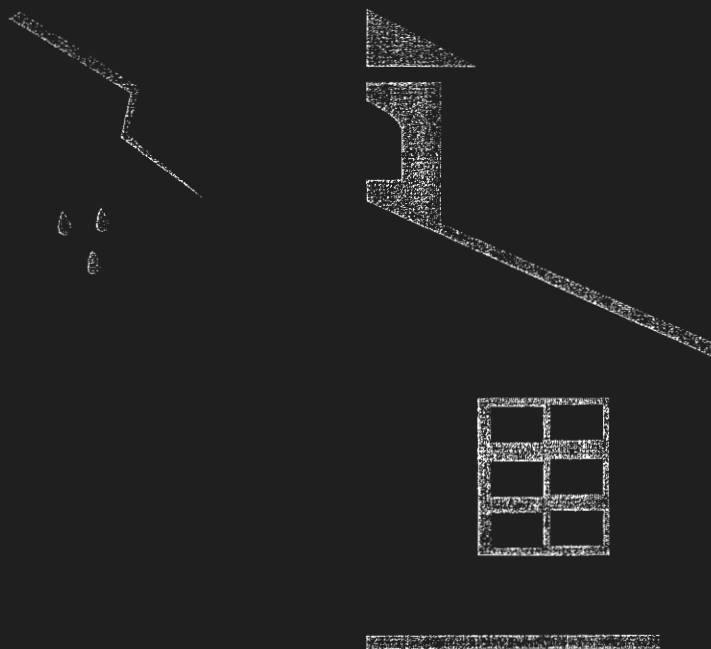
Sonstelie, J., Brunner, E. and Ardon, K. (2000). *For Better or For Worse? School Finance Reform in California*. San Francisco, CA: Public Policy Institute of California.

*Lawrence O. Picus is professor of Education at the Rossier School of Education and director of the Center for Research in Education Finance at the University of Southern California. He can be reached at 213 740-2175, or at [lpicus@usc.edu](mailto:lpicus@usc.edu).*

---

<sup>4</sup> When the total all funds budget of LAUSD is divided by its average daily attendance (ADA), the resulting calculation approaches \$12,500 per student.

# NOT CONDEMNED TO FAIL



DAPHNA BASSOK   DEVORA DAVIS   MARGARET RAYMOND

## EXECUTIVE SUMMARY

The results of this study support the following conclusions:

1. There is cause for cautious optimism about the course of accountability policies in the state. Less than 1 percent of the elementary, middle, junior, senior and k-12 schools in the state had chronic failure over three years. The incentives embodied in the Public School Accountability Act appear to promote positive responses in schools.
2. While proportionally a small fraction of all schools, the 70 chronically failing schools have jeopardized the education of over 90,000 students. No plan exists at this time to reclaim their futures with intensive intervention and remediation. Their loss today is California's loss tomorrow.
3. Traditional views that excuse low performance undermine the real capability of schools to make the necessary changes to improve. The evidence shows overwhelmingly that schools can and do improve even though the majority do not participate in any formal improvement program.
4. While the 70 failing schools renew efforts to improve under state monitoring and the School Assistance and Intervention Teams (SAIT) program, state and district officials should develop contingency plans to minimize the harm that chronic school failures imposes in students.

---

## STUDY OVERVIEW

---

This report provides evidence that the lowest performing schools in California are by and large showing significant improvement in their academic achievement, as measured by the Academic Performance Index (API), a school-level composite of student achievement test scores. Each year, schools are divided into deciles based on their scores, with Decile 1 consisting of the lowest performing schools. There have been five cohorts of Decile 1 schools identified since the beginning of the API in 1999, consisting of over 1100 schools. The 970 schools in the 1999, 2000 and 2001 cohorts are the focus of this study, which examined their progress in the two years following their designation as Decile 1 schools.

After repeated notice of poor performance, there are 70 schools—disproportionately urban and high schools—that have failed three years in a row. These schools represent about one percent of all California schools and around 7 percent of schools designated as Decile 1 schools. Over 90,000 students who are enrolled in these schools are being robbed of their educational opportunities. Districts and the California Department of Education have further optioned these students by providing the schools extended remediation efforts through the School Assistance and Intervention Teams (SAIT) process with no parallel intervention for the students caught in the middle.

The news of chronically failing schools overshadows the solid gains by the other Decile 1 schools. On average, Decile 1 schools improved more than the average school in the state. API scores range from 200 to 1000. The average California school gained 86 points on the API between 1999 and 2003. Elementary schools showed larger gains than middle schools or high schools. By comparison, the equivalent gain for Decile 1 schools was 176 overall. Like the state as a whole, when broken out by grade level, elementary schools fared better than middle schools or high schools.

The majority of Decile 1 schools are partially or fully meeting their Annual Growth Targets. In addition to absolute API scores, all schools are evaluated on their progress, known as Annual Growth Targets. A small proportion of schools failed to meet their growth targets

---

---

over a two-year period following their entry into Decile 1; about 9 percent of each cohort does not make sufficient progress in either year. The remaining schools (90 percent of each cohort) were found to make progress in at least one of the years, with a sizable share meeting their targets in both years.

**Careful analysis of Decile 1 schools refutes the notion that schools' mix of students or resources prevent them from making gains.** Schools with similar attributes were just as likely to make significant gains as small gains, based on regression analysis. In addition, the likelihood that a school would fail to meet its growth targets was largely unaffected by most of the factors that are currently measured about a school. From what is known about schools today, there is no "fatal factor" that condemns a school to failure.

---

## INTRODUCTION

---

California is rightly concerned about the performance of its public schools. From its enviable position in the 1970s as a model system, the condition of schooling in California slid to its current standing among the worst states in the nation.<sup>1</sup> After decades of unsuccessful reform efforts, a system of school accountability—common measures of school performance and explicit consequences for outcomes—was introduced in 1998. Since adoption of the Public School Accountability Act of 1998, schools have been judged on a school-wide aggregation of standardized student achievement tests scores known as the Academic Performance Index (API).<sup>2</sup> For the first time, this common yardstick puts the results of all schools on equal terms.

The API also highlights the relative positions of schools. Schools are ranked annually based on their scores, separately for elementary, middle schools and high schools. The ranks are divided into ten equal groups, with Decile 1 containing the lowest 10 percent of schools. It is little surprise that Decile 1 schools receive the designation of “high priority schools.”

As enabled in The Public School Accountability Act of 1998 and revised in the 2003 enactment of the High Priority Schools Grant Program,<sup>3</sup> the California Department of Education oversees targeted interventions for schools with low performance. Under both laws, low-performing schools’ participation was voluntary, but involvement allowed schools to access funding to design and then adopt plans to improve their quality of education. Rigorous evaluations of these programs revealed that the programs do not significantly impact the academic achievement of schools.<sup>4</sup> Schools that participated in the interventions did not perform any better as a result of their efforts than similar schools that did not join the programs.

Despite the bleak evaluations of the intervention programs’ results, the outlook for California’s failing schools is better than a few years ago. This report presents research on the progress of California’s worst schools. A small share does not respond to reports of poor performance. These schools are cause for great concern about the fates of the enrolled students who are affected. On the whole, however, poorly performing schools, regardless of their starting point, can and do make meaningful academic progress, as measured by the API. Perhaps most important from a public policy vantage, there are no known factors that condemn a school to chronic failure. Based on what we know today about schools and their students, for every school that

---

fails to turn its performance around, there are multiple schools like it that have and are working their way out of the failing school category. This welcome evidence puts the critics and naysayers on notice that real progress IS possible even for the most challenged schools.

## A Backdrop of Statewide Improvement

The gains realized by the lowest performing schools appear even more significant in light of an overall trend in improved Academic Performance Index scores. The average API scores in California have consistently gone up since they were introduced. As shown in Figure 1, the average API score in California has risen from 630 in 1999 to 717 in 2003. (While changes in the tests used to formulate the API make it difficult to compare scores longitudinally, the trend in average scores is still noteworthy.) By school level, elementary schools show the largest increases, and high schools show the smallest gains. Regardless, the trend is positive for all school types.

Figure 1. Average API Score All California Schools



Figure 2. Average Change in API Scores All California Schools



Consistent with other research, these figures suggest that accountability has produced a real and significant gain in academic achievement.<sup>5</sup> The introduction of consequences, as are present in the Public School Accountability Act, creates more positive gains than either no accountability or softer accountability approaches such as simple reporting of results. As shown in Figure 2, the gains were not equal across every year. Gains declined from 32.7 API points between 1999 and 2000 to 9.4 points between 2001 and 2002, likely influenced by the afore-

---

mentioned changes in the tests making up the API. Between 2002 and 2003, there was a return to large gains with an average gain of 28.3 API points. Again, the pattern was consistent across all school types, although high schools showed smaller gains than other schools.

But the averages do not tell the full story. The changes in statewide average scores on their own suggest that from a low-performing school's starting point, the state average is moving further away each year. But that is not the case. In reality, the distribution of schools is getting tighter. Over time, the difference between the best schools and the worst schools is getting smaller, reinforcing the overall pattern of improvement.

The two trends have important implications for the progress of low-performing schools. The upward shift in the average score and the narrowing of the distribution affect the chances of the lowest-scoring schools to achieve sufficient improvement to exit the lowest decile of the distribution. With the average score rising, the score needed to exit the lowest decile is a moving target. All else being equal, schools in the lowest decile that managed to improve their API scores by the same number of points as the state average would still remain in the lowest decile. This means that the schools that struggled the most academically had to make greater than average gains. With a narrowing distribution across all schools, schools are more closely clustered, so even if schools show some improvement they may remain in their original decile. These characteristics provide the backdrop for the experience of the Decile 1 low-performing schools.

## Profile of Decile 1 Schools

Since 1999, a total of 1199 schools have posted API scores that have landed them in Decile 1.<sup>6</sup> The schools are grouped into cohorts based on the year in which they were first identified as Decile 1. There have been six cohorts of Decile 1 to date, with the largest group identified in the first year of the API. This report focuses on the 1999, 2000 and 2001 cohorts because they have had several years available to demonstrate resolve and show progress.

Decile 1 schools show patterns of improvement similar to the state as a whole over the period 1999–2003. Figure 3 presents a similar trend of API gains for Decile 1 schools, broken out by type of school. It is noteworthy that the 4-year change for each school level for Decile 1 is larger than for the state as a whole. This means that not only are Decile 1 schools improving

---



Figure 3.  
Decile 1 Schools Average API Scores

Elementary	450.9(33.7)	Middle	496.8 (30.5)	High	166.8
Elementary	445.9(30.3)	Middle	477.1 (45.1)	High	105.4
Elementary	453.8(30.1)	Middle	477.1 (45.1)	High	59.2

each year, but that they are closing the gap over time.<sup>7</sup> As with the state as a whole, the smallest gains are found in high schools. They gain about half as much as middle schools, which in turn have about two-thirds the gain of elementary schools.

The progress achieved by schools that make up Decile 1 is surprising, when considering how they differ from the average school in California. A comparison of characteristics is displayed in Figure 4. In terms of demographics, Decile 1 schools have a dramatically higher proportion of minorities, English language learners and students that qualify for free and reduced-price lunch. The share of minority students in Decile 1 schools was found to be 35 percentage points more than the state average. An even larger share of Decile 1 students are eligible for free and reduced-price lunch, 90 percent compared to 49 for the state average. And Decile 1 schools had more than double the proportion of English language learners. Each of these demographics has trended over time with lower nominal levels of achievement—the lower side of the achievement gap. In addition, the parents of students in Decile 1 schools were found to be less educated, as reflected in the share of the school’s parents that did not finish high school, or the share that attained a bachelor’s degree or beyond. The share of parents not finishing high school is more than double the state average for Decile 1 schools, and one third as many parents complete college or beyond. Lower parental education is also associated with lower levels of performance, as measured by test scores. So it is clear that the Decile 1 schools contain higher proportions of students who historically have performed worse than the typical student in California.

One surprising finding is that Decile 1 schools do not differ from the state average on teacher resources as dramatically as they do on student demographics. While it is true that there are

Figure 4.  
School Characteristics

Minority Students	95%	59%
Students Eligible for Free and Reduced-Price Lunch	86%	50%
English Language Learner Students	56%	24%
Parents not High School Graduates	47%	19%
Parents College Graduate or Beyond	11%	33%
Teachers with Full Credentials	74%	88%
Teachers with Emergency Credentials	24%	11%

twice the share of emergency credentialed teachers in Decile 1 schools (24 percent compared with 11 percent for the state average), the absolute proportions are lower than one might have expected. Just about three quarters of teachers in Decile 1 schools hold full credentials, down from the state average of 88 percent.

Of course, these figures mask the fact that the figures may be different for individual schools. Some have speculated that the presence of full credentials may not assure that the Decile 1 teachers are equivalent to those in higher performing districts. Some insight to the question comes from recent work by Hanushek and Rivken, who found in Texas that the conventional wisdom that all the “good” teachers leave low-performing schools was a fallacy.<sup>9</sup> Until individual teachers can be followed over time, we will not know if the same is true for California.

## How Unusual Are Decile 1 Schools?

It would be a mistake to assume that because schools have high concentrations of minorities or English language learners or economically disadvantaged students that a school is conscribed to failure. Yet, that is the scenario assumed by many people. How valid is that viewpoint? The simple answer is: not very accurate.

---

A comparison of the characteristics of the 1999 cohort of Decile 1 schools—the largest cohort—with the top half of the state API distribution of schools revealed the following findings:

Of schools in which the percentage of minority students was greater than or equal to 95 (the average for the 1999 Cohort), there were 86 schools that were in Decile 5 or higher. Even though the 86 represent a small share (5 percent) of all schools with similar concentrations of minorities (95% or more), the fact that there are so many of them suggests that high performance for minorities is both realistic and achievable.

Of schools in which the percentage of students eligible for free and reduced-price lunch was greater than or equal to 86%, there were 69 schools that were in Decile 5 or higher. The 69 schools accounted for 3% of the schools with similar levels of SES.

There were 57 schools in which the percentage of English language learners was over 56% that were in Decile 5 or higher. Again, this is less than 4 % of the schools with this proportion of English language learners.

The existence of so many schools that are similar to those in Decile 1 but achieve solid performance suggests that no schools—regardless of the population of students they serve—are relegated to the bottom of the barrel. Greater support for this idea lies in the fact that the 2003 results show an *increase* in the numbers of schools with equivalent or higher shares of low income students, ELL students, or high-minority populations in the upper half of the score distribution. So not only can all types of schools do well, but all kinds of schools can do better. These simple associations are expanded upon later.

## How is Performance Judged?

According to the rules of the Academic Performance Index, all California schools whose API rank falls below the state mandated target of 800 must make annual incremental gains toward that score. These gains are referred to as the “Annual Growth Targets.” By design, Decile 1 schools have the largest requirement for gains, by virtue of being the furthest from the 800 score target.

---

---

Further, under the *No Child Left Behind* legislation, the state is required to demonstrate that students are making “Adequate Yearly Progress” towards state-set proficiency standards. The standards are set for Basic and Advanced Proficiency. Each year, schools are required to demonstrate that a fixed percentage of their students are at the Basic threshold. For 2003, for example, elementary and middle schools were required to have 13.6 percent of their students at proficient or above in English Language Arts (ELA) and 16 percent of students at proficient or above in mathematics. For high school, the thresholds were 1.2 percent for ELA and 9.6 percent for mathematics.<sup>10</sup> Here, too, Decile 1 schools must produce the largest incremental change.

For schools designated as “high priority” schools, their progress is carefully tracked for two years to determine if they achieve the required Annual Growth Targets. Schools that successfully make Annual Growth Targets two years in a row are released from their probationary status. Schools that make their targets one year out of two are maintained on watched status. According to the legislation, schools that do not make Annual Growth Target in either year are subject to further state intervention.

It bears mention that the requirements in *No Child Left Behind* for Adequate Yearly Progress, while not directly tied to the High Priority Schools Program, present schools with a more challenging standard of performance. Not only must schools meet the progress requirements for the school as a whole, they also must document equivalent progress across 11 designated subcategories of students. If a school fails to produce progress in a single subcategory, it fails to achieve Adequate Yearly Progress. However, there are loopholes in the federal policy that make it less onerous than the state policy. In practical terms, it remains the responsibility of the state to enforce accountability practices.

## What Happens to Decile 1 Schools?

Low-performing schools have been treated to a barrage of conflicting speculation about their prospects for improvement. Often well-meaning and concerned, some groups focus on what low-performing schools *can't* do, by suggesting that it is unfair, unconscionable or illegal to hold out high standards for school improvement if they enroll poor, minority or immigrant children. Others dwell on what they *shouldn't be expected to* do, supposing that the challenge

---

---

cannot be met without dramatic supplements to the resources that schools receive. Those in favor of standards and accountability point to the incentives inherent in accountability policies, considering that schools *ought to be* motivated to make improvements. Few of these expectations have been empirically examined. The historic performance of Decile 1 schools provides just such a chance to learn what they *actually* do achieve.

For this study, Decile 1 API scores were analyzed in a variety of ways to learn what happens to them. Beyond trends in decile average score gains, we examined cohorts separately to see how these schools responded in each year following their designation as Decile 1 schools. We also subdivided the decile into smaller ranges of scores to see if the trends were dependent on a school's initial starting position. Finally, we developed econometric models to test simultaneously if the factors that have been offered as predictive of progress, or conversely lack of it, have statistical merit. The results are consistent and encouraging.

The average performance of Decile 1 schools supports the idea that sustained progress is a reasonable expectation for all schools, regardless of their initial levels of competence. While a slim margin of schools continues to fail, the majority are on the rise.

## Some Schools Do Not Progress

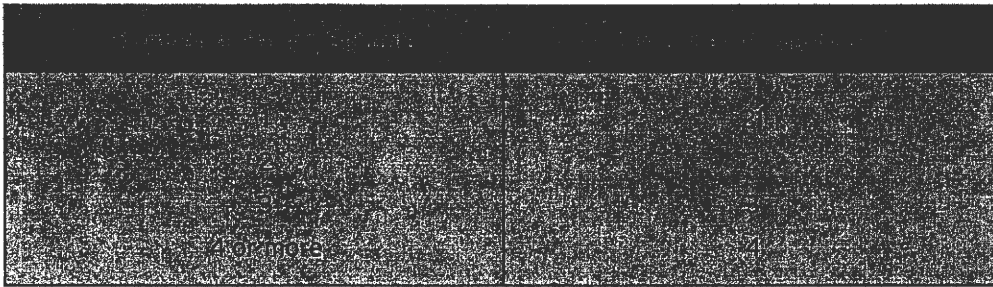
While the number is small relative to the number of schools that have been designated Decile 1 schools, 70 schools in 30 districts did not meet their growth targets for both of the two years following their first being identified as Decile 1. These schools represent 7 percent of the 964 schools whose scores that placed them in Decile 1 between 1999 and 2001. Despite the efforts they have made to improve, these schools show a continuing trend of low performance. They are failing schools. An alphabetic listing of the schools appears in Appendix A.

Closer examination of the schools is revealing. High schools are over-represented among failing schools. While across the state high schools make up 12.7 percent of the population of schools, among those that do not show improvement over two years, high schools account for 37 percent. One possible explanation is that since academic improvement programs have been so heavily concentrated at the elementary level, they have been better able to show the necessary growth in API.

---

Forty-five failing schools operate in the seven largest school districts, each with multiple failing schools. Los Angeles Unified School District tops the list with 17 failing schools, but Oakland Unified School District and Fresno School District have higher proportions of their schools fail, with 8 and 6 respectively. Twenty-one districts had only one failing school, as shown in the table below.

Figure 5.  
Number of Districts with Failing Schools



That only a small fraction of Decile 1 schools fail to make progress masks the true magnitude of the situation. In 2003-2004, the 70 schools enrolled over 90,000 students. Many of whom have been in their school for several years. The debt of failing performance is borne most heavily by these students.

## The Majority of Decile 1 Schools Improve

When average API score gains for Decile 1 schools are compared to those of other deciles, as shown in Figure 6, the scores show larger increases each year than any other group. This finding is consistent over all the years of study. Caution is needed to avoid over-interpreting the trend, however, as it blends several different factors: the evolving population of Decile 1 as schools exit and enter the decile, the heavier weight given by the API to progress by the lowest-performing students, possible effects from test measurement error, as well as real improvement. Clearly, a deeper look is needed to tease these effects apart.

Figure 6.  
Average API Growth by Decile 1999-2003

Decile	1999	2000	2001	2002	2003
1	41.67(30.7)	39.7(29.9)	42.4(30.6)	45.5(27.5)	48.3(27.2)
2	37.9(27.3)	38.1(31.0)	41.3(29.1)	30.5(26.6)	40.2(27.2)
3	32.1(25.3)	39.9(31.7)	26.1(23.0)	23.1(27.3)	36.0(27.2)
4	35.7(29.1)	39.7(32.0)	32.0(29.9)	14.9(26.5)	20.6(27.3)
5	30.1(23.1)	37.7(31.0)	36.7(24)	6.8(26.8)	20.6(27.2)
6	24.7(21.2)	32.9(28.2)	32.4(27.3)	1.5(26.0)	20.6(27.2)
7	28.7(25.3)	30.9(26.5)	31.9(25.1)	-1.9(23.3)	20.6(27.2)
8	23.1(19.6)	28.9(25.3)	29.6(21.8)	-7.0(22.1)	19.5(27.2)
9	17.4(16.1)	23.9(22.9)	21.9(18.0)	-8.6(20.4)	19.0(27.2)
10	15.1(17.8)	16.2(16.2)	14.1(17.4)	-7.5(17.4)	19.0(27.2)

Many of these factors can be controlled if Decile 1 schools are divided into cohorts by the first year their score placed them in the lowest decile. By standardizing their progress relative to that designation, it is possible to compare the same groups over time and over equivalent milestones. The average API for the 1999, 2000 and the 2001 cohorts are presented in Figure 7 for the two years after they were declared Decile 1. For all three cohorts, the average growth in API scores was substantial and sustained over the two years. The consistency of the trends suggests real growth.<sup>11</sup>

The analysis revealed an ironic side note about Annual Growth Targets. Because the targets are set based on the difference between previous year score and 800, the targets do not adjust for the general trend of scores, which in recent years has been upwards. This means that some schools can both meet their Annual Growth Targets and slide in the relative ranking of schools. This phenomenon affected significant numbers of schools that started out in Decile 2, met their Annual Growth Targets and still slipped into Decile 1.

Figure 7.  
Trajectories – Comparing Growth

1999 COHORT	669	416.7(20.7)	39.7(29.9)	39.1(30.9)
2000 COHORT	151	441.1(20.8)	47.0(33.1)	38.4(26.1)
2001 COHORT	150		-1.7(34.8)	47.1(33.1) 48.4(30.5)

The fate of Decile 1 schools was a prime motivation for this study: once they learned their place relative to other schools, did Decile 1 schools progress to higher deciles and leave the 'failing school' designation behind? Decile 1 schools were studied in the two years subsequent to being designated Decile 1 to see if they met their Annual Growth Targets and if they exited Decile 1.

Figure 8 presents the results of our analysis for the schools that became Decile 1 schools in the 1999, 2000 and 2001 cohorts. It is not surprising that the 1999 Cohort had the lowest proportion of its schools exiting Decile 1 after two years. With 668 schools, the cohort is by far the largest and includes those schools that entered the accountability system with the worst performance scores.

Regardless of how badly they started off, significant fractions produced sufficient gains relative to the rest of the distribution to reposition themselves in a higher decile and exit Decile 1. The fractions were even higher for the 2000 and 2001 cohorts. In the later cohorts between a quarter and half the schools exited Decile 1, depending on school type.

The converse situation is also presented in Figure 8—the proportion of schools that fail to make enough progress to meet their Annual Growth Targets and remain Decile 1 schools. The patterns across the cohorts are consistent with their exit trends. The first cohort posts a high fraction of schools that have not produced enough gains to move them forward in the standings or permit them to leave the decile. These schools appear to have the twin problems of



low performance and inability to effectively address the situation. That combination afflicts smaller shares of schools in the second and third cohorts. Across all cohorts, however, a larger share of high schools fails to make their targets and remain Decile 1 schools, compared to elementary and middle schools.

Figure 8.  
How Schools Fare in Decile 1, by School Level

<b>1999 COHORT</b>			
668 Schools			
Elem	27		4%
Middle	20%		14%
High	26%		26%
<b>2000 COHORT</b>			
151 Schools			
Elem	48%		3%
Middle	47%		0%
High	36%		21%
<b>2001 COHORT</b>			
145 Schools			
Elem	43%		5%
Middle	24%		0%
High	53%		12%
<b>TOTAL</b>			
Elem	33%		2%
Middle	24%		0%
High	32%		23%

An astute reader might question whether the “Leavers” and “Missed Targets” schools differed materially by their initial API scores. In other words, would schools that started out higher in Decile 1 be favored in their ability to make their targets and leave the decile? Decile 1 schools were sub-divided into quartiles, and their progress studied in terms of their propensity to achieve their Annual Growth Targets and their progress towards higher deciles. The results appear in Figure 9. The quartile average starting scores differ by 92 points. The share of schools in each quartile of Decile 1 that leave the decile differs markedly based on starting point. Compared to only 9 percent of the lowest quartile that exit, more than half of the highest quartile leaves the decile after two years. Differences in starting positions also explain why the share of each quartile’s schools meeting their growth targets in both subsequent years but remaining in Decile 1 declines steadily from 48 percent for the lowest quartile to 20 percent for the highest. Even with solid progress, the lowest quartile schools have the furthest to move before they exit the decile.

Figure 9  
How Initial API Score Impacts Trajectory  
Quartile Analysis of Decile 1 Schools

Quartile 1	198	9%	48%	32%	9%	2%
Quartile 2	203	16%	40%	32%	7%	5%
Quartile 3	260	36%	23%	31%	8%	2%
Quartile 4	297	54%	20%	20%	6%	1%

But progress is the predominant pattern across all deciles, as the remaining columns of Figure 9 illustrate. There is an eerily consistent share of schools across the subgroups that never meet their growth targets; luckily the fraction is fairly small. In addition, the proportion of Decile 1 schools in each subgroup that make progress in one of the two subsequent years is consistent for the lowest three subgroups, around a third, and 20 percent for the highest subgroup.

---

Two related stories emerge from Figure 9. The first story is that starting point does not materially affect whether a school can create positive gains in performance. The corollary is also true—that starting point does not affect a school’s likelihood of failure to meet targets. The second story is that starting point does matter in how quickly a school can exit the decile.

## Analysis of School Failure

Conventional wisdom suggests that schools fail because they have tougher students or less qualified teachers or higher student mobility. Those relationships can be tested through regression analysis. Regression analysis is a statistical tool that simultaneously examines the independent impact of a number of school characteristics on an outcome of interest. The models included mobility, the percentage of parents with a low level of education, the proportion of the teachers that were fully credentialed, the percentage of the student body that was minority, the proportion of students on free or reduced-price lunch, the percentage of students who were English learners, the school’s enrollment and the percentage of students tested. By restricting the analysis to Decile 1 schools, it is possible to focus in on their specific experience.<sup>14</sup>

In this case, the analyses focused on two different outcomes. The first explored whether school characteristics could explain the magnitude of growth over the two years following designation as Decile 1. In the second inquiry, the focus was on whether school attributes could explain which schools failed to meet growth targets for the two years and which did not.<sup>15</sup>

The model results are presented on the CREDO website as an appendix to this paper. Here, we summarize the findings. First, none of the models have very strong explanatory power overall; each can account for about one quarter of the variation in outcomes. Put another way, when all of the factors that are known about a school are taken together, they only explain one quarter of the results that actually occur. This suggests that in general there are a lot of random influences that are not captured by the models that affect schools’ results.

Even though the systematic portions of the models were fairly modest, the models allow the contribution of each school characteristic to be isolated from the rest of the school factors. Regression models provide the truest test of the effect of each factor on the outcome being studied.

---

---

*Explaining Two-Year API Gains* The proportion of parents in a school who had low levels of education was positively associated with two-year gains in API; that is, the lower the educational attainment of the parents, the bigger the gain. If this seems counter-intuitive, consider that the starting points for schools with low parental education were on average lower than schools with more educated parents, so their progress would be rewarded more heavily in the API formula.

School size was negatively related to API gains. This means that the larger the school the smaller the gain. This finding is consistent with current thinking about the difficulty of engaging students and teachers toward academic improvement in larger settings.

A positive association with two-year gains and the percent of the students who were tested was found. It is likely that schools that have strong administrative systems and can therefore undertake the necessary steps to assure that most parents and students are aware of the need to be present for testing would also be better equipped to effect the changes necessary to improve their API scores.

In none of the models was the proportion of teachers holding full credentials statistically significant.

In Decile 1 schools, the influence of student characteristics, such as mobility, minority status, eligibility for subsidized meals or being an English learner on academic gains is different than one normally expects. The anticipated trends are based on statewide associations across highly diverse school settings and student populations where mobility, concentration of minority students, English learners and students eligible for meal subsidies are inversely correlated with student achievement. But in Decile 1, a subset of all schools that start out with high degrees of each of the challenge factors, the associations are not as expected. With Decile 1 schools, only the contribution of minority concentrations mirrors the statewide picture: for each percentage point increase in minority populations, the two year gain in API is about a half-point lower. But this factor is more than offset by the positive influences of mobility rates, English learners, and the share of students eligible for lunch subsidies. The net result is that, for Decile 1 schools, the schools that have more disadvantaged student populations achieve greater gains over two years than others. This may be because of lower starting points, or it could be

---

---

because they respond more strongly to the incentives of accountability. Additional study is needed to better understand the results.

*Explaining Which Schools Fail.* The second regression analysis aimed to explain which schools failed to make their Annual Growth Targets for two consecutive years. If the conventional wisdom is accurate, then schools with more disadvantaged students and fewer school resources would have higher probabilities of being a failing school. But the models, based on the 1999 Decile 1 cohort, did not bear out these conjectures.

The failing school models are stronger than the API growth models in their explanatory power, accounting for about 30 percent of the variation across schools. However, of all the factors tested, only three had significant impact on the probability that a school would fail: proportion of students tested, school size and the proportion of English learner students. Schools with lower proportions of students tested had higher chances of failing to meet growth targets for two years; the direction of the association is consistent with the earlier conjecture that stronger administrative systems in schools led to both higher testing proportions and better improvement of scores. Larger schools had higher chances of being a failing school, as expected. But the direction of influence for English Learners was contrary to expectations. The lower the proportion of English learners in a school, the higher its chances of failing to meet growth targets for the two years of study. None of the remaining factors, including teacher credentialing, were significant.

*Interpretation of the Regression Models* The regression analyses provide few footholds to policy makers seeking to refine policies for greater academic improvements. There are no outstanding school factors to be shored up, nor student factors that if compensated for would translate directly into greater API gains or better chances of meeting growth targets. In general, what we currently measure about schools or students gives us little to go on in our quest to improve schools and the academic achievement of students.

Viewed from a different vantage, however, that same news is exceptionally encouraging. When the focus is on the worst schools in California, none of the popular conceptions that excuse low performance finds any support in the empirical evidence. Schools with low levels of school endowments are just as likely as better-equipped schools to make gains and achieve

---

growth targets, and may even be slightly more successful. Put another way, nothing condemns a school to failure at the outset.

## Conclusions and Further Questions

This study of five years of low-performing schools in California has revealed a number of unexpected results. First, the accountability policies in California appear to be working. The majority of Decile 1 schools made significant academic gains despite not participating in the state-sponsored intervention programs.

In fairly short periods of time, the majority of schools took effective action to alter their performance and begin to move towards higher API territory. They and their districts developed workable strategies and allocated the necessary resources to implement them without dramatic overhaul of their entire school finance system. It would appear, therefore, that reform is possible with the measures designed into the Public School Accountability Act. Clear consistent signals of performance combined with incentives and consequences have created stronger results than either of the two improvement programs the state has adopted.

Second, the most heartening result of this study is that dramatic improvement is possible regardless of the starting point of a school or the assets they possess. The evidence contradicting traditional views about why schools cannot improve are both a relief and a challenge to develop more grounded models of school capacities. The results obtained here are a useful beginning in pointing up new areas for exploration. We need to figure out the choices that helped schools make progress. More sophisticated measures of school operations may be needed in order to accurately assess those factors that are related to successful outcomes. Additional work by policy analysts and planners could profitably be engaged in this pursuit.

Finally, while the proportion of all Decile 1 schools that chronically underperform is small, it is still the case that 70 schools failed to demonstrate reasonable progress in their academic achievement over a three-year period. The education of over 90,000 students has been neglected, with more students affected each year that aggressive measures are not taken. This is a problem of dramatic proportions. With each additional year of low performance, greater numbers of students lose ground in their education. Allowing schools additional time to

---

improve must be weighed against the damage to these children and to their communities. The current policy approach is to deem these schools as state monitored. Subject to approval by the State Board of Education, the State Superintendent of Instruction must take action, which can include external reviews of school operations by School Assistance and Intervention Teams (SAIT) over another two year period.

It may be too soon to ascertain if these efforts are sufficient to turn the schools around. Despite best hope, it is almost a certainty that some of the schools will not be affected by these efforts. Rather than wait until the evidence reveals which schools did not improve, the state would be better served if planning for that eventuality began now. Districts with one or more chronically failing school should develop plans immediately to provide remedial services to students caught in these schools and provide them access to other more successful school settings.

## Endnotes

<sup>1</sup> <http://nces.ed.gov/programs/coe/2004/section2/table.asp?tableID=45>

<sup>2</sup> Public School Accountability Act of 1998. The API is a composite scale of test results used to measure academic performance and growth of schools, with scores ranging from 200 to 1000. For a school with a Base API score below 800, the annual growth target is 5% of the difference between 800 and its Base score. Schools with a base of 800 or above must maintain their score at 800 or above.

<sup>3</sup> The High Priority Schools Grant Program, California Education Code Section 52055.600-52055.660.

<sup>4</sup> Jennifer O'Day and C. Bitter. "Evaluation Study of the Immediate Intervention/Underperforming Schools Program and the High School Achieving/Improving Schools Program of the Public Schools Accountability Act of 1999". American Institutes of Research, Policy Analysis for California and EdSource, April, 2003. Also Betts study on selection and performance through PPIC. Also, Betts, Julian and Anne Dannenberg. "The Effects of Accountability in California." In Paul E. Peterson and Martin R. West, eds. *No Child Left Behind? The Politics and Practice of Accountability*, Washington, D.C.: Brookings Institution, 2004.

<sup>5</sup> Eric A. Hanushek and Margaret E. Raymond. "The Effect of School Accountability Systems on the Level and Distribution of Student Achievement", *Journal of the European Economic Association*, 2(2-3), April-May 2004, pp. 406-415.

<sup>6</sup> These numbers update figures presented in the Ed Source Report "California's Lowest-Performing Schools," published in February 2003. Their report focused on Decile 1 and Decile 2 schools, while this study includes only Decile 1 schools.

- <sup>7</sup> Part of the progress may be explained by the structure of the API, which rewards growth from the bottom of the performance distribution more heavily than growth from the middle upward. Additionally, since the standardized achievement tests on which the API scores are based are subject to a degree of measurement error, it is possible that some of the lowest performing schools were initially adversely affected by measurement error, in essence drawing worse scores than they actually deserved. Those same schools are likely not to have a bad run-in with measurement error two years in a row, so the score they achieve in the second year would appear to be improvement even if there was no real gain in fact. Since this phenomenon bears out at both ends of the spectrum (despite the preferential weighting of the API), it appears that some regression to the mean is occurring independent of the general rise in scores.
- <sup>8</sup> Part of the progress may be explained by the structure of the API, which rewards growth from the bottom of the performance distribution more heavily than growth from the middle upward. Additionally, since the standardized achievement tests on which the API scores are based are subject to a degree of measurement error, it is possible that some of the lowest performing schools were initially adversely affected by measurement error, in essence drawing worse scores than they actually deserved. Those same schools are likely not to have a bad run-in with measurement error two years in a row, so the score they achieve in the second year would appear to be improvement even if there was no real gain in fact. Since this phenomenon bears out at both ends of the spectrum (despite the preferential weighting of the API), it appears that some regression to the mean is occurring independent of the general rise in scores.
- <sup>9</sup> "Why Public Schools Lose Teachers", by Eric A. Hanushek, John F. Kain, and Steven G. Rivkin, *Journal of Human Resources*, 39(2), Spring 2004, pp. 326-354.
- <sup>10</sup> The criteria for Adequate Yearly Progress can be found on the California Department of Education website at <http://www.cde.ca.gov/ta/ac/ay/expnotes03p1.asp>
- <sup>11</sup> If statistical regression to the mean were operating, one would expect larger variances around the average scores in the first year (suggesting that students in a school got a bad draw on test measurement error) and smaller variances in subsequent years. However, the data generally do not support this.
- <sup>12</sup> If statistical regression to the mean were operating, one would expect larger variances around the average scores in the first year (suggesting that students in a school got a bad draw on test measurement error) and smaller variances in subsequent years. However, the data generally do not support this.
- <sup>13</sup> The fact that Decile 10 schools on average also have strong positive gains further suggests that regression to the mean is not a crippling problem in these analyses.
- <sup>14</sup> This approach parallels the one used by AIR in their study, and eliminates the problem of small numbers relative to the entire population. Models developed for all schools in the state explain the larger trends in performance, but swamp the more narrow questions posed here.
- <sup>15</sup> The analysis was conducted on the 1999 cohort because of its large number of observations.



## APPENDIX A

### List of Failing Schools in California

Alameda	Oakland Unified	Calvin Simmons Middle	907
	Oakland Unified	Fr Fremont Senior High	301
	Oakland Unified	Golden Gate Elementary	217
	Oakland Unified	Highland Elementary	641
	Oakland Unified	Jefferson Elementary	860
	Oakland Unified	Lowell Middle	540
	Oakland Unified	McClymonds Senior High	745
	Oakland Unified	Oakland Charter Academy	167
	Fresno	Coalinga-Huron Joint Unified	Huron Middle
Fresno Unified		McLane High	2470
Fresno Unified		Roosevelt High	2854
Fresno Unified		School of Unlimited Learning	182
Fresno Unified		Sequoia Middle	1034
Fresno Unified		Terronez Middle	1105
Fresno Unified		Yosemite Middle	864
Parlier Unified		Parlier High	834
Imperial		Calexico Unified	Blanche Charles Elementary
	Calexico Unified	Kennedy Garden Elementary	748
	San Pasqual Valley Unified	San Pasqual Valley High	196
Los Angeles	Compton Unified	Centennial High	1307
	Long Beach Unified	Jaun Cabrillo High	3100
	Long Beach Unified	Jordan High	4340
	Long Beach Unified	Pacific Learning Center	181
	Los Angeles Unified	Alain Leroy Locke Senior High	3088
	Los Angeles Unified	Crenshaw Senior High	2995
	Los Angeles Unified	Edwin Markham Middle	2059
	Los Angeles Unified	G. W. Carver Middle	2836
	Los Angeles Unified	George Washington Preparatory	2956
	Los Angeles Unified	Jordan (David Starr) Senior High	2641
	Los Angeles Unified	Los Angeles Academy	3090
	Los Angeles Unified	Main Street Elementary	1569
	Los Angeles Unified	Manual Arts Senior High	4093
	Los Angeles Unified	Mt. Vernon Middle	1857
	Los Angeles Unified	Olive Vista Middle	2041

Los Angeles (continued)	Los Angeles Unified	Park Avenue	1055	
	Los Angeles Unified	Robert Fulton Middle	2431	
	Los Angeles Unified	Roosevelt Senior High	4940	
	Los Angeles Unified	Susan Miller Dorsey Senior High	2137	
	Los Angeles Unified	Thomas Jefferson Senior High	3869	
	Los Angeles Unified	Woodlawn Avenue	1286	
	Pomona Unified	Garey Senior High	2358	
	Pomona Unified	Roosevelt Elementary	1113	
	Mendocino	Round Valley Unified	Round Valley Elementary	266
	Napa	Napa Valley Unified	Napa Valley Language Academy	555
Riverside	Coachella Valley Unified	Saul Martinez Elementary	742	
Sacramento	Rio Linda Union Elementary	Aero Haven Elementary	464	
	Sacramento City Unified	Maple Elementary	261	
	Adelanto Elementary	Westside Park Elementary	613	
San Bernardino	San Bernardino City Unified	Arrowview Middle	2261	
	San Bernardino City Unified	Lytle Creek Elementary	835	
	San Bernardino City Unified	Riley Elementary	984	
	San Diego Unified	Baker Elementary	549	
San Diego	San Diego Unified	Balboa Elementary Year Round	817	
	San Diego Unified	Emerson/Bandini Elementary	1017	
	San Diego Unified	Lincoln Senior High	2511	
	San Diego Unified	Sherman Elementary	690	
	Valley Center-Pauma Unified	Oak Glen High	57	
	San Francisco Unified	Gloria R. Davis Middle	191	
San Francisco	San Francisco Unified	J. Eugene McAteer High	<i>Closed in 2003</i>	
	San Francisco Unified	Mission High	889	
	Lodi Unified	Turner Elementary	79	
San Joaquin	Redwood City Elementary	Fair Oaks Elementary	517	
San Mateo	Casmalia Elementary	Winifred Wollam Elementary	30	
Santa Barbara	Pajaro Valley Unified School	Watsonville High	3081	
Santa Cruz	Alpaugh Unified	Alpaugh Elementary	150	
	Cutler-Orosi Joint Unified	El Monte Elementary	596	
Tulare	Visalia Unified	Charter Alternatives Academy	86	
	Hueneme Elementary	Art Haycox Elementary	807	
	Oxnard Elementary	Ramona Elementary	668	
Ventura	Woodland Joint Unified	Grafton Elementary	151	
Yolo				

INFORMATION ON  
APPOINTMENTS

SENATE RULES COMMITTEE  
APPOINTMENTS UNIT  
STATE CAPITOL, ROOM 420  
SACRAMENTO, CA 95814

PHONE (916) 651-4151  
FAX (916) 445-0596

1. Mr. \_\_\_\_\_  
Mrs. \_\_\_\_\_  
Ms. Last First Middle

2. Position (s) appointed to or sought: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Driver's License #: \_\_\_\_\_ 4. Birthdate: \_\_\_\_\_

5. Social Security #: \_\_\_\_\_ 6. Ethnicity: \_\_\_\_\_  
(optional)

7. Gender: \_\_\_ 8. Name of Spouse: \_\_\_\_\_ 8a. Maiden Name: \_\_\_\_\_

9. Are you a registered voter? \_\_\_ Yes \_\_\_ No County: \_\_\_\_\_

Please indicate party affiliation \_\_\_\_\_

Who is your State Senator? \_\_\_\_\_ Assembly Member? \_\_\_\_\_

10. Occupation: \_\_\_\_\_

11. Business Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

City County State Zip

Phone ( ) \_\_\_\_\_

Fax ( ) \_\_\_\_\_

12. Residence: \_\_\_\_\_

City County State Zip

Phone ( ) - Cll Phone ( ) - \_\_\_\_\_

13. Please list licenses held pertaining to the desired position (s) sought.

<u>License</u>	<u>Date Secured</u> (mo/yr)

14. Educational History:  
College/Graduate School                      From                      To                      Degree/Major  
(mo/yr)                      (mo/yr)


15. Work History:  
Employer                      From                      To                      Occupation/                      City/State  
(mo/yr)                      (mo/yr)                      Title


If additional space is needed, please attach a separate sheet.

16. List all professional organizations and societies you have been a member of:

<u>Organization/Society</u>	<u>From</u> (mo/yr)	<u>To</u> (mo/yr)

If additional space is needed, please attach a separate sheet.

17. Many positions require the appointment of persons with special background, experience, etc. Please indicate below those categories for which you may qualify.

<input type="checkbox"/> Advanced Technology	<input type="checkbox"/> Agriculture	<input type="checkbox"/> Attorney
<input type="checkbox"/> Education	<input type="checkbox"/> Environment	<input type="checkbox"/> Financial Institution
<input type="checkbox"/> Higher Education	<input type="checkbox"/> Insurance	<input type="checkbox"/> Labor
<input type="checkbox"/> Law Enforcement	<input type="checkbox"/> Health	<input type="checkbox"/> Local Government
<input type="checkbox"/> Small Business	<input type="checkbox"/> Student	<input type="checkbox"/> Veteran

18.  Yes  No Are you a citizen of a country other than the United States? If so, please list country.
19.  Yes  No Have you or your immediate family been affiliated (as an officer, owner, director, trustee, partner, advisor, or consultant) with any institutions (corporations, firms, partnerships, business enterprises, nonprofit organizations, etc.) within the past five years which might present a potential conflict of interest or appearance of conflict of interest with your requested appointment? If yes, please explain.
20.  Yes  No Do you own real property, personal property, or financial holdings which might present a potential conflict of interest or appearance of conflict of interest with your requested appointment? If yes, please explain.
21.  Yes  No Are you currently or have you ever been involved in a civil litigation, undergone an investigation or been convicted of a violation of any federal, state, county or municipal law, regulation or ordinance? (Traffic violation for which a fine of less than \$100 was imposed should not be included.) If yes, please explain.
22.  Yes  No Has a tax lien or other collection procedure ever been instituted against you by federal, state, or local authorities? If yes, please explain.
23.  Yes  No Have you ever been disciplined or cited for a breach of ethics or unprofessional conduct by, or been the subject of a complaint to any court, administrative agency, professional association, disciplinary committee or other professional group? If yes, please explain.
24.  Yes  No Have you ever run for political office, served on a political committee, or been identified publicly with a particular political organization, candidate or issue? If yes, please explain.

25. \_\_\_\_ Yes \_\_\_\_ No Have you ever been a member of any organization which you believe is relevant to the appointment you are seeking?
26. \_\_\_\_ Yes \_\_\_\_ No Have you ever written any books or articles? If yes, please explain.
27. \_\_\_\_ Yes \_\_\_\_ No Do you know anyone who might take any steps, overtly or covertly, to attack your appointment? If yes, please explain.
28. \_\_\_\_ Yes \_\_\_\_ No Is there anything in your background which, if made known to the general public through your appointment, would cause embarrassment to you and/or the Senate? If yes, please explain.
29. \_\_\_\_ Yes \_\_\_\_ No Are you presently on partial or full employment disability or retirement or have you applied for same? If yes, please explain in full detail.

### AUTHORIZATION FOR RELEASE OF INFORMATION

I hereby authorize any person or other entity in possession of information regarding any of the following to release that information to the California Senate Committee on Rules:

- |   |                  |                         |
|---|------------------|-------------------------|
| *Education  | *Credit Record   | *Employment             |
| *Military Service   | *Medical History | *Drivers License Record |
| *California State Summary Criminal History Information              |                  |                         |
| *Economic interest as reported in my Statement of Economic Interest |                  |                         |

Check box if you wish to receive a copy of your credit report

I authorize the California Senate Committee on Rules to use information obtained pursuant to this release for any purpose relating to the Legislature's review and deliberation concerning my nomination to public office, including, but not limited to, its use by Members and staff in preparation for, and during, committee hearings and other public debate on the floor of either house of the Legislature.

This authorization is valid for one year following the date of the signature below.

(Signed) \_\_\_\_\_  
Form SRC 9507

(Date) \_\_\_\_\_  
(Revised 2003)

**TO ALL PERSONS SEEKING A POSITION APPOINTED BY  
ASSEMBLY SPEAKER FABIAN NÚÑEZ**

Thank you for your interest in serving the people of the State of California. To be considered for an appointment with the Speaker of the Assembly, please complete and return the attached application form.

In completing the form, please note the following:

1. ***The application form must be completed in full.*** If a particular question does not apply to you, please make some indication (e.g., "not applicable" or N/A) rather than leave the space blank. In addition to the completed application form, please attach your resume and/or biography.
2. Please *type or print legibly* your information in the spaces provided on the form. If it is necessary to explain any of your answers, or if you wish to provide more information than the space allows, feel free to use attachments. Please number the entries on your attachments according to the question on the application form.
3. Your completed application form and all attachments should be stapled together and submitted to the Speaker's Office at the address below. We also ask that you fax us a copy at 916-319-2351.

**Honorable Fabian Núñez  
Speaker of the California State Assembly  
State Capitol, Room 219  
Sacramento, CA 95814  
Attention: Lisa Dominguez, Appointments Unit**

Again, thank you for your interest in serving the people of California.

Sincerely,

**FABIAN NÚÑEZ**  
Speaker of the California State Assembly

Enclosure



# SPEAKER'S APPOINTMENT APPLICATION FORM

First Name Middle Initial Last Name

Home Address (Number, Street) (City) (Zip) County

Home Phone Number Cell/Car Phone Number Home Fax Number

Resident since (date):  
(If less than five years, please attach a list of all residences for the last five years.) Email

## APPOINTIVE POSITION SOUGHT:

## PERSONAL INFORMATION

Social Security Number Ethnicity (optional) Sex: F  M

Driver License Number Date of Birth Full Name of Spouse

Are you registered to vote?  Yes  No

County in which you are registered to vote

Political Party Affiliation Country of Citizenship (if other than U.S.A.)

Your State Assembly Member Your State Senator Your Congress Member

## EMPLOYMENT HISTORY

### Current Employment

Employer Name Job Title

Business Address (number, street, city, zip)

Business Phone Number Business Fax Number

**Past Employment** (List all positions held in the last 10 years, with most recent employer first; attach separate sheet of paper if necessary.)

Employer/Firm Name	Title/Occupation	City & State	DATES From - To
--------------------	------------------	--------------	--------------------

**HIGHER EDUCATION**

Name and Location of School/College	Major	Degree	Number of Years Completed & Date
-------------------------------------	-------	--------	----------------------------------

---

---

---

Professional Licenses and/or Certificates Description	Date Issued      Expiration
--	--------------------------------

---

---

---

**PROFESSIONAL/CIVIC ACTIVITIES** (List organizations of which you are *currently* a member.)

Name of Organization	Member Since
----------------------	--------------

---

---

---

---

---

**SUPPORT/RECOMMENDATIONS** (List the people and organizations that support your appointment; attach their letters.)

---

---

---

---

---

---

---

---

---

---

**BACKGROUND INFORMATION**

(Please be sure to answer every question; explanations should be typed on another piece of paper.)

- 1.  Yes  No Have you ever been affiliated in any capacity with any institutions within the past five years that might present a potential conflict of interest or appearance of conflict of interest with your requested appointment? If yes, please explain.
  
- 2.  Yes  No Do you own real property, personal property or have financial holdings that might present a potential conflict of interest or appearance of conflict of interest with your requested appointment? If yes, please explain.
  
- 3.  Yes  No Are you or have you ever been a registered lobbyist? If yes, please explain.
  
- 4.  Yes  No Have you ever been convicted of a violation of any federal, state, county or municipal law, regulation or ordinance (including traffic violations for which a fine of \$100 or more was imposed, including driving under the influence of alcohol or drugs)? If yes, please explain.
  
- 5.  Yes  No Are you currently under federal, state or local investigation for possible violation of a criminal law, regulation or ordinance? If yes, please explain.
  
- 6.  Yes  No Has a tax lien or other collection procedure ever been instituted against you by federal, state or local authorities? If yes, please explain.
  
- 7.  Yes  No Have you ever been disciplined or cited for a breach of ethics or unprofessional conduct by, or been the subject of a complaint to, any court, administrative agency, professional association, disciplinary committee or other professional group? If yes, please explain.
  
- 8.  Yes  No Have you ever been involved in civil litigation, or administrative or legislative proceedings of any kind, either as plaintiff, defendant, respondent, witness or party in interest? If yes, please explain.
  
- 9.  Yes  No Have you ever run for political office, served on a political committee, or been identified publicly with a particular political organization, candidate or issue? If yes, please explain.
  
- 10.  Yes  No Have you ever been publicly identified, in person or by organizational members, with a particularly controversial national, state or local issue? If yes, please explain.
  
- 11.  Yes  No Have you ever submitted oral or written views to any government authority or the news media on any particularly controversial national, state or local issue, other than in an official government capacity? If yes, please explain.
  
- 12.  Yes  No Have you ever written any particularly controversial books or articles? If yes, please explain.
  
- 13.  Yes  No Do you know anyone or any group that might raise questions about your character and qualifications for your requested appointment? If yes, please explain.
  
- 14.  Yes  No Is there anything in your background that, if made known to the general public through your appointment, would cause embarrassment to you, the Speaker or the State Assembly? If yes, please explain.

**QUALIFICATIONS/SPECIALTIES**

(Many positions require the appointment of persons with special background and experience. Please indicate below those categories for which you may qualify.)

- Advanced Technology
- Agriculture
- Attorney
- Consumer Protection
- Education (K-12)
- Education (post-secondary)
- Environment

- Financial Institutions
- Housing
- Insurance
- Judicial
- Labor
- Law Enforcement
- Health

- Local Government
- Small Business
- Student
- Transportation
- Utilities/Energy
- Veteran
- Welfare

**PERSONAL STATEMENT**

(Please explain why you would like to serve as an appointee of Speaker Núñez)

---



---



---



---



---



---



---



---



---



---

**AUTHORIZATION AND RELEASE**

I understand that in connection with this application for appointment an investigation of my personal and business background will be conducted. I hereby authorize the release of any and all information pertaining to me or any business in which I participated, including information of a confidential or privileged nature in the possession of government or private agencies or individuals. I hereby release all such agencies or individuals who furnish such information from liability for damages that may result from furnishing the information requested. I also am aware that a consumer credit report may be requested and used in connection with this appointment application. The source of the report shall be a major national credit reporting agency, such as TRW, TRANSUNION, or EQUIFAX. In the event such a request is made, I understand that a copy of the report should be provided to me by the credit agency.

Signature

Date

Welcome to California

[Biographies](#)

[Press Room](#)

[Contact the Governor](#)

[Speeches](#)

[Appointments](#)

[California's Governors](#)

[Español](#)

**State Resources**

[Watch video of Governor Schwarzenegger giving his 2004 State of the State Address](#)

[Watch streaming video from the inauguration of Arnold Schwarzenegger as Governor of California.](#)



## Appointments

To all persons interested in applying for a position in the Office of Governor Arnold Schwarzenegger: *Thank you for your interest in being considered for an appointment to a position in California State government.*

1. For individuals interested in interning with the Governor's office, please fill out the application accordingly. Please indicate that you are applying for an internship in the "position sought" field.
2. Please fill out all the information. Your application will not be accepted if your First Name, Last Name, Social Security number, Driver's License, Date of Birth and a valid e-mail address are not included.
3. Ensure that all dates are in the correct format. 2 digit month/2 digit day/4 digit year. Example: 01/31/2004.
4. You must click on the "SUBMIT" button at the end of the application. The application will not go into our system if you do not click submit.
5. Follow the instructions after submitting the application.
6. We require that you print, sign and mail in the authorization form at the end of the application. The completed original application must also be mailed in with the signed authorization form.
7. We also ask that you include a copy of your current resume along with the completed original application.
8. Please keep a copy of all documents for your records.
9. Application materials should be returned to the Governor's Office at:

**Office of Governor Arnold Schwarzenegger**  
**Attn: Appointments**  
**State Capitol Building**  
**Sacramento, CA 95814**

Online Application Form Click below

<http://appointments.ca.gov/en/form/form.php>



[How Do I...?](#) [Advanced Search](#)

**Bottom of Form**

# OFFICE OF GOVERNOR ARNOLD SCHWARZENEGGER

## Statutory Index of Positions 2005

Accountancy, California Board of  
 Acupuncture Board  
 \* Admin. Hearings, Dir. of Office of  
 \* Administrative Law, Deputy Dir. of  
 \* Administrative Law, Dir. of Office of  
 Adult Offender Supervision, CA Interstate Council  
 Aging, California Commission on  
 \* Aging, Director of California Department of  
 Agnews State Hospital Advisory Board  
 Agri. Bargaining Assoc., Adv. Comm.  
 \*\* Agricultural Labor Relations Board  
 \*\*\* Air Resources Board  
 Alarm Co Operator Disciplinary Rev Comm  
 \*\*\* Alcoholic Beverage Control Appeals Bd  
 \* Alcoholic Beverage Control, Dir. of  
 Allocation Board, State  
 Apprenticeship Council  
 \* Apprenticeship Sids, Chief, Div of  
 \* Architect, State  
 Architects Board, CA  
 Arts Council  
 \* Arts Council, Deputy Director  
 \* Arts Council, Director  
 Asian & Pacific Islander Amer Affrs  
 Atascadero State Hospital Adv Board  
 Athletic Commission, State  
 Attorney Diversion & Asst Prog Oversight Board  
 \* Automotive Repair, Chief of Bureau of  
 Baldwin Hills Conservancy Govn Bd  
 Bar of Calif., Bd of Gov., State  
 Bar of Calif., Examining Comm., State  
 Barbering and Cosmetology, State Bd of  
 Bay Conservation & Develop. Comm., SF  
 Bay-Delta Authority, CA  
 \* Bay-Delta Authority, Director  
 Behavioral Sciences, Bd  
 Boating and Waterways Commission  
 \* Boating and Waterways, Dir. of Dept of  
 Building Standards Commission, State  
 Business, Trans., & Housing Agency, Dep Sec of Housing  
 \* Business, Trans., & Housing Agency, Sec  
 CA Science Center, Bd of Dir  
 \* CA Science Center, Expo Park Mgr  
 CA Service Corps  
 \* California-Mexico Affairs, Dir., Office  
 Californias Border Environ Coop Comm  
 Campus Sexual Assault Task Force  
 Capitol Area Committee  
 \* Child Support Services Dept, Dep Dir

\* Child Support, Chief Dep Dir  
 \* Child Support, Director  
 Chiropractic Examiners, State Bd of  
 Citizens Compensation Commission, CA  
 Climate Action Registry, CA  
 Coachella Valley Mtns Conserv Govn Bd  
 Coastal Commission, California  
 Coastal Conservancy, State  
 \* Collection & Investigative Services, Chief of Bureau of  
 Colorado River Board of California  
 Community Colleges, Board of Governors of California  
 \* Community Serv & Devel, Chief Dep Dir.  
 \* Community Serv & Devel, Dep Dir., Dept  
 \* Community Serv & Devel, Dir of Dept of  
 Compensation Insurance Fund, State Board of Directors,  
 \* Conservation Corps, CA, Director  
 \* Conservation, Director of  
 \* Consumer Affairs, Chief Dep Dir. of  
 \* Consumer Affairs, Dir, Dept of  
 \* Consumer Services, Chief, Div. of  
 Continuing Care Adv Comm, Dept of Social Services  
 Contractors' State License Board  
 \* Corporations, Commissioner of  
 Correctional Peace Officer Standards & Trng  
 Correctional Peace Officer Standards & Trng  
 Corrections, Board of  
 \* Corrections, Deputy Director, Paroles Hearings Svcs Div  
 \* Corrections, Director of Dept of  
 \* Corrections, Warden Avenal State Prison  
 \* Corrections, Warden, CA Inst. for Men  
 \* Corrections, Warden, CA Inst. for Women  
 \* Corrections, Warden, CA Medical Fac  
 \* Corrections, Warden, CA Men's Colony  
 \* Corrections, Warden, CA Rehab. Center  
 \* Corrections, Warden, CA State Prison - San Quentin  
 \* Corrections, Warden, CA State Prison at Calipatria  
 \* Corrections, Warden, CA State Prison at Folsom  
 \* Corrections, Warden, CA State Prison at Pelican Bay  
 \* Corrections, Warden, CA State Prison-Corcoran  
 \* Corrections, Warden, Centinela State Prison  
 \* Corrections, Warden, Chuckawalla Valley State Prison  
 \* Corrections, Warden, Correctional Cr., Susanville  
 \* Corrections, Warden, Correctional Inst. Tehachapi  
 \* Corrections, Warden, Deuel Voc Inst  
 \* Corrections, Warden, Ironwood State Prison  
 \* Corrections, Warden, Lancaster State Prison  
 \* Corrections, Warden, Mule Creek State Prison  
 \* Corrections, Warden, North Kern State Prison  
 \* Corrections, Warden, Richard J. Donovan

\* Corrections, Warden, Sacramento State Prison  
 \* Corrections, Warden, Sierra Conser Ctr  
 \* Corrections, Warden, Solano County State Prison  
 \* Corrections, Warden, Valley State Prison for Women  
 \* Corrections, Warden, Wasco State Prison  
 Court Reporters Board of CA  
 \* Criminal Justice Planning, Exec Dir  
 Criminal Justice, CA Council on  
 Cultural & Historical Endowment  
 Curriculum Develop. & Supplemental Materials Commission  
 Dental Auxiliaries, Committee on  
 Dental Board of California  
 \* Devel Disabilities Council, Dep Dir, Area Bd Oper  
 Develop. Disabilities Area Bds (1-13)  
 \* Developmental Disabilities, State Council on Dep Directors  
 \* Developmental Services, Chief Dep Dir  
 \* Developmental Services, Dir. of  
 Diablo Canyon Indpt Safety Committee  
 Domestic Violence Prog Adv Council  
 Domestic Violence Prog Adv Council (OES)  
 Economic Strategy Panel  
 Educ of Topeka Adv Comm, Brown v Bd of  
 Education Comm, CA Quality  
 Education Comm., CA Postsecondary  
 Education, Advisory Comm. on Special  
 Education, State Board of  
 Education, Western Interstate Comm. for Higher (WICHE)  
 Educational Commission of States  
 Educational Facilities Authority, CA  
 Electricity Oversight Board  
 \* Electronic & Appliance Repair, Chief  
 Emergency Council, California  
 \* Emergency Medical Services Auth., Dir.  
 Emergency Medical Svcs, Comm. on  
 Emergency Response Training Adv Comm  
 \* Emergency Svcs, Dep Dir., Office  
 \* Emergency Svcs, Dir. of Office of  
 \* Employment Development Dept, Chief Dep  
 \* Employment Development Dept, Dep Dir  
 \* Employment Development Dept., Director  
 Employment Training Panel  
 \* Employment Training Panel, Asst Dir  
 \* Employment Training Panel, Exec Dir  
 \*\* Energy Commission, State  
 Engineers & Land Surveyors, Board for Professional  
 Enterprise, Business Devel Corp., State Asst Fund  
 Exposition & State Fair, Bd of Dir., CA  
 \* Exposition & State Fair, Dep Gen Mgr  
 \* Exposition & State Fair, Marketing Mgr

- \* Full Time Salaried
- \*\* Full Time Salaried Boards/Commissions
- \*\*\* Part Time Salaried Boards/Commissions

**OFFICE OF GOVERNOR ARNOLD SCHWARZENEGGER**  
**Statutory Index of Positions 2005**

- \* Exposition & State Fair, Program Mgr
- F.A.I.R. Plan Governing Committee
- Fair Bds Agric. Assn, Bd of Dirs (54 dist)
- \* Fair Employment & Housing Dept, Dir.
- Fair Employment and Housing, Comm. on
- Fair Political Practices Commission
- Fairview State Hospital Adv Bd
- Film Commission, CA
- \* Finance, Chief Deputy Dir of
- \* Finance, Director of
- Financial Institutions, Commissioner
- Financial Institutions, Dep Comm/Credit Unions
- \* Fire Marshal, State
- Fire Services, State Bd of
- Fish and Game, Commission
- \* Fish and Game, Deputy Director of
- \* Fish and Game, Director of
- \* Food and Agriculture, Secretary of
- Food and Agriculture, State Board of
- \* Food and Agriculture, Undersecretary
- \* Forestry & Fire Protection Dept, Chief Counsel
- \* Forestry & Fire Protection, Director
- Forestry & Fire Protection, State Bd of
- Fraud Assessment Commission
- Gambling Control Commission
- \* General Services, Chief Dep Dir of
- \* General Services, Director
- \* General Services, Local Assist Officer
- \* General Services, Planning Officer
- \* General Services, Procurement Officer
- Geologists & Geophysicists, Bd for
- Gov't Org. and Economy, Milton Marks Comm on(Little Hoover)
- Guide Dogs for the Blind, State Bd of
- Hastings College of Law, Board of Dir.
- \* Health & Human Services Agency, Dep Secty of
- \* Health & Human Services Agency, Secty of
- Health & Safety & Wkrs Comp, Comm on
- Health Care Quality Imprv & Cost Containment Comm
- Health Facilities Financing Authority,
- Health Policy & Data Adv Comm., CA
- Health Professions Ed. Foundation, Bd of Dir.
- \* Health Services, Chief Deputy Director
- \* Health Services, Director of
- Healthcare Workforce Policy Commission, CA
- Hearing Aid Dispensers Advisory Committee
- Heart Disease & Stroke Prev & Treatment Task Force
- Heritage Preservation Commission, CA
- High-Speed Rail Authority
- \* Highway Patrol, CA, Commissioner of

- \* Historic Preservation Officer, State
- Historical Resources Comm., State
- Holocaust Era Insurance Claims Oversight Committee
- Holocaust, Genocide, Human Rights, Tolerance Educ Task Force
- \* Home Furnishings Bureau, Chief of
- \*\* Homeland Security, Dir of
- Horse Racing Board, California
- \* Housing & Community Develop., Director
- \* Housing and Community Dev, C&S Manuf Hous., Asst Chief
- \* Housing and Community Dev, C&SD Housing, Ast Chief
- \* Housing and Community Dev, Codes and Standards, Chief
- \* Housing and Community Dev, Community Affairs, Chief
- Housing Finance Agency, Bd of Directors
- \* Housing Finance Agency, Dir of Financing
- \* Housing Finance Agency, Dir of Insurance
- \* Housing Finance Agency, Ex. Director
- Housing Partnership Corp, Calif.
- Independent System Operator Govn Bd
- Indpnt Citizen's Oversight Committee (Stem Cell)
- \* Industrial Relations, Chief Deputy Dir.
- \* Industrial Relations, Director of
- \* Industrial Relations, Wkrs Comp, Court Admin
- Industrial Welfare Commission
- Infrastructure & Economic Devel Bank
- \* Infrastructure and Economic Devel Bank, Exec Dir
- Inspection and Maintenance Review Committee
- \* Inspector General
- \* Inspector General, Chief Dep
- \* Insurance Comm, Dep Comm, External Affairs
- \* Insurance Dept, Asst Chief Dep of Operations
- \*\* Integrated Waste Management Board, CA
- x Interagency Aquatic Invasive Species Council
- Interagency Coordinating Council on Early Intervent.
- Intern'l Studies Project Adv Comm
- Interstate Oil Compact Commission
- Joint Venture Policy Advisory Bd
- Judicial Performance, Commission on
- Juvenile Justice & Delinquency, Adv Comm
- Klamath Fishery Management Council
- Klamath River Basin Fisheries Task Force
- \* Labor & Workforce Devel Agency, Dep, Employment
- \* Labor & Workforce Devel Agency, Sec
- \* Labor & Workforce Devel, Dep Sec, Wage
- \* Labor Standards Enforcement, Chief of Div
- \* Labor Statistics & Research, Chief of Div
- Landscape Architect Technical Committee
- Lanternman Developmental Center Adv Bd
- Law Revision Commission, CA
- \* Librarian, State

- Library of California Board
- Lottery Commission, California
- \* Lottery, Director, The CA State
- \* Low-Income Oversight Board
- \* Managed Health Care Dept, Dir of
- \* Managed Health Care Dept, Patient Advocate
- Managed Health Care, Adv Comm on
- Managed Risk Medical Insurance Board
- Mandates, Commission on State
- \*\*\* Medical Assistance Commission, CA
- Medical Board of California
- \* Mental Health, Chief Dep Dir
- \* Mental Health, Chief Deputy Director of
- \* Mental Health, Dep Dir
- Mental Hlth Serv Oversight & Accountability Comm
- Mentally Ill Offenders, Council on
- y Metropolitan State Hospital Adv Bd
- Mexican American Veterans' Memorial
- \* Military Forces, Adjutant Gen.
- Mining and Geology, State Bd of
- \* Motor Vehicles, Chief Dep Director
- \* Motor Vehicles, Director of
- \* Motor Vehicles, Info Officer
- Mt. San Jacinto Winter Park Authority
- Museum, CA African-American, Bd of Dir
- Napa State Hospital Advisory Board, Mentally Disordered
- \*\*\* Narcotic Addict Evaluation Authority
- \* Native American Heritage Comm, Exec Sec
- Native American Heritage Commission
- Naturopathic Medicine Adv Council
- New Motor Vehicle Board
- Nursing & Psych. Technician Examiners, Bd. of Vocational
- Nursing, Board of Registered
- \* Occupational Health, Deputy Chief for
- \* Occupational Safety and Health Administration, Chief
- Occupational Safety and Health Stds Bd
- \* Occupational Safety, Deputy Chief for
- \*\* Occupational Safety/Health Appeals Bd
- Occupational Therapy
- Off-Highway Motor Vehicle Rec Comm
- Optometry, State Board of
- Osteopathic Medical Board of CA
- Pacific Fishery Management Council
- Pacific Marine Fisheries Commission
- \* Parks & Recreation, Deputy Dir for Legis
- \* Parks & Recreation, Dept. of, Director
- Parks and Recreation, Commission on
- Paton State Hospital Advisory Board for Mentally Disordered
- Peace Officer Stds & Training, Comm.

- \* Full Time Salaried
- \*\* Full Time Salaried Boards/Commissions
- \*\*\* Part Time Salaried Boards/Commissions

# OFFICE OF GOVERNOR ARNOLD SCHWARZENEGGER

## Statutory Index of Positions 2005

Performance Review Commission, CA  
 \* Personnel Admin, Dept of, Dep Director  
 \* Personnel Admin, Dept, Chief Counsel of  
 \* Personnel Admin, Dept, Dir  
 \* Personnel Admin, Dept, Labor Rel Officers  
 \*\*\* Personnel Board, State  
 Pharmacy, California State Board of  
 Physical Fitness & Sports, Gov's Council  
 Physical Therapy Examining Committee  
 Physician Assistant Committee  
 \* Pierce's Disease, Statewide Coordinator  
 Pilot Comm. SF, San Pablo, Suisun, Bd  
 Podiatric Medicine, Board of  
 \* Poet Laureate, CA  
 Porterville State Hospital Adv Bd  
 \* Printer, State  
 Prison Industry Board of Dir.  
 \*\* Prison Terms, Board of  
 Private Postsecondary & Voc Ed Bureau, Program Admin  
 Private Security Disciplinary Review Comm (North)  
 Private Security Disciplinary Review Comm (South)  
 Project Adv Bd, CA Arts  
 Project Adv Bd, CA Mathematics  
 Project Adv Bd, CA Reading & Literature  
 Project Adv Bd, CA Science  
 Project Adv Bd, CA Writing  
 Project Adv Bd, Foreign Language  
 Project Adv Bd, History-Social Science  
 Project Adv Bd, Phy Educ-Health  
 Project Adv Bd, World History & Intl Studies  
 Psychology, Board of  
 \* Public Defender, State  
 Public Employees' Retirement System, Bd. of Admin.  
 \*\* Public Employment Relations Board  
 Public Library Construction & Renovation Bd  
 \* Public Utilities Comm, Dir, Advocacy Div  
 \*\* Public Utilities Commission  
 Public Works Contract Arbitration Comm.  
 Pupil Assessment Review Panel  
 Race Track Leasing Commission, State  
 Racial Profiling Panel  
 \* Real Estate Commissioner  
 Reclamation Board, State  
 Recreational Trails Committee, CA  
 \* Rehab, Dep Dir, Blind, Vis Impaired, Deaf  
 Rehabilitation Appeals Board  
 Rehabilitation Council, State  
 \* Rehabilitation, Dept. of, Director  
 \* Rehabilitation, Dept., Chief Dep Dir

Repatriation Oversight Commission  
 \* Repatriation Oversight Commission, Exec Sec  
 Research Advisory Panel  
 \* Resources Agency, Asst to Sec  
 \* Resources Agency, Secretary of  
 Respiratory Care Examining Comm  
 San Diego Co Regional Airport Auth, Govn Bd  
 San Diego Reg Govt Efficiency Comm  
 San Diego River Conservancy Govn Bd  
 San Francisco Bay Area Water Transit Auth  
 San Gabriel & Lower LA Rivers & Mtns Conserv Govn Bd  
 San Joaquin River Conservancy Govn Bd  
 Santa Monica Mountains Conser Adv Comm  
 Santa Monica Mountains Conservancy  
 Scholarshare Investment Board  
 Science Adv Bd, Carcinogen Identification Comm  
 Science Adv Bd, Devel & Repro Toxicant Iden Comm  
 Seismic Safety Commission  
 \* Senior Staff Counsel, Dept. of Veterans Affairs  
 \* Service & Volunteerism  
 Sierra Nevada Conservancy  
 Small Business Reform Task Force  
 \* Small Business Advocate, Dir of Office  
 Small Business Development Board  
 \* Social Services, Chief Dep Dir. of  
 \* Social Services, Director  
 Sonoma Developmental Center Advisory Board  
 y South Coast Air Quality Mgmt Dist Bd  
 Southwestern Low-Level Radioactive Waste Commission  
 Speech-Language Pathology and Audiology Bd  
 \* State & Consumer Services Agency, Secty  
 State 911 Advisory Bd  
 State Bar Court  
 State Independent Living Council  
 \* Statewide Health Planning & Devel, Dir  
 Structural Pest Control Board  
 Student Aid Commission  
 Summer School for the Arts, Bd of Trustees  
 Tahoe Regional Planning Agency (Tahoe Reg. Planning Compact)  
 Teacher Credentialing, Commission on  
 Teachers' Retirement Board  
 \* Teale Data Center, Stephen P., Dir  
 Tobacco Education Oversight Comm  
 Tourism Marketing Commission  
 Transportation Comm, Riverside County  
 Transportation Comm, San Bernardino Co  
 Transportation Comm., Orange County  
 Transportation Commission, California  
 Transportation Commission, LA County Metropolitan

Transportation Commission, Ventura Co  
 \* Transportation, Chief Dep Director  
 \* Transportation, Deputy Director of  
 \* Transportation, Director of  
 \*\* Unemployment Insurance Appeals Bd  
 Uniform State Laws, Commission of  
 Univ of Calif., Governor's Adv. Selection Comm. for Regents  
 University of California, Regents of  
 University, Trustees of the CA State  
 \* Veterans Affairs, Inspector General  
 Veterans Board, California  
 Veterans Cemeteries, Gov's Comm on State  
 \* Veterans' Home at Chula Vista  
 \* Veterans' Home, Dep Sec  
 Veterinary Medical Board  
 Victim Compensation and Government Claims Board, CA  
 Voting Modernization Board  
 Water Commission, California  
 Water Council, Western States  
 Water Quality Control Board, Central Coastal Region  
 Water Quality Control Board, Central Valley Region  
 Water Quality Control Board, Colorado River Basin Region  
 Water Quality Control Board, Lahontan  
 Water Quality Control Board, Los Angeles  
 Water Quality Control Board, North Coastal Region  
 Water Quality Control Board, San Diego  
 Water Quality Control Board, San Francisco Bay Region  
 Water Quality Control Board, Santa Ana  
 \*\* Water Resources Control Board  
 \* Water Resources, Chief Counsel  
 \* Water Resources, Chief Dep Dir.  
 \* Water Resources, Deputy Dir.  
 \* Water Resources, Director of  
 Workers' Compensation Appeals Board  
 \* Workers' Compensation, Admin Dir., Div.  
 \* Youth & Adult Correc. Agency, Dep Secty  
 \* Youth & Adult Correc. Agency, Secretary  
 \*\* Youth Authority Board  
 \* Youth Authority, Director of

- \* Full Time Salaried
- \*\* Full Time Salaried Boards/Commissions
- \*\*\* Part Time Salaried Boards/Commissions