CALIFORNIA PROGRAM ON ACCESS TO CARE WHITE PAPER

IMPACT OF NATIONAL HEALTH CARE REFORM ON CALIFORNIA'S HEALTH CARE WORKFORCE

Janet M. Coffman, MA, MPP, PhD
Philip R. Lee Institute for Health Policy Studies
University of California, San Francisco

Gilbert Ojeda
California Program on Access to Care
University of California, Berkeley

October 2010

Acknowledgements

Support for this briefing paper was provided by the California Program on Access to Care, University of California Berkeley, School of Public Health. The authors' views and recommendations do not necessarily represent those of CPAC, UC Berkeley's School of Public Health, or the Regents of the University of California.

The authors thank Kevin Barnett, Dr. Katherine Flores, Serena Kirk, Dr. Robert Montoya, Perfecto Munoz, Dr. Cathryn Nation, Jeff Oxendine, Martin Radosezvich, and Pedro Salcido for their helpful comments on earlier versions of this document. The authors also thank Donna Fox, CPAC's staff editor, for her editorial assistance, and Perfecto Muñoz, for coordinating this project.

Table of Contents

Executive Summary

The new health care reform law, formally known as the Patient Protection and Affordable Care Act (ACA), will substantially increase the number of Californians who have health insurance. Currently 8.2 million Californians, or 22% of our state's population, lack health insurance. The new law will improve access to health insurance in various ways, including developing a new high-risk health insurance pool, expanding Medi-Cal, establishing health insurance exchanges, and subsidizing health insurance premiums.

While the new law provides a major opportunity to improve the health of Californians, it also poses a major challenge for California's health care organizations. Insuring more people will increase demand for care, further straining organizations that are already having difficulty recruiting and retaining health professionals. Health care organizations in California face shortages of health professionals, maldistribution of health professionals across the state, lack of racial/ethnic diversity, and an aging workforce. These challenges are compounded by the recession, which has substantially reduced State revenue and, thus, State funding for health workforce development.

Fortunately, Congress recognized the challenges facing health care organizations and included a number of provisions in the new law regarding health workforce analysis, health professions education programs, and financial assistance for health professions students.

This paper reviews the impact of national health care reform on California's health care workforce. We discuss issues relating to our state's health workforce needs and recommend strategies for expanding California's health care workforce and utilizing our present workforce more effectively.

Access to Health Insurance

The ACA will have a major impact on California's health workforce needs because it will substantially increase the number of Californians with health insurance. It will require most of California's 8.2 million uninsured to obtain health insurance or pay a tax penalty. A brief synopsis of health insurance changes in store for Californians is outlined below.

- ***Medi-Cal*:** As many as two million Californians will be newly eligible for Medi-Cal, the state's Medicaid program. Eligibility will be expanded to include all persons in families with incomes above 133% of the Federal Poverty Level (FPL), roughly equivalent to an annual income of $14,403 for a single person. (The income threshold increases as family size increases.) Total enrollment in Medi-Cal is projected to increase from seven million to nine million Californians.
- ***Individual Health Insurance*:** Some of the most dramatic effects of the ACA will occur in the individual insurance market. In September 2010, California established the Pre-existing Condition Insurance Plan to provide coverage to Californians with pre-existing health conditions who have been uninsured for at least six months. Beginning in 2014, insurers will be prohibited from denying coverage to persons with pre-existing conditions and from charging them higher premiums based on their health status. On September 30, 2010, Governor Schwarzenegger signed legislation that makes California the first state to establish

a health insurance exchange. Beginning in 2004, persons in families with incomes between 133% and 400% of FPL (annual incomes between $14,403 and $43,320 for a single person) will be eligible for subsidies to purchase coverage through the exchange. Persons with higher incomes will be able to purchase unsubsidized coverage through the exchange. As many as 2.4 million Californians will be eligible to purchase subsidized coverage through the exchange and as many as 2.1 million will be eligible to purchase unsubsidized coverage.

- ***Employer-Sponsored Health Insurance*:** The ACA's impact on employer-sponsored health insurance will be greatest among small employers. Beginning in 2010, employers with less than 25 employees who employ low-wage workers will be eligible for tax credits to purchase health insurance for their employees. Beginning in 2014, employers with less than 100 employees will be eligible to purchase coverage through California's health insurance exchange. Employers with more than 50 full-time equivalent employees who do not offer health insurance may be subject to fines. Fines will be imposed if these employers have at least one employee who receives a tax credit for purchase of coverage through the exchange.
- ***Medicare*:** The ACA will not affect eligibility for the Medicare program, but makes some changes in benefits for pharmaceuticals and preventive services. The ACA also establishes an office within the Centers for Medicare and Medicaid Services to improve access to care and quality of care for persons who are dually eligible for Medicare and Medicaid.

Demand for Professionals and Services

The increase in demand for health professionals will be felt more strongly in rural and inner city areas with high proportions of low-income, uninsured residents.

Findings from numerous studies suggest that persons who have health insurance use more health care services than uninsured persons, particularly in the areas of preventive services, physician visits, and prescription medications. California will likely experience a spike in demand for these primary care services among newly insured persons as well as a sustained increase in the level at which these services are utilized.

Therefore, ***primary care providers (i.e., primary care physicians, physician assistants, and nurse practitioners) are likely to experience the greatest increase in demand.*** The increase in demand for primary care providers will ***also boost demand for certain other health professionals who contribute to the delivery of primary care***, including:

- Clinical laboratory professionals and imaging professionals (e.g., clinical laboratory scientists, radiologic technologists) who provide screening and diagnostic tests;
- Pharmacists and other pharmacy personnel who process prescriptions; and
- Professionals who provide health education and counseling to prevent disease or manage chronic illness.

The ACA may also increase demand for care among some Californians who already have health insurance by lowering their out-of-pocket costs for care. The legislation prohibits lifetime and annual limits on the dollar value of coverage, provides subsidies to reduce cost sharing for persons under 400% FPL who purchase coverage through an exchange, and eliminates cost sharing for recommended preventive services.

Demand for professionals with expertise in health information technology will also increase because financial incentives for investment in electronic health records will be made available to providers with high Medi-Cal or Medicare patient volumes beginning in 2011.

Safety-Net Issues

Safety-net providers, including community health centers, will continue to play important roles in health care delivery. They are the only providers in some rural and inner city communities. Many persons who will be newly insured currently obtain health care from safety-net providers and will continue to do so. Furthermore, safety-net providers will be the only care source for 1.2 million uninsured undocumented immigrants in California who will not be eligible to enroll in Medi-Cal or purchase coverage through a health insurance exchange. Although the health reform legislation contains provisions that will help community health centers recruit and retain health professionals, the legislation also reduces Medi-Cal and Medicare Disproportionate Share Payments, which may limit safety net hospitals' ability to maintain residency programs and recruit personnel.

New Delivery Models Uncertain

The impact of ACA on the manner in which health professionals are utilized is uncertain. There is widespread interest in implementing new models of care delivery and the ACA establishes demonstration projects to evaluate innovations in care delivery and reimbursement. However, it is unclear whether these demonstration projects will lead to the widespread changes in reimbursement that will be necessary to sustain innovations in care delivery. In addition, much will depend on the commitment of California's health care organizations to delivery system reform. Some programs designed to promote new health care models will be funded through grant programs requiring annual appropriations. Securing adequate appropriations will be difficult in an era of federal budget deficits.

Health Workforce Investments

PPACA authorizes funding for a large number of health workforce development programs. These initiatives build upon funding provisions of the American Reinvestment and Recovery Act (2009) and the Fiscal Year 2010 Appropriations Act for the Departments of Labor, Health and Human Services, Education and related agencies, both of which increased funding for the National Health Service Corps, financial aid for health professions students, and grants for health professions training programs.

On June 16, 2010, the Obama Administration announced it would allocate $250 million to increase the number of primary care providers. The money, drawn from the Prevention and Public Health Fund established by the ACA, is directed at six initiatives:

- ***Primary care medical residency positions***: $167 million for more than 500 additional medical residency positions in primary care specialties (i.e., family practice, general internal medicine, general pediatrics);
- ***Physician assistants:*** $30 million to educate 700 additional physician assistants;

Reports from Massachusetts suggest that the health care reform law it enacted in 2006 led to a substantial increase in demand for health care that could not be readily absorbed by the state's health care providers.

- ***Advanced practice nursing students:*** $31 million for financial assistance so that 600 part-time nurse practitioner and nurse midwifery students can enroll on a full-time basis and complete their degrees more rapidly;
- ***Nurse-managed clinics***: $15 million for 10 nurse-managed clinics that will provide clinical education for nurse practitioner students; and
- ***Personal and home care aides***: $4 million for development and evaluation of a uniform curriculum to train more than 5,1000 personal and home care aides; and
- ***Health workforce planning:*** $6 million for grants to states for comprehensive health workforce planning.

The Administration also announced the allocation of $8 million from the Prevention and Public Health Fund to expand the Centers for Disease Control and Prevention's fellowship programs for public health professionals and $17 million for Public Health Training Centers, which enhance the skills of public health professionals and public health students.

In September 2010, the Administration announced that health professions schools and state government agencies in California had been awarded a total of $29 million in grants funded through the Prevention and Public Health Fund.

Other workforce development provisions of the ACA include authorization of funding for:

- ***Health workforce needs assessments and action plans***, including grants to states for planning and implementation of health workforce development initiatives;
- ***Further expansion of the National Health Service Corps;***
- ***New scholarship and loan repayment programs*** for nursing school faculty, pediatric specialists, and public health professionals;
- ***Expansion of programs to increase racial/ethnic diversity in the health professions and prepare health professionals for practice in underserved areas,*** such as the Minority Centers of Excellence, Health Career Opportunity, and Area Health Education Centers programs;
- ***Expansion of existing programs and establishment of new programs to increase supply in high priority professions***, including primary care physicians, physician assistants, nurse practitioners, registered nurses, allied health professionals, geriatricians, public health professionals, direct care workers, mental and behavioral health professionals, alternative dental health care providers, and general, pediatric, and public health dentists;
- ***Changes in Medicare reimbursement for graduate medical education (GME),*** including providing grants for the creation or expansion of teaching health centers, removing disincentives to train residents in non-hospital settings, and redistributing unused specialty residency positions to primary care residency programs; and
- ***New monetary incentives for primary care careers,*** including increasing Medi-Cal payment rates for primary care physicians during 2013 and 2014, and providing a bonus payment of 10% to primary care providers for care provided to Medicare beneficiaries from 2011 through 2015.

Recommendations

In order to meet the health care workforce needs brought about by the new reform legislation, we believe California's decision makers should invest their efforts in three specific areas: analysis, coordination, and advocacy.

Analysis

- Review available data and literature to refine understanding about the implications of increasing the number of Californians with health insurance. Specifically, there is a need to assess aggregate demand for health professionals, demand for specific types of health professionals, and variation in demand across geographic areas and types of health care organizations;
- Assess the supply and distribution of health professionals in California, including the pipeline of students at K-12, undergraduate, and graduate levels;
- Evaluate the scale, sustainability, and impact of current statewide and regional health workforce development initiatives relative to demand;
- Identify reimbursement policies, scope of practice laws, and licensure and certification requirements that limit the ability of California's health care organizations to utilize health professionals more cost effectively;
- Develop a comprehensive plan for increasing the number of primary care providers and the numbers of providers in other professions in which shortages exist;
- Identify strategies for expanding telemedicine and other modalities for improving access to specialty care in rural areas; and
- Assess the feasibility of developing funding streams for health workforce development supported by the health care industry, health professionals, and consumers.

Coordination

- Establish a commission or other entity that will focus solely on health workforce development and provide the commission with sufficient resources to collaborate with existing initiatives to strengthen lines of communication and improve coordination among State government agencies, health professions training programs, organizations delivering health care services, and other major stakeholders. The commission should be composed of persons with a demonstrated commitment to collaboration across institutions and interests to address the needs of all Californians. The commission's activities should include:

    - Disseminating information about funding opportunities provided by the ACA and other federal sources;
    - Enhancing the ability of California organizations to compete successfully for federal funds, especially grants that require organizations to partner with one another;
    - Exchanging information about successful strategies for addressing health workforce challenges;
    - Improving alignment between employers' health workforce needs and the numbers and types of health professionals educated by academic institutions;
    - Developing and executing coordinated strategies to address shortages in individual health professions as well as challenges that affect multiple professions; and
    - Facilitating collaboration among health care organizations and shared investment in health workforce development at both state and regional levels.

Advocacy

- Ensure that appropriations for health workforce development programs authorized under the ACA are fully funded to maximize federal resources for workforce development in California and other states;
- Secure funding to make temporary increases in Medi-Cal and Medicare payments for primary care physicians permanent;
- Institutionalize innovations in care delivery and reimbursement, including innovations in reimbursement of primary care providers for preventive and disease management services; and
- Change reimbursement policies, scope of practice laws, and licensure and certification requirements that pose obstacles to utilizing health professionals effectively and implementing innovations in care delivery.

I. Introduction

The Patient Protection and Affordable Care Act (ACA) is the most far-reaching health insurance legislation enacted since the establishment of Medicare and Medicaid in the 1960s. This legislation will substantially increase the number of Californians who have health insurance. Californians gaining coverage will no longer face financial ruin if they develop severe illness or suffer major injuries. They will also have greater access to preventive and primary care services that can improve their health and reduce their need for hospitalization and emergency services.

This major opportunity to improve the lives of many Californians poses a great challenge for California's health care organizations. The expansion of the number of persons with health insurance is likely to increase demand for health care services, further straining organizations that are already coping with the recession, cuts in State funding for health care, shortages and maldistribution of health professionals, and laws and reimbursement policies that restrict the manner in which health professionals may be utilized. In addition, pressures to contain costs and deliver care more efficiently and effectively are likely to increase.

Recognizing the need to help health care organizations meet the health workforce challenges presented by the expansion of coverage, Congress included a number of provisions in the ACA that authorize funding for health professions education programs and financial assistance to health professions students. The ACA also authorizes funding for analysis of health workforce needs and support for demonstration projects to assess new models for delivering and reimbursing health care services.

This paper addresses the challenges and opportunities that the ACA presents for meeting California's health workforce needs and recommends strategies that key stakeholders should pursue to maximize California's ability to expand and improve its health care workforce and to utilize its workforce more effectively.

II. Health Workforce Challenges Facing California

Implementation of the Patient Protection and Affordable Care Act will heighten California's health workforce challenges.

Shortages of Health Professionals

California is already experiencing shortages of many types of health professionals. A 2009 analysis of data from the first comprehensive physician survey conducted by the California Medical Board found that California's supply of physicians is 17% lower than previously estimated (Grumbach, Chattopadhyay, and Bindman, 2009). Demand for pharmacists and public health professionals is outstripping supply (University of California, 2005). Until recently, California also had a severe shortage of registered nurses (Spetz, 2009).[1]

Maldistribution of Health Professionals

In many health professions, California's health professionals are mal-distributed with regard to specialty and geographic location. Among physicians, California has ample numbers of specialists, but the numbers of primary care physicians are barely adequate (Coffman, et al. 2004; Grumbach, Chattopadhyay, and Bindman, 2009). The state's health professionals are also geographically maldistributed with abundant supplies in affluent urban and suburban areas and shortages in rural and inner-city areas. Only 16 of California's 58 counties have ratios of primary care physicians to population at or above recommended levels. Eight counties have less than half the recommended ratio of primary care physicians to population (Grumbach, Chattopadhyay, and Bindman, 2009). Access to specialty care is also limited for Californians in rural areas.

Lack of Racial/Ethnic Diversity among Health Professionals

In professions for which an undergraduate or graduate degree is required, health professionals are less racially/ethnically and linguistically/culturally diverse than California's population. Students in these health professions are gradually becoming more racially/ethnically diverse, but large gaps between the racial/ethnic composition of these professions and that of the population remain (Bates, Hailer, and Chapman, 2008). The gap is especially large for physicians (California Medical Board, 2008; Montoya, 2010). Research has found that physicians from under-represented minority populations are more likely to serve minority and economically disadvantaged patients (Cantor, 1996; Gartland, 2003; Komaromy, 1996).

[1] The reversal of the registered nurse shortage may be a temporary phenomenon that stems from the recession. Shortages of registered nurses often abate during recessions because most registered nurses (70%) are married. If a registered nurse's partner loses his or her job, a registered nurse may return to the workforce, increase his or her work hours, or elect to postpone retirement or efforts to pursue a career in another field. (Buerhaus, Auerbach, and Staiger, 2010).

Population Growth

California's population continues to grow at a faster rate than many other states. The California Department of Finance projects that the state's population will grow by five million persons (13%) between 2010 and 2020 and by another five million persons between 2020 and 2030 (CA DoF, 2007). The number of persons projected to be added to California's population between 2010 and 2020 is greater than the population of 30 states (US Census Bureau, 2005). Such a large increase in population will yield a substantial increase in demand for health care and health professionals independent of the enactment of national health care reform.

Aging Population

The percentage of Californians age 65 or older is expected to increase from 11% to 14% between 2010 and 2020 and to rise to 18% by 2030 (CA DoF, 2007). One-third of older Californians have incomes below 200% of the federal poverty level (Wallace, et al., 2008). The growth in the number of senior citizens with chronic conditions is already increasing demand for health care services.The percentage of older Californians with cancer, diabetes, and high blood pressure increased markedly between 2001 and 2005, with the highest rates of diabetes and high blood pressure occurring among African-Americans and Latinos. The increase in the rates of chronic disease among older Californians is especially pronounced in the San Joaquin Valley (Wallace et. al., 2008).

Aging Health Care Workforce

As California's population ages, so does its health care workforce. Large proportions of physicians, registered nurses, and other health professionals will reach retirement age within the next decade. In seven rural counties, over half of practicing physicians are age 55 or older (Grumbach, Chattopadhyay, and Bindman, 2009). Thirty-five percent of registered nurses with active licenses in California are age 55 or older (Spetz, 2009). While the current recession may be leading some health professionals to temporarily postpone retirement, the number of retirees is likely to grow when the state's economy improves. California will not be able to meet its future health workforce needs unless sufficient numbers of new graduates are trained to replace retiring health professionals.

Constraints on Capacity of Educational Programs

In some professions, most notably medicine, the number of students in health professions education programs has not kept pace with the growth in California's population. From 1995 to 2009, California's population grew by 20%, yet enrollment in California medical schools remained largely unchanged (Paxton, 2010). Establishment of the University of California's Program in Medical Education (PRIME) [2] has brought about in a modest increase in enrollment

[2] Launched in 2004, the University of California's Program in Medical Education (PRIME) has increased first-year slots in University of California medical schools by 10% (65 slots) by 2014 (Montoya, 2010). In September 2010, UC announced that six additional slots would be added through a partnership between UC-Davis and UC-Merced. PRIME recruits students from diverse backgrounds who are interested in practicing in underserved communities and provides educational experiences focused on preparing students for practice in underserved communities.

since 2005 (Montoya, 2010) and two new UC medical schools are being planned (UC Merced and UC Riverside)[3], but population growth continues to outpace enrollment.

Registered nurse education programs are a major exception to the constraint on capacity. A substantial investment of state and private sector funds resulted in an increase in nursing school enrollment of over 100% between 2000 and 2007 (Montoya, 2010; Spetz, 2009). This investment will need to be sustained to avert future shortages. However, some colleges and universities have put expansion plans on hold and others are considering closing or reducing enrollment in health professions education programs in response to budget constraints.

New Education and Certification Requirements

Recent national trends in health professions education and licensure and certification requirements for health professionals are also likely to add to California's health workforce challenges. Several health professions now require students to complete clinical doctorates rather than masters' degrees (e.g., the AuD for audiologists, the DNP for advance practice nurses, the DPT for physical therapists). These increases in educational requirements are likely to increase health professions educational costs, student debt levels, and possibly shortages as well.

Scope of Practice Laws

Scope of practice laws constrain the use of some types of health professionals. For example, California currently ranks near the middle of the 50 states and the District of Columbia with respect to nurse practitioner autonomy and independence. In California, nurse practitioners must collaborate with physicians and must develop joint written protocols that govern all aspects of their practice, including prescribing. In six states, nurse practitioners practice autonomously without physician oversight (Christian and Dower, 2008). Similarly, California licenses registered dental hygienists in alternative practice who practice independently in homes, residential facilities, schools, and areas with shortages of dentists, but laws governing referral requirements and scope of practice limit practice opportunities in other settings, and restrict the types of services they provide (Mertz, 2008). The Office of Statewide Health Planning and Development (OSHPD) is authorized to implement Health Workforce Pilot Projects to test new models for delivering health care services, but political opposition has often prevented enactment of legislative and regulatory changes required to disseminate such models across the state. Only one pilot project was conducted during the past decade (Wides and Dower, 2010).

Reimbursement Policies

Medi-Cal reimbursement policies limit the ability of Medi-Cal providers to utilize some types of health professionals. For example, fee-for-service Medi-Cal does not reimburse services provided by marriage and family therapists. As a consequence, mental health organizations that

[3] In 2008 the University of California Regents approved the establishment of a medical school at UC-Riverside. The medical school is scheduled to open in 2012. By 2021, enrollment is expected to reach 400 students, 160 residents and 160 graduate students. The UC Regents recently approved the launching of the UC Merced Medical School with the enrollment of six students in the joint PRIIME program with UC-Davis in fall 2011. It is anticipated that this medical school will be fully operational by 2015.

serve Medi-Cal beneficiaries cannot use these professionals to deliver counseling. Fee-for-service Medi-Cal also does not reimburse services provided by Promotoras or other types of community health workers who provide valuable outreach and health promotion services. A study conducted by the California Central Valley Health Policy Institute from California State University, Fresno found that Promotoras help reduce barriers to healthcare access, directly and indirectly reduce costs for treatment of chronic conditions, and increase the usage of preventive care services (Capitman, 2008). Safety net providers that want to utilize community health workers must obtain grants and often cannot afford to retain these workers once the grants end. Medi-Cal managed care plans have discretion to cover these providers, but generally have not chosen to do so.

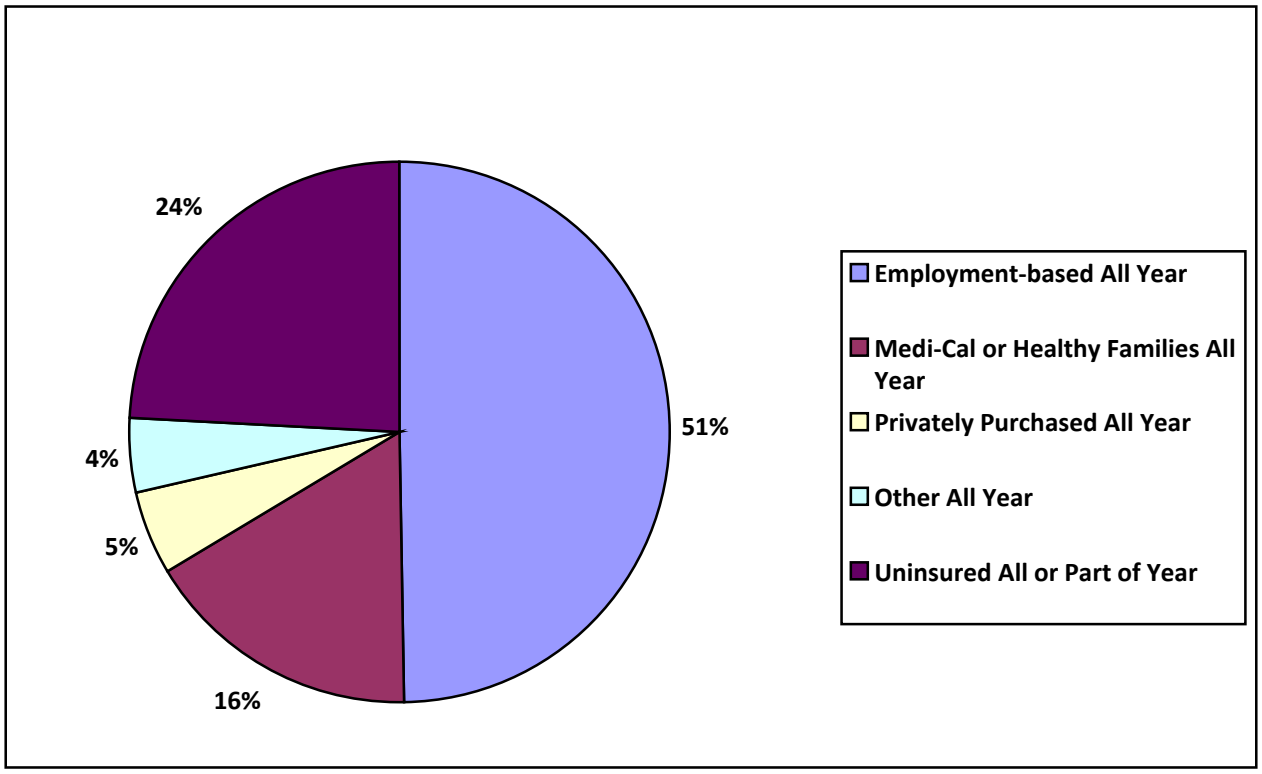
The Recession

The current economic recession and the State budget crisis have compounded California's health workforce challenges. The number of Californians who were uninsured for all or part of the year increased dramatically between 2007 and 2009, from 6.4 million to 8.2 million people (24% of non-elderly Californians), resulting in a substantial loss of revenue for hospitals, clinics, physician offices, and other providers (Lavarreda et al. 2010). The effects of the increase in the number of uninsured Californians have been especially acute for safety-net providers, such as community health centers and public hospitals and clinics. Safety-net providers have also had to cope with the elimination of Medi-Cal reimbursement for optional services, such as adult dental care, and cuts or elimination of other sources of state funding such as the Indian Health, Rural Health Services Development and Seasonal/Agricultural/Migratory Worker programs. Community health centers statewide report an increase in newly uninsured patients of up to 50%. Several community health centers have closed and others have had to lay off substantial numbers of staff members, who can take months, even years to replace (Serena Kirk, California Primary Care Association, personal communication, July 19, 2010). In addition, California's budget crisis limits the State's ability to invest new resources to address its health workforce needs.

III. Impact of the Patient Protection and Affordable Care Act on Access to Health Insurance

The Patient Protection and Affordable Care Act (ACA) will substantially increase the number of Californians with health insurance. Most Californians will be required to obtain health insurance or pay a tax penalty. The ACA's specific implications differ across the four major types of health insurance available to Californians. Figure 1 describes the distribution of non-elderly Californians by health insurance status in 2009. *The elderly population (persons age 65 or older) is not depicted.* Almost all elderly Californians, approximately 11% of Californians, are enrolled in Medicare (CA DOF, 2007).

Figure 1.
Health Insurance Coverage During Last 12 Months Among Non-elderly Adults and Children, Ages 0-64, California, 2009



Source: Lavarreda, et al., 2010.

Effects on Specific Sectors of the Health Insurance Market

Medi-Cal. The ACA will substantially increase the number of Californians eligible to enroll in Medi-Cal (California's Medicaid program). Eligibility for Medi-Cal will be expanded to all non-elderly adults and children in families with incomes up to 133% of the Federal Poverty Level (FPL) plus a 5% disregard based on modified adjusted gross income (Kaiser Family Foundation, 2010). California must begin enrolling newly eligible persons in Medi-Cal by 2014 and has the option of expanding enrollment as early as 2010. If approved, California's proposal to the federal government for renewal of its Medi-Cal waiver would enable counties to begin enrolling newly eligible Medi-Cal recipients in 2011. The University of California, Berkeley Center for Labor Research and Education has estimated that two million additional Californians will be eligible for Medi-Cal in 2016 (Jacobs, Tan, and Graham-Squire, 2010), increasing total enrollment from seven million (CA DHCS, 2010) to nine million Californians. Many of these Californians are likely to be childless, non-elderly adults without disabilities because this group of low-income persons has generally not been eligible for Medi-Cal under prior law.[4]

Individual Insurance. The most dramatic effects of the ACA will occur in the individual insurance market. In September 2010, California established the Pre-existing Condition Insurance Plan to provide coverage to Californians with pre-existing health conditions who have been uninsured for at least six months. This program complements California's existing high risk pool which offers limited benefits and has been periodically closed to new enrollees due to funding constraints (Cummings, 2008). California's application to the federal government to operate the Pre-existing Condition Insurance Plan estimates a monthly enrollment of 24,150 persons from 2010 through 2013.[5]

More extensive changes in the individual market will be initiated in 2014. California and other states will be required to establish health insurance exchanges through which persons can choose from multiple health insurance policies that offer standardized benefits. On September 30, 2010, Governor Schwarzenegger signed legislation making California the first state in the nation to establish a health insurance exchange (Gorn, 2010). Exchanges are expected to lower the cost of individual coverage for many persons by pooling risk across large numbers of persons. In addition, persons in families with incomes between 133% and 400% FPL who do not have access to affordable coverage through their employers will receive subsidies to purchase coverage through the health insurance exchanges.[6] These subsidies will apply to both the premium charged to purchase a policy and cost-sharing (e.g., deductible, coinsurance, copayment) charged when a person obtains care (KFF, 2010). In 2016, an estimated 2.4 million Californians will be eligible for subsidies for purchase of coverage through California's

[4] The State Children's Health Insurance Program (called Healthy Families in California) is another program that provides health insurance to low-income families. The Patient Protection and Affordable Care Act extended funding for this program through 2015 and requires states to maintain existing income standards for determining eligibility through 2019 (KFF, 2010).

[5] See *Solicitation for State Proposals to Operate Qualified High Risk Pools: Application for the State of California*. Submitted July 6, 2010. Available online at: http://www.mrmib.ca.gov/MRMIB/High_Risk_Pool/Solicitation_for_State_Proposals_to_Operate_Qualified_HRPs.pdf. Accessed on August 5, 2010.

[6] States also have the option to create a "Basic Health Plan" for uninsured persons whose incomes are between 133% and 200% of FPL who would otherwise be able to purchase coverage through an exchange (KFF, 2010).

exchange and an estimated 2.1 million will be eligible to purchase unsubsidized coverage through the exchange (Jacobs, Tan, and Graham-Squire, 2010). In addition, insurers selling policies in the individual market will be required to offer coverage to all persons and families who apply for coverage and will be prohibited from charging higher premiums to persons with pre-existing conditions.[7,8]

Employer-sponsored Insurance. The ACA will offer incentives for employers to provide health insurance to their employees and is likely to reduce health insurance premiums for some small employers. Beginning in 2010, employers with 25 or fewer employees whose average wages are no more than $50,000 will be eligible for tax credits toward the purchase of coverage. In 2014, firms that employ fewer than 100 persons will be eligible to purchase coverage through a health insurance exchange.[9] States may either create a single exchange for persons purchasing individual coverage and small employers or separate exchanges for these two groups. The legislation establishing California's exchange would create separate risk pools for the small group and individual markets within a single health insurance exchange agency. As with the individual market, enabling small employers to purchase coverage through an exchange will pool risk and reduce the cost of insurance for some small employers. An estimated 3.8 million California workers and their dependents will be eligible for small employer-sponsored coverage purchased through the exchange in 2016 (Jacobs, Tan, and Graham-Squire, 2010). Large employers may continue to self-insure or to purchase health insurance for their employees and dependents from health insurers. Employers with 50 or more full time equivalent employees that do not offer health insurance and have at least one employee that receives a premium tax credit for purchase of coverage through the Exchange will be subjects to penalties (KFF, 2010).

Medicare. The ACA will not affect eligibility for the Medicare program. All U.S. citizens and legal residents who have been in the U.S. for at least five years and who are age 65 or older will remain eligible to enroll.[10] However, the ACA makes some changes in premiums and benefits. The ACA would eliminate cost sharing for preventive services recommended by the U.S. Preventive Services Task Force effective January 1, 2011. The threshold for income-based premiums for Medicare Part B coverage (physician services) will be frozen from 2011 to 2019. The so-called "doughnut hole" in Medicare Part D coverage (prescription drugs) will be reduced from 100% to 25% by 2020, although the premium subsidy for Part D coverage will be reduced for individuals with incomes above $85,000 and families with incomes above $170,000. The

[7] On September 23, 2010, a provision of the ACA that prohibits health plans from denying coverage to children due to "pre-existing conditions" went into effect. This provision applies to new plans and policies sold on or after March 23, 2010. However, this provision does not prohibit insurers from charging higher premiums to for coverage of children with pre-existing conditions. See http://www.healthcare.gov/law/provisions/billofright/patient_bill_of_rights.html#NewConsumerProtectionsStarting.

[8] Premiums for health insurance purchased through an exchange may vary only based on location, age, family composition, and tobacco use (KFF, 2010).

[9] States will have the option to permit firms with over 100 employees to purchase health insurance through an exchange beginning in 2017 (KFF, 2010).

[10] Per legislation enacted in 1996, legal immigrants who have been in the United States less than five years are not eligible for Medicare. In addition, federal Medicaid funds cannot be used to provide health insurance to such immigrants. California has historically used state funds to provide Medi-Cal coverage to recent legal immigrants who meet eligibility requirements. Under the ACA, legal immigrants who have been in the United States less than five years and who meet income limits will be eligible for premium and cost sharing subsidies for coverage purchased through the exchange (KFF, 2010).

ACA also establishes an office within the Centers for Medicare and Medicaid Services to improve access to care and quality of care for persons who are dually eligible for Medicare and Medicaid (KFF, 2010). The responsibilities of this office will include assisting states, health plans, and physicians with coordination of care for dual eligibles and development of programs that better align their Medicare and Medicaid benefits.

IV. Impact of the Patient Protection and Affordable Care Act on Demand for Health Care Services

Factors Likely to Increase Demand for Health Care Services

Studies examining how health insurance coverage affects the use of health care services suggest that the Patient Protection and Affordable Care Act (ACA) could result in a substantial increase in demand for health care services, especially primary care.

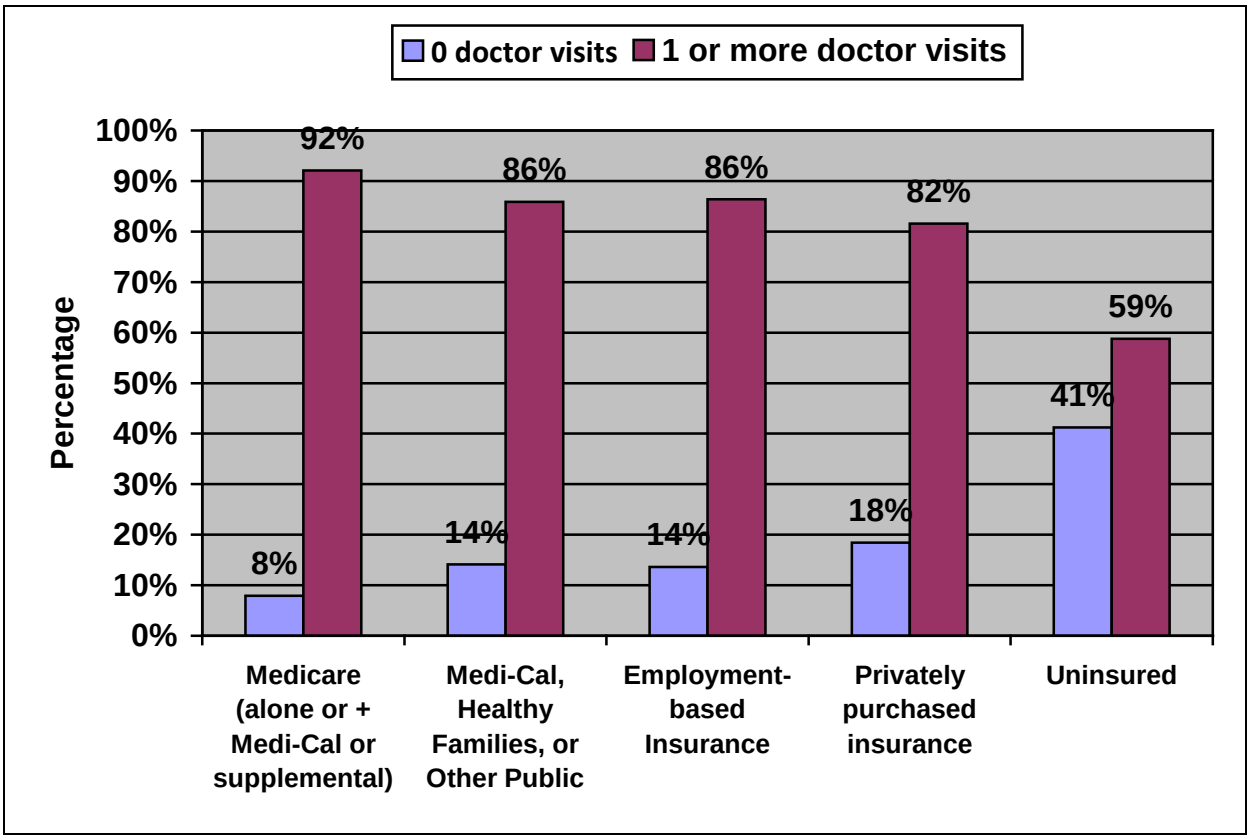
Differences between Insured and Uninsured Persons' Demand for Care. The ACA is likely to increase demand for care among previously uninsured Californians, especially for preventive and primary care services. Recent systematic reviews of studies of the effect of health insurance on use of health care services have consistently found that persons who have health insurance use more health care services than uninsured persons (Buchmueller et al., 2005; Freeman et al., 2008; Hadley, 2003; Hoffman and Paradise, 2008; IOM, 2009). This difference in demand for care persists even when taking into account differences such as age, sex, socio-economic status, and health status. Adults with health insurance have approximately one to two more physician visits per year than uninsured adults, while children with health insurance have approximately one more visit per year (Buchmueller et al., 2005). Insured adults are more likely to use preventive services (e.g., screening tests, prenatal care), disease management services (e.g., self-management education, monitoring, medication, screening for complications), physician services, and hospital services than uninsured adults. Insured children are more likely to visit a physician and to receive prescription drugs and preventive services (e.g., immunizations, well-child visits). Findings regarding effects on emergency department visits have been inconsistent (Freeman et al., 2008).

Data from the 2007 California Health Interview Survey (CHIS) are consistent with findings from systematic reviews. Figure 2 displays the percentages of CHIS respondents who had one or more doctor visits within the past year by health insurance status. Persons who were uninsured were less likely to have one or more doctor visits than persons with any type of health insurance (59% vs. 13%).[11] CHIS respondents who were uninsured in 2007 were also less likely to receive recommended cancer screening tests. Among adults age 50 years or older, uninsured persons were less likely to have ever been screened for colon cancer than those with health insurance (40% vs. 78%). Uninsured women age 50 years or older were less likely to have ever had a mammogram (86% vs. 97%) and uninsured women age 18 years or older who had not had a hysterectomy were less likely to have ever had a Pap test than women who had health insurance (83% vs. 92%).

California will likely experience a spike in demand for these primary care services among newly insured persons as well as a sustained increase in the level at which these services are utilized as more persons obtain health insurance. Persons who were previously uninsured may initially have pent up demand for care. The amount of "pent up demand" will vary widely across previously uninsured persons. Those who are healthy may make only a few additional office visits and receive a few additional immunizations or screening tests. Those who have chronic conditions

[11] All statistics reported are from the authors' tabulations of data from the 2007 CHIS survey using the AskCHIS online data analysis tool.

that are not well controlled will consume substantially more services. This spike in demand will abate over time but demand is likely to remain above pre-health care reform levels. The promise of health care reform is not so much that demand will decrease as that comprehensive coverage provides persons with the resources to obtain primary care services that can reduce hospitalizations and emergency room visits.



Source: CHIS 2007.

Impact of Cost Sharing on Insured Persons' Demand for Care. The ACA may also increase demand for care among some Californians who have health insurance because it may reduce their out-of-pocket costs for care. On September 23, 2010, provisions of the ACA went into effect that prohibit insurers from selling policies that place lifetime limits on the dollar value of coverage and establish minimum annual limits on coverage.[12] Beginning in 2014, health plans will be prohibited from selling policies with annual limits. Although most Californians with privately-funded health insurance have no annual limits or generous annual limits, a recent survey found that a small percentage of Californians have small annual limits (an average of $70,000 for group policies and $100,000 for individual policies) which can leave them with high out-of-pocket expenses if they experience catastrophic illness or injury (CHBRP, 2010). Cost-

[12] With certain exceptions, new health insurance plans and policies issued after March 23, 2010, cannot set an annual limit on coverage lower than $750,000 for plans and policies that go into effect between September 23, 2010 and September 22, 2011, $1.25 million for plans and policies that go into effect between September 23, 2011, and September 22, 2012, and $2 million for plans and policies that go into effect between September 23, 2012, and December 31, 2013. http://www.healthcare.gov/law/provisions/limits/limits.html. Accessed September 2010.

sharing subsidies and caps on out-of-pocket costs will further reduce the share of costs paid by persons in families with incomes below 400% FPL who purchase coverage through an exchange.

Effective September 23, 2010, Medicare, Medicaid, and new[13] individually purchased and employer-sponsored health plans/policies are required to provide first-dollar coverage (i.e., coverage without coinsurance or copayment) for preventive services recommended by the U.S. Preventive Services Task Force and additional recommended preventive services for women and children (KFF, 2010). Multiple studies have shown that persons who have lower deductibles and/or lower coinsurance or copayment rates use more preventive and primary care services and take more prescription medications than persons who face higher cost sharing (see for example Austvoll-Dahlgren et al., 2008; Faulkner and Schauffler, 1997; Goldman et al., 2007; Newhouse, 1993). The magnitude of the increase in demand associated with lower cost sharing will depend on several factors, including current levels of cost sharing and the extent to which persons purchasing coverage through the exchange select policies with higher versus lower coinsurance and copayment rates.

The Massachusetts Experience. In 2006, Massachusetts enacted comprehensive health insurance reform legislation similar to the ACA. Massachusetts created an exchange through which persons who do not have employer-sponsored coverage and are not eligible for Medicaid can purchase coverage. Studies of the Massachusetts experience suggest that health care reform led to a substantial increase in demand for health care (Long and Masi, 2009). Between 2006 and 2009, there were statistically significant increases in percentages of non-elderly adults in Massachusetts who reported having any physician visits, any visits for preventive services, or taking any prescription medications. The percentage with multiple physician visits also increased (Long and Stockley, 2010). However, some adults in Massachusetts have continued to experience difficulties obtaining care. In both 2008 and 2009, one of every five non-elderly adults responding to a survey conducted by the Urban Institute indicated that they experienced difficulty receiving care because a provider was not accepting new patients or not accepting new patients with their type of insurance (Long and Stockley, 2010).

Factors that May Attenuate Impact on Demand for Health Care Services

The impact of the ACA in California on demand for health professionals is likely to be attenuated by four major factors.

Lack of Assistance for Undocumented Immigrants. The ACA does not expand access to health insurance for undocumented immigrants. As a consequence, the magnitude of the increase in demand for care in California may be less than in many other states. An estimated 1.2 million uninsured Californians are undocumented immigrants. These persons constitute an estimated 18.9% of uninsured Californians (Jacobs, Tan, and Graham-Squire, 2010). They will not be eligible for Medi-Cal or to purchase coverage through the exchange (KFF, 2010). The impact of

[13] Existing individually purchased and employer-sponsored health plans/policies are exempt from this requirement so long as they do not make major changes in benefits or cost sharing.
http://www.healthcare.gov/glossary/g/grandfathered_health.html

the lack of expansion of coverage for undocumented immigrants will disproportionately affect community health centers, public hospitals, and other safety net providers.[14]

Option to Pay a Penalty Instead of Purchasing Health Insurance. With certain exceptions,[15] the individual mandate will apply to persons with incomes above the tax filing threshold. In 2009, among persons under age 65, the filing threshold was $9,350 for singles and $18,700 for couples. Persons subject to the individual mandate will have the option of paying a tax penalty instead of obtaining health insurance. The penalty will be phased in from 2014 to 2016, rising to 2.5% of household income indexed to inflation thereafter (KFF, 2010). Some persons may choose to pay the penalty rather than purchase insurance because the penalty will be lower than the cost of health insurance. The proportion of Californians who will choose to pay a penalty rather than purchase health insurance is unknown. In Massachusetts, the only state which required residents to purchase health insurance prior to the enactment of national health care reform, only 1% of taxpayers were fined in 2008 for not obtaining insurance when affordable coverage was available to them (Long, 2010). Adults in Massachusetts who remained uninsured were more likely to be single, male, under age 35, and healthy (Long and Stockley, 2010). The percentage of Californians electing to pay a penalty under the ACA may be greater because the penalty is not as large as that charged by Massachusetts (Carey, 2010).

Reductions in Medicare Payments for Services. The ACA will decrease annual updates in Medicare reimbursement rates for inpatient care, skilled nursing care, hospice care and other services. In addition, the ACA will restructure payments to Medicare Advantage plans (KFF, 2010). This restructuring will have a greater impact on California than in many other states because California has the fourth highest percentage of percentage of Medicare beneficiaries enrolled in these plans among the 50 states, the District of Columbia, and Puerto Rico. In California, 34% of Medicare beneficiaries were enrolled in Medicare Advantage plans in 2009 versus 22.5% in the U.S. overall (KFF State Health Facts, 2010). The impact of the restructuring of Medicare Advantage is difficult to estimate because Medicare Advantage plans will be eligible for new bonuses based on the quality of care provided to beneficiaries (KFF, 2010).

Reductions in Medi-Cal and Medicare Disproportionate Share Payments. The ACA will also reduce and restructure Medicaid and Medicare Disproportionate Share Hospital payments. These changes could have a substantial impact on the revenue of safety-net hospitals, which may limit their ability to hire additional health professionals, maintain their medical residencies, or invest in incumbent workers.

[14] As indicated previously, legal immigrants who have been in the United States less than five years and who meet income limits will be eligible for premium and cost sharing subsidies for coverage purchased through the exchange (KFF, 2010).

[15] Exceptions will be granted for financial hardship, religious objections, Native Americans, undocumented immigrants, incarcerated persons, persons without coverage for less than three months, and persons for whom the lowest cost plan exceeds 8% of income (KFF, 2010).

V. Implications for Demand for Health Professionals

More demand for health care services means more demand for health professionals in California.

The Increase in Demand will be Greatest for Primary Care Providers

Primary care providers (i.e., primary care physicians, physician assistants, and nurse practitioners) are likely to experience the greatest increase in demand because insured persons use more preventive services, primary care, and prescription medications than uninsured persons (Buchmueller et al., 2005; Freeman et al., 2008; Hoffman and Paradise, 2008; IOM, 2009). Many of these services are typically provided by primary care providers during office visits. Provisions of the Patient Protection and Affordable Care Act (ACA) that require Medi-Cal, Medicare, and new individual and employer-sponsored health plans to cover recommended preventive services without cost sharing will further increase demand for primary care providers.

Increases in Demand for Primary Care Providers will Increase Demand for Certain Other Health Professionals

Demand for health professionals who contribute to the delivery of preventive services, primary care, and disease management services will likely increase. Primary care providers are likely to perform or refer patients for more screening and diagnostic tests, such as Pap tests, cholesterol tests, colonoscopy, and mammography, which will likely increase demand for clinical laboratory and imaging professionals. In addition, persons who visit primary care providers more frequently may receive more prescriptions for medications to control chronic illnesses and reduce the risk of secondary complications. An increase in the number of prescriptions would increase demand for pharmacists and other pharmacy personnel. Demand for registered nurses and other health professionals trained to provide behavioral interventions to prevent or control disease may also increase, at least in organizations in which primary care providers have financial incentives to collaborate with other health professionals.

Demand for Health Information Professionals Will Increase

Health information technology can help health professionals control costs and improve quality of care. The federal government is allocating substantial resources to provide incentives for health professionals to install and use electronic health records, personal health records, and other information technologies. The American Recovery and Reinvestment Act authorized incentive payments for investment and meaningful use of electronic health records that will begin in 2011 (Blumenthal and Tavenner, 2010). California physicians and hospitals with high volumes of Medi-Cal or Medicare will be eligible for these payments. These financial incentives and other efforts to expand use of health information technology will increase demand for health information technology professionals to purchase, install, and manage electronic health records and train health professionals to use them. Health information technology will also directly affect the manner in which health professionals deliver care in the future, enabling them, for example, to order tests and review results online, conduct visits via electronic mail, and monitor patients with chronic conditions by reviewing data patients send them electronically.

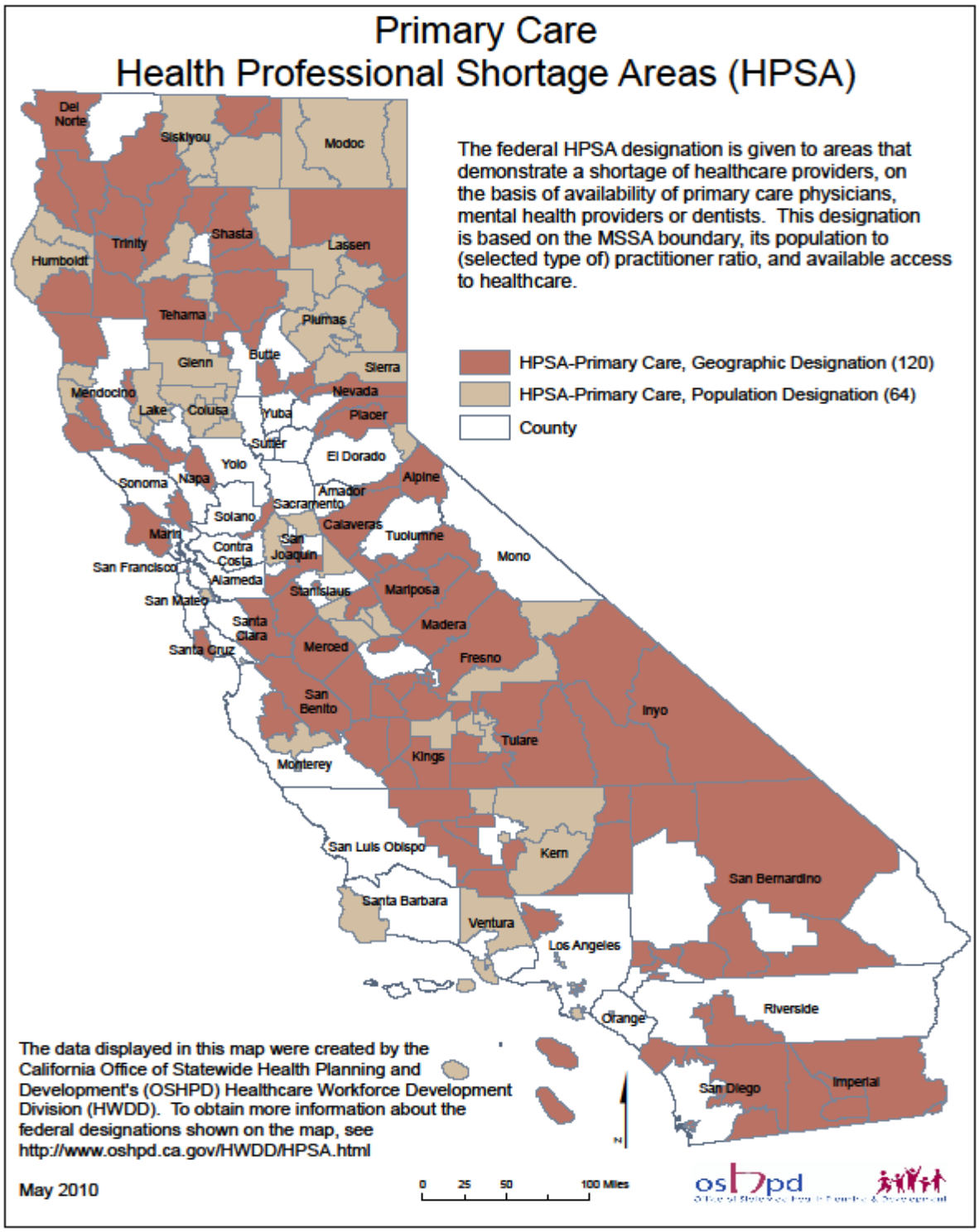
The Increase in Demand for Health Professionals Will Vary Across California's Communities

The increase in demand for health professionals will vary across California's communities because the percentage of Californians who are uninsured varies widely in different counties. The percentage of the population that was uninsured for all or part of the year in 2009 ranged from a low of 14.3% in San Mateo County to a high of 32.7% in Shasta County. In 37 of the state's 58 counties, the percentage of the population that was uninsured for all or part of the year was greater than the statewide percentage of 24.3% (Lavarreda, et al., 2010). Low-income, inner city and rural areas have greater proportions of uninsured residents than affluent urban and suburban areas.

Many inner city and rural areas already have shortages of primary care providers and other health professionals (Grumbach, Chattopadhyay, and Bindman, 2009). Figure 3 displays the areas of California that were designated as Primary Care Health Professions Shortage Areas (Primary Care HPSAs) as of May 2010. A total of 120 Medical Services Study Areas (i.e., groups of census tracts) are designated as Primary Care HPSAs for the entire population and 64 areas are designated as Primary Care HPSAs for certain population groups (e.g., farmworkers). As the map indicates, most Primary Care HPSAs are located in rural areas of California. However, some densely populated inner city areas are also designated as Primary Care HPSAs.[16] Additional health professionals will be needed to meet increased demand for care in these communities. However, the magnitude of the increase in demand for health professionals will be attenuated in areas with high proportions of undocumented immigrants, because the ACA will not increase their access to health insurance.

[16] For a complete list of Primary Care Health Professions Shortage Areas in California, see http://hpsafind.hrsa.gov/HPSASearch.aspx

Figure 3.
Primary Care Health Professions Shortage Areas



The Increase in Demand for Health Professionals Will Vary Across Health Care Organizations

The increase in demand for health professionals will likely be concentrated among safety-net providers. Many persons who will be newly covered as a result of the ACA currently obtain care from safety-net providers, such as community clinics, health department clinics, and public hospitals. This is especially true of uninsured persons who will be newly eligible for Medi-Cal. Some newly insured persons may seek care from other providers, but others are likely to continue utilizing safety-net providers, particularly in inner city and rural areas in which few other providers are available. Regardless of the care-seeking behavior of the newly insured, safety-net providers will continue to play important roles in care delivery because some Californians will remain uninsured because they are undocumented immigrants, cannot afford available coverage, or choose to pay a tax penalty in lieu of buying health insurance.

Demand for health professionals will likely differ across types of safety-net providers. As discussed below, the ACA and other recent federal legislation contain provisions that will help community health centers recruit and retain health professionals. These provisions include a substantial increase in funding for the National Health Service Corps and a new program to establish or expand teaching health centers. In contrast, reductions in Medi-Cal and Medicare Disproportionate Share Payments may limit the resources available to safety net hospitals for recruitment of health professionals, continuation of residency programs, and investment in incumbent workers.

Effects on the Manner in which Health Professionals are Utilized are Uncertain

Many health care experts believe that successful implementation of health care reform will require changes in the manner in which health professionals are utilized. For example, some experts call for the use of interdisciplinary teams to deliver care to persons with chronic illnesses and disabilities. There is widespread interest in implementing new models of care delivery and the ACA establishes demonstration projects to evaluate innovations in care delivery and reimbursement. Nevertheless, the impact of the ACA on the manner in which health professionals are utilized is uncertain. It is unclear whether these demonstration projects will lead to the widespread changes in reimbursement that will be necessary to sustain innovations in care delivery. In addition, some of the innovations authorized by ACA are funded through grant programs for which annual appropriations would be required. Securing adequate appropriations to fund and replicate such programs will be difficult in an era of increasing concern about the size of the federal budget deficit.

Much will depend on the commitment of California's health care organizations and federal and state policymakers to delivery system reform. Californians will want to monitor innovations in reimbursement that are already being implemented in the state, such as the accountable care network organized by Blue Shield of California, Catholic Healthcare West, and Hill Physicians (Evans, 2010) to assess their impact on the utilization of different types of health professionals and the manner in which care is delivered.

VI. Increases in Federal Funding for Health Workforce Development Prior to the Patient Protection and Affordable Care Act

The Patient Protection and Affordable Care Act creates opportunities as well as challenges for California's health professions workforce. The legislation builds upon health care workforce investments from the stimulus bill, known as the American Reinvestment and Recovery Act (ARRA), and from the Fiscal Year 2010 Appropriations Act for the Departments of Labor, Health and Human Services (HHS), Education and related agencies. (The Fiscal Year 2011 appropriations bill for these agencies is pending in Congress.)

Appropriations for Existing Programs Prior to Enactment of Health Care Reform

Table 1, found on the next page, summarizes recent investments in funding for existing federal health workforce programs. Congress typically allocates funding for these programs through the annual appropriations process.[17] Additional appropriations were made in 2009 through the ARRA.

National Health Service Corps (NHCS). The NHSC provides scholarships and loan repayment to primary care, dental, and mental health professionals who practice in federally designated Health Professions Shortage Areas (HPSAs) following graduation[18]. Many participants practice in federally supported Community Health Centers. The NHSC directly administers the scholarship program and one of two loan repayment programs. It provides funds to states to administer a second loan repayment program. The ARRA provided $300 million in additional funds for the NHCS nationwide. The Fiscal Year (FY) 2010 Labor-HHS-Education Appropriations Act further increased funding for the NHSC by $142 million. The ARRA and the FY 2010 appropriation combined have increased funding for the NHSC by 227% over appropriations for FY 2009. The President's proposed budget for FY 2011 includes $169 million for the NHSC, an increase of 19% over the FY 2010 appropriation (DHHS, 2010b). The Senate Appropriations Committee's Labor-HHS-Education appropriations bill for fiscal year 2011 includes appropriations of $141 million for the NHSC.

[17] One important exception not shown is Medicare payments to teaching hospitals for graduate medical education (GME). Medicare is an entitlement program, which means that the federal government is obligated to provide sufficient resources for the program to fulfill its obligations to beneficiaries and providers. Medicare GME payments are made to all teaching hospitals that serve Medicare beneficiaries and have a qualifying residency program in accordance with set formulas.

[18] Lists of all primary care, dental, and mental health HPSAs in California are available at http://hpsafind.hrsa.gov/HPSASearch.aspx.

Table 1.
Funding for Existing Federal Health Workforce Development Programs:
FY 2009, ARRA, FY 2010, and FY 2011 (Proposed)

Program	Fiscal Year 2009 Appropriations	American Reinvestment and Recovery Act Funding	Fiscal Year 2010 Appropriations	President's Budget for Fiscal Year 2011 (proposed)*
National Health Service Corps	$135,000,000	$300,000,000	$142,000,000	$169,000,000
Other Financial Assistance to Individual Health Professionals	$38,000,000	$28,000,000	$95,000,000	$95,000,000
Title VII and Title VIII grants	$354,000,000	$170,000,000	$403,000,000	$409,000,000
Grants for new medical schools in shortage areas	---	---	---	$100,000,000
Workforce Investment Act – Adult Services**	$862,000,000	$495,000,000	$862,000,000	$906,000,000
Workforce Investment Act – Dislocated Workers**	$1,342,000,000	$1,346,000,000	$1,413,000,000	$1,475,000,000
Department of Labor Health Care Training Initiative**	---	---	---	$100,000,000

*The Fiscal Year 2011 appropriations bill for the Departments of Labor, Health and Human Services, Education, and related agencies is pending in Congress. The final bill approved may differ from the President's proposed budget.

**Dollar figures in these rows reflect total appropriations for these programs. Only a portion of these appropriations is used to fund health workforce development.

Sources: DHHS, 2010; DOL, 2010c.

Other Programs Providing Financial Assistance to Individual Health Professionals. Several programs administered by the Bureau of Health Professions (BHPr) within the Health Resources and Services Administration (HRSA) provide scholarships, loans and loan repayment to individual health professionals. The Scholarships for Disadvantaged Students program provides grants to health professions schools to award scholarships to financially needy full-time students from socio-economically disadvantaged backgrounds.[19] The Nursing Scholarship Program and the Nursing Education Loan Repayment Program provide financial assistance to students and graduates, respectively, of registered nursing (RN) education programs who agree to practice full-time for at least two years in a healthcare facility with a critical shortage of RNs. The Faculty Loan Repayment Program assists health professionals from disadvantaged backgrounds who agree to serve as faculty for a health professions education program for at least two years. The ARRA provided $28 million for these scholarship and loan repayment programs. The FY 2010 Labor-HHS-Education Appropriations Act appropriated an additional $95 million for these programs. The ARRA and the FY 2010 appropriation combined have increased funding for these programs by 224% over appropriations for fiscal year 2009. The President's proposed budget for FY 2011 includes $95 million, the same amount as was appropriated in FY 2010 (DHHS, 2010b).

Title VII and Title VIII Health Professions Education Grant Programs. Multiple programs authorized under Titles VII and VIII of the Public Health Service Act provide funding for health professions education. These programs are administered by BHPr. They focus on high priority health workforce needs, such as increasing the number of primary care providers, increasing the number of health professionals practicing in underserved areas, and increasing racial/ethnic diversity in the health professions. These programs provide grants to health professions education schools for development of educational infrastructure (e.g., faculty salaries, training activities) and financial assistance for students (e.g., scholarships, loans). The ARRA provided $170 million in additional funds for Title VII and Title VIII grant programs nationwide. The FY 2010 Labor-HHS-Education Appropriations Act appropriated $403 million for these grant programs. The ARRA and the FY 2010 appropriation combined have increased funding for Title VII and Title VIII programs by 62% over appropriations for FY 2009 ($354 million). The President's proposed budget for FY 2011 includes $409 million for Title VII and Title VIII grant programs, a 1% increase over fiscal year 2010 (DHHS, 2010b). The Senate Appropriations Committee's Labor-HHS-Education appropriations bill for fiscal year 2011 includes appropriations of $648 million for Title VII and Title VIII grant programs. The House Appropriations Committee's Labor-HHS-Education appropriations bill also includes $648 million for fiscal year 2011, but the full committee has yet to vote on the bill.

[19] Colleges and universities that provide education in the following health professions are eligible to apply for grants to award Scholarships for Disadvantaged Students: allopathic medicine, osteopathic medicine, dentistry, optometry, pharmacy, podiatry, registered nursing (undergraduate and graduate levels), physician assistant, public health, chiropractic, clinical psychology, clinical social work, marriage and family therapy, professional counseling, audiology, dental hygiene, medical laboratory technology, occupational therapy, physical therapy, radiologic technology, speech pathology, registered dietitian, and veterinary medicine.

Department of Labor Workforce Investment Act Funding. The Department of Labor provides funds for health workforce development through a variety of programs. They include the Adult and Dislocated Worker Employment and Training programs authorized under the Workforce Investment Act of 1998 (WIA). This legislation authorizes the Department of Labor to provide grants to states for outreach, job search and placement services, career counseling, and job training. Priority for training and intensive placement and counseling services is given to low-income persons. In California, WIA services are provided by 49 Local Workforce Investment Boards, each of which serves a specific geographic area of the state (EDD, 2010). The ARRA provided $495 million for WIA's adult employment and training programs and $1.3 billion for dislocated worker employment and training programs.[20] The FY 2010 Labor-HHS-Education Appropriations Act appropriated $862 million for WIA adult programs and $1.4 billion for WIA dislocated worker programs. The ARRA and the FY 2010 appropriation combined have increased funding for these programs by 57% over appropriations for fiscal year 2009 for adult programs and 112% for dislocated worker programs. The President's proposed budget for FY 2011 includes $906 million for WIA adult programs and $1.5 billion for WIA dislocated worker programs, with 5% of each account, or a total of $108 million, reserved for a Workforce Innovation Fund (DoL, 2010). The Senate Appropriations Committee's Labor-HHS-Education appropriations bill for fiscal year 2011 includes appropriations of $897 for WIA adult programs and $1.2 million for WIA dislocated worker programs.

New Federal Resources Proposed in the President's FY 2011 Budget

The President's proposed budget for fiscal year 2011 calls for the establishment of two new health workforce development programs.

Proposed new program for medical school development. The President's proposed budget for FY 2011 includes $100 million for a new program to fund the development of new medical schools in federally-designated HPSAs (DHHS, 2010b). The goal of this program is to increase the number of physicians practicing in shortage areas.

New Department of Labor Health Care Training Initiative. The President's proposed budget for FY 2011 includes $100 million for a new initiative under which the Department of Labor would make grants to state and local organizations that provide health professions education (DoL, 2010).

[20] All dollar figures in this paragraph are for total appropriations for these programs. Only a portion of these appropriations is used to train health care workers.

VII. Health Workforce Investments in the Patient Protection and Affordable Care Act

The Patient Protection and Affordable Care Act includes a large number of provisions relating to the health professions workforce, as shown in Table 2.

These provisions authorize funding for the analysis of health workforce needs, financial assistance for health professions students, health professions education programs, hospitals and clinics that provide graduate medical education, and financial incentives for providing primary care to Medicare and Medicaid (Medi-Cal in California) enrollees. *Except where indicated, the funding levels reported in this section of the report are only authorizations. Congress will appropriate funds for many of these programs on an annual basis and decide whether to appropriate the full amount of funding authorized. For some programs, no specific level of funding has been authorized.*

In addition, the ARRA and the PPAC Act provide for multi-billion dollar investments in health information technology with the hope of reducing healthcare cost and improving health outcomes. Investments in personal health records, electronic medical records, and other information technologies will directly affect the manner in which health professionals deliver care in the future.

Initiatives Funded through the Prevention and Public Health Fund

Section 4002 of the Patient Protection and Affordable Care Act establishes a Prevention and Public Health Fund to sustain and expand the nation's investment in prevention and public health to improve the public's health and reduce growth in health care costs. The ACA appropriated $500 million for this fund for FY 2010, $750 million for FY 2011, $1 billion for FY 2012, $1.25 billion for FY 2013, $1.5 billion for FY 2014, and $2 billion for FY 2015 and subsequent fiscal years.

On June 16, 2010, the Secretary of Health and Human Services (HHS) announced that the Administration would allocate $250 million – half of the $500 million appropriated for Prevention and Public Health Fund in FY 2010 - to fund six initiatives aimed at increasing the supply of primary care providers (DHHS, 2010a).[21] On June 18, 2010, the Secretary announced that $23 million of the remaining $250 million would be used to fund two public health workforce initiatives. Grants funded through these initiatives were awarded in September 2010. A total of 29 million was awarded to health professions schools and state government agencies in California.

[21] California recently received $27 million in grants through these initiatives. http://www.hhs.gov/news/press/2010pres/09b/state_charts.html

Table 2. Health Workforce Investments: Patient Protection and Affordability Act

Only programs in the Prevention and Public Health Fund received specific funding appropriations. Funding for all other programs will be decided by Congress on an annual basis.

Prevention and Public Health Fund Initiatives	**Health Workforce Analysis Initiatives**	**Health Professional Student Financial Assistance**	**Health Professional Education Programs--** ***Reauthorized Grants***	**Health Professional Education Programs--** ***New Grants***	**Graduate Medical and Nursing Education**	**Reimbursement Incentives**
Primary Care Physician Residency Training	National Health Care Workforce Commission	National Health Service Corps	Area Health Education Centers (AHECs)	New Alternative Dental Health Care Provider Demonstration Project	Teaching Health Center Grants	Increase Medicaid reimbursement rates for primary care to Medicare rates
Physician Assistant Education	Grants to States for Health Workforce Development	Scholarships for Disadvantaged Students	Centers of Excellence	New Grants for Career Ladders in Nursing	Counting Resident Time in Non-Hospital Settings	Medicare bonus payments for primary care
Nurse Practitioner Education	National Center for Health Workforce Analysis	Loan Repayment for Faculty from Disadvantaged Backgrounds	General, Pediatric, and Public Health Dentistry Education	New Grants for Training in Cultural Competency, Prevention, Public Health, Health Disparities and Care of Persons with Disabilities	Redistribution of Medical Residency Positions	Medicare bonus payments for general surgery in Health Professions Shortage Areas
Nurse Practitioner Clinical Training		Nurse Student Loan Program	Geriatric Academic Career Awards	New Grants for Direct Care Worker Education	Graduate Nurse Education Demonstration Project	
State Primary Workforce Initiatives		Nurse Faculty Loan Repayment Program	Health Professions Careers Opportunity Program	New Grants for Geriatric Education and Training	Family Nurse Practitioner Post-Graduate Training Demonstration Program	

Prevention and Public Health Fund Initiatives *(Continued)*	**Health Workforce Analysis Initiatives *(Continued)***	**Health Professional Student Financial Assistance *(Continued)***	**Health Professional Education Programs-- *Reauthorized Grants (Continued)***	**Health Professional Education Programs-- *New Grants (Continued)***	**Graduate Medical and Nursing Education *(Continued)***	**Public Health Service Commissioned Corps *(Continued)***
CDC Public Health Fellowship Programs		New Loan Repayment Program for Individual Nursing Faculty	Nursing Workforce Diversity Grants	New Grants for Mental and Behavioral Health Education	Grants for Continuing Education for Health Professionals in Underserved Communities	
Public Health Training Centers		New Pediatric Specialty Loan Repayment Program	Preventive Medicine and Public Health Training Grants	New Grants for Mid-career Allied Health and Public Health Professional Education		
		New Public Health Workforce Loan Repayment Program	Primary Care Physician and Physician Assistant Education	New Grants to Prepare Low-Income Persons for Health Care Careers		
		New Geriatric Career Incentive Awards	Public Health Fellowship Training	New Grants to Medical Schools for Rural-focused Education		
				New United States Public Health Sciences Track		

Primary Care Physician Residency Training. HHS has awarded $167 million nationwide to increase the number of slots in residency programs in primary care (i.e., family practice, general internal medicine, and general pediatrics).[22] The Administration estimates that this funding would facilitate the training more than 500 additional primary care physicians by FY 2015. A total of $18 million was awarded to eight primary care residency programs in California.
Physician Assistant Education. $30 million has been awarded nationwide to increase the number of physician assistants. The Administration estimates that this funding would facilitate the training of more than 700 additional physician assistants. A total of $4 million was awarded to three physician assistant education programs in California.

Advanced Practice Nursing Education. $31 million has been awarded nationwide to provide financial assistance to encourage students who are enrolled in nurse practitioner and nurse midwifery education programs on a part-time basis to enroll on a full-time basis. Full-time students are more likely than part-time students to complete their degrees.. The Administration estimates that this funding would enable 600 nurse practitioner students to attend classes full-time. $1 million was awarded to one nursing school in California.

Nurse Practitioner Clinical Training. $15 million has been awarded nationwide to fund 10 nurse-managed clinics that provide clinical training to nurse practitioner students. To be eligible for funding, clinics must be staffed by nurse practitioners and provide primary care or wellness services to vulnerable populations. $3 million was awarded to fund two nurse-managed clinics in California.

Personal and Home Care Aides: $4 million has been awarded to six states for development and evaluation of a uniform curriculum to train more than 5,100 personal and home care aides. The California Community Colleges Chancellor's Office received $750,000.

Public Health Workforce. $8 million has been awarded nationwide to expand fellowship programs for public health professionals administered by the Centers for Disease Control and Prevention.

Public Health Training Centers. $15 million has been awarded nationwide to support the training of public health providers in advance preventive medicine, health promotion and disease prevention, and improve access and quality of health services in medically underserved communities.[23] A total of $1.9 million was awarded to three public health schools in California.

Health Workforce Planning. $6 million has been awarded nationwide to 26 states for comprehensive health workforce planning. California's Workforce Investment Board received $150,000 and is partnering with the Office of Statewide Health Planning and Development to implement this planning grant.

[22] This $167 million would be above and beyond any increase in funding that may be associated with the provision to permit reallocation of unused specialty residency slots to primary care residency programs discussed below.
[23] Public Health Training Center grants funded under this initiative were recently awarded to UC-Berkeley, UCLA, and San Diego State University. http://www.hhs.gov/news/press/2010pres/09/20100913a.html

Health Workforce Analysis Initiatives

The Patient Protection and Affordable Care Act contains three provisions that authorize appropriations of substantial additional federal resources for health workforce analysis.

National Health Care Workforce Commission. The legislation establishes a National Health Care Workforce Commission to be composed of 15 members representing a wide range of stakeholders, including health professionals, employers, insurers, consumers, labor unions, educational institutions, workforce investment boards, and health services researchers/health economists. The commission would be charged with reviewing, developing, and disseminating information regarding the U.S. health care workforce. The legislation requires the commission to address a wide range of topics, including supply and demand for health professionals, capacity of health professions education programs, workforce needs of specific populations (e.g., racial/ethnic minorities, persons living in rural areas), worker safety, and the impact of federal health workforce policies and programs. Appropriations are authorized for the commission but the amount is not specified (PPACA, 2010).

Grants to States for Health Workforce Development. The legislation authorizes the Health Resources and Services Administration (HRSA) to award grants to states for planning and implementation of health workforce development initiatives. Grants are to be made to partnerships that must include health care employers, labor unions, educational institutions, public secondary education agencies, and philanthropic organizations. The ACA authorizes planning grants of up to $150,000 per state to be awarded for a period of one year. States that receive planning grants would be eligible to compete for implementation grants that would be awarded for a period of two years. For fiscal year 2010, appropriations of $8 million are authorized for planning grants and $150 million for implementation grants. No amount is specified for subsequent years (PPACA, 2010).[24]

National Center for Health Workforce Analysis. The legislation establishes a National Center for Health Workforce Analysis within HRSA. The National Center is required to coordinate with the National Health Care Workforce Commission. Its duties include analyzing information regarding health workforce needs, evaluating and developing performance measures for federal health workforce policies and programs, creating a database of federal grants awarded for health workforce development, and providing grants or contracts for state and regional centers for health workforce analysis. HRSA had operated state and regional centers for health workforce analysis from 1997 to 2007 but discontinued the program due to lack of funding. The ACA authorizes appropriations of $7.5 million per year for fiscal years 2010 through 2014 for the National Center and $4.5 million per year for the state and regional centers.

[24] California's Workforce Investment Board and Office of Statewide Health Planning and Development have applied for one of these planning grants.

Financial Assistance Programs for Health Professions Students—Reauthorized Programs

The ACA expands two existing programs that provide financial assistance to health professions education students.

National Health Service Corps. The ACA authorizes additional funding increases for National Health Service Corps loans and scholarships. Funding increases are above and beyond those made by the ARRA and the FY 2010 appropriations bill. Appropriations of $320 million are authorized for FY 2010 and are authorized to rise to $1,154.5 million in FY 2015. Thereafter, authorized appropriations would be determined by a formula that takes into account changes in the cost of health professions education and the numbers of persons living in health professions shortage areas. Other provisions of the ACA create a Community Health Center Fund to expand resources for community health centers and the NHSC. The ACA appropriated monies from this fund for the NHSC in the following amounts: $290 million in FY 2011, $295 million in FY 2012, $300 million in FY 2013, $305 million in FY 2014, and $310 million in FY 2015. These appropriations provide the NHSC with a guaranteed minimum amount of funding through FY 2015 regardless of whether Congress chooses to appropriate additional monies to fund the program at authorized levels. They also represent substantial increases over FY 2009 appropriations for the NHSC.

Nurse Faculty Loan Repayment Program. The ACA increases the loan forgiveness available to faculty at certain nursing schools. Faculty must teach at nursing schools that receive grants to administer a Nurse Faculty Loan Repayment Program. This annual increase in the amount of loan forgiveness, from $30,000 to $35,500, may enhance nursing schools' ability to recruit faculty.

Nurse Student Loan Program. The ACA increases the maximum amounts that nursing students can borrow annually through the Nursing Student Loan Program. Increasing loan amounts will improve nursing students' ability to use these low-interest loans to finance their nursing education.

Students and Faculty from Disadvantaged Backgrounds. The ACA reauthorizes funding for three programs aimed at increasing the number of health professionals from underrepresented minorities and disadvantaged backgrounds. Appropriations of $51 million are authorized for Scholarships for Disadvantaged Students for FY 2010 with such sums as necessary thereafter. $60 million is authorized for other educational assistance for students from disadvantaged backgrounds for FY 2010. The ACA also reauthorizes funding for loan repayment and fellowships for faculty from disadvantaged backgrounds at a level of $5 million per year for fiscal years 2010 through 2014 and increases the amount of loan forgiveness available per year to from $20,000 to $30,000.

Financial Assistance Programs for Health Professions Students—New Programs

The ACA also establishes several new financial programs for health professionals in certain fields.

New Geriatric Career Incentive Awards. The ACA creates a new program under which grants or contracts will be awarded to advanced practice nurses, clinical social workers, pharmacists, or students of psychology who are enrolled in a graduate degree program in geriatrics or a related field. Health professionals who receive awards must agree to practice or teach in geriatrics, long-term care, or chronic care management for at least five years. The Act authorizes $10 million for this program from FY 2011 through FY 2013.

New Loan Repayment Program for Individual Nursing Faculty. The ACA creates a new loan repayment program for individual nursing school faculty members. This provision would expand the number of nursing faculty eligible for loan repayment beyond those teaching at nursing schools that receive grants from the Bureau of Health Professions (BHPr) to administer loan repayment programs for their faculty. Faculty who have completed a master's degree or equivalent are eligible to receive up to $40,000 and faculty with a doctoral degree or equivalent are eligible for up to $80,000. No specific appropriations are authorized for this program.

New Pediatric Specialty Loan Repayment Program. The ACA establishes a new loan repayment program for pediatric specialists. Loan repayment will be available to pediatric medical specialists, pediatric surgical specialists, and specialists in child and adolescent mental and behavioral health who agree to practice in areas with shortages of these professionals for at least two years. Mental and behavioral health specialists eligible to participate in the program include psychiatrists, psychologists, psychiatric nurses, social workers, marriage and family therapists, and school and professional counselors. The ACA authorizes appropriations of $30 million per year for loan repayment for pediatric medical and surgical specialists from FY 2010 through FY 2014 and $20 million per year for loan repayment for child and adolescent mental and behavioral health specialists from FY 2010 through FY 2013.

New Public Health Workforce Loan Repayment Program. The ACA creates new loan repayment programs for public health professionals employed by federal, state, local or tribal public health agencies. Students enrolled in programs leading to a public health or health professions degree or certificate are eligible. Also eligible are employees who have received a degree or certificate within the past 10 years. The ACA authorizes $195 million for FY 2010 and such sums as necessary thereafter for the federal government to establish a public health workforce loan repayment program. In addition, the ACA authorizes $60 million in FY 2010 and such sums as necessary for FY 2011 through 2015 for grants to states to operate similar programs.

Grants to Health Professions Education Programs—Reauthorized Programs

The ACA would reauthorize a number of existing programs administered by BHPr that provide grants to health professions education programs. In some cases, the ACA increases the maximum amount of funds that may be appropriated for these programs.

Area Health Education Centers (AHECs). The California AHEC and other AHECs across the United States provide grants for community-based and interdisciplinary education to prepare health professionals to more effectively meet the needs of underserved populations and persons living in underserved areas. AHECs also provide grants to increase the numbers of health professionals from underrepresented minorities, from disadvantaged backgrounds, and from rural areas. The ACA authorizes annual appropriations of $125 million for this program from FY 2010 through FY 2014.

Centers of Excellence. The Centers of Excellence program provides grants for programs to support underrepresented minorities in the health professions. Grants are used to increase the number of qualified applicants among underrepresented minorities, enhance student academic performance, improve recruitment and retention of underrepresented minority faculty, produce resources for education on minority health issues, support faculty and student research on minority health issues, and fund community-based training opportunities. The ACA authorizes annual appropriations of $50 million for this program from FY 2010 through FY 2015.

General, Pediatric, and Public Health Dentistry Education. The ACA reauthorizes provisions of Title VII that provide grants to schools of dentistry and other entities to operate training programs in general, pediatric, and public health dentistry for dental students, dental residents, practicing dentists, and dental hygienists and to provide financial assistance to participants. The ACA also permits grantees to use these grants to create loan repayment programs for full-time dental school faculty members. Appropriations of $30 million are authorized for FY 2010 and such sums as necessary from FY 2011 through FY 2015.

Geriatric Academic Career Awards. The ACA expands the types of health professionals eligible to receive Geriatric Academic Career Awards to include faculty in all health professions designated by the Secretary of HHS. Faculty with a full-time appointment who agree to devote 75% of their time to interdisciplinary education in geriatrics are eligible for this program. The bill authorizes funding for such grants for FY 2010 through FY 2014 but does not authorize a specific amount of funding

Health Professions Careers Opportunity Program. The Health Professions Careers Opportunity program provides grants to colleges and universities for programs that support students from disadvantaged backgrounds enter and graduate from health professions education programs. Grants are used to support recruitment, counseling, mentoring, tutoring, opportunities to conduct research, and interaction with practicing health professionals. The ACA authorizes annual appropriations of $60 million for this program from FY 2010 and such amounts as necessary for FYs 2011 through 2014.

Nursing Workforce Diversity Grants. The ACA reauthorizes the Nursing Workforce Diversity Grant program that provides grants to nursing schools to prepare students from disadvantaged backgrounds for careers in nursing. It also expands the range of activities that may be funded through these grants to include stipends for diploma or associate degree nurses to enter a bridge or degree completion program, student scholarships or stipends for accelerated nursing degree programs, pre-entry preparation, advanced education preparation, and retention activities. The ACA does not authorize appropriations specifically for this program.

Preventive Medicine and Public Health Training Grants. The ACA authorizes funds for the expansion of existing fellowship training programs in preventive medicine and other public health disciplines. Appropriations of $43 million are authorized for FY 2011 and such sums as necessary for FYs 2012 through 2015.

Primary Care Physician and Physician Assistant Education. The ACA reauthorizes Title VII provisions for grants to health professions education institutions for the training of family physicians, general internists, general pediatricians, and physician assistants. These grants cover costs associated with operating these programs as well as traineeships and fellowships for participants. The ACA also expands the scope of educational initiatives for which grants are available. It now includes demonstration projects that train primary care physicians to provide care in patient-centered medical homes. Appropriations of $125 million are authorized for FY 2010 and such sums as necessary for FYs 2011 through 2014. Additional appropriations of $750,000 per year are authorized from FY 2010 through FY 2014 for grants to promote interdisciplinary recruitment, training, and faculty development in primary care disciplines.

Public Health Fellowship Training. The Act authorizes funds for the expansion of existing fellowship training programs in public health disciplines. From FY 2010 through FY 2013, the following levels of annual appropriations are authorized for these programs: $5 million for epidemiology, $5 million for public health laboratory science, and $5 million for public health informatics.

Grants to Health Professions Education Programs—New Programs

The ACA would also establish a number of new grant programs for health professions education programs.

New Alternative Dental Health Care Provider Demonstration Project. The ACA authorizes a program to award grants of up to $4 million to 15 organizations to establish demonstration programs to train or employ alternative dental care providers. The goal of this program is to improve access to dental care in underserved areas. Higher education institutions and safety-net providers (e.g., federally qualified health centers, public hospitals) are eligible to apply for these grants. The ACA defines alternative dental care providers as including advanced practice and independent dental hygienists, community dental health coordinators, dental health aides, dental therapists, primary care physicians, and other types of health professionals. The ACA does not authorize a specific amount of funding for this demonstration project.

New Grants for Career Ladders in Nursing. The ACA authorizes grants and contracts for career ladder programs to assist certified nurse assistants, home health aides, licensed practical/vocational nurses, and associate and diploma degree nurses in becoming baccalaureate-prepared registered nurses. The goals of these programs are to retain participants the field of nursing and enable them to provide a higher level of care. Grants and contracts may also be awarded to develop internship and residency programs for new graduates of registered nursing programs and to improve collaboration, communication, and participation of registered nurses in organizational decision-making. No specific sum is authorized for such grants.

New Grants for Training in Cultural Competency, Prevention, Public Health, Health Disparities and Care of Persons with Disabilities. The ACA authorizes BHPr to award grants to health professions education institutions for research, demonstration projects, and development of model curricula for cultural competency, prevention, public health, health disparities, and providing care to persons with disabilities. The ACA authorizes funding for such grants for FY 2010 through FY 2015 but does not authorize a specific amount of funding.

New Grants for Direct Care Worker Education. The ACA creates a new program that will award grants to higher education institutions to provide financial assistance to direct care workers in long-term care settings who are enrolled in educational programs in geriatrics, disability services, long-term care services, or chronic care management. Persons receiving assistance must agree to practice in one of these fields for at least two years following receipt of assistance. To be eligible to receive these grants, higher educational institutions must establish a partnership with a long-term care provider. The ACA authorizes appropriations of $10 million per year for this program from FY 2010 through FY 2013.

New Grants for Geriatric Education and Training. The ACA also established a new grant program under which funds are available to geriatric education centers to operate fellowship programs to provide intensive, short-term education in geriatrics to faculty in health professions schools who do not have formal education in geriatrics to enhance their knowledge of geriatrics and interdisciplinary teaching skills. Geriatric education centers that receive such grants would also be required to offer training to family caregivers and direct care providers. The ACA authorizes $10.8 million per year for this program from FY 2011 through FY 2014.

New Grants for Mental and Behavioral Health Education. The ACA authorizes grants to higher education institutions to support didactic and/or clinical training for students in social work, psychology, child and adolescent psychiatry, behavioral pediatrics, psychiatric nursing, substance use disorder prevention and treatment, marriage and family therapy, and counseling. Grants are also available to organizations providing mental health services for the training of paraprofessionals who work with children and adolescents. For FY 2011 through FY 2013, the ACA authorizes annual appropriations of $8 million for social work education, $12 million for education in psychology, $10 million for training in child and adolescent mental health, and $5 million for training paraprofessionals who provide care to children and adolescents with mental health needs.

New Grants for Mid-career Allied Health and Public Health Professional Education. The ACA establishes a new program that will provide grants to educational institutions that offer training in allied health or public health disciplines to award scholarships to enable "mid-career" allied health and public health professionals to obtain additional education in their fields. The ACA authorizes $60 million for this program for FY 2010 and such sums as necessary thereafter.

New Grants for Rural-focused Physician Education. The ACA authorizes a new grant program for rural-focused education in medical schools. The program's goal is to increase the number of physicians trained who are likely to practice in underserved rural areas. Grants may be used to create, improve, or expand rural-focused "tracks" with admissions criteria that give priority to students from underserved rural areas or who express a commitment to practice in such areas. Priority will be given to medical schools with a strong track record of training physicians who go on to practice in underserved rural areas and which have partnerships with health care facilities in rural areas. The ACA authorizes annual appropriations for this program in the amount of $4 million for FYs 2010 through 2013.

New United States Public Health Sciences Track. The ACA authorizes the establishment of a "United States Public Health Sciences Track" to increase the numbers of physicians, dentists, nurses, nurse practitioners, physician assistants, public health professionals, and behavioral and mental health professionals trained to provide team-based care, public health, and emergency preparedness services. The Track will be administered by the Surgeon General in partnership with educational institutions. It will encompass both degree-granting and continuing education programs. Health professions students admitted to the track will receive tuition assistance and a stipend for up to four years in exchange for completing a residency in an approved specialty and serving in the Public Health Service's Commissioned Corps for two years for every school year during which assistance was received. Priority for admission will be granted to students from disadvantaged backgrounds and rural areas. The Secretary of HHS is authorized to transfer funds from the Public Health and Social Services Emergency Fund to implement the Track.

New Grants to Prepare Low-Income Persons for Health Care Careers. The ACA authorizes grants for demonstration projects to prepare persons receiving Temporary Assistance for Needy Families and other low-income persons to obtain education in health care occupations. Grants may be used to operate programs and provide financial aid, child care, case management, and other supportive services to participants. The ACA also authorizes grants to six states to conduct demonstration projects to develop training programs for certification of personal and home care aides. The ACA appropriates $85 million per year for FY 2010 through FY 2014 for these demonstration projects, of which $5 million may be used per year from FY 2010 through FY 2012 to carry out the personal and home care aide certification demonstration project.

Graduate Medical Education and Nursing Education

The ACA makes a number of changes in Medicare reimbursement for graduate medical education (GME) and establishes a Medicare demonstration project for graduate nurse education.

Teaching Health Center Grants. The ACA authorizes grants to organizations that provide community-based ambulatory care services for the establishment or expansion of primary care residency programs. Eligible organizations include federally qualified health centers, community mental health centers, health centers operated by the Indian Health Service or Indian tribes, and organizations receiving funds under Title X of the Public Health Service Act. Grants of up to $500,000 may be awarded to cover expenses associated with obtaining accreditation, curriculum development, and recruitment, training, and retention of residents and faculty. Priority will be given to organizations that are affiliated with Area Health Education Centers (AHECs). The ACA authorizes appropriations of $25 million for FY 2010, $50 million annually for FYs 2011 and 2012, and such sums as necessary thereafter. The ACA also authorizes HHS to make payments to teaching health centers for direct and indirect costs associated with providing residency training. Appropriations of $230 million are authorized for these payments for the period from FY 2011 through FY 2015.

Counting Resident Time in Non-Hospital Settings. The ACA authorizes teaching hospitals to count all time that medical residents spend in settings outside the hospital toward determination of Medicare GME payments, effective July 1, 2010. In the past, teaching hospitals have only been able to count time residents spent in their inpatient or outpatient departments. Permitting teaching hospitals to count time spent in non-hospital settings will reduce a significant barrier to the training of residents in community health centers and other community-based settings.

Redistribution of Medical Residency Positions. The number of medical residency positions funded by Medicare has been capped since the enactment of the Balanced Budget Act of 1997. The Patient Protection and Affordable Care Act would redistribute unused positions in specialty residency programs to primary care and general surgery residency programs. Priority will be given to teaching hospitals in rural areas and in states with low resident-to-population ratios or high proportions of the population living in health professions shortage areas.

Graduate Nurse Education Demonstration Project. The ACA establishes a demonstration project under which eligible hospitals may receive payments for costs associated with providing clinical education to advanced practice nurses. To be eligible to participate, a hospital must have a written agreement regarding advanced practice nurse education with at least one school of nursing and at least two non-hospital, community-based care providers, such as federally qualified health centers and rural health clinics. The ACA appropriates $50 million annually for FYs 2012 through 2015 for this demonstration project.

Family Nurse Practitioner Post-Graduate Training Demonstration Program. The ACA authorizes a demonstration program to provide grants to federally qualified health centers (FQHCs) and nurse-managed health clinics (NMHC) to train and employ new graduates of nurse practitioner education programs to prepare them for practice in FQHCs and NMHCs. Priority will be given to FQHCs and NMHCs that have sufficient infrastructure and resources to train and

employ three nurse practitioners per year, and which have a track record of providing clinical education. Grants may not exceed $600,000 per year. The ACA authorizes funding for such grants for FY 2011 through FY 2014 but does not authorize a specific amount of funding.

New Grants for Continuing Education for Health Professionals in Underserved Communities. The ACA establishes a new program to award grants to reduce the professional isolation of health professionals practicing in underserved areas by providing distance learning, continuing education, collaborative conferences, and electronic and tele-learning. Priority will be given to education in primary care. The ACA authorizes annual appropriations of $5 million for FY 2010 through FY 2014.

Increases in Payment Rates for Primary Care Physicians and General Surgeons

A major shortcoming of California's health care workforce is the geographic maldistribution of primary care physicians (i.e., family physicians, general internists, and general pediatricians). Many rural and inner-city areas have shortages of primary care physicians (Coffman et al., 2004; Grumbach, Chattopadhyay, and Bindman, 2009). Even in areas with adequate supplies of primary care physicians, Medi-Cal beneficiaries often have difficulty obtaining primary care. In some rural areas of California, access to surgical services is also limited.

Increase Medi-Cal Payments for Primary Care. Medi-Cal's reimbursement rates for physician services are among the lowest in the 50 states and the District of Columbia (Zuckerman, Williams, and Stockley, 2009). These low rates have contributed to the concentration of Medicaid beneficiaries in a small percentage of physician practices. A survey conducted in 2008 found that 25% of California's physicians provide care to 80% of the state's Medi-Cal beneficiaries. Only 57% of physicians reported that they were accepting new Medi-Cal patients. (Bindman, Chu, and Grumbach, 2010). During 2013 and 2014, the ACA will increase Medi-Cal payment rates for services provided by primary care physicians to Medicare payment rates. California and other states will receive 100% financing from the federal government to cover the cost of raising these payments. This increase in Medi-Cal payments for primary care should help to increase the number of primary care physicians willing to care for Medi-Cal beneficiaries and to practice in areas with high percentages of Medi-Cal beneficiaries.

Medicare Bonus Payments for Primary Care. From 2011 through 2015, the ACA requires Medicare to provide bonus payments of 10% to primary care physicians (including geriatricians), physician assistants, nurse practitioners, and clinical nurse specialists for whom primary care services account for at least 60% of allowed charges. This reimbursement increase is likely to be especially useful in rural areas of California, which tend to have higher proportions of elderly residents than urban and suburban areas.

Medicare Bonus Payments for General Surgery. From 2011 through 2015, the ACA requires Medicare to provide bonus payments of 10% for major surgical procedures performed by general surgeons practicing in health professions shortage areas. As with the bonus payment for primary care, this provision is likely to be most useful for recruiting and retaining general surgeons in rural areas because they tend to have higher proportions of elderly residents.

VIII. Recommendations

In order to meet the health care workforce needs brought about by the new health care reform legislation, we believe California's decision makers should invest their efforts in three specific areas: analysis, coordination, and advocacy.

Analysis

- Review available data and literature to refine understanding about the implications of increasing the number of Californians with health insurance. Specifically, there is a need to assess aggregate demand for health professionals, demand for specific types of health professionals, and variation in demand across geographic areas and types of health care organizations;
- Assess the supply and distribution of health professionals in California, including the pipeline of students at K-12, undergraduate, and graduate levels;
- Evaluate the scale, sustainability, and impact of current statewide and regional health workforce development initiatives relative to demand;
- Identify reimbursement policies, scope of practice laws, and licensure and certification requirements that limit the ability of California's health care organizations to utilize health professionals more cost effectively;
- Develop a comprehensive plan for increasing the number of primary care providers and the numbers of providers in other professions in which shortages exist;
- Identify strategies for expanding telemedicine and other modalities for improving access to specialty care in rural areas; and
- Assess the feasibility of developing funding streams for health workforce development supported by the health care industry, health professionals, and consumers.

Coordination

- Establish a commission or other entity that will focus solely on health workforce development and provide the commission with sufficient resources to collaborate with existing initiatives to strengthen lines of communication and improve coordination among State government agencies, health professions training programs, organizations delivering health care services, and other major stakeholders. The commission should be composed of persons with a demonstrated commitment to collaboration across institutions and interests to address the needs of all Californians. The commission's activities should include:

    - Disseminating information about funding opportunities provided by the ACA and other federal sources;
    - Enhancing the ability of California organizations to compete successfully for federal funds, especially grants that require organizations to partner with one another;
    - Exchanging information about successful strategies for addressing health workforce challenges;
    - Improving alignment between employers' health workforce needs and the numbers and types of health professionals educated by academic institutions;
    - Developing and executing coordinated strategies to address shortages in individual health professions as well as challenges that affect multiple professions; and

- Facilitating collaboration among health care organizations and shared investment in health workforce development at both state and regional levels.

Advocacy

- Ensure that appropriations for health workforce development programs authorized under the ACA are fully funded to maximize federal resources for workforce development in California and other states;
- Secure funding to make temporary increases in Medi-Cal and Medicare payments for primary care physicians permanent;
- Institutionalize innovations in care delivery and reimbursement, including innovations in reimbursement of primary care providers for preventive and disease management services; and
- Change reimbursement policies, scope of practice laws, and licensure and certification requirements that pose obstacles to utilizing health professionals effectively and implementing innovations in care delivery.

References

Austvoll-Dahlgren A, Aaserud M, Vist G, et al. Pharmaceutical policies: Effects of cap and co-payment on rational drug use. *Cochrane Database of Systematic Reviews.* 2008,1:CD007017.

Bates T, Hailer L, Chapman S. *Diversity in California's Health Professions: Current Status and Emerging Trends*. Los Angeles, CA: The California Endowment, 2008. Available at http://www.phi.org/pdf-library/connectingdots_march08.pdf. Accessed May 2010.

Bindman AB, Chu PW, Grumbach K. *Physician Participation in Medi-Cal, 2008*. Oakland, CA: California HealthCare Foundation, 2010 Available at http://www.chcf.org/publications/2010/07/physician-participation-in-medical. Accessed July 2010.

Blumenthal D. Tavenner M. The "meaningful use" regulation for electronic health records. *The New England Journal of Medicine*.2010;Epub ahead of print.

Buchmueller TC, Grumbach K, Kronick R, Kahn JG. The effect of health insurance on medical care utilization and implications for insurance expansion: A review of the literature. *Medical Care Research and Review*. 2005;62(1):3-30.

Buerhaus PI, Auerbach DI, Staiger DO. The recent surge in nurse employment: Causes and consequences. *Health Affairs*. 2009;28(4):w657-w668.

California Department of Finance (CA DoF). California Population Estimates, with Components of Change and Crude Rates, July 1, 1900-2009. Sacramento: CA DoF, 2009. Available at http://www.dof.ca.gov/research/demographic/reports/view.php#objCollapsiblePanelEstimatesAnchor. Accessed June 2010.

California Department of Finance (CA DoF). Population Projections for California and Its Counties 2000-2050, by Age, Gender and Race/Ethnicity. Sacramento: CA DoF , 2007. Available at http://www.dof.ca.gov/research/demographic/reports/projections/p-3/. Accessed June 2010.

California Department of Health Care Services (CA DHCS). *Medi-Cal Population by County, 2003 Through 2009*. Sacramento: CA DHCS, 2010. Available at http://www.dhcs.ca.gov/dataandstats/statistics/Documents/18_Total_Medi_Cal_population_by_County_2003_to_2009.pdf. Accessed September 2010.

California Employment Development Department (EDD). Workforce Investment Act. Available at http://www.edd.ca.gov/jobs_and_training/Workforce_Investment_Act.htm. Accessed May 2010.

California Health Benefits Review Program (CHBRP). *Analysis of Senate Bill 890: Basic Health Care Services*. Report to the California Legislature. Oakland, CA: CHBRP, #10-07, 2010. Available at http://www.chbrp.org/docs/index.php?action=read&bill_id=91&doc_type=3. Accessed May 2010.

California Medical Board. *2009 Cultural Background Survey Statistics*. Sacramento, CA: California Medical Board, 2009. Available at http://www.medbd.ca.gov/survey/2008CulturalBackgroundReport.pdf. Accessed July 2010.

Cantor JC, Miles EL, Baker LC, Barker DC. Physician service to the underserved: implications for Affirmative Action in medical education. *Inquiry*. 1996;33(2):167-180.

Capitman JA, Pacheco T, Ramirez M, and Gonzales A. *Promotoras: Lessons Learned on Improving Healthcare Access to Latinos*, CSU Fresno, Central Valley Health Policy Institute, 2009. Available at http://www.csufresno.edu/ccchhs/institutes_programs/CVHPI/publications/Excec_Summary_English_Final.pdf. Accessed May 2010.

Carey R. Federal health reform: The role of the exchange and lessons from Massachusetts. Presentation at the AcademyHealth Annual Research Meeting. Boston, MA, June 29, 2010.

Centers for Medicare and Medicaid Services. Money Follows the Person (MFP) Rebalancing Demonstration, 2007. Available at https://www.cms.gov/CommunityServices/Downloads/MFP_AwardsSummary.pdf. Accessed June 2010.

Christian S, Dower C. *Scope of Practice Laws in Health Care: Rethinking the Role of Nurse Practitioners*. Oakland: California HealthCare Foundation, 2008. Available at http://www.chcf.org/~/media/Files/PDF/S/ScopeOfPracticeLawsNursePractitionersIB.pdf. Accessed May 2010.

Coffman J, Quinn B, Brown T, Scheffler R. *Is There A Doctor in the House? An Examination of the Physician Workforce in California over the Past 25 Years*. Berkeley, CA: UC-Berkeley Petris Center on Health Care Markets and Consumer Welfare, 2004. Available at http://www.petris.org/Docs/CADocs.pdf. Accessed May 2010.

Cummings L, California's High-Risk Health Insurance Pool: Major Risk Medical Insurance Program. Legislative Briefing, June 26. Sacramento: Managed Risk Medical Insurance Board, 2008. Available at http://www.mrmib.ca.gov/MRMIB/MRMIP_June26-Capitol-Briefing.pdf. Accessed May 2010.

Evans M. Being held accountable. *Modern Healthcare*. 2010;40(2):6-7, 14.

Faulkner LA, Schauffler HH. The effect of health insurance coverage on the appropriate use of recommended clinical preventive services. *American Journal of Preventive Medicine.* 1997;13(6):453-458.

Freeman JD, Kadiyala S, Bell JF, Martin DP. The causal effect of health insurance on utilization and outcomes in adults: a systematic review of US studies. *Medical Care.* 2008; 46(10):1023-1032.

Gartland, JJ, Hojat M, Christian EB, Nasca TJ. African American and white physicians: a comparison of satisfaction with medical education, professional careers, and research activities. *Teaching and Learning in Medicine.* 2003;15(2):106-112.

Goldman DP, Joyce GF, Zheng Y. Prescription drug cost sharing: Associations with medication and medical utilization and spending and health. *Journal of the American Medical Association.* 2007;298(1):61-69.

Gorn D. Health Care Reform Eyes on California. *California Healthline*, September 22, 2010. Available at http://www.californiahealthline.org/capitol-desk/2010/9/why-the-nation-is-watching-california.aspx. Accessed September 2010.

Grumbach K, Chattopadhyay A, Bindman AB. *Fewer and More Specialized: A New Assessment of Physician Supply in California*. Oakland: California HealthCare Foundation, 2009. Available at http://www.chcf.org/~/media/Files/PDF/F/FewerAndMoreSpecializedMDSupplyInCA.pdf. Accessed May 2010.

Hadley J. Sicker and poorer: The consequences of being uninsured: A review of the research on the relationship between health insurance, medical care use, health, work, and income. *Medical Care Research and Review*. 2003;60(2 Suppl):3S-75S.

Hoffman C, Paradise J. Health insurance and access to health care in the United States. *Annals of the New York Academy of Sciences*. 2008;1136:149-160.

Institute of Medicine (IOM). *America's Uninsured Crisis: Consequences for Health and Health Care*. Washington, DC: National Academies Press, 2009.

Jacobs K, Tan L, Graham-Squire D. *Eligibility for Medi-Cal and the Health Insurance Exchange in California under the Affordable Care Act*. Berkeley: University of California, Berkeley Centre for Labor Research and Education, 2010. Available at http://laborcenter.berkeley.edu/healthcare/california_exchanges10.pdf. Accessed September 2010.

Kaiser Family Foundation (KFF). *Summary of the New Health Reform Law*. Menlo Park, CA: Kaiser Family Foundation, 2010. Available at http://www.kff.org/healthreform/upload/8061.pdf. Accessed May 2010.

Kaiser Family Foundation (KFF) State Health Facts. Medicare Advantage Plan Penetration, 2009. State Health Facts.org. Available at http://www.statehealthfacts.org/index.jsp. Accessed June 2010.

Komaromy M, Grumbach K, Drake M, et al. The role of black and Hispanic physicians in providing health care for underserved populations. *New England J Medicine.*, 1996;334:1305-1310.

Lavarreda SA, Brown ER, Cabezas L, Roby DH. *Number of Uninsured Jumped to More Than 8 Million Between 2007 and* 2009. Los Angeles: UCLA: Center for Health Policy Research, 2010. Available at http://www.healthpolicy.ucla.edu/pubs/files/Uninsured_8-Million_PB_%200310.pdf. Accessed May 2010.

Lavarreda SA, Chia YJ, Cabezas L, and Roby D. *California's Uninsured by County*. Los Angeles: UCLA: Center for Health Policy Research, 2010. Available at http://www.healthpolicy.ucla.edu/pubs/files/County_Uninsured_FS_CORRECTION.pdf. Accessed September 2010.

Long SK. *What is the Evidence on Health Reform in Massachusetts and How Might the Lessons from Massachusetts Apply to National Health Reform?* Washington, DC: Urban Institute, June 2010. Available at http://www.urban.org/UploadedPDF/412118-massachusetts-national-health-reform.pdf. Accessed July 2010.

Long SK, Masi PB. Access and affordability: An update on health reform in Massachusetts, fall 2008." *Health Affairs*. 2009;28(4):w578–w587.

Long SK, Stockley K. Sustaining health reform in a recession: An update on Massachusetts as of fall 2009. *Health Affairs*. 2010;29(6):1234-1241.

Mertz E. *Registered Dental Hygienists in Alternative Practice: Increasing Access to Dental Care in California*. San Francisco: UCSF Center for the Health Professions, 2008. Available at http://futurehealth.ucsf.edu/Content/29/2008-05_Registered_Dental_Hygienists_in_Alternative_Practice_Increasing_Access_to_Dental_Care_in_California.pdf. Accessed May 2010.

Montoya R. *Health Reform with Minority Representation: Increasing Diversity in California's Health Care Workforce*. CPAC Commissioned Paper, August, 2010.

Moreno G. Walker KO, Grumbach K. Self-reported fluency in non-English languages among physicians practicing in California. *Family Medicine*. 2010;42(6):414-420.

Newhouse JP. *Free for All? Lessons from the Rand Health Insurance Experiment*; Cambridge, MA: Harvard University Press; 1993.

Patient Protection and Affordable Care Act, 2010 (P.L. 111-148).

Paxton C (2010). California Health Care Almanac: California Physician Facts and Figures. Oakland, CA: California HealthCare Foundation. Available at http://www.chcf.org/publications/2010/07/california-physician-facts-and-figures. Accessed July 2010.

Spetz J, *Forecast of the Registered Nurse Workforce in California*. San Francisco: UCSF Center for the Health Professions, 2009. Available at http://www.rn.ca.gov/pdfs/forms/forecasts2009.pdf. Accessed May 2010.

U.S. Census Bureau. State estimates by demographic characteristics - age, sex, race, and Hispanic Origin. Available at http://www.census.gov/popest/datasets.html. Accessed June 2010.

U.S. Census Bureau. State interim population projections by age and sex: 2004-2030, Washington, DC, US Census Bureau, 2005. Available at http://www.census.gov/population/www/projections/projectionsagesex.html. Accessed July 2010.

U.S. Department of Health and Human Services (DHHS). Affordable Care Act: Laying the Foundation for Prevention. Washington, DC: USDHHS, 2010a. Available at http://www.healthreform.gov/newsroom/acaprevention.html. Accessed June 2010.

U.S. Department of Health and Human Services (DHHS). Fact Sheet: Creating Jobs and Increasing the Number of Primary Care Providers. Washington, DC: USDHHS, 2010b. Available at http://www.healthreform.gov/newsroom/primarycareworkforce.html. Accessed June 2010.

U.S. Department of Health and Human Services (DHHS). *Fiscal Year 2011: Justification of Estimates for Appropriations Committees: Health Resources and Services Administration.* Washington, DC: USDHHS, 2010c. Available at http://www.hrsa.gov/about/pdf/budgetjust2011.pdf. Accessed May 2010.

U.S. Department of Labor (DoL). *Fiscal Year 2011: Congressional Budget Justification: Employment and Training Administration*. Washington, DC: US DoL, 2010. Available at http://www.dol.gov/dol/budget/2011/PDF/CBJ-2011-V1-03.pdf. Accessed May 2010.

University of California, Universitywide Health Sciences Committee. *University of California Health Sciences Education Workforce Needs and Enrollment Planning*. Oakland, CA: University of California, 2005.

Wallace SP, Lee JH and Aydin MJ. *Trends in the Health of Older Californians*. Los Angeles, CA: UCLA Center for Health Policy Research, 2008. Available at http://www.healthpolicy.ucla.edu/pubs/files/Trends_Older_CAs_RT_111708.pdf. Accessed June 2010.

Wides C, Dower C. A Review of California Office of Statewide Health Planning and Development, Health Workforce Pilot Projects Program 1973-2007. San Francisco: UCSF Center for the Health Professions, 2010. Available at http://futurehealth.ucsf.edu//Content/8866/2010-05_A_Review_of_OSHPD_Health_Workforce_Pilot_Projects_Program_1973_to_2007.pdf 7. Accessed June 2010.

Zuckerman S, Williams A, Stockley K. *Medi-Cal Physician and Dentist Fees: A Comparison to Other Medicaid Programs and Medicare*. Oakland: California HealthCare Foundation, 2009. Available at http://www.chcf.org/~/media/Files/PDF/M/MediCalFeeComparison.pdf. Accessed May 2010.