CALIFORNIA'S OPEN DOOR PROVIDERS:

Ten Case Studies of the Health Care Workforce

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CALIFORNIA WORKFORCE INITIATIVE

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California Workforce Initiative

The California Workforce Initiative, housed at the UCSF Center for the Health Professions and funded by the California HealthCare Foundation and The California Endowment, is designed to explore, promote and advance reform within the California health care workforce. This multi-year initiative targets supply and distribution, diversity, skill base and regulation of health workers, utilization of health care workforce and health care workers in transition.

CALIFORNIA WORKFORCE INITIATIVE

The Center for the Health Professions

The mission of the Center for the Health Professions is to assist health care professionals, health professions schools, care delivery organizations and public policy makers respond to the challenges of educating and managing a health care workforce capable of improving the health and well being of people and their communities.

The Center is committed to the idea that the nation's health will be improved if the public is better informed about the work of health professionals.

THE CENTER FOR THE HEALTH PROFESSIONS
University of California, San Francisco

California HealthCare Foundation

CHCF, based in Oakland, is an independent philanthropy committed to improving California's health care delivery and financing systems. Formed in 1996, our goal is to ensure that all Californians have access to affordable, quality health care. For more information, visit us online at www.chcf.org.

CALIFORNIA HEALTHCARE FOUNDATION

The California Endowment

The California Endowment, the state's largest health foundation, was established to expand access to affordable, quality health care for underserved individuals and communities. The Endowment provides grants to organizations and institutions that directly benefit the health and well-being of the people of California.

THE CALIFORNIA ENDOWMENT

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EXECUTIVE SUMMARY

Critical health care issues related to the available supply of professional workers have emerged across the nation as hospitals and clinics struggle to provide needed services. Despite this increased awareness, little attention has been paid to these issues as they play out in health care "safety net" or "open door provider" institutions. These institutions provide:

- The majority of care for 1 in 5 Californians
- Fully ¾ of Level I trauma centers and ½ of the burn beds in California
- Often the only access to health care for rural, low-income or uninsured Californians
- Disproportionately high percentage of care to Medi-Cal patients
- Vital training facilities for physicians and other health workers

Open Door Provider

— a hospital, academic medical center, community-based health center or other entity dedicated to assure the accessibility of cost-effective, high quality and culturally appropriate health care services for low-income and uninsured populations, beyond those emergency and stabilization services required by law. Open door providers also ensure the availability of critical public goods, such as trauma and burn care, essential to the health and well-being of the public-at-large (California Association of Public Hospitals and Health Systems (CAPH), 1999).

Sustaining, through recruitment and retention, the right number of quality workers at public hospitals and community clinics is necessary to ensure access to care for low-income, uninsured and vulnerable populations. As there is no system of care that backs up the safety net, without adequately staffed safety net institutions, all Californians could find their well-being in jeopardy.

To understand this issue better, the Center for the Health Professions, with help from a number of organizations and individuals, conducted an examination of workforce issues in California's safety net institutions. This report starts with descriptions of the characteristics that define and describe open door providers and provides overviews of health care workforce issues common to all delivery sites. Ten case studies of California public hospitals and community clinics are included to provide qualitative information about the workforce experiences of these open door providers. Findings and recommendations are offered as next steps to ensure the workforce needs of California's open door providers are met.

Characteristics of open door providers

1. *Populations served* tend to be low-income, un- or under-insured for health care, and drawn largely from underserved racial or ethnic communities.
2. *Mission or mandate* is to serve anyone regardless of health insurance status or ability to pay.
3. *Services* offered by hospitals include full range of inpatient and outpatient services plus, in many cases, trauma and burn units; clinics offer full range of outpatient services.
4. *Funding sources* are limited and unstable.
5. *Physical plants and equipment* range from new and state-of-the-art to old, run-down and crowded.
6. *Bureaucracy* at hospitals run by county governments pervades all work; all open door providers work with government insurance program bureaucracy.
7. *Staffing* needs include interpreting services, discharge or referral planning in coordination with other health and social services for indigent and un- or under-insured patients, Level I trauma and burn care staff, public health nurses, community outreach workers, and volunteer clinicians.

Health care workforce issues common to all delivery sites

Issues that cross professions

- *Workforce shortages*, recruitment, and retention challenges increasingly common
- *Decreasing levels of satisfaction* among workers
- Rising *staffing costs*
- *Race and ethnicity* of health care professionals does not reflect general population
- Health care workers in *rural areas* in short supply
- *Emergency departments* feel staff and usage pressures

Profession-specific overviews

- *Physician Workforce* - geographic maldistribution, gender and race/ethnicity imbalances, some specialty shortages
- *Nursing Workforce* - statewide and national nurse staffing shortages; gender and race/ethnicity imbalance
- *Pharmacy Workforce* - changing practice patterns, statewide shortages
- *Selected Certified, Technical and other Licensed Allied Health Workforce* - specific issues and shortages
- *Dentistry Workforce* - geographic maldistribution; rural shortages
- *Hospital Executives* - high turnover

Case studies

Ten of California's open door providers (five hospitals and five clinics) were toured and high level administrators and leaders were interviewed to collect information about staffing challenges, issues and solutions. Site visits and interviews were conducted at Arrowhead Regional Medical Center, Colton; San Francisco General Hospital; Martin Luther King/Drew Medical Center, Los Angeles; Contra Costa Regional Medical Center, Martinez; Community Medical Center — Fresno; Sacramento County Primary Care Clinic; North County Health Services, San Marcos Health Center; Venice Family Clinic; Humboldt Open Door Clinic, Arcata; and Salud Para La Gente, Watsonville. The information gathered provides insight into the particular workforce concerns facing open door providers and their capacity to address those concerns. In addition, examples of best practices and models of success for improving recruitment and retention of health care workers were identified. These include:

- A state-of-the-art facility designed with staff input (see page 37)
- Outstanding volunteer clinician programs (see pages 69 and 81)
- A dental unit with new equipment and bilingual dentists (see page 93)
- Educational programs to facilitate community recruitment and staff retention (see page 61)
- Excellent staff retention and longevity (see pages 43 and 49)
- An in-house per diem system that works (see page 55)

Findings

California's open door health care institutions — public hospitals and health systems, and community and free clinics with missions or mandates to serve anyone regardless of ability to pay — represent vital health care resources for emergency care, the uninsured, and residents of geographically isolated areas. Not surprisingly, these open door providers share many of the workforce challenges that are now confronting all of health care in California and the nation. In addition, there are distinctive workforce challenges and opportunities for open door providers.

F1 California's open door providers share some workforce challenges with other delivery sites in the state including:

- Hiring and retaining nurses, pharmacy personnel, some physician specialties, and radiology personnel;

- The need for racial and ethnic diversity, cultural competence, and bilingual skills among workers;
- The need for flexible practice and professional models for the delivery of care services, and
- Recruiting and retaining health care practitioners in rural areas.

F2 In addition to common workforce challenges that health care delivery sites share, California's open door providers reported particular challenges in the areas of:

- Finding physicians who will accept referrals for Medi-Cal or uninsured patients;
- Dentistry workforce shortages;
- Public health nurse shortages; and
- Hiring and retaining clerical workers.

F3 Some global characteristics of open door providers can mitigate workforce challenges, making the site attractive to potential employees and improving retention rates. These characteristics include:

- *Service mission* An orientation or mandate to serve all patients regardless of their ability to pay. A stated and demonstrated mission to serve the underserved helps create strong teams, a sense of family, and dedication to the job. Places that "work well" have clear mission statements that are posted, known and referenced regularly by staff.
- *Comprehensive clinical services*. Open door providers often offer a full range of health care, often including trauma and other special unit care not available at other sites.
- *Strong benefits packages and stability*. Public hospitals and health systems in particular can often offer generous benefits packages (including well-funded retirement plans) and long-term employment stability.

F4 Some characteristics of open door providers exacerbate workforce challenges, making it more difficult for them to secure an adequate workforce. These characteristics include:

- *Lower salaries and wages*. Due to budget constraints and unstable funding sources, many open door providers can only offer salaries and wages that are lower than those of competitors. Some clinics rely on volunteer clinicians to provide care and must find enough of them willing to work to cover open hours.
- *Bureaucracy and competition*. Public hospitals in particular are subject to layers of bureaucracy that limit the ability to act quickly or independently on personnel issues, including hiring, adjusting salaries, and changing job titles or descriptions.

Where aspects of job posting, examinations, or hiring are centralized at the county level, county hospitals and clinics may lose potential hires to other sites and may not have easy access to information collected about the workforce.

- *Unattractive reputations*. Some open door providers suffer from unfounded myths regarding run-down facilities or less-than-optimal quality of care.

F5 For some professions (e.g. general medicine), open door providers' positive characteristics may be sufficient to outweigh the negative characteristics, as evidenced by workforce needs generally being met. For other professions (e.g. radiology technicians and clerical workers) the positive characteristics may be insufficient to counter-balance extreme pay differentials.

F6 Compared to other variables, location is often the most important factor in workforce issues. Aside from inability to act quickly, most open door providers had more or less the same workforce challenges (or lack thereof) as other providers in the same geographic area. Local collaborations among delivery sites or between delivery sites and educational institutions have shown success in addressing workforce issues in those areas.

F7 Each community clinic and public hospital has a distinctive set of challenges, constraints and resources.

- Several of California's open door providers, pushed by necessity to be creative with their approaches to staffing, hiring, recruiting and retaining the right number of quality workers, have implemented innovative solutions and "best practices" that can serve as models.
- Many institutions have worked within local constraints and limited resources to develop coping mechanisms for their problems and challenges.
- Often a winning idea or strategy was the work of one individual leader or manager, without whom the program would likely fail. This phenomenon sometimes led to a patchwork of distinct, unrelated programs and projects with designated funding that could not be shifted to other needs.
- The unique character of institutions and communities may make blanket policy proposals irrelevant to many sites.

F8 Populations served by open door providers directly affect workforce issues, including:

- Dictating essential characteristics, such as bilingual and bicultural skills, necessary for the health care workforce at a particular site;

- Creating a pool of potential health care workers from those served who are committed to the organization and to "paying back" the community with service; and,
- Producing site-specific epidemiological challenges (e.g. rates of tuberculosis) that forecast the need for particular programs, departments and professionals.

F9 An 18–24 month window was reported by many open door providers to be a critical employment period. Workers who stayed beyond this point would often stay for an entire career; by this time, they were committed to the work and the site. Those who would leave because of the environment would likely leave within the first two years.

F10 There are perceived tensions between groups of workers at some open door provider institutions that affect staffing.

- The perceived generation gap between younger and older health professionals may be exaggerated at open door providers. Older workers who entered health care generally, and public hospitals or community clinics specifically, because of a personal commitment that mirrored broader social movements to serve those in need, are unsure about the social, career and economic values of their younger co-workers.
- A gap between workers who were committed to the open door provider mission and those who were there for the job, or to run the business, was perceived at some sites. Leaders at some sites felt able to use this tension constructively and balance the different values, goals and strategies to provide high quality care in a cost-effective manner to all patients.

F11 Open door providers generally operate on extremely limited and unpredictable budgets that affect ability to hire and retain staff. In particular, when the economy slows and demand increases for public health services, and the staff needed to provide them, public program budgets are cut.

F12 Good leadership and management are of cardinal importance for successful implementation of workforce policies and strategies. However, open door provider leaders and managers have limited access to resources for their own professional development.

F13 The physical buildings, floor plans and equipment at each site have significant impacts on many workforce issues including unit staffing, employee satisfaction, worker safety and efficiency, access for patients and workers, and types of providers hired.

Like all delivery sites, these issues are critical but open door providers often face significant budget limitations for building and renovation. Community and free clinics are notably crowded and operating in space not originally built for health care services.

F14 Leaders at open door provider institutions must rely on good information to address staffing problems. Necessary information, however, is often lacking or unavailable to open door providers. Such information includes:

- Meaningful data on the workforce, including demographics, educational background, and reasons for choosing, remaining at, and leaving a job.
- Research on the impact of various staffing, teaming and utilization models on quality of care, patient satisfaction, employee satisfaction, and personnel costs.

Recommendations

To improve the hiring, training, management and retention of staff at California's open door provider institutions, a number of recommendations are offered. These are directed to a number of different audiences including county officials, institutional administration, state and local policymakers, union leaders, educators, researchers, and health care professionals. In many instances, collaborative efforts among several of these groups will be required for successful reform.

R1 Share *best practices* — Some of the best and most creative workforce innovations encountered in the study were low cost adaptations to common challenges. While heavily dependent on the work of individuals and somewhat site specific, these workforce innovations nonetheless could be adapted to other settings. Forums might include workshops, conferences, electronic exchanges and websites.

R2 Build on distinctive *centers of excellence*. Every site need not provide all services to all populations. By identifying their own outstanding clinical competencies or best practice models for addressing the needs of particular populations, open door institutions can focus on developing centers of excellence. Such strategies should allow open door providers to secure additional resources that can assist them in workplace redesign.

R3 Create *collaborative partnerships* between delivery organizations and labor unions representing workers — Such partnerships can improve understanding, create a common political agenda, redesign work and job function and make more effective use of limited resources.

R4 Streamline *bureaucracy* — This issue is most significant in the public setting and provides an arena where immediate action could be taken. Not having enough workers to deliver care may provide the motivation to make the necessary changes at the county level. Strategies driven by employees, unions and line managers (rather than top-down) may be the most important issues on which to focus. Until bureaucracy can be streamlined, support and training could be provided to managers to work in this environment.

R5 Change *practice and professional delivery models* — Many workforce shortages exist only because of and within the constraints of a model of care delivery that has built-in but outdated assumptions. Use current challenges of care and staffing as a way to raise issues of work redesign, personnel substitution, and technological substitution.

R6 Build and improve *leadership and management resources* — Individuals who are designing and implementing innovations throughout the system in California should be encouraged to share their managerial and leadership vision, skills and success with wider audiences. Reward those who become innovators.

R7 Create workable *career ladders and education support* — Career ladders throughout health care organizations improve quality of work life and make employment more attractive and sustainable. They can also target previously untapped pools of potential workers and help individuals from those pools enter professions experiencing critical shortages.

R8 Ensure *diversity and cultural competence in workforce* — Latino and African American workers are underrepresented in most health occupations in California. Most open door providers serve a higher percentage of these populations. Improving the match between populations served and workers needed will create new employment opportunity, improve health outcomes and build stronger ties between community and health care organizations. Continue and expand efforts to recruit and retain health care staff with the language skills and cultural competence to care for populations served.[1]

[1] Cultural competence resources can be found, among other places, at the UCSF Center for the Health Professions and the California Association of Public Hospitals and Health Systems.

R9 Incorporate *data collection and tracking* strategies into overall institutional information strategy — Over the next decade all health systems will make improvements in their data infrastructure. Human resources and management leadership should be clear about the types of information they could use to address workforce challenges organizations will confront. Additional qualitative research about, for example, the pivotal two-year window for employees, could also help institutional leaders better plan workforce needs.

R10 Ensure *adequate funding and financial management* for open door providers to meet their mandates to provide care to anyone regardless of ability to pay.

R11 Develop and implement plans to *better inform* policymakers and the public about open door providers, the work that they do, the workforce needs they have and the job opportunities they offer.

R12 Recognize *new patterns of work; changing work values and shifting demographics*—More than any factor in the future these three realities together are creating new opportunities and challenges for all health care organizations. By understanding and anticipating new patterns of work, open door providers can use them to their advantage when plotting strategic directions. For example, older people with means may serve as volunteers and the service-oriented values of younger workers may prove an asset for open door institutions.

1 INTRODUCTION

Critical health care issues related to the available supply of professional workers have emerged across the nation as hospitals and clinics struggle to provide needed services. Despite this increased awareness, little attention has been paid to these issues as they play out in health care "safety net" or "open door provider" institutions. These institutions provide:

- The majority of care for 1 in 5 Californians
- Fully ¾ of Level I trauma centers and ½ of the burn beds in California
- Often the only access to health care for rural, low-income or uninsured Californians
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- Vital training facilities for physicians and other health workers

Compared to other delivery sites, safety net providers have different experiences recruiting, training and retaining doctors, nurses and other health care workers (Huang, 2001). Unlike other sites, safety net institutions often serve as a last resort and workforce issues have a particularly critical impact on un- and under-insured patients who rely on the safety net to obtain needed care. If safety net providers do not have the appropriate health care professionals to provide particular health services, these services may not be available to vulnerable patient populations; there is nothing that serves as backup for the safety net.

The "health care safety net" is a catch-all term without boundaries; it refers to a patchwork of services, unrelated by any formal system, available to people who would otherwise not be able to obtain care because they do not have public or private health coverage or sufficient money to pay for the care. In its broadest sense, the safety net includes providers and delivery sites ranging from government-funded hospitals to private hospitals providing charity care, from neighborhood clinics to individual practitioners who care for uninsured patients. To permit a meaningful analysis, this study narrows its focus to two groups of institutions that together, provide a significant amount of care to California's low-income and un- or under-insured populations: public hospitals and health systems and community clinics. In many ways, they are anchors for the health care system, providing high quality and efficient care to all. Because of their explicit missions and/or legal mandates to serve indigent, uninsured and low-income populations, community clinics and public hospitals and health

systems are known as "**open door providers**", the term that will be used in this report to describe them collectively:

- **Public hospitals and health systems** in California serve all members of the community regardless of insurance status or ability to pay. Totaling 26, they are primarily county owned and operated hospitals — but also include one community hospital (Community Medical Center — Fresno) and three University of California medical centers (UC Davis, UC San Diego and UC Irvine) that have contracted with the local county to take on "Section 17000"[2] responsibilities of caring for the county's indigent population.[3]
- **Community and free clinics**[4] ("community clinics") in California provide outpatient care to the state's uninsured, low-income and minority communities. California's Office of Statewide Health Planning and Development (OSHPD) reports the existence of over 700 community and free clinics within the state (OSHPD Healthcare Information Division, 2002a).[5] Although some of the tables and charts include all the state's clinics,[6] this study focuses on the subset of this total that comprises the state's primary care clinics.

Open Door Provider

— a hospital, academic medical center, community-based health center or other entity dedicated to assure the accessibility of cost-effective, high quality and culturally appropriate health care services for low-income and uninsured populations, beyond those emergency and stabilization services required by law. Open door providers also ensure the availability of critical public goods, such as trauma and burn care, essential to the health and well-being of the public-at-large (California Association of Public Hospitals and Health Systems (CAPH), 1999).

[2] California Welfare and Institutions Code § 17000; (NHeLP, December 1997)

[3] For a list of the 26 public hospitals and health systems on which this study focuses, see Appendix A. Unless otherwise noted, this report relies on the definition of public hospitals and health systems used by the California Association of Public Hospitals and Health Systems, and does not include district hospitals or the state's one city hospital, which are publicly funded in whole or in part and serve some vulnerable populations but which have sufficiently different structures and mission/mandates from other public hospitals to necessitate separate study. A number of other institutions in California might be considered "safety net" under various definitions because they provide care to indigent or vulnerable populations but are not included in this study because of their lack of mandate or mission to provide care to anyone regardless of ability to pay.

[4] California's community and free clinics, licensed under California's Health and Safety Code § 1204, are operated by tax-exempt non-profit corporations that are supported and maintained in whole or in part by donations, bequests, gifts, grants, government funds or contributions. In a community clinic, any charges to the patient must be based on the patient's ability to pay, utilizing a sliding fee scale; in a free clinic, no fees are charged to patients. Note, as discussed below, the difference between a community clinic (as defined by California licensing law) and a community health center (a federal funding designation).

[5] OSHPD's count of over 700 community and free clinics is approximate. Most of these clinics are primary care although some specialty care and special population clinics (when they are not-for-profit) are included in the total; figures do not include most county clinics and federal tribal clinics (these entities are not required to report to OSHPD and most choose not to do so) or most specialized clinics for dialysis, psychiatric care and other non-primary care license types (California Primary Care Association, 2000).

[6] Information available through OSHPD does not permit easy identification of which clinics are primary care and which are specialty care.

Primary information and data sources

(additional references for citations can be found in footnotes and reference section):

The **California Association of Public Hospitals and Health Systems (CAPH)**

Mission: CAPH, a non-profit trade organization representing California's public hospitals and health systems since 1983, works to strengthen the capacity of its members to advance community health, ensure access to comprehensive, high-quality, culturally sensitive health care services for all Californians and educate the next generation of health care professionals. "Our passionate belief that everyone deserves an equal opportunity to enjoy good health—regardless of their insurance status, immigration status or ability to pay—drives our policy and advocacy agenda."

Members: CAPH represents more than two dozen hospitals, health care systems and academic medical centers in 18 counties — including each of the 15 most populated counties—throughout California. Also called "open door providers" because no one is denied access to the essential health care services they provide, CAPH members share a mission and mandate to provide care to all residents, regardless of their ability to pay. Among the members of CAPH are county-owned and operated facilities, University of California medical centers, and private, not-for-profit facilities sharing a common commitment to serving all people.

Contact information: **California Association of Public Hospitals and Health Systems**
2000 Center Street, Suite 308 Berkeley, CA 94704
Phone: 510.649.7650 Fax: 510.649.1533
http://www.caph.org/

The **California Primary Care Association (CPCA)** is a membership organization representing over 500 clinics, health centers and clinic networks. Its community clinics and health centers in California provide health care services to under-served populations, the uninsured, the homeless, rural and migrant families, women and children, the working poor and all those in need of affordable and accessible care. Its mission is to promote and facilitate equal access to quality health care for individuals and families through organized primary care clinics and clinic networks that, among other things, seek to maintain cost-effective, affordable medical services, as well as meet the linguistic and cultural needs of California's diverse population.

Contact information: **California Primary Care Association**
1215 K Street, Suite 700 Sacramento, CA 95814
Phone: 916.440.8170 Fax: 916.440.8172
http://www.cpca.org/

The **Office of Statewide Health Planning and Development (OSHPD)** is a department of the California Health and Human Services Agency. The office's mission is to plan for and support the development of health care systems, which meet the current and future needs of the people of California. To address its mission, OSHPD serves as the building department for all hospitals and nursing homes in the state (through the Hospital Seismic Safety program); provides loan insurance to not-for-profit health facilities; supports the training of health professionals, especially doctors and nurses who provide primary care services and are willing to practice their profession in underserved communities; and collects, analyzes, and disseminates information about hospitals, nursing homes, clinics, and home health agencies licensed in California. The information includes financial reports, data on the use of services, and measures of the quality of care provided.

Selected contact information: **California Office of Statewide Health Planning and Development**
Healthcare Information Division
818 K Street, Room 500 Sacramento, CA 95814
Phone: 916.323.8399 Fax: 916.324.9242
http://www.oshpd.ca.gov/index.htm

Organization of this report

Preceding this introduction is the executive summary which, among other things, provides the full list of findings about the workforces at California's open door providers and recommendations to address some of the challenges they face. Following this introduction is a discussion of seven characteristics that define and describe public hospitals and health systems and community clinics. The report then moves on to highlight selected pressing health care workforce issues in the broader context as well as possible implications for safety net institutions. The third and main section consists of case studies of five public hospitals and five community clinics in California to provide qualitative information and best practices from a sample group of sites. Based on the literature review, synthesis of existing data, and case studies, the report's conclusion ties the sections together and makes reference back to the findings and recommendations.

Characteristics of open door providers

Open door providers share attributes that both distinguish them from other delivery sites and help frame the health care workforce strengths and challenges they face. These characteristics directly or indirectly affect the institutions' ability to hire, retain and manage health care staff. In addition, these characteristics form the basis of reputations at the delivery sites that translate into attractions and shortcomings for potential employees. For example, a mission or mandate to care for the medically underserved attracts people committed to such a cause and helps form tight working relationships among colleagues; the same mission or mandate might not appeal to other health care professionals. Similarly, the range of services provided may be seen as extremely attractive to some new professionals anxious to gain experience and training but the provision of such services may exhaust and burn out other practitioners.

1. Populations served

More than any other single factor, open door providers are defined by the populations they serve. Compared to other delivery sites, the patient populations of community clinics and public hospitals and health systems tend to be lower-income, more un- or under-insured for health care, and drawn largely from underserved racial or ethnic communities. The numbers involved are not insignificant. An estimated 6.2 million Californians, including over 15 percent of the state's children and 22 percent of the adults, had no insurance at all in 2000 (Brown, Alex, & Becerra, 2002). These are the medically needy who, among others,[7] seek care at open door providers.

[7] Open door providers also see patients with private health insurance and patients who pay out-of-pocket for services. Because so many of these hospitals have Level I trauma centers, licensed burn beds, and high quality research and clinical staff, these hospitals are often the delivery site of choice for many Californians, regardless of financial or insurance status.

FIGURE 1

Percent of care to California Medi-Cal and indigent patients provided by open door provider hospitals, 2000

	County hospitals	UC open door provider hospitals	All open door provider hospitals	All California hospitals	Percent services provided by open door provider hospitals
Facilities	*22*	*3*	*26*	*374*	*7.0%*
Licensed beds	*9,123*	*1,529*	*11,397*	*74,674*	*15.3%*
County Indigent outpatient	*1,805,973*	*74,845*	*1,896,981*	*2,172,853*	*87.3%*
County Indigent inpatient	*66,652*	*3,776*	*72,340*	*98,335*	*73.6%*
Medi-Cal outpatient	*2,035,165*	*371,218*	*2,472,154*	*7,029,890*	*35.2%*
Medi-Cal inpatient	*120,103*	*19,699*	*150,983*	*583,327*	*25.9%*

Source: OSHPD, 2002b

Note: "All" California hospitals includes all hospitals defined as "comparable" by OSHPD plus Laguna Honda Hospital & Rehabilitation Center which is county-owned. Comparable hospitals excludes prepaid health plan (Kaiser), state, Shriners, specialty hospitals, and psychiatric health facilities. Under provisions of law and regulations, or type of care provided, these hospitals do not file comparable data with OSHPD.

The 26 open door provider hospitals includes county hospitals, the three UC hospitals who have taken on their local county's Section 17000 responsibilities and Community Medical Centers — Fresno.

While comprising about 15 percent (OSHPD Healthcare Information Division, 2002b) of California's comparable hospital beds,[8] the state's two dozen public hospitals and health systems deliver a disproportionate amount of care to economically disadvantaged Californians. These hospitals provide 26 percent of the state's inpatient care to Medi-Cal patients and 74 percent of inpatient care to the medically indigent[9] (OSHPD Healthcare Information Division, 2002b). CAPH reported that the number of medically indigent patient discharges at CAPH member hospitals increased by 11 percent between 1993 and 1998, while the number of discharges for these patients at investor owned hospitals decreased by 16 percent (California Association of Public Hospitals and Health Systems (CAPH), 1999).

The role these hospitals play in providing outpatient care to the underserved is even greater. They provide 35 percent of the state's outpatient care to Medi-Cal patients and fully 87 percent of outpatient care to the medically indigent (OSHPD Healthcare Information Division, 2002b). Again, public hospitals have seen an increase; between 1993-1998, there was a 20 percent increase in outpatient visits for uninsured patients at CAPH institutions (California Association of Public Hospitals and Health Systems (CAPH), 1999).

[8] Comparable hospitals, totaling 374, do not include prepaid health plan (Kaiser), state, Shriners, specialty hospitals, and psychiatric health facilities. See also note at figure 1 for more information.

[9] Generally, medically indigent adults are those uninsured with incomes below 100 percent of the federal poverty level (FPL) who are not eligible for Medi-Cal.

With regards to race and ethnicity, CAPH reports that 78 percent of patients served in and by public hospitals and health systems in 1999 were non-White (California Association of Public Hospitals and Health Systems (CAPH), 2002).

Comparable patient population characteristics hold for California's over 700 community and free clinics, most of which are funded specifically to serve medically underserved and indigent populations (OSHPD Healthcare Information Division, 2002a). Over 70 percent of the state's community clinic patients are non-White (OSHPD Healthcare Information Division, 2002a). Economically, less than one in five of community clinic patients pays for his or her health care through private insurance or out of pocket (OSHPD Healthcare Information Division, 2002a). The California Primary Care Association (CPCA) estimated in 1998 that about 61 percent of patients of California community clinics had incomes under the Federal Poverty Level, or less than $16,450 per year for a family of four (California Primary Care Association, 2000). Of note, a recent

FIGURE 2

Selected hospital services, California, 2000

	County hospitals	UC open door provider hospitals	All open door provider hospitals	All California hospitals
LICENSED BEDS	*9,123*	*1,529*	*11,397*	*74,674*
DISCHARGES	*240,339*	*63,319*	*332,609*	*2,673,732*
- Medicare (traditional & managed care)	*23,998*	*16,149*	*46,781*	*957,135*
- Medi-Cal (traditional & managed care)	*120,103*	*19,699*	*150,983*	*583,327*
- County Indigent	*66,652*	*3,776*	*72,340*	*98,335*
- Third Party payer	*21,083*	*18,186*	*45,766*	*919,763*
OUTPATIENT VISITS	*5,425,308*	*1,763,524*	*7,692,434*	*37,602,376*
- Medicare (traditional & managed care)	*513,846*	*423,386*	*937,232*	*10,448,095*
- Medi-Cal (traditional & managed care)	*2,035,165*	*371,218*	*2,406,383*	*7,029,890*
- County Indigent	*1,805,973*	*74,845*	*1,880,818*	*2,172,853*
- Third Party payer	*506,024*	*776,709*	*1,282,733*	*14,026,316*
EMERGENCY ROOM VISITS	*981,504*	*144,922*	*1,181,202*	*7,216,298*
- Urgent	*495,741*	*68,860*	*590,533*	*3,807,001*
- Non-urgent	*319,022*	*60,501*	*404,088*	*2,398,169*
- Critical	*166,741*	*15,561*	*186,581*	*1,011,128*
- ED visits resulting in admission	*133,614*	*25,945*	*166,730*	*1,094,719*
CLINIC VISITS	*4,198,858*	*1,350,281*	*5,736,223*	*13,874,482*

Source: OSHPD, 2002b & 2002c

Note: "All" California hospitals includes all hospitals defined as "comparable" by OSHPD plus Laguna Honda Hospital & Rehabilitation Center which is county-owned. Comparable hospitals excludes prepaid health plan (Kaiser), state, Shriners, specialty hospitals, and psychiatric health facilities. Under provisions of law and regulations, or type of care provided, these hospitals do not file comparable data with OSHPD. Emergency room usage for "All" category is based on comparable hospitals who reported utilization data to OSHPD.

The 26 open door provider hospitals includes county hospitals, the three UC hospitals who have taken on their local county's Section 17000 responsibilities and Community Medical Centers — Fresno.

FIGURE 3

California free and community clinics, patient demographics, 1990–2000

	1990	1995	2000
All Patients	***1,969,363***	***2,401,573***	***2,827,889***
Asian	*118,356*	*141,053*	*146,678*
Black	*167,307*	*199,366*	*176,362*
Hispanic	*764,385*	*1,140,444*	*1,556,681*
Native American	*73,347*	*59,205*	*59,768*
White	*808,220*	*805,975*	*720,506*
Other	*37,748*	*55,530*	*167,894*

Source: OSHPD 2001 & 2002a

study of California physician participation in the Medi-Cal program found that physicians working in community clinics treat a higher percentage of Medi-Cal patients in their practices than other physicians (Bindman, Huen & Vranizan, et al., 2002).

2. Mission

While all hospitals are required by law to provide emergency and stabilization care to all, open door providers have explicit missions and/or legal mandates to offer a full range of health care services to underserved populations. They provide care to all residents, regardless of their insurance or immigration status or ability to pay. California's public hospitals and health systems are either county[10] hospitals or hospitals that have contracted with the local county to take on the county's legal responsibilities to care for indigent populations. In addition to their legal requirements, public hospitals and health systems usually have adopted mission statements that clearly spell out the institution's commitment to serving anyone who needs care. For examples of mission statements, see appendix B.

Martin Luther King/Drew Medical Center, Los Angeles

Mission statement: To provide quality comprehensive Medical Care that is Accessible, Acceptable and Adaptable to the needs of the community we serve.

California's county clinics are mandated to serve everyone in the county regardless of their ability to pay for services. Although the remainder of California's community and free clinics are not required by law to serve the indigent, most were established with and

[10] Including county- and city/county- but not city-owned hospitals

adhere to a mission to do so. Their mission statements are usually clearly written and made known to workers and patients. In addition, community clinics' funding is often linked to their demonstrated commitment to provide care to vulnerable populations. For example, Federally Qualified Health Centers (including clinics that receive public funds through Community Health Centers, Migrant Health Centers, Health Care for the Homeless and Public Housing Primary Care programs, and Urban Indian and tribal health centers) meet federal standards to provide care to medically underserved and uninsured people (U.S. Department of Health and Human Services Bureau of Primary Health Care, 2002).

Sacramento County Primary Care Clinic

Mission Statement:

- Deliver quality primary health care services to medically indigent adults, children, the homeless and those who have no other source of health care;
- Ensure a healthy community through disease prevention, health and nutrition education and public health services;
- Empower those with chronic illnesses by teaching disease self-management and self-sufficiency;
- Recognize, serve, listen and respond to the needs of our community;
- Provide innovative, holistic, effective and efficient service delivery in collaboration with other community service agencies and health and human service systems;
- Promote the safety, welfare and professional development of our staff; and
- Appreciate and reflect the multi-cultural and experiential diversity of employees and of all members of the community we serve.

3. Services

Like other hospitals, most of the state's public hospitals and health systems offer a full range of inpatient and outpatient[11] health care services, with all the departments and units necessary to provide a full complement of round-the-clock health care services.[12] These services include primary care, outpatient specialty care, hospital care, emergency medical services, urgent care, prenatal, labor and delivery and neonatal care, substance abuse treatment services and mental health services. In addition, the state's public hospitals and health systems provide a significant proportion of the state's trauma and burn care.

[11] For a list of kinds of health care services provided in the outpatient setting, see Appendix C.

[12] Of the 26 public hospitals and health systems that are the subject of this study, two (Laguna Honda Hospital and Rehabilitation Center and Rancho Los Amigos National Rehabilitation Center) do not provide the full spectrum of hospital care but are part of county health systems that do.

They account for 9 of the state's 12 Level I trauma centers (California EMSA, 2002) and 6 of the state's 13 hospitals with licensed burn beds (OSHPD Healthcare Information Division, 2002c).[13] The CAPH reports that 61 percent of California's burn care and 63 percent of emergency psychiatric services are delivered by public hospitals and health systems (California Association of Public Hospitals and Health Systems (CAPH), 2002) These institutions provide more than health care; while not all academic medical centers are public hospitals or health systems, those that are (i.e., King/Drew, UCD, UCSD, UCI)[14] offer premier medical school training while also serving as open door providers to all members of the community in which they are sited. Finally, the state's open door provider hospitals train half of the state's medical residents (California Association of Public Hospitals and Health Systems, 2002).

Community clinics provide outpatient[15] care exclusively and the range of outpatient services varies from site to site. While some specialty care is provided at some clinics, most services are primary care in nature; in addition, some clinics offer limited complementary and alternative health care services. The clinics rely on networks of local practitioners and hospitals to refer patients who need specialty or inpatient care. Most clinics are open during daytime hours although many also have drop-in and/or appointments available in the evenings and weekends. The open door community clinics that are the subject of this report provide care to men and women, adults and children. Many of California's community clinics also serve as clinical training sites for health care professionals.

4. Funding sources

Compared to other delivery sites, open door providers of health care rely on somewhat different funding sources and have different financial structures. Major sources of funding include public health insurance programs and government subsidies. Government funding sources in particular fluctuate with economic cycles in an ironic manner: when economic times are good, government funding for health care often increases; when the economy is struggling — and when more people may therefore be in

[13] Public hospitals and health systems with Level I trauma centers: Harbor/UCLA, King/Drew Medical Center, LAC/USC (Los Angeles County/University of Southern California) Medical Center, San Francisco General Hospital, Santa Clara Valley Regional Medical Center, UC Davis, UC Irvine, and UC San Diego and University Medical Center (now part of CMC). Public hospitals and health systems with licensed burn beds (numbers in parentheses refer to number of licensed burn beds at individual sites): Arrowhead Regional Medical Center (14), LAC/USC (Los Angeles County/University of Southern California Medical Center (34), Santa Clara Valley Medical Center (8), UC Davis (8), UC Irvine (8), and UC San Diego (8).

[14] King/Drew is one of Los Angeles County's public hospitals; UC Irvine, UC Davis and UC San Diego have contracted with their respective local county to take on the county's responsibilities to care for the indigent under Welfare and Institutions Code §17000 et seq.

[15] For a list of kinds of health care services provided in the outpatient setting, see Appendix C.

need of public health care — public appropriations are likely to be cut. In terms of impact on workforce supply, limited and changing operating budgets can affect hiring terms, worker satisfaction and retention rates.

Unlike most states, California law requires that counties serve as the providers of last resort for the medically indigent. This arrangement has resulted in a multitude of different approaches implemented by the various counties to fulfill their responsibilities. Some counties operate their own hospitals and clinics; others contract with private institutions to provide the services. Each county relies to different extents on available funding sources. Although the variations among the 58 counties are too numerous and complex to cover in this study, an overview of common funding sources relied upon by open door providers is presented below.

Public hospitals and health systems[16]

California's core open door provider hospitals rely on a tenuous and unpredictable patchwork of funding — based primarily on Medi-Cal revenues and state and local subsidies — to carry out their mission and mandate to serve the health care needs of all residents, regardless of their insurance status or ability to pay. Over much of the past two decades, these programs have not kept pace with the rising costs of, and demand for, health care services.

Six main financing mechanisms exist to support health care services to California's uninsured: Medi-Cal, Medi-Cal supplemental payments (such as DSH), state tobacco tax (Proposition 99) appropriations, Medicare add-on payments such as Graduate Medical Education (GME) payments, "realignment" funds, and county general funds.

[16] This section on the funding for public hospitals and health systems is largely excerpted from a document prepared by the California Association of Public Hospitals and Health Systems (for the full document, see Appendix D) and focuses on funding sources for county hospitals. All public hospitals and health systems, including the three UC systems and CMC-Fresno that have contracted with the local counties to provide care to the indigent, receive a significant amount of revenue from various funding sources currently at risk. However, different hospital systems identify their funding sources slightly differently. For example, The University of California operates five academic medical centers; Davis, Irvine, Los Angeles, San Diego, and San Francisco. In addition to providing clinical teaching programs, the medical centers offer health care services in their communities. California's academic medical centers describe their revenue in three major categories: 1) patient service revenue, including charges for services delivered to patients at a medical center's customary rates (major sources: government sponsored health care programs, commercial insurance companies, contracts, and self-pay patients), 2) other operating revenue, derived from daily operations of the medical centers (major sources: federal and state payments for direct and indirect costs of providing medical education, cafeteria sales, and parking fees), and 3) non-operating revenue, derived from activities other than the daily operations of the medical centers (major sources: interest income and salvage value from disposal of a capital asset) (University of California Office of the Vice President — Financial Management, 2002). For a map of California counties served by open door provider hospitals, see Appendix A. For information about the financial health of California hospitals generally, see Appendix E.

Medi-Cal Reimbursement.[17] California's public hospitals and health systems have large Medi-Cal (California's Medicaid program) patient populations and thus rely substantially on Medi-Cal reimbursement. However, California has a long history of keeping Medi-Cal provider rates low. In 1998, California ranked 51st (including D.C.) in Medicaid reimbursement rates, about 33 percent below the national average (California $2,573 per patient versus U.S. $3,822 per patient) (Stroud & Cattaneo & Stroud Inc., 2001).[18] These low spending rates have compelled Medi-Cal providers to be among the most cost-efficient in the nation but they must rely on additional funding sources to cover shortfalls.

Medi-Cal Supplemental Payments. To address low Medi-Cal base rates, the state has created three programs over the last decade — the SB 855, SB 1255, and Graduate Medical Education programs — to provide supplemental Medi-Cal payments to targeted groups of hospitals. The SB 855 Medi-Cal disproportionate share hospital payment program (DSH) was created in 1991 to generate new federal funding for hospitals that treat the greatest numbers of Medi-Cal and uninsured low-income patients.[19] The SB 1255 and Graduate Medical Education programs, which provide supplemental payments to eligible safety net hospitals, recognize the added value of and higher costs associated with the mission of open door providers, including trauma care, teaching and serving a higher concentration of seriously ill patients.

Tobacco Tax (Proposition 99). When Proposition 99 was enacted in 1988, it increased the tax on cigarettes and devoted those revenues to a variety of health purposes, including indigent health services. As smoking rates in the state have declined, however, fewer dollars are available to fund these programs.

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[17] A major concern for public hospitals nationally is the federal change in Medicaid upper payment limit policy. California stands to lose about $300 million per year if the federal government implements the plan to reduce Medicaid upper payment limits from 150% to 100%. Because California was one of the first states to take advantage of this additional funding, and because the state did not abuse the policy by shifting monies into non-health related programs, California will have eight years to phase out the program versus two to three years for most other states. Yet, because California utilized all the additional funding for health programs, the state will be more adversely affected than states that used it for other purposes since there are no revenues available to support programs funded by the additional monies (Piotrowski, 2002).

[18] California also has high total costs and broad coverage. During 1995, Medi-Cal enrolled 6.8 million Californians, at a cost of $17 billion. Medi-Cal has relatively generous eligibility standards and goes beyond the minimum federal mandates, covering almost all optional services (Zuckerman et al., 1998).

[19] California's SB 855 works in conjunction with federal law requiring state Medicaid programs to take into account the situation of hospitals that serve a disproportionate number of low-income patients with special needs. This requirement, the Medicaid disproportionate share hospital (DSH) payment adjustment, results in a major expense for state and federal governments (Coughlin & Liska, 1997). California's SB 855 is designed to tap into matching federal DSH payments while minimizing state expenditures. DSH payments to hospitals in California is near the top range for all U.S. states, however the proportion paid per state resident is low, and non-preference rules put public hospitals in competition with other types of hospitals for payments. California hospitals are further disadvantaged by state policy limiting taxing (requires voter referendum) and a constitutional balanced budget requirement (Norton, Lipson, & The Urban Institute, 1998), both of which restrict the ability of state government to supplement funding for safety net health care institutions when economic times change.

Medicare Add-On Payments, Including Medicare Graduate Medical Education. Together, the state's open door provider hospitals train about half of the state's medical residents. Some hospitals are major teaching hospitals with hundreds of residents. Others operate only one or two residency programs. Federal funding of medical education costs is accomplished through two add-ons — for direct and indirect medical education costs — to a hospital's Medicare payments. Although most open door providers treat a small proportion of Medicare beneficiaries, Medicare GME financing is a significant funding source for these hospitals.

Realignment. Created in 1991, "realignment" is the major state-funded program that supports public health services as well as health care for the medically indigent. Funded by a portion of state sales tax and vehicle license fees, realignment funds were originally intended to ensure a steady source of revenue to counties to fund health care to the low-income uninsured as well as public health services independent of annual state budget negotiations. Because of the recession in the early and mid-1990s, however, the realignment revenues never realized their projected levels.

County general funds. Counties use local tax dollars from their general funds to subsidize health care for the indigent. Some spending is required in order to receive the state's matching funds, but many counties appropriate additional discretionary funds to cover the costs of serving the uninsured.

FIGURE 4

Percent of total patient revenue, Medicare and Medi-Cal by hospital type, California, 2000

	County hospitals	UC open door provider hospitals	All open door provider hospitals	All California hospitals
Amount of net patient revenue				
Medicare traditional and managed care	*338,172,500*	*336,397,000*	*777,763,000*	*10,121,266,000*
Medi-Cal traditional and managed care	*3,408,779,000*	*507,047,500*	*4,017,490,000*	*5,787,683,000*
Percent of net patient revenue				
Medicare traditional and managed care	*7.7%*	*24.5%*	*12.7%*	*35.4%*
Medi-Cal traditional and managed care	*77.2%*	*37.0%*	*65.7%*	*20.2%*

Source: OSHPD 2002b

Note: "All" California hospitals includes all hospitals defined as "comparable" by OSHPD plus Laguna Honda Hospital & Rehabilitation Center which is county-owned. Comparable hospitals excludes prepaid health plan (Kaiser), state, Shriners, specialty hospitals, and psychiatric health facilities. Under provisions of law and regulations, or type of care provided, these hospitals do not file comparable data with OSHPD.

The 26 open door provider hospitals includes county hospitals, the three UC hospitals who have taken on their local county's Section 17000 responsibilities and Community Medical Centers — Fresno.

Revenue sources for public hospitals and health systems

- National Association of Public Hospitals (NAPH) members reported in 2001 that they received about 70 percent of their revenues from Medicare, Medicaid and local government funds (National Association of Public Hospitals (NAPH), 2001).
- As competition has increased for all payer sources, the proportion of care to uninsured has been concentrated more greatly among public hospitals; in 1998 NAPH found that 66 public hospitals across the U.S. accounted for one-quarter of all uncompensated care provided to patients (California Association of Public Hospitals and Health Systems (CAPH), 1999).
- California's public hospitals and health systems received 13 percent and 66 percent of their revenues from Medicare and Medi-Cal respectively (OSHPD Healthcare Information Division, 2002b).
- Between 1995 and 2000, 23 California hospitals closed as a result of financial difficulties. During this time period, one county hospital (Stanislaus) closed and three converted to private institutions. Factors most often associated with closure among hospitals in general included insufficient Medicare payment revenues, decreased private insurance payments, nursing shortages and costs of seismic retrofitting. Southern California, particularly San Diego and Los Angeles counties, were home to 15 of the 23 closings. Among remaining hospitals in the state, about two-thirds were losing money (Nicholas C. Petris Center on Health Care Markets and Consumer Welfare, 2001).

Community and free clinics

Like public hospitals and health systems, community and free clinics rely on often unpredictable and limited funding sources to provide care to low-income and un- or under-insured patients. Depending on the status and qualifications of a particular clinic, funding sources may include government grants or contributions, cost-based reimbursement (through public or private insurance plans), patient charges, gifts and donations.

Although a number of clinics operate in California as for-profit entities, this report focuses on California's community and free clinics, which are required by state licensing law to be operated by tax-exempt nonprofit corporations (California Health and Safety Code § 1204).[20] Not all community clinics charge patients, but those that do must base any charges on the patient's ability to pay, utilizing a sliding fee scale. Free clinics are not permitted under the licensing code to charge patients directly for services or drugs

[20] County operated clinics have traditionally been considered part of county hospital systems, thus not requiring separate state licensure as a community or free clinic or reporting to OSHPD. County entities can be Federally Qualified Health Centers, entitling them to federal funds in addition to county funds.

(California Health and Safety Code § 1204); they operate largely with volunteers, and monetary and in-kind donations (California Primary Care Association, 2000).

Clinics may rely to varying degrees on cost-based reimbursement and private donations; most rely to a large degree on government funds.[21] A significant determinant of the public sources of funding for community and free clinics is found not in the state's statutory definitions but in federal program eligibility requirements. Many clinics are structured to meet requirements to be a Federally Qualified Health Center (FQHC) or FQHC Look-Alike as described below. In addition, many clinics receive federal funding as Ryan White Grantees or Rural Health Clinics.[22]

Federally Qualified Health Centers. FQHCs are public or not-for-profit, consumer-directed health care corporations which provide high quality, cost-effective and comprehensive care to medically underserved and uninsured people. These providers must meet rigorous federal standards related to quality of care and services as well as cost, and they are qualified to receive cost-based reimbursement under Medicaid and Medicare law. This nationwide network of safety net providers is primarily comprised of health centers which are supported by federal grants under the U.S. Public Health Service Act (PHSA): Community Health Centers, Migrant Health Centers, Health Care for the Homeless programs, Public Housing Primary Care programs and Urban Indian and Tribal Health Centers.

- **Community Health Centers.**[23] Originally known as neighborhood health centers in the mid-1960s, community health centers provide comprehensive primary medical care services with a culturally sensitive, family-oriented focus to anyone needing care regardless of ability to pay. These centers tailor their services to meet the specific needs of the community and its special populations that include the homeless, migrant and seasonal farmworkers, people infected with HIV/AIDS, the elderly and people who abuse alcohol and other drugs. In addition, users of health center services make up a majority of centers' governing boards. In FY 1995, community health centers provided services to more than seven million people nationally, 44 percent of whom were children and adolescents.

[21] The Bush administration has recognized the value of community clinics to the nation by recommending $124 million to fund the creation of 1,200 new clinics over the next five years (Tobler, 2001). In 2001, HRSA announced over $24 million in grants to states to expand community health services in the areas of oral health, pharmacy and substance abuse services (Tobler, 2001).

[22] Information in this section adapted from (Texas Association of Community Health Centers, 2002), citing National Association of Community Health Centers, National Conference of State Legislatures, HRSA HIV/AIDS Bureau, Center for Rural Health Initiatives.

[23] Clinics that receive federal funding under the "Community Health Center" program are not necessarily the same as clinics that are considered "Community Clinics" under California licensing law.

- **Migrant Health Centers**. The Migrant Health Act was passed in 1962 to provide a broad array of medical and support services to migrant and seasonal farmworkers and their families (authorized under section 329 of the PHSA). Migrant health centers are linked or integrated with hospital services and other health and social services existing within the services area. They use lay outreach workers (promotoras, migrant farm workers trained as health educators), bilingual/bicultural health personnel and culturally appropriate protocols.
- **Health Care for the Homeless** (HCH) programs. Established under the Stewart B. McKinney Homeless Assistance Act of 1987 and authorized under Section 340 of the PHSA, the HCH programs are intended to improve access for homeless people to primary health care and substance abuse treatment services. Fifty percent of HCH programs are found in community health centers; the other 50 percent of HCH programs are sponsored by health departments, hospitals and community-based service organizations.
- **Public Housing Primary Care** (PHPC) programs. The PHPC program was established under the Disadvantaged Minority Health Improvement Act of 1990, which amended the Public Health Service Act to add Section 340A. The PHPC program was developed to improve the health of residents of public housing by providing accessible and comprehensive preventive and primary health care services. Recipients of PHPC federal funds include resident management corporations, community health centers and Health Care for the Homeless programs.
- **Urban Indian and tribal health centers**. In 1976, the federal government authorized the Indian Health Care Improvement Act. The act provides for the establishment of programs to assist Native Americans residing in urban areas to access health care, including provision for direct services. Approximately 70 percent of Native Americans reside in urban areas.

Federally Qualified Health Center Look-Alikes. Some centers meet the same basic qualifications as regular FQHCs: they are public and not-for-profit, furnish services to anyone regardless of ability to pay, and have consumer boards made up of a majority of patients (at least 51 percent must be consumers of center services). But these centers are not official FQHCs because there are insufficient funds for them to receive Public Health Service grants. Because they "look like" FQHCs though, they receive the same cost-based reimbursement as other FQHCs. Some states have used these FQHC look-alikes to provide health services in areas of need, even if PHS funds are not available.

Ryan White Grantees. The Ryan White Comprehensive AIDS Resources Emergency (CARE) of 1990 (Public Law 101–381) provides funding to states and other public or private non-profit entities to develop, organize, coordinate and operate more effective and cost-efficient systems for the delivery of essential health care and support services to medically underserved individuals and families affected by HIV. The CARE Act was reauthorized in 1996.

Rural Health Clinic Program. A rural health clinic is a Congressionally created, federally certified health care provider. Rural health clinics (RHCs) were created for two purposes. One was to provide enhanced Medicaid reimbursement and the other to provide reimbursement to midlevel practitioners not in the physical presence of a physician. Overall, this new provider type was created to improve access to care for underserved populations, particularly Medicare and Medicaid recipients, in rural areas of the country. In order for rural health clinics to be Medicare certified, they must be in an area located outside an urbanized area as defined by the U.S. Census Bureau as well as being located in a medically underserved area (MUA) or health professions shortage area (HPSA).

5. Physical plants and equipment

Open door providers may operate under less than ideal physical conditions but the idea that they are all housed in old buildings using dated equipment is a misconception. Public hospitals, in need of new or expanded space and equipment, are often competing with pressing financial needs at the county level that come first; the average physical plant age of the state's 26 public hospitals and health systems is over 16 years compared to an average age of under 10 years for all California hospitals

FIGURE 5

Number of patient visits per payer type, California free and community clinics, 1990–2000

	1990	percent of patients	1995	percent of patients	2000	percent of patients
Medicare	*314,007*	*5.3*	*379,609*	*4.5*	*485,186*	*5.1*
Medi-Cal	*1,297,447*	*21.9*	*2,414,486*	*28.7*	*2,542,609*	*26.9*
State-funded programs	*324,943*	*5.5*	*1,288,959*	*15.3*	*1,395,387*	*14.8*
County-funded programs	*321,173*	*5.4*	*788,099*	*9.4*	*1,232,720*	*13.1*
Private Insurance	*386,114*	*6.5*	*382,916*	*4.5*	*513,508*	*5.4*
Self Pay	*1,375,859*	*23.2*	*1,703,482*	*20.2*	*1,341,996*	*14.2*
Non-Pay	*378,403*	*6.4*	*270,799*	*3.2*	*524,495*	*5.6*
Other payers	*1,521,546*	*25.7*	*1,190,851*	*14.1*	*1,408,735*	*14.9*
Patient totals	***5,919,492***		***8,419,201***		***9,444,636***	

Source: OSHPD 2001, 2002a

FIGURE 6

Net revenue growth, California free and community clinics, 1995-1999

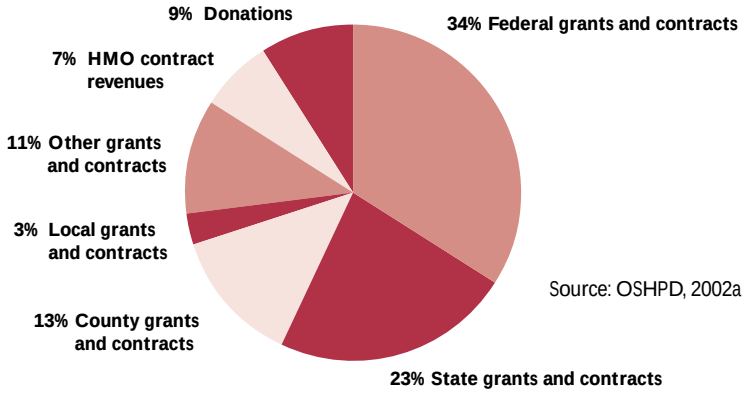
	Service Revenue		Contract & Grant Revenue				
Sources	**Medicare**	**Medi-Cal**	**Federal Grants & Contracts**	**State Grants & Contracts**	**Local Grants & Contracts**	**Private Grants & Contracts**	**Total Grants & Contracts**
1999	*$33,616,500*	*$223,902,000*	*$146,452,000*	*$96,614,000*	*$64,952,000*	*$47,284,000*	*$355,303,000*
1995	*$19,468,500*	*$173,801,000*	*$115,032,000*	*$60,676,000*	*$54,654,000*	*$24,910,000*	*$255,272,000*
absolute growth	*$14,148,000*	*$50,101,000*	*$31,421,000*	*$35,938,000*	*$10,298,000*	*$22,374,000*	*$100,031,000*
percent growth	*72.7%*	*28.8%*	*27.3%*	*59.2%*	*18.8%*	*89.8%*	*39.2%*

Source: OSHPD, 2001

Note: In 2000, federal funding accounted for 41% of the contract/grant revenue of California clinics; State funding accounted for 27%; figures are rounded to nearest thousand

FIGURE 7

Proportion of grant and contract revenues, California free and community clinics, 2000



Source: OSHPD, 2002a

(OSHPD Healthcare Information Division, 2002b).[24] Their physical space may limit the way care is provided and staff is managed (see case study on San Francisco General Hospital). On the other hand, due to legislation passed in the 1980s, in some counties the public hospital is actually the newest, most state-of the art health care facility in the area (see case study on Arrowhead Regional Medical Center). Seven California public hospitals and health systems are housed in facilities built since 1996.[25]

[24] OSHPD defines and calculates average age of physical plant as "accumulated depreciation (over history of hospital) divided by depreciation expense (for current year). This ratio indicates the relative age of the fixed assets in use by the hospital." (parenthetical comments added)

[25] Parentheses refer to date replacement facility opened: Arrowhead Regional Medical Center (1999), Contra Costa Regional Medical Center (1998), Natividad Medical Center (1998), Riverside County Regional Medical Center (1998), San Joaquin General Hospital (1996), San Mateo County Health Center (1998), Santa Clara Valley Medical Center (1998). In addition, Alameda County Medical Center has a new outpatient services building (Jones, May 10, 2002).

It is not uncommon for community clinics, which are often opened based on community needs but with very limited resources, to set up in space that was not originally designed for health care delivery. The physical layout may help dictate how services are structured (see case study on San Marcos clinic, where the two-story site contributed to the division of care through pediatrics on the lower floor and adult primary care on the second floor) and may also provide opportunities (see case study on Salud Para La Gente, where a back entrance leads to the teen clinic). Clinics often rely on donated medical equipment for their sites. Some of this may be second-hand, passed on from other delivery sites as they upgrade, but some clinics benefit from generous grants or gifts of brand new equipment or technology that are higher quality than that used in other local medical offices or hospitals.

6. Bureaucracy

Many open door providers are subject to high levels of bureaucracy at the city, county, state and federal levels that may impede their ability to act quickly and efficiently. While any entity as large and complex as a hospital must have administrative hierarchies (both internal and external), rules and policies, public hospitals and health systems, particularly those operated directly by county governments, can be highly bureaucratic.

As described in several of the case studies, centralized county offices can foster competition rather than cooperation for workers among hospitals and other sites (for example, in Los Angeles, the site hosting an exam for a posted job can review the applicant list before the other sites, even when a particular applicant had been recruited at another site), and can inhibit dissemination of relevant workforce data regarding vacancy rates, turnover and retention. In addition, many individual hospitals have large administrations with diffuse authority in various departments and offices and a plethora of requirements with which to comply and forms to complete. Open door provider hospitals are also subject to the requirements of bureaucracies that administer public funds and programs such as Medicaid and Medicare for reimbursement. Many of the staff at public hospitals and health systems are represented by organized labor which add another layer of bureaucracy; because union contracts cannot be easily opened mid-term, county facilities are often unable to quickly respond to “bidding wars” for staff such as pharmacists, pharmacy assistants and experienced nurses. The impacts of the bureaucratic culture on staffing are many and include relatively slow hire times, seniority systems of promotion, diffused and confusing decisions from various departments, and lack of ability for managers to respond innovatively to staffing challenges.

Open door clinics, governed by relatively small boards, do not generally have the same bureaucratic issues found in a county government's large administrative organization. However, the clinics are highly regulated and must answer to many masters. In addition to state licensing and state and federal safety and service reporting requirements, clinic staff spend considerable time completing forms and filing reports for their funders.

7. Staffing

Due to the characteristics that define open door providers—including patient populations and scopes of services—these health care delivery sites may feel particularly overburdened or under-supported in particular departments due to workforce needs. These include interpreting services, mental health, HIV/AIDS care, substance abuse and discharge or referral planning in coordination with other health and social services for indigent and un- or under-insured patients (Brewster, Rudell, & Lesser, 2001; Derlet & Richards, 2000; Knopp, Biros, White, & Waeckerle, 2000; Udasin, 2000; Whelan, 1996). Unique staffing issues at public hospitals and health systems include staffing for special units such as trauma and burn care services. Clinics face the unique challenges of finding and managing public health nurses, community outreach workers, and sometimes volunteer (unpaid) clinicians. Open door providers also have reputations — some are based on truth and others are based on myth and misinformation — that affect their ability to staff properly. A significant workforce challenge that open door providers face is to distinguish the fact from the fiction for potential employees to ensure a good fit as well as a fully staffed health care delivery site.

In addition to these unique staffing challenges that open door providers face, they are not immune from the global workforce concerns and challenges facing all health care delivery sites. These are explored in more detail in the next section.

2 OVERVIEW OF HEALTH CARE WORKFORCE ISSUES

The following overview of a number of health workforce issues provides a general context for all health care delivery sites, including open door providers in California and the U.S. The overview is divided into two sections; the first section covers issues that reflect or affect the workforce generally, and the second section focuses on several different health care professions and the internal challenges each faces.

ISSUES THAT CROSS PROFESSIONS

Workforce shortages, recruitment, retention

Generally, hospitals and clinics in the U.S. and in California are experiencing worker shortages in fields including nursing, pharmacy and imaging technology (see further discussion below).[26] A 2001 survey of U.S. hospitals (American Hospital Association, 2002) found major responses to worker shortages included:

- Exceeding the census (42% of hospitals)
- ED overcrowding (41%)
- Reducing the number of staffed beds (28%)
- ED diversion (26%)
- Increased wait time for procedures (22%)
- Canceling surgeries (15%)
- Reducing outpatient visits (14%)

Some hospitals turn to outsourcing;[27] over 43 percent of hospitals outsource anesthesiology, skilled nursing facilities, nuclear medicine, emergency medicine, MRI and equipment maintenance functions (Hospitals & Health Networks, 2001a).

[26] Ninety percent of CEOs participating in a survey about hospital restructuring during the 1990s reported that personnel were lost during restructuring. Eighty-four percent reported cross-training staff to provide services across disciplinary boundaries, 60 percent reported skill mix reductions of RNs, 25 percent laid off RNs, nearly half lost RNs due to attrition, more than half lost managers, and 70 percent lost managers due to attrition (Aiken, Clarke, & Sloane, 2000). From 1987–97, nurses consistently comprised 24 percent of hospital staff in the U.S. and LVNs declined from 5.5 percent to 3.5 percent, while patient acuity measures increased dramatically, especially among Medicare patients (Bond & Raehl, 2000).

[27] Most institutions outsourcing patient care functions indicated it allows them to obtain specialized services while staffing hard to fill jobs, controlling operational costs, and focusing on core competencies. In 57 percent of cases, risk is shifted to contracting organizations, relieving hospitals of this potential cost (American Hospital Association, 2001).

Changing levels of satisfaction among workers

U.S. health workers have been found to be more unhappy with their work environments than workers in general, rating work-life harmony, career development, organizational affiliation, compensation and benefits, and safety issues up to twice as poorly as other workers. In addition:

- about 48% indicated pay is below their expectations[28]
- nearly 36% indicated there is fear and harassment at work
- over 48% are disappointed in management
- nearly 34% found that physician managers did not meet their expectations of leadership

Source: (Hospitals & Health Networks, 2001b)

In California, hospital nurses were less satisfied with their jobs than non-hospital nurses. More important than pay concerns, they were dissatisfied with inadequate staffing levels per patient acuity and high levels of paperwork (Coffman, Spetz, Seago, Rosenoff, & O'Neil, 2001b). Nationally, only 29 percent of nurses feel administrators listen and respond to them, and about 40 percent believe they are recognized and can participate in workplace policy decisions (Aiken et al., 2001).

Studies of U.S. and California physician satisfaction indicate that though most physicians are satisfied with their profession, their level of dissatisfaction has risen with managed care restrictions, perceived declining quality of patient care, and less autonomy in decision-making the most cited concerns (Dower et al., 2001b).

The provision of benefits — notably health care coverage — for health care workers may play a role in levels of satisfaction for some workers. A recent study of uninsurance rates among U.S. health care workers revealed that between 1988 and 1998, the rate of uninsurance among health care workers increased faster than that of any other employment sector. Approximately 1.36 million health care workers, most with annual incomes under $25,000, were uninsured. The proportion of uninsured health care workers grew from 8.4 percent to 12.2 percent over the period. Nursing home workers, non-unionized workers and workers employed by private health care institutions had the highest rates of uninsurance. Workers in public health systems were less likely to be uninsured than private sector health workers (Case, Himmelstein, & Woolhandler, 2002).

[28] The average annual income of all health workers in California is on par with that of all workers in the state, $33,000, but salaries for individual health care professions vary greatly (California Department of Finance — Demographic Research Unit, 2002).

Staffing costs[29]

Nationally, payroll growth was the key driver of increased health costs within the hospital sector in 2000. Health sector payrolls grew at a rate of 4.7 percent, with hospital payroll rising by 3.7 percent alone (compared to a rise of 2.6 percent in 1999). Analysis indicated that growth of hours worked (including overtime) accounted for this increase rather than increases in employee salaries *per se*. Preliminary analysis of the first months of 2001 indicated a sharp rise in salaries in hospitals, likely a result of price competition due to the nursing shortage. In addition, these data indicated that shortages in health professions will likely accelerate wage increases as employers scramble to recruit a smaller pool of workers (Strunk, Ginsberg, & Gabel, 2001).

Race and ethnicity of health care professionals

The racial and ethnic composition of California's health workforce does not reflect the state's population. With very few exceptions among allied and auxiliary professions, California's health workforce is disproportionately White, and in several instances, disproportionately Asian or Pacific Islander. While Whites comprise less than 50 percent of California's population, they make up:

- 70% of physicians (Dower et al., 2001b)[30]
- 79% of registered nurses (Coffman et al., 2001b)
- 76% of dentists (American Dental Association, 1996)
- an average of 79% of therapists (Ruzek, Bloor, Anderson, Ngo, & UCSF Center for the Health Professions, 1999)[31]

The only other ethnic group over-represented in health occupations in California are Asians and Pacific Islanders. Asians and Pacific Islanders comprise about 12 percent of the state's general population but 20 percent of California physicians (Dower et al., 2001b) and two-thirds of California's pharmacy school graduates (California Board of Pharmacy, 2001).[32]

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[29] For more information about the impact of health care costs on staffing, see Appendix F.

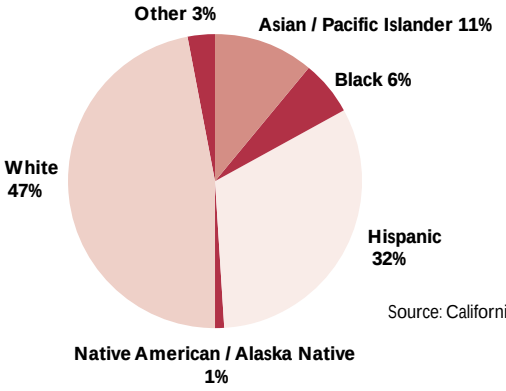
[30] Physicians of different races also tend to choose different practice specialties. While 70% of White physicians are in specialty fields, other races and ethnicities have closer to 50:50 ratios of generalist/specialist distribution (Dower et al., 2001b). Additionally, 1999 literature review found a positive correlation between racial/ethnic diversity in health professions and improved access to health care for underserved populations (Dower, Berkowitz, Grumbach, & Wong, 1999).

[31] "therapists" include speech therapists, respiratory therapists, physical therapists, occupational therapists and "other 'nec' (not elsewhere counted) therapists".

[32] The term "Asian and Pacific Islander" includes at least 12 major nationalities and over a hundred cultures and linguistic groups. A 1995 report by the Asian & Pacific Islander American Health Forum (Asian & Pacific Islander American Health Forum, 1995) found that, in calculating physician to population representation among primary Asian and Pacific Islander groups, the following groups were identified as underrepresented: Vietnamese, Hawaiian, Guamanian, Samoan, Cambodian, and Laotian. However, lack of comprehensive data delineating the various populations' representation limits ability to determine particular groups' over- or under-representation.

FIGURE 8

California Population by race and ethnicity, 2000



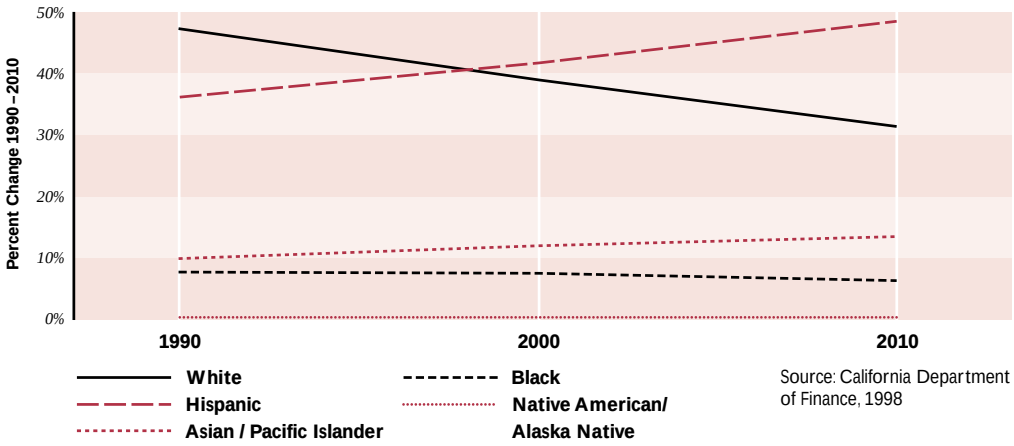
Source: California Department of Finance, 2001

Woefully underrepresented throughout the health workforce are California's Latino, African American, and Native American populations. A handful of professions, all in the allied and auxiliary fields, have racial proportionality or slight over-representation of African Americans and Native Americans. Not only is there is no category of health workers that is proportionately represented by Latinos, but most professions are extremely underrepresented: although over 30 percent of Californians are Latino, only 4 percent of physicians and 4 percent of registered nurses (RN) are Latino (Coffman et al., 2001b; Dower et al., 2001b).

The impacts and implications of the current lack of diversity and plans to improve diversity in the health professions are of special concern to open door health care providers whose patient populations are even more non-White than the state's general population. Improved racial and ethnic representation in the health professions may improve access to care, particularly for non-White patients. Studies have found that African American and Latino physicians are more likely to practice in underserved areas and for a larger number of racial and ethnic minority patients (Cantor, Miles, Baker, & Barker, 1996; Keith, Bell,

FIGURE 9

Percent change California youth population, by race and ethnicity, 1990–2010



Source: California Department of Finance, 1998

Swanson, & Willliams, 1985; Komaromy et al., 1996; Moy & Bartman, 1995; Xu et al., 1997). Greater diversity might also be part of the solution to health care workforce shortages; professions that can attract new members from more pools of people should have a better chance of meeting workforce needs. California's nursing workforce, which is disproportionately White and female, may exemplify a profession that needs to attract people from other populations to address its shortages (Dower, McRee, Briggance, & O'Neil, 2001a).

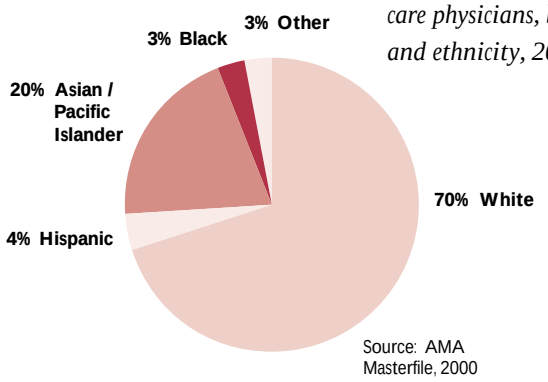
Health care workers in rural areas

Depending on where one lives, access to proper health care may be limited by a scarcity of health professionals; physicians, nurses, and dentists are not geographically well-distributed in California (Coffman et al., 2001b; Dower et al., 2001b; Mertz, Grumbach, MacIntosh, & Coffman, 2000; Ruzek et al., 1999). Rural areas suffer a disproportionate share of these shortages; 45 percent of Californians living in rural areas also reside in primary care Health Professions Shortage Areas (HPSAs), (Coffman, Rosenoff, & Grumbach, 2001a). Rural primary care shortage areas outnumber non-rural HPSAs by a ratio of almost 4:1.

In many health care arenas, rural institutions do not have the collective resources (standing capital, revenue streams, or human resources) to develop the specialization or economic efficiencies needed to compete with large urban health care delivery sites. These same principles apply to education resources and human "capital flight". In addition to those who seek to relocate to urban settings for personal reasons, many potential rural health workers gravitate toward urban centers for education and professional training; rural care delivery sites have a hard time bringing new professionals "back home" after their training. Rural open door providers have additional burdens.

FIGURE 10

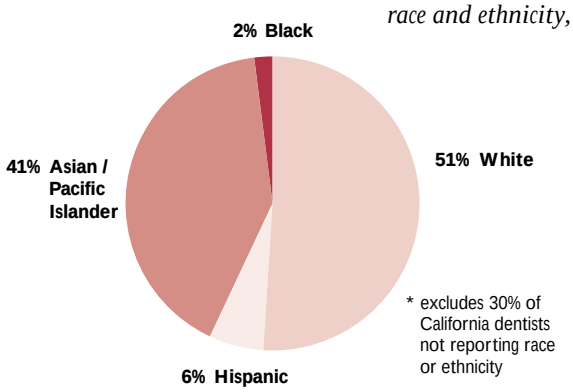
California direct patient-care physicians, by race and ethnicity, 2000



Source: AMA Masterfile, 2000

FIGURE 11

*California dentists by race and ethnicity, 1998**

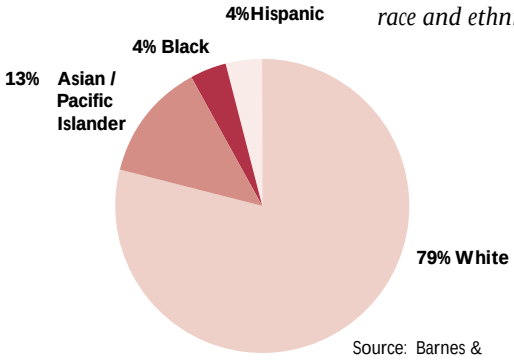


* excludes 30% of California dentists not reporting race or ethnicity

Source: Mertz, et al., 2000

FIGURE 12

California nurses by race and ethnicity, 1997



Source: Barnes & Sutherland, 1999

Rural Californians are much more likely to be uninsured (National Rural Health Association, 1999) (70 – 75 percent of the state's agricultural workers have no insurance, with only 11 percent having employer-sponsored coverage) (The California Endowment & California Institute for Rural Studies, 2000), older, less affluent and less healthy than urban residents. These conditions lead to fewer and smaller revenue streams to meet rural health workforce needs (The California Endowment & California Institute for Rural Studies, 2000).

Non-economic factors, including educational and career options, cultural offerings, and housing choices also contribute to rural workforce supply. The lack of teaching and specialized clinical opportunities, as well as reduced opportunities for collegial contact tend to dissuade some from pursuing rural health career opportunities.

Of final year medical students in 2001:

- 73% reported that "geographic location / lifestyle" was the most important consideration in choosing their jobs
- None preferred to work in communities of 10,000 or fewer people and 79 percent preferred in work in communities of 51,000 and over (Merritt Hawkins & Associates, 2001).

Health Professional Shortage Areas

Many communities in California have shortages of primary health care professionals. A federal government program designed to recruit and retain primary care practitioners in rural areas is the Health Professional Shortage Area (HPSA) Designation. HPSA designations are awarded by the Bureau of Primary Health Care (BPHC), in consultation with the Office of Statewide Health Planning and Development (OSHPD). The designation is primarily based on the ratio of primary care physicians (MDs or ODs) to population. HPSA designations are not automatically awarded to shortage areas; an organization in the community must apply (Coffman et al., 2001a).

Of 157 designated communities in California, 121 are rural (as of June 21, 2001); about 45 percent of the rural population of California lives in primary care HPSAs. Rural areas with high non-White populations and high poverty rates have exceptionally high shortages of primary care practitioners (Komaromy et al., 1996). Nationally, recruitment and retention of primary care practitioners in rural areas are affected by socioeconomic challenges and financing and delivery of health care services. A primary care HPSA designation is required for participation in government programs that seek to improve recruitment and retention, such as the National Health Services Corps and the State Loan Repayment Program.

Emergency departments[33]

Over the past decade, hospital emergency departments and emergency physicians across the U.S. have reported increased overcrowding and voiced concerns with the impacts on

[33] For expanded discussion of emergency departments, see Appendix G.

Loan repayment programs in practitioner shortage areas

The National Health Service Corps (NHSC) loan repayment program repays the student loans of primary care practitioners who practice in primary care HPSAs. Most NHSC practitioners work in community health centers or rural health clinics. Participation in NHSC is helpful for clinics that may not be able to offer salaries competitive with private practice settings. Also, the NHSC is a nationwide recruitment tool since the list of eligible organizations is circulated to health professions students throughout the U.S. (Coffman et al., 2001a; HRSA Bureau of Health Professions, 2002).

The California State Loan Repayment program, funded by NHSC and administered by OSHPD, repays educational loans of primary care providers working in California primary care HPSAs, based on a 50/50 fund match with participating health care organizations. One advantage of this program is that practitioners can practice in any primary care HPSA in California, whereas NHSC loan repayment funds are allocated to participating sites based on the ratio of primary care physicians to population. This can benefit community health centers in rural areas that have less severe shortages but still have difficulty recruiting practitioners to provide care to underserved populations (OSHPD Health Manpower Projects Division, 1999). However, administrators of community health centers and rural health clinics in the rural communities studied (Coffman et al., 2001a) stated they do not have the financial reserves needed to participate in the program. Some reported that even if they did have the money for the match they would prefer to raise salaries of the entire staff, rather than participate in a program that rewards a single provider.

patient care and professional angst (Brewster et al., 2001; Derlet & Richards, 2000). Nationally, the number of ER visits increased by 15 percent between 1990 and 1999 while the number of emergency departments decreased by 8 percent between 1994 and 1999 (Asplin & Knopp, 2001; Brewster et al., 2001).

Similarly, California experienced a significant increase in visits per emergency department between 1990 and 1999. During the same period however, the total number of emergency department beds increased, resulting in a slight decrease in visit per emergency department bed. In addition, critical visits per emergency department increased by 59 percent while non-urgent visits per emergency department declined by 8 percent (Lambe et al., 2002).

An 80 percent increase in emergency medical residency programs (to 120) between 1990 and 1998 has shifted physician workforce discussions from availability of emergency physicians to the supply and availability of on-call specialist consultants (Brewster et al., 2001; Derlet & Richards, 2000; Iserson & Kastre, 1996; Knopp, 1996). State and national shortages of qualified nurses are ongoing challenges for emergency departments (Derlet & Richards, 2000; Whelan, 1996).

PROFESSION-SPECIFIC OVERVIEWS

Each of the health care professions has specific issues and concerns that are relevant to workforce discussions for all delivery sites, including open door providers. Some of the primary areas of attention are discussed below.

Physician Workforce

With about 65,000 active, patient-care physicians, California has sufficient numbers of physicians to care for the state's population according to most current national estimates.[34] With one third of the state's doctors practicing in generalist fields of medicine (family practice, general practice, general internal medicine and general pediatrics) and the remaining two thirds practicing as specialists, the state also has sufficient to high ratios of these categories of physicians to population. However, the 58 counties have varying physician-to-population ratios ranging from more than adequate to notably low (Dower et al., 2001b). Physician supply is most concentrated in and around large urban areas while much of the Central Valley and eastern sections of the state have ratios that are below recommended minimum requirements.

In addition to geographic maldistribution, California's physician workforce suffers from demographic misrepresentation. Males make up over 75 percent of the profession and some races and ethnicities remain underrepresented; African Americans and Hispanics/Latinos each comprise less than 5 percent of the state's physician workforce but make up about 7 percent and 31 percent of the overall state population respectively (Dower et al., 2001b).

Physician participation in insurance programs affects access to care perhaps more than the simple ratios of physicians to population. For example, a 1998 survey of physicians in the 13 most urbanized counties in California found that only 55 percent of primary care physicians and 57 percent of specialists saw Medi-Cal patients. Of these doctors, most saw only a small number of Medi-Cal patients, resulting in 25 percent of primary care physicians providing approximately 80 percent of the Medi-Cal primary care in 1998 (Bindman, Huen, & Vranizan, 2002). Physicians who were more likely than other surveyed physicians to have Medi-Cal patients in their practices included: physicians from underrepresented minority groups, those who were Spanish-speaking, international medical graduates, physicians who were not board-certified and physicians who reported their main practice setting to be community health centers or public clinics.

[34] According to the Council on Graduate Medical Education (COGME), a suitable scale for physician supply is 145–185 patient-care physicians per 100,000 population. COGME suggests minimum requirements for generalists and specialists; 60–80 per 100,000 population and 85–105 per 100,000 population respectively (Council on Graduate Medical Education, 1996).

Nursing Workforce

California is facing a nursing workforce shortage of crisis proportions. Estimated deficits range from 2,600 to 3,600 per year over the next decade, which will result in aggregate shortages in the tens of thousands (Coffman & Spetz, 1999; Coffman et al., 2001b; Sechrist, Lewis, & Rutledge, 1999). The shortages have provoked concern among nurses and patient rights advocates regarding safety, quality of care and the workplace environment. They have also created competition among hospitals that includes high profile recruiting campaigns and hefty signing bonuses. The California legislature has responded with the unique approach of mandating departmental nurse-to-patient staffing ratios for hospitals (California Office of the Governor, January 22, 2002) (see Appendix H for the ratios). While the mandates may ultimately improve working conditions and patient safety, it is unknown how hospitals will meet the proposed new mandates given the difficulty hiring departments are having now.

Part of the answer to the nursing shortages may lie in increasing the attractiveness of the profession to men, underrepresented racial and ethnic groups and young people generally.[35] However, changes may be difficult to accomplish: currently, 79 percent of California RNs are White (U.S. Department of Health and Human Services-Division of Nursing, 1996), 94 percent are female (Barnes & Sutherland, 1999) and fewer people are entering nursing overall.

California's open door providers face an additional challenge recruiting experienced public health nurses. Nationally, the public health nursing workforce is aging and is having an extremely hard time attracting new nurses for several reasons. The post-RN training required is rarely compensated by significantly higher wages, and professional practice is moving toward individual, reimbursable visits and away from the more "public health" oriented issues of prevention, education, case finding and policy change. California may have a particularly acute shortage. Public health nurses are the largest identified group of public health professionals nationally (10.9 percent of workforce), but constitute only about 4 percent of the identified public health workforce in California (Gebbie, 2000).

Pharmacy Workforce

Pharmaceutical policy issues have become everyday news in the United States where drug costs as a percentage of health expenditures more than doubled to 8.5 percent ($112.1 billion) and the number of prescriptions dispensed increased 44 percent to 2.8 billion within the

[35] Additional state and national efforts to address the nursing shortage include the allocation of $60 million by California Governor Davis for educational programs, the U.S. Departments of Health and Human Services and Education's program intended to encourage children to consider careers in health care fields, particularly nursing, and Johnson & Johnson's $20 million marketing campaign intended to attract more nurses into the profession.

past decade (HRSA Bureau of Health Professions, 2000). Advances made in drug therapies and technology, the shear number of prescriptions being written, and concerns about an aging population have severely increased demand for pharmacy-related personnel while predictions that robotic pharmacy equipment would reduce demand have not been realized. In California and the U.S., although the headcount of licensed pharmacists has outpaced general population growth, the demands for pharmacy services and changing character of pharmacists' work have put pressure on this workforce that is unlikely to be relieved for up to two decades. A recent national survey of hospitals indicated that 94 percent of hospitals perceived a pharmacy shortage, with 70 percent reporting that the shortage was severe (Dunn, 2000). Safety net institutions reported even greater difficulty, with 33 percent reporting time to fill pharmacist vacancies between 6–12 months (18 percent reported over 12 months) (HRSA Bureau of the Health Professions, 2000).

HRSA (2000) found that the most common response to pharmacist shortages was limiting services. Additional studies have found that shortages are resulting in increased job dissatisfaction and stress, fear of increased errors, inability to monitor patient compliance and health outcomes for at-risk populations, and critical vacancies in academic training programs as a result of competitive hiring by private dispensing and insurance organizations.

Part of the shortage perceived by hospitals can be attributed to more options for pharmacists. The expansion of pharmacy services into supermarkets and large retail stores (e.g., Wal-Mart, Kmart), which pay an average of $6000 per year more than hospitals and provide services for up to 24 hours per day, has had the most significant effect on competition. Anecdotes describing signing bonuses of up to $10,000, cars and other premium perks abound (HRSA Bureau of the Health Professions, 2000). Also contributing to competition are pharmacists who remain in health services but choose to move from hospitals to long-term care settings.

Trends in pharmacy employment in hospitals indicate that a further pressure on public sector employment for pharmacists is the staffing decisions being made by hospitals themselves. Bond and Raehl (2000) found that while overall hospital employment increased by 13 percent between 1989 and 1998, there was a 23 percent decline in hospital pharmacy staffing. During the same period, the increases of pharmacy technician and clerk positions were 43 percent and 25 percent respectively. The number of licensed pharmacy technicians in California has risen rapidly since the mid-1990s. Although there are two-year degree programs in the state, all that is required for licensure is a high school graduation equivalency and on-the-job training hours. Recent legislation (California AB 536) limiting the number of pharmacy

technicians who can work independent of pharmacist direct supervision, a ratio of one-to-one, is likely to restrict pharmacies and health facilities from attempting to substitute technician staff where pharmacists are lacking.

In California, the production of pharmacy graduates has fallen or remained flat for the past decade[36] and the ratio of pharmacists per 100,000 population dropped sharply through the 1990s, likely as a result of rapid general population growth. Unlike most states, California is further disadvantaged when recruiting pharmacists educated out-of-state because it requires a unique licensing exam. After up to four attempts, only 41 percent of out-of-state graduates passed the California exam, compared to 80 percent of California graduates (California Board of Pharmacy, 2001).

Selected Certified, Technical and other Licensed Allied Health Staffing

Medical Laboratory and Radiology Technologists

Vacancies in U.S. hospitals of imaging technicians and lab technologists are comparable to those of nursing and pharmacy positions. The California Employment Development Department (EDD) estimated in 2000 that there were nearly 15,000 medical lab technologists and close to 16,000 radiology technicians[37] working in the state. The move to managed care and shift in Californians' technical career preferences during the 1990s reduced enrollments in two-year and four-year education programs for these professions. In 2000, the California Association for Medical Laboratory Technology (CAMLT) estimated a deficit of between five and ten thousand laboratory staff by 2008 (California Association for Medical Laboratory Technology, 2001). One part of the issue is that California is the only state that requires licensing of certified medical laboratory technologists. Although wages have risen steadily along with demand, for many laboratory scientists, the delay of the required internship and licensing process makes entering lower-paying health care jobs less desirable than higher pay and bonuses in California's booming biomedical industry. And while associate degree laboratory technicians and assistants, who numbered nearly 15,000 in 2000, are available for basic laboratory functions, health care administrators fear that competition for laboratory technologists and scientists will leave a leadership vacuum in the state's health laboratories in the future.

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[36] Graduates from established programs have fallen or remained flat while the opening of a new program at the Western University of Health Sciences is expected to produce about 100 graduates per year (California Postsecondary Education Commission (CPEC), 2000).

[37] (California Economic Development Division—Labor Market Information, 2001) Radiologic technologists/technicians refers to all certified and licensed workers in this field except for nuclear medicine technologists. This 15,000 figure does not include the 2,110 sonography technicians (ultrasound technicians) in California in 2000. Though less is known about sonographers than other types of radiologic technology workers, there is general agreement that the supply in California is lacking.

The demand for imaging services has skyrocketed in the past decade. Many cite improved equipment and technology, computerization and insurance companies' preference for reimbursing imaging interventions over surgical ones (Greene, 2001) as the reasons. A national survey of hospitals found that over half have vacancies in imaging positions and 71 percent reported they had increased imaging services to patients (Greene, 2001). Nineteen percent reported installing a PACS (teleradiology) system which allows medical providers to view radiology files anywhere a modem is available. With the increase of elderly population in California, job growth in radiological occupations is projected to be nearly 36 percent (nearly 5000 new positions) by 2008 (California Economic Development Division — Labor Market Information, 2001). California established licensing reciprocity in 2000 for persons passing the national exam for the most common radiologic technology positions (California Society of Radiologic Technologists, 2002). This, in addition to the efforts of California community colleges to renew and rebuild their radiologic technician training programs, is expected to increase the supply of workers over the next 5 to 10 years. A national survey of radiography personnel revealed that about 62 percent work in hospitals, with 71 percent working in outpatient settings. Unlike other categories of hospital workers, about three-quarters of radiographers indicated they were satisfied overall with their jobs and career choice (California Society of Radiologic Technologists, 2002).

Respiratory Care Providers

The California EDD estimated there were about 8,800 respiratory care providers (RCP) working in the state in 1998.[38] Job growth in this area is expected to be 58 percent by 2008, an increase of nearly 5000 positions (California Economic Development Division – Labor Market Information, 2001). Much of this growth is related to the growth of elderly population, although geographic distribution of active, licensed providers does not reflect counties with the highest expected growth of elderly residents. California issues only one type of license for respiratory care providers, though reciprocity exists for both levels of nationally certified and registered therapists (Respiratory Care Board of California, 2001).

[38] Concern about the ratio of respiratory therapists to patients prompted introduction of AB2712 (California AB2712), Respiratory Therapy Ratios bill in the 2002 Legislative session. This bill mirrors AB394, the nursing ratios law and states clearly that it would be a criminal violation to exceed whatever ratio would be established. The California Respiratory Care Board acknowledges that there are overlapping respiratory care functions among physicians, nurses and licensed technicians. It is probable that passage of AB2712 would require further clarification of RCP scope of practice.

Dentistry Workforce

Lack of access to dental care is of increasing concern to many Californians. Forty-four percent of adults in California did not have dental insurance in 1995 and those with insurance were twice as likely to visit a dentist as those without (MMWR Weekly, Dec. 19, 1997). Geographic distribution of dentists also affects access. In 2000, twenty percent of California's 487 Medical Service Study Areas (MSSA) were at or below the federal standard of one primary care dentist for every 5,000 people (Mertz et al., 2000). Of the 97 areas that had dentist shortages, 66 were rural and 31 were urban. Thirty-two MSSAs, most in rural areas, had no dentists at all. Areas with a shortage of dentists tended to have a higher percentage of minorities, lower median incomes and a higher percentage of children.

Of 28,800 licensed dentists in California in 2000, approximately 80 percent were in active practice and 81 percent of these were in general practice. Most dentists practiced and resided in urban areas (91.2 percent and 84 percent respectively). Only 18 percent of California dentists were women; however, 34 percent of dentists under the age of 40 were women. The average age of practicing dentists in California was 48. Race and ethnicity data on dentists are incomplete, as many dentists, particularly those over age 40, do not report it. Of those dentists who reported race/ethnicity in 2000, 51.8 percent of dentists in their 20s and 30s were White, 40.6 percent were Asian, 5.8 percent were Hispanic, 1.7 percent were African American, and 0.2 percent were Native American (Mertz et al., 2000).

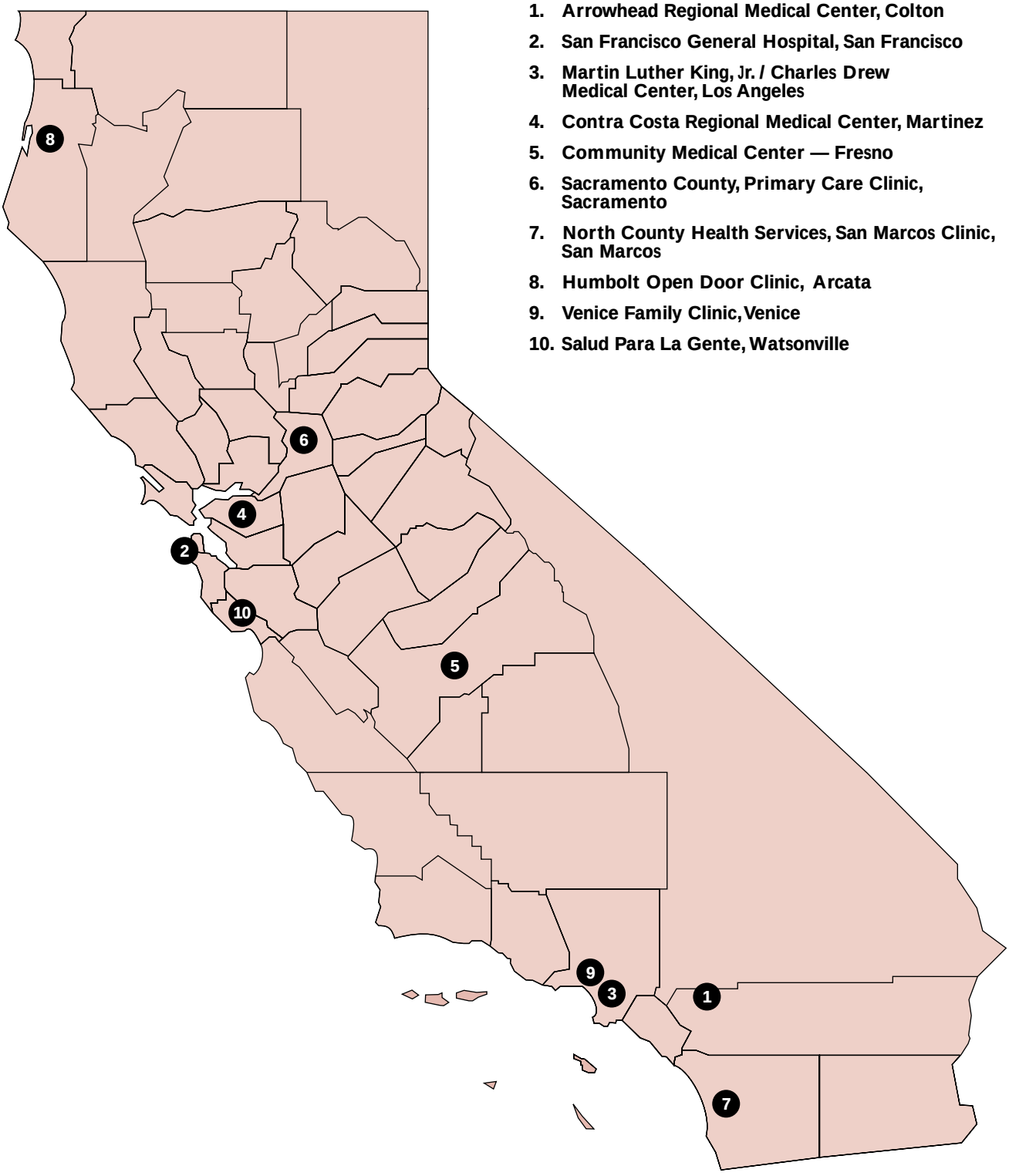
A factor that further contributes to a lack of services for residents of areas underserved by dentists is the regulation of scopes of practice for hygienists and dental assistants. In California, hygienists and assistants must be directly supervised by a dentist, limiting their abilities to perform basic dental care where dentists do not practice.

Hospital Executives

In 2000, California hospitals had a 24 percent CEO turnover rate compared to a national average of 17 percent (Kelly, 2002). Though retirement accounts for some turnover, other reasons include increased stress of dealing with workforce shortages, regulations, and complexities of hospital management. Compensation relative to pressures is a key factor: some CEOs find they can make more money for less stress in non-patient care industries. For those committed to work in health care, tenure is a concern since long-term programs and reforms are better managed by consistent leadership. Some hospitals are trying to stabilize turnover through pay incentives (Kelly, 2002).

FIGURE 13

Map of sites visited



1. **Arrowhead Regional Medical Center, Colton**
2. **San Francisco General Hospital, San Francisco**
3. **Martin Luther King, Jr. / Charles Drew Medical Center, Los Angeles**
4. **Contra Costa Regional Medical Center, Martinez**
5. **Community Medical Center — Fresno**
6. **Sacramento County, Primary Care Clinic, Sacramento**
7. **North County Health Services, San Marcos Clinic, San Marcos**
8. **Humbolt Open Door Clinic, Arcata**
9. **Venice Family Clinic, Venice**
10. **Salud Para La Gente, Watsonville**

3 CASE STUDIES

On the following pages are case studies prepared about ten open door provider institutions in California. The first five cases focus on county hospitals or hospitals that have contracted with the county to take responsibility for caring for the indigent. The second set of five cases concern community or free clinics. The short case studies are presented to illuminate how workforce issues are playing out in real settings. They include concerns and challenges individuals at the sites have about health care workforce. They also include several models and approaches leaders and staff at the various sites have implemented to address workforce issues. Many of the sites have found ways to capitalize on their strengths and to work creatively on solutions to the challenges of hiring and retaining health care workers. Examples of some of these assets and innovations can be found in the text and in the shaded boxes throughout this section.

The case studies are brief and, as such, only provide a quick and limited snapshot of each site; they are not meant in any way to comprehensively capture every workforce issue, solution or perspective at any particular site. They are included here to give concrete examples of the issues discussed above and to encourage the sharing of best practices and promising models that are working and might translate to other sites.

A note on methodology

For the case studies, the research team selected a short-list of case study sites based on a review of data and literature relevant to the topic and preliminary interviews with outside experts. Selection priorities included geographic balance, broad ethnic mix of patients, county funding or contracting, and variety of care providers on staff. Though priority was placed on county-funded institutions, variation in system structures meant that non-profit organizations served as proxies for these in some counties. Selection of clinics prioritized those providing primary care services for anyone regardless of ability to pay, although California is served by many special-population and specialty service clinics. The research team visited each site "blind," without knowledge of special programs or the status of innovation or challenges of the site: this method proved more heuristic than expected. Limitations of this methodology: any case study design can only represent a snapshot of larger issues or of a particular site at a given time. Site selection and data presented in this report were based on data from the Office of Statewide Health Planning and Development (OSHPD) which tracks particular types of institutions. For more detail about the methodology, please contact the authors.

Arrowhead Regional Medical Center, 2000

Licensed Beds	373
– Medical/Surgical Beds	144
– Pediatric Acute Beds	23
– Intensive Care Unit Beds	48
– Neo-Natal ICU Beds	30
Patient Days	91,943
Discharges	18,505
Clinic Visits	201,667
Emergency Dept. Visits	73,091
Trauma Level I	no

FTE Clinical Staffing, 2000

Registered Nurses	479
Lic Vocational Nurses	33
Technicians & Specialists	375

Selected budget data, 2000

Operating Expenses	$264,317,000
– employee salaries as % of operating expenses	30.7%
– employee benefits as % of operating revenue	5.6%
Operating Revenues	$200,475,000
Net patient revenue as % of operating expenses	99.3%
– MedCare	7.8%
– Medi-Cal	63.4%
– County Indigent	21.8%
– Other third party	6.9%

Source: OSHPD Annual hospital disclosure reports, 2000, www.oshpd.ca.gov/hid/infores/hospital/finance
Note: selected data, totals will not add to 100%

1 Case Study: ARROWHEAD REGIONAL MEDICAL CENTER

Located on the outskirts of Colton California (San Bernardino County) stands Arrowhead Regional Medical Center (ARMC), the state-of-the-art facility that challenges traditional images of "the county hospital". Completed in 1998 at a cost of $470 million, this 1 million square foot, 373-bed hospital serves a population base that is spread out over the largest county in the contiguous U.S. The building boasts premier seismic engineering, high-tech security systems and top of the line medical equipment. Features rarely found in county hospitals include an intra-hospital "Spectralink" phone system, a highly efficient pneumatic tube system for transporting samples and documents, contemporary art work throughout the halls, and an all-electronic imaging center that doctors can access from central work stations or home. Three heliports were included to serve remote areas of the county.

Mission Statement

To provide quality health care to the community.

Strengths

- *Employee input for state-of-art facility*
- *Staff "charm school"*
- *Proactive relationship with county board*

Challenges

- *Exit data to inform management and improve retention*
- *Limited use of LVNs*
- *Bureaucratic hiring process*

The new building and all the features that come with it are part of the draw for staff. Units are parabola-shaped to reduce walking and equipment and gasses are on rolling units that allow beds and equipment to be tailored to patient and staff needs. In the center of each unit is a room where records can be reviewed, imaging films can be pulled up by computer and the vacuum tubes can be used to send and retrieve paperwork or lab samples. These designs were based on a combination of safety and efficiency planning and input from staff. To ensure patient and employee safety, an intricate system of codes and passkeys allow a central security office to monitor every entry and exit through any doorway in the building.

Arrowhead experienced a major corporate change just prior to occupying the new building. This change was led by a new CEO and management team with experience in the private sector; most current administrators have been there for less than three years. To make the move to the new facility, all staff had to apply for jobs, meet educational requirements and accountability standards, and attend what management calls "charm school", a structured service training to build excellent internal and external customer relations. Administration reports that the program has been very successful. While some long-time employees left at the time of the culture shift, those who remained now thrive in a culture

of teamwork and trust where problems get resolved quickly. At Arrowhead, health care is a business, but a business where the employees share a sense of family and belonging.

Workforce overview

With affordable housing and nice neighborhoods within easy commute, ARMC considers itself fortunate when recruiting workers. Word is also getting around about the particularly good work environment. The new facility, which is seen as providing better and safer conditions than many private institutions, combined with the new culture that treats workers as customers too, is very attractive. For the majority of hospital workers, the benefits and retirement package offered by the county is icing on the cake.

A small number of workers at ARMC are not county employees but contracted for their services. Like many hospitals, ARMC medical doctors provide care under a contract arrangement. ARMC operates the Western University of Health Sciences Radiology resident program and the largest family practice residency program in the U.S. All pharmacy services (prescription filling and clinical) are contracted with a pharmacy company. ARMC also uses automated and robotic technology to fill 125–175 prescriptions per hour accurately. Finally, since county salaries tend to run low for some allied health professions, workers in medical imaging, medical coding, and occupational, physical and speech therapy work under contract rather than county employment. In contrast to some other facilities, ARMC has no shortage of respiratory therapists.

Arrowhead suffers relatively few health workforce shortages and challenges. The most difficult positions to fill include medical records and coders, occupational therapists, radiology support staff, scrub techs and psychiatric technicians. Some of these positions are filled through contract arrangements with professional companies. In addition, the hospital tends to lose custodial and clerical staff during strong economic times. While the county maintains some positions for the hospital only and thus gives the hospital its own exam authority, the county still maintains the pool and examinations for all competitive hires. And although the move to an online application process should lessen the paperwork, hiring continues to be time-consuming and somewhat bureaucratic. The CEO would like to phase out contracting, making all staff county employees, and expects that a continued rise in revenues may facilitate this evolution.

Consistent with the internal changes management enacted were changes in external relations as well. The new CEO spent considerable time reconstructing an alliance with the Board of Supervisors after years of mistrust. Believing that the hospital and the Board would work best as equal partners, Mark Uffer is committed to honestly laying out information for the Board and presenting them with choices. He sees half his job as getting

correct and clear information out to the public and the Board. ARMC and the supervisors now work together on issues facing the hospital.

Nursing

Administrators attribute both the physical space and the work culture for the lack of serious nursing shortage at Arrowhead. They hear from other hospitals about difficulties attracting and retaining nurses but by and large do not share this dilemma. Typically, the nurse to patient ratio at ARMC is about 1:6 overall and is estimated to be 80–90 percent RN, mostly BSN prepared, and 10 percent CNA. Teams are most commonly 4–5 RNs with 3 CNAs. The hospital does not use registry nurses. Advance practice nurses are used in internal medicine, neo-natal intensive care units, family practice and obstetrics.

Some of the perceived attractions for nurses at ARMC include the training site environment, the trauma center and a patient population that offers a range of complex cases and personalities. The nurses appreciate the good work experience, safe and clean conditions, county holidays and benefits and their own employee association. Nurse-doctor relations are good, with doctors relying on nurses to monitor medical residents. Some changes brought in by the new management include requiring nurse managers to work at least one shift per month on the floor, establishing a nursing recruitment and retention committee, and hiring a dedicated nurse recruiter. As a result of a survey fielded by the new committee, name tags now include credentials for nurses. Management is focusing on retention, including dedicating more money for staff to go to school, looking into offering premiums for bachelor's or master's-trained nurses, and maintaining a commitment to in-house training; the common belief among AMRC management is that a new BSN nurse can work in any unit with six months of on-site training. More decision-making authority is being vested in nurses. Nurses at ARMC are the institution's best recruiters. Recently, a nurse who was ill at another local hospital recruited three new hires for ARMC by talking about how much he liked his job.

Some challenges remain. Medical-surgical units are most likely to have vacancies or shortages and nurses must float from other units although they do not like to do so and do not receive any incentives. Management and organized labor are exploring ways to provide nurses who must work overtime due to workforce shortages with incentives or bonuses. Management is also setting up a counseling service for employees, such as those in the emergency department, who see horrible things that leave disturbing and lasting images. Staff also want to collect better information from nurses upon leaving regarding their experiences at the hospital and reasons for leaving; one outcome of the new nursing committee's work will be better exit data collection. In addition, although there is a lack

of Licensed Vocational Nurses (LVN) in the area because BSN/RN was favored for so long, ARMC is looking into better use of LVNs. However, while local schools may have the faculty to expand RN and LVN programs, they may not have the funding required or the sites for students to complete internships.

Emergency

The emergency department's (ED) posted sign indicates an average 8-hour wait for care. Although some staff suggest that many of the people waiting do not require emergency care but are merely waiting for a "day off work" slip, the room is full and contrasts with the bustling efficiency elsewhere in the hospital. The 8-bed trauma center (TC) and 15-bed operating room (OR) are attached on two floors with three ORs dedicated to trauma center/emergency department surgery. Shared ED/TC staff means emergency room wait may be longer if trauma center is activated.

Clinics

Clinics located near the emergency department process 700 visits per week. A patient can appear at any location of the hospital and be directed to the right clinic using a central computer scheduling system. All visits (except pediatrics and women's health) are by appointment. Walk-in adults are sent to urgent care/ER or to local clinics by zip code. Clinics are "contracted" or "corporate" but have a mix of county and private employees. This structure can also serve as a hiring pool; when positions must be filled in the hospital, it may be quicker to transfer clinic staff than to hire from outside.

Consistency makes efficiencies

The busy ARMC eye clinic is run on a strong practice model that, in addition to meeting patient needs, has had a positive effect on staffing. The staff of two MDs and two technicians sees 700–800 patients per month. In an extremely efficient practice model, all rooms are designed alike; placing equipment and supplies in the same location in each room makes delivery of care more time-efficient and smooth. In addition, a tight schedule is maintained; late patients and no-shows are rescheduled but not accommodated that day. Based in large part on the clinic's leadership and efficient practice model, the clinic enjoys good team spirit and very little turnover.

San Francisco General Hospital, 2000

Licensed Beds	724
– Medical/Surgical Beds	323
– Pediatric Acute Beds	15
– Intensive Care Unit Beds	22
– Neo-Natal ICU Beds	12
Patient Days	162,088
Discharges	18,849
Clinic Visits	339,066
Emergency Dept. Visits	75,051
Trauma Level I	yes

FTE Clinical Staffing, 2000

Registered Nurses	626
Lic Vocational Nurses	108
Technicians & Specialists	497

Selected budget data, 2000

Operating Expenses	$328,763,000
– employee salaries as % of operating expenses	44.9%
– employee benefits as % of operating expenses	12.1%
Operating Revenues	$271,994,000
Net patient revenue as % of operating revenue	99.4%
– MedCare	18.0%
– Medi-Cal	62.6%
– County Indigent	16.6%
– Other third party	0.8%

Source: OSHPD Annual hospital disclosure reports, 2000, www.oshpd.ca.gov/hid/infores/hospital/finance
Note: selected data, totals will not add to 100%

2 Case Study: SAN FRANCISCO GENERAL HOSPITAL

A sense of urgency, serious health care challenges and limited resources pervade San Francisco General Hospital (SFGH). Housed in a complex of aging buildings—some with brick facades from the early 1900s—the staff of approximately 5000, including city and county employees and University of California, San Francisco staff,[39] care for a primarily low-income population of dramatic racial and ethnic diversity in San Francisco. The demographic profile of the patient population, combined with its high medical acuity and complexity provide a key to understanding the institution's workforce issues. A select group of doctors, nurses and other health care professionals flock to SFGH, drawn by the challenges of dealing with very sick, underserved patients. Those same aspects also serve to keep other clinicians from ever considering working at SFGH, overwhelm some idealistic young practitioners, and burn out still others after years of long hours and hard work. Those who stay do so for a long time, developing extremely strong senses of institutional and departmental loyalty. Longevity and collegial bonding can however erect walls that are difficult for newcomers to break through.

Mission Statement

To deliver humanistic, cost-effective, and culturally competent health services to the residents of the City and County of San Francisco by:

- *Providing access for all residents by eliminating financial, linguistic, physical, and operational barriers;*
- *Providing quality services that treat illness, promoting and sustaining wellness, and preventing the spread of disease, injury and disability;*
- *Participating in and supporting training and research;*
- *The commitment to community involvement in healthcare needs*

Strengths

- *Position of Nursing Manager — Retention and Recruitment*
- *Premier health care*
- *Generous benefits package*

Challenges

- *Limited resources*
- *Bureaucracy*
- *Building age and layout*

Workforce generally

Health care providers at SFGH share a strong sense of loyalty and commitment to the mission of serving the city's most vulnerable residents. Many professionals, including doctors and nurses in particular, are there by choice and the hospital enjoys a relatively high retention rate. At the same time, a nursing workforce shortage and difficulties hiring non-nursing professionals (such as some physician specialties and pharmacists) and allied

[39] Mostly physicians, but also nurses, social workers, clerical, and other staff, are employed by UCSF.

health personnel (such as radiology technicians) due to national shortages were reported.[40] Some of these perceived shortages have improved due to salary increases but others, particularly for professions whose members are in short supply nationally, persist.

One reality at SFGH that affects workforce issues is the categorization of hospital workers by profession, by department, by labor organizations, and by civil service status. These differences can create or exacerbate tensions among health care professionals and can complicate hiring and managing efforts. For example, an agreement with UCSF ensures that UCSF doctors provide all medical care at the hospital. These doctors enjoy competitive academic salaries and relative freedom from the civil service bureaucracy (although they are subject to UC bureaucracy). The vast majority of workers at SFGH are civil servants whose salaries and benefits are mandated by a combination of city charter requirements, county rules and regulations, actions by the city's Board of Supervisors, and contracts negotiated by organized labor. While neither the city and county nor the university provides obviously better salaries and benefits (some civil service positions pay higher than UC, some pay lower), people working side-by-side at SFGH might have different salary scales, benefits and retirement plans.

Civil Service

The civil service hiring process is very slow, resulting in delays that can be the critical hiring difference between SFGH and other hospitals in the area. Delays, attributed to a complex hiring system and mass of paperwork, are not the only problem. The human resources department, which handles 7000+ San Francisco public health employees (SFGH being the largest, but far from the only institution) must serve several masters. The human resource staff is continually challenged to meet the requests and needs of hospital department managers within the political constraints of San Francisco civil service, the city's department of public health, the mayor's office, the Board of Supervisors, the controller and the city's human resources department. Adjusting hires or requirements to fill critical positions can be seen as overstepping political boundaries or departmental control. Complicating matters is the administrative and political structure in which most finances are controlled outside the hospital.

Although civil service can be a hiring disincentive, employment by the city can be attractive. Benefits are very competitive, especially the retirement plan, into which the city pays 7½ percent. Employees can enjoy floating holidays, tuition reimbursement and paid education leave. With civil service, jobs are stable, fostering a retention incentive.

[40] As noted elsewhere in this report, these shortages are not unique to SFGH.

Organized Labor

San Francisco is a strong labor town, and the S.E.I.U. represents approximately 75 percent of SFGH's employees. Other organizations (including AFSME and others) are also active. SFGH enjoys a positive and collaborative relationship with the nursing unions. However, some labor-related policies restrict personnel services' ability to respond to sudden staffing needs, procedural changes or economic realities. First, by order of the San Francisco City Charter, organized labor contracts cannot be opened midyear regardless of workforce realities. Also, unions representing different groups of workers negotiate different contracts, each with its own set of benefits. This situation can confound personnel management, making it sometimes impossible to fill vacancies, retain staff through financial incentives, or to adjust staffing structures.

Nursing

SFGH can appear to both the outside visitor and to insiders as nursing-centered, perhaps even more so than most hospitals. Nurses here are relatively independent and provide much of the patient care while also managing much of the workforce. While overall nursing workforce numbers at SFGH are not bad — the hospital reports a lower-than-statewide-average nurse turnover rate of 8–9 percent and average nurse-to-patient ratios are estimated at 1:5 or 1:6[41] — administrative leaders and managers consistently reported not having enough nurses to do the job. It is an ongoing challenge to recruit and retain adequate numbers of qualified nurses, according to Yuhum Digdigan, Director of Nursing Operations.

Although a number of recruiting strategies and means are used, she finds that word of mouth (nurse-to-nurse) and one-on-one recruiting is one of the best tools. She is exploring recruitment of overseas nurses, but her efforts are increasingly stymied by H1B visa requirements. Competitive salaries may also be part of the solution: staff at SFGH anticipate that the hospital will need to meet competitors' pay scales for nurses. More important than money however is the culture, which administrators perceive to be more welcoming for new nurses and respectful of independent practice by nurses than that of private sector hospitals that seem more doctor-centered.

Nursing's role and challenges can be seen clearly in the emergency department, which is administered in an area that was built 30 years ago to handle half the number of patients it currently sees. The physical space alone exacerbates the stressful work environment. Divided into four areas or zones that are separated by walls and hallways, staff cannot be

[41] Although the hospital average is 1:5 or 1:6, specific units differ. Critical care ratio is 1:1 or 1:2; critical care step down is 1:3 or 1:4.

shifted as needed based on changing demands. The ED uses medical exam assistants but nurses are responsible for patient care and may provide support services that ancillary support could provide. For example, ER nurses include patient transport in their jobs due to a shortage of patient transport workers. In an extremely busy and difficult department, this can stretch already-overworked nurses too thin. Again, however, those who stay do so for a long time. A strong sense of a family committed to universal care and comfortable with the fast pace can be felt among the nurses who work in emergency care.

Other units have specific concerns with the nursing workforce as well. For example, the operating room (OR) is short five RNs and two operating room technicians and the numbers are getting worse. Although some nurses are drawn to the OR at SFGH for a number of reasons, including the public mission, turnover is high. After a 6-month orientation that costs SFGH $45,000, nurses can leave for another institution that pays higher salaries. Competition with the private sector is the biggest issue for this department. At this level of specialization, the civil service restrictions on salary and promotion shortchange the staff, and private sector financial incentives can lure them away. Those who want to stay also face immediate barriers in the seniority system; newcomers feel the impact of having to work nights and holidays, having last choice of vacation time, and being required to float to other departments. In the medical-surgical unit, nursing is feeling the shortage in yet other ways. Here, LVNs are used extensively to fill in for total number of nurses needed (making up approximately 33 percent of staff); however, LVNs are never given duties beyond their scope of practice and the tasks requiring RN responsibilities continue to increase with patient acuity levels, paperwork and management requirements.

Task Force on Future of Medical Staffing

In conjunction with a planning process that is underway for the rebuilding of SFGH, Associate Dean Phil Hopewell has convened a Task Force on the Future of Medical Staffing at San Francisco General Hospital. The Task Force has been charged with addressing how trends in the delivery of medical care, increasing subspecialization and new technologies, and overall system trends will affect or challenge physician staffing at SFGH. A focus of the Task Force has been trauma services, which it will use as a case study that highlights many of the critical issues facing future physician staffing at SFGH. The Task Force's final report will be submitted to the Associate Dean and others for consideration and planning.

A visit to the scheduling offices reveals a coordinated strategy to address this large organization's complex staffing needs that are impacted by nursing competencies and shifting priorities for staffing as patient care needs change. Nursing scheduling for each shift initially is done separately by various divisions; these schedules note coverage gaps that may be left by nurses who are sick or on vacation. Because the need for communication and coordination among departments creates a challenging situation, the central scheduling office collates the information and schedules about 800 RNs, LVNs, and CNAs from staff, per-diem and registries to cover as much as possible. Computerized scheduling incorporating call preferences and skill lists helps in this task. However, staff in one area may not be competent to work in another area, the nurses who are willing and able to come in to "float" or fill in for colleagues is limited, and the scheduling office can burn out the same people by repeatedly calling them. SFGH uses agencies sparingly: many agencies do not have nurses with the qualifications necessary to meet the acuity of SFGH's patients and costs of agency staff are considerably higher than hospital staff.

Within the past two years, SFGH has developed a dedicated nurse recruitment and retention position. A first priority for this position has been collecting data. At this point, the reasons why new nurses come to SFGH or why staff leave have been mostly conjecture. Leslie Holpit, Manager — Retention and Recruitment, hypothesizes that the low turnover rate is influenced by the "golden handcuffs" of the civil service retirement benefits and the challenging environment that only SFGH can provide. The anecdotes about signing bonuses luring nurses away may not be substantiated but she is curious about the possibility of nurses leaving due to lack of professional development opportunities. The hospital had three times the number of applicants it could accommodate for recent in-house training in critical care, emergent care, and labor and delivery courses, and she would like to expand these offerings. The hospital might also explore opportunities to develop career pathways and salary incentives for auxiliary staff to train for clinical positions. She and others at SFGH want to underscore the reasons why nurses would choose to work at the hospital: the learning culture, trauma center, excellent benefits, and commitment to caring for those in the city who would not otherwise have access to health care.

Martin Luther King/Charles Drew Medical Center, 2000

Licensed Beds	537
– Medical/Surgical Beds	215
– Pediatric Acute Beds	54
– Intensive Care Unit Beds	53
– Neo-Natal ICU Beds	43
Patient Days	86,197
Discharges	14,841
Clinic Visits	164,140
Emergency Dept. Visits	54,634
Trauma Level I	yes

FTE Clinical Staffing, 2000

Registered Nurses	399
Lic Vocational Nurses	79
Technicians & Specialists	419

Selected budget data, 2000

Operating Expenses	$317,360,000
– employee salaries as % of operating expenses	52.0%
– employee benefits as % of operating expenses	14.2%
Operating Revenues	$269,799,000
Net patient revenue as % of operating revenue	98.9%
– MedCare	7.4%
– Medi-Cal	82.3%
– County Indigent	4.0%
– Other third party	4.9%

Source: OSHPD Annual hospital disclosure reports, 2000, www.oshpd.ca.gov/hid/infores/hospital/finance
Note: selected data, totals will not add to 100%

3 Case Study: MARTIN LUTHER KING / DREW MEDICAL CENTER

The hospital's placement in its community

Martin Luther King/Drew Medical Center (King/Drew)occupies a historic place in South Central Los Angeles, opening in 1972 as part of the recommendations stemming from the McCone Commission Report regarding the Watts riots of 1965. Many of the original 100 staff came from the neighborhood and some still work at the hospital. The civic renewal fervor of the time brought leading medical practitioners and progressive administrators to King/Drew. These early leaders "grew their own crop" of second-generation workers who now occupy leadership positions within the hospital and county health system. Many senior staff retain the old feeling of community service in their current work and have influenced younger staff in this mission. Administrators also perceive that staff who seek employment at King/Drew bring with them their own service-orientation. Work at King/Drew has a "family" feel even though many workers no longer live in the neighborhood and many commute from suburban areas.

Mission Statement

To provide quality comprehensive Medical Care that is Accessible, Acceptable and Adaptable to the needs of the community we serve.

Strengths

- *Strong sense of community service and mission*
- *Level I trauma designation and teaching programs*
- *Staff longevity in many departments*

Challenges

- *Serious financial constraints*
- *Competition among county health facilities for employees*
- *Rigid county personnel policies*

Neighbors think of King/Drew as "their" hospital with walk-ups and car deliveries of patients to the emergency department. Although the area is perceived by outsiders as dangerous many non-local medical residents change their perceptions when they are introduced to the patient population and quality and range of treatment programs. The excitement and innovation at King/Drew impresses and draws doctors who take the time to investigate. A remaining challenge is keeping these young physicians who, after several years, may be tempted away by jobs with higher pay and less pressure.

Much of the building, including medical/surgical and critical care units, patient waiting areas and the clinics, has a dated but comfortable appearance. Waiting rooms and hallways and elevators — shared by staff and patients alike — are crowded and busy; the hospital as a whole is a labyrinth of departments. Security is ever-present and there is a police substation in the emergency department. Any potential growth is limited by the physical space of the building and the urban campus.

The trauma center and adjoining diagnostic imaging units, completed in 1998, make up the newest section. In addition to a separate suite devoted to mammography patients, diagnostic imaging exam rooms are arranged around a hub of state-of-the art equipment and workspaces, allowing staff to move quickly between patients without having to relocate their workspace. The new imaging equipment combined with King/Drew's affiliation with local college training programs ensures sufficient staffing for this unit. The clean, well-equipped trauma center is ironic in its placement across a parking lot from the emergency department, which by contrast, is full, aging and chaotic. Staff reported that the ED is on paramedic traffic diversion most days as are the other major hospitals within the Trauma Center Network of Los Angeles County. The trauma center has dedicated equipment, which may be used by the emergency department, and dedicated staff, but physician staffing is provided on a rotational basis by ED staff. If the trauma center is activated, emergency department physicians may be pulled to trauma, making the situation worse for the ED.

Corpsman as critical staff position

A workforce innovation at King/Drew is the Corpsman position, developed by the county to utilize the unique training of the significant number of military-trained health professionals employed in the area. Corpsmen are used in the emergency department to handle non-critical urgent care as they are more skilled than medical assistants, but not qualified to take nursing positions by their military training. This position frees emergency department nursing time.

How King/Drew differs from the private sector

Certain departments and nursing generally at King/Drew boast enviable staff longevity. Administrators agreed that private hospitals in the area can offer higher salaries but fewer benefits, and cannot fulfill the public service mission that helps retain committed staff. Social cohesion at King/Drew generally and within many departments was also cited as good for morale, team building, retention and recruitment; staff report that word-of-mouth is one of the most successful recruiting devices. However, loyalty may also cause whole groups of friends to leave King/Drew to follow a colleague to another hospital or county department. Strong bonds among workers can also have negative impacts on procedural changes, floating, cross-training and the incorporation of new staff into a unit of "insiders."

At King/Drew, workforce competition is more among county health facilities than between public and private sectors. In part, this is based in the job security and retirement benefits that county employees can carry with them between agencies. For example, an LVN may start at King/Drew, move to a lower stress county job while completing education for an RN license, take a job at a jail or rehabilitation facility, then return to King/Drew after

gaining the experience and education to take a higher-paid clinical or supervisory position. Many loyal staff, who temporarily join the private sector or another county unit, expect to return to King/Drew during their careers. They enjoy the collegiality, neighborhood affinity, feeling that their work has a positive effect on the community, and promotion opportunities.

Administrators estimated that the nursing-to-patient ratio hospital-wide is probably about 1 to 10. Staff nurses do not have direct input into hospital policies; however the strong relationships within departments gives them a voice into procedures and patient care. In addition, physician-nurse relationships are regarded as more equitable than in private hospitals in the area.

Dedicated staffing model, Senior Treatment and Restorative Unit

King/Drew uses a dedicated staffing model for its Senior Treatment and Restorative unit. This inpatient unit is staffed by a set team of CNAs, nurses and physicians along with social workers and rehabilitation staff. The dedicated staffing structure ensures more social stability for patients and their families as well as facilitating case management as staff and patients become quite familiar with each other during the patient's treatment. A patient's length of stay is determined by reviewing the social support resources available to each individual. Rather than releasing a patient simply because their health condition has improved, the care team verifies that support services are arranged to facilitate the patient's self-care and recuperation prior to discharge. Patients without access to family or agency resources are retained for a period of time to improve their functioning and identify resources available to them including housing, rehabilitation and counseling services. Though the program is new, this approach has already had a positive effect on case management, provider-patient relations and is expected to reduce patient re-admittance. In addition, the staff on the unit likes the model, which management hopes will help retain employees working there.

Problems of bureaucracy

Employees are hired as civil servants through a centralized personnel unit of county government. The hospital has no exam authority, and even though it may recruit potential employees, whatever health facility hosts each exam receives priority choice from the list of qualified hires, meaning facilities may "steal" each others' recruits.[42] Centralized personnel management also complicates workforce planning; attrition data is submitted to the county but reported back for the system as a whole. This makes it difficult to track workforce trends and head off shortages. Administrators use benefits packages as an indicator of upcoming workforce changes: benefits packages are set by hiring date and staff tend to retire or transfer based on benchmark dates. King/Drew will face a significant

[42] Since initial interviews and site visit for this study, King/Drew reports that the county is piloting a computerized shared list of qualified nursing candidates. In the first months of this pilot, success has been encouraging enough that the county is considering expansion of shared hiring lists for other critical clinical positions.

attrition problem over the next ten years as many staff approach their 25th anniversaries. Although administrators are able to identify key departments that will require re-staffing as a result, the economic and political issues for the county make it difficult to project budgets or how care may be organized in the future, thus hindering planning. Generally, staff estimate the hospital's overall turnover rate is less than 15 percent.

The heavy bureaucracy and lack of understanding of contemporary health care staffing in county government limits innovation at King/Drew. Staff reported that best practices such as 20/20 training programs, meaningful and relevant tuition reimbursement and flex time have been terminated or initially rejected because they do not fit the regimented structure of county personnel practices. There is very little use of registry staff by King/Drew because the maximum pay allowed by the county is $49 per hour, too low to compete. The delays and bureaucracy of the county hiring process is another barrier to efficient staffing: the cumbersome three- to six-week process can deter even the most committed applicants. Young workers particularly, are not willing to wait when they can be hired in the private sector in a few days. This has had a negative effect on King/Drew's competitiveness to hire pharmacists, nurse specialists, skilled technicians and specialist physicians. Another barrier for attracting doctors is the ratio of salary to housing cost: although physicians in the Los Angeles area earn sufficient salaries to purchase housing in the area, several have been attracted out-of-state where comparable salaries can purchase larger homes or land in safer communities with better schools and shorter commutes. Administrators predict that physician salaries must rise within the next few years to keep the county hospitals competitive. Although entry-level salaries are now competitive, union and government restrictions on pay and promotion proscribe the hospital's ability to boost retention through pay increases. Physicians recently voted to be represented by a labor union. This arrangement now requires physicians who had never before accounted for their time to work a 40-hour week, and surrender a system of bonuses that for some will result in a 19 percent pay decrease. It is difficult to tell at this time how this change will affect physician staffing. Real shortages exist among radiologists, anesthesiologists, vascular and neuro-surgeons and pediatric intensivists.

At King/Drew, senior staff reported that young workers' values have changed within the past five to eight years. Younger workers will leave after obtaining adequate training or experience to pursue a higher paying position in either private sector or other public department. Although some stay with the county, there is no sense of loyalty to county employment if salary (not benefits) is significantly higher in the private sector. Young people with families can be convinced of the long-term benefits of county employment if the facts are presented to them, however most leave without seeking this information.

Fast-Track ED

In an effort to wean patients from using the emergency department of the hospital as an urgent care clinic, King/Drew developed a staffing structure to fast-track non-urgent emergency department (ED) visits to low- to mid-level providers. These providers communicate with patients about convenient health-system clinics they can use to reduce reliance on the ED. Eligibility workers within the hospital then identify resources for which patients are eligible to help them to avoid future ED visits.

With the diversity of employment sectors in Los Angeles, unskilled and low-paid staff may leave health care all together for other industries that pay better. Workers attracted to health, retirement and tax benefits (county employees are not required to pay FICA) include older or experienced workers, skilled workers from other county departments, and workers with families.

Several professions, including respiratory, occupational and physical therapy and on-call radiologists, have historically been so difficult to recruit and retain that they have been contracted by the county. Additionally, the hospital does not bother to recruit pharmacy technicians who leave too quickly for bonuses and competitive salaries in the private sector; King/Drew uses pharmacy interns from the local educational programs in these roles.

Assets in recruiting and retaining staff

King/Drew's Level I trauma designation and teaching programs are a recruiting and retention device for the hospital. Experienced clinicians enjoy the institution's teaching status and the ability to guide younger professionals in their practice. Affiliations with a local high school magnet, nearby community colleges, and UCLA and Drew Universities' medical, nursing and allied health programs provide King/Drew the opportunity to "grab" the interest of young clinicians and interns considering their first job. Recent enrollment declines in local health training programs have reduced the pool of potential hires, however. As with other safety net institutions, staff reported if King/Drew can make a positive impression on young clinicians' career and workplace choices within eighteen to thirty-six months, these clinicians are more apt to continue their positions for many years. King/Drew's sincere commitment to providing service to one of the county's most medically underserved and impoverished districts attracts the type of health provider whose service-orientation outweighs material and competitive pressures. Nursing staff particularly reported that the ability to treat a vast variety of conditions, to see results in patients who have little access to care beyond the hospital, and to feel that one's work is important to the community creates a situation where employment longevity is the norm.

Contra Costa Regional Medical Center, 2000

Licensed Beds	164
– Medical/Surgical Beds	83
– Pediatric Acute Beds	8
– Intensive Care Unit Beds	8
– Neo-Natal ICU Beds	6
Patient Days	45,048
Discharges	7,927
Clinic Visits	287,283
Emergency Dept. Visits	62,534
Trauma Level I	no

FTE Clinical Staffing, 2000

Registered Nurses	312
Lic Vocational Nurses	86
Technicians & Specialists	205

Selected budget data, 2000

Operating Expenses	$193,507,000
– employee salaries as % of operating expenses	49.3%
– employee benefits as % of operating expenses	13.6%
Operating Revenues	$136,089,000
Net patient revenue as % of operating revenue	93.3%
– MedCare	22.6%
– Medi-Cal	62.5%
– County Indigent	1.1%
– Other third party	12.5%

Source: OSHPD Annual hospital disclosure reports, 2000, www.oshpd.ca.gov/hid/infores/hospital/finance
Note: selected data, totals will not add to 100%

4 Case Study: CONTRA COSTA REGIONAL MEDICAL CENTER

Growth challenges tradition in sheltered community

Contra Costa Regional Medical Center (CCRMC) is a new and attractive complex of buildings in the heart of Martinez, a county seat and growing suburban community adjoining the San Francisco Bay Area. The main hospital building and laboratories were completed in 1997 and 2001 respectively; new clinic space will be completed in 2002. The new hospital has an expansive and open feeling with large windows overlooking a pleasant campus. Contra Costa County's unique 29-year old public insurance plan, which combines county employees, county indigent and small business buy-ins, makes the hospital and associated clinics the major provider of health services in the county. The investment into the new facilities reflects the county's commitment to health care but traditional organizational structures dominated by government bureaucracy and union influence are straining the health system's ability to adapt to external health workforce market pressures.

The county's proximity to San Francisco means it feels spillover effects of rising housing costs, commuter culture, declining educational quality, and a fluctuating economy. Competition for workforce is less a public-private issue at CCRMC than competing with urban areas and other employment sectors. The system has lost nurses, physicians and technicians to nearby cities, and has found it particularly difficult to recruit specialist physicians who perceive the county's comparative disadvantages in the area. Retaining and attracting young workers and skilled professionals with the pull of urban life so close is a constant struggle. The traditional perception of health care or county employment as stable and lucrative is losing out to images of the new economy. "Fifty-thousand a year doesn't make it here for a family," states an administrator.

Mission Statement

In partnership with the community our system ensures the public access to health care. We deliver comprehensive personalized services with compassion and respect. As a teaching institution we provide innovative leadership in the delivery of primary care, and in the training of family practice physicians, and the vision to be the health care system of choice in Contra Costa County where partnership with patients and employees exists to promote individual and community wellness.

The Medical Center is part of the larger Contra Costa Health Services, which has the mission of: Contra Costa Health Services (CCHS) cares for and improves the health of all people in Contra Costa County with special attention to those who are most vulnerable to health problems.

Strengths

- *New, well-designed building*
- *Adequate nursing staff*
- *New diagnostic imaging equipment*

Challenges

- *Bureaucracy and labor contracts*
- *Costly injured and sick employee absences*
- *Clinic laboratory scientists shortage*

To deal with the county's large size and wide distribution of patients, the system relies on the hospital plus three broad-service clinics and nine smaller clinics. The clinics bear the burden of treating homeless and indigent residents, often seeing patients referred for follow-up from the hospital emergency department to reduce the costs of urgent care. Contrasting sharply from the new, orderly appearance of the CCRMC hospital building, the Martinez Family Health Center, located on the same campus, is chaotic and crowded. Although a new building will be finished 2002 to house specialty clinic operations, there is no plan to increase staffing, which has not been expanded since the mid-1990s. Fortunately, the workforce attraction/retention of this clinic is strong; approximately 90 percent of the medical residents that train at the clinic take permanent positions here or in other system clinics. Nurses and allied staff are also dedicated to serving the steady clinic patient load.

Family practice model of care

The self-contained structure of the payer/care delivery health system in Contra Costa county facilitates efficient care management for individual patients that is absent in less contained, more free-market systems. Since clinics are well-dispersed throughout the large county and patient tracking and referrals can be managed in a somewhat centralized manner, providers and patients establish an on-going relationship with each other that resembles a traditional "family doctor" approach while making accessible an entire system of advanced medical care. The comprehensiveness of the payer/delivery structure creates a "seamless" system of health and social services that has improved continuity of care that seems appreciated by staff and patients. Hospital staff is reviewing ways to use this system to improve discharge outcomes for critical care patients; the health system structure is expected to make these reforms easier.

Impediments to progressive workforce strategies

In trying to meet current health care workforce needs, Contra Costa Regional Medical Center is somewhat stymied by bureaucracy and labor contracts. Even though the hospital system is the largest county workforce, accounts for half the health budget, and pays the county about $700,000 each year for personnel services, it receives no preference from county personnel systems. The impersonal and cumbersome hiring process takes an average of 30 days. In addition, all employees, including physicians, are unionized and although most employees belong to a local government workers union that makes relations easier and more relevant than national unions according to administrators, problems still arise. The administrative structure requires the Board of Supervisors to approve new positions, and strong union activity may influence these decisions. For example, unions have opposed the addition of certified nurse assistant positions for the hospital. Without assistance, nurses run treatment errands and complete vital statistics reports, resulting in 30 – 60 minute waits for patients.

Lack of control over the application and hiring process impedes competitiveness and effectiveness. For example, hospital administration persisted for 13 years before county personnel would implement a system to track applicants' willingness to work nights and weekends from employment applications for clerical staff. Not being able to focus hiring on those willing to work these hours created higher turnover and administrative demands managing this staffing. Another concern is lack of pay differential for essential clerical positions at the hospital compared to other county clerical positions; without the incentive of higher pay for jobs that are often more difficult and may require working nights and weekends, it is difficult to hire and retain people.

Nursing and other professional workforce issues

County policy allowing nurses with seniority to opt out of overtime and weekends has necessitated filling these shifts with registry or traveling nurses who are paid much more than regular nursing staff.[43] This creates friction and some attrition by hospital employees who witness the inequity of contractors having less responsibility for more pay. Administrators also are concerned about the implications of having an aging nursing workforce. The average age of nurses at CCRMC is 49. The hospital was able to use this concern as leverage to designate 25 new nursing positions last year to accommodate what promises to be a mass retirement in several years. Next door, the family clinic negotiated with unions to cut the need for registry staff by offering per diem pay to its own employees interested in working more hours.

Despite the hurdles, CCRMC has a high nurse-to-patient ratio of nearly 1 to 4 and much of the work is nurse-centered. Nurses are empowered and believe they are treated with respect by doctors and other providers, however administrators report that many nurses "don't understand how good they have it," when they complain about working weekends or floating. Many have never worked outside the county health system. Each department controls its own scheduling and there is minimum floating or overtime. Indeed, the work environment has been a recruiting device for private sector nurses who have worked through registries and on per-diem at CCRMC and recognize the better environment.

Allied and administrative positions including radiation and ultrasound technicians, laboratory scientists, pharmacists, managers and clerical staff are the most critical concerns for the system. Equipment in the diagnostic imaging department is the newest in the county. This has been an attraction for interns and imaging workers, although this department experiences severe staffing problems. Limited productivity of training

[43] At CCRMC, staff nurses make approximately $35 per hour; traveling nurses make an estimated $60 per hour.

programs and extreme competition for radiation and ultrasound technicians has left the hospital with a 40 percent vacancy rate for these positions. A silent problem behind this situation is that with the extreme shortage for all health facilities in the area, CCRMC workers — many of whom are young and supporting families — are tempted to moonlight in return for high registry and per-diem pay. Several imaging staff have worked 80 hour weeks on 2 or more jobs, increasing their injury rates and sick time, and opening the possibility of making errors in their work. With so few staff for an increasing demand for services, it is difficult to back up staff who call in sick or are injured. The only way the department has found to deal with the inability to fill the vacancies has been to refer out orders that cannot be processed within two weeks. Since contracting costs are paid from a different budget line than regular salaries, the county has never considered patient wait time or additional costs a problem. Injury and sick time, however, is a serious problem. County policy allows injured workers to receive 84 percent of salary while providing little monitoring of their leave. Human resources staff estimate that nearly 50 percent of their time is spent handling worker injury issues and staffing to cover positions. The jobs of injured workers cannot be back-filled for over one year, and only with great effort. Administrators would like to combat this problem through worker education, but some fear that abuse of the leave system is so ingrained that their efforts can never succeed without support from the county and unions.

Proximity to Bay Area biotechnology industry presents a challenge for hiring and retaining clinical laboratory scientists. Administrators admit that they are holding onto the staff they have by shear luck and have no strategy for competing with businesses that offer production bonuses and stock options. Similarly, pharmacy hours have been cut because the hospital has been unable to fill vacancies in pharmacist, technician and clerk positions. Pharmacist pay is $6 less per hour than the private sector, and the county cannot offer pay incentives. The use of registry staff has created a particular friction in the pharmacy department since it is hard for staff to understand why, like in diagnostic imaging, funding for contracted services cannot be transferred to increased pay for employees.[44]

Clerical and medical records staff is difficult to attract because of the lack of pay differential for night and weekend work, although most day shift positions are filled, and administrators believe that the problem will improve with a declining private economy. In a good economy, public sector clerical work cannot provide the high salaries and promotion of the private sector. Turnover in clerical positions creates record-keeping errors and backlogs, and inconsistent procedural application. Administrators are also

[44] Since the site visit, Contra Costa County approved pay increases for pharmacy and radiology to improve the hospital's ability to compete.

beginning to recognize that the personalities and charisma of individual leaders has been an important factor in achieving successes for the hospital and health system over the past few decades. Because there are fewer young managers willing to replace senior staff, they worry that there will be a leadership vacuum in the next decade. The 13-year battle to see one box on the county employment form was successful only because the same administrator was present each year to follow up on the request. If future managers and administrators are not committed in this way to the public mission and wanting to improve the organization, many hard-won gains could be lost along with the positive work culture that currently makes CCRMC a desirable workplace.

Emergent care as a training resource

CCRMC and the health system is structured on the British registrar system, with a family practice physician at the center of a hub of clinicians who focus on a panel of patients. Though this improves continuity of care, a problem with this structure comes from the expectation of filling leadership positions and replacing departing hospital physicians with system physicians who have grown comfortable with their Monday through Friday, 8-to-5 work schedule. Many prefer to keep their positions rather than take on the responsibilities of call and management. However, allowing family practice physicians to cross-train with specialists in emergency departments has been a recruiting incentive for the hospital.

The emergency department operates at a fast pace, seeing in excess of 100 patients per day; over half its patients are walk-in, and only 10 percent of patients brought in by ambulance. The emergency department is adjacent to the county's designated psychiatric treatment unit, providing easy communication and training between medical and psychiatric staff. The staff is enabled to focus on community needs of sexual assault and substance abuse. Emergency department staff have formed specialized teams to work with patients, and has used these issues to develop community outreach worker positions utilizing teens and members of non-English speaking communities. These bridging jobs funnel health workers into allied health and nursing education programs in local ROPs and community colleges.

In-house per diem system

Staff at outpatient clinics in the county health system may voluntarily participate in an in-house per diem pool that enables them to increase their work hours or income on a per-needed basis. The in-house pool has reduced the need for registry staffing, has increased employees' sense of control over work hours since scheduled per diems are never sent home during shifts, and has helped to maintain consistency for patients since they are seen by employees, not agency staff. The in-house pool was developed in partnership with local unions, clinic employees and administrators.

Community Medical Center — Fresno, 2000

Licensed Beds	745
– Medical/Surgical Beds	236
– Pediatric Acute Beds	0
– Intensive Care Unit Beds	12
– Neo-Natal ICU Beds	19
Patient Days	138,621
Discharges	28,951
Clinic Visits	187,084
Emergency Dept. Visits	102,464
Trauma Level I	no

FTE Clinical Staffing, 2000

Registered Nurses	658
Lic Vocational Nurses	106
Technicians & Specialists	583

Selected budget data, 2000

Operating Expenses	$305,785,000
– employee salaries as % of operating expenses	40.2%
– employee benefits as % of operating expenses	7.6%
Operating Revenues	$341,538,000
Net patient revenue as % of operating revenue	96.9%
– MedCare	31.2%
– Medi-Cal	30.7%
– County Indigent	4.9%
– Other third party	23.7%

Source: OSHPD Annual hospital disclosure reports, 2000, www.oshpd.ca.gov/hid/infores/hospital/finance
Note: selected data, totals will not add to 100%

5 Case Study: COMMUNITY MEDICAL CENTER — FRESNO [45]

Community Medical Centers (CMC) is a not-for-profit, locally-owned hospital corporation in Fresno. It is the largest health provider in the Central Valley, and serves as the safety net provider for the regional area. CMC is currently comprised of three large acute care hospitals [46] and a network of smaller ambulatory, outpatient, diagnostic, and long-term care facilities. One of the sites, University Medical Center (formerly Valley Medical Center) was a county hospital that was posting large losses in the mid-1990s. In 1996, in an attempt to restore economic viability to the facility, Valley Medical Center was merged with Community Medical Centers (CMC). CMC took over the operations of the facility and responsibilities for providing care to the county's indigent via a 30-year contract with the County of Fresno.

Mission Statement

To improve the health status of the community.
To promote medical education.

Strengths

- *Customer-service orientation*
- *Independent institutional flexibility for personnel issues*
- *Educational programs*

Challenges

- *Nursing shortage*
- *Merging together two hospitals*
- *Pharmacy workforce shortage*

For several years, CMC has operated both Community Medical Center — Fresno and University Medical Center (UMC) a few miles from each other. UMC however, is an aging downtown facility that will be closed and merged into the new Community Regional Medical Center in 2004. In contrast, Community Medical Center — Fresno (CMC-Fresno), which will serve as CMC's primary clinical care site in the city, is an impressive hospital.[47] Recently renovated, this hospital's atmosphere is pleasant and more similar to that of a professional business environment than many health care delivery sites. CMC-Fresno's patient units, public areas and business offices are well-organized and well-maintained.

[45] Over the past decade, California has witnessed the conversion of numerous small and publicly-funded hospitals into non-profit institutions. A county hospital selected for this study recently converted in this way. Though still a new endeavor that is not without problems, the transition suggests new organizational directions and possible solutions to some challenges facing public hospitals in the state. The case study also presents evidence of concerns that are shared by both private and public health care organizations.

[46] Community Medical Center — Fresno, University Medical Center, Community Medical Center — Clovis

[47] While we met with executives responsible for system-wide CMC workforce and policy, and with administrators from both the Community Medical Center — Fresno and University Medical Center, the only facility we visited and toured was Community Medical Center — Fresno.

Challenges in nurse staffing

While California is facing a severe shortage of nurses, scarcities are not distributed evenly among its heath facilities. Of the ten institutions included as case studies for this report, CMC's nursing crisis was among the most severe, with over 100 RN openings. In the face of this workforce challenge, CMC has made attracting and retaining both RNs and LVNs a priority, and has taken bold strides to do so.

CMC employs approximately 1,100 RNs[48] and 30 per diem employees, and currently has a system-wide vacancy rate of about 14 percent for RNs. Functioning on a current RN to patient ratio of between 1:7 and 1:8, the vacancy rate may increase when proposed new nursing staffing ratios go into effect in California. Also, while 14 percent is the vacancy rate system-wide, administrators from University Medical Center reported that their ratios on bad days approximated 1:10. At the time of our visit, UMC had an RN vacancy rate of 44 percent in the emergency department and 29 percent in the intensive care unit.

To meet its current needs, CMC is spending $17–20 million per year on overtime, registry, and traveling nurses. The utilization of travelers, while necessary presently, is not a sustainable solution to the system's nursing shortage. "They're bleeding us dry" stated one CMC administrator. This price does not include time "lost" by both travelers and nurse supervisors to provide these temporary employees with the necessary orientation to function effectively. In addition to being expensive, it was reported that the presence of such workers breeds discontent among full-time employees. Because traveler salaries are based solely on competencies and not longevity, younger and less experienced traveling nurses may be paid more than experienced staff nurses with whom they work.

To address its critical nursing shortage, CMC crafted a multi-faceted approach. First, they have begun to increase LVN staffing and to integrate LVNs more seamlessly into care delivery, while promoting a more supportive environment for them. Similarly, there has been a renewed commitment to hire more certified nurse assistants to help limited RN staff meet patients' needs.

Second, CMC has raised salaries significantly to make them competitive with other nurse employers. Between October 1996 and March 2001, starting RN salary increased from approximately $15 per hour to $22.84 per hour.

Third, with the equity raises in place, CMC has stopped competing with leapfrogging local salaries[49] in favor of increasing employee benefits and providing education opportunities for their employees. They have been able to survey current employees and those who

[48] The 1,100 number is the count of full-time equivalent (FTE) RNs.

[49] Evidently, the shortages experienced at CMC reflect nursing shortages generally in the Central Valley.

leave CMC to determine how CMC might improve recruitment and retention strategies and are exploring ideas that would make CMC a welcome change for some and a hard place to leave for others.

Finally, CMC has made career laddering and employee training a priority. They have forged numerous extensive partnerships with community and educational institutions to attract area students into nursing and other health care fields, while providing "bridge" and professional development programs (e.g., LVN to RN upgrade and interpreter certification programs) for its current employees. Internally, CMC is working to find creative solutions to its current shortage of nursing mentors and what it believes to be a lack of critical thinking among some nursing graduates. As one manger described, CMC is trying to move from a culture where nurses "eat their own" to one in which they "help cultivate their own."

Quick ER

A simple change in triage procedures led to a dramatic improvement in efficiency for Community Medical Center's emergency department. By operating separate modules for non-critical, "urgent care" patients between the hours of noon and midnight, CMC has reduced the usual wait time in its ED from 5–6 hours to 1 hour. Staff report that, in addition to accelerating the rate of care delivery, these "quick ER" modules help insure that the needs of non-emergent patients do not interfere with treating those with the most pressing needs.

Remaining workforce challenges

Disadvantageous to CMC's position in the labor market, however, is the need to establish and maintain a semblance of parity regarding pay, benefits, and working conditions among a disparate collection of independent hospitals, each with its own culture and history. Since the 1996 merger, CMC has had to make substantial equity adjustments in pay, upgrade clinical facilities and attempt to fuse non-congruent working cultures. For example, one CMC executive described the conditions under which UMC's pharmacists were working before the merger as "third world." Such discrepancies require a tremendous effort to remedy. A particular facility's reputation, parking accommodations, racial and ethnic composition, locale, and other variations significantly impact its ability to attract and retain staff. While such workplace diversity offers opportunity, it can also breed internal rivalries and discontent.

Besides a severe shortage of nurses, those professions identified as being in relative short supply include pharmacists, laboratory technologists, radiology technologists, pharmacy technicians, radiologists, and dieticians. Described as especially scarce are

radiologists and radiology technicians. The typical recruitment time for a radiologist is three years. Regarding other physicians, needs for additional anesthesiology, trauma-related plastic surgery, and some neurological subspecialty services exist. Also mentioned as being difficult positions to retain were unit clerks and monitor clerks for telemetry units.

Second only to nursing, meeting pharmacy workforce needs appeared to be the biggest headache for human resources managers. Despite hiring 13 pharmacists since January 2001, as of last December CMC had 11 of its 65 pharmacy positions vacant. The market for pharmacists is extremely tight; it is not uncommon for employers to pay sign-on bonuses of tens of thousands of dollars, and CMC responded last year by raising pay nearly 14 percent. Pharmacy technicians are also in short supply. At the time of our visit, CMC's pharmacy technician annual turnover rate was 58 percent. CMC is attempting to ameliorate this shortage by employing an automated system to fill prescriptions (increasing the efficiency of each pharmacist using the system by 53–60 percent) and by aggressively mining UMC's pharmacy internship program for potential permanent employees. However, factors affecting recruitment and retention in this specialty, like many others, often can be reduced to money. "If they come for money," said CMC's head of pharmacy, "they'll leave for money."

Shift in management culture

Administrators at CMC see the organization's shift in management philosophy as being integral to attracting and retaining nurses and other professionals in short supply by emphasizing a "hands-on" management style to establish a better interface between management and employees, and to improve care delivery. By placing a priority on developing managers who understand the organization's mission, CMC's leadership is attempting to imbue its working culture with a sense of "belonging." These efforts, they trust, will make CMC the employer of choice for outstanding employees.

Universally praised by those with whom we spoke were recent changes in managerial policies and culture. Based on the Ritz-Carlton Business Excellence model, CMC has made a concerted effort to provide managerial staff with in-house training and support to allow them to function effectively, and plans to increase management training in the immediate future. Interviewees stated that this, coupled with an increased emphasis on accountability by mangers has paid great dividends, both in terms of patient care and in working conditions for employees. CEO Phil Hinton, M.D., cited what he called the five "C's" of customer service as providing a kind of mantra regarding employee conduct: The 5 C's include, (1) cleanliness (e.g., keeping the facilities free of litter), (2) courtesy

to patients (e.g., treating patients as if they were your mother), (3) courtesy to doctors (e.g., treating physicians with respect), (4) courtesy to each other (e.g., community family), and (5) confidentiality (e.g., respect for patient information). As part of its new culture of accountability CMC's leadership has also emphasized setting and striving to achieve clear goals for the organization over the next decade. Phil Hinton says that within seven years CMC will strive to become, a top 100 employer, a top 100 hospital, and a Baldrige Award winner. When asked to prioritize which areas are most critical to succeeding as an organization, Hinton stated, "Workforce is number one."

CMC has contracted with the county to provide specified health services, but is not integrated into the county health system. This arrangement allows CMC a degree of flexibility and efficacy in meeting its workforce needs that many "safety net" institutions do not enjoy. That it is both charged with meeting Fresno's "county hospital" needs but with relatively few restrictions regarding its human resources decisions provide a promising, but not definitive, vantage from which one might begin to separate those workforce issues that are endogenous to county human resources systems from those belonging the vicissitudes of its health workforce market.

High-Low Telemetry Unit

Community Medical Center's nursing counsel suggested a care delivery innovation that has proved to be successful. In an attempt to avoid worrisome patient back-up due to transfers between ICU/ER beds and critical care units, an intermediary telemetry unit was proposed. CMC staff state that their "High-Low Tele Unit," with a current nurse to patient ratio of 1:5, has improved efficiency, patient care and staff morale. It is believed that nurse to patient ratio of 1:6 could be achieved with some modification.

Community Medical Centers' educational programs

CMC offers a wide range of educational and training programs, both internally and in conjunction with external educational and community organizations. Some benefits of these programs include the development of career paths for its employees, the amelioration of workforce shortages, and better community relations. Described below are three of CMC's successful programs:

- Community University — Community "U" is an aggregation of numerous education and training opportunities available to CMC employees (and in some cases their families.) The express goal of Community "U" is to "promote and improve personal growth and organizational performance." Among the learning services offered are certificate and degree completion programs that range from GED to BSN, extensive employee orientation programs, age-appropriate family counseling courses, and leadership development instruction.
- Paradigm 2000 — In order to help address central San Joaquin Valley's severe nursing shortage, CMC forged a partnership with Fresno City College to add an additional class of students to its nursing program. CMC agreed to provide funding for the requisite additional theoretical and clinical instruction under the condition that Fresno City College give preference to applicants employed at CMC. CMC scheduled its Paradigm students for evening shifts in order to allow them to attend afternoon classes. Eighty-eight nurses, an increase of 42 over FCC's previous class, graduated from the eighteen-month (two-year equivalent) program's first cohort. Thirty-three of those graduates were hired by CMC. CMC considers this to be a great return on its initial investment of $80,000. Since then, five other central San Joaquin hospitals have joined the collaboration to expand and replicate the Paradigm program.
- Jefferson Job Institute-In 1997 CMC, local community leaders and the Fresno Unified School District established the Jefferson Job Institute, an employment-training program for jobless parents from Jefferson Elementary, a school in close proximity to CMC. The six-week program consists of four weeks of basic didactic instruction, followed by two weeks of hands-on job training within CMC. From its first graduating class of eighteen, nine were hired by CMC. Now in its fifth year, the Jefferson Job Institute has been expanded to include the parents from five additional schools, and has produced over 100 graduates.

Sacramento County Primary Care Clinic

founded 1982

Patients seen, FY 1999-00: 12,749

Total visits, FY 1999-00: 32,374

Clinical Staff, 2000

Physicians	8.3
Family Nurse Practioners	0.4

Selected budget data, 2000

Operating revenues*	$1,617,592
– net patient revenues	$4,831,132
– grant/contract revenues	$3,100,567
Total operating expenses	$3,100,772
Salaries & wages as % of operating expenses	46.91%

* as reported, additional revenues may not be reflected

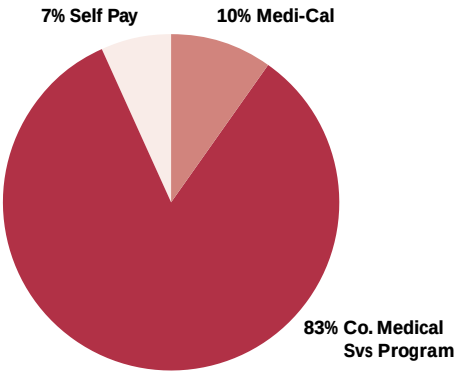
U.S. Bureau of the Census Poverty Estimate, Sacramento County, 1998

15.90%

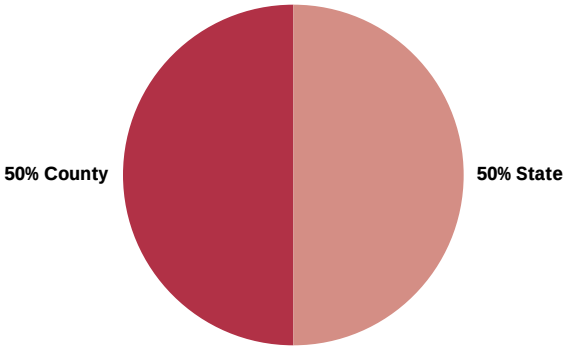
Sources: Sacramento County Department of Health & Human Services, selected access data based on budgeted or actual expenditures (as a result, totals may not equal 100%); US Bureau of Census, County estimates for all ages in poverty for California: 1998, www.census.gov/hhes/www/saipe/stcty

Note: Most county operated clinics do not report to OSHPD, therefore information for Primary Care Center is based on county reporting, does not correspond to OSHPD data categories for other clinics in this study.

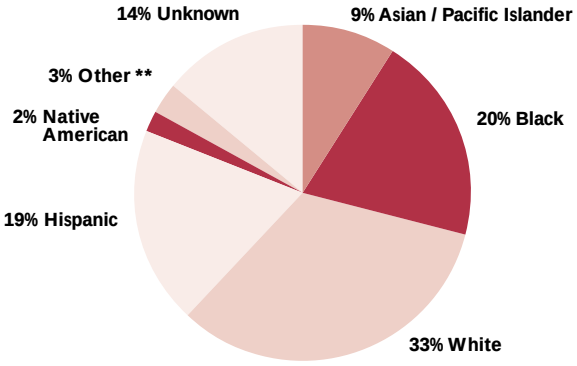
Major Sources of Patient Revenue, 2000



Major grants / contracts from government and private sources, 2000



Patients by race and ethnicity, 2000



** Other includes growing immigrant populations of Russion & Slavic and Middle Eastern patients

6 Case Study: SACRAMENTO COUNTY PRIMARY CARE CLINIC

Sacramento Primary Care Clinic is large, busy and full to capacity. Plans to build a new facility are still on paper but spoken about with pride and anticipation. The clinic system serves 77,000 patients during 159,000 visits per year. Patients wait in lines or in plastic chairs while security guards pace the halls near the pharmacy. Clinical care is provided in small rooms off a huge central coordination complex. The clinic's concern with tuberculosis is ever-present with signs, dedicated staff and covered windows between staff and common waiting areas. Over the past couple of years, a dramatic increase in caseload due to changes in eligibility criteria and an outbreak of TB coincided with big changes in medical leadership. The clinic has risen to the challenges of the expansion and epidemic to be seen as a thriving and effective provider of health care to the county's uninsured patient population.

Mission Statement

- *Deliver quality primary health care services to medically indigent adults, children, the homeless and those who have no other source of health care;*
- *Ensure a healthy community through disease prevention, health and nutrition education and public health services;*
- *Empower those with chronic illnesses by teaching disease self-management and self-sufficiency;*
- *Recognize, serve, listen and respond to the needs of our community;*
- *Provide innovative, holistic, effective and efficient service delivery in collaboration with other community service agencies and health and human service systems;*
- *Promote the safety, welfare and professional development of our staff; and*
- *Appreciate and reflect the multi-cultural and experiential diversity of employees and of all members of the community we serve.*

Strengths

- *Strong volunteer physician program*
- *Reformed image of working at clinic*
- *Monthly all-staff meetings*

Challenges

- *Limited resources*
- *Diverse patient population; limited bilingual skills among staff*
- *Shortages among some medical specialties*

Workforce generally and medicine

With the few exceptions discussed below, workforce was not reported to be a problem at Sacramento. The size of the staff has doubled to 214 FTEs since 1998 and rather than shortages, clinic leadership sees the biggest challenge to be a matter of changing the culture. Just a few years ago, a new medical director came on board to make significant changes in the medical staff. Since there is no county hospital in Sacramento, UC Davis serves this role in the safety net. The new medical director assumed that the clinic and UCD had a good relationship but found the opposite to be the case. One of the biggest problems was that residents could not train at the clinic because none of the clinic's doctors were board-certified, a residency program requirement. The new medical director

enacted a plan to hire high quality, board-certified doctors, a break from the old culture where doctors saw the clinic as employment of last resort. In the process, some doctors retired, others left when held more accountable for the care they provided, and some new positions were created in a good economy. As a result of these changes, the director now has a cadre of board-certified doctors committed to the mission of the clinic and to evidence-based, accountable care. Salaries at the clinic are competitive with Mercy/Sutter and just slightly lower than Kaiser but clinic doctors work weekday hours, with no call or weekends (residents provide these services) permitting them to moonlight to make more money if interested.

Most workers at the clinic are county employees under union contracts. As with other county institutions, this translates into generally excellent benefits and retirement plans counterbalanced with unreasonable six to eight week delays in the hiring process.

SPIRIT program

One of the key elements to successful staffing at Sacramento is the SPIRIT program through which volunteer doctors provide a significant amount of care. For example, in the primary care clinic, which is staffed with teams of medical doctors, LVNs, medical assistants and clerks,[50] seven physicians are paid staff (mostly internal medicine and family practice plus a podiatrist and a radiologist) but all additional specialist doctors serve through the SPIRIT program. The program is designed to be volunteer-friendly, meaning that paperwork is kept to a minimum, liability is covered (if registered with the county), and doctors are able to just practice pure medicine, meeting their desire to help people. Although the program has been very successful with medical doctors, the clinic has been unsuccessful in recruiting volunteer dentists; this is an area the clinic hopes to expand to meet patient needs.

Chest clinic

A tuberculosis outbreak in the homeless community two years ago prompted the creation of the TB Homeless Screening and Intervention Program. The chest clinic's basic work is to track and prevent the spread of TB in Sacramento. Staffed by 27 FTE workers, the chest clinic and the TB Homeless Intervention Program provide skin tests and x-rays to the area's homeless, and then issue identification cards verifying the tests. The identification cards are now required to access the local shelters. Staff here is long-term and very committed; the biggest challenge is filling public health nursing vacancies. While the clinic is currently moving out of crisis mode, having been successful with the

[50] Additional clinic staff include radiological and casting technicians, residents, and triage nurses.

TB Homeless Intervention Program, its future is debatable. State and county tuberculosis cases are on the rise again but other public health issues, including the threat of bioterrorism, may need to receive some of the attention that has been shifted away to handle the recent epidemic.

Nursing

Nurses in Sacramento County play several roles. The department employs about 85 nurse positions, with the majority being public health nursing jobs. These positions are very difficult to fill. Public health nurses must have a BSN to enter the specialty, meaning that about 54 percent of the state's nurses (Coffman et al., 2001b) are not eligible to certify for public health nursing. A public health nursing vacancy rate of 37 percent currently plagues the clinic; managers have discussed creating a Director of Nursing position to develop and implement solutions to the public health nursing shortage. About 20 positions at the clinic are RNs; they are mostly employed to conduct triage. They also provide some clinical care but the clinic uses LVNs and medical assistants to support the clinicians. Aside from the public health nursing shortage, management reports very few problems with meeting nursing needs; unlike many places in California, RN positions at the Sacramento clinic are fully staffed. Working at the clinic has many attractions and benefits and the clinic enjoys very high retention of nursing staff. Elements that clinic leadership wants to work on include increasing the level of initiative among triage nurses, staff and career development, revision of clinical protocols and reviewing questions of equity for LVNs and RNs.

BE SMART
(Behavioral Education Self-Management and Risk Reduction Therapy)

The BE SMART program takes an interdisciplinary approach to chronic disease management by using teams of health educators, pharmacists, dieticians, physicians and others to educate and enable patients to better manage conditions including asthma and diabetes. Providers conduct case review, planning and group visits that incorporate their particular areas of expertise. This approach has broadened perspectives on care for both providers and patients, and has expanded practice opportunities that benefit other patients who use clinic services.

Other workforce issues and shortages

Dentistry: Three FTE dentist positions have been open for three years at the clinic. It is hard to recruit due to competition with the private sector over salaries. Managed care has not yet affected the dental community, it is very hard to recruit volunteer dentists, and UOP does not place dentists in the county system. With the money allocated for unfilled positions, a dentist is paid on an on-call basis.

Pharmacy: The pharmacy is working at capacity[51] and has a current vacancy rate of 1.5 FTE. Pharmacy positions at the clinic are very hard to fill due to salary competition and low supply of graduates coming out of training programs. In addition, the clinic faces a shortage of pharmacy technicians; while the clinic may be able to attract some older, experienced pharmacists near retirement and committed to public service, technicians are not as likely to be able to bear the pay differential between the public and the private sectors. The clinic has committed to using robotic prescription-filling machinery in the not-so-distant future. However, although high technology automation may help, it will not solve the shortage at the clinic; the clinic already runs on a minimum pharmacy staff and a minimum number of people will always be needed to supervise and run any pharmacy technology. The current strains on the pharmacy reflect one negative impact of the increased physician efficiency; as clinicians work better and faster, the workload grows for ancillary units such as pharmacy and radiology.

Radiology: The clinic has had a radiology technician position open for one year; applicants "laugh" when they hear the salary, which is considerably less than what the private sector offers ($15.36/hour versus $20+/hour). To keep up with increasing patient loads (100 exams per day), clerical staff is being trained to do basic registration processing to allow the technicians and radiologist to deal exclusively with imaging. Compounding the problem at the front end is the lack of good preparation in math and sciences in the local public schools resulting in fewer students for the technician training programs. The increased patient load and staffing shortages threaten to affect the quality and safety of care provided. The radiology department has become the default checkpoint for patients who try to obtain help at different clinics. Although staff including doctors at the various clinics could check the computerized record system, which contains information on the number and dates of x-rays for all patients, they do not always do so, resulting in possible

[51] A breakfast truck arrives on site at 7 am for people waiting in line for the pharmacy, which opens at 8 am. This informal structure developed because awareness of the delays in service was well understood by the clinic's patients. Demand for pharmacy services is so great that many patients return for two to three days in a row in order to be served.

overdoses of radiation for individual patients. By default, the radiology department is the safety checkpoint for patients referred from the various clinics for x-rays. By scrutinizing each patient's records, the radiology department identifies those patients who, referred by different physicians at different clinics, have received a radiation study or x-ray procedure. Consequently, the radiology department confirms procedures to prevent unnecessary radiation exposure and notifies the ordering physician.

Public health laboratory: As technology and biotechnology industries grow, the increased competition for scientists has had a negative impact on the staffing at public health laboratories. Current workers at the Sacramento laboratory are mostly four-year liberal arts graduates who cannot secure other well-paid and benefited jobs. New biology and microbiology graduates coming out of college and university programs can make more money in the private sector and are not as likely as other health care professionals to have a commitment to local public service (contrasted with national, prestigious public health institutions such as NIH and CDC) that would carry them through the DHS licensing requirement courses and internships that result in a public health laboratory job for less money.

Monthly all-staff meeting and training sessions

Each month, all staff from the system clinics meet as a whole to share information and to participate in up to four hours of training on topics ranging from bioterrorism response to teaming and quality improvement. The all-staff meetings are relatively new and staff whose tenure pre-dates this innovation are enthusiastic about the improved communication between clinic sites that has resulted from the ability to get to know staff face-to-face and across hierarchical boundaries. Previously, staff from different clinics or from different position levels (who served many of the same patients) miscommunicated or resented "the run-around" they perceived, that was instead a result of poor communication between sites. Now that all staff have the opportunity to solve problems and learn together, relations and operations among clinic staffs have improved greatly. Each clinic takes turns remaining open for patients to allow staff from other sites to attend.

North County Health Services, San Marcos Health Center

founded 1979

Patients seen, 2000: 24,867

Total visits, 2000: 68,812

Patients who are farmworkers or dependents: 6,151 (24.7%)

FTE Clinical Staff, 2000

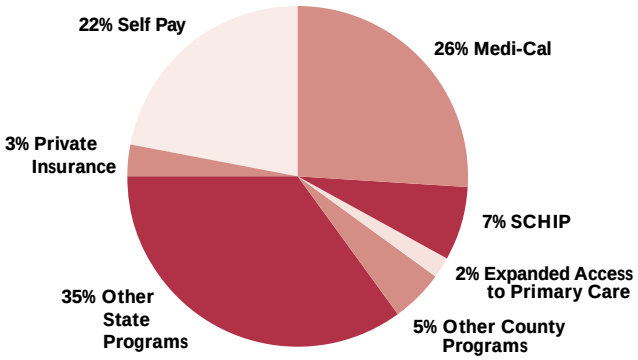
Physicians	8.12
Family Nurse Practitioners	3.3
Certified Nurse Midwives	2.66
Dentists	2.13

Selected budget data, 2000

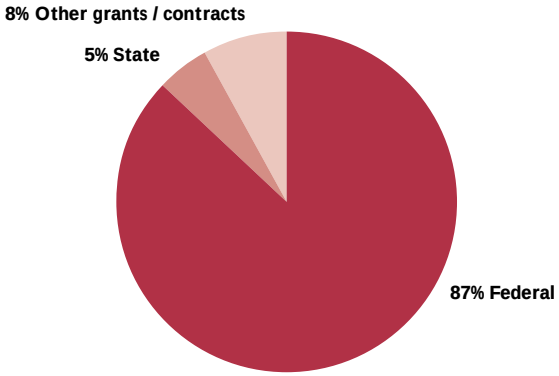
Total operating revenues	$6,723,412
– net patient revenues	$4,248,011
– grant/contract revenues	$1,164,017
Total operating expenses	$6,839,315
Salaries & wages as % of operating expenses	54.8%
Percent of patients, English not primary language	50%
Percent of total patients under 200% FPL, 2000	98.87%

Source: OSHPD Annual Utilization Report of Primary Care Clinics, 2000, www.oshpd.ca.gov/hid/infores/clinic

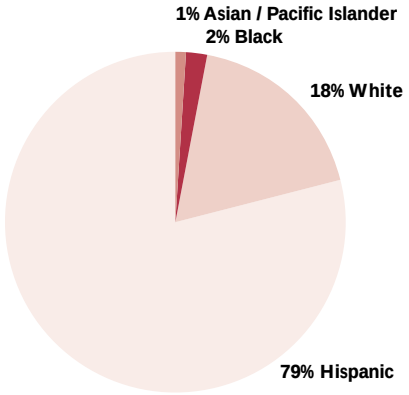
Major Sources of Patient Revenue, 2000



Major grants / contracts from government and private sources, 2000



Patients by race and ethnicity, 2000



7 Case Study: North County Health Services, San Marcos Health Center

San Diego County has no county clinics but instead contracts health services for the indigent with over 20 non-profit sites. North County Health Services (NCHS) is a non-profit healthcare corporation comprised of eight primary care health centers in five northern San Diego County cities. In addition, NCHS has a Women, Infants, and Children (WIC) supplemental nutrition program, and a large HIV/AIDS Community Case Management program. There is a volunteer Board of Directors of community representatives, and business, legal, and healthcare professionals, and a CEO who manages NCHS operations. The San Marcos Health Center (SMHC) is NCHS' largest health center with 42 percent of patient visits in 2001. SMHC was the focus of this case study as it contains the wide range of services provided by NCHS. It is co-located with administration in a social services complex with a church, WIC office, HIV/AIDS case management, a diabetes diagnosis and treatment project, a *promotora* training project, and several small specialty businesses. SMHC is adjacent to a dense neighborhood of modest homes on one side, and busy multi-lane roadways on the other. Until recently many patients used public transportation to travel to the clinic, however, changes to local public bus routes have made this option less convenient. To respond to this need, NCHS used a small grant to buy a patient shuttle that travels throughout the city of San Marcos to transport patients to and from the doctor's office.

Mission Statement

Improve the health status of our diverse communities by providing quality healthcare that is comprehensive, affordable, and culturally sensitive.

Strengths

- *Strong position in community*
- *Short and long-term planning*
- *Retention among staff*

Challenges

- *Bilingual skills required among staff*
- *Limited public transportation options to clinic*
- *Short supply: pharmacists, radiology technicians, nurses, dentists*

SMHC occupies 40,000 of the 80,000 square feet tinted glass building in which it is housed. The administrative offices, warehouse, custodial facilities and other non-clinical spaces are mostly hidden from public view. Patients are assigned to adult medicine, pediatric medicine, or prenatal care. The adult and pediatric medicine practices, one on each floor, operate in a separate but fairly parallel way. Both the pediatric and adult centers are divided into "pods" consisting of a provider office, a small number of exam rooms, a nursing station, and its own supplies, where board-certified/eligible physicians and nurse practitioners provide health care. Clinicians of NCHS staff five hospitals in San Diego

County and assist in pediatric, obstetrics and gynecology, and internal medicine. Only board-certified physicians have hospital privileges, hence when a client must be hospitalized, a designated physician will closely monitor the patient's care. The medical professionals at NCHS must work as a team to provide quality healthcare services to clients. NCHS' Chief Medical Officer (CMO) indicates that local hospitals have been unwilling and unable to grant privileges to mid-level practitioners. This creates an environment where physicians are more desirable for call than mid-level practitioners. Physicians can provide care in the health center, on call, and hospital settings reducing emergency room visits, unlike mid-level practitioners whose place of work must be limited to the health centers.

At SMHC, many basic and supplemental health services are available to patients including: radiology, dental, pharmacy, on-site laboratory, pediatric cardiology, gastro-enterology, mental health and counseling, prenatal care, Medi-Cal application assistance and ADHD (Attention Deficit and Hyperactivity Disorder) diagnosis and treatment. The CMO describes this as a "one stop health center shop" approach to medicine.

Patients of NCHS are often referred to the health centers by word of mouth; this is especially true for the migrant and Latino patients, who constitute about two-thirds of NCHS' clientele. NCHS' 50,000 patients receive low-cost medical and dental care, based primarily on their income and the size of their family, commonly referred to a sliding scale discount. The medical receptionist screens clients for specific fee schedules based on their financial and family situations. Patients are often medically uninsured, face cultural and linguistic barriers and income instability. For these reasons and others, NCHS has several programs (grant, state or federally funded) that subsidize the cost of care for children, teenagers, and adults. These grant and government-funded programs make it possible for most persons to have an affordable medical consultation at the health centers of NCHS. Furthermore, NCHS contracts with several managed care plans in an effort to make health care available to everyone.

The workforce of NCHS mirrors the communities that it serves. Consequently, NCHS makes it possible for its own employees to receive care within the network under their health insurance package. The majority of employees and their families opt to use medical and dental services at NCHS health centers.

Workforce

NCHS employs approximately 40 FTE clinicians, who together provided care to almost 50,000 patients who made about 175,000 medical and dental visits in 2001. With a 3.5:1 ratio of physicians to mid-level clinicians (nurse practitioners, physician assistants), the practice is physician-oriented. This is an unusually high ratio of physicians to mid-levels

in community clinic models. The CMO justifies this ratio by the complexity and range of patient needs, "most patients do not distinguish between a pediatric nurse practitioner and a pediatrician. In fact, the patient makes no distinction between clinicians, referring to both as "doctor" or "doctora."

The recruitment of board-certified physicians is an on-going challenge, however the move to an all-certified physician staff was an intentional decision in an effort to improve patient care, provide call and hospital coverage, as well as be an attractive recruitment incentive. The CMO described a perception of community health centers as "second rate" employers, but the organization's requirement of board certification serves to abate this perception among physicians. Another attractive recruitment tool for physicians is the company's willingness to support and promote the clinicians own clinical interests, including establishing and running specialty clinics on-site.

NCHS promotes its vision to be the employer of choice, and a training institution. NCHS serves as training site for nurse practitioners, dentists, physicians, medical assistants, etc. The organization's contractual agreements with other health care and academic institutions such as University of California San Diego, and Tufts University promote preceptorships, fellowships, and residencies for health care students.

Overall, the administrators believe that NCHS' competitive position in the health workforce market is relatively strong. Extensive benefits, a commitment to keep entry salaries within five percent of market, and the advantage of its San Diego County location make NCHS' recruitment in part successful. Competitive compensation and benefits, work/life balance with scheduling and time off, comprehensive career laddering programs, and an employee friendly work environment allow NCHS to maintain a good retention rate. Finally, the employee's understanding of the mission, vision and core values foster a spirit of family at NCHS, and aid with retention. "Time off," the Human Resources administrator stated, "is often more valuable than money." "The issue of recruitment is also one of retention," says the Human Resource Administrator, "it is not just getting them, it's keeping them," she concludes. The clinic reports retaining 75 percent of all employees in 2001, an improvement of 18 percent since 1998, and notes that 70 percent of resignations were unavoidable. Awards attest to the clinic's success: NCHS received an award in 1999 from the Work/Life Coalition for Leadership in Work/Life policies and was awarded semi-finalist status for Work Place Excellence in 2001 by the San Diego Society for Human Resources Management.

Most of NCHS' staffing problems mimic general California health workforce shortages. Pharmacists, radiology technologists, RNs and LVNs, dentists and dental hygienists are all in short supply. The highest turnover rates were for LVNs and RNs,

followed by medical assistants. Compounded with the supply problem is the one of cultural and linguistic skills. Because of the ethnically diverse population makeup of California, and specifically the populations of north San Diego County and community clinics in the area, it is essential not only to have qualified staff, but staff that can communicate sensitively to clients in their own language. Quality care means the provision of great services or products, but also great customer service to satisfy the client's needs.

Twenty percent of all patients are migrants/seasonal farmworkers and 73 percent of all patients characterized themselves as non-White. The majority (60 percent) of NCHS patients prefer to communicate in Spanish. Hence, "hiring bicultural and bilingual staff is a necessity, and meeting this need is a constant challenge," state NCHS administrators. While most clinicians speak Spanish, NCHS leaders admit that there is room for improvement in linguistic and cultural competence. While bilingual, bicultural RNs and LVNs are very difficult to hire, the organization's needs for bilingual and bicultural health educators were said to be "next to impossible" to meet. NCHS has only recently developed a mental and behavioral health program that consists of a part-time psychiatrist, two psychologists, and two licensed clinical social workers. The inability to effectively recruit additional bilingual mental and behavioral health workers was identified as the "chief" barrier to expanding these services.

The Comprehensive Prenatal Services Program (CPSP), North County Health Services

In February 2002, a pilot CPSP program began at the Oceanside Clinic of NCHS. The staffing of this pilot program helped solve the dilemmas of two existing programs. First, upon receiving a CPSP grant, NCHS Women's Health services needed to hire rare bilingual social workers and dieticians. At the same time, the NCHS WIC program wanted to provide full-time employment for their part-time dieticians and social workers. The programs were two doors away from each other; combining staffing satisfied the needs of both programs while also enhancing patient convenience. By combining staff and designing a combined scheduling program, patients were able to obtain care through one office. Social workers and dieticians with the combined program offer case assessment, patient orientation, advocacy and health education to low-income expectant mothers, and counseling and treatment for diabetic expectant mothers. The WIC staff enjoy the increased patient care challenges this program has brought. The directors of both programs hope that this program can inspire replication of staff-sharing for other clinics providing WIC and prenatal services. In only the first three months, over 100 patients have been served.

Venice Family Clinic

founded 1974

Patients seen, 2000: 12,680*

Total visits, 2000: 52,488

* for main clinic site only

FTE Clinical Staff, 2000

Physicians	17.07
Family Nurse Practitioners	0.13

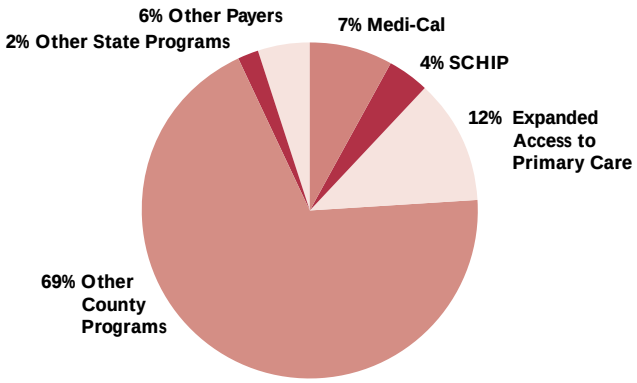
* Dental services are contracted with UCLA School of Dentistry

Selected budget data, 2000

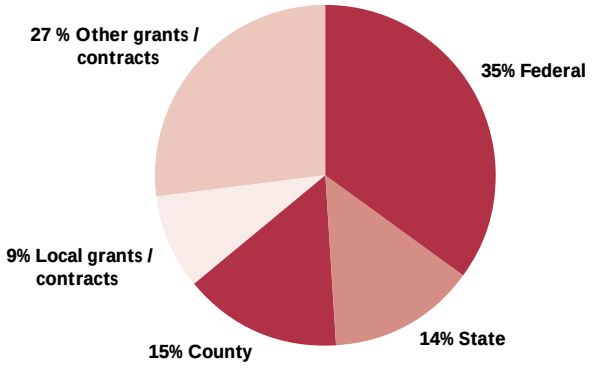
Total operating revenues	$7,857,424
– net patient revenues	$2,294,938
– grant/contract revenues	$2,532,922
Total operating expenses	$7,856,092
Salaries & wages as % of operating expenses	74.3%
Percent of patients, English not primary language	60%
Percent of total patients under 200% FPL, 2000	95.85%

Source: OSHPD Annual Utilization Report of Primary Care Clinics, 2000, www.oshpd.ca.gov/hid/infores/clinic

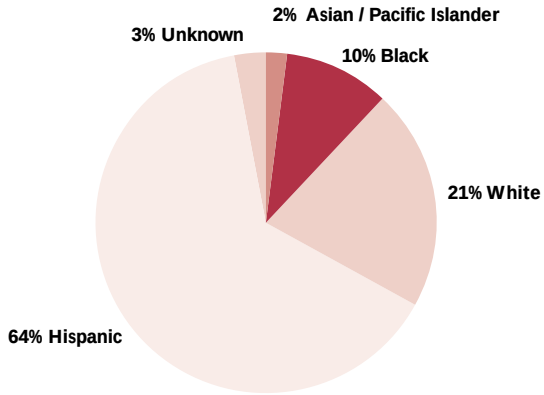
Major Sources of Patient Revenue, 2000



Major grants / contracts from government and private sources, 2000



Patients by race and ethnicity, 2000



8 Case Study: VENICE FAMILY CLINIC

The Venice Family Clinic (VFC) sees approximately 17,000 patients in 83,000 visits per year, and is the largest free clinic in the U.S. As part of the public-private partnership program of Los Angeles county, care is provided for free to low income uninsured adults and children living in Service Planning Area 5. This area has historically been a poor Hispanic community near a well-known beach area, but is now beginning to experience gentrification and traditional residents may be leaving the area. VFC expects that it may need to add to its clinic network (now including three clinic sites) in order to "follow" its patient population.

Mission Statement

To provide comprehensive primary health care that is affordable, accessible, and compassionate for people with no other access to such care.

Strengths

- *Volunteer physician program*
- *Fundraising*
- *Innovative workforce positions*

Challenges

- *Uncertainty regarding future funding*
- *Managing follow-up care for the homeless*
- *Retaining qualified security and accounting staff*

The clinic's establishment reflects its role in the community: in 1970, residents of Venice, angered by the county's decision to locate a clinic in Santa Monica, protested outside the Burke County clinic's opening reception. They were invited into the reception to discuss their concerns with Dr. Phillip Rossman. Surprised at the lack of services available to these residents, Dr. Rossman and other physicians began providing care after hours in the nearby UCLA School of Dentistry community site. Today, neighbors still view VFC as "their clinic," although services have expanded into other neighborhoods, including ironically, the Burke County Clinic that prompted VFC's founding.

Fund-raising is a major focus of the organization and VFC is extremely successful in private fund-raising efforts and solicitation of volunteers. The clinic's historical role in providing innovative care for indigent patients, its public-private partnership with the county, and its name-recognition position the organization to garner support many community and free clinics lack. Clinical staff and volunteers are encouraged to recruit in any social situation, even in personal medical visits to their own doctors. The clinic has the reputation of running smoothly with limited paperwork for volunteers who can choose the most convenient hours to serve. Doctors may also choose to provide primary care or specialty clinics and they have the support of staff physicians and clinicians during their service hours. Any follow up care is coordinated by paid staff.

Ecology of practice

Though reception areas in the two main buildings are cramped and a line often forms out the door during peak times, the clinic waiting rooms are pleasant and orderly thanks to security control of patient flow. There is a staffed play room for children and treatment areas are behind locked doors. The front desk area is bustling and well staffed. Exam rooms are well equipped and of typical size. The eye clinic is quite modern since this was required to attract an opthamologist volunteer and paid optometrist. Dental services are provided at the UCLA School of Dentistry and paid for by a variety of funders. The pharmacy is located within a central office behind several locked doors and hallways. Case manager desks are open to a hallway, but separated by glass dividers. During clinic hours, there is a constant but controlled bustle and employees seem to be in good humor, interacting with patients in an easy-going way. Currently, administrative staff are cramped in shared back offices. With completion of a current construction project, this problem will be relieved in addition to the clinic's gaining seven new exam rooms.

Family, social and mental health services are provided in a separate clinic building. This environment much more resembles an office building than a clinic. A staff of six social workers and therapists serve patient needs for mental health counseling and domestic violence intervention. Special programs also include a reading program and Early Head Start program. A teen clinic and women's health clinic operate in additional clinic locations.

Continuity of care is good for most patients, but a challenge for homeless patients. Same-day appointments are scheduled for homeless patients and time is allowed to perform as much as possible in one visit since it is difficult to elicit compliance with routine follow up appointments. Over half of the clinic's 25 percent no-show rate is for homeless patients who may also obtain showers and donated clothing from the clinic. Many homeless and non-homeless patients trust the clinic so much that they present with critical or emergency conditions that require immediate transfer to a local emergency room. Although important, trust sometimes backfires for VFC as numerous out-of-district or insured patients obtain free or low-cost care through the clinic without revealing their ineligibility or ability to pay. This means that tens of thousands of dollars of services each year are provided to those who have other options. Case managers and security staff have played an important role in limiting this abuse of services.

Not your typical workforce challenges

VFC is affiliated with UCLA; staff are UC employees paid by the Venice Family Clinic. This entitles staff to the same benefits as university employees. Their connection to UCLA medical training programs enables them to provide clinical sites for residents who

enjoy the experience and often would like to stay, however trends in physician recruitment work against the clinic in that they can no longer guarantee federal loan repayment nor offer high entry-level salaries. The UCLA affiliation has been helpful in terms of tapping a larger pool of potential workers. The benefits of UCLA are a recruiting tool for most clinical and operations positions. Yet, this affiliation is not without its costs. While it is clinic funds that pay staff , the clinic must adhere to freezes and budget or staffing restrictions just like any other UCLA entity.

Turnover is fairly low at VFC, but the clinic has difficulty recruiting qualified security and accounting staff. Security staff not only guard the door, but control patient flow, facilitate patient check in, and provide information about the patient's status and behavior to clinical staff. Handling the myriad reporting requirements of so many funders falls to accounting staff who are not trained to complete the unique narrative reports. Although a position has been designated for this reporting, there has been high turnover such that portions of other staff time have been carved out for this purpose. So far, a satisfactory system of dealing with so many different reporting requirements has not been found. Relatedly, the clinic has established no comprehensive way of evaluating its own work and assessing its successes. Although many students, faculty and researchers want to study their patient population, the clinic has no way of consistently studying its own operations or programs. Funding can be a double-edged sword: the clinic is very successful in attracting donations to support programs, but it is difficult to obtain general operations funding from foundations or charitable organizations. As the medical director commented, "all the special programs in the world are not going to help the next kid who comes in with an ear infection." Similarly, workplace safety and support is typically not the focus of fund-raising or allocation priorities. Much of the equipment at VFC has been donated, including some cast-offs. There is a growing concern about repetitive stress injuries caused by the use of old equipment. A clinician commented that the mindset of running the clinic on donations creates a "have not" mentality that may communicate to staff that their needs are secondary to those of patients. This sentiment is shared by overburdened operational staff who witness large proportions of money dedicated to patient care when they are unable to meet productivity demands due to insufficient staffing and incentives. For example, a university freeze of administrative positions several years ago cut the accounting staff while efforts to solicit more donations to compensate for the economic downturn increased the work required to manage the funds.

Although the nursing staff at VFC is small, RNs occupy management positions with great responsibility. Currently, VFC nurses are classified at the Certified Nurse II level within the UCLA system. Recruiting nurses is difficult because the work is closer to the Certified Nurse III role. VFC is assessing the problem of under-classification, but hiring

is made difficult when applicants compare the pay and responsibilities with similar positions in the UCLA system. Administrators believe there is no financial advantage in employing mid-level staff when a nurse practitioner costs nearly as much as an entry-level physician, but cannot take call, supervise the residents, or work without backup. The system of physician-centered care, progressive utilization of certified practitioners, and large proportion of volunteers often creates role confusion and misunderstandings that must be constantly monitored to maintain a positive work environment.

Of the paid medical staff, more than 80 percent are women. The medical director speculates it is because women are willing to work in a collegial family-oriented culture for lower salaries. Women also seem more willing to trade salary for lifestyle gains. The work structure of the clinic is physician-centered, yet all clinical staff exercise their skills and judgements based on patient need rather than professional designation. Although many physicians have volunteered at the clinic for over 20 years, and physician volunteers are loyal, there are several complications of managing this staffing model. Consolidation of physician practice in the area within the past ten years has decreased the flexibility with which doctors can provide free services or dedicate time outside their work schedules. Now that the market is requiring doctors to see more patients per day, many physicians do not have the energy to work an extra four hours per week. The old system of referring VFC patients for "off the books" specialty care is hindered by strict guidelines of groups and management organizations. Secondly, since specialist physician services are done on a completely volunteer basis, the recruitment and supply of particular specialties fluxes with the availability of doctors to serve. An example includes cardiology: last year the clinic had none, this year it has four.

Staffing innovations

The work structure at Venice Family Clinic allows allied health providers to practice at a high skill level. Tasks traditionally performed by medical assistants, such as escorting patients and taking vital statistics are performed by trained patient care assistants, a volunteer position often occupied by health sciences or medical students. Volunteers agree to serve 3–4 hours per week and undergo a three-hour training session. They are then paired with a staff member and evaluated on a list of skill competencies. They must demonstrate all skills to be allowed to operate independently. Each year, over half the services provided by VFC are done by the system's over 2,000 volunteers, 500 of whom are physicians.

Medical assistants perform non-invasive procedures often limited to nursing staff in other care settings, and they assist with exams. Several former medical assistants have used their positive experiences as a basis for further nursing education and have returned to work at the clinic or to volunteer. A downside to the empowered role of medical assistants

at VFC is the unusual dynamic created in relations with physicians. Medical assistants often approach patient care in ways that are perceived as overly sensitive to patient needs, or their advanced skills are taken for granted by volunteer physicians who "overuse" them for charting, analysis of histories, etc. One staff member commented that doctors sometimes confuse the medical assistants with nurses, expecting them to perform at advanced levels without recognizing the extra efforts they put forth.

Integrated services model

Since VFC operates primarily as a free clinic, medical providers can approach patient care in a more global manner, referring patients to needed services whether they be mental and behavioral health, social, or specialized health services including vision services, adolescent services or women's health care. Since social support and mental and behavioral health interventions are incorporated into the same buildings and care management structure, there is less stigma and fewer access barriers for patients, enabling them to use specialized services as a part of their regular primary care. The integrated system of care also facilitates communication among different categories and levels of health providers who are able to monitor complex patient needs in a more efficient way. It has also helped administrators to adjust programming and services according to trends they see in patient care.

All patient care is provided in teams led by a staff or volunteer physician and supported by medical assistants. Registered nurses are few and serve in triage roles. Since all patients are seen through appointments, except for homeless patients scheduled during daily walk-in hours, the clinic coordinator is able to structure teams that match patient needs. Patients spend significant time engaged in care. This allows time for the exam as well as the opportunity for patients to discuss needs for care and additional services with a Clinical Case Manager. This position is an innovation in the community clinic, and regarded as "what makes the clinic work." The position has recently been copied by the Los Angeles Free Clinic. Case managers organize and schedule all necessary follow-up care for patients, including off-site visits with volunteer specialists and laboratories that contribute services to VFC in their own facilities. They also refer patients to eligibility workers to assess insurance eligibility. Case managers become a contact person and advocate for patients, and are often so trusted that patients share relevant information with them that they do not even feel comfortable sharing with doctors. Case managers facilitate patients acting as "partners, not consumers" in their care; a relationship viewed as essential by VFC staff.

Humboldt Open Door Clinic

founded 1972

Patients seen, 2000: 9,946

Total visits, 2000: 27,461

Patients who are farmworkers or dependents: 100 (1%)

FTE Clinical Staff, 2000

Physicians	2.46
Physician Assistants	1.61
Family Nurse Practitioners	1.88
Dentists	1.83

Selected budget data, 2000

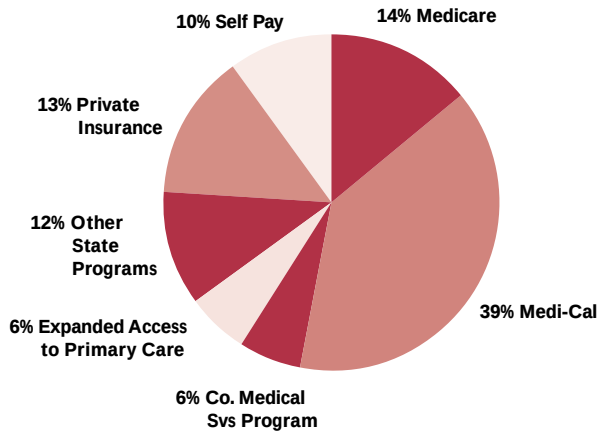
Total operating revenues	$3,137,254
– net patient revenues	$2,217,158
– grant/contract revenues	$796,552
Total operating expenses	$3,132,918
Salary expenses	$2,312,795
Salaries & wages as % of operating expenses	73.8%

Percent of patients, English not primary language 6%

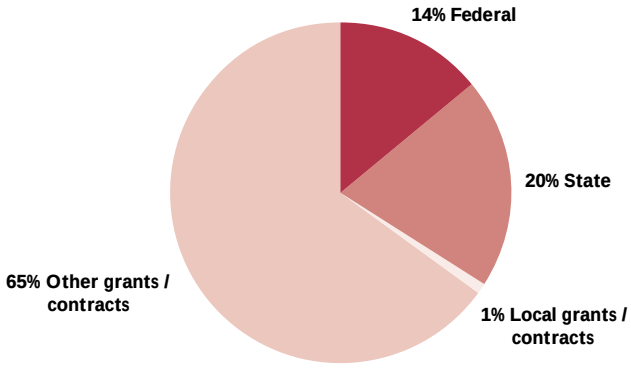
Percent of total patients under 200% FPL, 2000 92.61%

Source: OSHPD Annual Utilization Report of Primary Care Clinics, 2000, www.oshpd.ca.gov/hid/infores/clinic

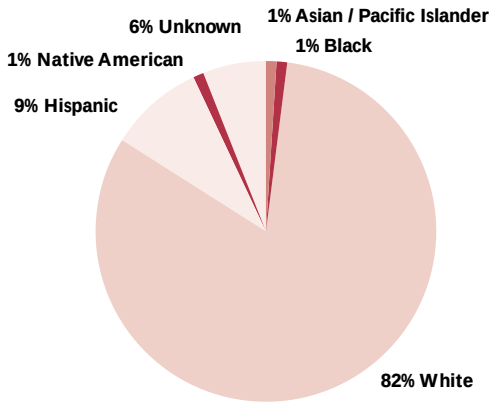
Major Sources of Patient Revenue, 2000



Major grants / contracts from government and private sources, 2000



Patients by race and ethnicity, 2000



9 Case Study: HUMBOLDT OPEN DOOR CLINIC

Open Door Community Health Centers (Open Door), a system of eight clinics that serve the primary care needs of 33,000 residents in northwest California, must respond to financial and population challenges that are the reality of many rural health care providers. Its two Arcata sites, the Humboldt Open Door Clinic and the North Country Clinic provide forty-two percent of Open Door's services. These clinics are located eight blocks apart in center of town. Humboldt Open Door Clinic is a patchwork of public areas, administrative offices, examination rooms and hallways that overflow from the commercial building that serves as its main façade through retrofitted passages to fill an adjacent Edwardian house. Open six days a week, its staff includes four physicians, four mid-level providers, a mental health counselor and two dentists who provide primary care and dental services, some specialty clinics and telemedicine consultation. Also housed in a commercial hybrid is the North Country Clinic, which has four physicians, five mid-level providers and a counselor on staff. North Country Clinic provides primary care and prenatal services weekdays and Saturdays.

Mission Statement

The community clinics located in Humboldt, Trinity and Del Norte counties, have joined together as the North Coast Clinics Network to accomplish the following purposes:

- *to coordinate the development of cooperative business plans which improve the quality of care and efficiency of Network members,*
- *to advocate for innovative strategies that integrate all community providers into a comprehensive and accessible system of high quality health care,*
- *to promote public knowledge and understanding of the role of community clinics and the challenges facing providers in rural areas.*

Strengths

- *Leadership involvement in state and national associations and advocacy groups*
- *Innovative and flexible employee scheduling options*
- *Loyal staff*

Challenges

- *Rural site*
- *Dentists and psychiatrists shortages*
- *Coordinating with educational institutions as pipelines*

Arcata has the feel of a New England coastal village; its gentle hills, dense rows of cottage-like homes and specialty shops are picturesque. Arcata's local university (Humboldt State), natural beauty and relatively reasonable cost of living afford its residents opportunities other towns of comparable size would be hard-pressed to rival. For these reasons, it should not be surprising that neither of the network's Arcata sites have as much difficulty meeting their staffing needs as some of the more remote clinic sites.

The relative abundance of health workers enjoyed by the agency's two Arcata sites, however, is not experienced by some of Open Door's other clinics. Located 90 miles (two hours)

north of Arcata on the Pacific coast is Open Door's Crescent City Clinic. This clinic has similar management, comparable salaries/wages, the same employee benefits and the same towering redwoods and ocean views as its sister clinics in Arcata. However, staffing at the Crescent City facility is a source of constant frustration for Open Door's executives. Unlike Arcata, whose college town atmosphere and relative cultural diversity are a significant draw to potential employees, many health workers feel "marooned" in the poorer, more isolated Crescent City site. The difference in maintaining adequate staffing in these two locales was reported to be "like night and day." Some provider openings at this site have gone unfilled for long periods of time or have experienced extremely high turnover rates.

Open Door's free drop-in teen clinic

"Absolutely Confidential Hassle-Free Services FOR TEENS (male and female)" read green business cards distributed to Arcata teens. They refer to a peer-run drop-in clinic conducted each Wednesday by the Humboldt Open Door Clinic. HIV testing and counseling, birth control services, and STD, hepatitis B, and pregnancy testing are among the health services offered to area teens. The teen clinic is staffed by its director and medical provider, Susan Riesel (a licensed physician assistant) and three site-trained high school students who function as case coordinators. The clinic's teen workers greet the patients, manage the requisite preliminary medical and billing paper work, and provide general information about available services. The teen clinic has a separate entrance and reception area to afford maximum privacy, and its patients can be referred directly to Open Door or other medical providers when necessary. "The clinic is known among local teens as a safe place to go when you need help or have questions," says Riesel. "Everyone needs a place like that."

The contrast in staffing the two clinical settings brings into sharp relief the fragility and mercurial nature of rural health workforce recruitment; as Open Door's Executive Director, Hermann Spetzler stated, "the distance of the nearest Costco can be the difference between success and failure." While the advantages of living and working in a rural community are significant, for many health workers the price to be paid is too high. Limited social options, inability to specialize one's practice, lack of educational choices for one's children, restrictive occupational choices for spouses and partners, and transportation difficulties were cited as significant barriers to workforce recruitment and retention. In addition, some rural institutions suffer from professional perceptions associated with practicing in a non-urban setting, including a lack of regular interaction with colleagues with similar professional interests, increased demands for flexibility and a broader scope of practice by employers, and diminished opportunities to provide clinical instruction. These competitive disadvantages coupled with inherent limitations

of economies of scale create a challenging situation. "Rural areas become feeder systems for large urban-based systems," said one Open Door executive, referring to the brain-drain that occurs in many rural areas.

Open Door's administrators have taken a practical approach to meeting workforce needs and maintaining self-sufficiency. For example, one aspect of Open Door's practitioner recruitment success involves state or federal loan repayment opportunities. The temporary nature of this incentive brings with it an inherent high turnover rate among employees who complete their required service. Rather than wasting resources resisting this natural condition, administrators have found that accepting it and building relevant recruitment programs around assumed turnover creates a less crisis-oriented recruitment process. In addition, Open Door has a core of long-term employees, constituting the majority of its workforce, who were drawn to the area by quality of life issues. Open Door hopes to improve retention of young providers through a heavy investment in information technology to facilitate and maintain academic collegial relations, lessening the separation many feel from academic or urban medical centers.

Forging non-traditional partnerships to improve care or efficiency

The disjointed nature of our health delivery systems and internecine nature of its professional groups are perennial sources of frustration for those who seek to improve the efficiency with which care is delivered. However, potential collaboration with non-health organizations and systems is often ignored in the search for improved efficiency. Policymakers and health industry leaders could make a concerted effort to explore such options: working in tandem with public service systems could improve or expand health-related services by avoiding redundancy, or undertaking collective ventures that might prove too costly were they attempted by independent systems. An intriguing proposal of this sort was offered by Open Door's CEO, Hermann Spetzler, who suggested that local or county health officials could forge partnerships to utilize state and federal facilities such as those managed by the California Highway Patrol or the U.S. Forestry Service, as health care delivery sites. Such facilities are typically well-designed and supplied with state of the art communications and transportation tools. These geographically well-distributed sites could provide urgent or emergency care options in remote rural areas, or serve as hubs for stabilizing and transporting severely sick or injured patients. While this particular partnership may prove unfeasible, questions such as "Why should counties pay to develop a helicopter service when the federal government has one already?" are well worth asking.

Regarding its sustainability, Open Door focuses on primary care and a long-term commitment to its community, having been in operation for thirty years. It is also working toward establishing a "center of excellence" in dentistry, which will help in recruiting and retaining dental providers who will find the new state-of-the-art dental facility attractive. Open Door's active membership in the North Coast Clinic Network and the California Primary Care Association reflects administrators' belief that both vertical and horizontal partnerships and coordination are necessary to protect the interests of the network and its patients when interacting with larger entities such as government agencies and health plans. In particular, CEO Hermann Spetzler's involvement and leadership at state and national levels to address the challenges faced by clinics generally and rural health care clinics specifically has put Open Door into a position of influence and responsiveness to the community it serves.

General workforce issues

Categorically, recruitment and retention for the Arcata sites were said to be somewhat easier than for the other six. However, relative to each site's general recruitment difficulties, there were consistent variations among the specific positions and services. Network administrators identified non-licensed clerical staffing and dentistry as two workforce areas that present perennial difficulty. While Open Door's willingness to provide training makes recruiting clerical staff rather easy, retaining these workers is a constant challenge. Unlike most Open Door employees, clerical staff and medical assistants are able to seek alternative employment without a drastic career change or relocation. Other area employers can lure them from the clinics with higher salaries or other benefits, and they recognize the skills possessed by these workers.

Dentists were said to be difficult to recruit because the opportunity cost of working in a community clinic setting is very high relative to private practice. Network administrators also report that hygienists are almost impossible to recruit and that dental assistants are in short supply as well. The confluence of these factors makes offering dental services with any consistency a struggle for Open Door.

Recruiting physicians, and particularly psychiatrists, was reported to require a concerted effort by Open Door staff. Open Door reported it has a need for additional licensed clinical social workers, but market scarcity presents a significant obstacle. Services delivered by marriage and family therapists are often not reimbursable. Open Door believes that were MFTs to be reimbursable, it could satisfy a host of mental health needs that are not presently served due to workforce scarcity and out-of-pocket costs.

Utilization of retired or semi-retired

Over the next few decades the health care industry, like all businesses, will have to revisit its policies and practices regarding older workers. Nationally and in California, the population is aging at a dramatic rate. The U.S. population of persons 65 and older will increase by 57 percent from 2000–2030 (U. S. Administration on Aging, 1999). In 1960, for every retiree, there were 5 workers, today the ratio of worker to retiree is 3:1. By 2044 the worker to retiree ratio is project to be 2:1 (Social Security Administration — Office of Policy, 2001). While the shifting demographic landscape is foreboding, it also offers new opportunities for creative use of human resources. Innovative bridges between full-time employment and retirement seem to hold promise for the health care industry. Many care delivery organizations, including Open Door, are attempting to utilize retired or semi-retired practitioners to meet staffing needs. Retaining and creatively employing these experienced workers and the intellectual capital they possess must be explored if we are to meet our aging population's health needs.

Salud Para La Gente

founded 1982

Patients seen, 2000: 10,832

Total visits, 2000: 31,760

Patients who are farmworkers or dependents: 8124 (75%)

FTE Clinical Staff, 2000

Physicians	3.6
Physician Assistants	1.8
Dentists *	0

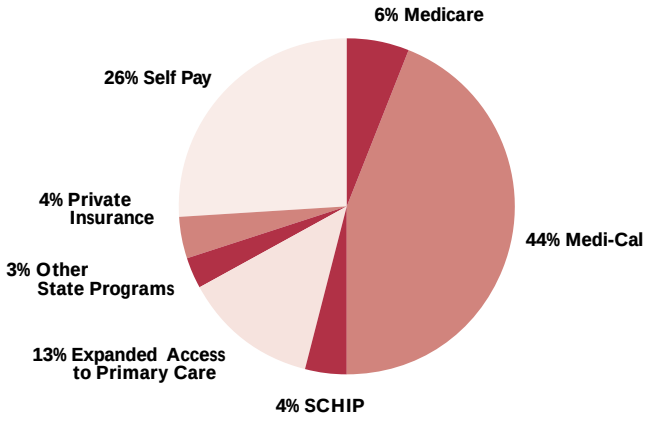
* as noted in text, Salud hired 3 Dentists in 2002

Selected budget data, 2000

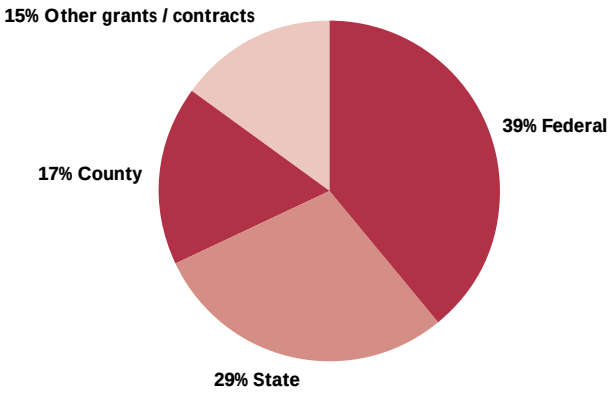
Total operating revenues	$3,303,113
– net patient revenues	$1,773,922
– grant/contract revenues	$1,517,343
Total operating expenses	$3,285,041
Salaries & wages as % of operating expenses	69.1%
Percent of patients, English not primary language	90%
Percent of total patients under 200% FPL, 2000	98.99%

Source: OSHPD Annual Utilization Report of Primary Care Clinics, 2000, www.oshpd.ca.gov/hid/infores/clinic

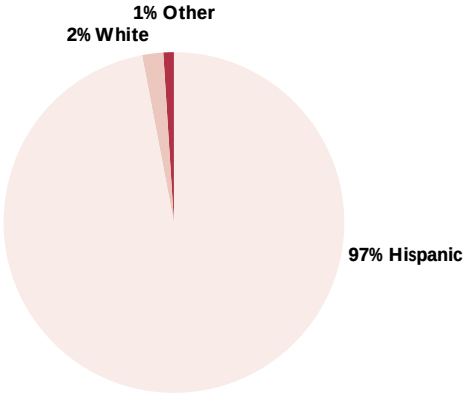
Major Sources of Patient Revenue, 2000



Major grants / contracts from government and private sources, 2000



Patients by race and ethnicity, 2000



10 Case Study: SALUD PARA LA GENTE

Behind the unassuming glass doors on Beach Street is Salud Para La Gente, the clinic dedicated to serving Watsonville's migrant farm workers. Swelling the area's migrant population from 20,000 to about 35,000 during the strawberry picking season of March through October, the workers and their families come from Mexico and the Southwest. In a county already straining to meet housing needs, the workers live in crowded rooms, garages and trailers — conditions that can exacerbate conditions such as asthma and spread diseases including tuberculosis. Workers are paid $6.25 an hour and, although some qualify for Medicare or Medi-Cal, only 30 percent (and rarely their families) are provided health care insurance as an employment benefit. Since the sale of the county hospital to an out-of-state corporation, which is itself facing financial difficulties, Salud has become the only primary care provider for many low-income residents; the clinic also provides acute and triage care to very sick patients who have been discharged by the hospital as soon as legally possible.[52] Official signage at "Salud" is in both Spanish and English but most of the posters and leaflets, and virtually all conversation — among the workers, between practitioners and clients, among the mothers and their children in the waiting area — is in Spanish.

Mission Statement

Salud Para La Gente, a non-profit organization comprised of dedicated individuals, is committed to providing a coordinated network of high quality and cost effective healthcare services to the evolving needs of the Pajaro Valley low-income communities.

Nuestra Misión: Salud Para La Gente, Inc. es una organización sin fines de lucro compuesta por personas dedicadas a proveer una red de servicios médicos. Los servicios son de alta calidad, costo accesible, y son una respuesta a la creciente necesidad de la comunidad de bajos ingresos en el Valle del Pajaro.

Strengths

- *Patient-centered floorplan*
- *Bilingual dental staff*
- *Strong community presence*

Challenges

- *Family practitioner shortages*
- *Pharmacy workforce shortages*
- *Continued need for bilingual/bicultural staff*

Staff and its connection to community

From a free clinic with 12 employees in 1988, Salud has grown to a staff of 75 at two sites and an annual operating budget of $8 million; clinic leaders hope to double the number of staff over the next five years. The clinical staff includes five medical doctors, four mid-levels (physician assistants and nurse practitioners), three RNs, two LVNs, and eleven medical assistants. Benefits are good at the clinic and many salaries are competitive with market rates.

[52] 42 USC Sec. 1395dd (Examination and treatment for emergency medical conditions and women in labor), (1986)

However, clinic leaders reported that people work at Salud because they want to do something for the community and they enjoy the environment. Retention rates are high at the clinic where internal promotion is supported, scheduling is flexible to accommodate family and education commitments, and workers are afforded the opportunity to speak their native Spanish.

With its growth and contributions to the health of the local population, including home visits to provide diabetes, asthma and prenatal care, Salud now has a considerable impact on the community. Several staff members have been invited to sit on local and statewide boards and committees; to the consternation of the local agricultural economy, the voice of the clinic is increasingly relied upon for policymaking at local and state levels. One manager reports that employees are seen as "ambassadors for change."

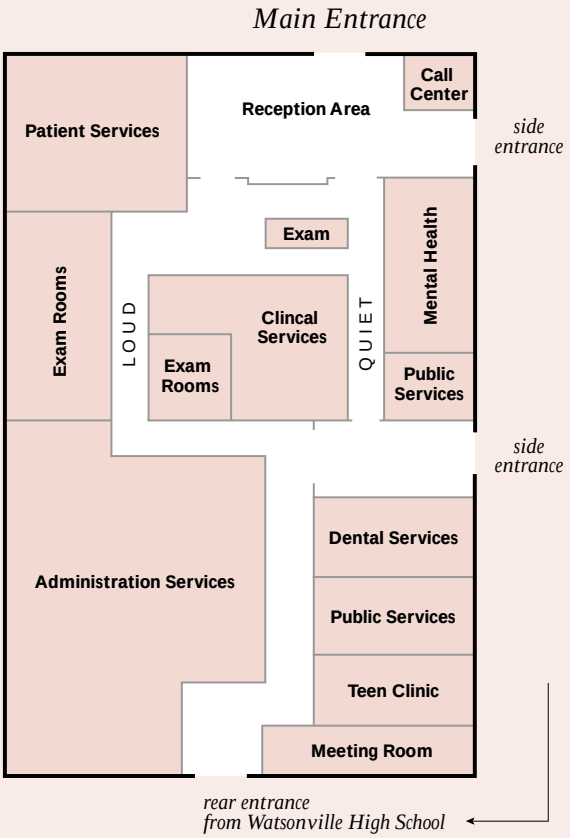
As the community is now listening to Salud, clinic administrators have long relied on the patients' voices to plan and deliver services; the clinic is designed and run with patients' needs in mind. The clinic's floor plan is physical proof of Salud's commitment to patient-centered care. Dedicated areas for teen health care and mental health care are almost sacred spaces, part of the clinic yet sufficiently private to assure confidentiality. The teen clinic even has its own back door, off the alley that leads to the high school campus across the street. Clinic workers share stories of their clients in an effort to comprehend their lives and discuss how services can be tailored to better meet their needs. One clinic leader notes that the life stories of the migrant workers "inspire us to be more sensitive and better citizens." Long committed to the Spanish-speaking workers, clinic administration is now trying to understand the needs of the growing minority of Oaxacan workers, who speak no English and limited or no Spanish.

Wanted: bilingual, culturally competent health care workers

The single most challenging aspect of hiring workers at Salud is finding health care professionals who speak Spanish and English and are fully bicultural. Here, bilingual health care is not merely a politically correct luxury or even a needed service for a minority of an institution's patients. At Salud, where Spanish is the primary language for 98 percent of the patients, it is as important for the doctors to speak Spanish fluently as it is for them to have their medical licenses; there is no wavering from this commitment by the clinic administration.

Salud's leaders make serious efforts to recruit locally. Arcadio Viveros, Chief Executive Officer, sees these efforts as an obligation to the community, "Who will take care of us if not ourselves?" Many of the clinic's workers live in the neighborhood and they or their families originally migrated from Mexico for farm jobs. The clinic draws heavily from its large volunteer and intern pools, from the local high schools (where a health academy was established) or from any of the health care worker programs in the area

Salud Para la Gente — Floor Plan



- **Intentionally-designed loud and quiet areas correspond to patient needs**
- **Privacy for clients of mental health and teen clinic services assured through side entrances**
- **A colorful mural surrounds rear entrance to teen clinic, convenient to a popular alley-gathering spot for high school students**

(including University of California, Santa Cruz, Cabrillo Community College and California State University, Monterey). The clinic also recruits through the state's Career Works program for youth and adults. Entry-level staff members are encouraged to move up within the organization and internal promotions, based on professional development plans tailored to the individual, contribute to the clinic's high retention rates.

Doctors and nurses

Salud finds it difficult to fill positions for doctors, especially family practitioners, primarily because of language and cultural requirements. It is also extremely tough to find professionals who are willing to work for the salaries that the clinic is able to offer. Sitting on the edge of California's Silicon Valley, the area has experienced astronomical housing and cost of living increases. Santa Cruz County, in which Watsonville is located, recently topped the list of California counties for median-priced housing. For professionals who hope to own homes and raise families, it is difficult to accept clinic wages.

Along with much of California, Salud is challenged to hire nurses. Bicultural, Spanish-speaking nurses are particularly few in number. The clinic relies on a number of strategies to fill open positions, including looking directly at its patient population as a pool of potential workers; one of the few RNs at Salud used to work in the fields himself. However, the response to job postings is low; a recent listing was up for three months and received only one inquiry. Because the clinic does not have a pharmacist on staff, the small on-site dispensary is managed by the Coordinator of Nursing, taking another RN away from clinical duties.

Dental care: the unexpected gem

After decades of not being able to offer dental care, Salud now operates a state-of-the-art dental clinic and is rightly proud of its three dentists on staff, an anomaly in California where many clinics struggle to hire dental professionals. With a grant to develop capacity to provide long-overdue dental care to the migrant workers, Salud's new dental unit, complete with computerized records (accessible at each chair) and x-ray processing, was ready before any dentists could be hired. Fortunately, three bilingual, bicultural dentists originally from Cuba were hired after a months-long national recruitment. Catching up on much needed care, these dentists and four assistants saw 900 patients in January, and are now seeing about 50 patients a day. In the near future, the clinic will double the number of chairs available for patient visits and plans to expand its dental clinic hours to nights and weekends. Unsolicited media coverage has been very positive; now that the word is out about Salud's dentists and the good work they are doing, the human resources department has received several calls from Latino dentists interested in working at the clinic. The clinic also hopes to expand its services to include dental hygiene, but expects finding bilingual dental hygienists will be a significant challenge.

Barriers to efficient staffing and patient care

Regulatory compliance is on everyone's mind at the clinic and, while Salud's management team insists on adherence, administration is concerned about the impact compliance has on staffing. For example, although many settings are grappling with insufficient numbers of nurses to run optimal organizations, clinics must currently meet staffing regulations that do not apply to hospitals or private practices. Salud makes every effort not to turn patients away in spite of an insufficient number of nurses on-site to comply with rules about maximum patient load permitted for each nurse present (regardless of the type of care the individual patient is seeking and the availability of other health professionals). The few nurses at the clinic are responsible for significant

Benefits compete where salaries can't

In a 2001 study of member clinics, the Council of Community Clinics (Southern California) found three factors other than salary were important in retention and satisfaction of workers: insurance, retirement and miscellaneous benefits; physical work environment; and cultural work environment. Several clinics participating in the current study have actively involved employees in choosing their preferred benefits. At Salud Para La Gente and San Marcos, many clinicians work less than 40 hours per week, yet all regular employees receive full benefits. Staff may also choose to receive health care for themselves and family members on-site. At Sacramento, San Marcos, Salud and VFC, staff from all locations and all levels participate in a monthly combined meeting and smaller training sessions. All staff agreed this has improved communication, the significance of staff recognitions and reward celebrations, and has increased cooperation among staff working at clinics that function quite differently. The Council's study of retention found that favored benefits such as paid training, educational assistance, employee recognitions and discount programs, free coffee/tea, comfortable well-equipped break rooms and "cost-free" benefits such as flexible scheduling, encouraging career advancement, and casual wardrobe contributed to retention and cost four to ten times less than recruiting new staff. Other benefits contributing to retention included ensuring a safe and pleasant work environment, providing several retirement and savings plans (including 529 plans), incentives and bonuses, and nurturing a welcoming or "family" culture that acknowledged work/life balance.

amounts of paperwork to meet regulatory requirements; this means that they do not have time to provide much clinical care.

Labor organizations can present their own ironic challenges to staffing. During financially difficult times several years ago, workers at Salud organized and today all staff except high level administrators belong to S.E.I.U. The challenge is to continuously work with the union towards common clinic organizational goals to provide quality primary care access to the uninsured and underinsured.

The future

Despite the significant workforce hurdles, Salud continues to thrive. Clinic leaders plan to expand services over the next five years and to double the number of staff. A position dedicated to research and grants administration allows one person to focus on these sources of funding for the clinic. The story of the clinic has been covered recently in several news pieces and the media attention helps the clinic in many ways, including recruiting. As the clinic grows to provide long-needed services, such as dental care, teen health care, and mental and behavioral health care, Salud moves closer to realizing staff goals of being a "one-stop" shop for health care for the local workers.

CONCLUSION

This review of literature and data, combined with the qualitative information from the case studies, provides a comprehensive look at the workforce issues facing California's open door providers of health care, the successes in recruitment and retention that some sites have achieved, and the challenges that remain. The essence of the full set of the findings, which can be found in the Executive Summary, is that California's open door providers:

- Face most of the same health professions shortages and concerns as other institutions in the same geographic area (such as nursing and radiology staff shortages);
- Face additional concerns and complications by nature of their funding, organizational governance, populations served and missions or mandates;
- Have addressed many of the workforce challenges by highlighting their strengths (some professionals will always choose to work at safety net institutions precisely because of their mission and mandate to serve the underserved) and through innovative programs; and
- Confront ongoing problems and challenges that must be addressed to ensure sufficient staffing.

For those who want or need to learn about the challenges of these first two points, this study provides an overview, and additional sources are included for more information. Others already know about the problems and are focused on the solutions of the second two points. For those interested in successful approaches to workforce issues, the case studies offer many examples and can be the starting point for models that may translate, in whole or with modification, to another site. Additional ideas for addressing workforce concerns are offered in this report's recommendations, also found in the Executive Summary. Some of these ideas can be carried out by individuals at single sites; others will require coordinated efforts and strategic plans. The next steps are up to policymakers, institutional leaders, educators, researchers, and health care professionals themselves. The ability of open door providers to continue to serve their essential role as cornerstones of the state's health care delivery system depends on their capacity to attract and retain the right people to do the job.

APPENDIX A: OPEN DOOR PROVIDER HOSPITALS IN CALIFORNIA*

Counties with open door provider hospitals, California 2002

County-owned hospitals

Alameda County Medical Center
Contra Costa Regional Medical Center
Kern Medical Center
Harbor/University of California Los Angeles Medical Center
High Desert Medical Center (Los Angeles County)
Martin Luther King/Drew Medical Center (Los Angeles County)
Olive View Medical Center (Los Angeles County)
Rancho Los Amigos National Rehabilitation Center (Los Angeles County)
Los Angeles County/University of Southern California Medical Center
Modoc Medical Center
Natividad Medical Center (Monterey County)
Riverside County Regional Medical Center
Arrowhead Regional Medical Center (San Bernardino County)
San Francisco General Hospital
Laguna Honda Hospital and Rehabilitation Center (San Francisco City and County)
San Joaquin General Hospital
San Luis Obispo General Hospital
San Mateo County Health Center
Santa Clara Valley Medical Center
Trinity General Hospital
Tuolumne General Hospital
Ventura County Medical Center

Non-profit hospitals that have contracted with local counties to take on California Welfare and Institutions Code Section 17000 responsibilities to care for the county's indigent population

Community Medical Centers (Fresno County)
University of California, Davis (Sacramento County)
University of California, Irvine (Orange County)
University of California, San Diego

*as defined by California Association of Public Hospitals and Health Systems and as used in this report.

APPENDIX B: MISSION STATEMENTS OF CASE STUDY SITES AND SELECTED CAPH MEMBERS

Alameda County Medical Center

Mission Statement: Alameda County Medical Center is committed to maintaining and improving the health of all County residents, regardless of ability to pay.

The Medical Center will provide comprehensive, high quality medical treatment, health promotion, and health maintenance through an integrated system of hospitals, clinics, and health services staffed by individuals who are responsive to the diverse cultural needs of our community.

The Medical Center, as a training institution, is committed to maintaining an environment that is supportive of a wide range of educational programs and activities. Education of medical students, interns, residents, continuing education for medical nursing, and other staff, along with medical research, are all essential components of our environments.

Arrowhead Regional Medical Center

Mission Statement: To provide quality health care to the community.

Community Medical Center—Fresno

Mission Statement: To improve the health status of the community. To promote medical education.

Contra Costa Regional Medical Center

Medical Center Mission Statement: In partnership with the community our system ensures the public access to health care. We deliver comprehensive personalized services with compassion and respect. As a teaching institution we provide innovative leadership in the delivery of primary care, and in the training of family practice physicians, and the vision to be the health care system of choice in Contra Costa County where partnership with patients and employees exists to promote individual and community wellness.

Contra Costa Health Services (CCHS) Mission Statement: Contra Costa Health Services (CCHS) cares for and improves the health of all people in Contra Costa County with special attention to those who are most vulnerable to health problems.

Harbor — UCLA Medical Center

Mission Statement: The mission of Harbor — UCLA Medical Center is to provide high quality, cost-effective, patient-centered care through leadership in medical practice, education, and research. Services are provided through an integrated health care delivery system to residents of Los Angeles County regardless of ability to pay.

Kern Medical Center

Mission Statement: Since 1867 Kern Medical Center has been caring for the people of Kern County. The city of Bakersfield has changed over the last 130 years, but our commitment to giving Kern County the best health care possible has not. Through the years, Kern Medical Center has continued to ensure a long-standing tradition of excellence in patient care.

One of most important contributions to medicine is the over 1,300 loyal, caring and professional staff members that contribute to keeping Kern County healthy. The highest professional standards are expected and employee performance is critical, both to our patients and their families. As a teaching hospital, our staff continues to obtain specialized skills that keep them at the forefront of their profession. By combining these skills with a commitment to customer service, hard work and dedication, Kern Medical Center is winning its battle to fight powerful problems with powerful medicine.

Los Angeles County — University of Southern California Medical Center

Mission Statement: To provide accessible, affordable and culturally sensitive healthcare to every patient in our care; to provide services through an integrated delivery system to residents of Los Angeles County regardless of ability to pay.

Martin Luther King/Drew Medical Center

Mission Statement: To provide quality comprehensive Medical Care that is Accessible, Acceptable and Adaptable to the needs of the community we serve.

Natividad Medical Center

Mission Statement: Our mission is to provide access to affordable, high quality healthcare and to improve the health status of the people of Monterey County. Vision: continue to be a recognized leader, open door provider and preferred partner in improving the healthcare status of the diverse populations served by Natividad Medical Center.

North County Health Services, San Marcos Health Center

Mission Statement: improve the health status of our diverse communities by providing quality healthcare that is comprehensive, affordable, and culturally sensitive.

Open Door Community Health Centers

Mission Statement: The community clinics located in Humboldt, Trinity and Del Norte counties, have joined together as the North Coast Clinics Network to accomplish the following purposes:

- to coordinate the development of cooperative business plans which improve the quality of care and efficiency of Network members,
- to advocate for innovative strategies that integrate all community providers into a comprehensive and accessible system of high quality health care,
- to promote public knowledge and understanding of the role of community clinics and the challenges facing providers in rural areas.

Sacramento County Primary Care Clinic

Mission Statement:

- Deliver quality primary health care services to medically indigent adults, children, the homeless and those who have no other source of health care;
- Ensure a healthy community through disease prevention, health and nutrition education and public health services;
- Empower those with chronic illnesses by teaching disease self-management and self-sufficiency;
- Recognize, serve, listen and respond to the needs of our community;
- Provide innovative, holistic, effective and efficient service delivery in collaboration with other community service agencies and health and human service systems;
- Promote the safety, welfare and professional development of our staff; and
- Appreciate and reflect the multi-cultural and experiential diversity of employees and of all members of the community we serve.

Rancho Los Amigos National Rehabilitation Center

Mission Statement: The mission of Rancho Los Amigos National Rehabilitation Center is to provide each patient with superior medical and rehabilitation services in a culturally sensitive environment.

Riverside County Regional Medical Center

Mission Statement: Riverside County Regional Medical Center is committed to the health and well-being of all those we serve, regardless of their ability to pay, and without discrimination. We accomplish this through:

- efficient and comprehensive delivery of quality health care to our patients;
- continuous improvement in the quality of the care and service we provide;
- education and training of physicians and other health care professions to ensure the future availability of comprehensive health services for our patients; and
- development of programs and services which specifically target the unmet needs of indigent patients, or for which access may be limited to a broad segment of the community.

Salud Para La Gente

Mission Statement: Salud Para La Gente, a non-profit organization comprised of dedicated individuals, is committed to providing a coordinated network of high quality and cost effective healthcare services to the evolving needs of the Pajaro Valley low-income communities.

Nuestra Misión: Salud Para La Gente, Inc. es una organización sin fines de lucro compuesta por personas dedicadas a proveer una red de servicios médicos. Los servicios son de alta calidad, costo accesible, y son una respuesta a la creciente necesidad de la comunidad de bajos ingresos en el Valle del Pajaro.

San Francisco General Hospital

Mission Statement: to deliver humanistic, cost-effective, and culturally competent health services to the residents of the City and County of San Francisco by:

- Providing access for all residents by eliminating financial, linguistic, physical, and operational barriers;
- Providing quality services that treat illness, promoting and sustaining wellness, and preventing the spread of disease, injury and disability;
- Participating in and supporting training and research;
- The commitment to community involvement in healthcare needs

San Joaquin General Hospital

Mission Statement: San Joaquin County Health Care Services Agency is dedicated to a philosophy of excellence in providing health services, education and professional training in an integrated system that values quality of life, family interaction, and respect for both clients and employees. The Agency is committed to the delivery of community-oriented, culturally sensitive, and affordable health care throughout San Joaquin County.

Santa Clara Valley Medical Center

Mission Statement:

- High quality, cost-effective medical care to all persons in Santa Clara County regardless of their ability to pay.
- A wide range of inpatient, outpatient, and emergency services within resource constraints.
- An environment within which the needs of our patients are paramount and where patients, their families and all our visitors are treated in a compassionate, supportive, friendly and dignified manner.
- A setting within which quality medical education and professional training are conducted for the welfare and benefit of our patients and community.
- A workplace which recognizes and appreciates our employees and allows employees to realize their full work potential.

Tuolomne General Hospital

Mission Statement: The mission of TGH is to be recognized as the region's center of excellence for health care; to recognize and respond to the needs of the community; to remain the only locally owned and governed center of excellence for physical, social and emotional health. TGH leadership will remain committed to "providing healthcare to all while respecting the dignity of the individual" through innovative planning and responding to the needs of the communities we serve.

UC Irvine Medical Clinic

Mission Statement: Our mission is to provide high quality patient care in a manner that supports the education and research programs of the UCI College of Medicine.

Venice Family Clinic

Mission Statement: To provide comprehensive primary health care that is affordable, accessible, and compassionate for people with no other access to such care.

Ventura County Health Care Agency

Mission Statement: The Ventura County Health Care Agency is primarily responsible for providing health care services to the residents of Ventura County.

A number of health related services are mandated by various codes and regulations, for example: health care for indigents (Welfare and Institutions Code Section 17000); service to the mentally ill and programs related to drug and alcohol abuse; and coordination of emergency medical services (SB 125).

HCA operations fall into two basic categories. One is providing protection to the public as a whole, as demonstrated by the activities of the county Health Officer and Emergency Medical Services. The other category is direct public service. Beyond HCA's Inpatient services at the Ventura County Medical Center and Mental Health, an extensive network of clinics has been established with the goal of maximizing public access, while keeping costs low.

APPENDIX C: OUTPATIENT SERVICES

What kinds of health care services are provided in the outpatient setting?

- Primary and preventive
- Well-baby
- Prenatal
- Orthopedic surgery
- Dental
- Nutritional counseling
- Family care/family medicine
- Family planning
- Ear, nose and throat
- Genetic screening
- Medical imaging
- Ophthalmology
- Pediatrics/children's health
- Sexually transmitted diseases
- Women's health
- Immunology
- Urology
- Nephrology
- Cancer care
- Perinatology/neonatology
- Geriatric medicine
- Child development
- Gastroenterology
- Cardiology
- Laser technology
- Speech pathology
- Pharmacy
- Immunizations
- Mental health
- Occupational health
- Fertility
- Physical therapy
- Internal medicine
- Pulmonary
- Obstetrics/gynecology
- Oral surgery
- Communicable disease
- Radiology
- Child abuse screening
- Pain management
- Domestic violence screening
- Occupational therapy
- Endocrinology
- Vision
- Podiatry
- And more...

Source: California Association of Public Hospitals and Health Systems (CAPH), 2001

APPENDIX D: FINANCING CALIFORNIA'S PUBLIC HOSPITALS AND HEALTH SYSTEMS

Prepared by Melissa Stafford Jones and Santiago Muñoz, California Association of Public Hospitals and Health Systems

Unstable Financing Structure

California's core open door providers currently rely on a tenuous and unpredictable patchwork of funding-based primarily on Medi-Cal revenues and state and local subsidies — to carry out their mission and mandate to serve the health care needs of all residents, regardless of insurance status or ability to pay. Unfortunately, over much of the last two decades, these programs have not kept pace with the rising cost of, and demand for, health care services. Indeed, during this same period, California's population has increased nearly 40 percent, the cost of medical care has skyrocketed, and the state has suffered a severe and prolonged recession, experienced a booming economy and then again returned to recession — all the while having a very high and growing number of poor and uninsured families. The number of uninsured grew dramatically over the last decade — from 4.5 million uninsured in 1987 to 7 million in 1998 (Brown et al., 2002).

Funding Sources

Six main financing mechanisms exist to support health care services to California's uninsured: Medi-Cal, Medi-Cal supplemental payments (such as DSH), state tobacco tax (Proposition 99) appropriations, Medicare add-on payments such as Graduate Medical Education (GME) payments, realignment funds, and county general funds. This limited and shrinking pool of federal, state and local funding is uncertain from year to year. Severe reductions in several safety net funding streams are expected to occur this year and in the coming decade.

Medi-Cal Reimbursement. California has a long history of keeping Medi-Cal provider rates low. In 1998, California ranked 51st (including D.C.) in Medicaid reimbursement rates, about 33 percent below the national average (California $2,573 per patient versus U.S. $3,822 per patient) (Heffler et al., 2001). These low spending rates have compelled Medi-Cal providers to be among the most cost-efficient in the nation. Still, the state's failure to keep pace with health care inflation means that Medi-Cal providers must rely on additional funding sources to cover shortfalls.

In particular, Medi-Cal outpatient rates have remained generally stagnant for most of the last 14 years and now reimburse providers, at most, at about 43 percent of actual costs. Even with the recent settlement of a lawsuit regarding Medi-Cal outpatient rates, these rates will remain significantly lower than the cost of providing care. Poor reimbursement is an impediment to open door providers undertaking expansions of outpatient services — services that could enhance patients' access to prevention-oriented primary care services and ensure a more cost-effective and clinically appropriate entrance to the spectrum of available health care services.

Similarly, basic Medi-Cal inpatient rates have risen only minimally during the last decade, even though health care inflation, new technologies, and quality and seismic standards and requirements continue to increase the cost of hospital care.

Medi-Cal Supplemental Payments. To address low Medi-Cal base rates, the State has created three programs over the last decade-the SB 855, SB 1255, and Graduate Medical Education programs — to provide supplemental Medi-Cal payments to targeted groups of hospitals.

The SB 855 Medi-Cal disproportionate share hospital payment program (DSH) was created in 1991 to generate new federal funding for hospitals that treat the greatest numbers of Medi-Cal and uninsured low-income patients. Under cuts enacted by the federal government in the Balanced Budget Act of 1997, including a 20 percent reduction in Medicaid DSH funding to states, California has already seen reductions in recent years of more than $264 million in Medicaid DSH funds (California Association of Public Hospitals and Health Systems (CAPH), April 2002). California will lose an additional $184 million in federal Medicaid DSH funds this year unless further congressional action is taken.

The SB 1255 and Graduate Medical Education programs, which provide supplemental payments to eligible safety net hospitals, are designed to recognize the added value of and higher costs associated with the mission of open door providers, including trauma care, teaching and serving a higher concentration of seriously ill patients. However, these programs — subject to annual negotiations and the vagaries of the state budget — lack predictability and stability needed to ensure open door providers long-term viability. Further, recent changes by the federal government to the regulations governing the Medicaid Upper Payment Limit will result in a loss to California of at least $1 billion in federal Medicaid funds over the next seven years and at least $300 million annually thereafter (California Association of Public Hospitals and Health Systems (CAPH), January 2002).

Tobacco Tax (Proposition 99). When Proposition 99 was enacted in 1988, it increased the tax on cigarettes and devoted those revenues to a variety of health purposes, including indigent health services. The County Health Indigent Program (CHIP), which counties administer, received more than $336 million in fiscal year 1989–90. Open door providers throughout the state received a significant portion of those funds. As smoking rates in the state have declined, however, fewer dollars are available to fund these programs. In state fiscal year 2001–02, the CHIP account decreased to $70.8 million — an overall 79 percent drop. The implementation of Proposition 10, which increased the tax on cigarettes by 50 cents in order to create the California Children and Families First Trust Fund for early childhood development programs, has also resulted in further declines in the Proposition 99 CHIP account.

Medicare Add-On Payments, Including Medicare Graduate Medical Education. Together, 30 core open door providers train about half of the state's medical residents. Some hospitals are major teaching hospitals with hundreds of residents. Others operate only one or two residency programs.

Federal funding of medical education costs is accomplished through two add-ons—for direct and indirect medical education costs—to a hospital's Medicare payments. Although most open door providers treat a small proportion of Medicare beneficiaries, Medicare GME financing is a significant funding source for these hospitals. This method of supporting medical education, however, has come under fire in recent years.

Realignment. Created in 1991, realignment is the major state-funded program that supports health care for the medically indigent, generally those uninsured with incomes below 100 percent of the federal poverty level who are not eligible for Medi-Cal, as well as public health services. It replaced a series of programs, including AB 8 (County Health Services program) and the Medically Indigent Services Program, which had been perennially underfunded since the early 1980s. To be clear, neither realignment nor any of its predecessor programs was intended to subsidize health care for all of California's uninsured, which is a larger societal responsibility.

Funded by a portion of state sales tax and vehicle license fees, realignment funds were originally intended to ensure a steady source of revenue to counties to fund health care to the low-income uninsured as well as public health services independent of annual state budget negotiations. Because of the recession in the early and mid-1990s, however, the realignment revenues never realized their projected levels. In fact, in the 1991–92 fiscal year, the first year of realignment, the actual indigent health portion was

11 percent less than the amount that was originally expected. The anticipated 1991–92 levels were not reached for three more years, until 1994–95 (California Legislative Analyst's Office, 1996).

Moreover, the gap has persisted. Taking into account all realignment revenues—those both directly and indirectly related to patient care—as well as Proposition 99 funding and county subsidies, public open door providers have experienced significant shortfalls associated with caring for the medically indigent population.

A further reduction in funds resulted from a new state law that reduced vehicle license fees (VLF) effective FY 1998–99 and thereafter (California AB 2797, 1998). The backfill of lost VLF revenues using general fund dollars has reinstituted a degree of vulnerability into the program. Maintenance of realignment funding is essential if county open door providers are to meet their section 17000 obligation to serve the medically indigent and provide public health services for all residents. Under this state mandate, which has been in place for about 100 years, counties are required to be the "providers of last resort" to all who cannot afford health care (NHeLP, December 1997).

County General Funds. Counties use local tax dollars from their general fund to subsidize health care for the indigent. Some spending is required in order to receive the state matching funds, but many counties appropriate additional discretionary funds to cover the costs of serving the uninsured. However, a decade of property tax shifts have severely constrained the ability of local governments to adequately fund health care services to the uninsured. Beginning in 1992–93, when the state suffered deep budget deficits as a result of the recession, the state shifted property taxes from counties and other local governments in order to increase funding for schools. Although there have been measures enacted to mitigate the impacts, these efforts have not provided full relief nor did they restore flexibility and discretion to the counties.

APPENDIX E: CALIFORNIA HEALTHCARE FOUNDATION (CHCF) ANALYSIS OF CALIFORNIA HOSPITAL FINANCING

A key difference between the California hospital market and that of the rest of the U.S. is the purchasing power of managed care organizations. In 1999, California had 54 percent managed care penetration compared to 34 percent for the U.S; yet, 85 percent of the state's market was controlled by five companies. This system fosters competition among different types of hospitals and health systems. California patients also have a higher acuity level than the rest of the country, 1.34 versus 1.22. The state has higher median hospital staff salaries, $40,984 versus $32,893 nationally, but the lowest nursing ratio in the U.S. and a higher proportion of uninsured residents than the country as a whole (21 percent versus 16 percent nationally).

In 1999, twenty-five percent of California hospitals operated with an average operating ratio of minus 7.76 percent. These hospitals provided care for 17 percent of the state's discharges. There is a widening gap between "have" and "have-not" hospitals. "Have-nots" (bottom quartile) were: rural, small, district-owned, city or county owned, DSH and non-health care system institutions; while "haves" (top quartile hospitals) included: medium-sized, investor owned, urban and health system hospitals. Investor-owned hospitals experienced a 2.26 percent decline in expense ratios compared to 1.98 percent for all California hospitals between 1995 – 99. Being a part of a health system was favorable towards expense ratios; system hospitals declined less than non-system institutions. City/County, district and rural hospitals were sorely under-represented among the top quartile and overly represented in the bottom quartile. Fifty-eight percent of southern California hospitals could be characterized as have-nots.

The gap between California's top and bottom quartile hospitals grew from 10.82 in 1995 to 13.48 percent in 1999. In 1999, top-performing California hospitals outperformed U.S. hospitals, a reversal of the 1995 figures, whereas the state's bottom quartile declined further (-3.8 percent) than bottom quartile hospitals in the U.S. on average (-3.6 percent). Between 1995 – 99, eighteen of the 19 hospitals that closed in California were small hospitals, yet, small and small-medium hospitals comprised over 17 percent of hospitals in the state. Overall, small and small-medium hospitals were equally represented among all quartiles in terms of financial health.

The study found that some of the most antiquated facilities (aside from seismic retrofit) are in rural and poorly served areas. If California hospitals continue to decline, these will

be the first to face closure, limiting access to care in these regions. Yet, the study did not explore whether or not these hospitals are providing more costly inpatient-oriented services due to resource constraints whereas these services are provided on a more cost-efficient outpatient basis in the rest of the state. Nor did the study indicate whether higher costs in rural and underserved areas is less cost-efficient because of antiquated facilities and equipment available for patient care (California HealthCare Foundation, 2001).

APPENDIX F: RISING STAFFING COSTS, DECLINING REVENUES

National health expenditures have risen $217.2 billion since 1997 (Heffler et al., 2001) with most of the rise resulting from hospital (by $48.1 billion) and prescription drug costs (by $41.8 billion). By 2010, these costs are expected to rise by another $304.7 billion and $249.1 billion respectively. U.S. spends more on health care than any other developed nation, but has individual out-of-pocket costs $202 more than our nearest competitor (Italy); among developed countries, only Turkey compares to the low rate of health coverage (most other developed countries have rates over 99 percent) (OECD Health Policy Unit, 2001). In 2000, about 14 percent of Americans were uninsured (U. S. Census Bureau, 2002). In California, about 18 percent were uninsured (State of California — Department of Finance, 2002). Consumer spending data indicate that in 1999, Americans spent 4.5 percent of their income on health care. This figure is down from the late 1990s, however rising premiums and health care costs are likely to drive out-of-pocket costs up again as the overall economy slows (Strunk et al., 2001).

Nationally, the cost of uncompensated care in U.S. hospitals increased from $12.1 billion to $20.7 billion 1990 – 99. In California, it rose from $1.9 billion to nearly $2.5 billion, or a 28.8 percent increase from 1998 – 99 (Stroud & Cattaneo & Stroud Inc., 2001). Rising costs of drug treatments, high-tech equipment and supplies along with 2001 energy crisis in the state stressed California hospital budgets. Nationally, since 1997, Medicare payments have risen only 1.6 percent and Medicaid DSH payments by federal government have fallen 20 percent in real dollars (in California from $1.1 billion 1997 – 98, to $877 million in 2001 – 02) (Stroud & Cattaneo & Stroud Inc., 2001). Amid these funding declines, staffing costs associated with regulation and operations standards have increased as a result of new requirements including HIPAA, EMTALA, mandatory neonatal/maternal stay, mental health expansion, not to mention operational costs associated with seismic upgrading and regular updates to EPA, OSHA and other government regulations.

Total health expenditure growth will account for an increasing proportion of national GDP from 13.2 percent in 1997 to 15.9 percent in 2010 (Heffler et al., 2001). Several aspects of these increases affect hospitals and safety net settings particularly. For example, federal Medicaid spending decreased at the end of the decade because of changes in welfare policies, creation of the SCHIP program and reduced caps on DSH

payments to hospitals. During this same period, state governments who pay an average of 42 percent of health expenditures experienced budget surpluses followed by rapid, steep declines in revenue due to economic downturns. Since 1997, state expenditures for health costs have risen by nearly 3 percent (or $32.1 billion). In December 2001, the National Governors Association and National Association of State Budget Officers released new data indicating that state budgets posted overall shortfalls of $40 billion which was expected to climb as high as $50 billion if unemployment did not improve (State Health Watch, Feb. 2002). Health costs were most cited as the reason. Nationally, state revenues are projected to increase through 2002 by about 2.4 percent but Medicaid spending, which now accounts for 14.7 percent of state general expenditures, is projected to rise 8.7 percent. Variation in unemployment rates could push deficits even higher, an equivalent of $1.6 billion per 1 percent increase.[53] With state governments taking on an increased proportion of public health coverage expenditures, regional or state employment figures could disproportionately affect individual states since tax revenues will fall as costs rise. Although states report that they are trying every means not to cut services or eligibility for their residents, there is a double-edged effect to service cuts since health spending nationally comprises such a large percentage of GNP. Major spending reductions will negatively impact job growth and profit margins, which could slow the economy further in addition to increasing service pressures on safety net institutions (State Health Watch, Feb. 2002).

The private share of health spending grew in the late 1990s, primarily due to a reduction of spending in Medicare, but private spending is expected to continue to increase over the next ten years as a result of increased coverage of prescription drugs (Heffler et al., 2001). Since 1988, employers increased their participation in managed care plans by 27 percent although severe jumps in premiums between 1999 – 01 have shaken confidence that these plans actually save employers money (Jacob, 2000). Heffler, et al. (2001) suggested that a shift to less restrictive managed care plans negotiated by employers will increase private hospital spending through 2003. Since 1999, total private spending on hospital costs rose by about 4.7 percent compared to only 2.9 percent in public spending. There is speculation that increased spending for drug therapies may reduce hospital costs: a Tufts University study (Cohen, 2002) found that among 19 of 25 leading disease management programs, 42 percent indicated that increased drug spending helped to limit overall health care costs for about patients with chronic illnesses while 21 percent reported total costs increased, and 37 percent said

[53] The projection model used estimates that for every 1 percent unemployment rises, about 860,000 workers are left uninsured, or about 85 percent of workers left uninsured if they lose their employment (Cohen, March/April 2002).

increased drug spending had no effect. Seventy-five percent agreed that increased spending on drug therapies lowered inpatient hospital costs. Focusing more analysis on the ways in which various types of health services offset each other could help to identify areas of intervention in the health care system that increase efficiency and reduce operating costs for hospitals.

California health expenditures

California spends less state money on its citizens than many other states, ranking 27th in overall expenditures per capita in FY1999. The state ranked 29th among U.S. states in health expenditures per capita, $779.77, or 24 percent of total per capita expenditures (Kaiser Family Foundation, 2002). In FY1999, California spent $26,392.9 million on health care expenditures, including $11,981.1 million in federal funds. Medicaid and SCHIP programs accounted for 17.8 percent of state expenditures, or $19,453.5 million (The Reforming States Group, National Association of State Budget Officers, & Milbank Memorial Fund, 2001). As Medicare and DSH funds have declined, SCHIP programs grew in all states including California, which means that states have access to increased funds for children's health care. Nationally, SCHIP policies tend to favor public health institutions (Norton et al., 1998). California is one of several states that have proposed expanding SCHIP to cover the uninsured parents of eligible children.

More patients, more hospital staff needed

Nationally, the number of hospitals has decreased 14 percent and number of beds by 18 percent since 1985 (Abelson, 2002). While inpatient care decreased through the 1990s, outpatient visits rose, between 1997 and 2000 by 16 percent. A combination of loosening managed care rules as a result of reduction in facilities and growth of provider networks, and growth of uninsured in the slowing economy since 2001 may be reasons for the increase in number of hospital visits, particularly through emergency rooms. At the same time, the U.S. is beginning to see the leading edge of aging baby boomers whose health will decline through the next several decades, necessitating more complex care than can now be provided through outpatient visits. In 2000, national inpatient census jumped sharply to 64 percent, the highest since 1993 and appears to be climbing. Many investor-owned and non-profit corporations are planning to construct and expand facilities over the next 5 years. This will mean more positions to be staffed by an ever-declining pool of health workers, a dynamic that will most likely drive prices up further and increase ED diversions and early-discharges of inpatients (Abelson, 2002).

APPENDIX G: EMERGENCY DEPARTMENTS

Over the past decade, hospital emergency departments and emergency physicians across the U.S. have reported increased overcrowding and voiced concerns with the impacts on patient care and professional angst (Brewster et al., 2001; Derlet & Richards, 2000). Nationally, the number of ER visits increased by 15 percent between 1990 and 1999 while number of emergency departments decreased by 8 percent between 1994 and 1999 (Asplin & Knopp, 2001; Brewster et al., 2001).

A University of California, Los Angeles study found that, in California between 1990 and 1999, the number of emergency departments declined by 12 percent while the state's population grew by 11 percent, resulting in a 27 percent increase in visits per emergency department. However, during the same period, emergency departments increased in size and total number of emergency department beds increased by 16 percent, resulting in a 4.5 percent decrease in visit per emergency department bed. Of particular interest is the finding that critical visits per emergency department increased by 59 percent while non-urgent visits per emergency department declined by 8 percent. Analysis suggests that perceptions of overcrowding in the state's emergency departments might be due to the increase in visits per emergency department and patient acuity (Lambe et al., 2002).[54]

Analysts often point to the increase in number of patients without insurance seeking care in emergency departments (Brewster et al., 2001; Iserson & Kastre, 1996; Knopp, 1996) and stricter enforcement of EMTALA[55] regulations as primary causes for perceived overcrowding. The Centers for Disease Control (2001) found that of the 102.8 million emergency room visits in 1999, less than half were for actual emergencies. The spread of managed care has also been cited as having an impact; HMO patients without easy access to physicians may be using ERs for primary care (Brewster et al., 2001). More detailed

[54] A study by the California Medical Association (California Medical Association, 2001) found that the state's emergency departments lost $325 million. From 1999 to 2001 alone, ten emergency departments closed due to financial problems. Between 1997 and 2000, financial losses in emergency departments rose by $34 million. Some believe that emergency departments could be ensured more stable funding if they were designated as essential public services by the legislature. In 2001, a group of state senators introduced SB254 (California Senate, March 28, 2001), the emergency medical services bill, to address this concern. The bill would establish a $200 million fund to reimburse hospitals and emergency physicians for services not covered by other sources, and would require local oversight to ensure that critical emergency services were protected in each service area of the state.

[55] The federal Emergency Medical Treatment and Labor Act (EMTALA) requires all hospitals that receive Medicare reimbursement — the vast majority of US hospitals — to provide screening for an emergency conditions, necessary stabilizing treatment and appropriate transfers for patients, regardless of their ability to pay (42 USC Sec. 1395dd (Examination and treatment for emergency medical conditions and women in labor), (1986).

analyses have explored a complex and interrelated list of reasons behind the ER overcrowding ranging from health workforce shortages to language and cultural barriers (Brewster et al., 2001; Derlet & Richards, 2000).

Although ongoing monitoring of the number of emergency physicians will be necessary to accurately plan for emergency department staffing (Moorhead, Schafermeyer, & Rorrie Jr, 1997), an 80 percent increase in emergency medical residency programs (to 120) between 1990 and 1998 has shifted physician workforce discussions from emergency physicians to the supply and availability of on-call specialist consultants (Asplin & Knopp, 2001; Derlet & Richards, 2000; Johnson, Taylor, & Lev, 2001; Snyder, 2001). State and national shortages of qualified nurses are ongoing challenges for emergency departments (Derlet & Richards, 2000; Whelan, 1996).

As a result of the overcrowding, hospital diversion policies are now activated regularly when ER patient census thresholds are reached; upon notification, emergency vehicles are diverted to alternative sites. Problems mount however when more than one hospital in an area is "on diversion" (Brewster et al., 2001). Other impacts of the overcrowding include reports of patients leaving without being seen (Hobbs, Kunzman, Tandberg, & Sklar, 2000), and concern over quality of care provided to patients.

Causes of emergency department overcrowding (Derlet & Richards, 2000):

1. Increased complexity and acuity of patients presenting to the ED
2. Overall increase in patient volume
3. Managed care problems
4. Lack of beds for patients admitted to the hospital
5. Avoiding inpatient hospital admission by "intensive therapy" in the ED
6. Delays in service provided by radiology, laboratory, and ancillary services
7. Shortage of nursing staff
8. Shortage of administrative/clerical support staff
9. Shortage of on-call specialty consultants or lack of availability
10. Shortage of physical plant space within the ED
11. Problems with language and cultural barriers
12. Shortage of house staff who rotate through teaching hospital EDs
13. Increased medical record documentation requirements
14. Difficulty in arranging follow-up care

Public hospitals may feel the pressures of emergency department overcrowding even more than private sector hospitals because of the high percentage of uninsured patients. In addition, it is not unusual for public hospitals to be a region's designated Level I trauma center; this puts tremendous pressure on adjoining emergency department resources and staff. For some public hospitals, the emergency department may serve as a primary portal for patient admission, which can exacerbate burdens felt by staff. For example, San Francisco General Hospital Emergency Department's Dr. Alan Gelb reports that 65 percent of the hospital admissions come through the emergency department, a figure that is double that of other hospitals (Nevius, 2002). In California in 2000, city and county emergency rooms saw nearly 13 percent of state's emergency visits, though they comprise only 6.5 percent of the state's hospitals (OSHPD Healthcare Information Division, 2002b).

APPENDIX H: CALIFORNIA'S PROPOSED NURSE-TO-PATIENT STAFFING RATIOS

In January 2002, California's Department of Health Services proposed the following nurse (RN and LVN) to patient staffing ratios at hospitals in the state. The staffing ratios, the first in the country, are undergoing public review and comment, and are planned to go into effect July 1, 2003.

Unit	Nurse to patient ratio
Emergency	varies by acuity of patient; bottom is 1:4
Operating Room	*1:1*
ICU/NICU/Burn, etc Labor & Delivery Post-anesthesia	*1:2*
Intermediate nursery Pediatrics Step-down	*1:4*
Specialty nurses (oncology etc) Regular telemetry	*1:5*
Medical-surgical* Postpartum Psychiatric	*1:6*
Normal newborn nursery Couplet	1:8

*reduced to 1:5, 12–18 months after implementation of the ratios

Source: California Nurses Association, 2002.

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