

Understanding California's Nursing Crisis

MARCH 2001

Background

As California's population ages and more nursing resources are required, will there be an adequate supply of well-trained professionals to staff the state's hospitals, clinics, and other health care services? What is the optimal hospital nurse staffing ratio to ensure the best medical outcomes for patients? Will nursing professionals have the ability to provide culturally competent care to an increasingly diverse state population?

Health care researchers warn that an impending public health crisis threatens California unless major changes are made immediately in nursing practice, education, recruitment, and retention.

The health care industry has come under increasing pressure and scrutiny in the past decade. Employers and consumers are demanding lower costs and higher quality. To keep costs down, more care has been shifted to the outpatient setting. Efforts to reduce length of hospital stay have resulted in a more seriously ill hospital patient population and a more intense working environment in the hospital setting. Mergers and acquisitions have resulted in market domination by a relatively small number of health plans. Insurers, providers, and hospitals engage in public spats about reimbursement levels. Hospitals have merged or re-engineered to streamline services. Financial constraints have reduced the ability of some health care

organizations to invest in orientation and training. The hospital work environment has become more contentious, with several well-publicized nursing strikes in recent years.

Perhaps no other issue has been as emblematic of the upheaval in health care as the current debate over what constitutes appropriate hospital nurse staffing ratios. Nurses and unions express concern about the effect of hospital staffing levels on the quality of patient care and RNs' level of stress. Experienced nurses say the staffing ratio issue is compounded by the realities of working with new, inexperienced RN graduates and unlicensed assistive personnel to provide care to more acutely ill patients.

The debate over RN staffing has polarized hospitals and unions representing RNs. Over the years, the unions introduced various bills and ballot initiatives to mandate minimum RN staffing levels, culminating in the enactment of Assembly Bill 394 in 1999. This legislation directs the California Department of Health Services (DHS) to institute minimum nurse staffing ratios for RNs and licensed vocational nurses (LVNs) at acute care hospitals by January 2002. (Prior law had already mandated minimum nurse staffing ratios for critical care units.) The stakeholders remain far apart, as indicated by their widely divergent proposals for minimum staffing ratios.

CHCF Issue Brief

Three New Studies

The California Workforce Initiative, housed at the Center for the Health Professions, University of California, San Francisco, studies and promotes reform within the California health care workforce. The Initiative targets supply and distribution, diversity, skill base and regulation of health workers, utilization of health care workforce, and health care workers in transition. Funded by the California HealthCare Foundation and The California Endowment, the California Workforce Initiative recently issued three studies, with findings and recommendations. They include:

- *Nursing in California: A Workforce Crisis*, Janet Coffman, M.P.P. et al, January 2001
- *Minimum Nurse Staffing Ratios in California Acute Care Hospitals*, Joanne Spetz, Ph.D. et al, December 2000
- *Diversifying the Nursing Workforce: A California Imperative*, Ed O'Neil, Ph.D. et al, January 2001

These studies will help policymakers, the media, health care professionals, and the public better understand the issues contributing to the critical situation for nursing in California. Many of the issues affecting nursing in California affect nursing nationally, as well.

Major Findings and Recommendations from the Reports

Over the next two decades, California may not have adequate numbers of nurses with appropriate skills. The result could be decreased patient access, higher health care costs, and lower quality of service.

- Demographic trends contributing to this problem include an aging population requiring more nursing care; an aging RN population with more RNs nearing retirement age than joining the profession; an increasingly diverse patient population; and greater job opportunities for women.
- California appears likely to need more than 60,000 additional RNs to meet the projected demand for nursing services in 2020.
- Some parts of California may experience a bigger nursing shortage than others. In some regions, more than half of the RNs currently in practice are age 50 or older.

Perception of the workplace may affect career decisions, contributing to the nursing shortage.

- Trends in the general work environment may affect perceptions about nursing as a career. Younger employees seek greater flexibility and independence in the workplace.

FIGURE 1. AGE DISTRIBUTION OF CALIFORNIA RNs, 1980 AND 1996



Source: National Sample Survey of Registered Nurses, 1996.

- In a robust California economy with many career options available to nurses, inflation-adjusted wage rates actually fell in the mid-1990s.
- The contentious and increasingly stressful hospital-based nursing environment may be a less attractive career option for those entering the workforce.

Nursing schools are an important part of the problem and the solution. The nursing education system needs serious attention, expansion, and integration among its various programs.

- A large number of qualified applicants are turned away from some basic RN education programs at state and community colleges because of lack of resources. In 1997, for example, 44 percent of applicants to California State University training programs who met academic eligibility requirements were denied admission because not enough spaces were available.
- There is little integration, standardization, or cooperation among the nursing programs in the three public systems of education – California Community College, California State University, and the University of California.

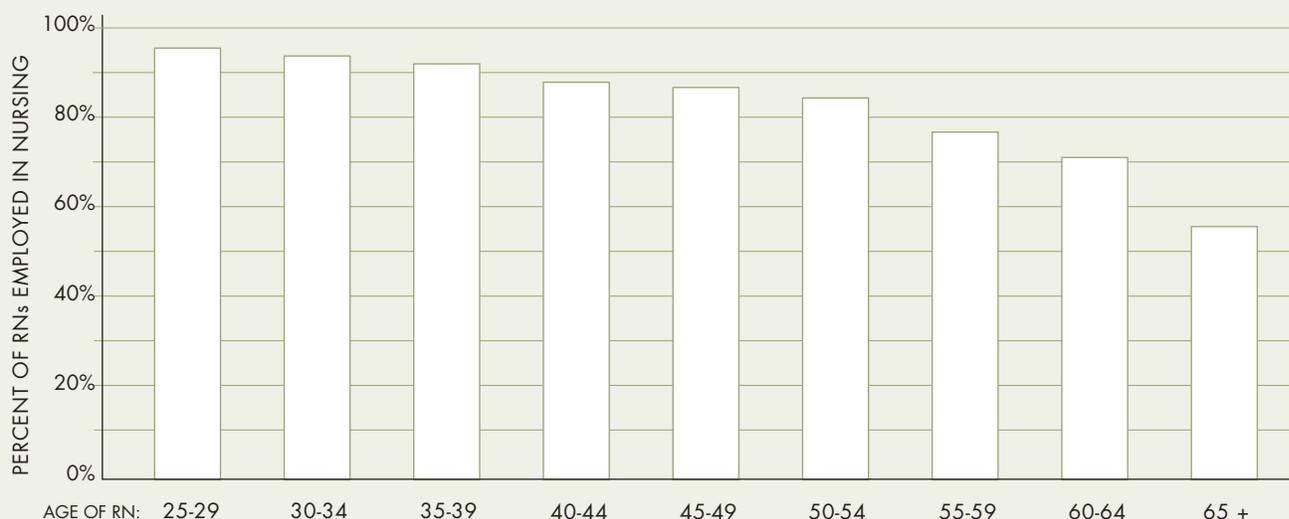
Better support must be provided for nurses who are currently employed and methods must be developed to leverage RN skills to better meet the challenges facing health care.

- This “fundamental realignment” may mean redefining nursing practice, adding new types of health care workers, sharing authority differently, and focusing on how to get better outcomes with constrained resources.
- Nursing as a profession must be repositioned to capture the interest and skills of the new California workforce.
- “Merely increasing the number of training programs or raising wages will not address the problems facing nursing,” says the workforce report. Health care organizations need to improve working conditions as well.

Work Environment

- Increase partnerships between health care industry leaders and unions representing RNs to help restore trust, increase interest in nursing careers, and retain experienced RNs.
- Learn from the frontline RNs. Senior health care executives must engage RNs in assessments of current practices and take seriously their suggestions for change.

FIGURE 2. PERCENT OF CALIFORNIA RNs EMPLOYED IN NURSING, BY AGE, 1997



Source: Barnes & Sutherland, 1999.

- Health care organizations should invest in long-term strategies for retaining RNs.
- Signing bonuses, mandatory overtime, and other approaches are understandable in a tight labor market, but they are ultimately counter-productive.
- A comprehensive retention strategy should include the elimination of mandatory overtime and the provision of greater financial rewards for experienced RNs, financial incentives for RNs to complete further education, and adequate sick leave. These costs would be offset by the reduction in costs associated with recruitment, turnover, use of temporary personnel, and improvement in employee morale.
- Unions representing RNs should place greater emphasis on career security and shared governance.
- Unions should consider partnering with management to conduct research on staffing issues and patient outcomes, and to apply research findings to practice.
- Health care organizations should invest in state-of-the-art information systems for patient monitoring and record keeping.
- The health care industry and unions should create partnerships with nursing education programs to provide new graduates with better preparation for clinical practice.
- As nursing education has shifted from the hospital setting to the campus setting, clinical education

programs have declined, leaving RN graduates unprepared for practice. Adequate clinical education is critical to patient safety and RN satisfaction. Recommended approaches include mentor programs, extended orientation/preceptor programs, and formal residency programs.

- Experienced RNs should receive financial incentives and reduced patient loads for serving as preceptors.

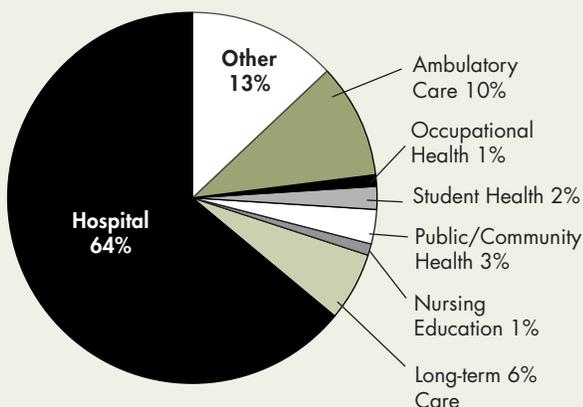
Educational System

- The workforce report proposes educational recommendations including:
 - Establish new RN education programs and expand existing programs.
 - Target funding to programs that produce the most RNs in the shortest time, with the best state licensure exam pass rate.
 - Consider temporarily suspending or diverting any funding from RN to BSN programs or, at least, consider not providing any new funding until the nursing shortage is substantially reduced. (RN to BSN programs, while valuable, don't increase the total number of RNs.)
 - Collect and make easily available to the public comprehensive RN education program data.
 - Make prelicensure and continuing education programs more accessible by streamlining curricula, expanding evening and weekend courses, and expanding the use of distance learning technology.
 - Increase diversity (race/ethnicity and gender) of nursing students through outreach and academic support programs.
 - Expand alternative pathways for RN education, such as master's entry programs and LVN to RN programs.

Nurse Staffing Ratios

- Current data and research literature do not indicate what minimum nurse staffing ratios might be ideal.
- Although the data are not conclusive, there is some evidence that increases in nurse-to-patient ratios and nursing skill mix are related to a number of

FIGURE 3. PRIMARY EMPLOYMENT SETTINGS OF CALIFORNIA RNs, 1997



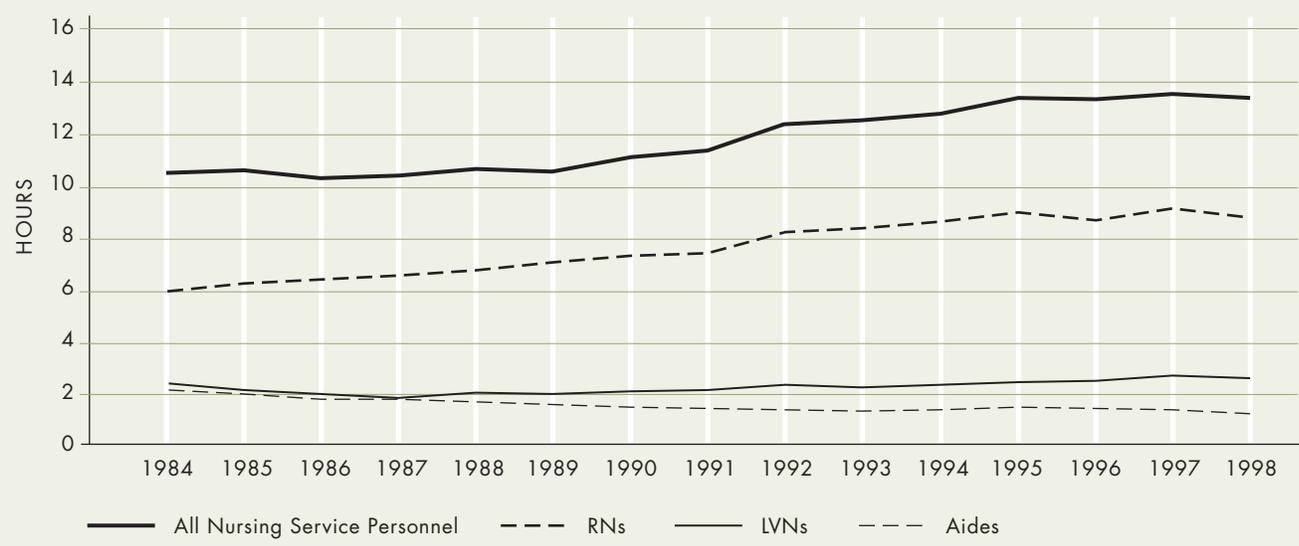
Source: Barnes & Sutherland, 1999.

positive patient outcomes. Unfortunately, the studies are not specific enough to provide ideal nurse-to-patient ratios.

- The available data are imperfect. Some are several years old, some are based on self-reporting, some are based on estimates, and some present an aggregated picture that does not necessarily translate to appropriate staffing ratios for an individual hospital unit.
- There is a wide range of nurse staffing ratios currently in use in California hospitals. For example, in medical-surgical acute care units, half of hospitals report RN hours per patient day between 3.35 and 5.10 – these same hospitals have ratios ranging between 4.7 patients per RN to 7.2 patients per RN. Rural hospitals tend to have a larger number of staff per patient because they must maintain a higher share of extra staff in case of unexpected admissions or changes in the illness levels of patients.
- California has a higher average and median number of RN hours per adjusted patient day than the nation as a whole. Eighteen states have higher average RN hours per patient day than California, and California is ranked 19th in median RN hours per patient day.

- “Best practices” California hospitals – those recognized for high quality and positive outcomes – do not uniformly have richer staffing than other hospitals. The report observes that “the uncertainty about whether best practice hospitals staff more richly than do other hospitals is a reflection of the difficulty of identifying and measuring the relationship between staffing and patient outcomes.”
- AB 394 may have a major impact on the demand for nursing personnel, hospital labor costs, the adequacy of the nursing supply, and the quality of nursing care provided to patients.
- **Proposals:** Proposed minimum staffing ratios vary widely. For example, the California Healthcare Association (CHA) and the Association of California Nurse Leaders (ACNL) have proposed a 1-to-10 ratio of nurses to patients for medical-surgical units. The California Nurses Association (CNA) has proposed a 1-to-6 ratio of nurses to patients, and the Service Employees International Union (SEIU) is proposing a 1-to-4 ratio. Under the terms of AB 394, DHS will ultimately determine the minimum staffing ratios.
- **Cost Estimates:** Hospitals across California already face major financial challenges, resulting in hospital closures, mergers, and discontinuation

FIGURE 4. AVERAGE NURSING SERVICE PERSONNEL HOURS PER CASE-MIX ADJUSTED PATIENT DAY IN CALIFORNIA HOSPITALS, 1984-1998



Source: California Office of Statewide Health Planning and Development, 1985-1999.

of unprofitable services. Some cost increase will result from nearly any minimum staffing ratio DHS establishes, unless hospitals use the minimum standards as a justification for reducing their RN staffing. Expenditures on RNs are likely to increase most in Los Angeles, the Central and Northern Sacramento Valleys, and the Central Coast. Small and rural hospitals will face smaller increases in costs, but even modest cost increases could be devastating to the finances of some rural facilities. With nursing costs currently comprising approximately one-sixth of hospital budgets, on average, the impact of minimum staffing ratios could be significant.

- **Implementation Issues:** Current state regulations require hospitals to set actual staffing levels using a “patient classification system” (PCS) to predict shift-by-shift nursing needs based on patient acuity. These regulations will continue to be in effect even after minimum nurse-to-patient ratios are established under AB 394. If a hospital’s PCS dictates that the hospital should be staffing more richly than the minimum ratios, the hospital is

expected to abide by the PCS. There is widespread distrust of virtually all PCSs. Current law does not specify any standards that hospitals must follow in purchasing or developing PCSs and there is nothing in the legislation that prevents hospitals from developing new PCSs that might result in a reduction of RN-to-patient ratios in many hospitals.

- The DHS should:
 - Consider all research and data available in making its determinations
 - Be sensitive to the political nature of the issues involved
 - Ensure that hospitals do not use the minimum standards as a justification for reducing RN staffing
 - Be sensitive to the needs of financially troubled hospitals and the communities they serve.
 - Support further research to evaluate the impact of AB 394. Researchers should make this data publicly available.

TABLE 1. AVERAGE PREDICTED PERCENT INCREASES IN RN EXPENDITURES CAUSED BY STAFFING MANDATES

	Percent of Hospitals	Original version of bill (CNA)	SEIU proposal	CHA proposal
All Hospitals	100%	18.5%	30.7%	4.6%
Los Angeles CMSA	44.4%	23.6%	35.6%	6.0%
Sacramento CMSA	4.0%	10.9%	23.1%	2.0%
San Francisco CMSA	17.6%	13.9%	26.2%	5.4%
San Diego	6.7%	14.1%	24.1%	3.6%
Central Valley	11.4%	19.8%	37.9%	3.6%
Central Coast	4.8%	21.4%	23.0%	5.8%
N. Sacramento Valley	4.0%	19.7%	34.9%	3.1%
Northern Mountains	4.8%	2.8%	11.3%	0.6%
Sierra Nevada	2.4%	7.8%	21.7%	0.1%

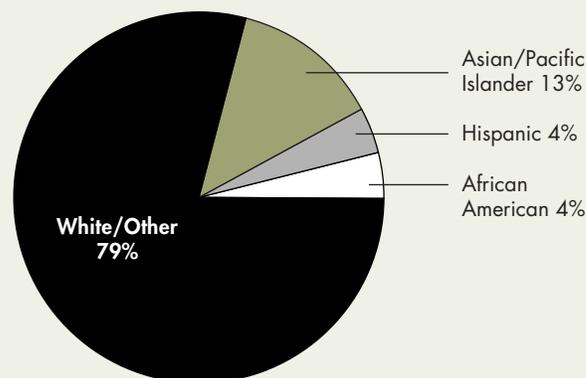
Source: OSHPD data.

Nursing diversity

- California nurses are disproportionately white and female compared to state demographics. Latinos are underrepresented, comprising more than 30 percent of California’s population, but only four percent of the state’s nursing workforce.
- Historically, nurses come from two pools: white females and nurses trained out of state. Future pools of potential nurses in California must include the racially and ethnically diverse population of young people, as well as allied and auxiliary health care workers who might consider pursuing nursing as a second career.
- Barriers for allied and auxiliary health care workers include workplace issues (lack of financial incentives, flexible scheduling, mentoring, and employer support) and education issues (limited adult education options, lack of credit for allied health care experience, financial barriers). Young people face a poor K-12 educational system, limited community college resources, and high costs of nursing schools. Low-income students in particular face the challenges of inadequate counseling and advising, and lack of access to advanced high school science, math, and writing classes.
- The study authors had to search statewide and nationally to produce a handful of innovative programs that might result in a more diverse nursing workforce:
 - Work-study programs with financial incentives and career paths.
 - K-12 academic programs about careers in health care occupations.
 - Employer/union sponsored professional development programs for allied and auxiliary health care workers.
- Recommendations to build a more diverse workforce:
 - Reorient the discussion about nursing diversity from increasing diversity in nursing to asking educators and employers to address the values, attributes, and goals of the potential pools of workers.
 - Align nursing profession with values and goals of potential workforce.
 - Create new career ladders and on-site educational, clinical, and mentoring programs for current health care workers to advance their careers.
 - Strengthen the K-12 and professional education systems. Boost opportunities for distance learning.
 - Enable allied and auxiliary health care workers to pursue nursing careers through more accessible and coordinated programs.

- Partnerships between employers and educators must ensure compatible schedules, facilitate financial arrangements, and adopt adult learning models geared to the targeted audiences.
- Coordinate professional education curricula to eliminate repetition of course work and provide credit for prior clinical training.
- An ad hoc group (with representation from employment, education, organized labor, and policy) should convene to plan and oversee development of a clear education articulation mechanism that would build upon the work initiated by the California Strategic Planning Committee for Nursing.
- Identify and develop special programs for career “influencers” such as family members, teachers, employers, and counselors.

FIGURE 5. RACIAL/ETHNIC MIX OF CALIFORNIA RNs, 1997



Source: Barnes & Sutherland, 1999.

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Mission

The California HealthCare Foundation (CHCF), a private philanthropy based in Oakland, California, was created in 1996 as a result of the conversion of Blue Cross of California, a nonprofit organization, to Wellpoint Health Networks, a for profit company. The Foundation focuses on critical issues confronting a changing health care marketplace by supporting innovative research, developing model programs, and initiating meaningful policy recommendations. For more information on CHCF, visit our Web site at www.chcf.org.