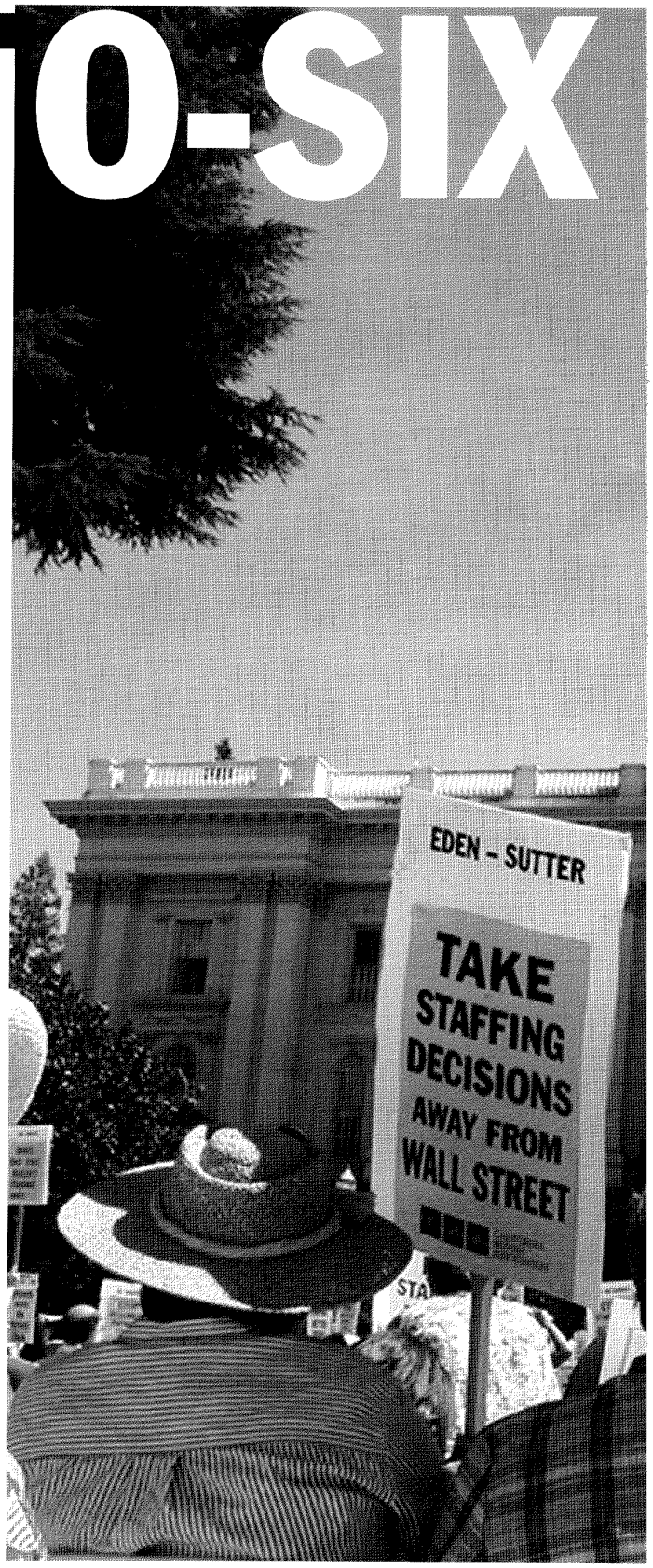
ONE-TO-SIX

Five years in the works, marked by deep divisions between hospitals and nursing groups, California's new nurse-patient staffing ratios are the first in the nation. But are they workable, and can they be enforced?

By Sigrid Bathen



Maureen Barry is a registered nurse who has worked for the past 14 years at the University of California Medical Center in Irvine — the only "level one" trauma center in Orange County. It is also a burn and liver transplant center, a teaching facility, a children's hospital and a nationally recognized cancer center.

While many nurses in recent years have left acute-care hospitals because they are burned out by the staggering workload in hospitals, where only the sickest of the sick are admitted, Barry has stayed. A self-described "adrenaline junkie," she is alternately energized and overwhelmed by the enormity and complexity of her work.

During testimony at a hearing in Los Angeles on proposed nurse-patient staffing ratios conducted by the state Department of Health Services in November 2002, she gave a mind-numbing tour of her typical day:

"On any given day," she said, "I may be taking care of a patient having a heart attack, an acute MI (myocardial infarction), an uncooperative, violent 5150 (individuals deemed dangerous to themselves or others) who has overdosed [on anti-depressants], a pediatric patient with an acute asthma attack, and an acute appendicitis.

"The acute MI requires that I place the patient on oxygen, a cardiac monitor, set up a non-invasive blood pressure cup to record vital signs ... and consider starting clot-busting protocol with powerful anticoagulant[s]. ...I

Photo: Gerard Brogan, California Nurses Association

am starting two intravenous lines, sending the STAT [emergency] labs, requesting an EKG [electrocardiogram] from our trauma techs, and am also ordering a STAT chest x-ray and grabbing an aspirin and the morphine — the aspirin for the blood-thinning properties and the morphine for the breakthrough pain."

Through all of this controlled chaos, the psychiatric patient — in leather restraints in the bed next to the asthmatic child — is screaming profanities. In the adjacent emergency room, there is "an active GI [gastrointestinal] bleed" patient who is vomiting blood. The emergency room charge nurse is too busy to help because she is trying to find beds for patients who have already been admitted. The emergency room is closed to ambulances because of "emergency saturation."

"But we're open for trauma," Barry testified, "because trauma makes money, and we get dinged by the emergency medical system and administration if we go 'down' [in] trauma too much."

On January 1, Barry and other registered nurses finally saw years of pressing for broad, nurse-patient staffing ratios rewarded when the state officially began requiring California hospitals to ensure specific minimum ratios of nurses to patients — one-to-six on medical-surgical wards, one-to-four in emergency rooms, one-to-two in labor-and-delivery and one nurse for each trauma patient. While nurse-patient ratios have existed for many years in certain high-risk units, such as intensive care, California is the first state in the nation to adopt across-the-board nurse-patient staffing ratios.

How much is enough?

It's been a long road, with a tortured legislative and regulatory history. The original legislation — AB 394 by now-Senator Sheila Kuehl (D-Santa Monica) and sponsored by the California Nurses Association — was passed in 1999 and signed by Governor Gray Davis. Earlier CNA-backed legislation failed in 1993 and 1998, although the latter bill passed the Legislature only to be vetoed by Governor Pete Wilson. Current legislation — AB 253 by Assemblyman Darrell Steinberg (D-Sacramento) and SB 1005 by Senator Joe Dunn (D-Santa Ana) — would toughen enforcement procedures.

After the Kuehl bill was enacted, the state Department of Health Services began the arduous implementation process. "It was a much more complicated regulations package than we had ever anticipated," said Brenda Klutz, longtime deputy director of the licensing and certification program in DHS, which regulates hospitals, nursing homes and other health care facilities in California.

As DHS staff struggled to come to grips with existing nurse-staffing conditions in hospitals, Klutz said, officials found that comprehensive studies "pointing to a particular numerical ratio that would affect patient health and safety on particular units" simply did not exist.

To gather the needed data, DHS conducted a detailed nurse-staffing study in conjunction with the University of California, Davis, which designed a staffing "survey tool." DHS carried out unannounced visits to 90 California hospitals, including weekends and holidays, on each hospital unit for which ratios were required. Klutz and others believe the results to be "the most comprehensive data base in the nation of how hospitals are staffed."

The regulations were strongly opposed throughout the process by hospitals — represented by the California Healthcare Association — which said the ratios would be unworkable, compromising patient care and forcing closure of hospitals.

CHA has since gone to court to block full enforcement of the ratios, taking particular aim at three key words in the staffing standards: "at all times," which means exactly what it says — that staffing standards will be in effect around the clock. Klutz says such language has been in DHS licensing requirements for intensive care and critical care units for nearly 30 years. "The term is not new," she said. "It's kind of surprising that it comes up at this point." A hearing on the CHA lawsuit is scheduled for March 19 in Sacramento Superior Court.

"Those are three little words with huge impact," says Jan Emerson, CHA vice president for public affairs. "If they take a short break, transport a patient to radiology or take a phone call, the hospital could be out of compliance [with the ratios]. Historically, nurses have always covered for each other. It's not that the patient is unat-

By the numbers

The average nurse in California is 47 years old; 30 % are over age 50.

California ranks 49th in the nation in terms of the number of RNs per capita. California currently has 585 RNs per 100,000 population — compared to the national average of 798 RNs per 100,000, according to the U.S. Bureau of Labor Statistics.

Where they work

Determining the current and future supply of nurses is complex. More than 87% of active RNs are employed full- or part-time in nursing. Of those, approx. 60% are working in hospitals. The remaining 27% are working in a variety of other health care settings — outpatient surgery centers, clinics, home health agencies, physicians' offices, schools and private employers.

Out-of-state

California has traditionally relied heavily on the migration of RNs from other states. Currently, 50% of California's RNs were educated elsewhere. But that number is dropping. The California Board of Registered Nursing (BRN) estimates that in the past 7 years, there has been a 20% decrease in the number of nurses moving to California from other states.

Sources: Board of Registered Nursing

tended — assigned patient load is back within minutes. ... But the way DHS wrote the regs, a 'substitute nurse' always has to be in the wings."

Emerson and other hospital officials say they are doing everything possible to be in compliance with the new ratios, while feverishly attempting to recruit new nurses at a time when many are retiring, working in non-acute-care settings or not actively practicing.

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Intensive efforts by hospitals, nursing groups, public officials and educational institutions to expand nurse-training programs throughout the state (nurses are primarily educated in community colleges and the state university system) have been hit with the double-whammy of state budget cuts and long waiting lists for training programs. According to the California Healthcare Association, the state graduates about 5,000 nursing students a year — but needs nearly twice that number to fill existing vacancies.

"Hospitals are doing everything they can to implement the law," says Emerson. "But with this new [staffing] requirement and the fact that we don't have enough nurses in California, we're between a rock and a hard place."

Kuehl and CNA officials note that many hospitals, including the huge Kaiser-Permanente system, which employs one of the largest number of nurses in California hospitals, are already in compliance with the new ratios.

"That leads me to believe the [hospital association] is raising an issue that is not of concern to all providers," Kuehl said about the flap over the "at all times" requirement. "I think it's a bit of a red herring, that when nurses take a lunch break they'll have to have some kind of coverage. I don't know that DHS is interested in that stringent a level of enforcement."

The ratios, says Kuehl, are about "nurses wanting to take adequate care of their patients. Many of them had gone part time or into the private sector because of the deplorable staffing conditions. There was a tsunami of critically ill patients. Hospitals were thinning staffs. Nurses were burning out. Something had to be done."

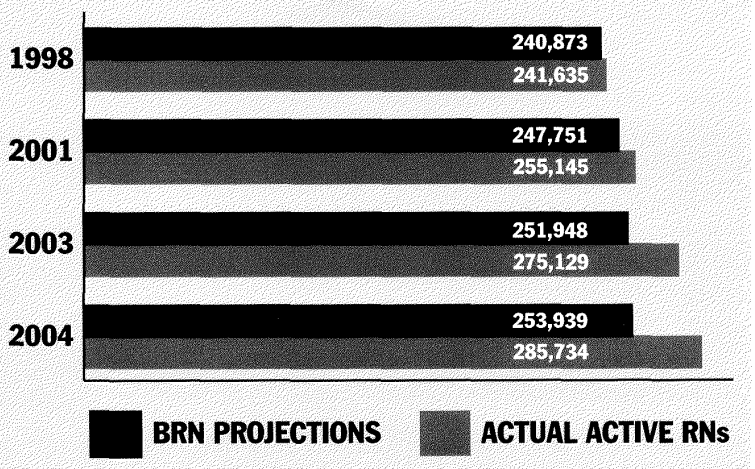
Getting nurses into the system

One of the key issues in nurse-staffing, Kuehl and others say, is retention of nurses, as well as encouraging more people to enter the profession. When nurses were asked in a survey during debate over the bill why they were leaving, Kuehl says, "the No.1 reason was patient overload. And when they ranked how many patients you can take care of ... each additional patient over four per registered nurse led to almost a 25 percent increase in the odds of burnout."

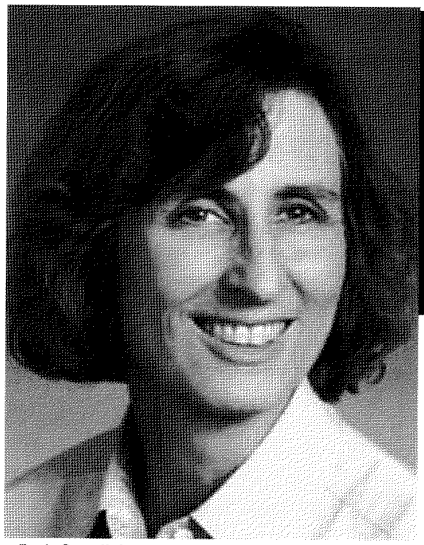
Kuehl is encouraged that the new regulations may help reverse that trend, citing a recent conversation with a nurse who hadn't been working because it was "so awful" but who had gone back to nursing since ratios were

Growth in California's RN Workforce

In 1997, the last time the Board of Registered Nursing (BRN) conducted a statewide survey of RNs, it projected a small annual increase of only 2,000 RNs per year. But the numbers have been growing by about 10,000 per year, even after subtracting those leaving the profession. Overall California today has nearly 32,000 more actively licensed RNs than the BRN estimated the state would have at this date. Specifically, the BRN projected that based on trends in the mid-1990s, the number of actively licensed RNs in California entering 2004 would be 253,939. As of December 30, 2003, California had 285,734 actively licensed RNs, according to the Board of Registered Nursing.



Growth of the active licensed RN workforce vs. BRN projections prior to enactment of the RN Staffing Ratio Law in 1999.
Graph compiled by California Nurses Association.



Beth Capell, healthcare lobbyist

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— Beth Capell

implemented because "now the halls were quiet, which means nurses were spending time with their patients. There was not the same level of impossible urgency."

In a compliance survey of 111 hospitals — nearly one-third of all California hospitals — by the nurses association in early February 2004, one month after the ratios went into effect, CNA reported that "staffing conditions are improved" in 68 percent of the hospitals surveyed, and 59 percent were "generally in compliance." In addition to Kaiser, CNA noted that the University of California medical centers are also in compliance.

"While some significant problems remain," said CNA President Deborah Burger, a Kaiser nurse-manager in Santa Rosa, "the progress made to date is very encouraging, and a hopeful sign." Among "problems" reported by CNA, some hospitals reportedly had "inappropriate" use of licensed vocational nurses, who are included in the complex regulatory scheme but must be supervised by a registered nurse.

LVNs are represented by a rival union, the Service Employees International Union (SEIU), which historically — and during the ratio debate — has been at odds with CNA, which represents only registered nurses, about 55,000 of the more than 280,000 RNs in California. SEIU represents some 30,000 RNs, as well as a whole range of health care workers, from medical interns and residents to nurses' aides and housekeeping staff. CNA and SEIU managed to patch up their differences to ensure passage — and implementation — of the ratios, but tensions remain.

While acknowledging historic tensions, neither union will speak ill — at least publicly — of the other where the ratios are concerned. "Trying to explain [the history] is roughly like trying to explain the Civil War," said Beth Capell, a longtime health care lobbyist who represents SEIU. Citing "a decade's worth of differences," she said in retrospect, "it all sort of blurs together; there is no 'Gettysburg moment.' ... I am personally and organizationally very happy to be working together in a cooperative way."

Her views are echoed by Donna Gerber, CNA government relations director. "Fundamentally, we agree on the policy," she said.

Noting that new RN licenses are "up significantly" in California in recent years, Capell and others said a major impact of the ratios is an expected increase in the number of nurses coming into the educational pipeline, as well as those entering — or returning — to California from other states and other countries. "We hope the ratios will help recruit more nurses by improving working conditions," Capell said. "The publicity around all this will make people think this is a profession worth considering."

Anita Zuniga, a registered nurse who is executive director of patient

Unexpected incidents

Inadequate staffing precipitated one-fourth of all unexpected occurences that led to patient deaths, injuries, or permanent loss of function — as reported to JCAHO, the Joint Commission on Accreditation of Hospital Organizations, 1998-2000.

Medical errors

Nurses intercept 86% of all medication errors made by physicians, pharmacists, and others prior to providing those medications to patients, according to the Journal of the American Medical Association.

Patient outcomes

Insufficient hospital nurse staffing is associated with higher rates of urinary tract infections, post-operative infections, pneumonia, pressure ulcers and increased lengths of stay, while better nurse staffing is linked to improved patient outcomes, according to the Agency for Healthcare Research and Quality.

Source: California Nurses Association Web site

Deborah Burger, California Nurses Association

"While some significant problems remain, the progress made to date is very encouraging, and a hopeful sign." — Deborah Burger

care services for Kaiser in Northern California, says the new staffing ratios are "operationally a challenge," but Kaiser is complying. While Kaiser has been the target of intensive labor actions, including major strikes by nurses in past years, the health care giant is widely praised for improving working conditions for nurses as well as encouraging lower-level staff to advance educationally up the nursing ladder with a system of scholarships, forgivable loans and grants.

"Education is a key benefit," she said of nurse recruitment and retention at Kaiser, which last year spent $3.6 million statewide to support nursing education programs. "We will train housekeeping staff to become nursing assistants, LVNs to become RNs, RNs without a bachelor's degree to get that degree."

Meanwhile, some worry about hospital closures due to increased costs associated with new staffing ratios. Thus far, tiny Santa Teresita Hospital in Duarte is the only hospital to announce that it would close its acute-care unit because of the new nursing ratios. It is run by Carmelite nuns primarily as a nursing home (177 of its 216 beds, according to DHS), with a small acute-care wing. "Santa Teresita was very marginal," said DHS' Klutz. "Their operating margin for the last six years has been very, very fragile."

Former Assemblywoman Helen Thomson (D-Davis) was the only registered nurse in the state Legislature when the Kuehl bill was being debated in 1999. Now a Yolo County supervisor, she is a former psychiatric nurse, married to a psychiatrist, whose daughter is a nurse. She was initially "ambivalent" about the bill.

"Sheila Kuehl and I had many, many conversations about it," Thomson recalls. "I could see what a challenge this would be for the hospitals. It wasn't that [hospitals] didn't believe it should be done, but they were concerned about finding the nurses and possibly being liable for fines. Patients today are very sick; you don't get into a hospital today if you aren't very sick."

In the end, she voted for the bill.

"While I recognize the challenges involved in getting to this point, I also recognize that nurses are hard to come by."

Perhaps the new staffing ratios will ease that problem. Perhaps more nurses — like Maureen Barry in Orange County — will remain in nursing despite the challenges. While admitting she thrives on nursing's frantic pace, Barry also expressed concern for the safety of her patients. "Yes, I am an adrenaline junkie," she said. "However, too much adrenaline can be dangerous."

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Patient safety

The Institute of Medicine of the National Academies in Washington, D.C., reports that RNs, LVNS and nursing assistants constitute 54% of all health care providers nationwide. As the "health professionals who interact most frequently with patients in all settings, their actions...are directly related to better patient outcomes. ... Better nursing staff levels result in safer patient care."

Health complications

A New England Journal of Medicine study documented that improved RN-to-patient ratios reduce rates of pneumonia, urinary infections, shock, cardiac arrest, gastrointestinal bleeding, and other adverse outcomes.

Death rates

Research in the Journal of the American Medical Association found that up to 20,000 patient deaths each year can be prevented. For each additional patient assigned to an RN, the likelihood of death within 30 days increased by 7%. Four additional patients increased the risk of death by 31%.

Source: California Nurses Association Web site