

NURSING WORKFORCE: SHORTAGES AND DIVERSITY

**A Report Prepared for
The California Endowment**

*A Joint Project of the
National Health Foundation and
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EXECUTIVE SUMMARY

In 2001, the Hospital Association of Southern California (HASC) launched a Nursing Workforce Initiative (NWI) to assess how hospitals could work with nursing schools to address the nursing shortage. In NWI's second year, funded by UniHealth Foundation and The California Endowment, this assessment was expanded to examine diversity within the nursing population. This report presents background information and the findings from the second year assessment.

- California ranks 49th in the country in its nurse per capita ratio. Its health care system faces a nursing workforce that is too small to meet its staffing needs and not sufficiently diverse to meet its patients' needs.
- California's nursing education pipeline cannot meet the statewide demand for nurses. By 2010 its nursing schools can graduate only 40,000 new nurses when estimates predict the state will need more than 125,000.
- Southern California¹ Nursing Schools:
 - Many have waiting lists of qualified, and ethnically/culturally diverse applicants, only 14% of which are male.
 - Enrollment increases in the last year have primarily been in RN to Bachelor and Masters programs, that is programs that advance careers, not programs that produce additional nurses.
 - About 1 in 5 students drop out primarily due to the demands of family and work outside school (88%), academic performance (71%), and student financial need (42%).
 - Major barriers to program expansion are lack of 1) funding for faculty salaries, 2) qualified faculty and 3) physical facilities.
 - Major barriers to increasing diversity are 1) inadequate data to document the educational experiences of different ethnic groups, and 2) lack of student support programs.
- Southern California Hospitals
 - 4 out of 10 hospitals assist their local nursing schools by financially subsidizing faculty, allowing staff to hold joint appointments or providing nursing student scholarships and tuition assistance. Average annual expenditures are over \$72,000/hospital.
 - 4 out of 5 hospitals want, and have the capacity to support, more students of all types and more clinical rotations.
 - To cover their nursing shortages, 9 out of 10 hospitals use temporary labor that costs approximately \$2 million/year/hospital. Almost two-thirds include hiring bonuses in their recruitment strategies averaging over \$62,000/hospital/year.
 - After two years, hospitals retain only two out of every three nursing schools graduates they have hired and trained.

Assuring California has a diverse and culturally competent nursing workforce will take many years and will require a coordinated and long-term strategy involving policy makers, education and health care administrators, deans and directors of nursing programs and hospital nurse executives. In the shorter-term, as HASC's Nursing Workforce Initiative demonstrates, hospitals can support their local nursing schools financially (e.g., by provided funds for faculty salaries), educationally (e.g., by offering more flexible student clinical rotations) and administratively (e.g., by requiring schools to better track students' ethnic/cultural backgrounds and cultural competency throughout their education and transition to employment). Such long-term and shorter-term collaborations are essential if the citizens of California are to receive the health care they need.

¹ This refers to the six counties that comprise the Hospital Association of Southern California's member area (Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara and Ventura Counties).

INTRODUCTION

Like the nation as a whole, California faces a severe shortage of nurses, particularly minority nurses. As a result there is an urgent need to both increase nursing program admission levels and retention rates, and to assure that the ethnic diversity of new nurses reflects the ethnic diversity of the State's population. In 2001, the Hospital Association of Southern California (HASC) launched a Nursing Workforce Initiative (NWI) to assess how hospitals in conjunction with academic institutions could address the nursing shortage. The second year of this initiative (2002), funded by UniHealth Foundation and The California Endowment, extended the assessment to examine diversity within the nursing population.

This report presents the findings from NWI's second year assessment in three discrete sections: 1) Background, 2) 2nd Year Survey, and 3) Conclusion. The Background section provides a context for discussing diversity and a brief history of this project. The 2nd Year Survey section briefly describes the survey on which this report is based and presents a summary of data from schools of nursing and hospitals in the six Southern California counties that comprise HASC's membership region. The Conclusion section discusses future opportunities for nursing schools and hospitals to work together to increase the number and diversity of nurses in the region.

BACKGROUND

In recent years, significant attention has been given to the increasing shortage of registered nurses and the financial and qualitative impact of this shortage upon our nation's healthcare delivery system. Less discussion has focused on the diversity of the nursing workforce and nursing students. This section presents information on the nursing shortage, specifically the inadequacies of the educational pipeline, and reviews the issue of student diversity

Inadequate Educational Pipeline

California, compared to other states, ranks 49th in the number of nurses per capita¹. This low ranking is despite the fact that for several years hospitals in the state have been recruiting foreign nurses. The inadequacy of the State's nursing education pipeline to meet the need for registered nurses (RNs) is reflected in the fact that almost 50% of California's active RN workforce has been educated outside the state or the country². The problem is centered in the inadequate capacity of the nursing education pipeline because many American students are interested in nursing careers and most nursing programs have waiting lists of qualified students.

The California Board of Registered Nursing (CBRN) 2001 Annual School Report showed almost all programs at or near capacity with enrollments up 7% over the previous year. Nevertheless, California's 97 nursing programs (Figure 1) cannot meet the statewide demand for nurses. Currently these programs graduate approximately 5,000 new nurses each year. This represents an increase of 40,000 nurses by 2010. However, published estimates predict that California will need more than 125,000 new nurses by 2010 and these estimates do not even factor in the impact of increasing retirement rates by the currently aging RN population³.

Figure 1: Summary of California Nursing Education Resources

Geographic Areas	# Associate Degree Programs	# Baccalaureate Programs	# Entry Level Masters Programs	# RN to BSN Programs
HASC Region	33	8	0	5
Northern/Central	31	12	4	2
San Diego	7	3	0	2
Total	71*	23*	4	9

Source: List of California Nursing Programs by Region (See Appendix A)

* These figures total 94 Associate and Baccalaureate Degree Programs. The other three programs referred to in the text are available through schools that provide ELM and RN to BSN programs.

To fully meet the State's demand for nurses, California's nursing education pipeline will require major structural changes that depend on decisions and actions by state

¹ Moses, E. *The Registered Nurse Population: Findings From the National Sample Survey of Registered Nurses 1996*. Health Resources and Services Administration, Department of Health and Human Services. Bureau of Health Professions. Division of Nursing. Washington, D.C., 1998.

² California Strategic Planning Committee for Nursing. *The California Nursing Workforce Initiative: Planning for California's Nursing Work Force, Phase II Final Report*. Sacramento, CA: Association of California Nurse Leaders, June 1999.

³ California Strategic Planning Committee for Nursing. *Nursing Summit 1999, Confronting the Nursing Shortage*. Sacramento, CA: CSPCN, 1999.

and federal policymakers. However, communities cannot simply wait for such decision and actions because, if they do, the situation will only worsen. In Southern California, the Hospital Association of Southern California (HASC) has mobilized its members to support their local nursing programs through its Nursing Workforce Initiative. This initiative seeks to increase nursing school enrollments by developing and strengthening relationships between local hospitals and schools of nursing. It includes surveying hospitals and schools of nursing and using the information gathered to support the development of new hospital-academic partnerships and the strengthening and expansion of existing partnerships.

The Initiative's hospital survey showed many hospitals face costly nursing shortages but have the capacity to accept more clinical student rotations. The nursing school survey showed more applicants than could be admitted because of insufficient faculty, classroom space, etc. In fact, more than three-quarters of the schools (77%) reported that limited resources were restricting their admission levels. This information was used to match hospital resources to nursing program needs and to build partnerships through which local hospitals could provide financial support for faculty and other resources to meet nursing program needs. As a result of this new support, a documented increase in funded nursing student positions began in fall 2001 and is projected to extend over the next two academic years (2002 and 2003).

Through its Nursing Workforce Initiative, HASC has shown that hospitals can help to expand nursing education pipeline capacity. In the second year of the Initiative, the surveys were expanded to include questions on the ethnic/cultural and gender diversity of the students applying, enrolling and graduating from nursing programs.

Student diversity

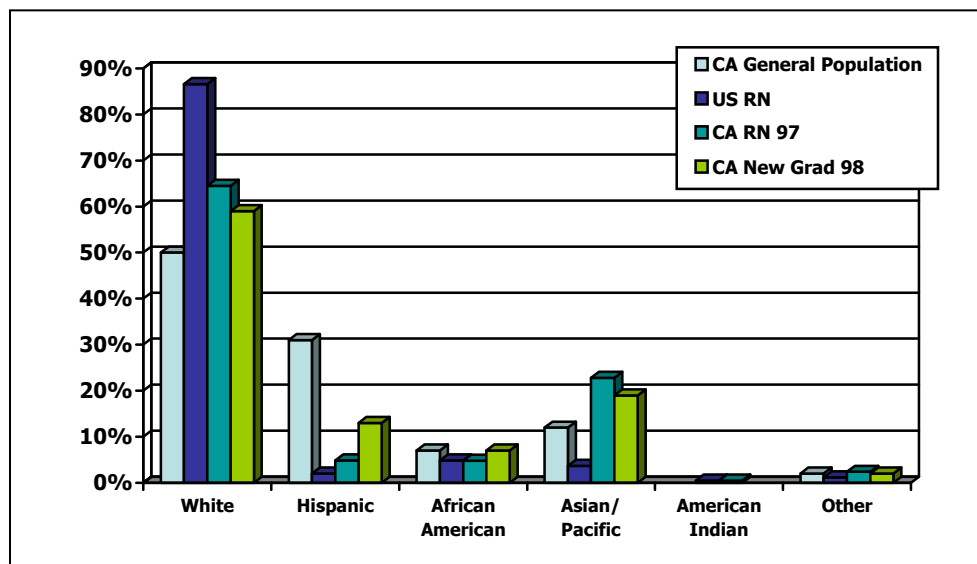
For a long time, ethnic diversity has been assessed using five categories: African American, Asian/Pacific Islander, Hispanic/Latino, White and Other. When American Indian is reported separately from Other, six categories are used. Such gross groupings are merely abstract compilations of many different groups and therefore do not necessarily capture reality in terms of true ethnic or cultural diversity. For example, the Asian/Pacific Islander category includes Vietnamese,

Samoan and Chinese and this level of detail is essential to properly assessing cultural diversity in the nursing workforce.

Within healthcare, a culturally diverse nursing workforce is extremely important. Nurses probably have the most interaction with patients and the quality and effectiveness of this care are highest where nurses and patients can speak the same language, and when nurses understand the cultural attitudes and beliefs of the patients they serve. For example, when nurses understand their patients' ideas and behaviors around nutrition, folk remedies and nurse-patient interaction, they are better able to provide appropriate care.

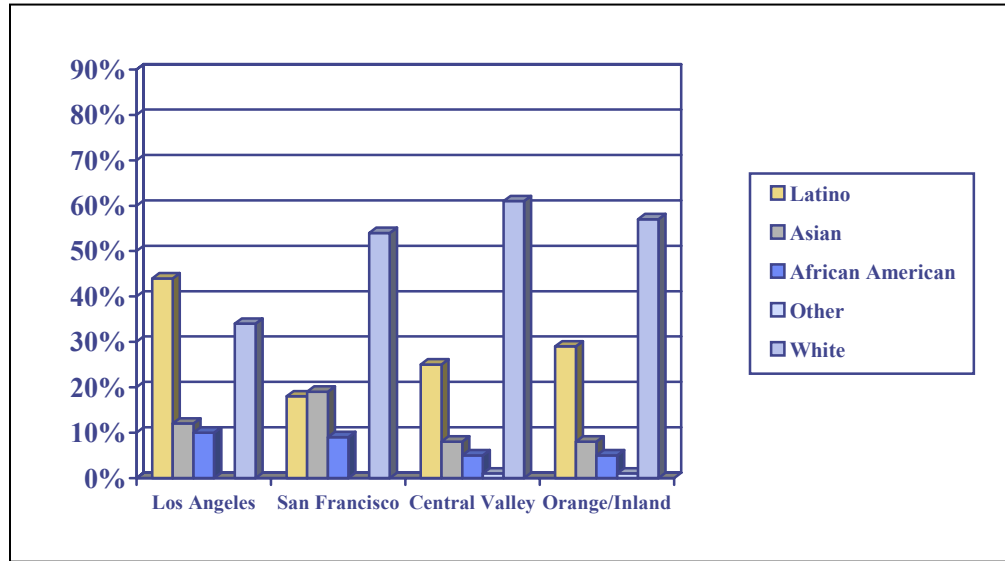
It is impossible to properly assess the magnitude of the cultural diversity problem faced by hospitals without more sensitive ethnic/cultural data. But a beginning understanding can be gleaned from reviewing current data. Comparing the ethnic/cultural breakdown of California's workforce with that of the entire United States shows California's nursing workforce to be more diverse (see Figure 2). However, this diversity does not reflect the diversity of California's current and projected populations (see Figures 3 and 4).

Figure 2: Diversity of California Population vs. US and CA Nursing Profession



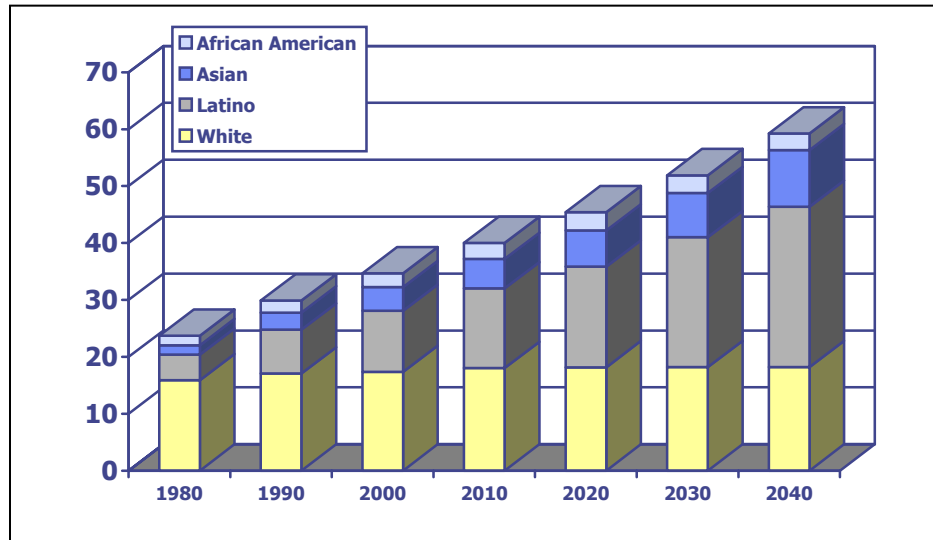
Source: National Sample Survey 2000, CA BRN Report

Figure 3: Race and Ethnicity by Region of California



Source: Baldassare (2002), and Johnson (1998) California Department of Finance (1998a)

Figure 4: Racial and Ethnic Change in California's Population (in Millions)



Source: Baldassare (2002)

While statewide data provide the broad outlines of cultural diversity, they cannot capture regional variations. California's nursing workforce is primarily White and female and therefore appears not to reflect the diversity of any of the four regions

(Los Angeles, San Francisco, Central Valley and Orange/Inland Empire) in the State. While Whites are over-represented in this work force, Hispanics and African Americans are underrepresented, but Asian/Pacific Islanders appear to be well represented. Thus, while hiring nurses from the Philippines has helped hospitals solve their nursing shortages, it has not necessarily helped them solve their patients needs for culturally competent nurses.

The problems of having a nursing workforce that meets the cultural needs of the State's population will not lessen. As Figure 4 shows, over the next several decades, the populations of African Americans and Whites in California will continue to decline while the populations of Latinos and Asians will increase. Again, given the diversity within these two latter groups, the need to recruit students from a wide variety of backgrounds will continue to grow.

Some ethnic/cultural data are available from CBRN's 2001 Annual Report where diversity among students and faculty in Northern and Southern California is compared. These data show fewer Whites and Asians and more Hispanics comprise Southern California's nursing student population compared to Northern California's (see Figure 5); while there are more minority faculty members (11%) in Southern California than in Northern California (5%).

Figure 5: Nursing Student Ethnic/Cultural composition

	Southern California	Northern California
White	37%	58%
Hispanic	24%	14%
Asian	9%	13%
Minority faculty	11%	5%

Source: CBRN 2001 Annual Report

Students from all ethnic/cultural groups are enrolling in nursing programs, but they are enrolling in different proportions in different types of degree programs. Most minority students are enrolling in Associate Degree (AD) programs where they represent 55% of the student body. In Baccalaureate (BSN) programs, they represent 48% of the student body and in Entry-Level Masters (ELM) programs, 38%. The long-term goal must be to also increase enrollments of minority students in BSN and ELM programs.

Once students are enrolled in programs, the challenge is to retain them and to maximize their graduation rates. The statewide student retention level averages 82%, with nursing programs in Northern California retaining more students (85%) than those in Southern California (80%) (CBRN 2001 Annual Report). However, these gross numbers capture considerable variation in retention levels across program types. For example, 97% of ELM students complete their programs, 91% of BSN students and 78% of Associate Degree students. The lower retention level for students attending community colleges has been attributed to open admission practices and the current lottery system¹. Certainly the lottery system does not assure admission of the most academically qualified students.

2nd YEAR SURVEY

A survey assessment of hospital-academic relationships was conducted throughout HASC's six county area (Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura) from March to September 2002. This was the second year that these surveys were distributed to hospital nursing Vice Presidents and Deans and Directors of nursing programs. Surveys were distributed to 46 (41 generic) schools of nursing, and 186 hospitals.

The academic and hospital assessment tools, (Appendices B and C) developed initially in 2001 as mailed paper surveys, were revised in 2002 to permit electronic submission. Also, the academic survey was expanded significantly to explore enrollment trends, student pool diversity, enrollment expansion barriers and program attrition. Initial survey distribution was accomplished electronically, with subsequent distribution by mail and facsimile. Additionally, face-to-face meetings were held with deans and directors of schools of nursing, and many nurse executives to encourage data submission.*

⁴ California Board of Registered Nursing Web Site. www.rn.ca.gov/nursing programs.

* While the 2001 return rates of both surveys exceeded 70%, the return rates in 2002 declined slightly to 65% for hospital surveys and 63% for the school survey. However, while 29 of the 46 schools responded to the survey, only 25 (53%) completed all survey sections. It is likely that the more detailed questions, included in the academic survey contributed to this decline. It is unclear whether the electronic submission also negatively impacted the return rates. Findings from the academic and hospital surveys are presented in turn.

Academic Survey: Data from Schools of Nursing

The nursing school data are provided in six primary topic areas: 1) Applications, 2) Enrollments, 3) Student attrition, 4) Program expansion, 5) Program effectiveness and 6) Hospital relationships. For most schools of nursing, the primary problems center on student attrition and lack of resources to support increasing enrollments.

Applications: Overall since 2001, nursing schools report a 19% increase in the number of applicants. Applications have increased in 42% of schools, decreased in 8% and remained the same in 50%. Schools generally report that the academic quality of students is unchanged, although there are a variety of experiences (see Figure 6).

Figure 6: Change in Academic Quality of Applicant Pool

Change in Quality	Schools Reporting
Student quality increased	21%
Student quality decreased	21%
Student quality unchanged	58%

Source: HASC NWI 2002 School Survey

Applicant pool characteristics have traditionally been difficult to monitor. Only 42% of schools document the gender and cultural/ethnic breakdown of their applicants. Among those that do, their applicants are more likely to be white and female although there is considerable ethnic and cultural diversity with 1 in 5 applicants likely to be Hispanic or Asian/Pacific Islander and 1 in 10 being African American (see Figure 7). Only 1 in 7 applicants (14%) is male.

Figure 7: Ethnic/Cultural & Gender Diversity of Applicant Pool

Ethnic/Cultural	
White	35%
Hispanic	21%
Asian/Pacific Islander	19%
African American	10%
Other	15%
Gender	
Female	86%
Male	14%

Source: HASC NWI 2002 School Survey

Most schools have waiting lists of qualified students that cannot be admitted due to limited capacities and faculty shortages. Given additional capacity, many schools (46%) would admit a high percentage (50-80%) of their wait-listed students (see Figure 8).

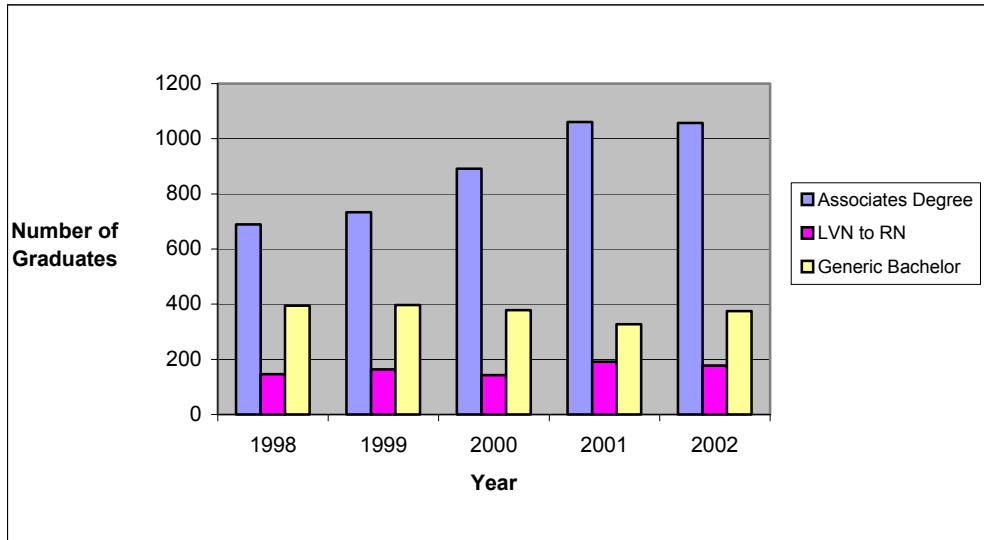
Figure 8: Admission Potential from Wait List

Proportion of schools	Proportion admitted
38% of schools would admit	81-100% of waitlist
46% of schools would admit	50-80% of waitlist
17% of schools would admit	Less than 50% of waitlist

Source: HASC NWI 2002 School Survey

Enrollments: Schools report varied experiences in enrollment trends for basic (generic) RN education programs. Student acceptance rates are monitored in 54% of schools. They report a slight increase in these rates for the last year from 48% in 2001 to 53% in 2002. This increase results primarily from a return to previous enrollment levels in bachelor degree programs which had fallen in 2001 (see Figure 9).

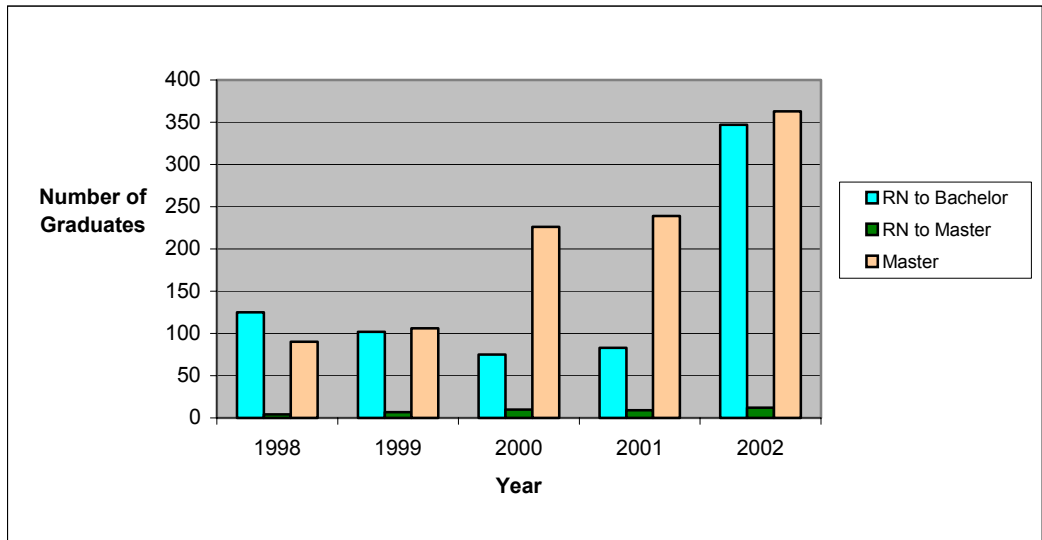
Figure 9: Enrollment Trends in Generic Nursing Programs*



Source: HASC NWI 2002 School Survey.
 *Data reported by 29 schools. Actual enrollments were reported for 1998 through 2002, while anticipated enrollments are reported for 2003 through 2005.

Enrollment trends for advanced education, or nursing degrees beyond pre-licensure programs are presented in Figure 10. They show that in 2002, enrollments in RN to Bachelor programs more than doubled over those in 2001 and that enrollments in Masters programs increased almost one-third.

Figure 10: Enrollment Trends in Advanced Nursing Education*



Source: HASC NWI 2002 School Survey.
 *Data reported by 29 schools.

Almost all of the reporting programs (83%) monitor the ethnic/cultural diversity and gender balance of their enrolled students. Comparing the ethnic/cultural and gender diversity of applicants and enrolled students shows White, Asian/Pacific Islander and female students are most likely to be admitted to nursing programs (see Figures 7 and 11).

Figure 11: Ethnic/Cultural Diversity and Gender Balance of Enrolled Student Pool

Ethnic/Cultural Groups	
White	49%
Hispanic	16%
Asian Pacific	20%
African American	7%
Other	8%
Gender	
Female	90%
Male	10%

Source: HASC NWI 2002 School Survey

Student Attrition: Although the CBRN requires nursing programs to monitor program attrition, only one in eight (12%) schools monitors the ethnic/cultural diversity and gender of students that leave its programs. Nevertheless, those that do monitor student attrition, generally report that it has improved in recent years. According to the CBRN, attrition has historically been higher in associate degree programs but this is changing. Current attrition levels reported by Southern California’s Associate Degree programs (18%) are similar to those of Baccalaureate programs (20%). Further study of attrition is critical to optimizing the number of students that successfully graduate. Causes of attrition vary by program but according to the schools responding to the 2002 HASC survey, the most prevalent causes are the demands of family and work outside of school (88%) academic performance (71%), and student financial need (42%).

Program Expansion: Most importantly, two-thirds (67%) of the reporting nursing schools believe that their enrollments can be expanded and that this can be achieved in a relatively short time. In fact, 62% of programs can increase their

student pools within the current or next academic years. Programs report an average enrollment increase potential of 23 students with one program able to expand to 90. Given the number of qualified students wait listed in most programs, there is hope that expansion of current nursing education capacity could begin to provide meaningful long-term relief to workforce shortages.

Schools report various barriers to program expansion. Faculty salaries and faculty shortages remain the most pressing issues for reporting schools (see Figure 12). Compared to 2001, physical plant has increased as a barrier; this is probably due to additional student cohorts being added in the recent academic year.

Figure 12: Rating of Barriers to Increasing Enrollment

Enrollment Barriers	Scale (1 low to 5 high)	
	2001	2002
Funding resource for faculty salaries	4.0	4.2
Availability of qualified faculty	3.0	3.3
Physical facilities for students	2.8	3.3
Adequate clinical sites for students	3.4	3.1
Number of slots allotted for students	3.1	3.1
Tuition/financial support for students	2.9	2.9
Availability of qualified students	2.9	2.6
Nursing support within academic institution	2.5	2.1
College limits, thresholds, or standards	2.0	2.0
Student access to non-nursing courses	2.0	2.0

Source: HASC NWI 2002 School Survey

Program Effectiveness: The quality and effectiveness of nursing programs are commonly measured by the National Credentialing License Examination (NCLEX) pass rates. Schools surveyed reported the graduates pass rates have increased slightly from an average of 79% for the class of 1998 to 82% for the class of 2001. This improvement was due to a sharp increase in the pass rate of baccalaureate programs in the region. Many programs (71%) also monitor their new graduates' transitions from schools to employment, and 58% survey the employers as well. Only 21% attempt ongoing monitoring of their graduates. There are no data regarding employment choices by ethnic or cultural group.

Academic-Hospital Relationships: All schools have clinical affiliations with local hospitals. These affiliations are the formal agreements by which faculty-supervised student groups rotate within designated clinical areas of the hospitals, and reporting schools have basic clinical affiliations with 1 to 12 hospitals. However, 75% of schools have relationships that include additional agreements. For example, hospitals provide faculty subsidies, their staff hold joint appointments with the school, or they commit other kinds of resources. Almost half of the schools (46%) and almost two-thirds (61%) of their partnerships include some form of financial support. Most commonly, this funding supports clinical faculty positions. Annual financial support provided by hospitals to schools of nursing ranges from \$10,000 to \$200,000. However, the average amount of financial support is \$83,000 per hospital and often represents a commitment covering multi-year agreements.

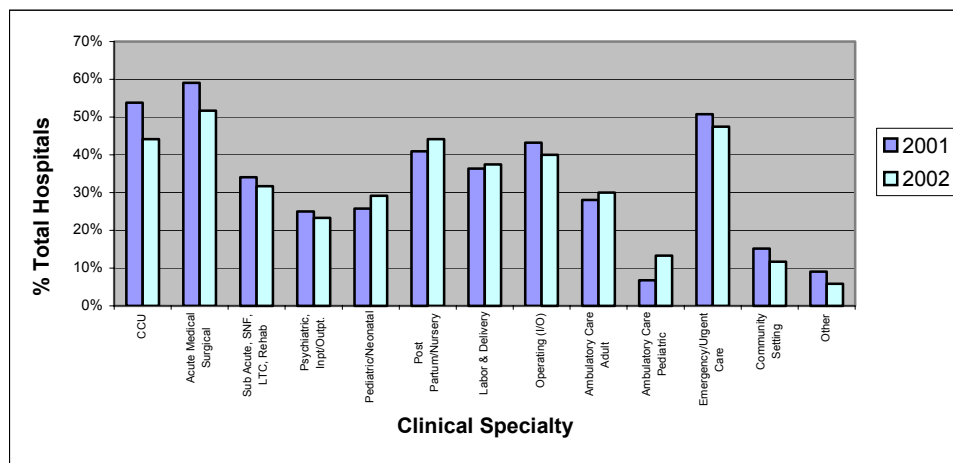
Hospital Survey: Data from Hospital Nurse Executives

Hospital survey data are provided in five primary topic areas: 1) Clinical capacity, 2) Hospital-Academic Relationships, 3) Impact of the nursing shortage, 4) New graduates, and 5) Other workforce development efforts. For most hospitals, their primary problem is to overcome their shortage of trained and available nurses, few have the resources to monitor the ethnic, cultural and gender status of their workforces.

Clinical Capacity: Hospitals' capacities to work with schools of nursing is shaped by the size of their own clinical specialties, how students can rotate through them and whether they choose to expand their relationships beyond clinical affiliations.

Affiliations with Schools of Nursing. Most hospitals (91%) have existing relationships with one or more local nursing programs, and almost as many (81%) would like even more students rotating within the clinical areas of their facilities. Hospitals report available capacity for students in almost every clinical specialty area. However, since 2001 the available capacity within all areas but 5 has decreased. The five areas where it has increased are 1) Pediatrics/Neonatal, 2) Postpartum and Nursery, 3) Labor and Delivery, 4) Adult Ambulatory Care, and 5) Pediatric Ambulatory Care (see Figure 13).

Figure 13: Available Hospital Clinical Capacity for Students 2001-2002



Source: HASC NWI 2002 Hospital Survey

This change in capacity may be due to the increase in hospital-academic partnerships that were initiated in the 2001-2002 academic year. It is also important to note that much of this capacity is not available at times when most schools and faculty would like to schedule rotations. There is less demand for evening, night, and weekend time slots, although ample clinical capacity is available at these times.

Student Rotations. In general, hospitals would like all types of students rotating within their clinical areas, and 73% have assigned resources to support and facilitate these rotations within their facilities. In fact, 18% of facilities have nurses working in joint appointment capacities (combination practice and education role). In addition, 40% of hospitals report that they have additional masters prepared staff that would be interested and able to serve as clinical faculty. This represents a significant untapped faculty resource for schools of nursing that are limiting admissions due to faculty shortages. It is also important to note that over half of the hospitals would like graduate students in addition to the undergraduate clinical rotations.

Hospital-Academic Relationships: Traditionally clinical affiliations between hospitals and schools of nursing have been for the purpose of arranging faculty supervised student rotations. On average, hospitals are affiliated with 3 nursing

schools, but the range of affiliations is from 1 to 12. However, 41% of reporting hospitals have relationships with schools that extend beyond these simple clinical affiliations. Most notably, direct financial subsidy is being provided to schools of nursing by over 29% of hospitals. The range of subsidy is \$2,500 to \$357,240 with an average annual expenditure of \$72,536.

Impact of the Nursing Shortage: More than three-quarters (76%) of the reporting hospitals monitor their vacancy rates, and they continue to identify a significant need for additional registered nurses. Hospitals reported, on average, an RN vacancy level of 14%, although the range (1-50% was considerable). Most hospitals report "significant" staffing shortages that they are meeting with temporary staffing strategies. The nursing shortage also has a considerable negative financial impact, which is reflected in increasing expenditures for temporary labor, hiring bonuses, and foreign nurse recruitment.

Nine out of ten hospitals (91%) currently utilize temporary labor. While some hospitals attempt to limit this use, most hospitals' expenses for temporary labor have risen sharply in the last year. This is not surprising given the highly competitive labor market. In 2002, the average annual expenditures per hospital for temporary (registry or traveler) nurses increased 56% over those in 2001. They now range from \$10,500 to over \$34 million and now exceed \$2 million/hospital/year.

Almost two-thirds (64%) of hospitals report utilizing hiring bonuses as a recruitment strategy, even though they do not appear to positively affect vacancy rates. (That is, hospitals that use hiring bonuses do not have lower vacancy rates than those that do not use hiring bonuses.) Annual hiring bonus expenditures average \$62,581 per hospital, although they vary based on facility size and structure of the bonus payments. Some hospitals limit the use of hiring bonuses to specific hard-to-fill positions.

Foreign nurse recruitment is an increasingly controversial recruitment/workforce strategy, reflected in a range of responses to questions on this topic. Fewer than half of the hospitals have previously or are currently considering foreign nurse recruitment. Over 40% of them have considered and rejected it or report they will

not consider it. Foreign recruitment costs vary significantly--from \$1,000 to \$30,000 per nurse—with an average of \$8,050 per nurse.

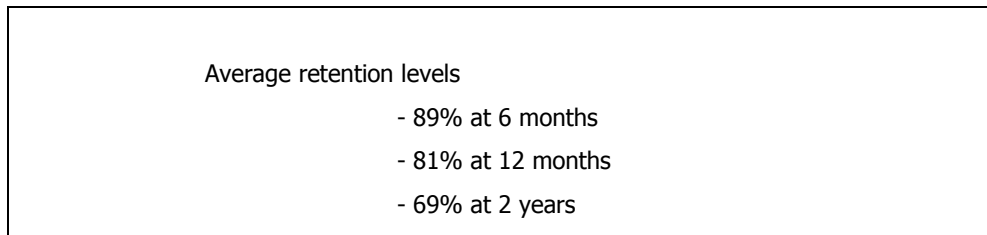
New Graduates: Given the current shortage of experienced nurses, hospitals hire new graduates and then invest significant resources in their orientation, training and development to ensure a successful school to career transition. However, high early turnover of new graduate nurses has historically been a problem. While this problem is recognized, hospitals have limited data on their new graduates, and many do not monitor the retention rates of these new hires.

New Graduate Support and Development. Almost all (96%) hospitals hire new graduates, even though they need additional education, support and training beyond the basic hospital orientation. Hospitals hire, on average, 18 new graduates each year, although the range of new hires (1-100) reflects the enormous variation captured in this average. Most hospitals (87%) hiring new graduates provide extended orientation programs commonly referred to as “new grad” programs. This additional support represents an average of 43 days or over 8 weeks of training and orientation. However, based on the range of days (2 to 180) committed to these programs, it is clear that hospitals have a highly variable definition of new graduate programs.

Over three-quarters (77%) of reporting hospitals also hire new graduates into specialty areas. In addition to basic orientation, 64 days or over 12 weeks of specialty support and education is provided. Again, the extreme variation in new graduate programs is reflected in a wide range in the length of these programs—from 5 to 240 days.

New Graduate Retention. Fewer than half of the hospitals (48%) monitor the retention rates of their new graduates. They report that after two years they lose almost 1 out 3 (31%) of their new graduates (see Figure 14). Such a serious problem has prompted hospitals to understand how to recognize and positively respond to early signs of dropping out. Based on experiences from several well-developed new graduate internship programs, retention appears to be linked directly to early practice support, guidance, and the quality of the work environment.

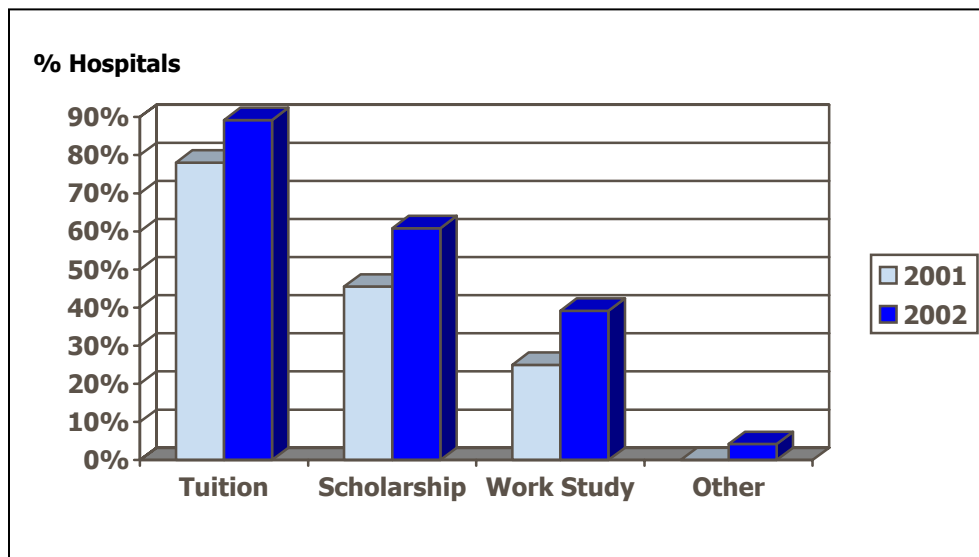
Figure 14: New Graduate Retention Levels



Source: HASC NWI 2002 Hospital Survey

Other Workforce Development Activities: Although hospital clinical affiliations with schools of nursing are a primary source of recruitment for new nurses, hospitals are also increasing their investment in other workforce development activities. Since 2001, the proportions of hospitals providing tuition assistance, scholarships, and work-study programs for employees and students within their facilities has increased so that currently almost all provide tuition assistance and more than half provide scholarships (see Figure 15). The increasing prevalence of these strategies reflects hospitals' increasing understanding of and commitment to active workforce development.

Figure 15: Internal Hospital Strategies for Workforce Development



Source: HASC NWI 2002 Hospital Survey

CONCLUSION

Hospitals and health systems in California face several major problems with the State's nursing workforce—it is too small to meet their staffing needs and not sufficiently diverse to meet their patients' needs. Solving these problems will require long-term, broad-based and coordinated action by policy makers, education and health care administrators, deans and directors of nursing programs and hospital nurse executives. This action must focus on expanding the educational pipeline so that more students apply and can be enrolled, retention levels increase, and graduates' school to employment transitions and career development are facilitated and supported. In the shorter-term, as HASC's Nursing Workforce Initiative demonstrates, hospitals can work with schools of nursing to increase the numbers of enrolled students. These partnerships now need to be expanded to also encourage the enrollment and retention of ethnically/culturally diverse and male nurses.

Building Capacity: Hospitals and health systems in California can, and must, contribute to both long- and short-term activities that address the State's nursing workforce shortages. Long-term activities must center on developing formal hospital/health system policy positions, crafting collaborative advocacy strategies and, through them, exerting pressure on public education systems to increase nursing program capacity throughout the State.

While they are involved in State level activities, hospitals can also support their local nursing programs financially, educationally and administratively. The financial and educational support will help address the nursing workforce shortage, while administrative requirements can strengthen nursing programs' abilities to recruit and retain students from all ethnic/cultural groups and both genders.

Financially, hospitals can help alleviate the nursing shortage by funding nursing school faculty positions, arranging joint appointments with nursing schools and paying their staff's nursing degree tuition fees. Educationally, hospitals could enhance students' experiences and hence their retention levels by offering more flexible student rotation schedules. Such schedules could work better for students with families and would maximize use of clinical space. To make such schedules

work, hospitals and schools must experiment with restructuring the traditional clinical training and faculty student supervision model in which hospitals play relatively passive roles. More active hospital involvement in supervision and teaching would probably be facilitated if hospitals and schools shared faculty. As these relationships are developed and enrollments increase, hospitals could also support schools by providing them with clinical laboratory support and classroom space.

Administratively, hospitals can begin the process of increasing enrollments of ethnically/culturally diverse and male nursing students by encouraging schools of nursing to expand their data collection systems. The ethnic and cultural needs of patients cannot be met if the assessment of workforce diversity is based on six categories (White, African American, Hispanic, Asian/Pacific Islander, American Indian and Other) as has been the case. Minimally, schools must be encouraged to collect and analyze data based on the Census 2000 categories and to assess the cultural competency skills of their students. In addition, researchers must be encouraged to develop better skills assessment instruments and educators must integrate cultural competency knowledge and training into their programs.

No, or inadequate, data collection currently presents the biggest stumbling block to understanding the different patterns among various student groups in applying for, enrolling in and completing nursing programs. Such data are essential to designing programs that will promote nursing workforce ethnic/cultural diversity. Making nursing a more attractive career for men requires a quite different approach that must overcome years of stereotyping nursing as "women's work."

To support schools' efforts to better document students' experiences, hospitals could require that nursing schools use their resources to meet clearly articulated and measurable objectives. These objectives in addition to encouraging more comprehensive data collection on ethnic/cultural backgrounds and cultural competency can also include cost-benefit evaluations, diversity trending and monitoring student retention and NCLEX pass rates.

However, there must be a word of warning. Although much can be achieved through local hospital-academic partnerships, schools of nursing must assure that their agreements with hospitals do not limit their students' clinical and academic

experiences. Students must experience a wide array of clinical environments throughout their educations. Their careers must not be constrained by the relationships their schools have with local hospitals.

Building Diversity. Although an interested, qualified and diverse student pool is available, special efforts are required to attract, recruit and retain more minority students and to enroll students with the highest academic capabilities. Such efforts, in addition to those at the State level to expand the educational pipeline, must include better data collection and information management systems and new programs. Nursing schools must consistently monitor the demographics and skills of applicants, enrolled students and students who do not complete their programs. This information must then be used to design support programs to help students of all ethnic and cultural backgrounds and both genders to successfully meet the academic and practice challenges of their nursing educations. These programs must, in turn, be continuously monitored to assess their impact on performance, program retention and NCLEX pass rates. Without this information and an iterative assessment process, strategies that ensure students' success cannot be implemented and maintained.

Schools are trying a variety of programs to help ensure the success of minority students and mentoring is one strategy that has been shown to work. Pairing minority students with minority role models helps ensure their success. However, because the most effective mentoring relationships are one-on-one and take place over several years, innovative programs that can support more students at any one time must be developed. Such programs are essential to promoting ethnic/cultural and gender diversity among nurses and increasing the retention levels of nursing programs.

Summary. Although long-term solutions to the nursing workforce shortage must be addressed at the national and state levels, hospitals and nursing school programs can collaborate to mitigate local workforce shortages and to increase the ethnic/cultural and gender diversity within the workforce. Experience in Southern California suggests such collaborations benefit both participants. Nursing schools benefit from increased resources and many hospital nurse executives and their staff report that clinical practice environments benefit immeasurably from the interests and energies generated by students and their academic pursuits.

Collaborations at many different levels are required to address the problems generated by too few nurses and too few ethnically/culturally diverse or male nurses. However, this work must continue if we are to assure that appropriate care will be available for all California's citizens.

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APPENDICES

List of California Nursing Programs

Academic Dean/Director Survey 2002

Hospital Vice President Survey 2002

Appendix A: List of California Nursing Programs by Region

Program Type	HASC	HCSD/IC	HCNC/CC	TOTAL
Associate Degree	Allan Hancock Antelope Valley Cerritos College Chaffey College College of the Canyons College of the Desert Compton College Cypress College East LA College El Camino College Glendale College Golden West College Long Beach City College LA County School of Nsg LA Harbor College LA Pierce College LA Southwest College LA Trade Technical LA Valley College Moorpark College Mount St. Mary's College Mt. San Antonio Mt. San Jacinto Pasadena City College Rio Hondo College Riverside Com. College Saddleback C College San Bernardino Valley C Santa Ana College Santa Barbara C College Santa Monica College Ventura College Victor Valley College	Cabrillo College Grossmont College Imperial Valley Maric College Palomar College San Diego City College Southwest Com College	American River Bakersfield Butte Community Chabot College City College of SF College of Marin College of San Mateo College of Redwoods College of Sequoias Contra Costa College Cuesta College De Anza College Evergreen Valley C Fresno City College Gavilan College Hartnell College Los Medanos Merritt College Modesto Jr C Monterrey Peninsula Napa Valley Ohlone College Sac City College San Joaquin Delta Santa Rosa Shasta College Sierra College Solano College Yuba College	
Baccalaureate Programs	Azusa Pacific University Biola University CSU Long Beach CSU Los Angeles CSU San Bernardino Loma Linda University Mount St. Mary's University of Southern CA	Point Loma San Diego State University University of San Diego	CSU Bakersfield CSu Chico CSU Fresno CSU Hayward CSU Sacramento Dominican Humboldt State Samuel Merritt San Francisco State San Jose State Sonoma State U University of SF	
Entry Level Masters			Samuel Merritt San Francisco State University of SF UC San Francisco	
RN to BSN Programs	UC Los Angeles			