

**NURSING EDUCATION AND THE
UNIVERSITY OF CALIFORNIA**

Final Report of the Nursing Subcommittee of the Health Sciences Committee

**SUBMITTED BY
UNIVERSITY-WIDE HEALTH SCIENCES COMMITTEE
To
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University of California –March 2002

I. BACKGROUND

Virtually all Americans will require nursing care at some time in their lives. Whether this care involves maintenance of health, episodic care of a highly technical or less complex nature, care for a chronic condition or illness, or long-term supportive care, the public expects that appropriate nursing care will be available. Nevertheless, continuing reports of a deepening nursing shortage raise serious concerns about the inadequate supply of Registered Nurses (RNs) in California and nationwide.

Factors contributing to this problem in California include an aging nursing workforce; a ratio of RNs to the population that is among the lowest in the nation; reliance on other states and countries to supply nearly half of the State's RNs; the highest rate of population growth in the country; an aging population; proposed new nurse staffing ratios in California hospitals; and a nursing education system that has not increased enrollments for more than a decade. Changes driven by managed care have created further challenges with increased workloads, decreased reimbursement for services, decreased funding for nursing education in health systems, and increased demand for nurses prepared at baccalaureate and higher levels. A growing shortage of nursing faculty raises serious added concerns.

Shortages of personnel in any workforce prompt educators in public and private systems to evaluate their responsibilities and capacity to respond. Toward that end, the Subcommittee on Nursing of the University of California's Health Sciences Committee was appointed in April 2001 and charged with making recommendations regarding the University's role in meeting these needs.

II. THE CALIFORNIA NURSING WORKFORCE SHORTAGE

Findings from the National Sample Survey of Registered Nurses conducted by the Bureau of Health Professions, Division of Nursing in 2000 indicated that California has only 544 working RNs per 100,000 population—second only to Nevada in the lowest proportion of working RNs in the nation. The same survey reported a national average of 782 RNs per 100,000, with a high of 1,194 RNs per 100,000 people.

Within this diminishing workforce, the average age of working nurses is steadily increasing. In 1990, the mean age of the California RN workforce was 43 years. By 1997, the average age had increased to 45, with fewer than 10% of all RNs under the age of 30. The demographic profile of the nursing workforce has also changed in other ways. Significantly, between 1990 and 1997 there was a 16% decline in the proportion of non-Hispanic white RNs and a nearly 80% increase in Asian nurses, primarily from the Philippines. Recent data indicate that approximately 60% of newly licensed California RNs are Filipino. The extent to which this trend continues, however, will be influenced by potential changes in federal immigration policies, including those that might result from the September 11, 2001 attacks.

Historic Reliance on In-Migration

California has historically relied on the in-migration of RNs educated in other states and countries to meet its workforce needs. Together, the State's public and private educational systems educate approximately half of the RNs needed to meet demand. Until the early 1990s, substantial in-migration occurred because nurses trained elsewhere were attracted to California by good wages and excellent living and working conditions. By the mid-1990's, however, changes in the health care system had increased workloads, decreased hospital staffing, and reduced morale among many nurses. Movement of major industries out of California during the same period reduced the rate of in-migration of nurses and increased the number leaving the State to relocate with their families. Anecdotal evidence also suggests that the continued out-migration of nurses trained in other countries is having negative effects in some areas, which could result in new efforts to improve retention and reduce migration to the US.

Projected California Demand for RNs

Between 2000 and 2025 California's population is projected to increase by 52%. This rate of growth will be among the highest in the nation and comes at a time when growth in other states is expected to decline. Approximately nine million people, or about half of the anticipated increase of 17.7 million Californians, are expected from foreign migration. Based largely on expected increases in population, the Employment Development Department (EDD) has projected an increased demand of 39,470 RN jobs in California between 1996 and 2006. The estimated 27,970 RNs that are expected to leave the workforce on a permanent basis will result in a total estimated need for 67,440 additional RNs by the year 2006 in order to maintain the State's already insufficient supply. Of further concern is the fact that the demographic profile of the nursing workforce does not reflect California's increasingly diverse population. Most notably, Latinos make up more than 30 percent of the State's population but only four percent of its working nurses.

Within the health care market, demand has intensified for nurses prepared in baccalaureate, entry-level masters and advanced degree programs that emphasize leadership, critical thinking, and case management in a wide range of clinical settings. The Veterans Administration (VA), the nation's largest employer of registered nurses, has recently established the baccalaureate degree as the minimum level of educational preparation for promotion beyond entry-level jobs beginning in 2005. The federal government has committed \$50 million over five years to help VA nurses meet this standard.

In California, the findings of a 1997-98 survey conducted by the California Strategic Planning Committee for Nursing (CSPCN) showed similar results indicating that employers plan to decrease employment of associate degree graduates by 5.8%; increase employment of baccalaureate nurses by 8.8%; and increase hiring of masters prepared nurses by 7.4%. In December 2000, the California Healthcare Association reported that statewide vacancy rates for RN positions in hospitals was 12.4%. Findings from a survey of 715 hospitals conducted by the American Hospital Association in June 2001 show a national nursing vacancy rate of 11%; among all hospital staff vacancies, 75% of positions listed were for RNs.

Nationally, enrollments in entry-level baccalaureate nursing programs increased in 2001 by almost four percent over the previous year, ending a six-year period of decline. Despite this recent growth, however, the national declines of the last decade have had a disproportionate impact on California. A review of 342 US baccalaureate pre-licensure programs shows a decrease in total enrollment between 1996 and 2000 of approximately 3,010 students annually. A corresponding decrease of 1,210 graduates per year has thus further reduced the pool of eligible graduates that the State can draw upon to meet its needs.

Shortage of Faculty for Schools of Nursing

A critical factor in addressing future needs relates to the growing shortage of nursing faculty. Statewide estimates based on average vacancies for California programs suggest that approximately 345 faculty positions will be vacant during the academic years 2000-01 and 2001-02. The State's ability to increase nursing enrollments in any sector of higher education will therefore be directly linked to an adequate supply of qualified faculty who are trained at the graduate level.

Among all schools, the positions most difficult to fill are those for doctorally prepared nurse practitioners and doctorally prepared faculty with specialties in pediatrics and obstetrics. Despite growing demand for faculty, however, the number of graduates of doctoral programs nationwide has been virtually unchanged over the past ten years at approximately 440 to 450 new graduates per year. Masters-prepared nurse educators are also in great demand as faculty for associate degree (AD) and baccalaureate programs in California.

Not unlike the nursing workforce in general, the faculty is aging and increasing numbers are approaching retirement. The American Association of Colleges of Nursing reported that in the year 2000, the mean age of faculty in four-year colleges and universities was 50.5 years, and the average age of assistant professors was 50.0 years – significantly older than for most other disciplines. Among nurses working as faculty in the year 2000, 44% were over 50 and 11% were age 60 or more. In California, a 1999 survey of 1,779 working faculty indicates that nearly 17% expected to retire within five years.

III. NURSING EDUCATION IN CALIFORNIA

The existence of multiple educational pathways leading to eligibility for RN licensure makes nursing unique among the health professions. Nationally, these pre-licensure programs include: hospital-based diploma programs (with relatively few remaining); associate degree programs offered primarily by community colleges; baccalaureate degree programs; masters-level entry programs; and doctoral-level entry programs.

RN Pre-Licensure Programs

Four types of RN pre-licensure programs exist in California. These programs are offered by the California Community Colleges (CCC) system, the California State University (CSU) system, private colleges, and the University of California. Most of these programs are fully subscribed and have waiting lists of qualified applicants.

Associate Degree Programs: Approximately 70% of RNs educated in California graduate from community colleges. These programs typically attract older, “community-bound” students with families who are unable to relocate to attend a program far from home. AD nursing programs are offered in 68 of the 108 CCCs and in three private colleges. These programs typically require a minimum of three years for completion, including one year of required coursework in the biological and social sciences, after which students may apply for admission to the two-year nursing curriculum. Because of high demand, qualified students may wait up to three years for admission to some programs.

Baccalaureate Programs: Thirteen of the 23 CSU campuses and nine private California colleges offer baccalaureate programs in nursing. Like students enrolled in associate degree programs, those entering CSU nursing programs must complete prerequisites for admission prior to acceptance to the nursing program. Waiting lists for CSU programs are also long, with many qualified students routinely denied admission. In 1997, CSU campuses reported that 44% of applicants who met eligibility requirements were not admitted due to limits in class size. Within the UC system, UC Los Angeles is the only campus that has offered a pre-licensure nursing baccalaureate program in the past 20 years. In 1995, however, this program suspended enrollments due to major cuts in the UC budget.

Masters-Level Entry Programs: Within UC, the Masters Entry Program in Nursing (MEPN) is offered exclusively at UC San Francisco. This program is designed for individuals who have earned a bachelors degree in another field who want to enter the nursing profession. Students admitted to the program complete requirements for RN licensure after one year of full-time study. Students are then eligible to take the licensure exam and work as RNs while completing work for the masters degree. UCSF’s MEPN is very competitive: in 2002 it received over 100 applications for the 16 available positions. Two private schools and one CSU campus offer an alternative masters-level entry program for college graduates. Each of these has a pre-licensure baccalaureate program and offers the masters option in conjunction with the baccalaureate degree.

Enrollments in California Nursing Programs

Notwithstanding recent increases in workforce demand, major state budget cuts in the early 1990s resulted in reduced class sizes in California's public nursing programs. The number of RN pre-licensure students decreased from a total enrollment of 12,911 in 1995-96 to 11,211 in 1997-98, due in part to the suspension of the baccalaureate pre-licensure program at UCLA and a 50% enrollment cut in the number of baccalaureate pre-licensure students at CSU Fresno. Table 1 below shows the number of California nursing graduates by program for 1994-95 through 1999-2000. As indicated, there are currently approximately 5,000 graduates from RN pre-licensure programs per year. In 1999-2000, 68.9% of these were graduates of associate degree programs, 28.6% were graduates of baccalaureate programs, and 2.5% were graduates of entry-level masters programs.

Table 1. RN Pre-Licensure Graduates by Program Type, 1994-95 through 1998-99.

Pre-licensure Program	1994-95	1995-96	1996-97	1997-98	1998-1999	1999-2000
Associate Degree	3,652	3,689	3,366	3,449	3,556	3,523
Baccalaureate	1,581	1,521	1,336	1,601	1,447	1,463
Masters Entry-level ^a	--	--	--	29 ^a	35 ^a	130
All Programs	5,233	5,210	4,702	5,079	5,038	5,116

Source: Board of Registered Nursing, *Annual School Reports*, 1994-2000. Unpublished.

^a Number reflects MEPN graduates only for 1997-98 and 1998-99; includes entry-level masters option and MEPN graduates (N=54) for 1999-2000. Pre-licensure graduates in 1995-96 and 1996-97 were included in the baccalaureate totals.

Post-Licensure Baccalaureate, Certificate and Graduate Programs

RNs receiving their pre-licensure education in associate degree or diploma programs may choose to continue their education in nursing or a related field. Programs leading to a bachelor of science in nursing degree (BSN) are offered by the majority of schools that offer baccalaureate RN pre-licensure programs. In addition, four CSU campuses and five private colleges that do not have RN pre-licensure programs offer the RN to BSN program for diploma and AD graduates. UCLA also offers an AD to BS to MSN program that graduates approximately five students a year. RN to MSN programs are offered by two private colleges and one CSU campus. It is important to note that while these programs offer important alternatives, fewer than 20% of California RNs who graduate from AD or diploma programs continue their education in nursing or a related field.

Programs leading to the MSN in a variety of nursing specialties are offered at 12 of the CSUs, eight private colleges, and at both UCLA and UCSF. Several CSU campuses, private colleges, and UC health sciences campuses (UCI, UCD and UCSD) also offer certificate programs leading to the nurse practitioner and/or nurse midwifery credential. Graduates of these programs are in high demand in many primary and specialty care settings such as community health, school based clinics, inpatient services, urgent care and private practice. As primary care providers with diagnostic and prescriptive authority, they provide services to medically underserved, vulnerable populations as well the population in general. Doctoral programs in nursing are offered at UCLA, UCSF, and the University of San Diego. Applications to UCLA's graduate programs for Fall 2002 have to date increased 30% over the previous year.

Additional information about UC's programs is included in Appendix A, with enrollment numbers summarized in Table A-1.

IV. SUMMARY OF SUBCOMMITTEE FINDINGS

(1) *California's nursing workforce crisis is serious and growing.*

The State's growing population, an aging nurse workforce and insufficient capacity in the nursing educational system are among the factors contributing to California's deepening nursing shortage. Implementation of new nurse staffing ratios in California hospitals will add further challenges that will result in unprecedented demand. The need for baccalaureate-prepared nurses is particularly high in all health care sectors.

(2) *Among public nursing education programs, the CSU and CCC systems offer the overwhelming majority of undergraduate nursing programs.*

Sixty-eight (68) California community colleges and 23 CSU campuses offer pre-licensure nursing programs leading to a nursing degree. Although these programs will likely continue, the strong demand for baccalaureate-prepared nurses is expected to increase pressure on other sectors of higher education to increase the size of their programs.

(3) *Significant growth in undergraduate nursing education will be needed to meet future needs.*

To meet State needs, growth in public and private undergraduate pre-licensure programs, development of new programs, and new strategies to recruit and retain licensed nurses trained in California and elsewhere will be necessary. Critical among such efforts will be those involving new or expanded training programs in California.

(4) *The growing shortage of nursing school faculty (in California and nationally) poses a major challenge for increasing enrollments in all programs.*

The State's capacity to increase enrollments in nursing programs in all segments of higher education is dependant on an adequate supply of qualified faculty and therefore a sufficient supply of nurses trained at the graduate level. Doctorally prepared nurses frequently serve as nursing school faculty for BSN, MSN and PhD programs, while masters-prepared nurse educators are in great demand as faculty for AD programs.

(5) *UC nursing schools play a central role in preparing future faculty for all California nursing programs.*

UC trains the majority of the State's doctorally prepared nurses and a significant number and proportion of masters-level and advanced practice nurses. Although UC's role in undergraduate education is small by comparison to that of the CSU and CCC systems, its role in graduate training and preparation of new faculty is unparalleled among California programs. For future growth in California undergraduate programs to be possible, an increase in available faculty will be required.

- (6) *The absence of a UC nursing program for undergraduates has had unanticipated negative consequences.*

Since the suspension of enrollment in UCLA's baccalaureate degree in 1995, college-bound high school graduates have not had an available UC option for pursuing an undergraduate degree in nursing. Students interested in nursing but strongly committed to a UC undergraduate education are therefore required to forgo nursing and select other majors. Students who are committed to nursing at the time they apply for college thus select among nursing programs at a CSU campus, community college or a private institution. Because the former UCLA undergraduate nursing program had been a strong pool for recruiting graduate students, suspension of this program had the further adverse effect of reducing the number of students who might otherwise pursue advanced degrees or future nursing faculty careers.

V. RECOMMENDATIONS

The CSU and CCC systems will have substantial continuing responsibilities for undergraduate public nursing education and will likely have significant responsibilities for meeting State needs for licensed RNs. UC, however, has a critically important role in both nursing education and in meeting future State needs. Nowhere is this more true than with respect to preparation of new faculty for nursing programs and the education and training of advanced practice nurses. As part of this review, UC nursing programs were asked to assess their capacity to expand existing programs and to develop new ones responsive to workforce needs. Based upon this review, and guided by consultation with faculty and other experts, the following five recommendations are made regarding the University's role:

- (1) *UC should participate in meeting the demand for baccalaureate-prepared nurses and should recreate an opportunity, however limited, for students to earn a baccalaureate degree in nursing from UC.*

To address the critical shortage of baccalaureate-prepared nurses, the UCLA School of Nursing has proposed re-establishment of the undergraduate nursing program with admission of 50 students per year as upper division nursing majors from either the UCLA College of Letters and Sciences or as transfers from community colleges. In view of existing strong demand for new graduates, the School has proposed admitting UCLA sophomores (for the initial two years of the program) who could complete their final two years as nursing majors and graduate within two academic years of their transfer.

- (2) *UC should expand graduate programs to prepare increased numbers of graduate students for future careers as faculty or advanced practice nurses.*

To help meet the urgent need for new faculty, UCSF has proposed offering a specialty in nursing education for 12 students per year as a new major within the existing masters program. By placing emphasis on the teaching role (rather than on a clinical specialty) it is expected that a majority of these students would pursue faculty careers.

- (3) *UC should expand programs that tap new and existing pools of students who are interested in working as an RN and who seek training at the masters level.*

To increase the pool of licensed RNs that possess graduate training, UCSF has proposed establishing a MEPN satellite site in either Fresno or Sacramento with an enrollment of 32 new students per year. Recruitment of students and faculty, and administrative assistant time to support the work, could begin if adequate resources were available. Students would enter the program in June and complete the coursework for RN licensure by the following June.

The existing UCSF-based MEPN program taps the pool of general college graduates as an unrealized source for entry level and advanced practice programs in nursing. Students enter the MEPN program with a commitment to full-time, intensive study for the first year of the three-year program, after which they are eligible to take the RN licensure exam. Students then work as RNs full- or part-time while completing coursework for the masters degree.

To answer the shortage of nurses, the UCLA School of Nursing is considering implementing an innovative Masters Entry Clinical Nurse Leader Program with an enrollment of 50 students per year. This program prepares those with a baccalaureate in other disciplines (biology, psychology, sociology, etc.) for professional bedside nursing. The focus of the Clinical Nurse Leader (CNL) would be to assume accountability for patient care outcomes by providing and managing care of individuals at the bedside. Graduates of this two year program will be uniquely qualified to provide direct care to patients and be accountable for care management of patient populations within the complex health care hospital environment.

Scholarship support for students entering this program is often necessary for recruiting top students who are required to leave the workforce to pursue intensive training in nursing. Experience with the existing MEPN program at UCSF has shown that it is costly in terms of tuition, fees, and unrealized income for students. Recruitment of top students is significantly enhanced when scholarship support is available to minimize indebtedness and to make the costs of attendance manageable.

- (4) *UC should, to the extent possible, expand access for community college nursing program graduates who wish to pursue a baccalaureate degree.*

UCLA should expand access for community college graduates by increasing enrollment in its existing AD/BS/MSN program. The existing UCLA AD/BS/MSN program enables a small number of registered nurses that have graduated from a community college to earn a baccalaureate and a masters degree within three years. The School has proposed modest expansion of this program as part of its overall plan for meeting current needs.

- (5) *UC should develop for a plan for supporting existing nurse practitioner and nurse midwifery programs that increase and diversify the skills of practicing nurses.*

The nurse practitioner and/or nurse midwifery programs at UCI and UCSD are currently in danger of closing due to lack of core financial support. While tuition dollars contribute to the resource base for these certificate programs, the total revenue generated by student fees is not sufficient for maintaining these programs. Masters graduates from UCD and UCSD (and their collaborating CSUs), as well as post-masters certificants from all three programs often serve as preceptors for RN pre-licensure students at the baccalaureate and masters-entry level. These programs require core support to meet current needs and to allow sufficient time to assess the feasibility of new partnerships within UC or other educational systems for RN pre-licensure, graduate and post-graduate programs. While the existing UCD program receives some funding from the University, it also relies heavily on extramural competitive grants for maintenance. The resource needs of these programs should be addressed and a plan developed for providing stable ongoing support.

Total Increase in UC Nursing Enrollments if Growth Occurs as Proposed

If the above recommendations were implemented as outlined, the two UC Schools of Nursing would have a total enrollment increase of **444** students. The total projected enrollment at the UCLA School of Nursing when the re-established baccalaureate and expanded AD/BSN/MSN programs are fully enrolled would be **324** students, including 200 student full time equivalents (FTE) students in the BSN undergraduate program (50 students per year for each of four years), 24 additional student FTE in the existing AD/BS/MSN program (8 students per year for three years), **and 100 student full time equivalents in the Clinical Nurse Leader Programs (50 students per year for two years)**. At UCSF the total projected enrollment when the MEPN and nurse educator programs are fully enrolled would be 120 students, including 96 in the MEPN program and 24 in the masters program who would be prepared to assume faculty positions.

VI. NEXT STEPS

The 1989 UC report, *Health Sciences Planning: The Context and the Issues*, showed foresight ten years ago when describing the challenges facing the nursing profession. At that time, the roles of the CCC and CSU systems in nursing education were reviewed and the need for increased emphasis on UC graduate education programs was clear. In developing a new strategic plan for the University's health sciences programs, and in view of changes in the health care delivery system and current workforce shortages, the Health Sciences Committee is encouraged to carefully consider the University's responsibilities for nursing education at all levels, including those related to undergraduate nursing education. This report identifies important first steps in this regard.

As part of the University's overall health sciences planning endeavor, continuing efforts should be made to strengthen existing programs at the UCLA and UCSF Schools of Nursing and to support increased RN pre-licensure and graduate enrollments at campus programs

and/or at satellite locations. Creation of new RN pre-licensure programs and graduate programs that meet regional needs should be considered at other UC health sciences campuses either as satellites of the two existing schools of nursing, as new consortium models, or as new schools of nursing. An objective assessment of the current UC costs of nursing education would clearly help inform this debate.

APPENDIX A

UNIVERSITY OF CALIFORNIA NURSING EDUCATION PROGRAMS

UC Schools of Nursing are located on the UCLA and UCSF campuses. While both Schools have graduate programs at the masters and doctoral level, only UCSF offers a pre-licensure masters-level entry program. For students that have earned an associate degree and are already credentialed as an RN, UCLA offers a unique AD to BS to MSN program. In addition to programs offered by UC Nursing Schools, the University's health sciences campuses in Davis, Irvine, and San Diego offer a combination of nurse midwifery and nurse practitioner graduate and/or certificate programs.

Schools of Nursing

University of California, Los Angeles offers an AD to BS to MSN program that is designed to move RNs prepared at the associate degree level into the masters program with minimum redundancy and educational time. UCLA also offers an MSN program (providing specialty nursing preparation at the masters level), an MBA/MSN concurrent degree program, and doctoral level education.

The UCLA faculty is prepared to re-establish the baccalaureate RN pre-licensure program as a means of providing UC-eligible students with an option for undergraduate education in nursing and creating a pool from which UC graduates may be recruited to graduate level nursing programs. The University community is informed and supportive of this interest and a plan is in place to begin curriculum development. In reviewing a timeline for admissions, the earliest assumes adequate future funding and an ability to obtain university approvals for the program and course content during the 2002-2003 academic year. The plan assumes that students can be recruited from among undergraduate science majors at UCLA or other campuses who have completed appropriate coursework for admission as juniors to the nursing major in Fall 2003. Student interest in a UCLA program continues to be very high among university-bound students. The School of Nursing reports at least 6 to 8 calls per week regarding the program and that approximately 25 students each year declare nursing as a major even though the program has been suspended for more than five years.

University of California, San Francisco has three program levels. The Masters Entry Program in Nursing (MEPN) prepares 55-60 students per year for the nurse licensure exam in a one-year intensive RN pre-licensure course that requires a prior baccalaureate degree in another field. At the end of the year, students are eligible to take the RN licensing examination. Students complete advanced practice specialty courses while working as an RN before graduating with a masters degree as their first professional degree. While access to clinical training sites in San Francisco limits expansion of the program in the Bay area, expansion of this program at a satellite campus in either Sacramento or Fresno would be possible with adequate financial support. The MEPN program provides access to a pool of individuals who have completed the baccalaureate and can be prepared for RN licensure in a short period of time. These students possess advanced training upon completion of their masters degrees and can often be motivated to pursue doctoral studies.

Masters program graduates are prepared for advanced practice roles in a variety of clinical specialties. All masters-prepared nurses are potential clinical preceptors for pre-

licensure students and some choose formal teaching roles either episodically or permanently. Within the masters program, students from any specialty may add an education minor to clinical specialty work to be prepared to teach at the associate degree and baccalaureate levels, or for staff development roles in health care agencies. Approximately 15-20 students per year complete such study. Beginning next year, students will be able to select the Education track as their specialty, adding to it advanced content courses in one of the five required nursing pre-licensure content areas. UCSF offers the masters program on the San Francisco campus and to students at the Fresno campus. The UCSF doctoral program provides graduate education courses and a teaching residency that prepares students for academic teaching and research careers.

Certificate Programs

University of California, Davis offers a 24-month Family Nurse Practitioner (FNP) program and concurrent Physician Assistant (PA) program. In collaboration with CSU Sacramento, UC faculty provides the FNP clinical specialty track and certificate for students completing the masters degree at CSUS. Although this arrangement provides no state funding for UC, the program receives core funding from the School of Medicine to support 30 students. The faculty is currently collaborating with the UCSF School of Nursing to provide training for certified nurse midwife students and would like to expand that collaboration to provide graduate nursing education.

University of California, Irvine offers a 12-month, post-masters FNP certificate program through the Office of Nursing and Allied Health in the College of Medicine for 8 to 12 students annually. The program operates on tuition and small state and federal grants and receives no core funding from the University. In response to significant unmet demand for nursing education programs south of Los Angeles County, faculty members are exploring options for offering RN pre-licensure and graduate nursing education on the UCI campus. Options include development of satellite or consortium models with existing UC Schools of Nursing, collaboration with other UC campuses, or potential development of a new School of Nursing. The faculty has also explored collaborative arrangements with California State University, Fullerton (CSUF) for offering the FNP clinical track as part of the CSUF masters program. Core funding for the UCI component would be required to support such an effort.

University of California, San Diego provides masters and post-masters education in both nurse midwifery and family nurse practice. The masters program is a collaborative program with San Diego State University (SDSU). Students spend one year on each campus, receiving a clinical certificate from UCSD and the masters degree from SDSU. The number of students entering from SDSU remains stable given the large demand in San Diego for advanced practice education. Programs are funded by clinical income earned by the faculty, small state grants, post-masters tuition and, for the masters program, minor support from the University. Core funding will be required to sustain the program given that federal grants are no longer a stable source of support. The faculty is exploring new options for expanded graduate programs at UCSD. These include development of programs at satellite sites and/or establishment of a collaborative model with another UC campus. A collaborative community-based MEPN program is also under consideration.

TABLE A-1
UNIVERSITY OF CALIFORNIA HEALTH SCIENCES CAMPUSES
ENROLLMENTS IN NURSING EDUCATION PROGRAMS

Program and Campus	1998-1999		1999-2000		2000-2001	
	New Enrollments	Graduations	New Enrollments	Graduations	New Enrollments	Graduations
Masters Level Entry Program (MEPN) UCSF	36	35	55	54	57	57
RN to BSN to MSN UCLA	5	4	6	4	4	5
Masters Program, Nursing Administration UCLA	8	5	9	6	14	9
Masters Program, Nurse Midwifery UCLA	9	4	10	9	5	8
Masters Program, Nurse Midwifery UCSF	11	7	13	11	11	14
Masters Program, Nurse Practitioner Specialties UCLA ¹	114	100	104	117	102	109
Masters Program, Nurse Practitioner Specialties UCSF ²	82	62	107	55	88	80
Masters Program, Other Specialties UCLA ³	2	1	2	2	3	1
Masters Program, Other Specialties UCSF ⁴	32	52	49	31	60	39
Doctoral Program, Nursing UCLA	8	8	6	3	3	3
Doctoral Program, Nursing UCSF	24	6	21	19	15	12
Certificate, Family Nurse Practitioner UCD ⁵	32	25	24	30	14	22
Certificate, Family Nurse Practitioner UCI	10	7	8	4	9	6
Certificate, Family Nurse Practitioner UCLA	1	2	2	3	1	1
Certificate, Family Nurse Practitioner UCSD ^{6,7}	14	15	13	13	14	14
Certificate, Family Nurse Practitioner UCSF	13	13	8	8	3	3
Certificate, Other Nurse Practitioner Post-Masters UCLA ³	3	5	4	1	1	4
Certificate, Nurse Midwifery UCSD ⁶	10	8	8	8	6	6

¹Specialties include: Acute Care, Family, Gerontology, Occupational & Environmental Health, Oncology/Adult, and Pediatric.

²Specialties include: Acute Care, Adult, Family, Gerontology, Neonatal, Occupational Health, Oncology, Pediatric, Psych/Mental Health, and School Nurse.

³Specialties include Acute Care, Gerontology, Oncology and Pediatric.

⁴Specialties include: Advanced Practice Home Care, Cardiovascular Nursing, Community Based Health Systems, Critical Care/Trauma Nursing, Gerontology Clinical Specialist, Occupational Health Administration, Oncology Nursing, Perinatal Nursing, Psych/Mental Health Clinical specialist.

⁵Includes students who receive a master's degree from Sacramento State University and a certificate from UCD.

⁶Includes students who receive a master's degree from San Diego State University and a certificate from UCSD.

⁷Includes students in a Family/Gerontology specialty through 2000 only.

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