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ABSTRACT

This report addresses three issues concerning the ability of California's collegiate nursing programs to produce enough registered nurses to meet a growing statewide shortage: (1) the existing enrollment capacity of nursing programs in the State's public and private colleges and universities; (2) plans for the expansion of enrollments on existing campuses and the possible addition of new programs; and (3) the status of curriculum articulation between community college and California State University programs. The report suggests that capacity and potential for expansion are affected significantly by variables outside a program's ability to change (e.g., availability of clinical placements and recruitment and retention of qualified faculty), and that the State could do well to focus limited resources on these other aspects of the shortage equation and those aimed at improving the working conditions of nurses. These variables, it is argued, ultimately have the determining effect on California's ability to meet its current demand for registered nurses. An appendix contains a copy of Assembly Bill 1055 (1990), and the Executive Summary of "Meeting the Immediate and Future Needs for Nursing in California." (GLR)

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ED 338 189



CALIFORNIA'S CAPACITY TO PREPARE REGISTERED NURSES



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

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Summary

Through Assembly Bill 1055 (Roos, 1990), the California Legislature asked the California Postsecondary Education Commission to report on three issues concerning the ability of California's collegiate nursing programs to produce enough registered nurses to meet a growing statewide shortage:

1. The existing enrollment capacity of nursing programs in the State's public and private colleges and universities;
2. Plans for the expansion of enrollments on existing campuses and the possible addition of new programs; and
3. The status of curriculum articulation between community college and California State University programs.

The Commission responds to that request in this staff report, which indicates that:

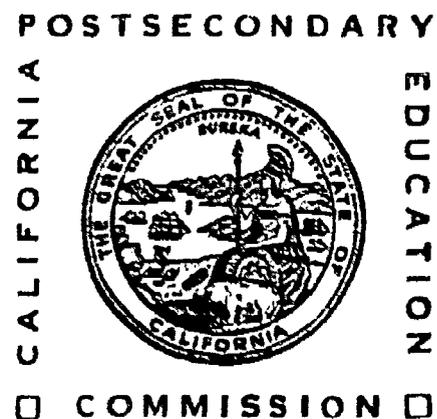
1. In 1990, California's colleges and universities had a capacity of enrolling a total of some 12,855 students in their associate degree and baccalaureate degree registered nursing programs -- 11,449 in its public institutions, and 1,406 in its private ones.
2. As of 1990, administrators of more than half of the programs indicated that their programs had some room for expansion by enrolling more students, but only four institutions have either opened a new program since 1990 or plan to open one in the near future.
3. Beyond existing articulation agreements, a major effort is currently underway by the California Association of Colleges of Nursing and the California Associate Degree in Nursing Educators' Group to develop a model articulation framework that can be used by all associate degree and baccalaureate degree programs in the State for improving their articulation.

Additional copies of this report may be obtained from the Publications Office of the Commission at (916) 324-4991. Questions about the substance of the report may be directed to Mary Vixie Sandy of the Commission staff at (916) 322-8012.

CALIFORNIA'S CAPACITY TO PREPARE REGISTERED NURSES

*A Preliminary Inquiry Prepared for the Legislature
in Response to Assembly Bill 1055
(Chapter 924, Statutes of 1990)*

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
Third Floor • 1020 Twelfth Street • Sacramento, California 95814-3985





**COMMISSION REPORT 91-13
PUBLISHED SEPTEMBER 1991**

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California's Capacity To Prepare Registered Nurses

Findings of the inquiry

In September 1990, the California Legislature enacted, and the Governor signed, Assembly Bill 1055 (Roos), which required the California Postsecondary Education Commission to report to the Legislature on the ability of California's nursing programs to produce enough registered nurses to meet a growing statewide shortage. Specifically, the bill, which is reproduced in Appendix A to this report, directed the Commission to:

1. Document the existing enrollment capacity of nursing programs in the University of California, the California State University, the California Community Colleges, and private colleges and universities;
2. Identify plans for the expansion of enrollments on existing campuses and the possible addition of new programs; and
3. Review the status of curriculum articulation between community college and California State University programs.

The Commission responds to each of those three requests here:

1. *Existing Enrollment Capacity:* In the Fall of 1990, California's colleges and universities had a capacity of enrolling a total of some 12,855 students in their associate degree and baccalaureate degree registered nursing programs, according to the California Board of Registered Nursing. Of these students, California's independent non-State-supported institutions could enroll 1,406, or 10.9 percent. California's State-supported institutions -- the California Community Colleges, the California State University, the University of California, and one public diploma program -- enrolled the rest -- 11,449, or 89.0 percent. The California Community Colleges could enroll over two-thirds of these 11,449 students in their associate degree programs, while at the baccalaureate level the California State University could enroll almost all of the
2. *Plans for Expansion:* Administrators of slightly more than half of the college and university programs indicated in 1990 that their programs had some room for expansion, but beyond the expansion of these programs by enrolling more students, the Commission is aware of only four institutions that have either opened a new program since 1990 or plan to open one in the near future:
 - The San Francisco campus of the University of California opened an entry-level master's program this past spring (1991);
 - The Northridge campus of the California State University plans to open a baccalaureate program in nursing this next fall, bringing to 13 the number of State University campuses offering undergraduate nursing programs;
 - In 1992 the Fullerton campus of the State University plans to add a master's degree program to its existing bachelor's degree program; and
 - Barstow College will open an associate degree program in 1992.
3. *Status of Curriculum Articulation:* Beyond the articulation agreements over transferable units and the use of various placement or entrance examinations that individual community colleges and four-year institutions in California have created to ease the transfer of their associate degree students to baccalaureate degree programs, a major effort is currently underway in California to develop a model articulation framework that can be used by all associate degree and baccalaureate degree programs in the State for improving their articulation. Following discussions in 1987 about ways to improve articulation, the California Association of Colleges of Nursing and the California Associate Degree in Nursing Educators' Group appointed a task force to recommend means of improving articulation

between associate and baccalaureate programs. The task force has developed a proposed model articulation framework and expects to present the framework to the two associations this fall and to a larger group of nursing faculty and administrators next February. If these groups endorse it, and if funding continues to be available, it will be field tested in three or four regions of the State; and if these pilot tests prove successful, it will gradually supplement existing articulation agreements or, in some cases, supplant them. Most of the individuals who would have to accept the model in order for it to be implemented statewide are currently involved in one way or another in its development, but for optimal implementation, both the systemwide offices of California's higher education segments and national accrediting agencies such as the National League for Nursing will need to modify at least some of their current practices and policies.

Origins of the report

The Legislature enacted AB 1055 of 1990 as a follow-up to the report of the RN Special Advisory Committee, which was established in January of 1989 under SB 2755 (Royce, 1988; codified as Article 1.5, Division 2, Chapter 6, of the Business and Professional Code). The Legislature had charged that Special Advisory Committee to develop recommendations for it, the Board of Registered Nursing, and other appropriate entities regarding the following issues:

1. Increasing the supply of registered nurses;
2. Improving the use of registered nurses so that their skills and education are maximally utilized;
3. Identifying projects that demonstrate innovative approaches to educating registered nurses; and
4. Identifying projects that demonstrate innovative approaches to the use of registered nurses in clinical settings, including, but not limited to, acute care hospitals, out-patient clinics and home health care.

The Committee was given 18 months to complete its

work, and in June 1990, it issued its report, *Meeting the Immediate and Future Needs for Nursing in California*. The complete executive summary and recommendations of that document appear in Appendix B of this report

For three reasons, the Commission relied primarily on existing information in responding to AB 1055:

1. The significant work of the RN Special Advisory Committee in this area, including its proposed strategies of expanding existing programs, developing satellite programs in rural and high-density urban areas to make them more accessible to practicing nurses, and State subsidies for students to enroll in private sector programs if the public sector programs in their region are filled to capacity;
2. The Commission's own interest in helping policy makers make priority judgments about where to put the State's scarce resources for nursing; and
3. The Commission's lack of resources to conduct a full-fledged supply and demand study.

To collate existing information, the Commission staff consulted with the Intersegmental Program Review Committee and several individuals who were working on issues related to the nursing shortage, including:

- David Keepnews of the California Nursing Association;
- Marilyn Flood of the University of California, San Francisco;
- Barbara Juzek and Patricia Stanley of the Chancellor's Office of the California Community Colleges; and
- Carol Denton of the Board of Registered Nursing in California's Department of Consumer Affairs, who had served as Project Director to the RN Special Advisory Committee.

The Commission is indebted to these individuals and others for their help. Based on their assistance, in the following pages the Commission's staff offers its summary conclusions about the issues of educational capacity, expansion, and articulation in light of California's nursing shortage -- and then provides the data on which its findings are based.

California's nursing shortage

The RN Special Advisory Committee described California's present nursing shortage as follows (1990, p. 2):

Although there have been shortages of registered nurses in the past, the present shortage is characterized by not only insufficient numbers of nurses to fill current vacancies in health care settings, but also by the surge in demand for nursing services and the simultaneous withdrawal of nurses from the workforce. The adequacy of nursing resources is determined by three things: the supply of nurses, the need for nursing services, and the demand for nursing services. While systems are in place to identify the number of nurses in the country and the number of students graduating from nursing schools, quantifying the demand for nursing services is impeded by fragmented and inconsistent information. The magnitude of the shortage has also been understated because estimates of nurse manpower supply requirements have been based on models of projected need, not on public demand.

It then concluded that "there is a continuum of interventions from those having the most immediate impact to those that can help prevent future shortages," and it grouped its recommendations into three sections:

Maximizing the Current Supply of Nurses. There are significant work dissatisfactions, inequities, and missing or inadequate services that prevent the best utilization of existing nursing resources. The Committee's recommendations aim to retain and recruit registered nurses using strategies that will have the most immediate impact that can be implemented within existing structures.

Assuring a Future Supply of Nurses. This nursing shortage is persistent, and the demand for nursing services will continue to grow dramatically. The Committee's recommendations for assuring a future supply of nurses involve human resources and educational planning, increasing enrollment capacities, and recruitment of future nurses. The strategies may as a rule take longer to produce results, involving some

restructuring of current systems. The recommendations and strategies in this section are essential in solving the nursing shortage, and the Committee believes that they require immediate action to achieve long-term benefits.

Correcting Underlying Problems in Nursing Education and Practice. Nursing shortages are a recurrent phenomenon related to problems in the organization of both education and health care services. Solutions to these problems involve innovations which, in turn, require study and demonstration. The Committee's recommendations and strategies include projects, pilot programs, and cooperative ventures that connote changes in existing systems. They generally require external funding, and their greatest impact may not be felt until the next decade (1990, pp. 6-7).

The Committee included five recommendations under the second section of "Assuring a Future Supply of Nurses":

Recommendation 5. Establish master plans for nursing manpower and education to ensure an adequate supply of nurses prepared for the demands of the industry and to meet the health care needs of the population.

Recommendation 6. Increase enrollments in California nursing programs through the addition of nursing programs leading to registered nurse licensure, enlargement of existing programs, development of satellite programs, and provision of adequate resources to nursing programs. Support educational mobility through improved coordination between educational sectors.

Recommendation 7. Increase immediate and long-term enrollments in nursing programs through outreach efforts directed to ethnic minorities and other groups that are underrepresented in nursing, and development of coordinated recruitment strategies for both young and older applicant populations. Enhance the long-term recruitment potential of nursing by improving the public image of nurses.

Recommendation 8. Institute or augment services that enable students to remain enrolled in nursing education programs in California.

Recommendation 9. Prepare new graduates, re-entry nurses, and foreign nurse graduates for the needs of the workplace by strengthening partnerships between education and service (1990, pp. 11-14).

As can be seen, the Legislature's charge to the California Postsecondary Education Commission in AB 1055 (Roos, 1990) relates most closely to the Committee's sixth recommendation concerning increasing enrollment and increasing students' educational mobility by improved coordination between educational sectors.

General conclusions

1. Despite recent and current efforts to study California's nursing shortage, the State still lacks a definitive study of nursing supply, demand, and need. This report, as well as most of the current research in this area, presumes a shortage based on extensive anecdotal information and studies of subgroups in the nursing profession. Dealing with the supply and demand question requires expertise from within the health-care community that the Commission does not have and could not address in this limited study.
2. According to the RN Special Advisory Committee's Spring 1990 survey of registered nurses, only between 63 and 71 percent of all registered nurses residing and licensed in California are actively working in nursing. Thirteen to 15 percent of these nurses are permanently out of the workforce due to retirement, relocation, disability or recent death. Another 13-15 percent are simply not working as RN's and many of them have no intention of returning to nursing. Reasons for their withdrawal include wage compression, high levels of on-the-job stress, dissatisfaction with the amount of non-nursing tasks required of them, limited participation in policy or management decision making processes, inadequate benefits, limited opportunities for ad-

vancement, erratic work schedules, and child care options.

Many of these factors, which significantly impact the shortage of nurses, are beyond the ability of higher education to control. Until such time as these conditions change and the profession becomes inherently more attractive to currently registered nurses who have dropped out of nursing, it is beyond the ken of colleges and universities to fix the situation.

3. In 1990, California's college and university programs to prepare registered nurses were able to accommodate just over half of the qualified applicants seeking admittance to them. That year, these programs had to turn away 2,383 qualified applicants either because the programs that were geographically accessible to them were already at capacity or because those programs with available space were in independent institutions that charge far higher fees than public institutions. Only 215 spaces remained unfilled in California's registered nursing programs that year -- 64 percent of them in private colleges. Thus a need clearly exists to expand existing and/or develop new nursing programs. In this regard, the California State University plans to expand its nursing programs by adding one new baccalaureate program in the fall of 1991 and a master's degree program to an existing baccalaureate program in 1992. The community colleges will be opening one new associate degree program in nursing in the fall of 1992 and expect to add several new programs over the next 10 to 15 years as new community colleges develop.
4. Fundamental to any significant expansion of capacity is the availability of the necessary resources for its support. State funds to support capital outlay are especially scarce now, given California's current budget crisis, but an even more elusive resource impacting the State's ability to accommodate current demand for more registered nurses are qualified faculty members and the availability of clinical placements for nursing students. Even if the State were able to support the physical expansion of nursing programs, the new faculty needed to staff this expansion are simply not available, and access to appropriate health care facilities for clinical

placements is already limited. These are critical variables to consider when planning for expansion.

5. If resources can be found, expansion of nursing programs in California's public segments of higher education could occur at three levels:

- *Across-the-Board Expansion:* Any available resources could be distributed to public nursing programs, based on demonstrated need, enabling them to add more students to existing programs or possibly establish new programs, depending on the level of support.
- *Two-Year Associate Degree Programs:* Available resources could be focused specifically on producing more registered nurses by supporting two-year programs only, since the largest proportion of qualified applicants who are turned away seek admission to these two-year programs.
- *Baccalaureate and Graduate Programs:* Available resources could be used to expand four-year baccalaureate and graduate programs, producing more registered nurses and nursing faculty, as well as providing opportunities for registered nurses to pursue advanced degrees. The RN Special Advisory Committee found

from its survey that of the 25 percent of working California nurses who intend to pursue additional nursing education within the next three years, "nearly 60 percent of these nurses will be seeking baccalaureate degrees, and 40 percent master's or doctoral degrees" (1990, pp. 2-3).

Capacity and the need for expansion

Ninety-one of California's colleges and universities offer programs that prepare registered nurses. The largest number -- 69 -- are California Community Colleges that offer the associate degree in nursing. The remaining 22 are baccalaureate level institutions -- 12 of them campuses of the California State University, nine of them independent colleges, and one of them a University of California campus. In addition, Los Angeles County Medical Center offers a diploma program through which students can become registered nurses. Display 1 below shows the enrollment capacity of these California colleges and universities by public and independent segment and by degree level as of Fall 1990. As can be seen, only 215 of the total 12,855 available spaces were

DISPLAY 1 Enrollment Capacity of California College and University Programs Preparing Registered Nurses, Fall 1990

<u>Segment and Degree Level</u>	<u>Actual Enrollment</u>	<u>Unfilled Spaces</u>	<u>Capacity</u>
Public Institutions			
Associate Degree Programs	7,641	54*	7,695
Baccalaureate Degree Programs	3,241	14	3,255
Master's Entry-Level Program	40	0	40
Diploma Program	449	10	459
Independent Institutions			
Associate Degree Programs	84	4	88
Baccalaureate Degree Programs	<u>1,185</u>	<u>133</u>	<u>1,318</u>
Total	12,640	215	12,855

* Includes 29 generic spaces and 25 advanced placement spaces.

Source: Unpublished data, Nursing Education Program Survey, Fall 1990. California Board of Registered Nursing.

unfilled -- or only 1.6 percent of the programs' capacity.

1990 applications and admissions

According to the 1990 Nursing Education Program Survey of California's Board of Registered Nursing, as of Fall 1990, California's 91 institutions that grant degrees in registered nursing had 4,729 spaces open for new nursing students -- 4,099 of them at public institutions (primarily community colleges) and 630 of them at private institutions. For these 4,729 spaces, they received 8,777 applications for admission. Of these applicants, 1,880 did not meet the admission criteria of the program to which they applied, leaving a total of 6,897 qualified applicants. The programs admitted a total of 4,514 students, or 65.4 percent of all those qualified -- 4,021 at public institutions and 493 at private ones -- filling 95 percent of their capacity and leaving only 215 spaces unfilled. These 215 spaces remained unfilled largely because they were geographically or financially inaccessible to the remaining qualified applicants. Of the 215, 78 spaces were at public institutions, while 137 were at private institutions. Twenty-seven percent of them were in associate degree programs, 68 percent were in baccalaureate programs, and 5 percent were in a diploma program.

Of the 2,383 applicants who were qualified but could not be admitted to nursing programs due to lack of space or to inaccessibility, 85 percent of them had applied to associate degree programs, while the remaining 15 percent had applied to baccalaureate programs.

1990 enrollments

At least 12,640 students were enrolled in registered nursing programs in California's colleges and universities in 1990, according to the Board of Registered Nursing's 1990 program survey. As Display 2 on pages 7 and 8 shows, the community colleges enrolled 7,641 of them (not including Pacific Union College, an independent institution offering an ADN program, or San Joaquin Delta, which did not report); the California State University enrolled 3,189; the 10 independent institutions (including

Pacific Union College) enrolled 1,269; the University of California enrolled 92; and Los Angeles County Medical Center enrolled 449.

All in all, California's programs to prepare registered nurses are producing fewer graduates than they were five years ago, but they have now enrolled enough students that they will increase the number of their graduates during each of the next several years.

Degrees granted during 1989-90

The 91 institutions awarded a total of 4,830 degrees in nursing during 1989-90, as Display 2 also shows: 3,288 associate degrees awarded by the community colleges, and 33 granted by California's independent institutions; 904 bachelor's degrees by the California State University; 391 bachelor's degrees by the State's independent institutions; 34 bachelor's degrees by the University of California; and 180 diplomas awarded by the Los Angeles County Medical Center. In addition to these degree recipients, 422 nursing students completed the necessary coursework in 1990 to be eligible to take the RN license examination, and 135 licensed vocational nurses completed the 30 units of advanced nursing coursework needed to achieve eligibility to take the examination.

Plans for expansion

In 1990, administrators of slightly more than half of the 91 programs indicated to the State's RN Special Advisory Committee that their programs had some capacity for expansion, but some of them stated that they could not expand because their institutions' total enrollment was already at maximum capacity. Among the problems that others cited as impeding expansion were physical space limitations and difficulty in hiring qualified faculty in certain specialties.

Beyond the expansion of programs by enrolling more students, the Commission has been apprised of the creation of one new program since the Board's survey and of plans for creating new programs:

DISPLAY 2 Nursing Enrollments and Degrees Granted at California Colleges and Universities, 1990

<u>Institution</u>	<u>Enrollment</u>	<u>Degrees</u>	<u>Institution</u>	<u>Enrollment</u>	<u>Degrees</u>
Associate Degree Programs					
Allan Hancock College	25	0	Moorpark College	79	41
American River College	120	60	Mt. San Antonio College	172	49
Antelope Valley College	115	48	Mt. San Jacinto College	58	31
Bakersfield College	122	65	Napa College	118	65
Butte College	25	14	Ohlone College	89	36
Cabrillo College	85	31	Pacific Union College (Independent)	84	33
Cerritos College	136	56	Palomar College	131	55
College of the Canyons	59	30	Pasadena College	187	83
Chabot College	85	41	College of the Redwoods	73	26
Chaffey College	102	41	Rancho Santiago College	154	74
Compton College	48	6	Rio Hondo College	166	52
Contra Costa College	117	48	Riverside City College	226	117
Cuesta College	93	35	Sacramento City College	126	66
Cypress College	170	94	Saddleback College	216	75
De Anza College	113	79	San Bernardino College	154	52
College of the Desert	143	67	San Diego City College	92	43
East Los Angeles College	148	48	City College of San Francisco	169	65
El Camino College	144	57	San Joaquin Delta College	NA	NA
Evergreen College	140	48	College of San Mateo	82	33
Fresno City College	164	78	Santa Barbara College	113	32
Gavilan College	0	19	Santa Monica College	66	47
Glendale Community College	67	28	Santa Rosa Junior College	99	37
Golden West College	239	122	College of the Sequoias	118	51
Grossmont College	116	72	Shasta College	104	54
Hartnell College	61	21	Sierra College	39	17
Imperial Valley College	53	29	Solano College	98	45
Long Beach City College	217	82	Southwestern College	82	36
Los Angeles Harbor College	185	71	Ventura College	155	64
Los Angeles Pierce College	158	68	Victor Valley College	230	94
Los Angeles Southwest	126	29	Yuba College	31	21
Los Angeles Trade-Tech	86	22	Total	7,725	3,321
Los Angeles Valley College	174	86	Baccalaureate Degree Programs		
Los Medanos College	68	33	<i>The California State University</i>		
College of Marin	85	38	Bakersfield	102	41
Merced College	37	33	Chico	193	48
Merritt College	90	30	Fresno	279	96
Modesto Junior College	209	62	Hayward	198	41
Monterey Peninsula College	89	36			

(continued)

DISPLAY 2, Continued

<u>Institution</u>	<u>Enrollment</u>	<u>Degrees</u>	<u>Institution</u>	<u>Enrollment</u>	<u>Degrees</u>
Baccalaureate Degree Programs (continued)			Independent Institutions		
<i>The California State University (continued)</i>			<i>Independent Institutions</i>		
Humboldt	107	35	Azusa Pacific University	108	24
Long Beach	287	119	Biola University	63	18
Los Angeles	432	105	Dominican/St. Luke's	83	25
Sacramento	295	87	Loma Linda University	212	2/55**
San Bernardino	59	0	Mount St. Mary's	128	41
San Diego	289	92	Point Loma Nazarene College	109	29
San Francisco*	355	110	Samuel Merritt College/St. Mary's	168	45
San Jose	593	130	University of Southern California	79	27
Segmental Total	3,189	904	University of San Francisco	235	125
			Segmental Total	1,185	391
<i>The University of California</i>			Diploma Program		
Los Angeles	92	34	Los Angeles County		
			Medical Center		
				449	180
			<hr/>		
			Grand Total	12,640	4,830

*Includes baccalaureate and entry level master's program enrollments.

**Two associate degrees and 55 baccalaureate degrees.

Source: 1990 Nursing Education Program Survey, California State Board of Nursing.

- In the Summer of 1991, the University of California, San Francisco, opened an entry-level master's program.
- The Northridge campus of the California State University plans to open a baccalaureate program in nursing this next fall, bringing to 13 the number of State University campuses offering undergraduate nursing programs.
- In 1992, the Fullerton campus plans to add a master's degree program to its existing bachelor's degree program.
- And Barstow College will open an associate degree program in 1992.

As new community colleges are created over the next two decades, the majority of them will probably plan to open nursing programs. Yet the creation of more programs, like the expansion of existing programs, is only one of several strategies need-

ed to overcome California's shortage of registered nurses -- and only a long-term aid rather than an immediate remedy, as the RN Special Advisory Committee has noted. According to the Committee's 1990 survey of California's registered nurses, only between 63 and 71 percent of all those residing and licensed in California were actively working in nursing -- considerably below the national average of 78 percent -- and the Committee quoted one registered nurse from Thousand Oaks as saying, "It appears futile to focus on increasing the numbers of nurses in the profession with little regard for improving working conditions for nurses" (1990, p. 21b).

Articulation of programs

The Commission's third responsibility under AB 1055 was to review in this report "the status of cur-

riculum articulation between community colleges and the California State University nursing programs" -- and here the Commission can report encouraging progress. Early in 1987, the California Association of Colleges of Nursing and the California Associate Degree in Nursing Educators' Group met to discuss articulation between the State's associate degree and bachelor's degree programs in nursing. As noted above on page 1, these two groups appointed a task force consisting of program chairs from all sectors of higher education nursing programs to make recommendations about improving articulation between associate and baccalaureate programs. The task force, chaired by Marilyn Flood -- a nursing educator at the University of California, San Francisco -- has met between four and five times annually since then, with the support of both associations and grants from the Chancellor's Office of the California Community Colleges and from the Kaiser Foundation.

Currently, the task force is continuing to develop its proposed model articulation framework (Display 3, pages 10-11) and expects to present the framework to the two associations at a meeting scheduled for this fall, and to a larger intersegmental group of nursing faculty and administrators in late February 1992. If the plan meets with their approval and funding continues to be available, it will be field tested in three or four regions of the State.

The task force hopes that, upon successful completion of the pilot tests, the framework will gradually replace current articulation practices, which consist largely of program-to-program negotiations over transferable units and/or various placement or entrance examinations.

The task force recognizes that articulation is a voluntary process in which institutions participate at their own discretion, and it believes that any framework, such as that illustrated in Display 3, should not attempt to impose rigid articulation requirements on institutions and their nursing programs. Instead, it looks on its framework as a general articulation agreement that, as indicated by the three columns in the display, addresses all institutions' need to supplement any statewide understanding with school-to-school articulation agreements for unusual curricular characteristics and individualized examinations or portfolio evaluations for applicants

who are not graduates of California's associate degree programs in nursing.

The task force also is aware that a design such as this one can become the statewide model for articulation only when it represents the consensus of nurse educators across the State. Encouragingly most of the individuals who would have to accept the model in order for it to be implemented statewide are currently involved in one way or another in its development. Nonetheless, for optimal implementation, both higher education systemwide offices and professional accreditation bodies will need to modify at least some of their current practices and policies.

Summary

California's "capacity" to prepare registered nurses, as defined in this report, relates to the number of openings in collegiate nursing programs, in terms of total enrollments plus unfilled spaces. Capacity and the potential for expansion are affected significantly by numerous variables, many of which are beyond any one program's ability to change -- for example, the availability of clinical placements; the recruitment and retention of qualified faculty, especially given more rigorous credentialing requirements; upper limits on the size of the freshman class; accreditation requirements; and the State's present ability to finance educational growth of any kind. If limited State resources prevent much progress from being made in the short term on the program expansion side, the State could do well to focus limited resources on these other aspects of the shortage equation and those aimed at improving the working conditions of nurses. These variables ultimately have the determining effect on California's ability to meet its current demand for registered nurses.

Reference

RN Special Advisory Committee, Margretta M. Styles, Chair. *Meeting the Immediate and Future Needs for Nursing in California: A Report to the Legislature*. Sacramento: California Board of Registered Nursing, 1990.

DISPLAY 3 Proposed California Articulation Framework, Associate Degree Programs in Nursing to Baccalaureate Degree Programs

<u>Statewide Articulation Agreements</u>	<u>School to School</u>	<u>Individualized Examination or Portfolio Assessment</u>
<p>Purpose</p> <p>To award credit for basic content to all graduates of California associate degree programs in nursing or provide advanced placement without repetition and/or testing.</p>	<p>To acknowledge the unique strengths and additions to the basic content offered at individual associate degree schools of nursing.</p>	<p>To award credit or advanced placement to individuals where general agreements are not possible.</p>
<p>Target Population</p> <p>California Registered Nurses who graduated from a California Community College associate degree program.</p>	<p>California Registered Nurses who graduated from a California Community College associate degree program which has an additional specific written articulation agreement with a particular four-year institution offering a Bachelor of Science in Nursing.</p>	<p>Students who have completed only part of a California associate degree in nursing program; out-of-state registered nurses and in-process nursing students; diploma registered nurses; 30-unit option registered nurses (California); international applicants.</p>
<p>Principles</p> <p>Content is required by the Board of Registered Nursing in all California Registered Nursing Programs.</p> <p>Course content consists of basic content in the five National League for Nursing roles, the five clinical areas of nursing, and the Board of Registered Nursing required support in biological and behavioral science coursework and communication.</p> <p>Care Provider Role:</p> <ul style="list-style-type: none"> • Medical/Surgical • Psychiatric • Obstetric • Geriatric • Pediatric <p>Communicator Role Manager Role Teacher Role Member of the Profession</p>	<p>Recognize regional/school uniqueness where special emphasis in specific content areas is provided. Maximize utilization of available clinical resources.</p> <p>Foster effective partnerships in local and regional geographic areas.</p> <p>Expedite career ladder from associate degree programs in nursing to bachelor of science programs in nursing without repetition.</p>	<p>Recognize that people come from a variety of educational backgrounds with credit being awarded on an individualized basis (30 units is the maximum award for experiential learning permitted by the Western Association of Colleges and Schools).</p> <p>Theory Evaluation: Use of standardized tests (e.g., ACT-PEP, NLN, etc.) for validity purposes and to avoid regional, cultural, and gender biases.</p> <p>Clinical Evaluation: Clinical proficiency evaluation based on nursing process.</p>

(continued)

DISPLAY 3 Continued

Statewide Articulation Agreements

School to School

**Individualized Examination
or Portfolio Assessment**

Process

Credit for core content as verified by an associate degree in registered nursing and passing the National Council Licensure Examination should be awarded to graduates of associate degree programs in nursing seeking the bachelor of science in nursing without further testing or repetition. Assuming structural changes grant 30 semester units of nursing credit without repetition or testing (acknowledging that the majority of the associate degree program curriculum is designed to meet basic Board of Registered Nursing requirements.

Written articulation agreement will reflect the community college's unique curricular strengths in nursing content beyond the basic content as required by the Board of Registered Nursing and credit will be awarded for those curricular strengths where feasible.

Recognize unique curricular content in a specific associate degree program in nursing beyond the 30 units of basic content (will be specific to each associate degree program curriculum).

Portfolio assessment; proficiency and placement examinations; interviews.

Source: Adapted from the draft report of the task force of the California Association of Colleges of Nursing and the California Associate Degree in Nursing Educators' Group.

Assembly Bill No. 1055

CHAPTER 924

An act relating to nurses.

[Approved by Governor September 14, 1990 Filed with
Secretary of State September 17, 1990.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1055, Roos. Registered nurses: supply.

Existing law authorizes the Office of Statewide Health Planning and Development to make grants to, and enter into contracts with, public and nonprofit private entities to improve programs that have the purpose of recruiting individuals to enter educational programs for training as registered nurses.

This bill would state legislative intent to encourage the provision of an adequate supply of registered nurses and to encourage articulation between programs to educate registered nurses in community colleges and the California State University.

This bill would require the California Postsecondary Education Commission to conduct a preliminary inquiry into the capacity of public and private institutions of higher education in California to educate registered nurses. This bill would request the commission, in consultation with certain representatives and associations, to conduct a review of the status of curriculum articulation between community colleges and California State University nursing programs.

This bill would require the results of the inquiry and the review, if conducted, to be submitted to the Legislature on or before February 15, 1991.

The people of the State of California do enact as follows:

SECTION 1. (a) It is the intent of the Legislature to encourage the provision of an adequate supply of registered nurses to meet the demands of Californians for health care by examining the capacity of public and private institutions of higher education to educate a sufficient number of registered nurses.

(b) It is further the intent of the Legislature to encourage articulation between the programs to educate registered nurses in community colleges and the California State University in order to meet the needs of those who wish to seek the baccalaureate of science of nursing degree.

SEC. 2. The California Postsecondary Education Commission shall conduct a preliminary inquiry into the capacity of public and private institutions of higher education in California to educate registered nurses. This inquiry shall include a documentation of the

existing enrollment capacity among these institutions, as well as identification of plans for expansion of enrollments on existing campuses and the possible addition of new programs.

The California Postsecondary Education Commission is requested to conduct a review of the status of curriculum articulation between community colleges and California State University nursing programs. This review is to be done in consultation with representatives of the Board of Registered Nursing, nursing professional associations, associations of employers of nurses, associations of nursing educators, the Chancellor of the California Community Colleges or his or her designee, and the Chancellor of the California State University system or his or her designee.

The results of the inquiry and the review, if conducted, shall be submitted to the Legislature on or before February 15, 1991.

Appendix B

Executive Summary of Meeting the Immediate and Future Needs for Nursing in California

Note: This appendix reproduces pp. 1-16 of *Meeting the Immediate and Future Needs for Nursing in California: A Report to the Legislature* -- the final report of the RN Special Advisory Committee, created in 1989 under SB 2755 (Royce, 1988).

Introduction

A persistent and critical shortage of registered nurses exists in California and in the nation. The California State Legislature, recognizing the need for action, added Article 1.5 to the Business and Profession Code, Division 2, Chapter 6, effective January 1, 1989, establishing a special advisory committee on the nursing shortage. The committee was charged with developing recommendations for the Legislature, the Board of Registered Nursing and other appropriate entities by June 30, 1990 to increase the supply and improve the use of registered nurses, and to identify or recommend projects that demonstrate innovative approaches to the education and utilization of registered nurses.

Initially the Committee gathered information about the nature and scope of the nursing shortage in California. Published documents, presentations by experts in education and health care services, and public testimony provided insights and background data about the causes, extent, distribution, and results of the shortage. Little information existed, however, that described the California registered nurse workforce or the extent to which California nursing education programs are not able to accommodate qualified applicants. The Committee conducted two major surveys to gather these data. The Committee surveyed nursing education programs throughout the State to determine not only the capacity of programs, but the kinds of resources needed to recruit and retain students. It also contracted with the Survey Research Center at California State University, Chico, to design and conduct a survey, under the Committee's general guidance, of a representative sample of individual registered nurses licensed in California. This survey provided information about the employment, geographical and specialty distribution, educational background and future plans of nurses in the State, as well as aspects of work that are satisfying and dissatisfying.

After examining secondary data and analyzing the information received from expert and public witnesses, but before the survey data were available, the Committee drafted a set of proposals to address problems of supply and utilization of registered nurses. Using the Board of Registered Nursing's mailing list, these proposals were sent to all actively licensed registered nurses residing in California, as well as appropriate organizations and agencies, to solicit opinions through public hearings and written testimony. Comments were received regarding general content, the desirability and feasibility of specific actions, and priorities for attention. These responses, together with current California information from the completed surveys, provided the Committee

with data to formulate a set of final recommendations and strategies. The Committee believes that implementation of these recommendations and accompanying strategies would have a substantial and lasting effect on the nursing shortage.

Description of the Shortage

Although there have been shortages of registered nurses in the past, the present shortage is characterized by not only insufficient numbers of nurses to fill current vacancies in health care settings, but also by the surge in demand for nursing services and the simultaneous withdrawal of nurses from the workforce. The adequacy of nursing resources is determined by three things: the supply of nurses, the need for nursing services, and the demand for nursing services. While systems are in place to identify the number of nurses in the country and the number of students graduating from nursing schools, quantifying the demand for nursing services is impeded by fragmented and inconsistent information. The magnitude of the shortage has also been understated because estimates of nurse manpower supply requirements have been based on models of projected need, not on public demand.

In its February, 1990 survey of California nurses, the Committee found that:

Only between 63 and 71 percent of all registered nurses residing and licensed in California are actively working in nursing. This is less than the national average of 78 percent.

Thirteen to 15 percent of California licensed registered nurses are out of the workforce permanently due to retirement, relocation, disability or recent death.

Another 13 to 15 percent of those holding California RN licenses are not working as registered nurses. Over one third of this group has no intention of returning to nursing.

California nurses are geographically maldistributed. The Orange County and Los Angeles Metropolitan area and the Central Valley area have proportionately fewer nurses than the population residing in those areas while Northern California has a larger percentage of nurses relative to the population.

Approximately 25 percent of working California nurses intend to pursue additional nursing education within the next three years. Nearly 60 percent of these nurses will be seeking baccalaureate degrees, and 40 percent masters or doctoral degrees. Currently only six percent of registered nurses in California have earned masters or doctoral degrees, a proportion consistent with national data. In other professions the proportion of those prepared beyond the first professional degree averages between 15 and 20 percent. In the context of rapid change, more registered nurses with advanced degrees are needed to assume new, expanded and leadership roles in clinical, administrative, and educational practice.

Following national patterns, California nurses report that wage compression and high levels of on the job stress frequently lead to withdrawal from the workplace. Recent trends in the utilization of nursing and non-nursing personnel serve to aggravate the shortage. On the national level the most recent information available shows that hospitals are using fewer licensed vocational/practical nurses, ancillary nursing personnel and non-nursing staff than they did formerly. Although recent California information indicates that this pattern may be reversing, earlier trends have resulted in the addition of clinical and non-clinical functions to the existing responsibilities of registered nurses. Nurses surveyed in California expressed dissatisfaction with the amount of non-nursing tasks required of them, as well as the level of participation permitted them in policy or management decision-making processes. Nurses in direct patient care positions also tended to be dissatisfied with benefits, opportunities for advancement, work schedule, and child care provisions.

Despite a downward trend in applications through 1988, as of Fall 1989, 4,386 new students were admitted to nursing programs in California while 1,467 qualified applicants could not be accommodated due to lack of space in programs that were geographically accessible. Current funding mechanisms prevent programs that have sufficient space, faculty, and clinical sites from expanding to match the applicant pool. Although there were 232 unfilled spaces for new students statewide, most of these were in private baccalaureate programs.

In California, the ethnic composition of working registered nurses does not mirror that of the State's population. Seventy-eight percent of working nurses are white, in comparison to 83 percent of the total population of California (U.S. Department of Commerce, 1989). Thirteen percent of RNs are of Asian heritage, a proportion exceeding Asian representation in the State. Afro-Americans (5%) and Hispanics (4%) are underrepresented in the registered nurse population in proportion to their representation of 7.5 percent and 21.6, respectively, in the State. Nurses from other groups, including American Indians and Alaskan natives, were about one percent of the RN population.

In nursing education programs, as a result of concentrated efforts on minority recruitment, the proportions of Afro-American (8%), Asian (15%), and Hispanic (11%) nursing students are somewhat higher. Almost half of California nurses of Asian descent attended baccalaureate programs for their basic nursing education, however, nursing programs are seeing greater numbers of Asian immigrant students, for whom this pattern may not hold. The number of Hispanic students still falls short of the proportion of people of Hispanic origin in the general population. Intensive recruitment needs to continue and retention programs need to be developed and enhanced to make nursing education attractive, accessible and successful for potential applicants from all ethnic groups.

The lack of comprehensive information about the nurse population poses a serious limitation to the development of plans for the education and utilization of nurses in the future. The Committee's survey of the registered nurse population, in addition to providing current information, should serve as a pilot instrument for the maintenance of a data system on nursing in California. While the Committee has identified some innovative approaches to nursing education and practice, additional projects, demonstrations and studies need to be conducted to identify and test the effectiveness of these and other strategies to aid recruitment and retention.

Relationship of Nursing to Changes in the Health Care System

The nursing shortage cannot be viewed in isolation from circumstances surrounding health care delivery. Changes in population demographics and in the delivery and financing of health care will continue to shape the environment in which issues of recruitment, retention and utilization of registered nurses have to be resolved.

The population continues to age. Currently 12 percent of the population is 65 or older. It is estimated that this age group will comprise nearly 20 percent of the population by 2025, with the very elderly (age 85+) portion of the population growing at the fastest rate. The compression of chronic disease toward the end of the life span coupled with decreased ability to live independently without assistance will change the nature of the health care services needed in the future. The nursing home and home health care sectors are likely to absorb most of this need. Yet, under current payment policies, the shift to extended care and community based services leaves many families without access to the nursing services they need at a time when they are least able to provide personal care themselves.

The health care system is changing rapidly. Within the last decade, prospective payment systems, contracting, preferred provider and health maintenance organizations and other payment systems have changed the way Americans receive health services. Managed care systems have shifted much of the burden of recuperation from serious illness from the hospital to chronic care and assisted living facilities and to the home. Managed care now affects not only hospital inpatient and outpatient care, but increasingly, physician services and the prescription drug market.

Over twenty percent of Californians are uninsured. At this time approximately six million Californians do not have health insurance. About two-thirds of these are employed persons and their dependents who do not qualify for medical assistance under public programs. Individuals without access to essential health care services are at increased risk for both chronic and communicable diseases. The full effects of inadequate health care may not be seen now but will manifest themselves in the twenty-first century, and will result in greater demand for costly restorative services.

Consumers are becoming increasingly sophisticated. With increased knowledge and awareness of choices, consumers express less confidence in "authorities" in the health care system. As of 1988, 60 percent of the population believed that our country's health care system had some good things but needed fundamental changes and 29 percent felt that there was so much wrong with the system that it needed to be completely rebuilt (Morrison, 1989).

In an environment of significant dissatisfaction with access, availability and cost, new roles for nurses continue to develop. Both for current roles and for those that are being created, nurses have the knowledge and skills needed to help fill gaps in health care and control inflation in the health care sector. Registered nurses with advanced technical and case management skills can provide group and individual primary

prevention services in health care settings, schools, businesses and communities, coordinate care for sick individuals, monitor the progression of chronic illnesses and make appropriate referrals, and assist individuals and families in making informed choices about health care alternatives.

In recent years, the issues of educating more nurses and preparing them adequately for the workplace through strong partnerships between academic institutions and health care facilities have received much attention. The Committee believes, however, that only by improving working conditions and utilization of registered nurses can the problem of retaining nurses in the workforce be addressed. Immediate solutions that will have long-term benefits include:

- (a) increasing the participation of nurses in policy and management decisions that affect their work.
- (b) assuring that adequate staffing is maintained so that nurses can supervise or provide safe and effective care to patients, and
- (c) guaranteeing that nurses are compensated at levels appropriate to their responsibilities to limit withdrawal from the workforce.

Beyond immediate solutions, fundamental changes in the way in which nurses are viewed and used in health delivery systems must occur before efforts at increasing the number of nurses graduated from California programs will result in a sufficient and stable supply of nurses to meet California's needs.

The nursing shortage poses a critical threat to the health of Californians. The Committee believes that the effective use and appropriate recognition of registered nurses, combined with concerted efforts to recruit nurses to meet the changing needs of the State's population, will solve present and future nursing shortages. Furthermore, the Committee believes that nurses will have a vital, continuing role in a reorganized health care system and that they will provide services that improve the access to, availability, quality and cost-effectiveness of health care.

The Committee's Recommendations

"Meeting the Immediate and Future Needs for Nursing in California's Health Care System" is the overarching theme of the Committee's recommendations, highlighting the need for both short and long term changes in the system. Recommendations are grouped into three sections: (1) Maximizing the Current Supply of Nurses, (2) Assuring a Future Supply of Nurses, and (3) Correcting Underlying Problems in Nursing Education and Practice. The Committee believes that there is a continuum of interventions from those having the most immediate impact to those that can help prevent future shortages.

"Maximizing the Current Supply of Nurses". There are significant work dissatisfactions, inequities and missing or inadequate services that prevent the best utilization of existing nursing resources. The Committee's recommendations aim to retain and recruit registered nurses using strategies that will have the most immediate impact and that can be implemented within existing structures.

"Assuring a Future Supply of Nurses". This nursing shortage is persistent and the demand for nursing services will continue to grow dramatically. The Committee's recommendations for assuring a future supply of nurses involve human resources and educational planning, increasing enrollment capacities, and recruitment of future nurses. The strategies may as a rule take longer to produce results, involving some restructuring of current systems. The recommendations and strategies in this section are essential in solving the nursing shortage and the Committee believes that they require immediate action to achieve long-term benefits.

"Correcting Underlying Problems in Nursing Education and Practice". Nursing shortages are a recurrent phenomenon related to problems in the organization of both education and health care services. Solutions to these problems involve innovations which, in turn, require study and demonstration. The Committee's recommendations and strategies include projects, pilot programs, and cooperative ventures that connote changes in existing systems. They generally require external funding and their greatest impact may not be felt until the next decade.

SECTION 1: MAXIMIZING THE CURRENT SUPPLY OF NURSES

Recommendation 1

Create structures and services to support the practice of nursing, enhance the quality of patient care and assure the effective utilization of registered nurses. Implement strategies for the retention and career development of experienced nurses within institutions.

Strategies:

1.1 Nursing and employers of nurses should establish practice patterns that distinguish between levels of practice as a result of education, experience and/or specialized expertise, thereby creating advancement opportunities and compensation consistent with clinical or administrative responsibilities.

1.2 Employers of nurses should implement and evaluate models of nursing practice that use various combinations of licensed and non-licensed nursing personnel in order to assure safe and comprehensive nursing care for patients.

1.3 Employers of nurses should provide adequate numbers of non-nursing support personnel such as housekeeping, clerical support and transport workers so that nursing staff are utilized appropriately.

1.4 Employers of nurses should invest in labor-saving equipment and facilities to increase the productivity of registered nurses, such as computers for record-keeping, remote monitoring and communications systems and interior workspace.

1.5 Employers of nurses should promote clinical nurse involvement in decision-making by maximizing communication and cooperation between clinical nurses, nurse managers, administrators, and physicians. Negotiated agreements and

innovative organizational structures should be recognized as methods to achieve increased influence of clinical nurses.

1.6 Employers of nurses should develop and implement methods, structures and networks to enhance nurse/physician communication such as, but not limited to, the framework described by the California Joint Practice Commission.

1.7 Employers of nurses should encourage nurses' involvement in professional and specialty organizations and activities through institutional supports. Examples of such supports include paid sabbatical leaves, requested time off granted on a paid or unpaid basis, and flexible schedules.

1.8 Employers of nurses should assist registered nurses to make lateral transfers within their place of employment by providing preceptorships and other training programs.

1.9 Employers of nurses should explore exchange programs between facilities that encourage registered nurses to share expertise and acquire new skills.

1.10 The Legislature should appoint a task force of representatives from both the public and the private sectors to examine the working conditions and utilization of registered nurses in every type of facility in State service and provide a report and plan of action within a year of commencing work.

1.11 All planning, regulatory and accreditation bodies that have an impact on the health care delivery system in California should appoint representatives of the nursing profession in sufficient numbers to assure adequate representation so that the contributions of nursing can be most effectively utilized.

Recommendation 2

Provide compensation for registered nurses that expands salary ranges, and corrects inequities between health care sectors and assures benefits designed to meet the specific needs of nurses.

Strategies:

2.1 Employers of nurses in public and private organizations providing all levels of health care should expand the salary ranges for registered nurses providing direct patient care to recognize the levels of responsibility and contributions of nurses and reflect the nurse's performance, education, experience, and longevity.

2.2 Employers of nurses should provide an array of compensation and benefit packages as incentives for nurses to continue working in the profession such as tuition reimbursement, child-care, flex time options and other facility-specific and individualized benefits for both full and part-time working nurses.

2.3 A task force of representatives from nursing organizations and the health care industry should investigate retirement options that ensure adequate income following a nursing career.

2.4 Employers of nurses should recognize applicable previous experience of newly hired registered nurses and compensate them commensurately.

2.5 The Legislature should reallocate public funds, where needed, to enable State institutions and agencies that employ registered nurses to compete effectively for qualified staff. County Boards of Supervisors should also give consideration to reallocating county-administered funds, where needed, to enable county hospitals and health departments to compete with private sector health agencies for nurses.

Recommendation 3

Assure an adequate supply of nurses for clinical and managerial leadership by facilitating educational mobility for employed nursing personnel.

Strategies:

3.1 Employers of nurses should use mechanisms such as tuition reimbursement, flexible schedules, service pay back loans, etc. to encourage and facilitate advancement into registered nursing for nurse assistants and licensed vocational nurses.

3.2 Employers of nurses should provide support for registered nurses who desire graduate education in nursing, especially in areas of greatest need, through measures such as educational leaves, flexible scheduling, scholarships and loans.

Recommendation 4

Assure the recruitment and retention of qualified faculty in nursing programs.

Strategies:

4.1 Institutions of higher education should increase the salaries and benefits of nursing faculty to assure that nursing education programs have the ability to recruit and retain qualified faculty.

4.2 Institutions of higher education, in collaboration with employers of nurses and the Board of Registered Nursing, should develop cross-training programs for nursing faculty in response to changing clinical practice and teaching assignments.

SECTION 2: ASSURING A FUTURE SUPPLY OF NURSES

Recommendation 5

Establish master plans for nursing manpower and education to ensure an adequate supply of nurses prepared for the demands of the industry and to meet the health care needs of the population.

Strategies:

5.1 The Legislature should fund a permanent databank, including information about nurse licensure, employment status and demographics, under the authority of the Board of Registered Nursing and the Office of Statewide Health Planning and Development.

5.2 The Legislature should authorize, fund and require the Board of Registered Nursing and the Office of Statewide Health Planning and Development to prepare and maintain comprehensive five-year master plans that monitor the supply of nurses, assess and project demand for nurses by educational level, geographic region and area of practice, identify discrepancies between needs and resources, and make recommendations based on actual and projected health care needs and the supply of other health care providers. The nursing manpower master plan should be developed in consultation with employers of nurses, representatives of nursing professional associations, and nursing educators.

5.3 The Legislature should authorize, fund and require the California Postsecondary Education Commission and the Board of Registered Nursing to develop, in consultation with employers of nurses, representatives of nursing professional associations, and nursing educators, a master plan for nursing education responsive to the master plan for nursing manpower.

5.4 The Legislature should authorize and require the Board of Registered Nursing to monitor the master plans for all nursing education and manpower in the State and to report biennially to the State Legislature.

5.5 The Legislature should authorize, fund and require the Board of Registered Nursing to monitor the implementation of all recommendations and projects designed to alleviate the nursing shortage and to report progress biennially to the Legislature.

Recommendation 6

Increase enrollments in California nursing programs through the addition of nursing programs leading to registered nurse licensure, enlargement of existing programs, development of satellite programs and provision of adequate resources to nursing programs. Support educational mobility through improved coordination between educational sectors.

Strategies:

6.1 The Legislature and the three sectors of public higher education should provide adequate funding for nursing programs that have reached maximum enrollment and have capacity and excess qualified applicants. These programs should be provided with faculty, space, supplies, services, support personnel for both faculty and administration, or other resources as needed, to enable expansion. When maximum enrollment has been reached at the institutional level, institutions of higher education should do all that is possible within their discretionary power to supplement enrollment in the nursing program.

6.2 The Legislature should provide tuition support for students to enroll in private sector nursing education programs in their communities when accessible public sector nursing programs have reached maximum capacity. The Legislature should provide funds to assist students who must relocate as a result of redirection from one nursing program to another within the public sector.

6.3 Nursing schools should establish satellites of existing undergraduate and graduate programs in rural and high density suburban areas to provide upward educational mobility and preparation for new practice roles.

6.4 Institutions of higher education should fund and support the articulation plan of the Joint ADN/BSN Articulation Committee. Existing policies within these institutions which pose barriers to implementation of the plan should be revised.

Recommendation 7

Increase immediate and long-term enrollments in nursing programs through outreach efforts directed to ethnic minorities and other groups that are underrepresented in nursing, and development of coordinated recruitment strategies for both young and older applicant populations. Enhance the long-term recruitment potential of nursing by improving the public image of nurses.

Strategies:

7.1 The Legislature should authorize and provide funding for the Office of Statewide Health Planning and Development to create regional recruitment centers in areas where there are no existing programs and work with existing regional centers to avoid duplication and to maximize efforts.

7.2 Employers of nurses, schools of nursing and professional organizations should form partnerships to aggressively recruit applicants from ethnic minorities, other health occupations, male and older applicant pools such as mid-life career changers and displaced homemakers as well as traditional high school age student populations. To reach minority, male and older populations, service-education partners should make use of techniques with demonstrated effectiveness such as family contact, church sponsored activities, etc.

7.3 Professional organizations and their members should organize on a community basis to provide regular, on-going volunteer services to local secondary school districts to supplement the career guidance currently provided by school counselors related to the nursing profession.

7.4 Professional nursing organizations in California should implement efforts designed to improve the public image of nursing and enhance recruitment into the profession, including, but not limited to, regional application and augmentation of the National Council on Nursing Implementation Project (NCNIP) Ad Council Campaign.

Recommendation 8

Institute or augment services that enable students to remain enrolled in nursing education programs in California.

Strategies:

8.1 Institutions of higher education, and health care settings when appropriate, should develop programs of academic, social and financial support, specific to nursing, that facilitate retention of students, such as tutoring, child care, and personal or family counseling.

8.2 Schools of nursing and employers of nurses should identify students interested in entering or advancing in nursing and help

secure financial aid. Employers of nurses and nursing schools, in partnership, should develop other innovative programs to increase the opportunities for nursing students to gain experience and earn money while enrolled in academic programs.

8.3 The Legislature should develop a nursing student loan program to assist new and continuing students in all programs leading to registered nurse licensure. The loan forgiveness program of the Minority Health Profession Education Foundation should be expanded to include graduates of all nursing programs. The definition of underserved areas should include State and county health facilities regardless of location.

8.4 The Legislature should authorize, fund and require the Office of Statewide Health Planning and Development to include nursing in the Health Professions Career Opportunity Program. Funds would be used to support demonstration enrichment programs developed by schools of nursing for students from academically disadvantaged groups.

Recommendation 9

Prepare new graduates, re-entry nurses and foreign nurse graduates for the needs of the workplace by strengthening partnerships between education and service.

Strategies:

9.1 Schools of nursing and employers of nurses should establish regional planning groups with representatives from each sector of education and health care to implement strategies designed to strengthen partnerships between education and service.

9.2 Regional planning groups should evaluate the adequacy of content in curricula related to technological and health care changes in practice and the creative use of health service resources in the region for clinical placements.

9.3 Nursing programs should create learning environments that provide sufficient experience in clinical situations under the direction of nurses and faculty with high levels of current clinical expertise through use of strategies, such as current certification of faculty, faculty practice arrangements and use of practice-based clinical preceptors.

9.4 Regional planning groups should identify the contributions of each sector to the new graduate's transition from school to work. Employers of nurses should develop innovative transition programs to assist the new nurse in adapting to the workplace. Organizations representing employers of nurses should disseminate information about innovative programs and provide support for evaluation research to determine the characteristics of the most successful models.

9.5 Institutions of higher education and employers of nurses should evaluate existing programs to recruit and update the skills of nurses who have been out of the workplace to determine whether scheduling, cost and availability of programs enhance participation by prospective re-entry nurses. Employers of nurses should give high priority to hiring re-entering nurses and should develop transition programs that will enable the returning nurse to gain competence and confidence in the workplace.

9.6 The Board of Registered Nursing should explore, in collaboration with organizations representing foreign nurse graduates, strategies that assist nurses educated in other countries to pass the National Council Licensing Examination-Registered Nurse (NCLEX-RN) and perform successfully in the workplace.

SECTION 3: CORRECTING UNDERLYING PROBLEMS IN NURSING EDUCATION AND PRACTICE

Recommendation 10

Develop strategies that use registered nurses most effectively in clinical and managerial roles, in existing organizations, in independent nursing organizations and through the development of innovative health care delivery systems.

Strategies:

10.1 Private sector organizations, such as trade organizations, foundations and corporations, should fund projects that foster career development of nurses employed in health care settings using strategies that have been shown to promote long-term career growth and that reflect administrative and clinical structures that promote autonomy and policy making roles for nurses.

10.2 Organizations of health professionals should collaboratively support additional studies of the working relationships between nurses, physicians and other health care professionals in various settings to identify structures and environments which promote collegiality. Support should include funds for students and researchers to conduct investigations and for institutions to demonstrate model projects.

10.3 Nursing organizations should approach federal agencies and philanthropic foundations to develop and fund projects that measure the effectiveness of various models of nursing practice related to patient outcomes and the cost of care.

10.4 Federal and State agencies, professional and trade organizations should support or conduct projects that expand the role of the professional nurse in the delivery of cost-effective, quality health care services. Projects such as nurse managed long term/extended care, elderly day care, substance abuse programs, sick child care, prevention and primary care are examples of potential areas for expansion of the nursing role.

10.5 Federal agencies, health care trade organizations and private sector research organizations should provide funds for both academic and service-based researchers to further study the impact of payment systems and regulations on the amount of nursing care provided and the relation of these factors to patient outcomes.

Recommendation 11

Develop additional academic nursing programs using innovative educational models in all sectors of higher education to provide high quality academic and clinical

experiences that prepare nurses for changing health care roles and which promote education/service partnerships.

Strategies:

11.1 The University of California, the California State University and private institutions, as a strategy for recruiting college graduates, should consider increasing the number of accelerated baccalaureate, and entry-level master's or doctoral level nursing programs based on assessment of geographical needs and community resources.

11.2 Private sector organizations such as philanthropic foundations, health care facilities and trade organizations, should support projects that demonstrate structural and other collaborative efforts to improve the clinical preparation of nursing students. Examples of proposals are affiliations between nursing homes and schools of nursing to prepare nursing leaders for the care of the frail elderly, joint faculty appointments between service agencies and nursing programs, etc.

Recommendation 12

Recognize the nursing shortage as a direct threat to the health of the people of California. Give priority to legislative action and regulatory changes to assure universal access to health services, and that will utilize and compensate nurses appropriately for a full range of nursing activities.

Strategies:

12.1 Federal and State legislators representing Californians should work collaboratively to develop a comprehensive health care system that will meet future health care needs.

12.2 The State Legislature should assess the Medi-Cal program on an on-going basis to ensure that the payment level allows health care agencies to offer compensation adequate to recruit and retain nurses.

Note

1. The California estimates represent a range based on different assumptions about the working status of nurses having undeliverable mailing addresses on the October, 1989 data tape from the Board of Registered Nursing.

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature.

Members of the Commission

The Commission consists of 15 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. The other six represent the major segments of postsecondary education in California.

As of September 1991, the Commissioners representing the general public are:

Lowell J. Paige, El Macero; *Chair*;
Henry Der, San Francisco; *Vice Chair*;
Mim Andelson, Los Angeles;
C. Thomas Dean, Long Beach;
Rosalind K. Goddard, Los Angeles;
Helen Z. Hansen, Long Beach;
Mari-Luci Jaramillo, Emeryville;
Mike Roos, Los Angeles; and
Stephen P. Teale, M.D., Modesto.

Representatives of the segments are:

Joseph D. Carrabino, Sherman Oaks; appointed by the California State Board of Education;

William T. Bagley, San Rafael; appointed by the Regents of the University of California;

John F. Parkhurst, Folsom; appointed by the Board of Governors of the California Community Colleges;

Theodore J. Saenger, San Francisco; appointed by the Trustees of the California State University; and

Harry Wugalter, Ventura; appointed by the Council for Private Postsecondary and Vocational Education.

The position of representative of California's independent colleges and universities is currently vacant.

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including community colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory planning and coordinating body, the Commission does not administer or govern any institutions, nor does it approve, authorize, or accredit any of them. Instead, it cooperates with other State agencies and non-governmental groups that perform these functions, while operating as an independent board with its own staff and its own specific duties of evaluation, coordination, and planning,

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, its meetings are open to the public. Requests to speak at a meeting may be made by writing the Commission in advance or by submitting a request before the start of the meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its executive director, Warren H. Fox, who was appointed by the Commission in June 1991.

The Commission publishes and distributes without charge some 30 to 40 reports each year on major issues confronting California postsecondary education. Recent reports are listed on the back cover.

Further information about the Commission, its meetings, its staff, and its publications may be obtained from the Commission offices at 1020 Twelfth Street, Third Floor, Sacramento, CA 95814-3985; telephone (916) 445-7933.

CALIFORNIA'S CAPACITY TO PREPARE REGISTERED NURSES

California Postsecondary Education Commission Report 91-13

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities. Additional copies may be obtained without charge from the Publications Office, California Postsecondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 95814-3985.

Recent reports of the Commission include.

90-28 State Budget Priorities of the Commission, 1991: A Report of the California Postsecondary Education Commission (December 1990)

90-29 Shortening Time to the Doctoral Degree: A Report to the Legislature and the University of California in Response to Senate Concurrent Resolution 66 (Resolution Chapter 174, Statutes of 1989) (December 1990)

90-30 Transfer and Articulation in the 1990s: California in the Larger Picture (December 1990)

90-31 Preliminary Draft Regulations for Chapter 3 of Part 59 of the Education Code, Prepared by the California Postsecondary Education Commission for Consideration by the Council for Private Postsecondary and Vocational Education (December 1990)

90-32 Statement of Reasons for Preliminary Draft Regulations for Chapter 3 of Part 59 of the Education Code, Prepared by the California Postsecondary Education Commission for the Council for Private Postsecondary and Vocational Education (December 1990)

91-1 Library Space Standards at the California State University: A Report to the Legislature in Response to Supplemental Language to the 1990-91 State Budget (January 1991)

91-2 Progress on the Commission's Study of the California State University's Administration: A Report to the Governor and Legislature in Response to Supplemental Report Language of the 1990 Budget Act (January 1991)

91-3 Analysis of the 1991-92 Governor's Budget. A Staff Report to the California Postsecondary Education Commission (March 1991)

91-4 Composition of the Staff in California's Public Colleges and Universities from 1977 to 1989: The Sixth in the Commission's Series of Biennial Reports on Equal Employment Opportunity in California's Public Colleges and Universities (April 1991)

91-5 Status Report on Human Corps Activities, 1991

The Fourth in a Series of Five Annual Reports to the Legislature in Response to Assembly Bill 1829 (Chapter 1245, Statutes of 1987) (April 1991)

91-6 The State's Reliance on Non-Governmental Accreditation, Part Two: A Report to the Legislature in Response to Assembly Bill 1993 (Chapter 1324, Statutes of 1989) (April 1991)

91-7 State Policy on Technology for Distance Learning: Recommendations to the Legislature and the Governor in Response to Senate Bill 1202 (Chapter 1038, Statutes of 1989) (April 1991)

91-8 The Educational Equity Plan of the California Maritime Academy: A Report to the Legislature in Response to Language in the Supplemental Report of the 1990-91 Budget Act (April 1991)

91-9 The California Maritime Academy and the California State University: A Report to the Legislature and the Department of Finance in Response to Supplemental Report Language of the 1990 Budget Act (April 1991)

91-10 Faculty Salaries in California's Public Universities, 1991-92: A Report to the Legislature and Governor in Response to Senate Concurrent Resolution No. 51 (1965) (April 1991)

91-11 Updated Community College Transfer Student Statistics, Fall 1990 and Full-Year 1989-90: A Staff Report to the California Postsecondary Education Commission (April 1991)

91-12 Academic Program Evaluation in California, 1989-90: The Commission's Fifteenth Annual Report on Program Planning, Approval, and Review Activities (September 1991)

91-13 California's Capacity to Prepare Registered Nurses: A Preliminary Inquiry Prepared for the Legislature in Response to Assembly Bill 1055 (Chapter 924, Statutes of 1990) (September 1991)

91-14 Supplemental Report on Academic Salaries, 1990-91: A Report to the Governor and Legislature in Response to Senate Concurrent Resolution No. 51 (1965) and Supplemental Language to the 1979, 1981, and 1990 Budget Acts (September 1991)

91-15 Approval of Las Positas College in Livermore: A Report to the Governor and Legislature on the Development of Las Positas College -- Formerly the Livermore Education Center of Chabot College (September 1991)