NURSING
IN HAWAII
1968

HARRIETTE JOESTING
Assistant Researcher

Report No. 4, 1969

LEGISLATIVE REFERENCE BUREAU

UNIVERSITY OF HAWAII
Honolulu, Hawaii 96822

Price $1.00

FOREWORD

This report of the Legislative Reference Bureau was authorized by the Fourth Legislature of the State of Hawaii, Regular Session of 1968. We are pleased to present it to the Fifth Legislature, Regular Session of 1969.

We are happy to acknowledge the help we received from many persons in preparing this report. We are especially pleased to have had the assistance of a subcommittee of the advisory committee to the school of nursing at the University of Hawaii, particularly in the initial stages of the study. The former dean of the school of nursing, Marjorie S. Dunlap, and her staff, provided much valuable assistance, and were always ready to give their time and attention to the problems encountered in this study.

We hope the information contained in this report will contribute in the planning and delivery of better health services to the people of Hawaii.

Herman S. Doi
Director

February 1969

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INTRODUCTION

In the 1968 budget session of the Fourth Legislature, the Legislative Reference Bureau was asked to bring up to date its 1962 report on nursing and nursing education in Hawaii. A copy of House Resolution 45 directing this report appears as Appendix A. Particular attention was called to the national shortages of health services manpower, including nursing service personnel, and to the necessity for increasing the numbers and availability of nursing service personnel for the care of the increasing numbers of aged persons in Hawaii. Copies of the resolution were sent to the president of the University of Hawaii and to the director of the Legislative Reference Bureau.

The president of the University of Hawaii appointed a committee to advise the University School of Nursing on its programs. From this committee, a small subcommittee was selected to assist the Bureau with the nursing study. This group met several times in setting up the study design, and in reviewing the results of the study. The assistance and expert advice this group provided helped make it possible to complete the study within the required time period.

Pressures on the Health Services

In Hawaii and throughout the United States, increased attention has been focused on the health care field in recent years. This interest and concern have probably risen from several sources, not the least being the growth in knowledge in the biological and behavioral sciences and in medical technology. Such rapid advances have occurred in these fields that successful organ transplants are no longer newsworthy and the possibility now exists of affecting human evolution by compensating for genetic flaws.

In the United States, a growing population, the rising urbanization, affluence, and increased education level of the nation, medical insurance coverage, as well as the civil rights movement, have created large groups of individuals who are aware of the gap between their medical needs and their actual medical care. Middle income, lower income, and poverty groups are demanding more and better health services. Some of this pressure has been translated into federal legislation to finance Medicare for health services for those over 65 years old, and Medicaid for federal-state medical assistance programs for the indigent and medically indigent.

These various pressures have also forced medical costs higher, to where health care services now take about 5-1/2 per cent of the gross national product, will take about 7 per cent in 1975, and could rise to 15 per cent in the next fifty years. By 1975, this could mean health services could cost approximately $400 a year per person, or a total national expenditure of almost $100 billion.[1]

We have certain undeniable situations: health manpower shortages; high and increasing medical costs; the emergence of new methods and patterns of health care delivery; increases in the demand for health care services among all segments of the population; and enormous technical advances in medical skills and techniques. These technical advances rival those of space technology, and contribute just as basically to the challenges of present value systems and beliefs. Such elements as space flight, computer technology, and medical advances have had, and will continue to have, profound effect on the social, cultural, and psychological systems of the world. Whole economic and political systems have found it necessary to adjust to the advances in scientific knowledge, and further adjustments will be necessary. Health care services form part of a total picture of the modern world and like other areas of society, health care is changing. An integral part of health care is nursing and nursing care.

Health Manpower

Today, there are national shortages of such health manpower as physicians, dentists, and nurses. These shortages are expected to continue in the near future. The Report of the National Advisory Commission on Health Manpower anticipates an expected demand for nurses to reach 900,000 by 1975, with the supply increasing only to a total of 800,000. This leaves a 100,000 gap in demand for nurses over the supply available.[2] There is, however, no immediate shortage of training facilities, for there are more places available in nursing schools than there are candidates to fill them.

An important source of nursing manpower not currently in the labor market is the professionally trained nurse who is not practicing her profession. The Report of the National Advisory Commission on Health Manpower indicates that between 500,000 and 600,000 of these nurses may be available to fill the critical nursing need. The Report recommends that rather than increasing training facilities, it would be more desirable to attract trained nurses back into the active practice of their profession. The Report further states:

> . . . nursing should be made a more attractive profession by such measures as appropriate utilization of nursing skills, increased levels of professional responsibilities, improved salaries, more flexible hours for married women, and better retirement provisions.[3]

The nursing service employer will also be interested in exploring ways to supply nursing needs with personnel who have not previously been used to supply these services. As the professional registered nurse has become more highly trained, has taken on additional professional responsibilities, and functions in a health team setting, the licensed practical nurse and the unlicensed nursing attendant will take on more of the simpler nursing care duties. The professional registered nurse is moving into functions which carry increased responsibilities, and increased leadership roles.

This same kind of change is occurring in the role of the physician, where there are fewer and fewer general practitioners and more specialists. Also, a new medical assistant, or assistant physician, is being created. The role of the medical assistant has not yet been fully defined and developed, but there is some indication that he may take on some of the simpler procedures usually performed by the doctor, as well as some of the traditional nurse's skills and technician's skills.[4]

The changing roles of all health personnel will affect the role the nurse plays in the health services field. Part of the nurse's role will evolve as a result of interaction with the other health service groups, and part will result from the nursing profession's own concept of its future role.

Any review of the health care professions should maintain a clear view that one of the main questions in health care is not solely a question of manpower supply, but the problem of the production and distribution of health services. It is the services which are needed, and they must be made available at the time and in the place where they are needed. Manpower supply is only one function of this production and distribution of services. The link between health manpower and services is a very close one, but there are altering relationships, or other patterns of relationships which are possible. As new techniques, new discoveries, new equipment, and new ways of delivering care are developed, the link between manpower and services will be altered.[5] Also, within the health care field, relationships between the health care professions are altering. The roles of the physician, the nurse, and the other professionals are changing. Other

health workers are being developed to handle some of the more technical or the less demanding elements of health care. Therefore, the emphasis on shortages of health manpower should not obscure the real issue:

> . . . that manpower provides services is obvious--that there is a fixed quantitative relationship between the two is not clear. The greater the fixation on manpower itself, the more likely it is that a search for ways to raise the productivity of that manpower will be ignored. The cost of focusing on the wrong target may, therefore, be high.
>
> Medical manpower policy, therefore, should move beyond the maintenance of specified historically derived manpower-population ratios. It must ask whether goals can be reached in alternative less costly ways with fewer resources (or, putting it differently, whether even higher goals can be reached). It must consider the usefulness of various kinds of personnel. The quest is for policies that promote efficiency, if efficiency is lacking; that conserve scarce resources, if they are being wasted; that permit us to deliver more medical care to the population even at today's costs and that will enable us to meet tomorrow's demands more fully.[6]

Rising Medical Costs

From the question of health manpower to the question of medical costs, it is found that concern over rising medical costs is widespread. Both nationally and in the State of Hawaii, increasing costs have caused government concern. State, local, and national governments now pay for about 30 per cent of all personal health care expenditures in the total health field.[7] Government participation includes such items as direct medical services to military personnel and veterans, to Eskimos, Indians, and American merchant seamen; indirect medical services by financing medical care to the aged and the indigent through Medicare and Medicaid; and environmental and protective health services through the various programs of the public health services such as air and water pollution control, and communicable disease control. These health services are performed by the federal, state, and county governments in varying degrees.

Health care prices have been increasing gradually over a period of 25 years, but since 1946, medical care costs have increased much faster than consumer prices in general. (See the following Table 1 and Figure 1.)

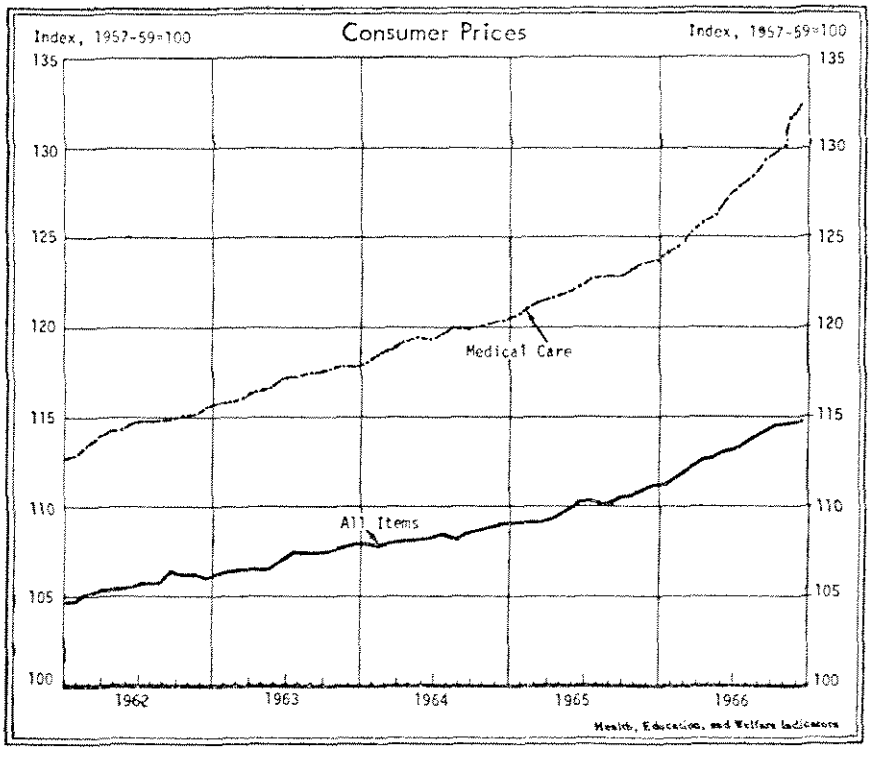
Table 1

PERCENTAGE INCREASE IN COMPONENTS
OF THE CONSUMER PRICE INDEX

Period	Medical Care	All Items
1936 to 1946	22	41
1946 to 1956	51	39
1956 to 1966	42	19

Source: A Report to the President on Medical Care Prices, p. 14.

Figure 1



Source: A Report to the President on Medical Care Prices, p. 14.

In the period 1950-1964, the medical care index rate of increase was more than twice that of the consumer price index.[8] Most of the medical care index consists of the price of services, and all service prices have been increasing at a faster rate than the price of goods. Further, the prices of medical care services have been rising even faster than the prices of other services. (See Table 2.)

Table 2

PERCENTAGE INCREASE IN SERVICE COMPONENTS OF THE CONSUMER PRICE INDEX

Period	Medical Care Services	All Services
1936 to 1946	26	19
1946 to 1956	57	48
1956 to 1966	50	33

Source: A Report to the President on Medical Care Prices, p. 15.

Recently, in 1966 and 1967, prices for medical care services have leaped upward. Probably the most significant new factor which occurred in this time period was the medical care amendments to the Social Security Act in 1965, and the taking effect of these amendments in July 1966. The most significant new portions were Medicare, Title 18, and Medicaid, Title 19. Almost 20 million aged persons are now eligible for medical care help under the Medicare hospital program and about 93 per cent of these persons are enrolled in the optional insurance plan covering doctors' fees.[9] Medicaid, Title 19, is a federal-state program to assist the indigent and medically indigent. The states are required by the federal government to provide certain minimum medical benefit standards, and to increase these benefits to an eventual goal of comprehensive personal health care to all indigent and medically indigent. Hawaii has had its Title 19 program approved and in effect since January 1, 1966, the earliest permissible date to participate in the federal program.

INTRODUCTION

In 1966, the medical care index had its largest annual increase in 18 years--6.6 per cent. The largest percentage increases were in hospital charges, which increased 16.5 per cent, and physicians fees, which increased 7.8 per cent.[10] All price index increases have shown the effects of inflationary pressures, but medical care prices have had a greater increase than the consumer price index. The following tables indicate these increases. Tables 3 and 4 give the increases through 1966, and Table 5 carries the data forward to December 1967.

Table 3

CONSUMER PRICE INDEX:
PER CENT INCREASES BY TYPE OF COMPONENT

	Per Cent Increase		
	Average Annual 1960-65	Dec. 1964-Dec. 1965	Dec. 1965-Dec. 1966
Consumer Price Index	1.3	2.0	3.3
All Medical Care	2.5	2.8	6.6
Hospital Charges	6.3	6.6	16.5
Physicians' Fees	2.8	3.8	7.8
Drugs and Prescriptions	-.8	0	.2

Source: A Report to the President on Medical Care Prices, p. 17.

Table 4

MEDICAL CARE PRICE INDEX:
ANNUAL PER CENT CHANGES BY TYPE OF ITEM

Item	Year ending June 30					
	1961	1962	1963	1964	1965	1966
All medical care	3.1	2.8	2.4	1.8	2.4	3.9
Medical care services	3.8	3.4	3.1	2.2	3.2	4.7
Physicians' fees	2.6	3.1	2.2	2.3	3.5	5.7
Family doctor—office visits	2.4	3.3	2.5	2.4	3.7	6.0
—house visits	2.8	3.6	2.1	2.8	3.8	7.4
Herniorrhaphy, adult	NA	NA	NA	NA	2.4	4.2
Tonsillectomy and adenoidectomy	1.9	2.1	2.3	2.9	3.1	4.4
Obstetrical cases	2.3	3.4	1.5	2.3	2.3	3.6
Pediatric care-office visits	NA	NA	NA	NA	5.5	8.5
Psychiatrist-office visits	NA	NA	NA	NA	2.1	4.3
Hospital services:						
Daily service charges	8.2	6.4	6.6	4.0	5.5	7.7
Operating room charges	NA	NA	NA	NA	3.8	6.5
X-ray, diagnostic, upper gastro-intestinal	NA	NA	NA	NA	1.3	2.5
Dentists' fees	.2	3.0	2.7	2.3	3.4	3.0
Examination, prescription, and dispensing of eyeglasses	3.5	1.7	.5	1.1	2.0	2.6
Routine lab tests	NA	NA	NA	NA	1.9	2.1
Drugs and prescriptions	−1.1	−1.5	−1.3	−.1	−.5	.5
Prescriptions	−3.5	−3.9	−2.8	−1.3	−1.2	−.3
Over-the-counter items	NA	NA	NA	NA	.6	1.5

Source: A Report to the President on Medical Care Prices, p. 16.

Table 5

MEDICAL CARE PRICE CHANGES:
SELECTED ITEMS AND PERIODS
JUNE 1965 - DECEMBER 1967

Item	Index, 1957-59 = 100				Annual rate of change		
	June 1965	June 1966	June 1967	Dec. 1967	June 1965-June 1966	June 1966-June 1967	June 1967-Dec. 1967
Consumer price index, all items	110.1	112.9	116.0	118.2	+2.5	+2.7	+3.8
Medical care, total	122.2	127.0	136.3	140.4	+3.9	+7.3	+6.1
Medical care services	127.0	133.0	145.2	150.4	+4.7	+9.2	+7.3
Physicians' fees	121.1	128.0	137.3	141.0	+5.7	+7.3	+5.5
Dentists' fees	117.4	120.9	126.9	130.7	+3.0	+5.0	+6.1
Daily hospital service charges	152.5	164.2	200.1	211.4	+7.7	+21.9	+11.5
Drugs and prescriptions	98.1	98.6	97.7	98.1	+.5	−.9	+.8

Source: Medicaid: State Programs After Two Years, p. 43.

Health Indices

The rising cost for personnel services, including nursing service, has formed a significant part of the justification by hospitals for their increasing costs. However, concern over the rising cost of health care has not been the only concern. There has also been serious doubt that these increasing costs have been buying better health care. Increased health expenditures have not necessarily resulted in increases in life expectancy in the United States. In fact, in some age groups, life expectancy for males has actually declined.[11]

Improvement in the infant mortality rate, the index which gives the number of infants who die in the first year out of every 1,000 born alive, has been slowing down. Where in 1915, about 100 of every 1,000 infants died in the first year of life, now fewer than 25 die in the first year of life. However, this rate has not been improving in the last 20 to 30 years. Also, the non-White infant mortality rate is two times that of the White infant mortality rate. The infant mortality rate of the United States is also lagging in comparison with international infant mortality rates. In 1959, the United States ranked 11th in the world. By 1965, the United States had slipped to number 18.[12]

Improvement in life expectancy rates for United States adults has also lagged in comparison with the rest of the world. Between 1959 and 1965, the United States slipped from 13th place to 22nd place in life expectancy for males, and from 7th place to 10th place in life expectancy for females.[13]

This study will touch only briefly on such topics as the changing role of the nurse and the nursing profession, and the economic status of nurses in the State of Hawaii. Only a brief mention of nursing salaries will be included.

The study will concentrate on the numbers of registered nurses in Hawaii at a particular point in time, and where these nurses are employed. It will also describe the basic education of nurses in Hawaii.

This study will link information gained in the 1962 Bureau study with data gathered in 1968. This effort will establish some continuity of information over a short period of time, but a period of great growth and change in Hawaii.

Chapter II

NURSING PERSONNEL AND NURSING EDUCATION

The health occupations are one of the largest occupational groups in the United States. There were 2.8 million persons in health occupations in 1966, and by 1975, another million persons will be needed.[1] However, numbers alone will not answer the health problems of the nation -- these persons must be organized to deliver health care at the time and place where it is needed.

The process of providing nursing care services to those in need of such care is accomplished by a variety of occupational categories. These categories vary from registered professional nurses to aides, orderlies, and home health aides and homemakers. These nursing personnel may give this care in hospitals, infirmaries, nursing care homes, clinics, doctors' offices, industrial plants, schools, or in patients' homes.

Professional Nurses

Professional nurses, also known as registered nurses (R.N.),

> . . . are responsible for the nature and quality of all nursing care that patients receive. They are also responsible for carrying out the physicians' instructions and for supervising practical nurses and other non-professional personnel who perform routine care and treatment of patients.[2]

The registered nurse must be licensed to practice her profession. She is required to be a graduate of a nursing school approved by the state board of nursing, and must pass a state board examination. In practice, the state board examination is often the examination prepared by the National League for Nursing. (See copy of the State of Hawaii Board of Nursing brochure "How to Obtain a License to Nurse in Hawaii" in Appendix B.)

There are three basic programs for the training of registered nurses -- the college or university baccalaureate program, the junior or community college associate degree program, and the hospital diploma program.

Baccalaureate Degree Programs

The baccalaureate program covers:

> . . . course work in the biological, physical, and behavioral sciences, in languages and mathematics, and an upper division major in nursing.
>
> Clinical nursing experience is planned so that students learn how to give nursing care to adults and children in hospitals and public health agencies. Both the candidates for admission and the faculty members must meet university requirements. . . .
>
> Graduates of baccalaureate degree programs are broadly prepared to give nursing care, to interpret and demonstrate such care to others, and to plan, direct, and evaluate nursing care. They are prepared for positions as public health nurses and team leaders, and for advancement to positions as head nurses and clinical specialists. They also are prepared to begin graduate study for teaching, administration, and clinical practice.[3]

Associate Degree Programs

The associate degree programs, started in 1952, and located primarily in junior and community colleges, are programs:

> . . . with a ratio of general and nursing education, including clinical experience, developed in accordance with college policy and the regulations of the State licensing authority.
>
> Graduates are prepared to give care to patients as beginning staff nurses; to cooperate and share responsibility for their patients' welfare with other members of the nursing and health staff.[4]

The increasing numbers of nursing students enrolling in associate and baccalaureate degree programs is in part due to the strong position taken in 1965 by the American Nurses' Association that the education of nurses should take place within the general educational system rather than outside it. The American Nurses' Association has taken the following position with regard to nursing education:

1. The education for all those who are licensed to practice nursing should take place in institutions of higher education.

2. The minimum preparation for beginning professional nursing practice at the present time should be baccalaureate degree education in nursing.

3. The minimum preparation for beginning technical nursing practice at the present time should be associate degree education in nursing.

4. The education for assistants in the health service occupations should

> be short, intensive preservice programs in vocational education institutions rather than on-the-job training programs.[5]

Diploma Program

The diploma program is associated with a hospital or in some cases, is independently incorporated. Like the baccalaureate and associate degree programs, applicants for the diploma school must be high school graduates. The diploma schools:

> . . . have their own faculties, although many provide instruction in certain sciences through cooperation with a college or university. Curriculum content is selected primarily to prepare the graduate as a practicing nurse. Instruction and related clinical experience focus primarily on the nursing care of patients in hospitals. Instruction that combines theory and experience in nursing continues throughout the program.
>
> Graduates of diploma programs are prepared to use basic scientific principles in giving nursing care. They are able to plan with associated health personnel for the care of patients, and may be responsible for the direction of other members of the nursing team.[6]

At the present, about sixty-four per cent of all nursing students are enrolled in hospital connected diploma programs.[7] This percentage represents a decrease over the past ten years, as more and more students are enrolling in the baccalaureate and associate degree programs.[8]

The time required to complete these three programs varies. The diploma program requires three years beyond high school, the associate degree program requires two years beyond high school, and the baccalaureate program requires four and sometimes five years beyond high school.

Here in Hawaii, two hospital associated diploma schools were available for training nurses, but both have been discontinued. St. Francis Hospital's School of Nursing closed in 1966 and the Queen's Hospital School of Nursing graduated its last class in June, 1968. Professional nursing education now takes place in the University of Hawaii school of nursing. The school of nursing is a part of the college of health sciences and social welfare, and offers master's and baccalaureate degree programs in professional nursing, the associate degree program in technical nursing, and a certificate program in dental hygiene. The baccalaureate degree program began in 1952, and the technical nursing program in 1964. The nursing programs are

accredited by the Hawaii Board of Nursing and the National League for Nursing. At present, graduate work and the master of science degree in nursing is available with specialties in mental health-psychiatric nursing, community health nursing, and administration of organized nursing services. The baccalaureate program emphasizes a liberal arts program for the first two years, with the last two years emphasizing medical science and nursing. The majority of course work for an associate degree, which takes two years, is in the areas of biological science and nursing.

Although the practice varies from school to school, the University of Hawaii does not permit the automatic transfer of credit for work from a diploma school or from an associate degree program to the baccalaureate program. The University of Hawaii bulletin states:

> . . . No advanced standing credit will be granted for nursing courses completed in a diploma or associate degree program. However, the University of Hawaii, in common with many other universities, allows students to take the regular University department examinations in courses in which it is deemed the student has had equivalent training. If successful, credit is granted for the course.[9]

Practical Nurses

The licensed practical nurse (L.P.N.), "provides nursing care and treatment of patients under the supervision of a professional nurse."[10] The practical nurse can be expected to provide "such treatments as drainage, irrigation, catheterization, routine medication if permitted by the institution, and in taking and recording temperature, pulse, respiration and blood pressure."[11] The practical nurse may also "assist with the supervision of nursing aides, orderlies, and attendants."[12] Since 1960, the licensing of practical nurses is provided by law in all 50 states.

Practical nurses must graduate from a state approved school of practical nursing, and pass a state board of examination. (See Appendix B for information on "How to Obtain a License to Nurse in Hawaii".) Practical nurse training programs may be located in public technical or vocational schools, or in private schools connected with hospitals, health agencies, or colleges.[13] These programs take from 12 to 18 months to complete. The programs usually:

> . . . center on direct bedside care and on learning to nurse patients in selected situations. Appropriate basic concepts in biological and behavioral sciences and in nursing are included.

> Graduates of programs of practical nursing are prepared for two roles: They assist professional nurses in giving nursing care, and they perform certain routine functions independently.[14]

In Hawaii, there are three schools of practical nursing. The Hawaii Technical School program in Hilo, and the Castle Memorial Hospital School in Kailua are provisionally accredited by the state board of nursing. The Kapiolani Community College program in Honolulu is fully accredited.

Nursing Aides, Orderlies and Attendants

Nursing aides, orderlies and attendants assist the professional and practical nurse by performing the less skilled tasks in the care of patients. These unlicensed nursing personnel are sometimes called the paramedical or ancillary personnel. Their training usually occurs at their place of employment, hospital, clinic, or nursing home, and does not require the approval of the state board of nursing. The training program may include classroom instruction and practice sessions, depending on the individual institution where the training is given.[15] In Hawaii, nursing aides are also trained at Kapiolani Community College.

Home Health Aides and Homemakers

Home health aides and homemakers who are also called home aides or visiting health aides, provide the supportive services necessary:

> . . . to provide and maintain normal bodily and emotional comfort and to assist the patient toward independent living in a safe environment. The services are given under the supervision of a nurse, or, when appropriate, of a physical, speech, or occupational therapist.[16]

Like the aides, orderlies, and attendants, their training is provided at their place of employment. These nursing care personnel are not licensed by the state.

Nursing Education

Nursing education in Hawaii can be usefully compared with 12 other western states which are members of the Western Interstate Commission for Higher Education (WICHE). This organization is financed both by the member state governments, and through grants

from public agencies and private foundations. A special division within the organization is specifically concerned with higher education for nursing (Western Council on Higher Education for Nursing - WCHEN). In a 1966 report on nursing, it was noted by WICHE that between 1959 and 1965, there were nine fewer diploma schools admitting students, that associate degree programs had more than doubled in number from 19 to 44, and one additional baccalaureate program had been opened. This made a total of 126 professional nursing schools available in the west in 1964.[17] A 1967 National League for Nursing publication on associate degree programs indicates another large increase in these programs in the west, to a total of 68. This publication also lists a total of 42 nationally accredited programs, and a total of 289 state and nationally accredited associate degree programs available.[18]

The number of students enrolling and graduating from various nursing programs in the west has also changed in the period from 1959 to 1964. In this period, a small increase was noted in the number of students enrolled in all nursing programs, with a corresponding increase in the total number of graduates. Nationally, about 35,000 nurses are being graduated each year from the three basic programs.[19] However, while the number of diploma school admissions was relatively the same, associate degree programs were enrolling three times as many students, and baccalaureate degree programs were enrolling fifty per cent more students. The diploma school still trains the majority of professional nurses throughout the nation, but it appears that in the west at least, the associate degree and baccalaureate degree programs are now training approximately sixty-five per cent of the nursing students.[20]

One aspect of western education for nursing which represents wasted resources is the availability of more space in schools than there are students to fill them. WICHE reported that in 1966 there was space available for twenty-eight per cent more students in the diploma and associate degree programs, and space for sixteen per cent more students in the baccalaureate degree programs.[21] This represents wasted personnel and facilities resources which should be preparing students for nursing. In the WICHE report, the major reasons given by the nursing schools for the gap between actual enrollment and maximum enrollment potential were:

Lack of qualified applicants -- 33%
Unpredictable student attrition -- 20%
Lack of qualified faculty -- 10%
Limited clinical facilities -- 10%
Cost to student and lack of scholarship funds -- 9%

More than sixty per cent of the reasons given by the nursing schools has to do with problems focusing on students -- the lack of qualified applicants, student attrition, and the cost to students and lack of scholarship funds. Further information presented in the WICHE report indicates some students enrolled in practical nursing schools were probably qualified to enroll in professional and technical nursing programs.[22] Better coordination between practical nursing schools and professional nursing schools, along with better student counseling and increased scholarship funds, could make more students available for the professional nursing programs. This could be particularly well organized in Hawaii, where the practical nursing programs in the community colleges, and the professional and technical nursing programs at the University of Hawaii are all under the general direction of the University. Improved student counseling could encourage applicants who are interested in short term nursing care training to enter practical or professional nursing programs at the community college or university level, and scholarship or loan funds for nursing education programs could be coordinated at one location.

Nursing Organizations

Two national organizations relating to nursing care are also vitally concerned with nursing education. The National League for Nursing, formed in 1952 as a merger of seven nursing groups, is primarily concerned with community planning for nursing, development of nursing manpower, and standards of nursing education and service. This organization has its headquarters in New York, and leagues for nursing in 48 states, including Hawaii. Its membership consists of professional and practical nurses, interested citizens, nursing service agencies and institutions, and schools of nursing. The National League has a national accreditation program to accredit schools of professional and practical nursing, and public health agencies. The League has a testing service for nursing school applicants, and for the licensing of practical and professional nurses for the United States and Canada.[23]

The other national organization, the American Nurses' Association, is the professional organization of registered nurses. Founded in 1896 as an alumnae association, it became the American Nurses' Association in 1911. Its primary purposes are to foster high standards of nursing practice, and to promote the professional and educational advancement and welfare of nurses. With headquarters at the same address as the National League for Nursing in New York, this group

has member associations in all 50 states and in the District of Columbia, Guam, Panama Canal Zone, Puerto Rico, and the Virgin Islands. Membership at the end of 1967 was slightly over 200,000. In general, the programs of the ANA are concentrated on improving the quality of nursing care by defining the standards of professional practice, nursing service, and nursing education, and by promoting the economic and general welfare of nurses. With regard to the economic welfare of nurses, the ANA issued a salary pronouncement at the 1968 biennial convention, announcing its position that the minimum salary for registered nurses entering nursing practice with a diploma or associate degree should be $7,500 annually, and for those with a baccalaureate degree the entry salary should be $8,500 annually. The Association noted this would place nursing in a competitive position with other professions and occupations, and would help attract students to the profession of nursing. This salary pronouncement also indicated that advanced education, experience, and clinical expertise should be given recognition in establishing salary schedules for nursing service.[24]

Surgeon General's Nursing Study

Various studies, with their accompanying recommendations, regarding nursing and nursing education have been conducted on a national scale in the last few years. In 1963, the United States Department of Health, Education, and Welfare issued a report by the Surgeon General's Consultant Group on Nursing on nursing and nursing education. This report indicated there is a critical problem in supplying enough nurses for adequate nursing service to meet health needs. This point of view is not necessarily universally shared. There is also the view that persistent nursing care shortages will be met by finding alternative methods of care, or substitute nursing personnel. This view also holds that if the public is not willing to pay the high cost of quality nursing care, the public will have to compromise and be satisfied with a lesser quality of care.[25] Not only was this seen as a problem of the numbers of nurses available, but also as a question of the quality of nursing service available, the patterns and organization of nursing service, and the kinds of nursing education available. The major recommendations made by the Surgeon General's Consultant Group were based on the premise that major changes in medical practice would occur in the next few years, and that sociological and economic trends have created enlarged demands for health care service.

The major recommendations of the Surgeon General's Consultant Group included the following:

(1) A study be made of nursing education, especially with regard to the responsibilities and skills for a high-quality of patient care.

(2) The Public Health Service should give financial assistance and other help to recruitment programs for nursing and other health personnel, and federal funds should be made available for scholarships and low-cost loans for nursing students.

(3) Federal funds should be made available for schools of nursing to expand and improve their programs.

(4) The professional nurse traineeships should be expanded to at least double the present number, as well as compensating the schools of nursing for taking part in the traineeship program.

(5) Federal assistance should be given for experimentation in new methods, for training in new methods, and for consultation with hospitals to improve the quantity and quality of nursing care.

(6) Increased support should be given by the Public Health Service to the nursing research fellowship program, as well as increased funding for the extramural program in nursing research.[26]

The first recommendation made by the Surgeon General's Consultant Group, that there be a study made of the present system of nursing education, has been taken up by an independent, privately incorporated organization called the National Commission for the Study of Nursing and Nursing Education. The establishment of this Commission has been supported by the American Nurses' Association and the National League for Nursing and has been financed by two foundations and a private individual. While there have been no progress reports to the present time, the Commission has been involved in work with its advisory panels, searching nursing literature, and setting up its field visits.[27]

Federal Aid to Nursing and Nursing Education

Another major recommendation of the Surgeon General's Consultant

Group was that federal funds be made available to schools of nursing and practical nursing for construction needs for educational facilities, and low-cost loans to nursing students. This recommendation was met by the congressional enactment of the Nurse Training Act of 1964, PL 88-581, with amendments of 1968 extending the Act through fiscal 1971. This Act provided:

1. Grants to assist in the construction of new facilities, or for the replacement or rehabilitation of existing facilites of collegiate, associate degree, and diploma schools of nursing;

2. Grants to collegiate, associate degree, and diploma schools of nursing to assist them in projects which will strengthen, improve, or expand their programs to teach or train nurses;

3. Payments to diploma programs as reimbursement for a portion of the cost of training students;

4. Traineeships for the training of professional nurses
   a) to teach in various fields of nursing education (including practical nurse training),
   b) to serve in administrative or supervisory capacities, or
   c) to serve in other professional nursing specialities determined by the Surgeon General to require advanced training;

5. A student loan fund which allows a student in need of financial assistance to borrow up to $1,500 annually. This loan has a low rate of interest, and the student need not begin to repay the loan until nine months after the student leaves school. Up to fifty per cent of the loan can be cancelled if the student works full-time as a professional nurse in a public or non-profit institution, or the entire loan can be cancelled if the employment is in an area designated by HEW as having a substantial shortage of nurses.

6. a) A National Advisory Council on Nurse Training of 18 members, with the Surgeon General as chairman. This Advisory Council advises the Surgeon General in the preparation of general regulations and policy matters arising under this Act, and in reviewing application for construction projects and for projects to strengthen and improve nurse training programs,

   b) A committee to review the programs of this Act, and make recommendations on the continuation, extension, or modification of any programs. This committee was to report to the Secretary of Health, Education, and Welfare by November, 1967, after which the committee went out of existence.

To fulfill this last provision, a program review committee was appointed by the Secretary of Health, Education, and Welfare. This

committee reviewed the Nurse Training Act, and made its report and recommendations. In general, the committee recommended the program authorized under the Nurse Training Act be continued for at least five more years (1970-1974) and that it be expanded and modified. Two members of the 26-member committee dissented from the recommendation to substantially increase the quantity of nurses by 1975. These two members were concerned that a wide disparity between an announced "need" for nurses and actual job vacancies would result in causing an oversupply of nurses available for job vacancies. This could act to depress salary levels and make nursing a less attractive career than at present.

The program review committee noted the "changing roles and functions of nurses resulting from changing health needs and scientific advances. . ."[28] and indicated that "Continuous study of the demands and needs relative to all types of nursing manpower is essential as new technologies, institutions, and patterns of care are developed."[29]

An act similar in intent to the Nurse Training Act is the Allied Health Professions Personnel Training Act of 1966, PL 89-751. With regard to the allied health professions, this Act has the following provisions:

1. Grants to assist in the construction of new facilities or for the replacement or rehabilitation of centers for allied health professions;

2. Grants to training centers for allied health professions to develop new or improved curriculums for training allied health professions personnel;

3. Traineeships for training allied health professions personnel to teach, serve in administrative or supervisory capacities, or to serve in allied health professions specialities as determined by the Surgeon General;

4. Grants to public or nonprofit private allied health professions for projects to develop, demonstrate, or evaluate curriculums for the training of new types of health technologists.

Allied health professions were defined as medical technology, optometric technology, dental hygiene, and any other allied health technical or professions and professional curriculums as specified by regulations of the Surgeon General. This Act also contained provisions to enable schools of nursing to offer nursing educational opportunity grants to qualified high school graduates of exceptional financial need. The

intent of these provisions is to enable students who lack financial means to gain a nursing education.

The U. S. Senate committee report accompanying this Act made the point that:

> . . . Across the board for health personnel---we must have more people; we must train new kinds of people; and they must be used as efficiently and effectively as possible. We cannot wait, because the demand for health care in this country is growing rapidly, and it will continue to grow.[30]

Chapter III

NURSING POPULATION

The numbers of nurses available to give nursing care, and the ratio of nurses to the general population is often considered valuable information in evaluating the health care of a community. In absolute numbers, and as a ratio to the population, nurses are increasing at a faster rate than the general increase in population. (See Table 6.) While absolute numbers and ratios are available, it is well to keep in mind that there are as yet no uniform standards of productivity rates in relation to units of nursing service.[1]

Table 6

PROFESSIONAL NURSES IN RELATION TO POPULATION, 1954-1967

Year	Resident Population (in thousands)	Number of Nurses in Practice			Nurses Per 100,000 Population
		Total	Full-time	Part-time	
1967	196,858	640,000	a	a	325
1966	194,899	621,000	a	a	319
1964	190,169	582,000	450,000	132,000	306
1962	184,598	550,000	433,000	117,000	298
1960	178,729	504,000	414,000	90,000	282
1958	171,922	460,000[b]	a	a	268
1956	165,931	430,000[b]	a	a	259
1954	159,825	401,600[b]	a	a	251

Source: Facts About Nursing, 1967, p. 12, as taken from Interagency Conference on Nursing Statistics, 1967.

[a]Information not available.

[b]Excludes Alaska and Hawaii.

This is in contrast to the declines in physician and dentist population ratios.[2] While the numbers of employed nurses in the United States are increasing at a faster rate than the rate of population growth, this is possibly due to the increased numbers of nurses entering the field on a part-time basis. As the demand for nursing care services has accelerated, there have probably been increasing numbers of nurses who were previously inactive in the field who are now returning to active employment. The need for nursing service has also brought changes in the organization of some institutions, to enable these institutions to offer part-time employment to nurses.

In absolute numbers, and when comparing the information in the 1962 study, Nursing and Nursing Education in Hawaii, it can be seen that nursing population ratios have improved. In October 1961, there were 1,883 nurses registered and employed in Hawaii, and a total (based on 1958 figures) of 460,000 nurses in the United States. In 1966, there were 2,193 nurses in Hawaii, and in 1967, 640,000 in the United States.[3] On a ratio basis these ratios are:

Table 7

RATIO OF PROFESSIONAL NURSES TO POPULATION
1962-1967

	United States			Hawaii		
Year	Population (in thousands)	Total No. of Nurses in Practice	Nurses Per 100,000 Population	Population	Total No. of Nurses in Practice	Nurses Per 100,000 Population
1967	196,858	640,000	325	--	--	--
1966	194,899	621,000	319	750,000	2,193	292
1964	190,169	582,000	306	--	--	--
1962	184,596	550,000	298	693,000	1,883	285

Sources: U. S. figures--Facts About Nursing, 1967 ed., p. 12, and U. S., Department of Health, Education, and Welfare, Health Resources Statistics 1965, p. 111. Hawaii figures--population, from Hawaii, Department of Planning and Economic Development; nurses, from ANA Department of Research and Statistics 1966 Inventory and WICHE report, Today and Tomorrow in Western Nursing.

The American Nurses' Association provides an Inventory of Registered Nurses on a periodic basis. The most current inventory is called the 1966 Inventory of Registered Nurses, with the data being collected in 1966 and 1967. Although the official summary report is not yet available, data for the State of Hawaii are available through the State Board of Nursing. The information for this Inventory is collected by the ANA through state boards of nursing at the time registered nurses renew their licenses to practice. These renewal forms are reviewed by the ANA in order that duplicate licenses may be eliminated. Thus each nurse is assigned to the state where she is actually located in order that the data might reflect a state's actual supply of nurses.[4]

The Inventory includes thirteen tables on nursing employment, educational preparation of nurses, and areas of clinical specialization. In some tables, this information is also broken down by age group and marital status.

Each table provides information of value to various groups and agencies which plan for nursing education and nursing service. Direct comparisons between the 1962 study and the 1966 Inventory of Registered Nurses can be made in the following table:

Table 8

FIELD OF EMPLOYMENT OF EMPLOYED NURSES

Field of Nursing	1956-58 Hawaii N=1,681 Per Cent	1956-58 U.S.[a] N=440,355 Per Cent	Hawaii: 1961 Number	Hawaii: 1961 Per Cent	Hawaii: 1966 Number	Hawaii: 1966 Per Cent
TOTAL			1,883	100.0	2,193	100.0
Hospital or Other Institution	68.3	58.5	1,168	62.0	1,557	70.9
School of Nursing	1.7	3.1	37	2.0	48	2.2
Public Health and School	6.9	7.3	135	7.2	156	7.1
Private Duty	7.2	15.4	171	9.1	131	5.9
Industrial	4.0	3.9	66	3.5	45	2.0
Office	9.4	8.0	231	12.3	236	10.7
Other	2.4	1.0	40	2.1	4	.1
Dual Fields	--	--	25	1.3	--	--
Nursing Home	--	--	--	--	1	--
Unknown	.1	2.8	10	.5	15	.6

Sources: Mildred D. Kosaki, Nursing and Nursing Education in Hawaii, University of Hawaii Legislative Reference Bureau, Report No. 3 (Honolulu: University of Hawaii, 1962), p. 13, and ANA Department of Research and Statistics 1966 Inventory of Registered Nurses for Hawaii.

[a]Includes the 50 states, the District of Columbia, and Puerto Rico.

As part of the 1968 study on nursing, the Legislative Reference Bureau distributed a questionnaire to 32 hospitals, 10 extended care facilities, and 20 clinics in the State. Replies were received from 31 hospitals, 9 extended care facilities, and 9 clinics. (See Appendix C *for a copy of the questionnaire.*)

Some of the data which resulted from this questionnaire are given in the following section.

Table 9 gives the responses to the 1968 questionnaire on budgeted vacancies for professional nurses (RNs), licensed practical nurses (LPNs), and hospital aides, orderlies, and attendants (Aides). This is one of the more crucial tables reporting the 1968 data, for it sums up the information each health care institution reports about its own budgeted vacancies. The use of "budgeted vacancies" rather than merely "vacancies" is important, for although an institution might like to have more health care workers, or more workers of a certain type, only budgeted vacancies can be considered actual vacancies which would be filled if a potential employee presented himself for work. In this table, there were a total of 5 nursing care personnel budgeted vacancies in extended care facilities, 5 vacancies in clinics, and 125 vacancies in hospitals. The percentages these vacancies represent as a part of total personnel employed are shown in Table 10.

Table 9

NURSING CARE PERSONNEL: BUDGETED VACANCIES

	EXTENDED CARE FACILITIES[a] (Urban = 7; Rural = 2)						CLINICS[a] (Urban = 6; Rural = 3)						HOSPITALS[b] (Urban = 11; Rural = 20)					
	Total Employed 1968			Vacancies			Total Employed 1968			Vacancies			Total Employed 1968			Vacancies		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Registered Nurses	64	7	71			0	97	16	113		1	1	1,003	480	1,483	20	34	54
Licensed Practical Nurses	20	13	33	1	1	2	40	11	51	2		2	401	556	957	5	36	41
Aides	147	35	182	1	2	3	41	2	43	2		2	368	201	569	13	17	30

[a]Total responding to questionnaire = 9.

[b]Total responding to questionnaire = 31.

Table 10

NURSING PERSONNEL VACANCY RATES

	Extended Care Facilities			Clinics			Hospitals			Total Personnel
	No. Employed	Vacancies	Per Cent	No. Employed	Vacancies	Per Cent	No. Employed	Vacancies	Per Cent	
RNs	71	0		113	1	.8	1,483	54	3.6	1,667
LPNs	20	2	10	53	2	3.9	968	41	4.2	1,041
Aides	151	3	2	44	2	4.6	584	30	5.1	779

These figures do not represent high percentages of vacancies in nursing care personnel. Although not completely comparable, these vacancy rates can be compared with the rates found in Facts About Nursing, 1967 Edition. In this report, the American Nurses' Association research department indicates that the median vacancy rate of budgeted staff-level nurse positions in a selected group of hospitals was 14.2 per cent, with a middle range of 9.6 per cent to 22.7 per cent.[5] The hospitals in Hawaii do not appear to reach these vacancy rates, even though the 1968 questionnaire did not ask for staff-level vacancy rates. (See the entire American Nurses' Association table in Appendix D.)

Another way to look at these vacancy rates is to divide the vacancies between the urban institutions and the rural institutions. This distinction is given in Table 11.

Table 11

VACANCY RATES: URBAN AND RURAL

All Institutions = 49

	Rural			Urban			
	Total	Vacancies	Per Cent	Total	Vacancies	Per Cent	Total Personnel
RNs	503	35	6.9	1,164	20	1.7	1,667
LPNs	580	37	6.4	461	8	1.7	1,041
Aides	405	19	4.7	374	16	4.3	779

It appears that the rural areas have higher percentages of vacancies in nursing personnel than do the urban areas of the State. The urban area is the city of Honolulu, for approximately 80 per cent of the population of the State lives on the island of Oahu where Honolulu is located, and of this number, more than half live within the city itself.[6]

In the next 5 years, and the next 12 years, the larger health care institutions expect great changes in the services they will offer, and in their organization of health services. Consequently, these institutions expect to substantially increase their nursing personnel. There is a difference, however, between the nursing personnel needs as projected by the urban hospitals and by the rural hospitals. In the next two time periods covered in the questionnaire--5 years and 12 years--rural hospitals indicate their greatest need will be for personnel at the aides, attendants, and orderlies level. Their next greatest need will be for registered nurses, then for practical nurses. However, urban hospitals indicate they will have the greatest need for registered nurses, and the least for aides, attendants, and orderlies. In fact, the urban hospitals which answered this question anticipate they will require even fewer aides, attendants, and orderlies than they now employ. (See Table 12c, Nursing Care Personnel Needed in Future: Hospitals.)

Given these projections, we should examine the projected additions to the nursing care personnel labor market from the nursing schools in Hawaii.

GRADUATES FROM NURSING PROGRAMS IN HAWAII

	1966	1967	1968	1969
University of Hawaii				
B.S. & A.D.	39	51	65	117
Masters		3	5	4
Diploma	56	46	35	
TOTAL	95	100	105	121

Source: University of Hawaii School of Nursing, December, 1968.

Table 12a

NURSING CARE PERSONNEL
NEEDED IN FUTURE: CLINICS*

	Total Employed 1968	Additional Personnel Needed In: 5 Years		12 Years	
		Desirable	Minimum	Desirable	Minimum
RNs	113[a]	36	18	51	19
LPNs	51[a]	33	18	22	12
Aides	43[b]	21	17	24	22

*Total responding to questionnaire = 9.
Greatest number responding to this question = 8.

[a]Number responding to this question = 8.

[b]Number responding to this question = 3.

Table 12b

NURSING CARE PERSONNEL NEEDED IN FUTURE:
EXTENDED CARE FACILITIES*

	Total Employed 1968	Additional Personnel Needed In: 5 Years		12 Years	
		Desirable	Minimum	Desirable	Minimum
RNs	32[a]	15	7		
	25[b]			15	9
LPNs	16[b]	8	4		
	14[c]			5	2
Aides	65[a]	42	32		
	61[b]			22	14

*Total responding to questionnaire = 9.
Greatest number responding to this question = 4.

[a]Number responding to this question = 4.

[b]Number responding to this question = 3.

[c]Number responding to this question = 2.

Table 12c

NURSING CARE PERSONNEL
NEEDED IN FUTURE: HOSPITALS*

	RURAL						URBAN					
	Total Employed 1968		Additional Personnel Needed In:				Total Employed 1968		Additional Personnel Needed In:			
			5 Years		12 Years				5 Years		12 Years	
	Full-time	Part-time	Desirable	Minimum	Desirable	Minimum	Full-time	Part-time	Desirable	Minimum	Desirable	Minimum
RNs	426	50	276	249	378	344	965	38	30	19	111	56
LPNs	531	22	226	200	352	319	394	7	51	6	101	39
Aides	184	14	168	157	247	228	342	9	18	25	57	1

*Total number responding to questionnaire = 31.
Greatest number responding to this question =31.

These figures indicate registered nurses from the University can fill currently existing vacancies. However, although we may be graduating enough nurses, not all of these nurses stay in Hawaii to practice or enter full-time employment in Hawaii. Also, for the near term, if Canadian trained nurses will not be allowed to take the national licensing examination for practice in Hawaii, there may be a sudden shift in the numbers of nurses available for work in Hawaii.[7]

The present programs for filling Hawaii's need for licensed practical nurses may be adequate. The institutions which answered the 1968 questionnaire indicated that there are 45 budgeted vacancies for licensed practical nurses. There is a relatively larger percentage of vacancies for practical nurses than for registered nurses, and the health care institutions indicate they will need about 50 per cent more practical nurses over the next 12 years. In 1968, 32 practical nurses were graduated from Kapiolani Community College, and it is anticipated there will be 60 to 70 graduates in 1969 from the programs at Kapiolani, Hilo, and Castle Hospital. A program is planned for the island of Kauai as an extension of the Kapiolani Community College program, but classes had not yet started in December, 1968. If these practical nurses remain in Hawaii to practice, and if they enter full-time employment, there should be a sufficient number for immediate needs.

Chapter IV

SUMMARY AND CONCLUSIONS

Changes Occurring

It is obvious from the literature and from interviews held with the professionals in the field that marked changes are occurring in the health services field, and that both the extent and the rate of change will be accelerated in the near future. Advances in scientific and medical technology, and increasing demands for health services are creating new methods of health care. Where one-to-one personal relationships were possible for those able to afford such relationships, under present patterns of medical care, the heavy demands on the health care system are making these personal relationships more and more expensive, and consequently, less frequent. If these relationships are deemed essential for good health care, ways must be found to pay for these relationships, or new personnel, new patterns, and new systems of health care should be tried. Health care systems can well benefit from systems analysis and operations research to restructure health care or to suggest new patterns of health care. Such research would be especially productive in such areas as the management and control of hospitals, and of medical care programs.

The nursing profession is deeply involved in all these changes in health care. Nurses have been an important part of modern health care since Florence Nightingale organized nursing service for military hospitals in the Crimean War. The role the modern nurse plays, however, is a very different one from the role the nurse played even a few years ago. Today, the majority of nurses are employed in institutional settings. Today, the duties performed by a nurse range from such levels as directors of nursing in large modern hospitals, or directors of nursing schools in university settings, to nurses in charge of intensive care units, to supervising and surgical nurses, to staff and general duty nurses. The nurses administering health care directly are assisted by a variety of workers, such as licensed practical nurses, nurse's aides, attendants, and orderlies.

The changing role of the modern hospital, as a unit for intensive, complex medical care, is affecting the role of nurses who are employed there. Not only are there changed medical techniques and methods, but the part the nurse plays in medical care, and her relationship to the physician and to other health workers is in the process of altering.

A source of confusion in this altering system of health care,

and one which complicates the role of the modern nurse is that several health care occupations are called "nurse". These occupations include the registered nurse, practical nurse, and nurse's aide. The confusion is compounded by distinguishing the baccalaureate degree program as the professional nursing program, and the associate degree program as the technical nursing program. A student can be trained at three different basic levels - diploma, associate degree, and baccalaureate degree. Students trained at the baccalaureate level are sometimes called professional nurses, and those trained at the associate level are called technical nurses. However, graduates of any of these three programs all take the same licensing examination, and are given the same license to practice.

The Situation in Hawaii

Interviews with professionals in the nursing field, as well as the evidence presented in the 1968 Bureau questionnaire, indicate there is no serious shortage of nurses in Hawaii. While other parts of the country are experiencing severe shortages of nursing care personnel, Hawaii appears to have a sufficient number of registered nurses, practical nurses, and aides, attendants, and orderlies to fill most vacancies. Where there are critical shortages in the rest of the nation, Hawaii has a relatively small percentage of vacancies, and these vacancies tend to be in rural areas rather than in urban Honolulu. There are often nurses ready and available for work who cannot find immediate employment. This situation is reported to be unique or at least very unusual in the United States. This does not mean, however, that individual hospitals, primarily those in rural areas, find it easy to fill existing nursing vacancies. The reasons for their vacancies are related to factors other than the availability of nursing care personnel. For vacancies that do exist, improvement in the vacancy rate could be expected by making work available to nursing care personnel who are willing to work on a part-time basis. Working conditions relative to pay, hours of work, and fringe benefits should also be kept compatible with working conditions for other persons in the labor market who are required to have comparable training requirements. There should also be recognition of the differences in training and licensing between the professional nurse and the practical nurse by making distinctions in their work assignments and their pay rates. Not until 1966 were real differences made between the pay of the registered nurse and the practical nurse in Hawaii. (See Nursing Personnel Pay Rates in Hawaii, Appendix E.)

SUMMARY AND CONCLUSIONS

At this point in time, it is possible that the glamor and climate of Hawaii have served to attract large numbers of registered nurses to Hawaii. Although these "transient" nurses do not necessarily stay in Hawaii as permanent residents, they have been replaced by a continuing supply of new nurses. However, employers of nurses should not rely too heavily on this favorable situation continuing indefinitely. The American Nurses' Association council of state boards of licensing had intended to discontinue in December, 1968 the practice of allowing eight Canadian provinces to use the National League for Nursing test pool examination. However, the council of state boards has extended this period to June, 1970. Although information on the numbers of Canadian trained nurses now working in Hawaii is lacking, there is some evidence to indicate they constitute part of the transient nurse supply. If Canadian nurses find it necessary to pass another examination before Hawaii grants a license to practice, Hawaii may not hold the same attraction it presently does. At present, the American examination is being used by the following Canadian provinces: Alberta, British Columbia, Manitoba, Newfoundland, Nova Scotia, Prince Edward Island, Quebec, and Saskatchewan.

If an important reason Hawaii is in a favorable recruiting position is based on the lure of Hawaii, this attraction could be replaced at any time by another state or another area of the world. To properly prepare for the nursing service needs of the state, there should be adequate training opportunities to train local residents to supply at least the minimum of Hawaii's nursing service needs.

Unless there are marked changes in health care and health care delivery systems, including the utilization of health personnel, or if substantial numbers of Hawaii's nursing graduates do not enter employment in Hawaii, the presently projected number of nursing school graduates, and the nurses coming here from other states and countries appear to be adequate to fill the near term nursing needs of the state.

FOOTNOTES

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7. Interview November 1968 with Mrs. Maybelle Clark, Executive Secretary of the State Board of Nursing indicates the practice of allowing Canadian trained nurses to take the American licensing examination may be discontinued by June 1970.

APPENDIX A

(To be made one and eight copies)
FOURTH LEGISLATURE, 1968
STATE OF HAWAII

COPY

H.R. NO. 45

HOUSE RESOLUTION

REQUESTING THE LEGISLATIVE REFERENCE BUREAU TO UPDATE ITS PREVIOUS STUDY ON NURSING AND NURSING EDUCATION IN HAWAII.

WHEREAS, the Legislative Reference Bureau issued a report in 1962 on Nursing and Nursing Education in Hawaii; and

WHEREAS, there is increasing concern nationally on the shortage of health services manpower, and the future of all the health services, including nursing services; and

WHEREAS, the question of health services manpower is of particular concern at this time because of the problem of providing the nursing services necessary for the increasing numbers of aged persons in Hawaii, and in relation to the whole question of improving the existing health care system; now, therefore,

BE IT RESOLVED by the House of Representatives of the Fourth Legislature of the State of Hawaii, Budget Session of 1968, that the Legislative Reference Bureau be, and hereby is, requested to bring up-to-date its 1962 report on Nursing and Nursing Education in Hawaii, and to submit such a report to the Fifth Legislature at its General Session of 1969; and

BE IT FURTHER RESOLVED that duly certified copies of this Resolution be transmitted to the President of the University of Hawaii and the Director of the Legislative Reference Bureau.

APPENDIX B

HOW TO OBTAIN A LICENSE TO NURSE IN HAWAII

STATE OF HAWAII
BOARD OF NURSING
P. O. Box 3469
Honolulu, Hawaii 96801

HOW TO OBTAIN A LICENSE TO NURSE IN HAWAII

LICENSE REQUIRED

Professional, technical and practical nurses who work for hire in Hawaii must be licensed. Foreign nurses as well as those who hold licenses from other jurisdictions in the United States should establish eligibility before deciding to practice in Hawaii.

PROFESSIONAL NURSE LICENSE BY EXAMINATION

Requirement:

1. Completed notarized application
2. $20 fee
3. Student Final Record or official transcript sent directly from the school to the Hawaii Board of Nursing

Graduates of the following nursing programs are eigible to take the examination:

1. State accredited university or college nursing programs
2. State accredited hospital schools of nursing
3. State accredited associate degree programs in nursing
4. Foreign schools of nursing; those from non-English speaking countries will first be required to pass a standard test of English comprehension at high school graduation level

The curriculum must meet the requirements of this Board. A minimum score of 350 in each area, medical surgical, obstetrics, pediatrics and psychiatric nursing, is required. The NLN State Board Test Pool examination is regularly scheduled in Honolulu twice each year. It is imperative that completed applications be on file in the Board office 3 weeks prior to the examination. Application for re-examination in the areas failed may be made for a fee of $5.

PROFESSIONAL NURSE LICENSE WITHOUT EXAMINATION

Requirements:

1. Completed, notarized application
2. $20 fee
3. Endorsement from the state of original licensure sent directly to the Hawaii Board of Nursing

The following are eligible:

Those who have passed the professional nurse state board licensing examination in another jurisdiction of the United States. If the applicant took the NLN State Board Test Pool examination, a minimum score of 350 must have been obtained in each of the five areas: medical, surgical, obstetrics, pediatrics and psychiatric nursing.

Note: APPLICATIONS MUST BE PROCESSED WITHIN ONE YEAR

PRACTICAL NURSE LICENSE BY EXAMINATION

Requirements:

1. Completed, notarized application
2. $10 fee
3. Student Final Record or official transcript sent directly from the school of nursing to the Hawaii Board of Nursing

The following are eligible:

1. Graduates of accredited schools of practical nursing which have a curriculum which meets the requirements of this Board.
2. Those who withdrew in good standing from an accredited school of professional nursing within the past 5 years; provided, the minimum requirements for the PN curriculum have been met. (A recommendation from the director of the school is required.)
3. Those who have satisfactorily completed the 40 week Advanced Medical Specialist Training of the armed forces which has been approved by NLN. (A record of the classes will be required for evaluation.)
4. Persons who hold unexpired Hawaii licenses by waiver.
5. Those who hold licenses by waiver from other jurisdictions of the United States.
6. Graduates of foreign schools of nursing who meet the nursing education requirements of the Hawaii Board of Nursing. Those from non-English speaking countries will be required to pass a standard test of English comprehension at the 8th grade level or above.

The NLN State Board Test Pool examination is regularly scheduled in Honolulu twice each year. It is imperative that completed applications be on file in the Board office 3 weeks prior to the examination. The minimum passing score is 375. Failure requires re-take of the whole examination; the fee is $3.

PRACTICAL NURSE LICENSE WITHOUT EXAMINATION

Requirements:

1. Completed, notarized application
2. $10 fee
3. Endorsement from the state of original licensure sent directly to the Hawaii Board of Nursing

The following are eligible:

Those who have passed the practical nurse state board licensing examination in another jurisdiction of the United States. If applicant took the NLN State Board Test Pool examination, a minimum score of 375 must have been obtained.

Note: APPLICATIONS MUST BE PROCESSED WITHIN ONE YEAR

TEMPORARY PERMITS are granted only to graduates of accredited schools of nursing in United States under the following circumstances:

1. *Those who pay the licensing fee and show a* valid, unexpired license from another state pending completion of application and endorsement forms.
2. Those who have been accepted for the licensing examination, after the following documents are on file:
   a. Application and licensing fee
   b. Student Final Record or official transcript
3. Those who have taken the NLN State Board Test Pool examination in another state and are awaiting results after the following documents are on file:
   a. Application and licensing fee
   b. Verification from the respective state board as to the dates the examination was taken and the date the results can be expected

NURSES FROM OTHER COUNTRIES

The immigration status must permit employment. Temporary licenses or permits are not granted. Applicants from non-English speaking countries will be required to validate comprehension of the English language by means of a standard test.

FEES

Make checks and money orders payable to Hawaii Board of Nursing.

FEES ARE NOT REFUNDABLE

PROCTORING SERVICE is available; arrangements shall be made through the original board of nursing.

ANNUAL REGISTRATION is required to maintain a valid license; fee of $3 and application for renewal *must be received by the Board on or before June* 30. Late registration penalty is $5.

INACTIVE STATUS may be requested in writing if licensee does not intend to practice nursing in Hawaii during the ensuing year. No renewal fee is charged while on inactive status.

EMPLOYMENT

A list of hospitals will be sent on request and inquiry may be directed to these potential employers.

Information about employment conditions for professional nurses may be obtained by addressing a request to the Hawaii Nurses Association, 510 South Beretania Street, Honolulu, Hawaii 96813.

Note: APPLICATIONS MUST BE PROCESSED WITHIN ONE YEAR

11/6/67

APPENDIX C

NURSING STUDY QUESTIONNAIRE

1. On September 13, 1968, what is the size of the

   a. Clinic?

      Number of physicians in clinic _____

   b. Hospital or long-term facility?

      Number of beds _____

      Average number of patient days _____

      Number of out-patient visits _____

      Average daily patient census _____

2. How many registered nurses, licensed practical nurses, nursing aides, attendants, and orderlies are on the payroll September 13, 1968?

Number

	Full-time	Part-time	Budgeted vacancies	Total
RNs				
LPNs				
Nursing aides, attendants, and orderlies				

3. What months of the year do your nursing service employees most frequently leave their jobs? (Check the appropriate box.)

	Jan.-March	Apr.-June	July-Sept.	Oct.-Dec.
RNs				
LPNs				
Nursing aides, attendants, and orderlies				

4. How many employees in your nursing service have been employed by you more than one year? (September 1967 to September 1968)

	Number		
	Less than 1 year	More than 1 year	Total
RNs			
LPNs			
Nursing aides, attendants, and orderlies			

5. List below the number, levels, and professional preparation of registered professional nurses employed on September 13, 1968. (Clinics and long-term facilities may not have all the following job titles. Write in the number of employees you have in a designated category, and write the number you have with the particular professional preparation.)

	Number	Professional Preparation				
		Diploma	Associate Degree	B.S.	M.S. M.A.	Ph.D. Ed.D.
Director						
Asst. Director						
Supervisor						
Asst. Supervisor						
Head Nurse						
Staff Nurse						
Nurse Specialist (list titles)						

6. What training programs are offered to the nursing staff? Name and list those offered between September 1967 and September 1968.

Continuing education _____

_____

_____

_____

_____

In-service education (including orientation to position) _____

_____

_____

_____

_____

7. Check the appropriate box to indicate to what extent program changes have occurred at your medical facility in the past three years - 1965-1968.

1965-1968

	No Change	Some Change	Moderate Change	Considerable Change
Administrative structure				
Medical services provided				
Rearrangement of medical services				
Capacity expansion				
Other (write in)				

Briefly describe those programs which you have checked as having shown considerable change.

8. Check the appropriate box to indicate to what extent you anticipate program changes at your medical facility in the next 5 years, and over the next 12 years--up to 1980.

	Next 5 Years				Next 12 Years			
	No Change	Some Change	Moderate Change	Considerable Change	No Change	Some Change	Moderate Change	Considerable Change
Administrative structure								
Medical services provided								
Rearrangement of medical services								
Capacity expansion								
Other (write in)								

9. Check the appropriate box to indicate the kind of personnel changes you think will occur at your medical facility from the anticipated program changes over the next 5 years, and the next 12 years--up to 1980.

	Next 5 Years	Next 12 Years
Reassignment of present personnel		
Training present personnel for new duties		
Hiring more of present kinds of personnel		
Hiring new kinds of personnel		
Other (write in)		

10. Write a number in the boxes below to indicate your estimate of your nursing service personnel needs in the next year, the next 5 years, and the next 12 years--up to 1980.

	Will Employ:					
	Next Year		Next 5 Years		Next 12 Years	
	Desirable Number	Minimum Needed	Desirable Number	Minimum Needed	Desirable Number	Minimum Needed
RNs						
LPNs						
Nursing aides, attendants, and order-lies						

How confident are you in your estimate of your needs next year, in the next 5 years, and the next 12 years? Rate the confidence with which you hold this estimate.

	Next Year	Next 5 Years	Next 12 Years
Not very confident			
Somewhat confident			
Very confident			

Name of person filling out this questionnaire _____

_____

Title _____

Name of medical facility _____

Address _____

APPENDIX D

DISTRIBUTION OF VACANCY RATES IN BUDGETED STAFF-LEVEL NURSE POSITIONS[a] IN A SELECTED GROUP OF LARGE NONFEDERAL SHORT-TERM GENERAL HOSPITALS, MARCH 1967

Per Cent of Budgeted Vacancies	Number of Hospitals
TOTAL HOSPITALS	103
No Vacancies	4
1.0% - 4.9%	8
5.0 - 9.9	15
10.0 - 14.9	27
15.0 - 19.9	15
20.0 - 24.9	7
25.0 - 29.9	7
30.0 - 34.9	2
35.0 - 39.9	1
40.0 - 44.9	3
45.0 - 49.9	3
50.0 - 54.9	2
55.0 or more	2
Not Reported	7
Median	14.2%
Middle Range	9.6% - 22.7%

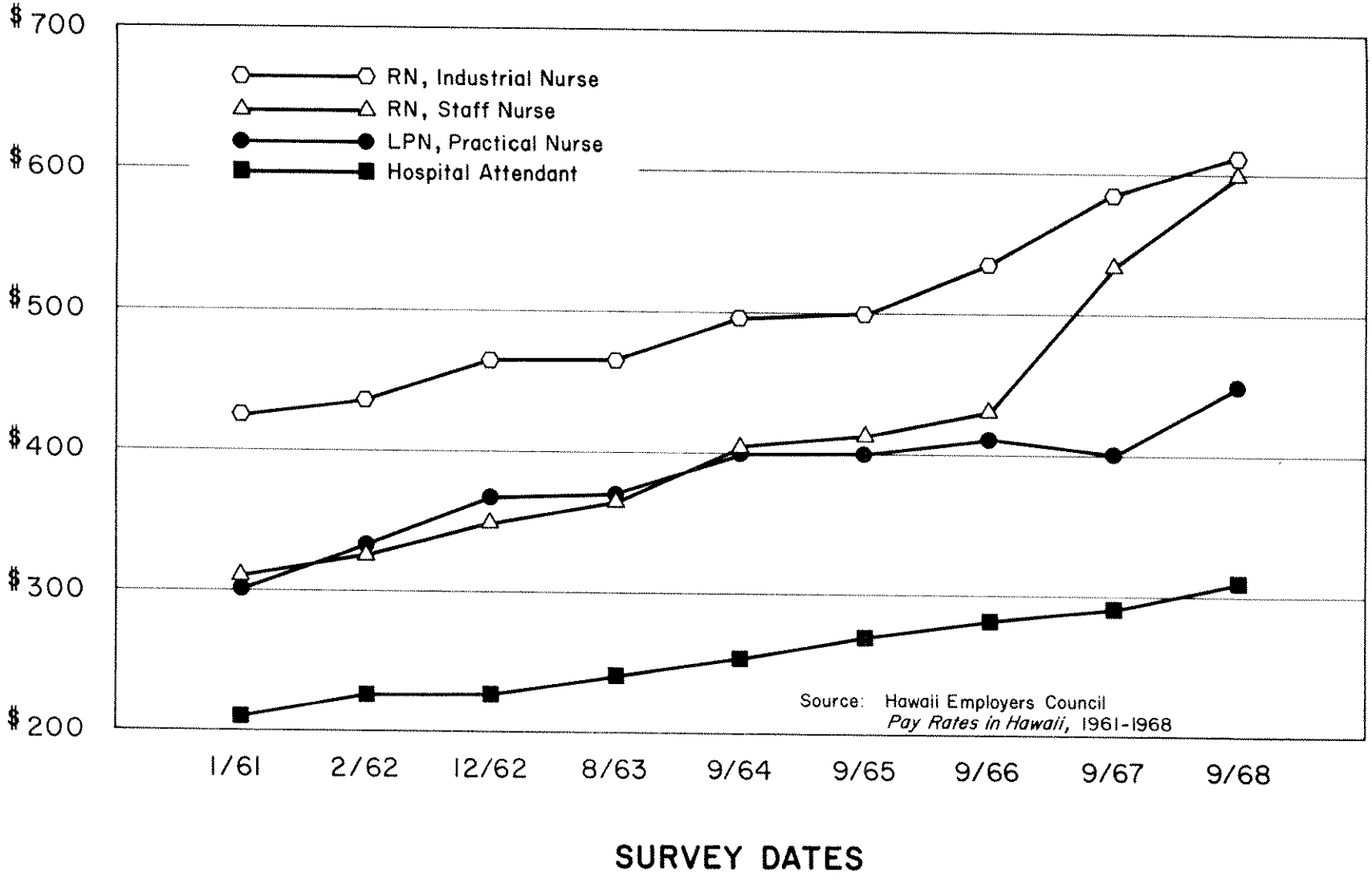
Source: American Nurses' Association, Facts About Nursing, A Statistical Summary (1967 ed., New York: n.d.), p. 21.

[a]Based on the total of full-time positions plus the full-time equivalency of part-time positions.

APPENDIX E

NURSING PERSONNEL MEDIAN PAY RATES

Industry and Government in Hawaii



PUBLISHED REPORTS OF THE LEGISLATIVE REFERENCE BUREAU

1959
1. The Foreign-Trade Zone. 48 p.
2. Administration of Indigent Medical Care in Hawaii. 55 p. (out of print)
Some Effects of Hawaii's 1957 Tax Law. 118 p.
Hawaii State Government Organization. 2 volumes. (out of print)

1960
1. Pre-Session Filing and Related Legislative Procedures. 38 p. $1
2. Capital Improvements Programs in Hawaii. 47 p. $1
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