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Descriptive analysis of associate degree nursing in Massachusetts : changing perceptions.

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DESCRIPTIVE ANALYSIS OF ASSOCIATE DEGREE NURSING IN MASSACHUSETTS: CHANGING PERCEPTIONS

A Dissertation Presented

by

KATHLEEN F. O'BRIEN

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ABSTRACT

DESCRIPTIVE ANALYSIS OF ASSOCIATE DEGREE NURSING IN MASSACHUSETTS: CHANGING PERCEPTIONS

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The purposes of this study were: to investigate the practice and education of associate degree nurses in Massachusetts; to determine the relevance of the program to present as well as the future practice environment; and to determine if the program prepares its graduates to function within the limited scope of registered nursing practice proposed by Mildred Montag. Changes in the nursing curriculum are suggested based on the outcomes of this study.

Competencies of the associate degree nurse, standards of nursing practice, licensure requirements, and job descriptions are used as a frame of reference to examine the current practice.

A telephone survey was conducted to obtain information about job description and responsibilities of registered nurses at acute care hospitals. The hospitals selected were general medical/surgical facilities with at least 100 beds.

The curricula of the associate degree nursing programs in Massachusetts were reviewed to determine if they reflect the guiding principles of the original program developed by Mildred Montag in 1951. A comparison is made of: length of programs; total number credits, including non-nursing as well as nursing; and the prevalence of the term technical nurse.

Evidence presented in this study indicate that nursing practice will change. Nursing practice in the future and specifically in Massachusetts will be shaped by: government intervention in cost containment; increased proportion of the older population; increased complexity of patient needs and severity of patient conditions; and shift in delivery of patient care away from hospitals.

The areas that need to be addressed in the present associate degree nursing curriculum are community health, home care and gerontology. A greater percentage of the curriculum should be geared toward the geriatric patient in non-hospital settings. A outline of program changes is suggested based on predicted trends in health care delivery.

In conjunction with the changes in the curriculum, nursing service and education need to come to consensus on the differences in practice based on the educational preparation of the nursing graduates.

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CHAPTER 1

INTRODUCTION

Nursing practice is a major component of the health care delivery system. Today health care delivery is experiencing rapid change which is predicted to continue for some time. This change impacts on nursing practice as well as nursing education and raises questions about what a practitioner needs to know and and be able to do.

There are several levels of nursing education programs that prepare a registered nurse for practice: diploma, associate degree, and baccalaureate degree. This study will focus on the associate degree level preparation.

The associate degree nursing program is relatively new in nursing education. In addition, it is the first nursing program to be planned deliberately and this program has changed nursing education more dramatically than any other. It was proposed by Mildred Montag in 1951: a result of her doctoral research.

Since the program was developed over 35 years ago, nursing has failed to generate satisfying answers to the persistent questions, "What do associate degree nurses do? " and "What should they do? " Answers to all these questions are not only practical but are necessary in order for nursing education to prepare a nurse for future practice.

Purpose of the Study

The purpose of this study is to investigate the practice and education of associate degree nurses in Massachusetts and to determine if the program prepares its graduates to function within Montag's guidelines which limited the scope of practice for associate degree nurses. These guidelines will be discussed in Chapter 3.

The study will address the relevance of the program to today's practice environment and whether it is desirable to change the curriculum so that the program corresponds not only to the present reality but also the future reality of nursing practice in Massachusetts.

Over the next 15 years, nursing is going to be affected by changes in health care delivery, patient population, and health technology. There is also the beginning of a shortage not only in the number of practicing registered nurses but in the number of applicants interested in a nursing education.

In order for nursing to remain competitive as a provider of quality health care, it is necessary to examine these changes with a view toward the implications these changes will have for associate degree nursing education.

The following questions will be addressed:

1. Does Mildred Montag's premise which describes a

limited scope of practice for the graduates of associate degree programs, fit today's practice of nursing?

2. Should the levels of registered nursing practice be differentiated?
3. Has the education of the associate degree nurse changed over the past 25 years?
4. Has the practice of the associate degree nurse changed over the past 25 years?
5. What has contributed to those changes?
6. Will the present use of associate degree nursing programs in Massachusetts, prepare its graduates for a more differentiated practice to meet the future health care needs of its citizens?
8. Should the associate degree in nursing be considered a terminal degree, as suggested by Montag?

The research results will be the bases for the suggested curricular changes in the associated degree nursing program.

Limitations of the Study

The study will be limited to the examination of the associate degree nursing programs in Massachusetts and their graduates from 1961 through 1986. Even though the study is restricted to Massachusetts, it is hoped that the

descriptive analysis will have implications for associate degree programs nationally.

The controversy surrounding the entry point of professional nursing practice will not be address in this study. The "entry into practice" issues are so complex with multiple subissues including scope of practice, testing licensure, titling, and educational mobility, that it could not be treated adequately. The focus of this study, the examination of associate degree nursing, is only one aspect of this dilemma.

The belief is that this study may be of some use to the following groups of individuals:

1. Those concerned with supplying society's need for nursing service;
2. Those interested in developing programs for the preparation of associate degree nurses;
3. Those interested in delineated objectives of associate degree programs that are consistent with the changing demands on nursing practice;

Methodology

The practice of the graduates of associate degree nursing programs in Massachusetts will be examined to determine if it conforms to Montag's original intent which was to work in a defined, middle-range practice setting which differentiated levels of registered nursing practice.

Competencies of the associate degree nurse, standards of nursing practice, licensure requirements, and job descriptions will be used as a frame of reference to examine the current practice. Practice includes work setting, patient population and practitioner.

A telephone survey was conducted to obtain information about job description and responsibilities of registered nurses at acute care hospitals. The hospitals selected were general medical/surgical facilities in Massachusetts with at least 100 bed capacity.

General medical/surgical hospitals were selected because 2/3 of all registered nurses in Massachusetts are employed in acute care institutions (Massachusetts Area Health Education Center, 1984; National Commission on Nursing Interim Report, July, 1988).

Likewise, the curricula of the associate degree nursing programs in Massachusetts will be examined to see if they reflect the guiding principles of the original program developed by Mildred Montag in 1951. A comparison will be made of length of program, total number of credits, including non-nursing as well as nursing, and the prevalence of the term technical nurse in the curriculum.

CHAPTER 2

REVIEW OF LITERATURE

The literature review presented in this chapter addresses the issues of associate degree nursing practice and education in a changing health care delivery system. The review is divided into three sections: practice, education, and health care delivery.

Practice

Furthermore, marked differences exist between the intended practice of this graduate and the employment of this nurse. Examples of this disparity can be found in the writings of various nurse educators and administrators such as Ashkenas, 1973; McSherry and O'Neill, 1978; and Rose, 1985. The results of their studies will be discussed in the next three paragraphs.

Ashkenas (1973) studied graduates of associate degree nursing programs during their first six weeks of employment to identify factors they saw as being aids or deterrents to their care of patients. In most of the agencies in which associate degree nursing graduates were employed she found that there was very little differentiation between the practice of the two types of registered nurses: one with a bachelor degree in nursing (professional nurse) and the

other with an associate degree in nursing (technical nurse). The graduates of associate degree nursing programs noted that although the majority were employed as staff nurses, they were frequently asked to perform those activities and assume responsibilities other than those for which they had been prepared. Ashkenas found little evidence of the associate degree nursing graduate being identified or employed as a technical nurse.

McSherry and O'Neill (1978) found that the job descriptions and responsibilities of graduates from associate degree nursing programs is largely determined by the philosophy and needs of the employing agency. They examined the nursing service perspective regarding the expected practice of graduates from this type of nursing program. The nursing service administrators they interviewed saw no difference among beginning practitioners from the existing types of nursing programs (bachelor, associate, or diploma). The licensure was the same for each and the legal responsibility was identical. Additionally, they noted that because the competencies remained unclear, it was not practical or cost efficient to formulate staffing patterns and job descriptions that were significantly different for baccalaureate, associate degree, and diploma nurses.

As late as 1985, Mary Rose conducted a review of the literature to determine if the conceptual differences

between baccalaureate, associate degree, and diploma prepared registered nurses were identified. In her review of a 25 year period of literature written about nursing education, she found no consistent evidence that there was a difference among educational levels regarding competency, performance, and quality of care.

The literature reviewed above seems to indicate that there was much confusion among educational levels and between service and education about the unclear expectations for the graduates of the different types of nursing programs. Perhaps this could have been avoided if the competencies describing the specific practice of the graduate from each type of program had been developed at the same time that the new associate degree nursing program was proposed in 1951. It was not until 1978 that practice competencies for associate degree graduates were identified: followed in 1979 by the practice competencies for bachelors prepared nurses.

Current information about the relationship between practice patterns and educational preparation of newly registered nurses was obtainted by the National Council of State Boards of Nursing, Inc. (NCSBN) in 1986. The Study of Nursing Practice and Role Delineation and Job Analysis of Entry-Level Performance of Registered Nurses interviewed 4,000 new graduates. Between 54 and 55 percent were associate degree graduates.

The research indicated that most of the newly licensed registered nurses were working in acute care settings (especially medical-surgical units and intensive care settings), regardless of the type of program from which they graduated. The graduates of associate degree nursing programs worked more often in small-to medium sized institutions, while graduates of bachelor degree nursing programs tended to work more often in larger institutions.

The study also revealed that there was a great deal of similarity in the frequency with which different types of activities are performed by the newly-licensed graduates of the various types of educational programs. Further, the study indicated that to a large extent, the practice patterns of newly licensed registered nurses are shaped by patient needs and that the majority of their needs lie in the intermediate range of nursing practice.

In Massachusetts, 77% of all associate degree nurses are employed in hospitals. Most work as staff nurses giving direct patient care. This compares with baccalaureate nurses, 68% of whom work in hospitals, primarily in leadership or supervisory positions (Massachusetts Area Health Education Center, 1984).

Adding to the difficulties facing nursing, there appears to be the beginning of a nursing shortage nationally, as well as in Massachusetts. The supply of

registered nurses in Massachusetts available for work is at an all time high (Commonwealth of Massachusetts Board of Registeration in Nursing, 1987). There were over 122,000 licensed registered nurses in Massachusetts in 1986, as compared to 57,840 in 1976. This means that the supply of registered nurses has doubled in just over ten years. However, the supply of nurses is not meeting the demand. There is a 10.9 percent registered nurse vacancy rate in Massachusetts in acute care hospitals as they attempt to staff 70 percent of their nursing positions with registered nurses (Massachusetts Hospital Association, 1987).

In The National Shortage of Nurses: A Nursing Perspective (1985), Fagan identifies several factors that have caused an increased demand for registered nurses. These are: (1) increased acuity of hospitalized patients of all ages; (2) increased degree of illness of long-term care patients of all ages; (3) increased sophistication of treatment in and out of hospitals; (4) increased pressure on nurses from changes in physician specialization in hospitals; (5) demographic changes in population, with growth in number of persons over 65 years of age; (6)focus on community based care and home health care; and (7) emphasis on health and health maintenance.

Prescott (1987) states that there are four kinds of nursing shortages, only one of which is the result of

difficulty in filling vacant positions. The other three shortages are the result of policies of hospitals to staff with inadequate numbers of nurses to meet the nurse-defined need even on units where there are no vacant positions. Transient shortages result from unplanned changes in patient acuity, staff absences, and use of inadequately skilled or experienced staff. Scheduling shortages are regularly planned events when staffing is at skeleton staff levels, such as weekends, holidays, and off-shifts. Position shortages result from allocating too few, or the wrong mix of, positions to a unit to meet patient care needs.

According to Prescott, each of these situations can occur alone or, as is frequently the case in practice, in combination with other types. The result, particularly if the situation is allowed to exist for a prolonged period, is overextension and burnout of existing staff members.

The factors identified as causing the present shortage of nurses also create conditions that inhibit long-term employment. In addition, other factors, such as economic conditions, status problems, career mobility, rotation of hours, and power to effect change contribute to the frustration and unhappiness in many nurses. Since another position is always available and since for some nurses the life long career is less important than the job, leaving one job for another is common.

The nursing shortage will not be corrected quickly or easily. Enrollment in nursing programs has shown a decline in the past three years (National League for Nursing, 1987) which has not yet impacted on the labor market. With a steady or increasing demand for registered nurses and a dwindling supply of new graduates, shortages can be forcast into the foreseeable future.

Education

In 1951, Mildred Montag began a trend which changed the pattern of nursing education dramatically. Based on her doctoral dissertation, Education of Nursing Technicians (1951), Montag proposed education for a new kind of nurse which she called a "technical nurse."

This person would have an education consisting of two years in a community or junior college and would be prepared for "intermediate nursing functions requiring skill and some judgement" (Montag, 1951, p.6). She stated that the functions of this nurse would be: "(1) to assist in the planning of nursing care for patients; (2) to give general nursing care with supervision; (3) to assist in the evaluation of nursing care given" (Montag, 1951, p.70).

Montag's rationale for this new caregiver was that the function of nursing had become too broad and too complex to be delivered by one level of registered nursing practice.

She envisioned two types of registered nurses, professional and technical.

Montag viewed the function of nursing as having a spectrum-like range of activities. At one extreme of the continuum were those nursing functions that were simple and which served to give assistance to the nurse or physician. They included those skills that any individual is able to do or which could be learned on the job. An aide, trained on the job, could be assigned these tasks and would always work under the supervision of the nurse.

The functions of nursing found at the other extreme of the continuum were extremely complex and required a high degree of skill and experience acquired through long periods of training. The nurse who would assume the responsibility for the complex function at this level needed preparation of the professional type. This preparation would be received within the university or college setting and lead to the bachelor's degree.

She described the functions performed in that portion of the middle-range to be semi-professional or technical. The judgements required would be considerably more limited in scope than those required of the nurse with the professional prearation. This technical nurse would work under the professional nurse or the physician.

Today, a disparity exists between Montag's original curriculum design and current associate degree nursing educational programs. In her suggested curriculum their was no evidence of a leadership/management component (pp.99-100) which is found in the curriculum of many programs today.

DeChow (1977) maintains that over the years this manager feature has crept into associate degree education. She points out that when the associate degree nursing program was conceived it was not meant to prepare graduates for administrative positions and tasks. However, she noted that there was an unwillingness on the part of the educational arm of nursing and the service component of nursing to identify explicitly the roles and responsibilities of each practitioner prepared in the different types of nursing education programs.

Tilton (1983) discusses how associate degree nursing education has literally revolutionized the education of nurses and the practice of nursing over the past 30 years. During that period of time, the programs graduated over 350,000 associate degree nurses: and in 1983, there were approximately 100,000 students enrolled in 750 associate degree nursing education programs in the United States.

Today there are 776 programs with 19 in Massachusetts alone. The number of graduates from these programs in 1986

was 41,333. In Massachusetts, 995 or 40% of the total registered nursing graduates were from associate degree programs and 93% passed the licensing examination in Massachusetts (National League for nursing, 1987; Massachusetts Organization for the Advancement of Associate Degree Nursing, 1988). This data supports Tilton's conclusions about the growth and success of these programs.

While those numbers were an achievement, he stressed the greater significance to be the fact that the institution of associate degree nursing education radically changed the composition of the nursing profession. Before the advent of associate degree nursing education, nursing students in the United States were traditionally young, unmarried, white female members of the middle class. In 1983 he found the associate degree nursing programs to have the following: a greater number of students who were older, married, mothers of children; and a higher percentage of blacks, other minority groups, and men. He also maintained that the lower fees and tuition at community colleges have also attracted a number of students for whom a college education or a career in nursing would not have been possible.

Most significantly, Tilton argues contrary to Montag's premise that the nurse with an associate degree is a technical nurse. He contends that this nurse functions as a professional nurse today: one who cares for patients with

complex as well as common problems, in both structured and unstructured settings. He submits that if it were the original mission of associate degree nursing programs to educate a technical nurse (one who cares for patients with common, well-defined nursing diagnoses in structured settings) who would be recognized at a different level from the professional nurse, it is too late to go back to that original concept.

Despite the controversies over the educational preparation necessary for nurses, there is agreement in the literature that nursing education must expand its effort to ensure that its nurse graduates will have the knowledge and skills required for adequate practice with the elderly (Aiken, 1982; Bezold, 1985; Giorella, 1986; Golden, 1985; Styles, 1985). These skills includes functional, rather than diagnostic, approaches to the long-term care of older persons. Greater emphasis must be placed on chronicity, morbidity, and rehabilitation. This change differs from the past where the major focus was on mortality.

Additional recommendations from the National Task Force on Gerontology and Geriatric Care (1987) stress the need for every nursing student to have exposure to and experience with well, acutely ill, and chronically ill older people as part of their clinical practica. These experiences should occur in independent living facilities,

nursing and rehabilitation centers, hospitals, as well as the home.

Gerontology must be included in the nursing curriculum to prepare nurses to address the issues of ageism, sexism, adequate economic support, appropriate ethical decision-making, and social policy as they relate to the elderly.

With this in mind, Evelyn Giorella (1985), suggests that quality care for persons in this age group requires modification of the current assessment techniques and nursing interventions which are taught in the nursing programs. The elderly respond to stimuli such as medications, noise, pain, and many others differently from younger patients. What is considered an abnormal laboratory value in a middle-aged adult may be normal for an elderly person. In short, nursing practice with the elderly must be designed to account for the aging process.

In Nursing for the Future: Facing the Facts and Figures, Eli Ginzberg (1987) concludes that at this point, given the supply trends - who is going to nursing school and who is graduating - the nursing profession cannot be divided into two categories, one with baccalaureate and advanced degrees (professional) and the other, technical nurses with lesser educational qualifications.

Health Care Delivery

To meet the present demands of health care delivery and to plan well for the future, it is necessary to have an understanding of today's needs and a view of the force that will shape the immediate future, that includes information about the practice setting and the patient population. The following three reports offer such evidence.

In 1984, Arthur Anderson and Company and the American College of Hospital Administrators issued a study, Health Care in the 1980's: Trends and Strategies, which predicts the future shape of the American health care system in the 1990's. This report's conclusion based on a survey of 1,000 health care experts, revealed a high level of consensus on future trends for hospitals as well as for other healthcare providers.

For hospitals, the experts agreed that:

1. Multi-hospitals will continue to grow;
2. Investor-owned hospitals will increase substantially and will be more profitable;
3. The emergence of new types of providers will reduce the share of health care expenditures consumed for inpatient, acute-care hospital services;
4. Emphasis in health care will shift to ambulatory services and new alternative delivery systems.

For other providers, such as nursing homes, extended-care facilities, specialty-care institutions, and ambulatory-care facilities, the experts forcasted:

1. Greater use of less expensive alternatives to acute, inpatient hospital care will occur;
2. More providers, both institutional and individual, will compete in the markets represented by these alternative levels of care.

In A View of the Immediate Future (1986), the Governing Board of the National Commission on Nursing Implementation Project identified the following major forces as being the most important in shaping nursing's role in the health care environment over the next several years. These forces are consistent with the trends described by others. They are:

1. shifting payment systems;
2. increased proportion of the aged population;
3. increased complexity of patient needs and severity of patient conditions;
4. government intervention in cost containment.

The third report deals with the health care consumer. The American Association of Retired Persons predicts that over the next 15 years the proportion of elderly people will increase significantly. The number of elderly persons

and others for whom uncompensated care must be provided will escalate.

Adding to this, the National Task Force on Gerontology and Geriatric Care Education in Allied Health (1987) reported that by the year 2050, one out of every three individuals in our society will be 55 years of age or older. The 65+ age group will account for roughly 25 percent of the US population. At that time, the 75+ age grouping will be the same size, proportionally, as the 65+ age grouping is today.

This "aging of America" has special importance for health care; because the elderly, especially the over-80 group, tend to use health care facilities more frequently and for a longer time. Their probability of using long-term care facilities is two-to-one, particularly for the chronic disabilities that plague them.

Another area of particular concern to the Task Force is staffing in nursing homes. It is viewed as a critical area because nursing homes serve a large population of elderly residents. It is projected that the number of registered nurses employed in nursing homes will increase 223 percent between the years 1980 and 2000.

Based on the data supplied by the Massachusetts Area Health Education Center (1984), associate degree and diploma nurses in Massachusetts constitute the greatest

percentage of registered nurses staffing nursing homes; 7 percent of all associate degree nurses and 12 percent of diploma nurses work in nursing homes compared with 4 percent of the baccalaureate nurses. It is probable that the future demand for registered nurses employed in nursing homes will continue to be filled by associate degree and diploma registered nurses.

It is documented in Constraining National Health Care Expenditures (1985) that while they comprised only 11 percent of the population in 1978, persons 65 and over consumed 29 percent of the $168 billion in personal health care expenditures. Reflecting the greater volume of health care services and the increased use of high-cost services, the average medical bill for the 65 and over age group reached $2,026 in 1978, compared with $764 for the 19 to 64 age group, and $286 for the under 19 group. It is predicted that the average per capita health care expenditure for the elderly will be $6,024 in the year 2000, compared to $627 for children.

The issue of spiraling health care costs and how to bring them down has been addressed in recent years by every sector of the economy. For its part, the federal government in 1983 introduced the concept of Diagnostic Related Groups (DRGs) to the Medicare and Medicaid systems.

Both state and local governments have instituted cost containment programs for their own employees. While in the private sector, it has become rare to find an employer or a union that has not instituted some kind of health care cost containment program or has not at least studied the issue. In the 1986 Bureau of National Affairs report on Health Care Costs: Where's The Bottom Line?, evidence is presented to support the statement that new policies are being developed in response to demands for lower costs. Because of these initiatives, the number of hospital admissions is down, as is the average length of stay in a hospital. The conclusion drawn by the Bureau of National Affairs is that cost containment efforts have been successful in slowing the rate of cost increase but have not been successful in lowering the cost, or even in keeping it even.

One must also keep in mind that as the effort toward cost containment continues, the steps that are being taken to solve the cost increase problem are giving rise to new questions such as: How are changes in delivery affecting the quality of health care in the United States? Are wellness and preventive care programs an effective way to save costs?

As the financing of health care changes from a system of retrospective payment to one of prospective payment, myriad changes are occurring in the delivery of health

care. This raises the public policy issue of concern, namely, the provision of quality health care to the broadest number of people at the lowest possible cost.

McArdle (1987), believes that rising health care costs have played a particularly strong role in encouraging payers to seek out ways of providing health benefits in more cost effective ways. The nation's employers, who provide the bulk of health coverage to the population, have taken substantial steps in that direction; and the federal government has also initiated changes in its public programs, particularly in the Medicare hospital insurance program. However, he states that it is difficult to know exactly how much these independent efforts have will contribute to lower health costs. What is certain is that despite recent declines in the rate of increase in nominal health spending, health care costs are still rising much faster than the overall Consumer Price Index.

This is supported by Friedland (1987), who suggests that attention has been focused on the decline in the growth of national health care expenditures since 1981. In 1982, health care expenditures increased 12.8 percent over the previous year.

In the most recent year for which data is available (1985), health care expenditures rose 8.9 percent over the previous year's spending. He maintains that the slowdown

in nominal health care expenditures, however, does not necessarily mean that the cost containment activities of third-party payers have been successful. The primary reason for this decline in the growth in health care expenditures is the decline in the prices throughout the economy since that time.

Many have assumed that Medicare, as the nation's largest single payer of health care, has been responsible for halting the trend in health care expenditures by moving to prospective reimbursement for hospital services. From federal fiscal years 1983 to 1984, hospital admissions declined approximately 3.3 percent. Since PPS was implemented in October 1983, many assumed that it was the cause of the decline. However, an appreciable source of the decline in hospital use was due to a drop in hospital admissions among people who are not Medicare recipients. Among persons age 65 and older, hospital admissions declined 2 percent and among persons under age 65, 4 percent.

Interestingly, Friedland notes that while non-Medicare patients drove the trends in hospital admissions, it was the Medicare population that drove the decline in average length of hospital stay. From 1983 to 1984 the average length of stay in the hospital declined 5 percent. Among persons age 65 and older, length of stay declined 7 percent and for persons under age 65, 4 percent.

Whether health care services are effective in improving health depends, in large part, on the quality of care. Quality, in turn, involves the amount of care provided to patients and the technical merits and appropriateness of that care, as well as the interpersonal skills of providers in achieving a working relationship with their patients.

Given the uncertainty of what effects quality, it is not surprising that little is known about how initiatives to contain health care costs affect the quality of health care. It would appear that reductions in health care expenditures pose a potential conflict with providers' abilities to maintain quality and could ultimately lead to sacrifices in quality.

This is discussed by Donabedian (1986). She suggests that the point at which reduced revenues improve or deminish quality is likely to vary among procedures and by individual circumstances. She proposes that the trade-off between quality and cost raises emperical and ethical issues. Emperically assessing the cost-effectiveness of particular procedures is replete with methodological problems. If clinical experiments succeed in measuring quality, other concerns arise. For example, can the current payers of health care finance all the quality care that will be demanded by a growing population? If not, to what extent should health care be rationed? These questions are of

growing concern as payers attempt to reduce spending for health care.

Most health care monies are spent in hopitals, where costs have been rising rapidly in the last decades. Efforts to moderate hospital costs by reducing so-called unnecessary admissions and decreasing length of stay may work, but these may also adversely affect the care of the elderly. Assessment and intervention techniques must be developed to insure that costs are not reduced at the expense of one of society's most vulnerable groups, the elderly.

In some areas, using nursing as an alternative to high-cost care has reduced morbidity and mortality for the aged. For example, Runyan (1975) demonstrated that nurses have played a significant part in improving such outcomes as lowering systolic blood pressure in persons with hypertension, decreasing hospitalization by 50 percent in one group of patients. In another study of chronically ill patients at home and in nursing homes (Masters, 1980), the lengths of stay and frequencies of hospital admissions were markedly lower among patients followed by a nurse practitioner with physician back-up than among those patients followed only by a physician. Evidence showed that preventive and rehabilitative strategies proved to be more economical than bold technological interventions.

The current trend of shortened hospitalizations will accentuate the need for home health services for patients who are acutely ill. It is predicted by Mahler (1981) that, by 2000, 60 percent of all registered nurses will be practicing outside the hospital in home health agencies to a patient population composed largely of the over 65-age group. Thus, nursing must expand its effort to insure that its nursing graduates will have the knowledge and skill required for this non-traditional practice in the future.

As discussed earlier, the literature reveals a disparity between Montag's original curriculum design and current associate degree nursing programs. There appears to be differences between Montag's intended practice for the graduate and the employment of this registered nurse.

Lack of consistency is found among educational levels and between service and education with the implementation of the competencies relegated to associate degree, diploma prepared, or baccalaureate degree registered nurses. However, there is agreement throughout the literature, that nurses are central to the health care delivery care system. They make up the largest single group of health care employees. Nurses are the core of any hospital, of any ambulatory care system, of any home care system, of any chronic care system, or alternative health care system. The

future of health care is extricably bound to the future of nursing.

Evidence has been presented that health care and its delivery is changing. The literature reviewed forcasts a rapidly changing health care scene and implies in the forcast a need for nurses who are prepared differently from the way nurses are prepared today. Since the nursing education system prepares persons for nursing practice, this study will examine the nursing curricula of associate degree nursing programs in Massachusetts. The nursing curricular changes to be suggested will reflect the anticipated trends in health care delivery.

CHAPTER 3

ANALYSIS OF PRACTICE OF ASSOCIATE DEGREE NURSING IN MASSACHUSETTS

Nursing is a practice discipline. The characteristics of nursing comprise both practice and education components. In this chapter the components of practice will be discussed: including the setting, the patient population, and the practitioner. The educational portion will be treated in Chapter 4.

The focus is the current and future practice of associate degree nursing in Massachusetts. The intended practice versus utilization of associate degree nurses will be addressed. Changes will be examined with a view toward the implications these changes will have for associate degree nursing education.

Settings

There was a time when nursing practice was caring, hands-on nursing, and the "bedside" was literally the bedside, be it in the hospital or home setting. The concept bedside was related to illness and nurses were primarily involved in responding to the needs of sick patients.

Today the parameters are less clear. Nursing practice has come to include such things as doing a physical

examination, collecting and interpreting data from a monitor, or reading an electrocardiogram, as well as caring. The bedside has expanded beyond the hospital and home to include long-term care as well as the ambulatory care setting.

Hospitals

It is essential to realize that what is occurring in nursing cannot be understood without also looking at what is happening in the evolving health care system. In the past, hospitals have been the focal point of the health care industry. Between 1965 and 1983, the total number of hospitals registered by the American Hospital Association (AHA) in the United States grew from 7,123 in 1965 to 7,156 in 1975 and then declined to 6,888 in 1983. These hospitals accounted for over 1.4 million beds in the United States in 1983, handled over 39 million admissions and provided about 379 million in-patient days of service (American Hospital Association, 1984).

Despite the decrease in total hospital beds, there was an increase in community hospital beds. One reason for both the decrease in total beds and the increase in community hospital beds can be explained by the major impact that the federal government has had and continues to have on health care delivery.

For example, the Hospital Survey and Construction Act of 1946 (commonly known as the Hill-Burton Act, Public Law 79-725) provided federal funds to match those raised by local communities for new hospital construction, as well as modernization and replacement of existing facilities. The Hill-Burton program which was in effect from 1943 to 1974, played a part in the construction of 365,250 hospital beds or about 43 percent of the total (National Commission on the Cost of Medical Care, 1977). It also resulted in the building of many small rural hospitals in areas where none existed.

Another example of the government's strong influence is in the area of financing health services. In 1965, an amendment to the Social Security Act was passed. Title XVIII of the Act, which was termed Medicare, provided payment for hospitalization and for the purchase of insurance to meet physicians' fees for persons over the age of 65. Since that time, the Medicare program has become the nation's largest, single, payer of hospital, nursing home, and home health costs. In 1985 the federal government paid 41 percent of the nation's $371 billion dollar bill for personal health care in the United States (McArdle, 1987). In addition, it has been responsible for moving the health care reimbursement system from one of retrospective to one of prospective payment.

Although our national health policy goal traditionally has been one of access to quality health care for all residents, in recent years, this goal has been expanded to include high-quality care at the least possible cost.

A significant portion of health care administered from 1965 to 1980 was delivered in hospital settings, and was shown to be very costly. This high cost prompted Congress to authorize a major revision of Medicare's hospital reimbursement formulae to allow prospectively determined, fixed-price, payment based on patient diagnosis. The Tax Equity and Fiscal Responsibility Act of 1982, known as the DRG law, replaced Medicare's former practice of retrospective, cost-based, reimbursement.

This amendment has had far reaching implications for hospitals. If a patient is kept for more than the number of days designated by the patient discharge diagnosis (DRG category), the extra cost must be absorbed by the health care facility. The following is an illustration. A hospital performing a cholecystectomy (gall bladder removal) on a patient under 70 years old without complicating factors (such as a pre-existing heart condition) will be reimbursed by Medicare for $4,340. If the hospital keeps its cost under $4,340, it is allowed to keep the surplus. If it spends more than the $4,340, it must absorb the loss. More money is allowed in older patients with complications.

Since the average cost of a stay in a Massachusetts hospital is roughly $500 per day (Freidland, 1987), the DRG system gives hospitals a powerful incentive to reduce a patient's length of stay.

In an attempt to expand health care access to all, to control health care costs, and to insure quality in health care, we have created a system of rules and regulations so complex as to be close to impossible to comprehend and decipher. Health Care Financing Administration (HCFA) is setting new highs for the volume and number of regulations it is issuing which affect Medicare and Medicare. What is certain is that social change and legislation are in flux constantly. Each causes action to occur and each reacts to the effects of the other's activity.

The data from the American Hospital Association's National Hospital Panel Survey conducted in 1984, reports shorter patients stays in hospitals after the passage of the amendment. It found that from 1983 to 1984 the average length of stay in the hospital declined 5 percent. Among persons 65 years of age and older, the length of stay declined 7 percent and persons under 65, the decline was 4 percent.

Likewise, the patient census began a steady decline after 1982. Fewer patients were admitted to hospitals. Between 1983 and 1984 the number of hospital admissions

decreased by 1.5 million and hospital occupancy dropped to 66.6 percent, the lowest it has been since 1963.

During that same time period, there was an increase of about one million lower-cost out-patient visits. This is attributed to shifting emphasis in health care practice from in-patient care to ambulatory care. Kralovec (1988) disclosed an increase of out-patient visits by 4.8 percent in 1985 and an increase of 8.3 percent in 1986. He proposed that technological advances in diagnostic imaging, surgery, and anesthesiolgy have combined with changes in reimbursement policy and provider practice to fuel strong out-patient growth.

In the traditional acute care setting, the hospital, where the majority of registered nurses are employed, the complexity of patient care continues to rise while the average length of hospital stays is declining. Many patients who would have died quickly in the years past are saved today because of the advances made in technology. These include the distressed neonate, the burn victim, the trauma victim, and those with respiratory distress. However, these patients require more intensive observation and care, and the use of more specialized equipment. The net result of this occurrence is an increase in the number clinical tasks to be performed by a registered nurse.

The current trend to admit patients to hospitals only for the acute phase of their illnesses has also contributed to the requirements for more intense levels of nursing care and a higher staff to patient ratio.

These changes in illness patterns have: altered the projected number of nurses required for present and future employment; created a shortage of registered nurses in the workforce; increased the workload per nurse; and altered the way that registered nurses care for their patients. Often times, care is prioritized and only care that is deemed essential can be provided.

In the last 15 years, the needed number of hospital based registered nurses (RNs) per patient day has increased four times, from 1/4 full time equivalent (FTE) per patient day in 1970 to one FTE per patient day in 1986 (Management Science Associate Report, 1987).

The National Commission on Nursing Implementation's, Interim Report (1988) supports the trend discussed above. The Commission found that between 1983 and 1986, hospitals increased the number of full-time equivalent registered nurses they employed by approximately 6 percent. This was about 38,000 registered nurse equivalents. In addition, increases have been noted in the number of registered nurses employed in hospitals per patient (86:100 in 1984 and 96:100 in 1986).

Despite this increase in employment, the following has occurred:

1. The vacancy rate has more than doubled between 1983 and 1987 (from 4.4 percent to 11.3 percent);
2. It has become more difficult to recruit registered nurses to the critical care and medical-surgical care areas;
3. The inability of hospitals to fill vacant positions has resulted in the closing of some hospital beds.

The Commission concluded that the current shortage of registered nurses is primarily the result of an increase in demand as opposed to a contraction of supply. Although the registered nurse supply continues to grow, there are strong indications that the registered nurse supply has not kept pace with increased demands.

Empirical evidence and witnesses appearing before the Commission indicated that the average severity of illness among hospital in-patients increased after the onset of the Medicare Prospective Payment System (PPS) in 1983. This observation is supported by a 1987 American Hospital Association report which indicates that 81 percent of hospitals responding, admitted patients having a greater severity of illness than the patients admitted in 1986 and to the extent that patients are sicker, they require greater amounts of nursing services.

In 1984, older people accounted for 30 percent of all hospital stays and 41 percent of all days of care in hospitals. The average length of a hospital stay was 8.9 days for older people, compared to only 5.6 days for people under 65. The average length of stay for older people has decreased over five days since 1968 and nearly two days since 1982 (U.S. Department of Health and Human Services, 1986). Thus, the practice of providing most of the care in hospitals and other acute care settings is decreasing in use.

Concurrently, with the trend of hospital treatment for the acute phase of the illness and home care or nursing home care for the recovery phase, there has been an increase in patient acuity in hospitals and a shortage of long-term care services for those patients who are discharged with unresolved health care needs.

Patients are being discharged from hospitals with more complex needs and many require care in nursing homes, long-term care facilities, community agencies, or the home (adult day care, community health centers, and day treatment facilities). These needs are changing the delivery of nursing care in the future to the extent that utilization of non-traditional practice settings such as home care, day hospitals, and nursing homes will continue to grow and develop.

Long-Term Care

Long-term care services for chronic diseases and conditions are one of the fastest-growing areas of health care. In part this is due to the success of medical science in saving those who once might have died, and in part to the fact that the nuclear family has no place for those who, years ago, were simply cared for at home with no public help.

The long-term care represents a continuum of care dealing with quality of life for residents and families. The long-term care population encompasses people of all ages and should not be thought of as encompassing only the elderly. Recent estimates suggest that over nine million Americans suffer from severe functional impairments, and this number is expected to grow dramatically during the next 25 years (Hogstel, 1983). Reasons for this growth include: (1) the growing number of ill neonates who are surviving with symptoms requiring long-term intervention; (2) an increase in trauma victims who are surviving the trauma but are left with deficits in self-care; (3) a growing number of individuals with terminal illnesses; and (4) the rapidly expanding elderly age group (American Health Care Association, 1984).

There are two major categories of long-term care institutions: long-term stay hospitals (for example, rehabilitation and chronic care), and nursing homes

(extended care facilities). Nursing homes account for 70 percent of the institutionalized population (Kelly, 1987).

Nursing home care has become the third largest expenditure for health in the country. Less than 50 years ago, the nursing home industry was virtually non-existent. By 1960, $500 million was spent nationwide on these services (Gibson, 1983).

Nursing home care is the most expensive of the long term health care services. Nursing homes generally provide long-term care for convalescing patients and continuing care for the elderly. Some facilities provide skilled nursing care, while others, generally known as intermediate care facilities, provide care at a more custodial level.

Patients enter nursing homes by one of two different routes. Those discharged from short-term general hospitals may be transferred directly to nursing homes for convalescents or for continued long term care. Similarly, patients may be admitted to nursing homes directly from their own homes in the event that short term hospital care is not indicated and the patient's need is for long-term care. Of course a long-term patient may be transferred to a hospital if an acute medical problem arises during the course of stay at the nursing home.

While the nursing home bed supply has increased over the past 25 years, the supply has not kept pace with the rapidly growing population age 75 and over; those most likely to need nursing home care. During the middle to late 1970's, the nursing home bed supply increased at an annual average rate of 2.9 percent while the age 75 and over population increased at an average of 4.5 percent. The size of the population age 75 and over is significant because its rate of institutionalization is many times greater than the rate for those aged 65 to 74 (Department of Health and Human Services, 1983).

At the present time there are 52,607 nursing home beds in Massachusetts, with a need for an additional 2,220. Massachusetts has a severe shortage of available beds. There are 1.9 beds per 1000 population age 75 and over compared to 4.5 beds per 1000 population age 75 and over nationally (Massachusetts Hospital Association, 1988).

The Massachusetts Hospital Association is extremely concerned that the number of patients waiting in hospitals for nursing home beds will increase, not decrease, over time as the population of elderly age 75 and over grows faster than the number of available nursing home beds.

Most of the nursing homes are operating at, or near, full capacity. Because occupancy rates have been very high historically (estimated at 92.4 percent in 1980 by

Massachusetts Hospital Association), this has created difficulties for some individuals in gaining access to care. The excessive demand for nursing home care has resulted in patients remaining in acute care general hospitals because of the long waiting lists.

The shortage seems to stem from two fundamental factors: failure of nursing home beds to keep pace with increases in the number of those most likely to need nursing home care; and avoidable nursing home admissions of persons who could have been cared for in less costly settings.

The Interim Report of the National Commission on Nursing Implementation (1988), discusses the increased demand for registered nurses in non-hospital care settings. Although empirical data for the non-hospital sector are much weaker than for hospitals, several factors appear to be working to increase the demand in the non-hospital sectors. It has been determined by the Commission that the registered nurse employment in nursing homes increased 22 percent from 1981 to 1986. In addition, the ratio of registered nurses to nursing home beds increased from 5.2 to 5.9 registered nurses per bed during that same time period.

It is believed by the Commission that the patient length of stay in hospitals declined, largely, because of the Medicare Prospective Payment System. As a result of the

payment system, patients are being discharged from hospitals to nursing homes and home care with higher skilled care needs. Today patients are admitted to nursing homes with intravenous lines, complicated medications and complicated technology. The primary need is no longer a long-term patient who must be fed.

Between 1981 and 1985, Medicare admissions to skilled nursing facilties increased 23 percent. This data presented by the Commission, supports the argument that the decrease in hospital length of stay has contributed to an increase in acuity in nursing homes and thus an increase in demand for registered nurses.

Data on increased demand for registered nurses is less clear in the home health and ambulatory care sectors. However, from 1980 to 1987, Medicare home health visits provided by registered nurses increased almost 60 percent.

Before nursing can can assume a pivital role in the management and delivery of long-term care services, there must be an adequate supply of registered nurses to meet the needs of the elderly and chronically ill. Currently, only 8 percent of the registered nurse work force is employed in nursing homes and 6 percent in home care. The National Institute on Aging estimates that in 1990, just two years from now, there will be a nationwide need for approximately

265,00 nurses educated in geriatrics. At the present time, there are 130,000 (Weicker, 1988).

Home Health and Ambulatory Care

As the costs of health care have increased, public and private payers of the nation's health care bill have begun to look for less costly ways of providing care. In addition, some literature suggest that many elderly do not receive long-term care services appropriate to their needs (Aiken, 1982; Bureau of National Affairs, 1986; Carlson, 1978; Feinstein, 1984; Kelly, 1987; Waxman, 1986). These studies and reports have indicated that many elderly and chronically ill persons could be better served in less formal settings such as home care.

Accordingly, the time span from 1980 to 1985 has shown the development of some alternative methods to avoid unnecessary hospital or nursing home admissions. Part of the efforts to control the use of expensive facilities, such as hospitals, has increased the provision of care in out-patient settings. Such efforts include, but are not limited to preadmission testing programs for patients scheduled for hospitalization, use of out-patient surgery, and the development of free standing emergency centers.

In 1986, home health care was a $9 billion industry, and it is projected to more than double before 1990

(National Task Force on Gerontology and Geriatric Care in Allied Health, 1987).

The Congressional Budget Office estimated that the federal government would have saved $3.4 billion between 1983 and 1987 from wider use of home health services. Furthermore, a pilot program conducted by the New York Department of City Planning and the Lutheran Medical Center of Brooklyn attempted to measure the cost-savings associated with encouraging earlier discharges with home health care of a selected group of patients. By investing $50,000 to make in-home services available, it was possible to save $2.5 million in hospital and nursing home expenditures (Stein, 1985). Expanded use of nurses in home health care for older persons has been shown to improve the quality of life and to reduce the probability of rehospitalization or admission to an extended care facility.

As home health and community support services prove to be more appropriate treatment modalities for certain persons, there will be an increased willingness on the part of the medical community to prescribe alternative services and a greater need for nurses with the skills necessary to assess the patient's individual needs to ensure that patients receive the most appropriate level and type of health care services.

Patient Population

Nursing exists as a profession to serve the health needs of society. These needs are dictated, in part, by the age distribution of the population. For example, infant populations have needs that are different from those of adolescents, and the aged have needs that are different from those of younger adults.

This section of Chapter 3 will identify the changes in age groupings within the population so that associate degree nursing education will be able to incorporate those changes into the curricula.

Between 1960 and 1980, there has been a dramatic shift in the population. The percentage of persons aged 65 years or older throughout the nation grew by 50 percent. Experts forsee a 57 percent growth from 1980 to 2000 and a 65 percent jump between 2000 and 2020 (U.S. Department of Health and Human Services, 1983).

There is a significant increase in the elderly patient population nationally as well as in Massachusetts. The older population, persons 65 years or older, numbered 28.5 million in 1985. They represented 12 percent of the United States' population, about one in every eight Americans. The number of older Americans in Massachusetts represented 13.4 percent of that state's population, which is higher than the

national average. It is ranked eleventh nationally for its' high elderly population.

Not only is this growth is expected to continue in the future, it is predicted that the only age group to experience significant growth in the next century will be those past age 55 years (US Department of Health and Human Resources, 1986).

In 1983 there were more people over 65 in America than there were teen-agers. Because of the Baby Boomers (70 million people born between 1946 and 1964) growing old that condition remains a constant at least through 2040. This dramatic aging of the population will result in continued strong demands on the health care system, especially for services to treat chronic conditions.

Most older persons have at least one chronic condition and many have more than one. The most frequently occurring illnesses for the elderly in 1984 were: arthritis (53 percent), hypertension (42 percent), hearing impairment (40 percent), heart disease (34 percent), cataracts (23 percent), orthopedic impairments (19 percents), visual impairments (14 percents), hardening of the arteries (10 percent), cerebrovascular accidents (10 percents), and diabetes (10 percent). Additionallly, about 20 percent of older persons living in the community need the assistance of another person to perform one or more personal

activities. These include bathing, dressing, eating, using the toilet, taking medications, etc. (American Association of Retired Persons, 1986).

As age increases, more people experience illness, restricted mobility, and reduced self-care capabilities. Thus, the health care needs of the aging society necessitate far greater emphasis on chronicity, morbidity, and functioning than in the past, when mortality was the principal focus. Functional, rather than diagnostic, approaches are more appropriate to the long-term care of older persons. An example of this is that the need for help with activities of daily living (ADLs) increases with age.

Even assuming the current rates, the prevalence of limitations in ADL's doubles as one moves from the 65-75 age group to the 75-85 age group, and triples as one moves from the 75-85 age group to the 85+ group (National Task Force on Gerontology and Geriatric Care Education in Allied Health, 1987).

Overall, unless major break throughs in the treatment of chronic diseases occur, extended life expectancies, with greater likelihood of chronic disabling diseases and a reduced number of family members to provide informal care, will lead to a net increase in the population most likely to need nursing home services.

Another group that has increased its survival rate due to advances in medical technology is the seriously ill infant. Many infants with multiple and serious handicaps can now survive anywhere from weeks to years and require chronic care after the initial intensive period of care.

Substantial advances in medical technology have increased life expectancy and changed the prevalent causes of death. Better control of high blood pressure, improved surgical and medical treatment of heart disease, and early cancer detection as well as changes in lifestyle (e.g. decreased smoking and more exercise) have been major factors.

In 1960, the life expectancy of a 65-year-old woman was 15.8 years compared to 19 years in 1984. The average life expectancy of a 65-year-old man was 12.8 years in 1960, compared to 14.5 years in 1984 (U.S. Department of Health and Human Services, 1986).

Living longer has meant that chronic health conditions have become major causes of death, disability, and functional dependency. These conditions can afflict individuals for years, impairing their ability to function and necessitate high use of health resources to manage but not cure the conditions.

In a report to the Massachusetts Nurses' Association on Health Care Trends, Monica Adams reviewed the Health

Plan for Massachussetts: 1983-1990, developed by the Office of State Health Planning (1983). The trends and projections presented in the plan anticipate the changes in the population which were noted previously. The report projects that Massachusetts will experience a decline in the 0-14 years group, a decline in the number of births, and a continued increase in the 65 and over age group. Based on this information the health policies developed by the Office of State Health Planning stress: prevention of disease and management of chronic conditions for the rapidly growing elderly population; reduction of in-patient utilization services and increase in alternative community services; curtailment of the growth of pediatric and maternity services; and establishment of standards and criteria for health promotion and disease prevention.

The elderly population has been identified as the largest population group in the health care system of the future. Likewise, there is much debate about the real or imagined burden that this population will put on the economy.

There is no question that cost containment is first on the nation's health agenda. It also means that the health care services delivered must be cost-effective as well as appropriate.

Practitioner

In order to examine nursing's function in an increasingly fluid health care system, one should examine the practitioner as well as the practice setting and the patient population. The intended practice of the associate degree nurse will be reviewed and contrasted with the employment of this graduate in the delivery of nursing care in Massachusetts.

Nursing is described in many ways, but the concepts of caring for the individual as a whole is generally consistent. Definitions of nursing vary according to the philosophy of an individual or group.

One of the most widely accepted definitions of nursing practice is by Henderson (1966) and serves as the basis for registered nursing practice in Massachusetts. She wrote that the function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health, recovery, or to peaceful death, that he or she would perform unaided, if he or she had the necessary strength, will, or knowledge. This is done in such a way as to help the individual gain independence as rapidly as possible.

Many facets of nursing have changed over the course of time, but one factor remains constant. It is the nurse who serves as the primary link that binds all of the health

professions and delivery mechanisms in the provision of quality care to the patient. It is the nurse in the hospital and in the home health agency who provides the most frequent contact with the patient: monitoring, assessing, treating, and coordinating care. It is the nurse who functions as the basic component in the delivery of health services outside hospitals and nursing homes, through home health agencies, community outreach programs, school nursing, and public health nursing. It is the nurse who, within these levels of care, assists the patient with the personal, health care needs. Direct patient care has always and will always be the core of nursing practice, and it is one of the prime objectives of associate degree nursing education.

Practice is directed by competencies of practice, standards of practice, and by state licensure. In nursing practice, there is a common core of knowledge and technical skills that the registered nurse must have to perform at the entry-level. This common core is taught in all nursing programs leading to the registered nurse licensure. These basic nursing functions include interviewing, examining, evaluating, referring, collaborating, as well as caring for persons during periods of their dependence.

Regardless of the educational preparation, all new graduates are presumed to:

1. Know how to write a nursing care plan using the nursing process;
2. Know how to give expert basic care to patients including supervising nursing assistants in their care;
3. Record completely and accurately on the patient's chart;
4. Recognize basic legal responsibilities, know his/her own limitations as well as abilities, and ask for help as necessary;
5. Work cooperatively with colleagues and other personnel;
6. Behave ethically with patients, families, and others;
7. Take initiative in learning what is necessary to safely perform the staff nurse responsibilities (Kelly, 1987).

Employers expect registered nurses to have at least basic nursing skills (common core), the ability to become proficient in the skills that are more complex, and to apply these skills by using a standard decision making methodology called the nursing process.

Intended Practice of Associate Degree Nurse

At the present time there are three major educational routes that lead to the registered nurse license. They are diploma programs operated by hospitals, associate degree programs usually offered by junior or community colleges, and baccalaureate programs offered by four-year colleges and universities. This section will focus on the associate degree registered nurse.

The first-level position for registered nursing is that of general duty or staff nurse. The basic requirement for that position is graduation from an approved school of nursing and nursing licensure or eligibility for licensure.

Staff nursing responsibilities includes planning, implementing, and evaluating nursing care through: assessment of patient needs; organizing, directing, supervising, teaching, and evaluating other nursing personnel; and coordinating patient care activities. It involves working closely with members of the health care team to provide the best possible care to all patients.

To help guide these expectations, the ANA published in 1973, Standards of Nursing Practice. These general standards were guidelines for practice and included the following:

1. The collection of data about the health status of the patient is systematic and continuous. The

data is accessible, communicated, and recorded.

2. Nursing diagnoses are derived from health status data.
3. The plan of nursing care includes priorities and the prescribed nursing approaches and measures, to achieve the goals derived from nursing diagnoses.
4. The plan of nursing care includes priorities, and the prescribed nursing approaches, to achieve the goals.
5. Nursing actions provide for patient participation in health promotion, maintenance, and restoration.
6. Nursing actions assist the patient to maximize his/her health capabilities.
7. The patient's progress or lack of progress toward goal achievement is determined by the patient and the nurse.
8. The patient's progress or lack of progress toward goal achievement directs reassessment, reordering of priorities, new goal setting, and revision of the nursing care plan.

Involved in meeting the standards of nursing practice are literally hundreds of nursing tasks, some of which can be carried out by less prepared workers such as licensed practical/vocational nurses and nurses' aides and some that require the knowledge base and skill level of the registered nurse.

In addition to the Standards of Nursing Practice, competency statements were also written to differentiate the abilities of the graduates of the different types of registered nursing programs. During the late 1970's, the Competencies of the Associate Degree Nurse on Entry into Practice and the Characteristics of Baccalaureate Education in Nursing were released by the National League for Nursing.

These competencies were developed in collaboration with nurse educators, practitioners, and administrators to identify the outcomes of the different types of educational programs as well as the abilities of the practitioners. They were created to be used to guide curriculum development as well as patterns of employment for nurses in the practice setting. The major competency differences between the practices focused on the type of patient (patient condition) and the environment for practice (structure and support). The following table gives an overview of the differences as identified by the National League for Nursing. For example, the associate degree nurse cares for patients with common, well-defined nursing diagnoses in structured health care settings, with established policies, procedures and protocols. The baccalaureate degree nurse cares for patients with complex problems in both structured and unstructured settings,

which have the potential for variations requiring independent nursing decisions.

TABLE 3.1

OVERVIEW OF PRACTICE DIFFERENCES

	Associate Degree	Baccalaureate Degree
Patient	Individual	Individual, family and community
Problems	Common, predictable	Less common, more complex
Problem Solving	Established protocols and principles. Clearly defined decision making	Complex, less defined decision making
Setting	Structured setting	Structured or unstructured setting
Practice	Follows directions, participates	Gives directions, coordinates
Goal	Prevention of illness	Promotion, maintenance, and restoration of health
Time Frame	Immediate	Immediate, intermediate and long-term

(Source: National League for Nursing, 1978; 1979)

According to DeBack (1986), nursing educators expected these competency statements to solve the problem of differentiating the functions of associate degree and baccalaureate nurses in practice. Perhaps that would have occurred if the competencies had been developed and implemented at the same time that the associate degree

nursing program was created. However, a time lag of 27 years with no clear initial differentiation of practice contributed to the present resistence surrounding the use of the competency statements in the practice area.

The Study of Nursing Practice and Role Delineation and Job Analysis of Entry-level Performance of Registered Nurses discussed in the literature review illustrates the confusion that still exists. The study revealed that the graduates of the three types of programs were performing the same nursing functions. In staff nurse positions there was no differentiation of these functions based on educational preparation. The nursing community had not moved beyond development stage for these guidelines.

This information contradicted the premise held by the American Nurses' Association, the National League for Nursing's Council of Associate Degree Programs, the American Organization of Nurse Executives, and so forth, that there was wide acceptance and support for differentiated practice and differentiated educational outcomes between associate and baccalaureate degree nurses.

In fact, the associate degree nursing program is based on the premise that the functions of nursing are differentiated and that programs preparing for this should and could be developed. However, unless differentiation carried over into practice this confusion will continue.

To determine the current acceptance of differentiation of practice in Massachusetts, a telephone survey (O'Brien, 1988) was conducted. General medical/surgical hospitals were selected to be part of the survey because 2/3 of all registered nurses are employed in acute care institutions (Commission on Nursing,1988, and Massachusetts Area Health Education Center,1984). The information was obtained from the Nurse Recruiter employed by the institution.

The following questions were asked:

1. Does your institution have job descriptions for basic staff registered nurses that differentiate knowledge, skills, and abilities of graduates at the professional and technical levels?
2. Are the entry-level functions of graduates of diploma, associate degree and baccalaureate degree programs delineated?
3. Is the job description for staff registered nurse based on educational preparation?

There are 78 acute care hospitals in Massachusetts with a bed capacity of at least 100 as shown in Table 3.2 . From this pool, information was obtained from 75. None of the responding hospitals:

1. Differentiate knowledge, skills, and abilities of graduates (professional and technical) in job description;
2. Delimit entry-level functions of graduates of

associate degree and baccalaureate degree programs;

3. Base job description for registered nurse on educational preparation (diploma, associate degree, baccalaureate).

TABLE 3.2

LIST OF HOSPITALS IN HOSPITAL TELEPHONE SURVEY

Hospital	Beds	Hospital	Beds
Beverly	233	Brockton	301
Beth Israel *	471	Cardinal Cushing	275
Boston City	409	Lahey Clinic	200
Brigham and Womens	720	Cambridge	152
Carney	339	Mount Auburn	305
Children's	339	Santa Maria	150
Faulkner *	259	Lawrence F. Quigley Memorial	154
Massachusetts General Hospital	1081	Emerson	221
New England Baptist	245	Hunt Memorial *	142
New England Deaconess	474	Charleton Memorial	279
New England Medical Center	452	St. Anne's	182
St. Elizabeth's	350	Falmouth	130
St. Margaret's	128	Burbank	182

* Beth Israel, Faulkner, and Hunt Memorial did not respond.

(Continued on next page)

TABLE 3.2 CONTINUED

LIST OF HOSPITALS IN HOSPITAL TELEPHONE SURVEY

Hospitals	Beds	Hospitals	Beds
Sturdy Memorial	176	Framingham Union	311
University	379	Addison Gilbert	113
Veterans Administration Medical Center	604	Henry Hayward Memorial	142
Holyoke	243	Providence	225
Cape Cod	228	Lawrence General	375
Leominster	118	Lowell General	293
St. John's	254	St. Joseph's	232
Atlantic Medical Center	354	Lawrence Memorial	200
Malden	250	Marlborough	164
Melrose-Wakefield	253	Bon Secours	294
Milford-Whitinsville	182	Milton	161
Leonard Morse	259	St. Luke's	433
Anna Jaques	156	Newton-Wellesley	303
North Adams Regional	172	Cooley Dickerson	189
Norwood	302	Jordan	142
Berkshire Medical Center	369	Baystate Medical Center	650
Quincy City	303	Salem	322
South Shore	280	Mercy	322

(Continued on next page)

TABLE 3.2 CONTINUED

LIST OF HOSPITALS IN HOSPITAL TELEPHONE SURVEY

Hospitals	Beds	Hospitals	Beds
Harrington Memorial	121	New England Memorial	256
Goddard Memorial	236	Morton	207
Waltham Weston	305	Winchester	154
Franklin Medical Center	131	Haverhill Municipal-Hale	188
Choates-Symmes	226	St. Vincent	559
Worcester City	270	University of Massachusetts Medical Center	349
Worcester Hahnemann	211	Worcester Memorial	336

Note: Response rate = 96%

(Source: American Hospital Association, 1988)

Utilization of Associate Degree Nurses

Although nursing service agencies in Massachusetts do not differentiate practice, they have compiled skills lists that they expect all graduates to have for employment. These lists are based on the current staff nurse practice and the staff nurse job description is the same for all registered nurses working within an institution.

While the degree of nursing judgement needed should determine the best person to care for a patient, the information obtained from the hospitals contacted suggests that the tendency is to assign graduates from different types of registered nursing programs to the same kinds of tasks and responsibilities. This custom fails to take into account the different levels of knowledge and skill that the practitioners develop in their educational preparation for practice.

One difficulty with the competencies developed in 1978 is that they were developed by faculty and practitioners who described the service needs and educational preparation necessary at that time. They were here and now statements; not futuristic in application. They were developed for a health care system that no longer exists. The current system is in a state of flux. The existing competency statements may not be helpful for either practice or education in a future, structually different system that is cost-effective, multitiered, and technologically advanced. Therefore, it is appropriate to consider these statements themselves to be in flux and expect them to be revised and refined as the health care system and thus, nursing changes.

A matter of considerable discussion and controversy within the nursing profession concerns which skills the new graduate should possess and to what level of proficiency

(competency). Nursing service's expectation of the registered nurse in clinical practice continues to increase. The acuity of the conditions of the patient population in all settings is increasing. This increase demands higher levels of skill to maintain high-quality care.

Nursing service agencies have developed their own lists of skills which new employees are expected to possess, while educators have generated lists of competencies descriptive of the practice for which their graduates are prepared. Unfortunately, many times the lists are mutually exclusive.

The lack of consensus between service and education on the differences in practice between the graduates of associate degree and graduates of baccalaureate degree nursing programs (Kohnke, 1972; Primm, 1978; Rines, 1977; Rotkovitch, 1986) is illustrated by nursing educators' statements that nursing service is not utilizing these graduates in the capacity for which they were prepared and countered by nursing service statements that educators have not prepared graduates for realistic practice.

Very little evidence has been collected on differentiated performance in practice settings. Only recently, have competency statements defining differential educational outcomes been made the basis for development of

differentiated job descriptions and been tested in the clinical setting (Primm, 1986). Data are now being collected on the effectiveness and efficiency of differentiated practice in hospital settings (Rotkovitch, 1986). It will measure quality of care delivered, cost-effectiveness, staffing effectiveness, and job satisfaction in differentiated practice. This study is in its early stages, and outcomes are just beginning to emerge.

It has been established that differentiation of practice is not occuring at the staff nurse level. The question remains, "What do the associate degree nurses do?"

The job description for registered nurses in acute care hospitals in Massachusetts is based on the Massachusetts Nurse Practice Act and the American Nurses' Association Standards of Nursing Practice. Nurses are used interchangably in this practice setting. The job description will vary in some aspects from institution to institution, but all contain a definition of registered nurse, qualifications for the position, and performance responsibilities. The performance responsibilities are divided into three areas: responsibilities to patient; responsibilities to the institution; and professional responsibilities. They also cover five basic components of nursing practice: provision of direct care, communication with and on behalf of the patient, patient teacher, management of patient care, and member within the

profession of nursing. Teaching evolves from the interface of provision of care and communication. Coordination with other disciplines evolves from the interaction of communication and management of care. Delegation of care evolves from the intermingling of provision and management of care.

No place in the Commonwealth of Massachusetts' regulations governing the practice of registered nurses, developed in 1956 and revised in 1965, 1971, and 1982, is there a differentiation of levels of practice. In fact, in the latest document, Regulations Governing the Approval of Schools of Nursing and General Conduct Thereof (1982), it states that the graduates of diploma, associate degree, and baccalaureate degree programs are eligible for admission to the registered nurse licensure examination and are prepared to practice professional nursing. This is contrary to the position now held by the American Nurses' Association which states that a baccalaureate degree is the minimum requirement necessary for professional nursing practice (American Nurses' Association, 1985).

Licensure of the practitioner should not be confused with professional standards of nursing practice or care. The professional standards measure quality of care and are developed by the professional organization(s), while licensure validates the individual has the minimum ability to perform skillfully and proficiently the

functions that are within the legally defined role of the licensee, and to demonstrate the interrelationship of essential knowledge, judgement and skill and is monitored by the Board of Registration in Nursing.

Although licensure laws differ somewhat in format from state to state, the elements contained in each are similar. For instance, there are sections on definition of the profession that describes broadly the scope of practice; requirements for licensure, such as education; exemptions from licensure; grounds for revocation of a license; creation of an licensing board, including member qualifications and responsibilities; and penalties for practicing without a license.

Initially, the licensure law was a voluntary process by which a nurse who met predetermined standards would be given a license to practice, and this license would be registered with the state. The nurse could call herself (there were no male nurses at that time) a registered nurse (R. N.).

The first laws providing for permissive licensure were passed in 1903 by North Carolina, New Jersey, and New York. Massachusetts passed a similar law in 1910. This was followed by mandatory licensure of all registered nurses beginning in 1947 (Kelly, 1987).

The Commonwealth of Massachusetts Board of Registration in Nursing (CMBORN) has three basic responsibilities. First, the Board initially reviews candidates for licensure, making sure they have appropriate educational preparation and meet any other professional standards. Secondly, the Board establishes minimum criteria for performance on the licensing examination, administers the examination to eligible candidates, and set requirements for re-licensure. Finally, the Board monitors nurses'practice throughout their careers.

A registered nurse as defined by the CMBORN is an individual who is: licensed to practice professional nursing; holds ultimate responsibility for direct and indirect care; is a graduate of an approved school for professional nursing; and is currently licensed as a Registered Nurse pursuant to Massachusetts General Laws, Chapter 112 (CMBORN, 1979). An approved school of professional nursing is defined as diploma, associate degree, and baccalaureate degree educational institutions.

Simultaneously, the registered nurse has full and ultimate responsibility for the quality of care she/he provides to individuals and groups. Included in such responsibility is health maintenance, teaching, counseling, collaborative planning and restoration of optimal functioning, or for the dignified death of those they serve.

A registered nurse within the parameters of his/her generic and continuing education and experience, may in addition, delegate nursing activities to other registered nurses and/or health care personnel, provided, that the delegating registered nurse bears full and ultimate responsibility for the outcomes of the delegation.

Over the past 30 years the term registered nursing has been used synonymously with the term professional nursing. Nurses have been licensed as registered nurses and not as technical nurses or as professional nurses. Although the term, "technical nurse", was used to describe the first graduates of associate degree nursing programs, the phrase has never been understood in nursing. Partly, the interchangeable use of the terms professional nurse and registered nurse has contributed to the confusion. There seems to be a misunderstanding of technical and a belief that a technician is of lower or less quality. Frequently nurses are disturbed by any indication that all nursing functions are not professional in nature and that not all nurses are professional people.

Whether the term technical will continue to be used is not clear. Today the concept is considered a step down from the professional label that has been attached to all registered nurses through licensing definitions and common usage over the years. So the question arises, "Is this the

most appropriate term to be used to describe the level of practice of the associate degree registered nurse?"

Because agreement has not been reached on a clear definition of technical or semi-professional nursing, the substituted term, associate degree nurse has gained much more support and will be used throughout this report in place of the phrase technical nurse.

Specific information about the overall career patterns of registered nurses has been obtained from the National League for Nursing (NLN) Career Pattern Study (1984) which was initiated in 1962. To date it is one of the most comprehensive studies. Several thousand (6,900) students from diploma, associate degree, and baccalaureate programs were followed for 15 years after graduation with 70 percent still responding to the final questionnaire. These nurses makeup a good part of today's workforce.

This group consisted primarily of women. The majority were white, Christian, and native-born with working class or white-collar parents. Most were 18-or 19-years-old, but about half of the associate degree students were over 20. The latter were also likelier to be married and to have children. More than one-third of the associate degree graduates to about two-thirds of the baccalaureate degree graduates were in the top fourth of their high school class. By the end of the 15 years, six out of ten reported working

for 10 years or more. The older married associate degree graduate whose children were beyond school age stayed in the job market most consistently. Graduates from other programs usually married within 5 years and often showed a gap in service.

As the time from graduation lengthened, fewer nurses worked in hospitals (down from 80 to 52 percent). Instead they turned to non-staff nursing positions. Those who had continued their education were more likely to be in the nurse labor force at the 15 year interval, but were less likely to be working in positions directly related to patient care. Within the hospital setting, 43 percent of the associate degree nurses worked as staff nurses and provided direct patient care. This differed from the baccalaureate degree nurse in that 24 percent were employed as staff nurses.

As of January, 1988, Massachusetts had approximately 88,000 registered nurses (Commonwealth of Massachusetts Board of Registration in Nursing, 1988), 95 percent were actively employed and 70 percent were employed in acute care settings. With this number there was still 2,000 vacant registered nurse positions in hospitals.

Statistics indicate that 77 percent of all associate degree nurses in Massachusetts are employed in hospitals giving direct patient care. This compares with

baccalaureate degree nurses, 68 percent of whom work in hospitals, primarily in leadership or supervisory positions (Aubut and O'Reilly, 1987). It appears that the more education a registered nurse gets before or after he/she begins to work, the quicker he/she leaves direct patient care.

As the demand for nurses increases, the diminishing supply will be critical. Ironically, both the current shortage and the nursing opportunities available are consequences of the changing health care delivery system.

The increased acuity and consequent diminishing supply prompted a study to be conducted in Arizona (Smeltzer, Hinshaw, Atwood, 1986) to determine the stress levels of staff nurses in hospitals. The research showed that stress is much higher among nurses in the medical-surgical areas and less in the Intensive Care Units (ICU) where there is specialization and homogeneity of patients, physicians, procedures, and diagnoses. On the medical-surgical units there is a rapid change in patient population, a greater mix of nursing diagnoses, along with a larger number of physicians to deal with. An important factor that came out of the study is that one satisfier of nurses is to feel competent, and medicalsurgical nurses may be feeling less competent than the ICU nurses in the present time of change. The current registered nurse vacancy rate in Massachusetts supports this conclusion. The vacancy rate for the medical-

surgical nursing areas is 14.3 percent. It is lower in the ICUs, 10.9 percent. This is followed by a 7.0 percent vacancy rate in pediatrics, and 6.0 percent vacancy rate in Ambulatory Care.

As discussed earlier, the elderly population will be the largest population group in the health care system of the future. The implications of an aging society on health care needs have direct consequences for the registered nurse. There is a clear need for nurses with expertise in geriatrics and gerontology because an increasing percentage of clinical contact for registered nurses will be with older patients. Emphasis on treatment and rehabilitation of chronic diseases and disabilities, maintenance of independent lifestyles, and health promotion and prevention methodologies will grow, while attention to acute patterns of treatments and traditional concepts of cure lessens.

Clearly, the present health care delivery system is changing and along with it so is nursing practice. The major forces shaping nursing practice over the next several years are:

1. Increased proportion of the aged population.
2. Shifting payment systems.
3. Increased complexity of patient needs and severity of patient conditions.
4. Government intervention in cost containment.

The information presented indicates that a larger number of nurses must be prepared to practice outside of acute care institutions because there will be a shift in patient population away from this setting. This shift will provide new combinations of in-patient and out-patient services.

The proportion of elderly consumers will increase significantly. Services for management of chronic illness will be in demand and the need for home care services will increase. The need for nurses prepared to meet the physiological, psychological, and sociological needs of the elderly will continue to rise.

The traditional settings will also require a greater proportion of nurses with advanced preparation to manage the increasing complexity of patient care. Although the number of patient days in hospitals is decreasing, the intensity of care or acuity level is increasing so that the number of registered nurses needed is increasing. This impacts the acuity level in extended care facilities as well. It increases the complexity of patient care in those agencies.

There is an evolving need for registered nurses who can function in future environments that are different from what presently exists and who can manage the increasingly complex needs of patients. Nurses will need educational preparation

that is different from the education of today. This educational preparation will be discussed in Chapter 4.

Lastly, in view of the expected national shortage of registered nurses, nursing service needs to re-examine its employment of the graduates of the different types of registered nursing programs. At the present time, all are expected to function in the same capacity. In order for this to be accomplished, extended orientation programs are given to the new staff nurse by the employing agency. In a time of cost containment, these programs are costly (Ginzberg, 1987).

CHAPTER 4

GUIDING PRINCIPLES OF ASSOCIATE DEGREE NURSING

History of Development

Nursing has struggled with the issue of how to prepare its practitioners since the formalization of nursing 120 years ago.

It has had four traditional ways of preparing students to become nurses: the diploma program, the original method of nursing education, represents an apprenticeship model of learning; the associate degree program, established in 1952, is based on the technical mode of learning; the baccalaureate program is a professional model of learning whose graduates are considered beginning nurse generalists; and the practical nurse program is based on a less skilled, practical/technical model of learning.

Until the first formal training schools were established in the United States, individuals who were involved with the care of the sick received only infrequent lectures from physicians.

The earliest schools were created independent of hospitals by committees or boards which had the power to develop schools. They were soon absorbed, however, into the hospitals to which they were attached because of a lack of

an endowment. This factor proved to be the greatest weakness in the system, since many hospitals soon discovered that schools could be created to serve their needs and a valuable source of almost free labor could be obtained. Nursing become the major product dispensed by the hospitals. The real function of the school of nursing became not education, but service. In addition, neither a policy for control of the numbers of nursing schools nor the standards for admission or graduation were established or accepted. Consequently, a proliferation of nursing schools occurred. The first decade of the twentieth century demonstrated a period of phenomenal growth, with the establishment of over 700 new schools. All school functions were ultimately placed under the direction of hospital authority (Dolan, 1975).

The objectives of the school programs were to "train nurses for the sick in order that women shall find a school for their education and the public shall reap the advantage of skilled and educated labor" (Dock, 1901).

There seemed to be confusion from the start about whether the real objective was charitable service or nursing education and much of the learning was on a trial-and-error basis.

With some outstanding exceptions, the education offered was largely of the apprenticeship type. There was

some theory and formal classroom work, but for the most part students learned by doing, providing the majority of the nursing care for the hospitals' patients in the process.

The curricula of the early nursing schools were based on a simple job analysis of nursing as it then existed. A list of the bedside functions to be mastered was distributed to the students and provided the focus for the content of the program of study. The list was copied from one used earlier by the Nightingale School in England.

Other than this list of skills which all students were expected to master, there was little uniformity in the program of study within any one school or among the several schools. The student learned through trial and error. Most of the instruction was conducted through ward experiences. Little attention was paid either to the sequence or to the relative proportion of each of the experiences within the total curriculum. Classroom instruction consisted of a limited number of lectures by physicians. Students took notes and later participated in recitations conducted by the ward nursing staff.

Gradually these conditions improved, the faculty were better educated, and the students had more classroom teaching. Generally, the educational program has been three years in length, although most diploma schools have now

adopted a shortened program. Upon satisfactory completion of the program, the student is awarded a diploma by the school.

This diploma, it should be understood, is not an academic degree. Because most hospitals operating schools of nursing are not chartered to grant degrees, no academic credit is usually given for courses taught by the school's faculty.

There has been a perceptible shift away from diploma schools over the past 15 years. According to Kelly (1987), this shift can be explained by three factors:

1. Many hospitals are terminating their schools, either because of the expense involved in maintaining a quality program and the objection of third party payers, such as insurance companies and the government, to having the cost of nursing education absorbed in the patient's bill, or because of difficulty in meeting professional standards;
2. Increasing numbers of high school graduates are seeking some kind of collegiate education;
3. The nursing profession is more and more committed to the belief that preparation for nursing, should take place in institutions of higher learning.

The first school of nursing to be established in a university setting was begun at the University of Minnesota in 1909. The program existed as a quasi-autonomous branch of the university's school of medicine. Close inspection of the curriculum would reveal a program little different from the three year hospital program. Nothing was required in the way of higher education, and graduates were prepared for the R.N. certificate only. Education was predominantly apprenticeship in nature, and students provided service to hospitals in exchange for education.

As baccalaureate programs in nursing developed, most were five years in length. This provided for the three years of nursing school curriculum not vastly different from that of hospital schools, and for the two additional years of liberal arts (Ellis, 1984).

Although the development of baccalaureate education for nurses may not seem to be a major step today, in 1909 women had not yet been granted the right to vote and nursing was considered by many as a less-than-desirable occupation, vocational in its orientation, overshadowed by militaristic and technical aspects, and confined to women. A liberal education, scholarship, and knowledge were thought to be incompatible with the female personality, and possibly posed problems for marriage later.

The nursing curriculum, with its emphasis on performance of skills rather than the philosophical and theorectical approaches used in the humanities, was not well accepted by the universities. The growth of these schools was slow. In 1919 there were eight programs; in 1986 there were 455 programs reporting 25,170 total graduates (National League for Nursing, 1987).

The first formal practical nursing program was begun in New York in 1887. It was a three month course which taught home care of the elderly, chronic invalids, and children. Included were cooking, care of the house, diatetics, simple science, and simple nursing procedures. By 1947, there were only 36 schools in the United States, and only a few states had any kind of legislation regulating practice.

After World War II, there was an extraordinary expansion of practical nursing programs with the states gradually requiring licensure (Ellis, 1984). By 1982, there was a peak of 1,319 programs admitting about 60,000 students a year, followed by a decline in the number of programs and students.

Today, with the advent of a higher percentage of more acutely ill patients in hospitals, in long-term care facilities, and at home, all requiring more complex care, administrators of health care programs are finding it more cost effective to hire registered nurses who can do broader

service, than practical nurses whose practice is more limited by education and legislation.

The differences between the levels of competence of the registered nurse and the practical nurse have been more clearly delineated than the differences among the three types of registered nursing programs.

Unfortunately, nursing has made its greatest advances and notable achievements in connection with wars. Nations tend to recognize, respect, and value nurses when faced with the human tragedies of war. The unique circumstances of war and the need for care of the wounded dramatically emphasize the role of the nurse.

It was the nursing shortage after World War II, as well as the realization that nursing was becoming more complex, that prompted Mildred Montag to investigate the differentiation of nursing functions and to plan a program that would prepare this type of nurse. This study probably changed nursing education more dramatically than any other.

Thus, the associate degree program in nursing is relatively new in nursing education and is the first nursing program to be planned deliberately.

The purpose of the program is to prepare individuals, both men and women, to perform those functions commonly associated with the registered nurse: giving direct bedside

care to patients. This kind of nursing practitioner is based on the belief that in the occupation of nursing, there is a need for more than one worker because of the wide variation in the tasks to be performed. Moreover, when preparation for nursing is education, rather than service centered, the time required for learning may be reduced.

Montag proposed placement of this program within the junior or community college setting. She believed that nursing education belonged within the organized system of higher education.

The characteristics of this program, are as follows.

1. The program is college centered and college controlled. It is an integral part of the total college program. The faculty of the college plans all dimensions of the curriculum and teaches all aspects.
2. It is a two year curriculum, combining both general education and technical nursing training. General education accounts for one third to one half of the total credits, while nursing accounts for the remaining graduation requirements. Students majoring in nursing meet the college requirements in general education and take those courses with non-nursing majors.

3. The curriculum offers fewer nursing courses than the traditional nursing programs. The courses offered are broader in scope and attempt to avoid duplication and repetition.
4. The clinical practice in nursing is planned as a laboratory experience. It is much shorter in time, but the learning experiences selected are related to the objectives of the course and the learning needs of the student.
5. Community facilities are selected to provide a variety of clinical learning experiences. The choice of different types of agencies is possible because no part of the program is hospital controlled and at no time is the student an employee of a hospital.
6. The students meet the same admission, academic, and graduation requirements as all other students in the college.
7. The faculty in nursing have the same status as all other faculty members.
8. The program is supported from the same sources and in the same manner as other programs at the college.
9. Students make their own living arrangements.
10. Students qualify for the associate degree.
11. Graduates are eligible for the licensing

examination of the state in which the college is located (Montag, 1951).

Curriculum of the Associate Degree in Nursing

Traditionally, nursing education had been almost exclusively technical. Montag believed that education should prepare an individual to live effectively as a person and as a citizen of the community, as well as teach technical skills. She suggested that the junior/community college was an educational institution equipped to provide the technical training along with preparation for living.

The curriculum developed by Montag, reflects this philosophy. It calls for a program of two academic years in length, composed of two different, but closely related components, one technical (nursing) and the other general education. They are approximately equally divided in emphasis and time. Both nursing and general courses are taken in each of the four semesters. The credit and time allotted to each course is based on the usual college ratio of time and credit. It was recommended that the credit for the clinical experience be the same as that for laboratory work.

The courses are divided almost equally among the four semesters and the total clock hours per week range from 21 to 28. This is considerably closer to the time

commitment of other college students in two year curricula than typical nursing programs have been.

The following is a discussion of the two parts of the curriculum with the understanding that the two components are closely interrelated.

The nursing portion of this curriculum was new since there were no programs of this type in existence. It was influenced by the shift away from standardized curriculum to curriculum development within the institution itself (Murdock, 1983). Montag supported this position. In her curriculum plan she allowed for faculty input and design.

In addition, she placed considerable emphasis on the development of skills needed to give nursing care to patients. This was seen as the chief function of the associate degree registered nurse. Sciences were taught to give significance to the skills developed and skills were learned in the environment in which they were practiced i.e. the hospital, clinic, and home.

The following courses comprised the nursing component of the initial curriculum: human biology, microbiology, human growth and development, nutrition, and the nursing arts. The nursing needs of various age groups and those with various kinds and degrees of illnesses were addressed in nursing arts. This was accomplished by the utilization of classwork, demonstration and discussion,

laboratory practice, and clinical experience. Throughout the curriculum, the practical and the applied were highlighted (Montag, 1951).

Traditionally, students in hospital based schools of nursing had been assigned to various clinical services for a certain number of weeks and for a specified number of hours each week. The number of hours decreased as the programs evolved over time, but at the time Montag designed this program, nursing students were spending from 40 to 48 hours weekly in combined class and clinical experience (Bullough, 1984). The fact that the student had worker-status rather than student-status allowed school and hospital administrators to place heavy work demands.

The part of the curriculum referred to as general education included courses designed to prepare the student for social and personal competency. One of the first requirements of any educated individual is the ability to communicate both orally and in writing. Courses in English, composition, and literature are commonly required in the first two years of college. Courses in literature, music, and art are recommended to provide enjoyment not only during time in school, but for leisure hours later in life. An understanding of individuals, how they develop and how they behave, is essential for those who will be working with people under a variety of conditions. Psychology courses were suggested to accomplish this. Courses in history,

sociology, economics, and government help the student appreciate the community and world in which he/she lives and understand the resources it offers. Table 4.1 shows Montag's curriculum, the nursing and general education courses required, and the suggested sequence to be followed.

TABLE 4.1

CURRICULUM PLAN FOR INITIAL ASSOCIATE DEGREE NURSING PROGRAM

FIRST YEAR

First Semester	Credits	Second Semester	Credits
Communication Skills	3	Communication Skills	3
Human Biology	3	Human Growth and Development	3
General Sociology	2	Nutrition	2
Elementary Economics	3	Microbiology and Community Hygiene	2
Orientation to Nursing	4	Medical-Surgical Nursing	6
	Total 16		Total 16

SECOND YEAR

First Semester	Credits	Second Semester	Credits
Literature	2	Literature	2
History of United States	3	Introduction to Government	3
Nursing of Children	4	Psychiatric Nursing	4
Nursing of Mothers and Infants	4	Medical-Surgical Specialties	6
Mental Hygiene	3	Elective	2
	Total 16		Total 16

(Source: Montag, 1951).

Development of Programs

Associate degree nursing programs began in 1952 with a grant from the W. K. Kellogg Foundation (Anderson, 1966). This grant, The Cooperative Research Project in Junior and Community Colleges, was a five year "action research project" directed by Mildred Montag. Seven junior and community colleges and one hospital school participated in the project. The project's purpose was to develop and test the new type of nursing program which prepared men and women to practice those common functions associated with the registered nurse.

The inclusion of a nursing program within the community college was seen as a natural development by Montag, since one of the basic functions of the community college is to meet the needs of its community for essential services. Nursing is an essential service in every community. Furthermore, the community college was free to develop such new programs without being hampered by tradition (Montag, 1957).

Montag referred to the methodology used in the project as action research. Certain data were collected by the project staff, but the essential work of the curriculum development was done by those faculty actually in the nursing program.

As in many attempts to experiment with an educational plan that deviated markedly from the familiar pattern, skepticism was expressed at the outset by many nurses, nurse educators, and others about the practicality of this new type of program. At the time the program was launched there was very little support for the idea that education for nursing should be geared into the nation's system of higher education. Few nursing educators sensed that the junior and community colleges would develop as rapidly across the country as they did. Nor, was there much support for an accelerated program to prepare people for licensure as registered nurses (Milner, 1988).

However, the study demonstrated that:

1. Junior and community colleges could attract into nursing new types of student, who because of age, family responsibilities, or other factors were not able to enter other types of nursing programs;
2) Graduates of these experimental programs were successful in the licensing examination;
3) Graduates performed satisfactorily in service situations after orientation to the particular institution or agency.

Montag (1957) concluded that the project evaluation, including follow-up of all 811 graduates of the eight experimental programs, presented persuasive arguments for

the development of additional programs. She cautioned however, that emphasis should be focused on the program's philosophy which was non-traditional and not on the shortened length of the program.

When Montag proposed a new type of nursing program in 1951, she stressed one license for the three levels of registered nursing education. Later, she stated that "In order to gain acceptance, we had to prove that the associate degree graduate could pass a licensing examination that was really geared toward the diploma graduate" (quoted in Fondiller, 1983). In 1951 the vast majority of registered nurses were educated in diploma programs (National League for Nursing, 1983).

There were several advantages of the two year program. Locating the program in an educational institution allowed the student to maintain a student-status rather than a worker-status throughout the program. The growing accessibility of community colleges made more of these programs possible for students. Figures supported the fact that the program attracted students who otherwise would not have chosen nursing. The reasons most frequently given for chosing the associate degree nursing program were that it was a college program, its shorter length, and the ability to live at home. Another advantage of this type of nursing program was the fact that a substantial amount of general education was included in the curriculum and contributed to

the overall development of the person. The decreased length of the program afforded the graduates less investment of time and money, as well as earlier earning power.

Thirty five years later, in 1986, associate degree programs make up the largest segment preparing nurses for registered nurse licensure. The programs have increased in number and are no longer experimental.

According to the statistics compiled in Nursing Data Review (1987), in 1986 there were 1469 registered nursing education programs in the United States. Of this number, 776 were associate degree programs, 238 were diploma programs, and 455 were baccalaureate programs. Specifically in Massachusetts, there were 19 associate degree programs, 13 diploma programs, and 14 baccalaureate programs.

CHAPTER 5

ANALYSIS OF ASSOCIATE DEGREE NURSING PROGRAMS IN MASSACHUSETTS

As stated in the previous chapter, one purpose of this study is to examine associate degree nursing programs which were in existence in Massachusetts in 1986. Their program objectives and curricula will be compared and contrasted with Montag's program to determine if they reflect her original intent. Programs will be reviewed to establish their relevance to today's practice environment in Massachusetts as well as to the future practice of graduates of associate degree nursing programs. In addition, the development of the first two-year associate degree nursing program (Newton Junior College) will be compared with the associate degree nursing program at Quincy Junior College which was developed 20 years later.

Montag (1951) said that there was room for variation in the program, and experimentation should be encouraged. The programs should be maleable in the sense of being conscious of new methods and materials, and of the need for periodic change. She cautioned that adjustment would be necessary to deal with the changing health care needs. If educational readjustment did not occur, the program would become static and perpetuate preparation for dealing with

the problems of yesterday, instead of the ones nurses must face presently and in the future.

Table 5.1 lists the 19 associate degree nursing programs that developed between 1954 and 1986 and the year each was instituted.

TABLE 5.1

MASSACHUSETTS ASSOCIATE DEGREE NURSING PROGRAMS BY YEAR

Program	Year
Lasell Junior College	1954
Newton Junior College *	1959
Greenfield Community College	1963
Atlantic Union College	1964
Quinsigamond Community College	1966
Berkshire Community College	1967
Massachusetts Bay Community College	1967
Bristol Community College	1968
Cape Cod Community College	1968
Massasoit Community College	1968
Northern Essex Community College	1968
North Shore Community College	1968
Holyoke Community College	1970
Springfield Technical Community College	1970
Laboure College	1972
Middlesex Community College	1972

(Continued on next page)

TABLE 5.1 CONTINUED

MASSACHUSETTS ASSOCIATE DEGREE NURSING PROGRAMS BY YEAR

Program	Year
Mt. Wachusett Community College	1972
Bunker Hill Community College	1975
Quincy Junior College	1979
Becker Junior College	1982

* College closed in 1978

(Source: Massachusetts Nurses Association, 1976).

Curriculum

The curriculum of each program differed somewhat from the original program proposed by Montag and from each other, but there was complete agreement in the guiding principles of associate degree nursing. It was recognized by all programs that in the occupation of nursing, there is a need for more than one worker because of the wide variation in the tasks performed. All agree that the associate degree nurse is prepared to practice as an entry level registered staff nurse caring for persons throughout the life span who are experiencing common health problems and are in structured settings. This nurse was conceived to work in a defined, circumscribed, middle-range level, somewhere between the practical nurse and the baccalaureate prepared nurse. There is also agreement that nursing care is based on broad principles in the physical, biological, and

behavioral sciences and directed toward maintaining and achieving the optimal wellness of humans.

While all of the programs referred to a limited scope of practice for the associate degree graduate, many of the programs offered their students learning opportunities which were not included in Montag's original program such as patient teaching, management of nursing care, and responsibilities in critical care and other special care units.

Historically, associate degree programs have not included principles of management in their curriculum plans. However, the new Test Plan for the National Council Licensure Examination for Registered Nurses effective July, 1988, includes questions on basic principles of management behaviors (National Council of State Boards of Nursing, 1987).

These additions to the original range of skills are expected and necessary changes in the curriculum to keep pace with the expanding functions of the associate degree nurse.

One of the basic principles followed in the development of the programs in Massachusetts, was that the nursing program should become an integral part of the institution. Therefore, nursing programs differ from one another just as

each college differs in its policies and procedures, and in its curriculum.

There are, however, certain characteristics common to all of the nursing programs reviewed. The first is that each program includes both nursing and general education courses in the curriculum. A possible explanation for this is that the educational concern of the junior/community college is the development of the individual as a person, as a citizen, and as a worker. Therefore, general education accounts for from 40 percent to 50 percent of the curriculum with nursing accounting for the remaining 50 percent to 60 percent. Each of the colleges has specific requirements for all students who are candidates for the associate degree. The requirements in general education vary widely, some colleges having developed integrated or core courses while others have course or credit hour requirements in several areas. All have a requirement in communication skills, in the social sciences, and in the physical and biological sciences. All have a requirement in the humanities, and some make provision for electives.

The nursing students take the same general education and elective courses as other students in the college. No course in general education has been developed exclusively for or is limited to them. The scheduling of these courses has taken into account the schedule of nursing courses so that no required course is made up only of nursing students.

Tables 5.2, 5.3, and 5.4, show the general education and nursing requirements for three of the programs. Although similar, each program is unique: Quincy Junior College provides a nursing course in geriatric problems; Northern Essex Community College stresses teaching/learning principles in one nursing course; Lasell Junior College offers a course in care of complex patients.

The second characteristic is that the specialized nursing courses are grouped around a central theme instead of the numerous small courses found in the more traditional nursing programs. Montag advocated that this organization allowed greater flexibility and more meaningful learning experiences. The nursing courses offered and the sequence followed can be seen in the same tables.

The allocation of credit to the nursing courses and the number of nursing courses follow the pattern of the specific institutions. Common practice is one credit for each class hour and one credit for either two or three laboratory/ clinical hours. The distribution of credits among the nursing courses varies among the programs. The nursing courses with clinical components range from four to eleven credits, while the theorectical courses award from one to three credits.

TABLE 5.2

CURRICULUM PLAN FOR 1985-1986

QUNICY JUNIOR COLLEGE

First Year

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
General Psychology	3	Abnormal Psychology	3
Health Science I	6	Health Science II	6
Nursing I (Foundations)	8	Nursing II (Geriatric and Mental Health Processes)	8
Total	17	Total	17

Second Year

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
English Composition I	3	English Composition II	3
General Sociology	3	Mathematics	3
Nursing III (Maternal Child Health Processes)	10	Nursing IV (Multi-problem/Acute Processes)	11
Total	16	Total	17

(Source: Quincy Junior College Catalog, 1986-1988).

TABLE 5.3

CURRICULUM PLAN FOR 1985-1986

NORTHERN ESSEX COMMUNITY COLLEGE

First Year

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
Anatomy & Physiology I	4	Anatomy & Physiology II	4
English Composition I	3	English Composition II	3
Introduction to Psychology	3	Developmental Psychology	3
Nursing I (Introduction to Nursing)	8	Nursing II (Intergration of phamacotherapeutics and teaching/learning principles	8
Total	18	Total	18

Second Year

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
Introduction to Sociology	3	Social Science Elective	3
Microbiology	4	Nursing IV (Care of the Critically Ill & their Families)	10
Nursing III (Care of the Child-bearing Family)	8		
Humanities Elective	3		
Total	18	Total	13

(Source: Northern Essex Community College Catalog, 1985-1986).

TABLE 5.4

CURRICULUM PLAN FOR 1985-1986

LASELL JUNIOR COLLEGE

First Year

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
Writing I	3	Psychology of Life Span	3
Introduction to Psychology	3	Anatomy & PhysiologyII	4
Anatomy & Physiology I	4	Nursing Care of the Adult I(Common Health Problems)	5
Introduction to Nursing Practice	7	Nursing Care of Child-bearing Family	5
Practical Computer Applications I	1	Practical Computer Applications II	1
	Total 18		Total 18

Second Year

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
Writing II	3	Introduction to Sociology	3
Microbiology	4	Nursing Issues & Trends	2
Nursing Care of Adult II (Acute Medical/Surgical Nursing)	5	Nursing Care of Adult III (Care of Patients with Complex Problems	4
Nursing Care of Children	5	Nursing Care of Psych-iatric Patient	5
	Total 17		Total 15

(Source: Lasell Junior College Catalog, 1985-86)

A third characteristic of the programs is that the students in nursing have the same status as all other students at the college. They are eligible for the same cultural, social, and academic opportunities and are held to the same standards and obligations as are other students.

The final characteristic is the length of the program. Although Montag proposed a program to be two academic years in length, the initial programs were not able to to meet this criterion.

Prior to the development of the associate degree nursing program at Newton Junior College in 1959, the regulations governing the approval of nursing programs in Massachusetts required programs to be at least three years in length. Special legislation was necessary to allow the establishment of an experimental two-year associate degree nursing program. The process to change the regulations took almost two years to complete (Commonwealth of Massachusetts Board of Registration in Nursing Minutes, January 11, 1954; December 13, 1957; November 5, 1958; September 22, 1959).

Even with the changes, associate degree nursing program directors found that in order to satisfy both the college's requirements for graduation and the Board of Registration in Nursing's requirements, it was necessary to

extend the length of the program to include one, or in some cases, two summer sessions.

The initial program at Newton Junior College required two summer sessions which were not eliminated from the curriculum until 1962 (Allen, 1971). In 1986 there was still one program in Massachusetts which had a summer session built into the curriculum. At Atlantic Union College, nursing students take Introduction to Sociology and Religion elective during the summer session between first and second year of the program.

Curriculum development has been considered a faculty responsibility. Each college developed its own curriculum and structured it around a conceptual framework. The consistent concept found in each program was nursing process.

The inclusion of nursing process in the curriculum is mandated by the Board of Registration in Nursing. The Board defines nursing process to be a series of informed judgements and actions by the nurse. The objective of this process is to provide nursing care based on scientific principles, prescribed therapeutic regimens and current knowledge (Commonwealth of Massachusetts Board of Registration in Nursing, 1982).

For example, the curriculum at Bristol Community College is based on a framework in which the concepts of

homeostasis and the nursing process serve as the unifying elements. The curriculum is designed so that students progress from the simple to the complex in learning to apply the nursing process in assisting individuals to maintain or regain homeostasis. There is also an integration of general education with nursing (Bristol Community College,1986).

At Northern Essex Community College, the curriculum is based on the unifying elements of the wellness-illness continuum, adaptation, and nursing process. At that institution, the faculty view nursing as a dynamic process concerned with the promotion, maintenance, and restoration of optimal health. Again, the nursing process is the structure used to guide the nurse in delivery of holistic nursing care. Learning experiences are also designed in a simple to complex format and theorectical content precedes or is concurrent with clinical practice (Northern Essex Community College,1986).

The nursing courses in all the programs are placed into broad groupings, similar to Montag's plan. The learning experiences move from normal to abnormal conditions, from simple to complex. In addition, there is a minimum of 1000 hours of classroom instruction and concurrent clinical practice mandated by the Board of Registration in Nursing.

The programs are similar in that the first nursing course introduces the basic concepts of nursing process and

communication skills as well as an understanding of normal health needs. Process and communication are recurring themes throughout the programs.

The second course in 60 percent of the programs is Parent/Child Nursing. Course content focuses on high-risk health problems as well as the normal child-bearing cycle. Care of adult patients with uncomplicated health problems is next. One program, Quincy Junior College, offers an integrated course on geriatrics and mental health in semester two.

Concurrent learning experiences are provided in a variety of clinical agencies. The majority of agencies are acute care hospitals. The exception, Springfield Technical Community College has a community centered approach and provides learning experiences for students in community health facilities.

The second year courses are approached in several ways. The major emphasis is on nursing problems encountered instead of on disease entities or diagnoses. They include a continuation of those concepts and skills begun in previous courses, with adaptations to the care of patients with special nursing problems. Included in many courses are concepts of nursing leadership, teacher/ learning process, care of groups of complex patients, and management skills. The locus of care is primarily

hospitals: no experience is provided in home care; minimal experience (approximately 84 hours) is provided in extended care facilities (Monaghan, personal communication, March 7, 1987).

All programs acknowledge that the graduates are eligible to take the registered nurse licensing examination and are prepared for entry-level staff nurse positions. Two programs state that they prepared nurses for technical practice (Quincy Junior College) or at the technical level (Holyoke Community College). Springfield Technical Community College claims in the catalog that the program prepares graduates to be "professional nurses." The remainder of programs use the term registered nurse to describe their graduates rather than the term "technical nurse." Clearly, there is still significant resistance to the use of the terms technical nurse and technical practice within the educational programs.

Preparation for Current and Future Practice

The success of any educational program is measured against its ability to generate a product that is relevant and valued in the workplace. Numerous challenges face health care delivery and therefore nursing education today, and in the future. They include changes in the setting where care is delivered, the changing patient population, and technological advances.

This section of the paper draws from information already presented and examines how the associate degree nursing curricula meet these present or anticipated changes.

The delivery of health care is shifting from institutions to community-based settings. As mentioned previously, by the year 2000, over 60 percent of registered nurses will be employed in non-traditional settings.

While few schools are unaware of this trend in health care delivery, the majority of associate degree programs still prepare their graduates for traditional (hospital based) nursing practice. This tendency arises from the long standing affiliation of schools of nursing with hospitals, where students obtain most, if not all, of their clinical experience.

Despite the prevailing movement toward multidisplinary care in non-traditional settings, schools continue to train for provision of care in traditional settings, with little or no attention to home and community based care. Many schools persist in their emphasis on the disease model. Stress should be placed on the maintainence of function and education of older people for the physical, mental, and social changes which they may experience in their attempts to cope with advanced age.

In the acute care settings the complexity of patient care has increased dramatically thus demanding higher levels

of skill to maintain higher levels of care. This high quality of care has communication as its basis, including the ability to communicate successfully with peers, supervisors, patients, families, and other health care providers. Throughout all the programs reviewed, a strong communication component was evident.

With a shortened length of stay in the hospital, the patient education function of the nurse in acute care settings is increasing in importance. More teaching must be accomplished in a shorter period of time, so that patients can meet their care needs in the home environment. In order to facilitate this patient need, the nurse must have an understanding of teaching and learning principles. Two programs (Greenfield Community College and Northern Essex Community College) include content on teacher/ learning process and see this as within the scope of practice for graduates of associate degree nursing programs.

Earlier in this paper patient population was addressed. It was shown that there has been an impressive increase in the elderly population and this increase will continue well into the next century.

While all students in associate degree nursing programs in Massachusetts have the opportunity to care for acutely ill elderly patients in hospitals, very little experience is allocated in the programs, to care for elderly

persons in extended care facilities. Unfortunately, when the experience was provided in the past, the focus of the learning experience was to master basic nursing skills rather than development of an understanding of what is "needed care" for the elderly age group. While all programs offered a course in Psychology of the life span, only one program (Quincy Junior College) offered evidence of specific coursework in gerontology.

The National Institute on Aging estimates that in 1990, less than two years from now, there will be a need nationwide for 265,000 nurses educated in geriatrics. At the present time there are only 130,000 (Weicker, 1988).

Another trend which affects nursing education is the rapid escalation of technology. Technology is changing the tenor of patient care with improved monitoring and measurement devices. Traditionally, nurses have utilized complicated technologies as they have become available in various health care settings. In high technology areas such as intensive care units, coronary care units, neonatal intensive care units and dialysis units, it is the nurse who best applies the technologies.

There is a trend in the associate degree nursing programs to provided learning opportunities for the students to care for complex patients in these specialty areas and to work with monitoring and measuring devices. This addition

to the original range of associate degree nursing graduates skills is a necessary change in the curriculum which keeps pace with the expanding functions of the registered nurse. It should not be viewed as a confusing violation of the original differentiating principles which separated associate degree and baccalaureate degree nurses.

The associate degree nurse was conceived to work in a defined, circumscribed, middle-range nursing capacity. The intent of the program was to prepare graduates for the responsibilities commonly in the mid-range on the nursing continuum, and relegated to the registered nurse. It was assumed by Montag that in addition to the associate degree nurse, hospitals would employ a number of professional nurses, graduates with baccalaureate degrees, who would perform at a level beyond that of graduates of associate degree programs. The assumption was incorrect, in part because the number of associate degree nursing programs (and number of graduates) increased more rapidly than baccalaureate degree nursing programs, and predominantly, hospital nursing service administrators did not develop differentiated job descriptions for the staff registered nurse, to reflect two levels of registered nursing practice. Had the latter occurred, nursing might present a different appearance today.

In Massachusetts, between 1961 and 1983, associate degree nursing programs grew from 2 to 19. In this period,

baccalaureate nursing programs expanded from 4 to 14 and diploma schools decreased from 27 to 15 programs (Massachusetts Nurses' Association, 1976; Commonwealth of Massachusetts Board of Registration in Nursing, 1986). The pattern, an increase in all collegiate programs and a decrease in diploma programs, is consistent with the national trend.

Associate degree nursing programs have provided educational opportunities to a broad population of non-traditional students. Most students in these programs are older, married, mothers, and divorced or widowed women. These programs also attract more men and minorities than do baccalaureate programs. Nationally, they graduate the largest percentage (62%) of men and minorities compared to other registered nursing programs (M-OAADN, 1987).

In Massachusetts, the associate degree programs admit more students to nursing each year than the other two types of nursing programs. Between 1981 and 1986, these programs admitted 8,706 students (41%) from a total of 21,524. During the same time period, the baccalaureate programs in Massachusetts admitted 8,200 or 38 percent.

The graduation statistics show that the associate degree programs had 6,059 (46%) students complete the program, while the baccalaureate degree programs had 5,695 (43%). Of the 5,695 graduates of the baccalaureate

programs, 2,150 previously held associate degrees in nursing (National League for Nursing, 1987). This is consistent with the national trend which shows a dramatic increase over the past five years, in registered nurses enrolled in baccalaureate programs.

Individually, the associate degree nursing programs in Massachusetts admit between 20 and 194 students each year and graduate between 17 and 152.

Information on enrollment in the individual programs is not as significant as admissions and graduations. Enrollments are affected by such curricular changes as increasing or decreasing program lengths, which affects the number of students in the program at that time. For example, if an increasing number of students are taking three years to complete an associate degree program, that will increase the enrollment for those programs or mask a decrease. However, it will not increase the number of graduates per year. In contrast, schools that decrease the length of the program, decrease the enrollment but do not change the number of admissions.

Development of Specific Programs in Massachusetts

The first junior college to develop an associate degree nursing program in Massachusetts was Lasell Junior College in 1954. However, it did not contain many of the

elements found in the model proposed by Montag and was not part of the Cooperative Research Project.

Originally, it was a three-year program with nursing faculty on loan from a diploma nursing program at Peter Bent Brigham Hospital. Students were required to live at the college and the nursing classes were conducted at the clinical agencies (Milner, 1988).

The two students who were admitted and graduated in the first class are still members of the work force in Massachusetts. They have continued to work as staff nurses in hospitals.

In 1951 the necessary regulatory and community support could not be found to allow this program to be created following Montag's guidelines. Gradually, modifications were made so that it did conform. For example, in 1968 the length of the program was changed to two years, and in 1985 the summer session was eliminated.

The first two-year associate degree nursing program in Massachusetts, at Newton Junior College, was developed as a demonstration project funded by the United States Public Health Service (Regionalization Project Grant{W-31[C]}).

In the Spring 1956, the Health Division of the Community Services of Metropolitan Boston, initiated a project to create a plan for the regional organization of

health and medical services in the greater Boston area. The Nursing Council of the Health Division was asked to contribute to the plan in the field of nursing.

After deliberation the nurse council identified the acute shortage of registered nurses as the major problem of the region. Therefore, a way to increase the supply of registered nurses became the group's primary focus.

As a result, the group recommended that a regional school of nursing be established in a section of Greater Boston where general hospitals, without schools of nursing, were located. The clinical facilities of these institutions would be utilized by the proposed nursing program and thus provide an additional source of future recruitment.

It was also agreed that various patterns of nursing education should be examined and that experimentation should not be overlooked, since the terms of the grant stressed "demonstration and experimentation" in metropolitan regional planning in the health field.

Given the educational climate in Massachusetts at that time, it was indeed futuristic to propose a "regional nursing program", which would be the first in the country. There were twenty-six hospital based registered nursing programs and only one centrally based registered nursing diploma program (Massachusetts Nurses Association, 1976).

The tradition in hospital based education, even as late as the 1950's, had been for many classes to be taught by physicians, with the focus on giving care in the hospital sometimes more important than the why of giving care. For the most part students learned by doing, providing the majority of nursing care for the hospitals' patients in the process. When sciences were taught by a nearby college, courses were designed especially for nurses, often at a lower level than for other students. The nursing students were typically white, single, 18 year old, females who were required to live in hospital dormitories.

A geographic feasibility study conducted by the Health Division of the United Community Services identified an area northwest of Boston where there were five general hospitals without schools of nursing: Symmes-Arlington Hospital, Arlington; Emerson Hospital, Concord; Charles Choate Hospital, Woburn; Waltham Hospital, Waltham; and Winchester Hospital, Winchester).

Concurrent with the study of the health facilities was a through exploration of the existing patterns of nursing education in the United States. Two studies that had a great impact on the project study staff, and thus on the development of associate degree nursing programs in Massachusetts were Nursing for the Future by Esther Lucile Brown, published in 1950, and The Education of Nursing Technicians by Mildred Montag.

Brown's report addressed both nursing education and nursing service. She believed that major reasons for the nursing shortage were the continuation of a low prestege status for all nurses and an anti-collegiate faction in nursing which saw no point in higher education. She believed that this faction was cheered and nurtured by a large number of physicians and nursing administrators. She proposed that "the only way to provide the necessary status for the profession of nursing was to separate nursing schools from hospitals and to transfer the responsibility for training to educational institutions. Efforts should be directed to building basic schools of nursing in universities and colleges, comparable in number to medical schools, sound in organizational structure, adequate in facilities and faculty, and well distributed to serve the needs of the entire country" (Brown, 1950, p.45-58).

After various plans had been submitted to the Advisory Committee, the concensus was to develop the first, two year collegiate nursing program in Massachusetts. It would be two academic years and two eight week summer sessions in length. The plan proposed a demonstration program for an experimental period of six years. In this plan, the nursing experiences would correlate with the theory taught and would take place in the five general hospitals that had been invited to join the project.

The Committee believed that the historical success with the Cadet Nurse Corps during World War II supported the concept of a shortened nursing program just as the emerging community college was seen as a suitable setting for this project. Mindful of this, it was decided that Newton Junior College was best suited for the suggested program.

On July 30, 1959, the Newton School Committee voted to establish the nursing program at Newton Junior College for an experimental period of six years. The Nursing Council of the United Community Council agreed to raise any necessary funds to finance the costs incurred over and above the income from tuition and fees.

For the first six years it was estimated that the program cost would amount to approximately $200,000. Since the College was supported by the City of Newton, it was decided that the citizens of Newton would not be called upon to cover any deficits of a program which did not provide for a specific need of that city.

In Massachusetts, at the time the regional school of nursing was being planned, there existed two separate legal bodies which controlled nursing: the Board of Registration in Nursing, and the Approving Authority of the Schools of Nursing and Schools of Practical Nursing. The Board of Registration was primarily responsible for licensure of

nurses. The Approving Authority for Schools of Nursing and Schools of Practical Nursing was responsible for the examination and approval of schools.

If a nursing program did not conform to the requirements and recommendations for approval, graduates of that program were not allowed to sit for the licensing examination and could not call themselves registered nurses. Therefore, a program was not viable unless it had this approval.

Early in the planning stage, the Advisory Committee began a dialogue with the Approving Authority Board to legally permit the establishment of a two-year associate degree nursing curriculum in Massachusetts. This was necessary not only to explain the purpose of the experimental project, but also to identify the modifications needed in the state rules and regulations, regarding the curriculum hours and content.

The Minutes of the Approving Authority Board's meetings held monthly from January 11, 1954 to August 28, 1963, discuss the process involved making these changes. For example, at the January 11,1954, meeting it was established that all registered nursing programs must be 36 months in length. Consequently, when Newton Junior College proposed a "two year program" which did not conform to some course content nor to length of program, a request to the

Attorney General's Office was made, to allow the Board the authority to grant approval for the changes, and thus, allow the graduates to sit for the licensing examination.

Finally, after many meetings and much discussion, the Board voted on November 5, 1958, to "approve changes in the regulations which will make possible the establishment of a two year program substantially outlined in the Newton Junior College Bulletin, 1958-1960" and on September 22, 1959 they granted final approval (Commonwealth of Massachusetts Board of Registration in Nursing Minutes, November 5,1958; September 22, 1959).

Initially, a quota system was instituted for use in student recruitment. The ultimate hope of the plan was that the graduate would return to her/his community and work in the area hospital.

The maximum number students to be admitted to the school for the first year was 50. It was proposed that five sixths of the student enrollment would come from the nineteen communities serviced by the five hospitals, one sixth of the student body would come from Newton, and no non-resident of Massachusetts would be accepted.

According to Allen (1971), the regional interest in the new program did not result in a proliferation of applications. It seems that there was some skepticism

regarding the feasibility of the nursing program which resulted in a "wait and see" attitude from the community.

Therefore, applications were considered regardless of the candidate's residency. Forty-seven percent of the applicants accepted into the first class came from outside of the designated recruitment area and this percentage remained essentially the same for the remaining five years of the project.

Allen (1971) described the students admitted to the nursing program as heterogenous in relation to sex, age, marital status, and educational background. They all met the entrance requirements of the Approving Authority and of Newton Junior College. The majority of students were between the ages of 17 and 25, female, and single. Each year of the project, there was a steady increase in the number of applicants between the ages of 26 and 55, male, and married.

Over the six years of the experimental program, there was an increase in the number of students admitted who had some type of schooling beyond high school. Frequently, they were the older students who had left a hospital diploma program to marry.

The nursing curriculum at Newton Junior College was influenced by the National League for Nursing statement that while, the nursing profession as a whole should identify

educational standards, the faculty of each program should be responsible for developing its own curriculum. This action made the concept of a standard curriculum obsolete and inaugurated a new era in the evolution of nursing education.

The focus in curriculum development shifted away from nationalized efforts to standardize the curriculum to efforts within individual schools. This shift allowed the faculty, the persons most directly concerned with the curriculum, to become directly involved in writing the program objectives and content.

Another major curriculum change occurred during this period. Prior to 1950, nearly all nursing curricula had similar organizational patterns with courses structured in relation to either specific diseases, body systems, or patient care areas. Although this emphasis continued in many schools during the 1950's and 1960's, other structural designs influenced associate degree nursing curricula.

In an analysis of the variety of designs used during that period, Stevens (1971) observed that there were essentially four types: logistic, operational, problematic, and dialectical.

The logistic type, more often referred to as the traditional format or medical model, was exemplified in the disease, body systems, or patient care approaches. The

curriculum was built on the individual parts of the nurse's responsibility. From this approach, it was hoped that the student would come to view the totality of human illness and its treatment.

In the operational mode the student became the center of attention. The curriculum was organized in relation to the student's perceived learning needs. The focus was not on disease or the patient, but on the nurse's operations. Within this organizational theme, real or simulated patient cases and the principles underlying nursing actions served as centers for learning.

The third type of model focused on problems rather than on the patient, the disease, or the student. This model had its origin in the works of John Dewey (1916) which focused on the act of inquiry, or the problem solving method rather than on content.

In the final model, the dialectical, the organizing principle was some synthesizing "whole" such as the developmental life span of man or the health-illness continuum. Within this organizational pattern, students gained an increasingly comprehensive understanding of the patient as they progressed through the curriculum. The aim of this type of curriculum was to teach the nurse to interact with the whole person. Thus, the patient became the central focus.

The nursing curriculum designed for the proposed regional school of nursing at Newton Junior College was developed to reflect the philosophy and to meet the objectives that were written by the Project Study Committee of the United Community Services. The statements were broad in context and were compatible with the general philosophy for community colleges and associate degree nursing education programs. They were tentative documents subject to changes by those college staff members who would be responsible for the program's implementation (Allen, 1971).

The philosophy and objectives were reviewed and revised by the nursing faculty to present statements which defined education, learning, nursing, the technical nurse, and their stated beliefs regarding associate degree nursing education and the nature of the nursing program at Newton Junior College.

Working within the academic framework at the College, the curriculum was designed to reflect the philosophy and to meet the objectives as outlined by the nursing faculty. The curriculum was planned to include two academic years and two eight-week summer sessions, and to culminate with a total of 77 college credits; 40 in nursing and 37 in general education. The time requirements, as stipulated by the Commonwealth of Massachusetts Board of Registration in

Nursing were met, thus, qualifying the graduates from the nursing program to write the licensing examination.

Experience had convinced the nursing faculty that new students were too concerned with their own performances to focus attention on the problems of patients. Therefore, the curriculum was organized according to the student's perceived learning needs. The first course in nursing was planned to focus on the nurse's role and the basic skills necessary for all levels of nursing. From this basic level, content and experiences were planned to gradually increase the scope of nursing care by focusing on the patient, then his family, and finally by reaching out into the community. Thus, the principles underlying nursing actions served as centers for learning.

Nursing faculty believed that the graduate's performance in the employment situation and on state board examinations was evidence of success or failure in meeting the nursing program's objectives. Therefore, evaluation of the nursing graduates was a planned and ongoing activity of every nursing department.

Each year efforts were made to gather pertinent information regarding each graduate. Questionnaires were mailed to all the graduates and their employers to determine the number of nursing graduates who were employed in general staff nursing, and employed in the initial five

hospitals. Lastly, the scores of the Newton Junior College graduates on the licensing examination were examined and compared with the scores obtained by graduates in Massachusetts and across the United States.

The statistical data (Allen, 1971) obtained from information gathered during the first six years of the program (1961 to 1967) was consistent with the national data obtained during that time frame.

It was the hope of the Nursing Council of the United Community Services that the majority of graduates would remain in the Greater Boston area and work in the small community hospitals utilized for student experiences. Graduates from the first class did remain in the area and sought employment in the agencies where they had had experience as students. This profile changed substantially over the next five years. The majority of the more recent graduates chose to seek employment in the larger medical centers in the city of Boston.

Perhaps, as the quality of the program became known, making the graduates more desirable, the larger medical centers recruited these nurses to work in Boston.

When the six-year project period terminated, the United Community Services of Greater Boston was no longer committed to raise funds for the financial support of the nursing program. Evidence of the success of the program

and its contribution to the city of Newton and the surrounding communities was presented to the Newton School Committee. Data reinforced the conclusion that a graduate, educationally qualified to perform general nursing activities, could be prepared in two years. The majority of the nursing graduates were employed in general nursing positions and evaluation reports from their employers indicated satisfactory to above-satisfactory performance.

Allen (1971) identified strengths and weaknesses in the regional organization of the nursing project. Recruitment of qualified nurse applicants from the towns and communities serviced by the participating hospitals was challenging. In spite of efforts to recruit from the region, statistics showed that each year a substantial number of enrolled students came from outside the designated area.

However, she saw the regional plan to utilize the hospital facilities as an extended campus was generally successful. Although the agencies were small, an adequate amount and variety of learning experiences were provided. Not only had the nursing program contributed to the region, the Greater Boston area and Massachusetts, but, as the first two year associate degree program in New England, it had contributed to the growth of other associate degree nursing programs in the northeastern section of the United

States. The nursing program at Newton Junior College served as a prototype in the New England area.

The Newton School Committee voted in July, 1965, to assume full responsibility for the nursing program's continuing support. This support continued until 1976 when the entire institution closed.

A comparison of the Newton program which began in 1959, with a program initiated in 1979, offers a sense of how these programs change as they develop and grow.

With the decision by the Quincy City Hospital Board of Managers to phase out the existing hospital school of nursing by 1979, a citywide task force was established to study the feasibility of maintaining a nursing education program to serve the needs of the Quincy/South Shore region.

The Needs Assessment Report conducted in March, 1978 by the task force found a community need for a nursing education program on the South Shore: specifically, a two academic year program designed to prepare associate degree nurses. The survey found that, of the 23 new nursing programs developed in Massachusetts since 1961, 15 were in junior or community colleges leading to an associate degree.

Concern was expressed that with the closing of the Quincy Hospital School of Nursing, it appeared that there

was no nearby nursing education program available to serve the needs of the Quincy and South Shore residents seeking a nursing career. Therefore, on April 12, 1979, the Quincy School Committee voted to approve the establishment of such a program at Quincy Junior College.

Quincy Junior College, similar to Newton Junior College, is a municipal college. In 1958, a charter was issued by the Board of Collegiate Authority establishing Quincy Junion College as a division of the Quincy Public Schools.

The College was granted Initial Approval to develop a nursing program by the Board of Registration in Nursing on May 23, 1977, and the program was established with the admission of 44 students on September 6, 1978.

The curriculum developed by the nursing faculty at Quincy Junior College reflected the trends in curriculum development occuring during the 1960s and the 1970s. The curriculum was planned to include two academic years and to culminate with a total of 64 credits: 30 in liberal arts and sciences; and 34 in nursing. The number of class hours was less than at Newton Junior College (N.E.A.S.C. Accreditation Self-Study Report, 1980). There was more integration of concepts with emphasis on the quality of teaching and clinical practice and the elimination of

unnecessary repetition beyond the point where it was necessary for the student's learning.

The dialectical mode of curriculum design was used by the faculty at Quincy as compared to the operational mode utilized by the faculty at Newton. The courses were organized to provide the student with an increasing understanding of the patient as he/she progressed through the curriculum.

According to Murdock (1983), faculty efforts to link the notions of conceptual structure and curriculum integration in nursing education were widespread during the 1960's and the 1970's. Conceptual framework provided the unifying principle around which to integrate the curriculum.

The conceptual framework stemmed from the program's philosophy and, ideally, was a concise statement or diagram depicting the major concepts, skills, and values that the faculty defined as essential to nursing. It was used to structure the courses of the curriculum and to provide a framework within which to view nursing practice.

In September, 1978 the first class was admitted to the program with an enrollment of 44 students (Quincy Junior College, 1981). Again, the makeup of the class was heterogeneous. There were a larger number of students from the surrounding areas than from the Quincy proper. The largest group of students was between the ages of 18

and 25, while the range was between 17 and 50 years. There were predominently single, white, female, post-secondary students, similar to the data presented by Newton Junior College.

The evaluation of the graduates' performance in the employment situation and on state board examinations was accomplished utilizing a process similar to the one designed by Newton Junior College. Questionnaires were sent to graduates and their employers within six months after completion of the program to assess the perceived competencies of the graduates. The information obtained served as a guide in the review and revision of the nursing curriculum.

By September, 1986, one hundred ninety-four students had graduated from the nursing program at Quincy Junior College and had successfully passed the licensing examination.

A comparison of the time frame from inception to implementation of the nursing program at Quincy Junior College with the time frame at Newton Junior College reveals a shorter time line for Quincy Junior College than for Newton Junior College: two years as opposed to three and one-half years.

In the 20 year interim period between the implementation of these two programs, many changes occurred

to facilitate the planning and development of the program at Quincy Junior College. This type of program was no longer considered an experimental project. Associate degree registered nurses comprised 48% of all new registered nurses throughout the country (Facts About Associate Degree Nursing, 1984) and were recruited and employed by acute care hospitals throughout Massachusetts. The regulations governing the approval of schools of nursing had been clarified, negotiated, and revised for Newton Junior College, so it was not necessary to initiate or change legislation for Quincy Junior College.

The most significant change to occur was the growth of the community college movement in Massachusetts. In 1960 Berkshire Community College opened its doors as the pioneer of the state system. Since that time an additional 14 community colleges have been established. In 1977, all but one offered nursing programs at the associate degree level.

During that time span, there have been changes in the expectations of what activities the graduates of these programs are capable of performing. Many associate degree educators do not view the programs as terminal or technical, seeing a difference in amount rather than kind of professional education. The entire concept of the associate degree nursing program as terminal has changed over the last 20 years.

Obviously, no educational program should be terminal in the sense that graduates cannot continue their education toward another degree. Trends have developed toward enhancing educational opportunities for associate degree nurses to persue a baccalaureate degree as well as opportunities for practical nurses to qualify for advanced standing in associate degree nursing programs. However, the associate degree nurse need not continue formal education to hold a valuable place in the health care system.

CHAPTER 6

CONCLUSIONS

The purpose of this study was: to investigate the practice and education of associate degree nurses in Massachusetts; to determine the relevance of the program to present as well as the future practice environment; and to determine if the program prepares its graduates to function within the limited scope of nursing practice proposed by Mildred Montag. Changes in the associate degree nursing curriculum are suggested based on the outcomes of this study.

Projections for the future of health care in this country clearly indicate that nursing practice will change. As shown in this study, nursing practice in the future and specifically in Massachusetts will be shaped by:

1. government intervention in cost containment;
2. increased proportion of the older population;
3. increased complexity of patient needs and severity of patient conditions;
4. shift in delivery of patient care away from hospitals.

The government's involvement in cost containment has had a major impact on health care delivery and thus on nursing. Federal health programs not only pay for health

care for the elderly and the poor, but also influence the supply, composition, and distribution of the workforce. Changes in illness patterns, expanded treatment alternatives, and increased survivability for the newborn and the aged have all been influenced by governmental interventions.

Many of the new ideas in clinical care come from federally funded research such as development of holistic models of care that permit elderly people to remain in their communities as well as primary care models that emphasize prevention or the maintenance of high level functioning among elderly persons.

With the initiation of a prospective reimbursement system there is a greater demand on nursing to deliver cost effective quality care in the future.

The practice of providing most care in hospital settings is decreasing in use. With the average length of stay going down, nurses are encountering sicker patients in the community. This earlier discharge of patients is dictating changes in nursing practice. More sophisticated levels of nursing practice include the initiation of comprehensive, patient, discharge-planning and referrals to community resources, prior to the patient's hospital discharge. Knowledge of basic community concepts, home care

and community resources, and skills in discharge-planning and referrals are crucial.

Traditionally, associate degree nursing graduates have had a limited introduction to discharge-planning and to selected community health. This information has been sporadic at best and has not emphasized the most important aspect, continuity of care.

The growth in home health care for the elderly population is another area that requires a wider range of nursing skills. Specifically, knowledge and skills in self help, self care, disability prevention and health maintenance are needed. In the current associate degree nursing programs these concepts are not emphasized. Future practitioners must have a wider base of skills not only because health problems are multifactoral and interactive but because broader skills are typically needed in home care.

Given the predicted changes in the health care delivery system, far more nurses will have to commit themselves to gerontology. Nursing will be expected to provide the range of physical, psychological, spiritual, social and economic services necessary to help older people attain, maintain or regain their optimum levels of functioning.

A comparison of the current practice with the future practice of registered nurses in Massachusetts is offered in

Table 6.1. It summarizes the nursing practice data presented in this paper.

TABLE 6.1

COMPARISON OF CURRENT AND PROPOSED PRACTICE

	Current Practice	Proposed Practice
Patient Population	Mixed; slight increase in elderly group	Large elderly population; decrease in pediatric group
Practice Setting	Hospitals 70%; non-hospital 25%	Hospital 35%; non-hospital 60%
Illness Pattern	Hospitalization for acute phase	Decreased hospitalization; increased community care
Focus of Care	Curative	Health promotion, prevention, and management of chronic diseases

* Examples of non-hospital settings are: outpatient facilities; nursing homes; home care; adult daycare centers; and day surgical centers.

The increasing number of associate degree graduates licensed and in nursing practice has shown that this type of educational preparation has been successful. However, the work environment is unprepared for two levels of registered nurses.

The associate degree nurse was conceived to care for patients with common, well-defined nursing diagnoses in structured health care settings, with established policies, procedures and protocols. Montag referred to this as a

limited scope of practice. In the practice setting, nursing service expects the associate degree nurse to function in the same capacity as the baccalaureate degree nurse.

There is a major communication gap between nursing service and nursing education. Competencies describing practice of graduates from different types of nursing programs are not utilized in the practice setting. Nursing service does not differentiate the job description of the associate degree and baccalaureate degree nurse. The expectations are that registered nurses perform the same functions although their educational preparation may not be the same.

The movement from competencies to differentiated practice has not happened. One reason is that the competencies have been used more to guide education rather than to guide practice. The practice setting has continued to operate predominantly in the technical sphere and has failed to use diploma nurses, associate degree and baccalaureate degree nurses differently. This causes confusion among the new graduates, and fosters discontent in nursing as a whole. Until educationally differentiated nursing practice occurs, the reality gap will continue.

A second explanation offered for the lack of differentiation is that at the time of the development of

the competencies, most of the nursing care required fell within the middle range of nursing activities. The common core of nursing knowledge and skills necessary for the nurse to practice bedside nursing was sufficient to care for the patient population. Today, with the increase in the complexity of patient care in all health care settings and the predicted escalation of patient acuity, it is unrealistic to assume that the common core of nursing knowledge will be optimal for quality patient care. Likewise, it is impractical not to build on the unique function of each program.

With the present and anticipated future shortage of baccalaureate degree nurses it is not cost effective for baccalaureate nurses to be utilized in the same capacity as associate degree nurses. It has been shown that baccalaureate degree nurses have short work records as bedside nurses and more frequent replacements are necessary. The average cost to a hospital of replacing a bedside registered nurse costs $20,000. Nationally, the nursing turnover costs $3,000,000,000. As the health care economy becomes more restrictive under prospective payment plan, there will be less money to retrain nurses for hospital practice.

While bedside nursing is part of the baccalaureate program, it is not the major focus. Since the inception of the associate degree program in 1951, the primary focus

of the program has been to prepare nurses for direct patient care.

Another aspect of this paper reviewed the origin and progress of associate degree nursing to determine its relevance to future of health care. The evidence presented indicated that associate degree nursing education has not only changed the education of nurses but has made a significant contribution to the practice of nursing.

The purpose of this program was to prepare registered nurses in a shorter period of time to give direct bedside care to patients. It was based on Montag's belief that in the occupation of nursing, there is need for more than one worker because of the wide variation in the tasks performed. It was assumed that in addition to the associate degree (technical) nurse, the hospitals would employ a number of baccalaureate degree (professional) nurses who would perform at a level higher than the associate degree graduate. Unfortunately, that "higher level" was never defined clearly.

Today the associate degree nursing program is not the same as the original program proposed by Mildred Montag. Educational readjustments have been made as necessary, to deal with changing health care needs. The following are examples. The associate degree nursing programs in Massachusetts prepare their graduates to function as

registered nurses within the full scope of practice as defined by the Board of Registration in Nursing. Associate degree nurses are prepared to give direct bedside care to patients but they are also prepared to care for complex patients. The program is no longer considered terminal and mobility through education is an option for those graduates who wish to advance in nursing.

The essence of the associate degree program remains unchanged. The associate degree nursing program still prepares its graduates to give direct patient care to patients in structured settings. However, a structured setting does not necessarily mean the hospital environment. It is an environment that has well established policies, procedures, and protocols. Thus, as health care delivery moves away from hospitals, the majority of associate degree nurses will be employed in other structured settings.

As the health care system is changing, so must the education which prepares nurses to function in that system. Nursing programs must be adapted to prepare people to work in the future health care system which includes prospective payment, emerging outpatient and home care settings, expanding technology, an aging society, increased patient acuity and a rapid increase in extended care facilities.

At the present time, the majority of the associate degree nursing programs prepare the students for the

traditional nursing employment. The student gains most of, if not all of their clinical experience in acute care hospitals. Education must be pro-active in implementing curricular revisions that anticipate or parallel changes in the health delivery system.

The research conducted in this study indicates that the areas that need to be addressed in the present associate degree nursing curriculum are community health, home care, and geriatrics. A greater percentage of the associate degree curriculum should be geared toward the geriatric patient in non-hospital settings. Table 6.2 which is found on page 112 is an outline of program changes in the nursing education curriculum needed based on predicted trends in health care delivery.

Continuity of care should be one of the first major, curricular, emphases as a response to the expected shortened hospital length of stay and greater level of acuity among discharged patients. Continuity of care, both its planning and operationalization, is stressed in community health nursing concepts.

Secondly, the overall intent of the content should be to provide the future graduate with information about how the health of the hospitalized individual is maximized by increasing continuity of care between health care providers. Associate degree nurses with increased knowledge of

community health concepts and services, skills in discharge planning, and implementation of appropriate referrals, will practice more competently, and maintain continuity of care between acute, community, and home settings.

Based on the current health care trends and relating these trends to nursing practice, the following five objectives are offered as a tentative framework for integration of community health content into the associate degree curriculum:

1. Gain knowledge base of community health concepts;
2. Identify individual and family situations that require referral to community agencies;
3. Become aware of services that are appropriate and available for referral in the community;
4. Utilize steps in the referral process;
5. Given a discharge plan, identify community resources for referral.

Thirdly, there is a clear need for nurses with expertise in geriatrics and gerontology because of the increased proportion of the elderly population. Most of the current associate degree nurses lack specific assessment, treatment, and evaluation skills relevant to the needs of the elderly. The nursing programs make inadequate provisions for teaching students to work with the aged. This calls for educational programs to place emphasis on

differences among and within older age groupings and treatment modalities appropriate for those age groupings.

TABLE 6.2

PROPOSED CURRICULUM FOR

ASSOCIATE DEGREE NURSING PROGRAM

First Year

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
Anatomy & Physiology I	4	Anatomy & Physiology II	4
English Composition I	3	English Composition II	3
Introduction to Psychology	3	Psychology of Life Cycles	3
Introduction to Nursing	4	Community Mental Health Nursing	4
Introduction to Geriatric Health Care	4	Maternal Child Health Nursing	4
Total	18	Total	18

Second Year

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
Introduction to Sociology	3	Social Science Elective	3
Microbiology	4	Care of the Critically	6
Medical/Surgical Nursing	4	Community Health/Home Care Nursing	6
Humanities Elective	3		
Total	18	Total	15

Because of the forcasted patient population, nursing students will spend an increasing percentage of clinical contact with older patients. In recognition of this, nursing education programs must provide comprehensive yet well defined geriatric curricula and the opportunity for quality geriatric clinical experience. There is a need to change the curricula to include core content on geriatrics so that graduates coming into practice are prepared to care for geriatric patients. The program must provide the student exposure and experience with well, acutely ill, and chronically ill, older people as part of their clinical experience.

Students should study drug interactions and adverse reactions in the elderly, and how medications may effect provision of care and compliance with treatment regimens. Again, this should be part of basic education for associate degree nurses.

Model curricula would address the following areas: biological, social, and psychological aspects of aging; common medical problems of the elderly; death and dying; public policy and models of health care delivery; health promotion and disease prevention for the elderly; advocacy; and interpersonal management.

The clinical portion of the education program is especially crucial. Early experiences in a wider variety of settings are important adjuncts to the development of quality care concepts. This is especially true in settings in which the needs for nurses are growing: nursing homes, residential and adult day care centers, and home care. Students must become as familiar with these settings as they are with hospital settings. Learning opportunities are needed to teach the student how to perform patient assessment and provide appropriate care within these new settings.

In reviewing the curriculum, caution must be exercised to prevent any unnecessary expansion of the total credits. It should remain possible to complete requirements for the associate degree in nursing in two years, should that be the student's choice. Faculty face the challenge to review and refine the curriculum in such a way that the nursing content reflected is essential and relevant. The tendency is to add as much as possible to the curriculum in order to graduate a nurse who is prepared to succeed in a work environment of escalating expectations.

When the curriculum is examined for essential and relevant content, it would be helpful to remember that any student in a health profession today will spend 75 percent of his or her work life caring for persons over 65. Based on that figure, the question remains how much learning time

is, versus, how much time should be devoted to the study of theory and practice of geriatric nursing?

In comparison, information obtained from the job analysis by the National Council of State Boards of Nursing (1984) found that less than three percent of new graduates go to work in hospital pediatric units or labor and delivery units. If one or two of every 100 graduates go to work in a pediatric or labor and delivery unit, how much learning time should be devoted to the study of theory and practice of pediatrics or maternal/child health?

At present, each associate degree nursing program in Massachusetts has distinct courses in pediatrics and maternal/child health. Only one program has a course in geriatric nursing.

Adjusting the curriculum to reflect the changes in health care delivery is only one important step in the process to prepare a graduate for future nursing practice. In conjunction with the changes in the curriculum, nursing service and education need to come to consensus on the differences in practice based on the educational preparation of the nursing graduates. Only with the merging of education and practice differentiation will nursing be able to provide the full range of nursing services in a cost efficient and quality manner.

Lastly, this controversy has prevented the formulation and acceptance of satisfying answers to the questions, "What do associate degree nurses do?" and "What should they do?" It is time to answer these questions.

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