Economic Perspectives for Nurse Practitioners

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THE EMERGING ROLE OF THE NURSE PRACTITIONER has raised many issues for which the nursing profession has an opportunity to propose courses of action. Some of these issues entail economic and financial factors. Although economics cannot be relied on solely in seeking solutions to nursing problems, its theory offers some unique perspectives for analysis of certain situations.

We discuss two issues that were selected from problems reported to us by 42 nurse practitioners in a recent study (*1*). These issues are (*a*) the pricing of nursing services in various practice settings and (*b*) the impact of unequal financial positions between the nurses and their physician colleagues on the expectations of these physicians. Both issues are of central importance to nurse practitioners because they relate to the need for development of an economically viable situation in which to practice.

By using economic concepts as a framework, we hope to provide a perspective from which to bring about an understanding of the problems and how they may be resolved. Our primary purpose here is to focus the attention of nurses and other health care providers on the implications of the two issues for their particular practice situations so that they will participate more actively in seeking solutions.

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Background

Since 1965, programs for teaching nurses an "expanded role" as primary care providers have been developed nationwide because of the increased emphasis on seeking new ways to provide health care. The expanded-role content is now included in the curriculums of many schools of nursing. In one study (*2*), it was found that nurses performed health appraisals of a quality at least as high as the health appraisals performed by the physicians who judged the nurses' performance. Additionally, nurses with background in the behavioral and developmental sciences are now including teaching and counseling as part of their services—an aspect of care not commonly available to clients in the established system.

This new form of primary care practice has given impetus to the movement in all States toward updating their nurse practice acts to include teaching and counseling in the legal definitions of practice. In the meantime, the legal definitions of independent nursing prac-

tice are ambiguous; to date, adequate reimbursement and remuneration systems have not been developed to pay for the services of nurses who practice independently. Although nurses take on more primary care responsibilities, reimbursement for their services continues to be included in the physician's fee, and remuneration remains on a straight salary basis. It is clear that changes in the present health care financing and delivery system are needed in light of the changing patterns and opportunities for extending the primary care services of nurse practitioners. However, the economic principles at work in the current system must be clearly understood before change can be initiated.

Pricing of Nursing Services

Traditionally, most nurses have practiced in hospitals or other institutions in which nursing services were included in the overhead of the facilities and not explicitly identified to the patients. The introduction of nurse practitioners has not altered this situation. As a result, the consumer does not think of the nurse practitioner as an independent professional; her services are considered to be part of the medical treatment. Insurance companies also have similar perceptions, and thus they are reluctant to reimburse nurse practitioners for their services unless reimbursement is requested by physicians. At a time when nurses need alternative financing arrangements to underwrite new practice modes, the lack of direct third-party reimbursement limits the kinds of services they can perform. Additionally, the historical precedent of acute-care orientation of nurses has resulted in a limited number of nurses practicing in community settings and providing ambulatory care.

Currently, most graduate programs are preparing nurse leaders who will practice in a variety of settings and use a combination of clinical, administrative, and teaching skills. The employment areas open to these graduates include clinics, community health practices, health centers, outpatient departments, physicians' practices, family therapy, group therapy, hospital administration, government and universities, and faculty positions at the graduate and undergraduate levels. These diverse settings must be considered in a discussion of ways to price nursing services. One system of pricing may be considered necessary for consumer recognition and utilization in certain clinics, but another pricing mechanism may be more appropriate for nurses in administrative positions.

The new roles have tended to combine functions in two or more clinics or between a teaching or an administrative role and practice. Although many nurses have attempted to structure salaries for combined functions,

problems have arisen because of incompatible systems. Salaries and benefits for civil service workers are not easily split to facilitate employees' contributions in non-government settings. University teaching positions that include a percentage of practice not only create a complex budgeting system, sometimes different in each individual situation, but they also create a need for more faculty than otherwise would be required. This trend could double the space required for faculty, not to mention the time required for adequate communication among a larger number of people. In the past, positions were not mixed, and a fairly even ratio existed between the number of full-time positions and the number of nurses employed.

The multiple educational paths for training as nurse practitioners also complicate the pricing of services. Nurse practitioners who have been prepared in master's programs have a considerably broader and more standardized education than those from certificate programs, who may have had only an associate degree in nursing before certification. Although some of the content may be similar, the knowledge base is different. These differences are recognized in educational and teaching combinations, but they are often inappropriately disregarded in clinics and thus in pricing of services.

Pricing of nursing services is best analyzed within the economic framework of factor and product markets. In economics, there are two marketplaces: (*a*) the factor market, where factors of production (nurses) offer their services to producers of goods and services (physicians' practices or public health departments) and (*b*) the product market, where goods and services are offered to the consumer. In each marketplace, services are bought and sold at assigned prices (*3*). Nursing services have always been priced in the factor market, as reflected in nurses' salaries, but they seldom have been explicitly priced in the product market. Traditionally, in product market pricing the cost of nursing services has been included in the employer's overhead, rather than specifically billed to the consumer.

The framework of factor and product markets can be applied to each of the practice settings described. For example, one can see if nursing services are "financially visible" to the consumer. In a faculty setting nurses are priced in the factor market by salaries, but in the product market they are priced as educational services in tuition fees—the generally accepted convention for all professionals in universities. However, this arrangement is not always satisfactory in clinics where the nurse practitioner is striving for consumer recognition, nor is it the generally accepted convention in clinics. One mark of independent professionals—such as physicians, dentists, and physical therapists—is having the option to offer their services in the product market at prices they set. It is a goal that other professionals such as psychiatric social workers are currently striving toward. In New York State, for example, a law enacted in 1977 permitted reimbursement for psychiatric or psychological services provided by social workers under certain conditions. To date, nurses do not have this option.

Pricing and Product Marketing

In many clinics, a unit pricing mechanism,—one type of reimbursement used on the product market—may be more in line with the long-range objectives of the nursing profession for recognition as independent professionals. We believe that this mechanism should be an option available to nurse practitioners in private practices. With unit pricing, nursing services could be offered to consumers as an identifiable and separately priced service. Unit pricing has a number of implications for nurse practitioners.

Practice pressures. A corollary of pricing nursing services in the product market is that the time and content of nursing services can be evaluated in relation to how much revenue the services command. Evaluation mechanisms used in nursing to date have not made this relationship clear. Evaluation in terms of revenue generated creates economic pressure for the nurse practitioners involved. This pressure was seen among graduates who entered fee-for-service settings but not among those who entered non-fee-for-service settings (*4*). The pressure to see more patients and to shorten patient visits was noted by some of the nurse practitioners in fee-for-service settings and considered a frustration of the practice. In contrast, the nurse practitioners in the non-fee-for-service settings did not mention pressure to see more patients as a problem in their practice situations. They felt less rushed and freer to carry out functions such as teaching and counseling that may require lengthier patient visits; in other words, they were not under economic pressure to limit the range of skills they could practice.

It is not surprising that these pressures exist in fee-for-service settings in view of the economic incentives involved. According to economic theory, the medical care firm such as a private practice or ambulatory care center operates as a constrained profit maximizer (*4*). The owner acts to maximize net revenues within the constraint of social responsibilities, peer review, and public opinion. In fee-for-service settings, gross income is a function of the number of patient visits; the opposite holds for non-fee-for-service settings. Thus, in fee-for-service settings the owner has an incentive to in-

crease patient visits in order to maximize revenue. One solution to this problem is to charge more for the extended visit, which includes teaching and counseling, with a nurse practitioner. This approach does not reduce the gross income of the entrepreneurial physician. The time-oriented approach to pricing nursing services suggested in the following section is a way to implement this system.

Measurement problems. Implementers of a unit pricing model for nursing services must fully understand what nurse practitioners do. The nursing profession has had difficulties in defining its role (*5*). Now, because evaluations include the economic viability of nurse practitioners, it is essential that nurse practitioners' services are accurately and completely defined so that cost analyses will be in terms of the full mix of services provided. In such areas as teaching and counseling, this type of measurement may be a particular challenge because adequate standards for judging quality are only now being developed.

Because teaching and counseling are often integrated with the process of history taking and physical examination, it is difficult to differentiate time spent in teaching and counseling from other activities. Nurse practitioner training emphasizes the importance of teaching and counseling in patient care, and it can be hypothesized that, as a result, nurse practitioners may perform relatively more of these activities than other professionals do. If teaching and counseling activities are not recognized as such in evaluation studies, it may appear that nurse practitioners take longer to perform a given activity, such as history taking, than another professional. In reality, the nurse practitioner may be integrating teaching and counseling into the history taking process while the other professional is not.

Two possible approaches to measuring nursing services in implementing a unit pricing model are time-oriented measures and task-oriented measures. With a task-oriented measurement system, prices are assigned to each task. With a time-oriented system, a price is assigned to a unit of nursing time, and different rates are applied to different activities. Under a task-oriented system, tasks must be completely defined; otherwise, they will not be priced and the revenue generated by a nursing encounter will not be maximized. Under a time-oriented system, a full understanding of what a nurse practitioner does is necessary in defining general activities, such as counseling and teaching, and in setting unit of time prices for these activities. It also is essential for understanding what services were provided for given costs, for example, nurses' salaries and overhead.

A time-oriented approach to measuring nursing services is preferrable to a task-oriented approach. Time units would allow the nurse to select from a variety of possible approaches to a client's problem, and even a combination of methods when deemed necessary, without concern for the relative value placed on each treatment method. Implementing a task-oriented measure would be cumbersome at the least (consider the difficulties of assigning prices to each potential nursing task) and actually contrary to the patient-objectives approach stressed in nursing education, particularly if one considers the quality-evaluation process in nursing in conjunction with the financial-evaluation process that we described.

Peer review in nursing is conducted in terms of attainment of patient objectives through counseling, long-range planning, and other nursing processes. Evaluations do not center upon how well a blood pressure was read or a patient history taken. In other words, nursing evaluation is not concerned with how well tasks are performed but rather with whether the proper mix of nursing processes is selected to reach an objective. Thus, it would be contrary to this orientation if the pricing of processes was based on individual tasks.

The first step in implementing a time-oriented system of measuring nursing services is the development of a detailed categorization of these services. The most efficient way to develop these categories is to draw up a list that includes a description of tasks within each nursing activity. This list could be validated by observations of nurse practitioners at work in various clinical settings. After the list is validated, a fee schedule can be established.

Third-party reimbursement. The introduction of unit pricing for nursing services is complicated by the structure of the health insurance system in this country. Most medical services are not paid for directly by the consumer but rather by third-party payers—primarily insurance companies or the Federal Government. In fiscal year 1975, 67.4 percent of all personal health care expenditures were covered by third-party payments. (*6*) Thus, the price to the consumer in terms of out-of-pocket expenditures is much lower than the price billed by the health care provider.

An important piece of legislation, passed by the 95th Congress, was the Rural Health Clinics Bill. This bill amended the current Medicare law to allow for third-party reimbursement of clinic services rendered by a "physician extender" in rural health clinics where a physician is not present but periodically reviews clinic operations. Passage of this legislation represents a first

step in recognition of third-party reimbursement for selected services of nurse practitioners who are not under direct supervision by a physician.

At present, most nursing services are reimbursed by third-party payers only if the services are provided under the direct supervision of a physician, or in the case of home health services, under physician's orders. This reimbursement situation has two implications for the nursing profession. First, it discourages unit pricing of nursing services. If nursing services are priced independently, third-party payers may not reimburse the patient for these services, and the consumer must pay the entire fee out of pocket. In turn, the consumer may seek alternative services where third-party reimbursement is available. Thus, there is an incentive to incorporate nursing services into billing items that are acceptable for third-party reimbursement. For example, well-child care rendered by a nurse practitioner may be billed as a standard office visit to a pediatrician rather than as a separate fee for the nurse practitioner's services.

A second implication of the limited third-party reimbursement is that the relatively higher cost of non-reimbursable services of nurse practitioners discourages the use of such nurses in practices such as clinics with offsite physician reviewers. For example, in other than rural clinics maintained by a nurse practitioner, services would not be reimbursable by third-party payers. The relatively high out-of-pocket expense to consumers of using such clinics would discourage their use, and for low-income persons the clinic services would be unavailable because of cost. These cost factors defeat the purpose of the clinics, to increase availability of health services, and thus make the concept inoperable. For the nurse practitioner, lack of third-party reimbursement means that a practice arrangement is unavailable to her as an option because her services have not been recognized by third-party payers as functionally independent of direct physician supervision.

Third-party reimbursement is unlikely to occur on a large-scale basis, however, until the nursing profession has demonstrated the viability of the nurse practitioner's role. The introduction of unit pricing and an analysis of revenue generated by nurse practitioners relative to expenses provide a first step in documenting the financial viability of nurse practitioners.

Pricing and Factor Markets

Pricing in factor markets is an issue of obvious interest to nurse practitioners in all practice settings. We noted in the opening remarks of the earlier section on pricing that the varied employment settings of nurse practitioners complicate any analysis. Thus is true in discussing factor markets as well as product markets.

Many nurse practitioners combine a variety of employment settings into a full-time job. Of the nurse practitioners studied at the University of Rochester, 28.6 percent were in this type of situation (*1*). Nurse practitioners in joint employment situations must negotiate between employers for fringe benefits and assurance that combined earnings are equal to full-time earnings with one employer for comparable work.

Although negotiating a salary basis poses problems for all concerned, nurse practitioners in non-unit-priced settings, such as universities or health maintenance organizations, face a unique problem. As noted earlier, many types of health care professionals have had much experience in fee-for-service settings, and this experience provides a base for negotiating salaries in, for example, universities or administrative positions in hospitals. Nurse practitioners, on the other hand, represent a relatively new professional group with little salary history. Until more data are available from private practices, the only alternative for nurse practitioners in academic settings is negotiation based on their worth compared to that of other health professionals in similar setttings.

Team Roles and Financial Structure

The roles of various members of a clinical team in relation to the financial structure of a practice can hinder team performance. When one member of the team assumes the majority of financial risk, relationships among colleagues are likely to be strained. This problem occurs more often in the practices of private physicians who employ nurse practitioners. The issue does not arise when the nurse and her colleagues work for an organization.

The physician in private practice is an entrepreneur, that is, he is assuming the financial risks of the enterprise. The nurse, as an employee of the physician, assumes no risk. In terms of the factors of production necessary for a firm (the practice) to produce a service (medical care), the nurse represents labor and the physician represents both labor and employer (*7*). In a practice situation where both the nurse and the physician (or any other colleague, such as a school psychologist) are salaried, neither assumes the financial risk of the operation and both represent the same factor of production.

Problems arise when graduate programs build expectations for relationships among colleagues and fail to consider financial roles. Although these roles are only one aspect of the nurse practitioner-physician relation-

ship and must be handled within the context of all aspects of the relationship, the conflict of financial roles and expectations of colleagues represents a barrier to full recognition of the nurse practitioner model.

It is understandable that the physician's entrepreneurial role in the private practice setting could hinder a colleagueship between nurse practitioner and physician. According to the comments in the survey of graduates, it is apparently exceedingly difficult for the physician to divorce himself from his financial role in functioning as a team member. However, this situation is unsatisfactory for the nurse practitioner on the team because she expects to have the role of a colleague. Of course by avoiding private practice settings, the nurse practitioner can eliminate the problem. But such an action is not in the best interest of the patient, the nurse, or the physician. Consumers demand broad-spectrum primary care when they need it; nurse practitioners seek recognition in the primary care field as providers of health care; and physicians stand to reap benefits in more stable working conditions and the professional stimulation of the interdisciplinary colleagueship.

Further, the number of openings in nonprivate settings is limited, and as the supply of nurse practitioners increases over time, a better alternative may be to offer primary care in joint practice settings than for physicians and nurses to be providing it separately. In 1974, 68.4 percent of the U.S. physicians in patient care were in office-based practice (*8*). If nurse practitioner-physician colleagueships are to be developed, the private practice dilemma must be addressed.

One context in which to understand the overall relationship to team functioning is in terms of force-field analysis (*9*). In educational processes, people often tend to concentrate upon the forces that drive them toward a given objective while failing to consider and evaluate the barriers to attainment within the system (*10*). This tendency can lead to false expectations and dissatisfaction when graduates enter into actual practice arrangements. If the area of colleagueship is identified as a target of change, then the problem of entrepreneurial roles can be considered a "restraining force" acting upon improved colleagueships. Entrepreneurship is only one of many restraining and driving forces. The value of force-field analysis is the perspective it gives to the situation. This line of thought, of course, applies not only to entrepreneurship as a restraining force but also to other factors that are restraining forces upon colleagueships.

Recognizing entrepreneurship as a restraining force in private practice relationships, the nurse practitioner has two choices. One choice is to relinquish the right to the role of a colleague and function as a non-risk absorbing employee. This function may be satisfactory for those nurse practitioners who understand the tradeoff. For some nurse practitioners, however, the privilege of being a full colleague may be worth a price. The price is the assumption of risk with the entrepreneur. This second alternative necessitates a reimbursement arrangement whereby the nurse practitioner's salary is a function of practice revenue. The nurse practitioner then accepts the risk for the success of the practice and is in a position to develop a more desirable working relationship with the physician.

Conclusion

The growth of the nurse practitioner movement has reached a point where economic theory can help to elucidate some of the problems faced by nurse practitioners. A fuller recognition of the role of the nurse practitioner depends in part upon unit pricing of nursing services, third-party reimbursement for these services, and adjustment of colleagues' expectations to take into consideration financial roles.

Unless the challenge of these economic problems is met, the nurse practitioner may never have a chance to realize the full potential of her contribution to the health care delivery system in this country.

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