DUKE PHYSICIAN'S ASSOCIATE PROGRAM

informational pamphlet series

Evaluations

DUKE UNIVERSITY
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PHYSICIAN'S ASSOCIATE PROGRAM
INFORMATIONAL PAMPHLET SERIES
EVALUATIONS

Since the beginning of the Duke University Physician's Associate Program in 1965 and the graduation of the first physician's associates two years later, these new health workers have undergone numerous evaluations in order to ascertain their impact on the delivery of health care services. These evaluations have helped establish the current value and future potential of physician's associates; they have also shown that physician's associates are easily integrated into the medical service.

The object of all these studies, the physician's associate, is a well educated and extensively experienced individual prepared to assume many of the professional diagnostic, therapeutic and administrative tasks traditionally performed exclusively by the physician. The physician's associate is the most highly educated and extensively experienced type of physician's assistant. (Physician's assistant is a generic term referring to a wide variety of physician-dependent allied health personnel having anywhere from four hours to two or more years of formal medically related education and training.) According to the National Academy of Sciences, the physician's associate is "distinguished by his ability to integrate and interpret findings on the basis of general medical knowledge and to exercise a degree of independent judgment." The physician's associate assumes such responsibilities only under the supervision and direction of a licensed physician, and it is the duty of the responsible physician to determine the extent of the individual physician's associate's role. The physician's associate's formal education includes at least two years of academic education and clinical preparation at a college or university with medically-related facilities.

Evaluation studies thus far have been conducted in four basic areas—physician acceptance, patient acceptance, task analysis and productivity. The results of these studies are briefly reviewed below. More detailed information concerning any of the following information can be obtained by writing the Duke University Physician's Associate Program.

PHYSICIAN ACCEPTANCE

Before any type of physician's assistants could be integrated into the allied health care team it was essential that physicians support their utilization. Consequently, one of the first studies undertaken was aimed at analyzing physician acceptance.

While many physicians had indicated an interest in employing physician's assistants, a more precise analysis was desired. To provide that analysis, a survey of physicians was taken in Wisconsin in 1966, which indicated that approximately 2,000 would be interested in employing a physician's assistant. A more elaborate nation-wide study in 1968 revealed that over 50% of the responding physicians indicated a willingness to employ a physician's assistant. With these results the initial hypothesis for the professional acceptance of the physician's associate was secured. Since that time, physicians have varified the acceptability of all types of physician's assistants through personal experience and an expressed interest in employment.

PATIENT ACCEPTANCE

Patient acceptance was another obvious and crucial factor governing the utilization of physician's assistants and was deemed especially important for those qualified to have a significant input in patient care—the physician's associates. Without patient acceptance, physician's associates would be unemployable. Fortunately, studies of patient reactions in 1968 revealed that patients would accept physician's associates readily. The study showed that patients needed only to be informed of the physician's associate's role and be assured that the physician's associate communicated regularly and effectively with the supervising physician before accepting him as a bonefied member of the physician's team.

The most comprehensive research on the subject of patient acceptance completed to date offers some interesting insights into the acceptance of the physician's associate. This survey revealed that acceptance increased linearly with the number of years of the patients' formal education. Acceptance was also curvilinearly related to income, being higher for patients in middle income ranges and lower for both those in the low and high income brackets.

According to the study, patients with six years or less of formal education, none of whom enthusiastically accepted physician's associates, typically did not understand their role and therefore could not see how physician's associates could help them get better medical care at less cost.

The curvilinear relationship between acceptance and income level was also explained. Upper income groups who typically pay full medical costs felt they were being shortchanged; while public care patients felt they were receiving second-rate treatment because they were public patients. The study concluded that the patient's level of education appears to be the primary factor in their acceptance of the physician's associate as a legitimate member of the health team. It also noted that patient acceptance was higher in the small or rural communities, where the physician shortage is most severe and the physician's associate most valuable.

In a more recent evaluation it was found that patients readily accepted the physician's associate for "routine things," but felt that there were "some things that only the physician should handle." This study revealed that some patients would "trust their life" with the physician's associate; furthermore, none of those interviewed said they would prefer to see a fully qualified medical doctor for all their medical care. The supervising physician at this particular study site, in reviewing these results, said that "properly trained and introduced physician's associates will find that patients will accept them as they have long accepted other members of the health care team."

TASK ANALYSIS

Physician's associates have been educated to provide a vast array of services on behalf of their supervising physicians. To date these services usually have been described in generalized terms and are seldom supported by specific factual data concerning their functional roles and task performances. In order to provide such data, and to enable training programs to consider the relationship of the training to the tasks performed by their graduates, utilization and task analysis studies were undertaken at Duke.

One of the earliest task analyses was done in a small North Carolina town. In the two week period examined, the physician's associate was involved in the care of 72% of the patients seen. The physician's associate's involvement in those cases was found to consist mainly of routine histories and physical exams (76%); minor office surgery accounted for 18% of the physician's associate's work and miscellaneous office work (i.e. laboratory analyses etc.) amounted to 6% of the total involvement.

To corroberate these statistics a more recent task analysis involving a number of test sites revealed that "history taking, physical examination and medical tasks are performed much more frequently on an independent basis than are other tasks." This later study, which focused on determining the extent of task supervision, concluded that among individual physician's associates there is substantial variation in the percentage of tasks done frequently without actual physician surveillence.

One factor which has influenced the task analyses is related to the type and location of the practice setting. As a supplement to the latest survey it was noted that approximately one-third of Duke's graduates are working in small private practices. Another third are employed in medical centers; and the remainder are working primarily in hospital and group based practices. Over 50% of the graduates list family practice or general medicine as their primary function and twelve percent identified themselves as primarily administrators. About eight percent of the graduate physician's associates are in surgery; six percent are in pediatrics and the rest are scattered through other specialties and subspecialties.

PRODUCTIVITY

Conclusive data relating to physician's associates productivity obviously will not be available until they become permanent members of the health care team. However, some studies have already been undertaken in an attempt to evaluate their effects on productivity. The studies to date have not attempted to judge the effect physician's associates have had on the first consideration of medical care—its quality—as objective criteria for measuring quality are not available. These studies are primarily quantitative; they have provided

analyses of time utilization, productivity and utilization patterns.

In a single site study it was shown that with the addition of a physician's associate the supervising physician could potentially care for 76% more patients. The addition of the physician's associate to the practice allowed the physician to cut his contact time from 9.85 minutes to 5.6 minutes for the average patient. With the physician's associate seeing patients for 5.8 minutes each patient received 11.4 minutes of professional care, or 16% more than when the physician saw the patients alone. It was also shown in this study that the physician and physician's associate together completed proportionately 13 times as many complete work-ups as were done by the physician working alone.

Contrasting with the results of this early study are the results of a more recent evaluation. This study, involving numerous test sites, concludes that the physician's associate does not appear to have the dramatic effect of increasing the availability of care that is potentially possible. It goes on to say that while the physician's associate does add efficiency to a physician's productivity, the supervising physician uses the increased efficiency to decrease the time spent in actual patient care. This study does verify the earlier study's conclusion that, given time as a constant, the potential impact of adding a physician's associate to a solo practice could yield an increased productivity of over seventy percent. It must be emphasized, however, that the results of these productivity studies are the most recent and least consistent of any evaluations undertaken to date.

But productivity studies are not the only aspect of the physician's associate's role that needs further study. More research needs to be done in many areas; data from ongoing evaluations will help facilitate the efficient utilization, the responsible growth and the continued development of the physician's associate.