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NEW HEALTH PROFESSIONALS AT KAISER:
A QUESTION OF ROLE AMBIGUITY*

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Presented at the
American Sociological Association
New York, New York
August, 1973

*This research was supported in part by Public Health Service Regional Medical Program Services, Contract No. HSM 110-72-372 and by HEW Grant No. CH 00235 from the National Center for Health Services Research and Development.

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Précis

In July, 1970, the Kaiser medical care delivery system in the metropolitan area of Portland, Oregon introduced its first pediatric nurse practitioner (PNP), who was followed two months later by the first physician assistant (PA) and in February, 1971 by the first certified nurse midwife (CNM). Those developments were widely perceived within Kaiser as initial steps toward full-fledged services of the new health professionals in the Departments of Pediatrics, Medicine, and Obstetrics-Gynecology.

Nearly three years later, as the summer of 1973 approached, the system still had only one PNP for 20 pediatricians and one CNM for 12 gynecologists. The number of PAs, however, had grown to 7 for 39 internists. Although the optimal ratio of nurse practitioners or PAs to physicians has not been established, the 1:20 and 1:12 proportions are much smaller than generally would be regarded as achievable without threat to quality of service. The 1:20 and 1:12 ratios also contrast sharply with the 1:5 or 1:6 ratio for PAs and internists.

This paper looks into Kaiser's disparate experience with the three programs. Although several variables can be identified as contributing

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to a disparity not only in growth rate but in job-delegation patterns as well, the most important factor may have been the differential implications which the respective programs held for physician role and status. The character and intensity of the role and status consequences, as they varied among the three medical specialties, are at the heart of the discussion which follows. First, however, we shall describe the context of the innovations and briefly review factors other than role challenge which may have helped to shape the disparate results.

The Context of the Innovations

The Kaiser delivery system provides comprehensive prepaid medical care for approximately 180,000 Health Plan members who live in the Portland metropolitan area. The delivery system comprises a centrally located hospital and six outpatient clinics, one of which is located across the Columbia River in Vancouver, Washington. Physician services are supplied by a partnership of 133 full-time physicians under a capitation contract to the Health Plan. A distinctive feature of the physician group is that all are specialists; even the Department of Medicine did not contain general practitioners until quite recently.*

In the late 1960's the Health Plan membership seemed to be growing faster than physicians could be added easily to the physician partnership, particularly in some specialties, with the result that appointment

*In the last few years, several GPs have been used in walk-in and emergency care at the hospital. Just recently 3 GPs were added to the Department of Medicine.

lags became a serious issue and physicians complained about heavy patient loads in the clinics. The medical director's strong disposition to bring in physician assistants and nurse practitioners, from the "new health professional" training programs that were springing up around the country, evoked substantial negative response from some Department chiefs in the form of open opposition or passive resistance. Professional norms (e.g., physician responsibility for quality of care) were frequently invoked to justify contravention of bureaucratic goals (e.g., mitigation of members' complaints about delays in service.)

If the new professionals were introduced, they would be employees of the Health Plan rather than of the physician partnership; thus physicians theoretically, at least in the short run, would buy increased leisure at zero cost. The Health Plan would gain not only faster service for its members but also, it might reasonably presume, greater cost efficiency from the employment of lower-salary personnel for some of the routine medical services.

With respect to this basic structure of economic incentives and restraints, physicians in the three medical specialties which eventually introduced the new professionals were similarly placed. Growth-rate and job-delegation differences in the nurse practitioner and PA programs therefore must be explained by other factors, to which we now turn.

Determinants of Disparate Response

At the turn of the decade, the three specialties -- medicine, pediatrics, and OB-GYN --- inhabited considerably different market settings as they were perceived locally. Pediatricians were relatively

plentiful. Internists were more difficult to recruit. The tightest of the three markets to recruit in was OB/GYN, especially after liberalization of abortion laws made fee-for-service practice almost explosively lucrative. Thus on market considerations alone one would have expected the OB-GYN chief to be the most receptive, and the pediatrics chief the least receptive, to the proposed innovation.

That that was not the case may be explained in part by differences among the chiefs in ideology and temperament. Relatively nonhierarchical in his perception of the proper interrelationships of health care providers, the head of the Department of Medicine was not only favorably disposed toward the use of PAs but also inclined to define the role of the new personnel less narrowly. Moreover, once the innovation occurred, he handled the inevitable abrasions with finesse and firmness. The associate medical director, who had provided the primary thrust for innovation, had shepherded the introduction of PAs into the system, and continued to put the weight of his office behind the program, is a practicing internist in the Department of Medicine. In addition he was chief of the clinic in which three of the first four PAs were used during the critical period of job and role definition. No comparable push existed in Pediatrics, although the chief was not unreceptive to nurse practitioners. The OB-GYN head was the least receptive in the beginning, and although he eventually became somewhat enthusiastic about midwifery, his enthusiasm dwindled during the first year of the

program. A second CNM was added in the summer of 1971,* about six months after the program began, but when the first CNM resigned in early 1972, she was not replaced. Conflicts which may arise from differences of personality or style are apt to be especially significant when numbers are small; such differences were operative in the case of the first CNM and, to a smaller degree, in the case of the PNP.

Professional identity was particularly strong in the first CNM, who, for example, refused to register under Oregon's new Physician Assistant law in 1971. She felt it would be something of a come-down from, and would unnecessarily complicate, the legal identity and protection she already enjoyed under the state nursing statutes. The second CNM took a similar position. Their unwillingness to be certified as PAs was a matter of expressed discomfort to the OB-GYN chief, who, in his bureaucratic role as protector of institutional interests, wished to take advantage of the new law's supposed reduction of institutional risk. In this instance it was the CNMs who in effect charted their course by professional norms rather than accommodate themselves to bureaucratic goals.

The formal training of the two CNMs greatly exceeded that of the PNP and the PAs. Both CNMs are baccalaureate nurses who had gone on, respectively, to take Master's degrees in the Yale and Columbia midwifery programs. The PNP was a nonbaccalaureate RN in the Kaiser

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*See Jane Cassels Record and Harold R. Cohen, "The Introduction of Midwifery in a Prepaid Group Practice," American Journal of Public Health, March, 1972, pp. 354-360.

system who, under Kaiser sponsorship, took a four-months PNP training program at Massachusetts General Hospital.* The PAs, trained mostly at Duke, are former military medical corpsmen without college degrees.**

Unlike the PNP, the PAs and the CNMs were first encountered by Kaiser patients, physicians, nurses, administrators, and so on, as distinctive professional personages in the distinctive professional roles they were employed to fill, for the achievement of which they owed nothing to Kaiser. It was to be expected, particularly in the case of the CNMs, that they would have a sense of "turf;" that is to say, that they would identify with and feel committed to professional goals and norms clearly separate from, and to some extent potentially conflicting with, both the institutional bureaucracy of the Health Plan and the professional collectivity of the medical specialty Departments. To the degree to which the conflict of loyalties made it more difficult for the Health Plan and Departmental bureaucracies to command the new professionals, one would suppose that both the PA and the CNM programs, on that criterion alone, would have expanded more slowly than the PNP program.

We speculate that gender may have been a significant determinant of the degree of success that has characterized the three programs. The PNP and CNMs are females, the PAs male.*** Virtually all physicians in

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* The Bunker Hill Health Center PNP program, operated in collaboration with the Hospital, was one of the first in the country. It has been taken over by Northeastern University.

** With the exception of one PA from the Alderson-Broaddus College program.

***Some attempt has been made to employ a female PA, but the small number of female graduates of PA programs thus far has made females difficult to recruit.

the three Departments are male; there is one female internist, one female obstetrician-gynecologist, and no female pediatrician. Formal and informal surveys have indicated that for some obstetrical and gynecological patients the CNM's gender is a distinctive advantage, as is the case for some mothers of pediatric patients in their relations with the PNP.* Moreover, several of the physicians who were openly skeptical about the innovations as a threat to quality of care expressed greater anxiety about the male PAs than about the female PNP and CNMs, because the latter, having been socialized first as nurses, "know what the proper relationship between a physician and an assistant ought to be;" to wit, the nurse practitioners would have an inculcated "sense of their own limitations," in contrast to the PAs, who "may go off on their own in all directions" to the detriment of patient welfare.**

Yet the fact that the PAs are male may help to explain the relative ease with which their institutional role was defined, and the breadth of the role, in the Medical Department. For if the male physician was to surrender part of his theretofore almost exclusively held rank and

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* As seems to be generally the case, patient receptivity to new professionals has been quite high at Kaiser, dissipating the fear expressed by some physicians that patients would not accept treatment from nonphysicians. See Record and Cohen, op. cit., and Paul D. Lairson, Jane Cassels Record, and Julia C. James, "Physician Assistants at Kaiser: Distinctive Patterns of Practice," a paper presented to the American Public Health Association's Annual Meeting, November, 1972. For a study not yet released, nurse and pharmacist surveys asked about patient receptivity to the PAs. Internists at the Vancouver Clinic were similarly questioned during interviews. All sources indicated high receptivity.

**In statements to, or reported to, the authors.

privilege, it might have been easier to share it with other men, thereby fostering no implicit threat to his maleness.

By far the most important factor in shaping the dissimilar experience with new health professions, however, may be the differential implication for the basic role distinctiveness of the respective three kinds of physician. For that reason we wish to discuss comparative role strain at some length in the next section.

Differential Role Implications For The Three Specialties

The PA could be viewed as helping to liberate the internist to assume the occupational role for which the internist had been trained; that is to say, to perform the definitive set of functions and discharge the definitive set of obligations of that role. The Kaiser internists, who practice adult nonsurgical general medicine, had long complained not merely about the size of their case loads but also about the content of their practices. With no general practitioners in the Department of Medicine, internists had to combine two roles --- primary physician as well as consultant-diagnostician; they treated colds, athlete's foot, and gonorrhea as well as the more complicated morbidities. The PAs, by taking over many of the minor cases, began to free internists to pursue more intensively the diagnostic services and subspecialties which distinquish them from the GP. Thus more of the internist's occupational behavior could be concentrated in the skill level at which normatively he expects, and is expected, to perform. And because, as role theory posits, the rewards for filling a social position follow from the duties and obligations of that position, the PA might be regarded as enhancing

the reward potential of the internist's occupational and social position, to the extent that the PA helped to move the internist's role performance to a higher level.

In contrast, the CNM and the PNP pose something of a threat to the role, and therefore to the status or rewards, of physicians in their respective Departments. Let us begin with the OB-GYN specialty, which is medial to internal medicine and surgery. The OB-GYN specialist is physician to adult women, whose differentiated medical care needs have been perceived as primarily related to reproduction. In the gynecological (as distinguished from the obstetrical) area a physician assistant might establish the same sort of role relative to physicians that he occupies with internists or general surgeons; that is to say, by performing routine pelvic exams, taking Pap smears, and treating vaginitis, for example, he would release the gynecologist to function at the higher skill level which distinguishes him from the general practitioner. Both CNMs at Kaiser have performed routine gynecological services, and the remaining CNM continues to do so. However, CNMs perceive their distinctive occupational role to be in the obstetrical area. Moreover, the CNM's training encompasses the whole maternity cycle -- prenatal, delivery, and postnatal* -- thus paralleling rather than buttressing the obstetrician's specialty. True, her competence is limited to "normal pregnancies," but

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*A January, 1971 "Joint Statement on Maternity Care" by the American College of Obstetricians and Gynecologists, the Nurses Association of that organization, and The American College of Nurse-Midwives included these clauses: "1. The health team organized to provide maternity care will be directed by a qualified obstetrician-gynecologist. 2. In such medically-directed teams, qualified nurse midwives may assume responsibility for the complete care and management of uncomplicated maternity patients."

they constitute the overwhelming majority of cases. The obstetrician's definitive specialty has been pregnancy, not abnormal pregnancy. If his specialty were redefined as abnormal pregnancy, the total number of obstetricians would have to be drastically reduced. If pregnancy rather than abnormal pregnancy is his desired specialty, much of what he does can be duplicated by CNMs with Masters' degrees or less. A classic method of protecting the privileges of an occupational role has been to limit access to the role by raising the role credentials, which then tend to become the rationale for the privileges. To some extent obstetricians face a potentially zero-sum situation threatened by invasion of the valued role, with discomfiting implications for the eventual level of status or rewards, including job security, remuneration, and prestige.

At the beginning, the OB-GYN Department at Kaiser defined the CNM functions to include management of normal pregnancy, from conception through postnatal follow-up, plus prenatal classes, instruction in family planning, and treatment of minor gynecological problems.* Six months after the program's inception a survey of Department physicians by the chief disclosed general approval; indeed, 9 of 10 respondents answered yes to the question, "Would you like to see the midwife role expanded in the future?" Requested to "please list in which areas you would expand the role," 7 of the 9 physicians mentioned prenatal care, 7 labor and delivery, 4 prenatal education, 2 routine gynecology, and 1 family planning.

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*Record and Cohen, op. cit.

Precisely what was meant by role expansion was not made clear, however. One physician who cited labor and delivery specified "labor and delivery preparation," for instance, which is a far cry from delivery management. In answer to a subsequent question, "In which of the following areas do you feel nurse-midwives display the greatest competence?" only 3 of the 10 respondents marked delivery and labor in a check list of five areas, whereas all 10 checked prenatal education, 7 prenatal care, 5 family planning, and 5 diagnosis and treatment of minor gynecologic conditions.

Neither of the CNMs had had intensive experience in delivery before coming to Kaiser. When the second CNM arrived, she was placed in the delivery room for several weeks before assuming a practice pattern similar to the first CNM's. Within a few months that pattern had changed substantially, with more time allotted to prenatal education and less time to the delivery room. For the past year the one remaining CNM has practiced at the small Vancouver clinic, with one OB-GYN physician. She teaches no prenatal classes. She treats minor gynecological problems and gives routine pelvic exams, with Pap smears. She screens all new pregnancies, retaining some of the uncomplicated cases for management during the prenatal period. However, she is isolated from labor and delivery -- the climactic test of the obstetrical specialty -- and thus has a sense of role truncation.*

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*The midwife, however inadequate, established her role long before obstetrics developed as a medical specialty. Thus in an earlier era it was the physician who replaced her rather than the other way around; in fact, the obstetrician established his role largely in combat with and at the expense of midwifery. The psychological setting of recent paramedic innovations may therefore be somewhat different in obstetrics than in medicine or pediatrics, where no such established precursor of the physician existed.

(Incidentally, nurse-midwifery may embody something of a role-invasion threat to physicians with respect not only to degree of substitutability but to dominance over the content of medical care as well. In general, nurse-midwives tend to be more receptive than physicians to natural birth and other obstetrical techniques that permit the patient to play an active role in the delivery process. In prenatal classes taught by CNMs, not only the CNMs' patients but the doctors' may be exposed to the Lamaze technique, alternative anesthetics, husband-in-delivery-room, and similar possibilities as matters of patient choice --- a perspective at odds with the traditional definition of the delivery room as run primarily for the busy physician's convenience, with the doctor in full command of an essentially passive patient.)*

At Kaiser the PNP's situation is more nearly comparable to the CNM's than to the PA's. The pediatrics specialty is children rather than nonwell children -- that is to say, the whole area of child development, normal as well as abnormal -- and the fully trained PNP's competence to manage well-baby development roughly resembles the CNM's competence to manage normal pregnancies. The Kaiser PNP handles telephone calls from mothers, gives going-home instructions for the newborn, and examines well babies on referral from the pediatricians. The usual arrangement has been for the physician to see babies at one, six, twelve and twenty-four months and the PNP at two, three, four, nine and eighteen months.

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*On this and other issues discussed throughout the paper, individual physicians vary substantially, in all three departments.

In her first six months of service, 62% of the babies referred to the PNP came through 4 (of a potential 14) pediatricians, although those 4 doctors handled only 33% of newborns delivered at the Kaiser hospital. Another 4 pediatricians referred only 5% of the babies seen by the PNP despite their handling of 28% of the newborn. All 17 pediatricians answering a Departmental questionnaire deemed the PNP to be competent to perform well-baby care, but 7 thought that physician well-baby care was better. Even so, Kaiser pediatricians appeared to be more receptive to PNPs than were pediatricians in general at that time.*

Examining and monitoring the development of well babies are a large segment of the pediatrician's practice, and pediatricians have not been scarce. An expansion of provider supply, whether paramedic or M.D., could seriously erode the advantaged market position which physicians in general so long have enjoyed. The recent experiences of college professors and engineers on this point are an open text for all professions, and physicians cannot have missed the additional instruction. Because PNPs, and especially CNMs, are surrogates for pediatricians and obstetricians to a degree that is not true of PAs and internists, there may be more of a tendency to arrange medical care delivery so that CNMs and PNPs, in contrast to PAs, do not develop patients of their own. In obstetrics and pediatrics there may be a greater propensity to make a physician input (over and above general supervision) necessary at

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*Kaiser's experience with the PNP, as discussed here, is taken primarily from Andrew G. Glass, Lois Heinlein, and Lois Grufke, "Using a Nurse Practitioner in a Prepaid Group Practice," a paper presented to the American Public Health Association's Annual Meeting, 1971.