

THE SOCIAL CONTROL OF MEDICAL PRACTICE

Licensure Versus Output Monitoring

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The Report of the Carnegie Commission on Higher Education¹ is the most recent of a series of evaluations to highlight the acute shortage of medical manpower (doctors, dentists, nurses and so forth).² To meet the future needs of this country, the report strongly recommends that the number of medical school entrants should be increased from the present 9,000 to 15,300 by 1976, and to 16,400 by 1978. Such an increase should be accompanied by an average expansion of approximately 39–44 per cent in existing and developing schools by 1978. Also, the number of dental school entrants should be increased to at least 5,000 by 1976, and to 5,400 by 1980.³

More critical for the present, the Commission recommends that university health science centers consider the development of programs to train physician's and dentist's assistants.⁴ For although the physician shortage is certainly one of the factors responsible for the crisis in the provision of medical care, it is important to recognize that at least part of the shortage may be functional, that is, attributable to the extraordinarily inefficient manner in which health manpower resources are currently being employed. One commentator has gone so far as to suggest that the major problem today is not the paucity of physicians but rather the improper use of health manpower.⁵ It is becoming more apparent that there must be a dramatic change in the

organization of health care systems to free the doctor from many tasks that can be just as effectively performed by other types of health personnel.⁶

One of the major impediments both to the optimal utilization of existing categories of health personnel and to the development of new categories of auxiliary workers, is the body of state professional licensure laws.⁷ Once the Supreme Court, in the late nineteenth century, had removed the laissez-faire doctrine of freedom of contract from the area of health care, medical practice acts were passed in all the states.⁸ When written, these laws served as a means of regulating the human input into the health care delivery system by protecting the public from incompetent and unethical practitioners. The statutory mechanism of the practice acts granted a duly licensed physician an unlimited scope in the practice of medicine, and created a general prohibition on the practice of medicine by any other individual. Gradually, as other categories of medical professionals emerged, organized and exerted leverage upon the legislative process, a series of limited, narrowly defined scopes of practice were eked out of the general prohibition. As each new category took on the status and prestige of licensure, it in turn resisted the effort to be licensed of new groups that threatened to encroach upon its own perimeter of practice.⁹

It is not surprising that this mechanism has proved to be rigidly unresponsive to the sweeping technologic advances in medical care and to the huge increase in demand for health services resulting from the population explosion and societal recognition that adequate health care (subsidized by the state if necessary) is a right of every citizen.¹⁰ What is more, the practice acts have not accomplished what they were originally intended to do—that is, maintain a minimum standard of practitioner competence. Nowhere in the statutes governing physicians, nurses and other professionals are there provisions requiring the licensee to submit the periodic re-examination or to a program of continuing education in his specialty as a condition for maintaining licensure.¹¹

The draftsmen of the statutes did not foresee the tremendous explosion in medical knowledge beginning in the 1930's and continuing into the present, which has since subjected many a medical technique to the possibility of rapid obsolescence. Today, the renewing of licensure is a rubber-stamp procedure.¹²

No one would question that the doctor shortage could at least be mitigated by delegating those routine tasks traditionally reserved for the physician to qualified persons lower in the health care hierarchy. However, were the patient to sustain an injury at the hands of a physician's substitute and elect to bring a lawsuit for damages, two legal doctrines may come into play that hardly favor either the physician or his assistant. The first is the *respondeat superior* ("let the master respond") doctrine, which allows the patient to recover from the physician for the injurious actions of his negligent employee. The second is the "negligence per se" rule, which provides that mere violation of the terms of the statute is an inference of negligence or is conclusive on the issue of negligence.¹³

The consequences of delegation are even more severe if the delegatee is unlicensed. Under the practice acts, the delegatee would be criminally liable for the unlicensed practice of medicine and the professional could be prosecuted for aiding and abetting the unlicensed practice of medicine.¹⁴ In a civil suit, of course, the unlicensed delegatee could not rely upon whatever presumption of competence a licensed worker might enjoy by virtue of his occupation's having been recognized by the legislature.

The problem of delegation is further complicated by the fact that the statutory language delineating a particular profession or occupation's scope of practice does not provide the physician with a "bright-line" distinction between what is within a subordinate's scope of practice and what is without. It is immensely difficult to apply the vaguely worded statutory terms of the various scopes of practice to complex modern-day treatment procedures that have been shaped by rapid technologic advances unforeseen at the time the statutes were enacted.

Thus, the uncertainty of the statutory language and the ever-present threat of civil, if not criminal, liability combine to produce a detrimental chilling effect upon any physician inclined to reallocate tasks among old and new categories of medical personnel in furtherance of the social policy of expanded medical care.¹⁵

Another feature of the practice acts that impedes the flexible utilization of manpower is commonly referred to as vertical (career) immobility.¹⁶ Each licensed category of health personnel has its own set of formal educational requirements. The unlicensed aspirant, or the already-licensed worker wishing to move up to a more responsible position, may well find that his own education or experience is deemed inadequate or irrelevant to the new position, and that therefore he must undertake a costly and time-consuming formal educational program to qualify. The mechanism of the present state licensure laws also results in what is commonly referred to as horizontal (career) immobility,¹⁷ or the power of one state medical board to refuse recognition of another state's license. A physician who has received a license in one state may not be permitted to practice medicine in an adjoining state.¹⁸ Of course, to some extent 48 states provide some mechanism for recognition, be it through endorsement of another state's licenses (based on equivalent standards) or reciprocity (equivalence plus reciprocal recognition by both states). Yet, as shown by the Health Manpower Report, in 16 of the states all endorsements of licenses are under the control of the licensing board at its discretion, and only eight states endorse all the licenses of all other jurisdictions.

The impact of restrictions upon recognition of other states' licenses affects not only the extent of territorial coverage of the physician, but also the extent of authority for delegation of responsibilities. Consequently, a physician's assistant would likewise be prevented from providing complete medical coverage to a rural area spanning state boundaries. And, despite intense pressures for change because of the shortage of physicians, little evidence is found of significant modifications of recognition

policies, although there appears to be some liberalization of the reciprocity requirement as shown by the increasing number of states that have granted discretionary authority to licensing agencies for endorsing licenses of nonreciprocating states.¹⁹

Of the proposed alternatives to the practice acts in their present form, one planning model has been advanced that addresses itself specifically to the shortcomings of the state mandatory licensure system recounted above. That model, first put forth by Nathan Hershey²⁰ and later modified by Dan McAdams²¹ would give state institutional licensing bodies the authority to establish job descriptions for various positions in the health care institution. The job descriptions would be broadly defined so as to provide the institutions with some flexibility for employing individuals in accordance with their self-perceived manpower needs.

To the extent that the Hershey model shifts the regulatory focus from the individual practitioner in the abstract to the individual in the context of his institutional function, it complements two other recent trends in the reorganization of the health care delivery system: (1) the growing tendency of medical care institutions to have attributed to them characteristics of responsibility and liability that have traditionally been ascribed to the individual practitioner; and (2) the move toward national standards of care, as indicated by recent malpractice case decisions and by bills currently before Congress proposing national programs of health care. Both warrant separate examination to understand the impetus they provide for a radical alteration of present licensure laws.

Despite its compatibility with these important trends in the organization of health care, the Hershey model should not be viewed as more than an interim measure. To appreciate why this is so, it is helpful to think in terms of "evolutionary stages" of health manpower regulation, defined and differentiated in terms of the regulatory mode peculiar to each stage. Though it has been 70-odd years since the demise of the freedom of contract doctrine, manpower regulation cannot be said to have

passed beyond its first evolutionary stage. That stage is characterized by its reliance on the screening of human *inputs* into the health care delivery system as the sole means of maintaining quality control in the practice of the healing arts. The Hershey model perpetuates this traditional reliance on input regulation; it does not, therefore, capitalize upon the results of recent research involving the entirely different idea of quality control that, when perfected, will enable manpower regulation to move into its second evolutionary stage. With the help of applied computer techniques, medical scientists will be able to quantify what were formerly crude and unsystematized articulations of treatment outcomes (outputs). Such a method of quality control portends radical reorderings not only in the manpower regime but also throughout the health care system of which it is a component. Because of its emphasis on the institutional context, the Hershey model provides an excellent bridge between the first and second evolutionary stages of manpower regulation. The point that needs to be stressed about the Hershey model—particularly in light of the fact that aspects of it have been included in the comprehensive health care bills now before Congress—is that it is transitional, no more and no less. Truly comprehensive and long-range planning for this nation's health needs must recognize the benefits to be derived in terms of flexibility from the output-measurement method of quality control.

ALTERNATIVE MODELS

Because of the inadequacies of the present licensure system, the following proposals have been suggested for reforming it:

1. Modifying existing personnel licensure laws to provide for increased task delegation and periodic re-examination of health personnel.
2. Establishing a national qualifying board to set national standards, administer national examinations and thereby eliminate the present "chaos of state's rights."²²

3. Abolishing personnel licensure for a scheme of institutional licensing.

The first recommendation, that of strengthening existing state laws, can be achieved through exemption clauses that "loosen up" requirements for delegation of responsibility by the physician, and provisions that require re-examination and continuing education. This will result at best in mitigating the onerous aspects of respondeat superior on the full utilization of medical manpower, and in an improvement of consumer protection, but will fail to resolve other critical restrictive features of mandatory licensure—i.e., rigid categorization of personnel, and vertical and horizontal immobility.

The second proposal seems much more in keeping with contemporary trends toward national standards of care.²³ Besides improving the protection of the patient against incompetent care, a national scheme would eliminate the problems of horizontal immobility that are inherent in individual state licensure. However, it is unlikely that a national licensure of personnel per se will resolve the restrictive effects of rigid categorization of personnel, vertical immobility and physician liability under the respondeat superior doctrine. Therefore, its overall effect would probably be to hinder the optimal utilization of health manpower.

The last recommendation, that of merging the two kinds of licensing—personnel and institutional—into one system, developed out of an awareness of the incompatibility of personnel patterns established by licensing legislation and those most advantageous to the institutions for providing patient care. Nathan Hershey worked out the first principal model for this new type of licensing. In his proposal, Hershey recommends that health services institutions be invested with the responsibility for regulating health care within limits determined by a state institutional licensing agency. This agency would be empowered to establish in broad terms with the advice of health care experts, "job descriptions, including required education and work experience for specific hospital positions."²⁴

The Hershey proposal is an improvement over the existing system of licensure for two reasons. First, more flexibility is provided for manpower innovation. Laws are difficult, if not impossible, to change at a rate consistent with necessary alterations in the use of health personnel. Here an agency can define the job descriptions of the institutional personnel and more easily modify the descriptions to meet new institutional needs. It has been suggested that the Hershey proposal would invest the institution with the role of "doer" in determining the distribution and quality of health care.²⁵ Although the institution enjoys a decidedly more active role in this system, nevertheless, it can hardly be equated with that of a "doer" for the state institutional licensing agency actually establishes the job descriptions and required qualifications with which the institution must comply.

Second, the possibility exists for circumventing the liability to physicians resulting from respondeat superior. Inasmuch as the health care institution is given major responsibility for deciding which personnel will perform which functions, it would appear reasonable to hold the institution responsible for the negligent acts of its employees. In fact, a natural consequence of this proposal might be the development of an institution-based compensation mechanism for patients injured while being treated by the institution. Such a scheme would operate in much the same manner as a workmen's compensation system, in which the negligence of the institution need not be established because specific injuries are compensated for in accordance with fixed payment schedules.²⁶

By the same token, the following important problems remain unresolved:

1. Horizontal immobility: according to Hershey institutional licensure would remain a state function. In fact, because each state institutional licensing agency will establish its own pattern of job descriptions, the proposal actually compounds the legal difficulties of moving across state boundaries.

2. Consumer protection: no provision is suggested that would counteract the educational obsolescence that is not prevented by the existing state laws, unless one can assume that the institution as employer will be in a position to act against individual incompetency. Even so, the standards of care would most likely be defined on a state-by-state rather than on a nationwide basis.
3. Despite the ease of altering job descriptions, the proposal may actually continue the problem of vertical immobility engendered by the licensure laws, unless the interrelation between the "institution" and the educational system were such as to facilitate personnel in obtaining necessary training for increasing levels of responsibility within the institution.

Recognizing some of the unresolved issues in the Hershey proposal, Dan McAdams made a major modification while retaining the basic structure of institutional licensure.²⁷ He suggested employing a private agency, such as the Joint Commission on Accreditation of Hospitals (JCAH), to assume the role (establishing job descriptions including required education and work experience) Hershey gave to the "state institutional licensing bodies." This private agency, representing all health occupations, would function in effect as a national qualifying mechanism, and thereby provide for the horizontal mobility that is the primary advantage of a national licensure code.²⁸ In addition, such an agency would assure the competency of practitioners by continually reviewing the credentials of participating health care personnel.²⁹ Perhaps the main concern McAdams has with his recommendation is that such an institutionally based (private) agency as JCAH would not guarantee the competence of practitioners who do not operate within an institutional setting.³⁰ This could be remedied if some mechanism were constructed that would essentially tie all health personnel into an institutional structure.³¹

The Hershey-McAdams institutional framework for licensure

seems to be the most promising for meeting present health needs. As will be explored in the next section, it will be possible in the near future to improve upon the institutional paradigm with a system that reflects the rapidly developing technology in the monitoring of the output of health care as a method of quality control.

However, before assessing the impact of this development, considering the close association of the Hershey-McAdams proposals with the emerging trends toward the institutionalization of liability, and the establishment of national standards of care, it would be appropriate to examine these trends.

TWO CONVERGENT TRENDS IN THE ORGANIZATION OF THE HEALTH CARE SYSTEM

*Institutionalization of Liability*³²

The trend toward the institutionalization of liability is most evident in several recent court cases. In the past most state courts drew a distinction between medical and administrative acts as a means for determining hospital liability. The rationale for this differentiation is twofold: that a hospital functioning as a corporation could not practice medicine in the traditional sense, and that the trained professional was an independent contractor and not "controlled" by anyone.³³ Therefore, a hospital could not be held derivatively responsible for the negligent acts of its professional employees, though it could be so held for "administrative negligence."³⁴

But, the medical-administrative dichotomy is being increasingly ignored.³⁵ The hospital is becoming more and more liable³⁶ either under the theory of corporate negligence (a result of selecting or retaining incompetent employees; negligently maintaining its equipment and buildings; or for furnishing defective equipment or supplies),³⁷ or that of vicarious liability for the acts of its individual employees (physicians, nurses). With regard to the former, the Darling case³⁸ in 1965 extended considerably the scope of corporate negligence by holding the hospital liable for violation of duties it owes to the

patient.³⁹ In this now-famous case an 18-year old male was treated for a fractured leg at the emergency ward of a community hospital. A general practitioner working in the emergency ward treated the patient by applying traction and placing his leg in a cast. After a few days passed the patient complained frequently of severe pain (caused by circulatory impairment from compression) and the odor of decayed tissue was observed. But necessary attention was delayed until amputation of the leg was required.

Legal action was brought against the hospital;⁴⁰ and, although the general practitioner was not employed by the hospital, the institution nevertheless was found liable for allowing an unqualified doctor to perform orthopedic surgery, and for not requiring consultation or review of treatment. Interestingly, the court permitted the application of standards on consultation requirements in the regulations of the state hospital licensing agency, in the hospital's own bylaws, and in the private standards of expected care promulgated by the Joint Commission on Accreditation of Hospitals.⁴¹ But, the most important feature of this case is the redefinition of the role of the institution in the practice of medicine. The court was not suggesting that the hospital must actually control the medical practice of the physician.⁴² Instead, the decision emphasizes the joint responsibilities of physician and institution for the standards of patient care, and thus refutes the antiquated notion that a corporation cannot practice medicine.⁴³ Subsequent decisions on corporate negligence have generally followed the holdings in the *Darling* case, and have often added innuendoes of interpretation. For example, in *Fiorentino v. Wenger*, the New York Appellate Court stated that an institution may be liable if the administration knows, or should know that a physician is departing from acceptable modes of care.⁴⁴

The second type of liability that is increasingly attributed to the hospital is vicarious liability under the doctrine of *respondeat superior*. This trend particularly demonstrates the shift away from the notion of the physician as "Captain-of-the-

Ship" toward that of the institutionalization of liability; and, concomitantly, an expanded interpretation of medical practice wherein the institution is viewed as the primary provider of care.⁴⁵ The case of French versus Fisher illustrates this new development.⁴⁶ In this case, a scrub nurse incorrectly counted the number of sponges following an abdominal operation on an infant. After a few days the child became critically ill, and it was necessary to operate and remove two-thirds of the child's small intestine because of the presence of a sponge. Under the traditional "Captain-of-the-Ship" doctrine, the surgeon would have been held liable for the nurse's negligence. However, the court abandoned this doctrine and found the hospital liable.

The shift of liability from the physician to the hospital involves another aspect of liability in addition to respondeat superior; i.e., the determination of accepted standards of care. *Kapuschinsky versus U.S.*⁴⁷ demonstrates the use of this determinant of liability, which has often been employed against physicians. In this case the government was found negligent for allowing an inexperienced nurse who had not been subjected to proper physical examination to come in "critical contact" with a premature baby. As a result the baby contracted staphylococcus infection of the hips, which caused residual injuries. The court ruled that it was no defense for the hospital to argue that the accepted standard of care is that prevailing within the community (the locality rule), and allowed a medical expert from outside the area to testify.

As the next section will explain, a similar move from the "locality" principle to national standards for physician practice has been operating the past several years.⁴⁸ The parallels between evaluations of standards of care expected of physicians and those of institutions, and the obvious transfer of respondeat superior from physician to institution are striking evidences of the institutionalization of medical liability.

National Standards of Care

Augmenting the impact of the move toward the institutional-

ization of liability on the development of an institutional framework of licensure, is an equally forceful trend toward the delineation of national standards of care. Perhaps the most significant manifestations of this trend are:

1. The development by the National Board of Medical Examiners of national examinations for determining the qualification of physicians to practice.
2. Recent court decisions involving medical malpractice that refute the traditional locality rule for acceptable standards of care.
3. Emerging proposals (bills) for a national program of health care.

Regarding the first of these manifestations, it is sufficient to say that these examinations are being accepted by virtually all the states in lieu of individual state qualifying examinations, and probably will eventually replace the state exams altogether.⁴⁹

Recently several court cases involving medical malpractice have refuted the "locality rule" and advocated the application of national standards of physician care. One of the most important landmark cases is *Brune versus Belinkoff*,⁵⁰ which was decided in 1968. In this case a specialist in anesthesiology administered a high dosage of pontocaine as a spinal anesthetic to a pregnant woman. Many hours after the birth of her child the patient attempted to get out of bed, but because of numbness and weakness in her left leg she fell and injured herself. At the trial a specialist from Boston testified that the dosage of pontocaine administered was excessive, but the court charged the jury to apply the locality rule. The Supreme Court of Massachusetts, on the other hand, upheld the introduction of this testimony⁵¹ stating that the proper standard is not whether the physician has exercised the level of care acceptable in the locality in which he practices, but rather that care and skill of the average qualified practitioner taking into account medical advances and available resources.⁵²

The Brune versus Belinkoff case, and the line of cases that followed supporting this holding, are final breaks with the outmoded past.⁵³ But, from a more progressive viewpoint, they are also forerunners of a new trend that is attempting to define in a very broad sense a national concept of acceptable medical care.⁵⁴

The last significant manifestation to be discussed is that of the current proposals for a national program of health care. These proposals are efforts to use specific payment methods to alter and expand the organization and delivery of health services. Two of these "bills"⁵⁵ in particular—"Health Securities Program" (S. 3: Kennedy Bill), and "National Health Insurance and Health Services Improvement Act of 1971" (S. 836: Javits Bill)—provide specifically for the implementation of "national standards" for health personnel. The "Health Securities Program" explicitly renders restrictive state licensure laws inoperative in determining the eligibility of otherwise qualified physicians and other health personnel for the program.⁵⁶ In addition, this bill provides for the establishment of national standards for participation of both individual and institutional providers of health services,⁵⁷ and authorizes the Health Security Board to set requirements for the continuing education of health personnel.⁵⁸

The "Javits Bill" is similar to the "Kennedy Bill" in setting national standards, though it has no explicit provision to negate the state licensure laws. However, the "Javits Bill" does authorize the Secretary to prescribe requirements for participating physicians in the sections entitled as follows:

- "A. Standards of continuing professional education
- B. National minimum standards of licensure . . . ⁵⁹
- C. Adherence to the standards for continuance in the program."⁶⁰

In effect this authority circumvents the restrictions of the state licensure laws, and is not unlike that granted the Secretary in the Social Security Amendment of 1971 (Sec. 239, "Payments to Health Maintenance Organizations").⁶¹ This provision in-

vests the Secretary with the capability of defining national standards, but, unlike the "Javits Bill," it does not specify the requirements the Secretary can impose.⁶²

It is quite likely that some national program of health will be enacted in the near future. Significant premonitory evidence of this is the recent passage of the Emergency Health Personnel Act of 1970.⁶³ This new law will expand the scope of activity of the Public Health Service by allowing health professionals (doctors, dentists, nurses) to enlist in the Service for the purpose of dispensing medical care in areas where demand is high, such as the rural areas and urban ghettos. Those participating in the Service will be paid on a salary basis by the federal government and be assigned at the discretion of the Secretary of Health, Education, and Welfare. In effect, this act is a major step toward the nationalization of the medical care system because it provides government involvement in direct health services to population groups long felt within the exclusive province of the private practice of medicine.⁶⁴

All three of these signs of a shift toward national standards of care, along with those regarding changes in the role of the institution in medical care, strongly support a dynamic alteration of state licensure policies. Logically, for a new licensure policy to be compatible with these trends, it would have to emphasize the primacy of the health care institution within a nationwide context. Of those being considered at the present time, the Hershey-McAdams proposal, seems to be the one that most likely fulfills these objectives. But, as discussed earlier, it merely perpetuates the traditional reliance on input regulation and, therefore, does not recognize the important developments in outcome-measurements of health care.

THE CASE FOR NONLICENSURE

The solutions presented thus far for affording societal control over the quality of health services have continued to stress the regulation of the inputs into medical care by some form of

licensure. Of these proposals, the Hershey-McAdams recommendation seems basically compatible with both the discernible trends toward the institutionalization of liability and national standards of care, and the growing need for a system that allows for a more flexible allocation of duties among health personnel. As a result, the institutional framework of licensure is presently the most acceptable plan for resolving many of the issues affecting the regulation of health care.

However, one of the most critical events of the contemporary medical scene has not been considered, and that is the introduction of computer technology. The computer has already been successfully applied to various medical tasks. It is used in diagnostic tests such as automated readings of electrocardiograms, image processing, chromosome analysis, retinograms, mammograms and electroencephalograms; and, in therapeutic activities such as monitoring cardiac patients, and delivering anesthesia during surgery. Now, because of the computer, it will be possible to monitor accurately the output of medical care, an accomplishment that will undoubtedly revolutionize the entire health care system.⁶⁵

In an unrefined way output determinations have been operational in hospitals for several years, conducted by such groups as tissue and infection committees, utilization review committees and medical record and audit committees. The function of these groups has been to evaluate the changes in the patient's condition during his hospitalization to assure high standards of performance in the delivery of care. Assessments of care have unfortunately been predicated on imprecise criteria and are accordingly expressed in broad terms—either descriptively, or as the degree to which actual outcome approaches expected outcome, or as an accounting of the patient's maintenance, gain or loss of status.⁶⁶ However, much research is being conducted on arriving at an operational definition of health status that will provide some criteria for establishing meaningful output determinants. For example, it has been proposed that a definition for health status might be worked around the notion of

“function/dysfunction” based on one’s ability or inability for carrying out the usual daily activities appropriate to individual social roles.⁶⁷ Alternatively, it might be based on a scale of classification of “impairment,” that is along a continuum from “no impairment” to “bedridden” and “death.”⁶⁸ It is expected that within the next four to five years an operational definition of “health status” will have been sufficiently researched to serve as the basis for developing output determinants.⁶⁹

The computer is actually forcing a realignment of medical information into more sophisticated organized patterns that will be far more objective and quantifiable. The clinician is being compelled to improve the standardization of medical procedures by developing methods “for becoming more consistent in designating, more uniform in recording and more reliable in verifying symptoms and signs that are main units of clinical measurement.”⁷⁰ Lawrence Weed at the Cleveland Metropolitan General Hospital has developed one of the most thoughtful approaches to organizing medical information in a manner that would be readily adaptable to computer requirements, and provide a more rational method for patient management. Weed recommends orienting the data of patients around *each medical problem*, so that as the data develop the findings can be “crystallized” into specific diagnoses that require particular therapy. Over time the “problem-oriented” medical records would result in an amount of data from various patients around specific problems sufficient enough to ensure that new “standards for reasonable numbers of tests and good care will emerge.”⁷¹ Once standards are so delineated, it would be relatively easy with the computer to set up methods for appraising the performance not only of the individual practitioner, but also that of the health care institution. A computer could be programmed to screen large amounts of data for evidence of inadequate care (diagnosis, treatment and so forth) and thereby provide information for monitoring the quality of care. This is already being done on a limited scale in several institutions throughout the country, and it is felt that the capability exists now for expand-

ing computer usage to the point where it will assume the primary role in the regulation of health care.⁷²

The implementation of a computerized nationwide yet regionally based network for monitoring the quality of care of medical institutions would dynamically alter the utilization of health manpower. No longer would professional licensure, or "input" regulation be needed; for now it would be possible to regulate the end-product of elements, professional and institutional, that interact in the care of patients. Input regulation is at best an indirect attempt to control the output of the medical care process. From the societal standpoint it serves no other function and consequently would be rendered obsolete by the development of a reliable mechanism for regulating output.

Although having some features in common with the Hershey-McAdams institutional framework for licensure, the theoretical model of a system of output monitoring would depart in significant ways from that framework. Emphasis in the proposed model would be on the institution as the responsible agent for providing care, on the use of national rather than state standards of care and on the freedom for employing various mixes of health personnel to meet individual institutional and community needs. But, in addition, this shift of attention from "input" to "output" would have a radical impact on three crucial components of medical care: (1) consumer protection, (2) medical "professionalism" and (3) medical education.

With regard to "consumer protection" the results of a system of output regulation would be most favorable. Standards for acceptable care would have to be established on a national basis and applied through regional organizations against the "output" of individual institutions. The monitoring itself could be conducted by a private agency, which would work closely with both professional medical societies (representing all health personnel), and the federal agency responsible for financing the care. One could reasonably conjecture that the primary sanction against the institution providing inadequate care would possi-

bly be ultimate loss of "certification" by the regulatory agency, and concomitant withdrawal of federal support.

Consumer participation would also likely be an important feature of this new system. Each institution would be forced to establish its own "regulatory" body that would periodically evaluate the activities of its health personnel in the light of current needs. Such a committee should consist of representatives from the various medical professions as well as members of the community. This regulatory committee, to respond to the requirements of the nationwide agency, would be empowered to impose sanctions on individual practitioners who are performing inadequately. Such sanctions might take the form of requiring additional education or, in the extreme, revising an individual's job description. And, the last aspect of consumer protection would be some means for compensating injuries incurred from the institution's care. Because the institution rather than the individual would be the provider of care, it would be liable for the negligence of its personnel. A natural resolution of this problem might be the implementation of some national insurance compensation scheme analogous to workman's compensation that would recompense the injured party for the institution's negligence.

The second essential component of health care that will be affected by the shift to "output" regulation is the professional identity of medicine. The salient characteristic of a profession that distinguishes it from other occupations is that society has invested it with a "legitimate" autonomy, the right to determine both who can perform its functions, and how.⁷³ Licensure has served a pivotal role in shaping the contours of the medical profession. Though conceived as a method for protecting the health consumer, licensure as an operating system has been forced to rely heavily on the expertise of licensed members of the profession, so that it rapidly became a powerful instrument for creating an elite that has been able to effectively exclude others from its scope of activities.

The important issue now is whether licensure of medical

personnel is still essential for the preservation of a professional identity. It is probably not that important, for the "core" characteristics that define the profession—specialized training in an "abstract" discipline, and a collective orientation to service—will survive without licensure.⁷⁴ The effects of "nonlicensure" might be the converse, that is that more emphasis will be appropriately placed on the educational features of the profession as reflected in the quality of performance, which will enhance the sense of identity and "collectiveness." The physician would continue as the director of the health care team. However, opportunities would be provided for vertical mobility whereby particular health workers (e.g., technologists, nurses) could conceivably, through continuing education or apprenticeship, climb a "ladder" of progressive responsibility. Throughout the medical care professions, the proper allocation of responsibilities as determined by medical training and competence should introduce significantly more incentive than has licensure for achieving optimum performance.⁷⁵

Finally, the medical curriculum will undergo profound revisions as a result of the use of computer technology in medical care. This will occur primarily for two reasons. First, the computer's capabilities for rapid and accurate retrieval of medical information will make the current need for enormous accumulations of facts essentially superfluous. The student will be free for the first time to pursue other disciplines of increasing importance to the institutional practice of medicine, i.e., the social, economic and behavioral sciences, as well as the humanities (particularly ethics).⁷⁶ And, second, the multitudes of social, economic and medical factors that will converge at every major medical decision will require specialized personnel capable of understanding the intricate processes of "medical" decision-making. The overall impact, therefore, will be a changing of emphasis from basic medical research to the perplexing issues of health services.

For the other members of the health care team, formal education will probably be geared closer to that of the physician,

especially for the first few years. Even now universities are experimenting with such innovations as the development of a "core" curriculum for pharmacists, physician assistants, nurses and others.⁷⁷ The advantage of upgrading the education of other health professionals is that they will be competent to be employed with greater flexibility.

CONCLUSION

It is generally agreed that the present state mandatory licensure system, with its rigid delineation of functions for each of the respective health professions, does not allow the flexibility in manpower utilization that is required in expanding current health resources to provide comprehensive health care for every citizen. One suggested alternative to the present licensure laws, the Hershey-McAdams model, offers greater flexibility in manpower use by allowing the manpower classifications to be defined by, and in terms of the needs of, the health care institution. The Hershey model has the added advantage of complementing the general trend toward the institutionalization of health care (and the legal liability therefor) and the nationalization of the standards of that care.

Because of its sole reliance on input regulation to control the quality of practice—the trademark of the first evolutionary stage of manpower regulation—the Hershey model cannot jettison all the constrictive features of licensure. Notwithstanding its shortcomings in this respect, its institutional emphasis enables it to serve as a bridge between the first evolutionary stage of regulation and the second, the latter of which is characterized by primary reliance on the measurement of treatment outcomes to achieve quality control. Recent advances in the quantification of these outcomes, or "outputs" of the health care system, enable medical scientists to predict that such a quality control mechanism will be widely operational in five years.

Viewed in this perspective, the legislative proposals currently before Congress, which contain structural components similar

to the Hershey model, are the blueprints of short-range planning only. Long-range planning to meet vastly increased consumer needs requires the drafting of legislation that will incorporate the free-form innovations of quality control through outcome measurement in a system of "nonlicensure."

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²³ See the discussion of the trend toward delineation of national standards of care in the next section of this paper.

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²⁵ McAdams, *op. cit.*, p. 52.

²⁶ Research on such a system for compensation is being conducted by the American Rehabilitation Foundation, Minneapolis, Minnesota.

²⁷ McAdams, *op. cit.*, pp. 51-53; Somers, A., HOSPITAL REGULATION: THE DILEMMA OF PUBLIC POLICY, Princeton, Princeton University Press, 1969, pp. 122, 125.

²⁸ McAdams, *op. cit.*, p. 52.

²⁹ *Ibid.*, p. 53. The agency would be composed of representatives from each health occupation as well as from the general public and would, in effect, set standards for each discipline.

³⁰ *Ibid.*, p. 53.

³¹ The Physician's Right to Hospital Staff Membership: The Public-Private Dichotomy, *Washington University Law Quarterly*, 485, December, 1966. Presently the physician's right to become a staff member of a hospital depends on whether that hospital is characterized as public or private. If it is a public institution the physician has the right to use the hospital facilities so long as he adheres to the hospital's regulations. In contrast, if it is a private hospital, the board of directors has nearly unlimited discretion in accepting or rejecting a physician for membership on the staff, and expelling him from the staff. If an institutional structure is to be effective it will be necessary to reexamine the rights of the physician in the private institution. See also, Somers, *op. cit.*, p. 18.

³² Of course recent bills being considered by Congress, which employ payment mechanisms as a means of achieving a new structure of provider services, reflect and give impetus to the institutionalization of all aspects of medical care: a. Section 239 of the Amendment to Title XVII of the Social Security Act—H. R. 1 (introduced by Mr. Mills, January 22, 1971, passed the House of

Representatives late June 1971): "Payments to Health Maintenance Organizations"—wherein the institution is paid on a "per capita rate for services provided for enrollees in such an organization." This emphasizes the institution over the individual physician by suggesting a mechanism other than fee-for-service. As a result, the institution becomes financially and otherwise the provider of care.

- b. S. 1623, "National Health Insurance Partnership Act of 1971," introduced by Senator Wallace Bennett on April 22, 1971, on behalf of the Administration: This would require employers to make available to employees and their families a health care plan under private insurance providing specified benefits. Employees would have the option of enrolling with an approved health maintenance organization (to be paid on a per capita basis under Family Health Insurance Plan for low-income families with children not covered under a required employer plan, HMO's would be paid a prospective per capita rate equal to 95 per cent of the estimated amount needed if the service were furnished by other providers in the area) and the employers would contract with these organizations for those employees who chose to enroll.
- c. "The Health Security Program" (S. 3) would stress a capitation payment mechanism allowing for fee-for-service to primary physicians. In addition, money would be distributed on a subregional fund basis determined by the size of the population. The overall effect would be toward paying larger institutions rather than individual physicians for health care, thereby resulting also in the institution as the provider of care. One senses the same potentiality for the Javits Bill (S. 836), though the details of payment have not been carefully defined.

³³ Southwick, R., *Hospitals Responsibility*, *Clev.—Mar. Law Review*, 17, 156, 1968.

³⁴ Leff, *op. cit.*, p. 369.

³⁵ Southwick, *op. cit.*, p. 156.

³⁶ Somers, *op. cit.*, pp. 37–38. Twenty-eight jurisdictions impose total liability for negligence on the hospital.

³⁷ Southwick, *op. cit.*, p. 151; Somers, *op. cit.*, p. 32.

³⁸ *Darling v. Charleston Community Hospital*, 33, Ill. 2d 326, 211 N.E. 2d 253, 1965.

³⁹ Southwick, *op. cit.*, p. 161; Somers, *op. cit.*, p. 32.

⁴⁰ Action also was taken against the physician, who settled the claim against him and was dismissed as a defendant. Southwick, *op. cit.*, p. 161. This is not a respondeat superior case for the negligence of the doctor was never determined in court and consequently the hospital could not be held vicariously liable.

⁴¹ As with the "locality principle" in standard of physician care, the hospital argued that its duty is to be determined by the care customarily offered by hospitals generally in its community. However, the court applied national standards as well. See Somers, *op. cit.*, p. 33.

⁴² Southwick, *op. cit.*, p. 161.

⁴³ *Ibid.*, pp. 160, 161.

⁴⁴ *Fiorentino v. Wenger*, 26 App. Div. 2d 693, 272 N.Y.S. 2d 557, 1966. In this case the surgeon had applied a surgical procedure that was not generally accepted treatment in the community for the patient's condition, and the child

died. The hospital was not held liable on appeal because there was no duty for it to obtain a second consent, or verify the one received. However, it could have been held liable if it knew, or should have known that an informed consent for surgical treatment was not obtained.

⁴⁵ Southwick, *op. cit.*, p. 159.

⁴⁶ *French v. Fisher*, 50 Tenn. App. 587, 362 S.W. 2d 926, 1962.

⁴⁷ *Kapuschinsky v. United States*, 248 F. Supp. 732 D.S.C., 1966.

⁴⁸ Southwick, *op. cit.*, p. 147. The courts are saying that hospitals and medical staff must adopt the "best" methods of professional standards, and not average methods or local community methods. Professional standards become a joint problem of hospital and medical staff; and the "community" has become "nationwide."

⁴⁹ Somers, *op. cit.*, p. 94.

⁵⁰ *Brune v. Belinkoff*, 354 Mass. 102, 235 N.E. 2d 793, 1968. Case overruled the 1880 case of *Small v. Howard*, 128 Mass. 131, which established in Massachusetts the "locality rule."

⁵¹ Landau, D., Medical Malpractice: Overturning Locality Rule Used in Determining a Physician's Standard of Skill and Care, *Boston University Law Review*, 48, 710.

⁵² *Brune v. Belinkoff*, *op. cit.*, The court also included a statement about the expected care from the general practitioner. The court said that the specialist should be held to the standard of skill of the average member of the profession practicing the specialty.

⁵³ Landau, *op. cit.*, p. 711.

⁵⁴ *Ibid.*, pp. 712, 713. One of the very real practical consequences of the *Brune v. Belinkoff* case (and similar ones) is that the decision represents a determined effort by the court to mitigate the burden on plaintiffs in malpractice cases. It attempts to do this by: (1) raising the professional standards of care to that of a major medical center, subject to some qualifications; (2) permitting expert medical witnesses to be obtained from other than "similar community;" (3) removing geographic limitations on the admissibility of medical treatises and books.

⁵⁵ The proposal endorsed by the American Medical Association is H.R. 4960, the "Health Care Insurance Act of 1971," introduced by Representative Richard Fulton on February 25, 1971. This bill is referred to as the Mediredit proposal. In the Mediredit proposal of 1970 (and the Fisher Bill—H.R. 1283—of 1971) utilization of the existing peer-review procedures was stressed. The "Health Care Insurance Act of 1971" deleted the provision that established Professional Review Organizations (PRO) to review charges and utilization. Of course, with the implementation of the AMA tax credit scheme it would be natural to include ultimately basic quality standards. The "National Healthcare Act of 1971," H.R. 4349, introduced by Representative Omar Bursleson on February 17, 1971, is endorsed by the Health Insurance Association of America. This Bill provides for setting standards for providers of services, be they Institutions (hospitals, extended care facilities and home health agencies); health maintenance organizations, or physicians and dentists.

Therefore, though not explicitly supporting national standards of care, all of the major types of proposals for a national program of health care seem implicitly to support the imposition of national standards. See: Report of A Spe-

cial Committee on The Provision of Health Services, AMERIPLAN: A PROPOSAL FOR THE DELIVERY AND FINANCING OF HEALTH SERVICES IN THE UNITED STATES, Chicago, American Hospital Association, 1970. From the standpoint of licensure of personnel, AMERIPLAN embodies the Hershey-McAdams model by investing the Health Care Corporation (the organizational entity that is capable of providing comprehensive health care to a defined population) with the authority for control over the use and development of personnel. In addition, AMERIPLAN provides for the establishment of national standards of care through a National Health Commission whose function would be to promulgate federal regulations for the Health Care Corporation. The state health commissions would be concerned with assuring that the Health Care Corporation complies with the national regulations.

⁵⁶ S. 3 ("The Health Security Program").

⁵⁷ *Ibid.*, Sx. 56 (a): (1), (3), (4).

⁵⁸ S. 3, Sx. 54, "Consideration of Professional Association Standards:" ". . . the Board shall take into consideration standards or criteria established or recommended by any appropriate professional or other association or organization."

⁵⁹ See "Javits Bill," S. 836, Sx. 141 A and B.

⁶⁰ *Ibid.*, Sx. 141 C.

⁶¹ H.R. 1, Sx. 239 (To add to Title XVIII of the Social Security Act Sx. 1976, "Payments to Health Maintenance Organizations").

⁶² H.R. 1, Sx. 239 (Sx. 1876 [4]), "demonstrates to the satisfaction of the Secretary proof of financial responsibility and proof of capability to provide comprehensive health care services, including institutional services, efficiently and economically;" and 6: ". . . that services measure up to quality standards which it establishes in accordance with regulations."

⁶³ Emergency Health Personnel Act of 1970, P.L. 91-623 (42 USC Sx 254b).

⁶⁴ Professionals will serve in such areas at the request of state health authorities and county medical societies, and participate in programs of Model Cities and Office of Economic Opportunity (in addition to traditional programs such as the Indian Health Service, Coast Guard Health Service, Public Health Service Hospitals that treat merchant seamen and so forth). This enlistment will be in lieu of military service.

⁶⁵ Schwartz, W., Medicine and the Computer: The Promise and Problems of Change, *New England Journal of Medicine*, 283, 1257, 1970.

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⁶⁹ Williamson, J. W., personal correspondence.

⁷⁰ Feinstein, A., CLINICAL JUDGMENT, Baltimore, The Williams & Wilkins Co., 1967, p. 329.

⁷¹ Weed, L., Medical Records that Guide and Teach, *New England Journal of Medicine*, 278, 593-600, 1968.

⁷² Schwartz, *op. cit.*, p. 1260. Drug control section (25) of the Kennedy Bill attempts to use drug treatment as a means of establishing standard treatments for various diseases. The Javits Bill also provides for a similar control. X Sx.25 (S. 3): "The Board . . . shall establish and disseminate (and review and if necessary revise, at least annually) (1) a list of drugs for use in participating institutions and comprehensive health service organizations, and (2) a list (for use outside such institutions and organizations) of diseases and conditions for the treatment of which drugs may be furnished as a covered service, and specification of the drugs that may be so furnished for each disease or condition listed."

⁷³ Freidson, E., PROFESSION OF MEDICINE: A STUDY OF THE SOCIOLOGY OF APPLIED KNOWLEDGE, New York, Dodd, Mead & Co., 1970, pp. 354-357.

⁷⁴ *Ibid.*, pp. 71-73.

⁷⁵ Drucker, P., THE PRACTICE OF MANAGEMENT, New York, Harper & Row, Publishers, 1954, Chapter 23.

⁷⁶ Schwartz, *op. cit.*, p. 1260.

⁷⁷ An example of such a curriculum is the pharmacist clinician program at the University of California, San Francisco.