The Quest for Better Hospital Care

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ON THE WALL of my office in Bethesda there is a reproduction in fine script of the Act of the Relief of Sick and Disabled Seamen, passed by the Fifth Congress of the United States at the close of the 18th century, which established the first governmental medical care program. I am reminded daily that 164 years ago, the first prepayment plan for comprehensive hospital care was authorized, at a premium rate of 20 cents a month deducted from the wages of the beneficiaries.

Five years after the act of July 16, 1798, the professor of the theory and practice of physic of Harvard Medical School wrote to the Federal official in charge of the Port of Boston:

". . . About 20 years ago a medical school was annexed to this university. . . . A course of lectures is given annually. . . . We have, however, felt and lamented the want of a hospital to which our pupils might repair to see our doctrines reduced to practice. Many and various have been the attempts to supply this deficiency but they have all failed and left only the distant hope of a marine hospital.... When President Washington visited this university . . . President Willard . . . suggested the great public utility of a hospital in the single point of medical instruction. . . . The late Mr. Russell declared repeatedly, to me, that he would give more than merely the ground on which to build an hospital on two conditions:

Dr. Masur delivered the Wilinsky Lecture at the Harvard School of Public Health, Boston, Mass., on April 17, 1962. He is Assistant Surgeon General and director, Clinical Center, National Institutes of Health, Public Health Service, and the current president of the American Hospital Association. "1st, that it should be erected in his native place Charlestown;

"2nd, that it should be extended to the instruction of medical students. . . .

"I visited President Adams at Quincy and acquainted him with the slender qualifications of the medical candidates in general. . . . In Philadelphia and New York medical instruction is on a better footing than it is with us . . . for the obvious reason they have hospitals for the admission of pupils to see the course of diseases as well as surgical operations. . . . With this plan, in view of making the marine hospital answer the purpose of medical instruction as well as the primary one of comforting and healing the sick and wounded, I have it in contemplation to apply for the appointment of Physician to it; as my view of conducting it, the general idea is:

"1st. To fulfill every thing required by its institution respecting the sick and wounded. The rules and orders respecting them to be considered as superseding all others.

"2nd. To introduce pupils of physic and surgery to the bedside of the sick and to all important chirurgical operations subjected to all those good and wholesome rules established in European hospitals.

"3rd. To give a set of clinical lectures comprehending what may be called extemporaneous practice of physic and surgery, and also a short course of lectures on the most approved mode of preserving the health of seamen, with other matters, that may arise out of existing circumstances which cannot at present be foreseen . . ."

Within a few years the professor of theory and practice, Dr. Benjamin Waterhouse, was appointed physician in charge and promptly

proceeded to carry out his ideas on medical service, medical education, and preventive medicine. As a conscientious "keeper of the hospital," Waterhouse immediately secured the construction of additional storage space, improved the landscaping, and revised the regulations regarding the conduct and privileges of the patients, the responsibilities of the steward, and the duties of the nurses. Your professorial ancestor and my Public Health Service predecessor started an outpatient service so that minor ailments and injuries could be treated without taking the seamen into the hospital in order to avoid filling up the limited number of beds which were needed for the more seriously sick applicants for admission. Moreover, he began an intern training program by the appointment of "a senior pupil, or a well-instructed medical young gentleman, constantly residing, night and day in the house."

In the light of similar difficulties nowadays about psychiatric services in general hospitals, it is interesting that Waterhouse also refused to admit insane seamen to his general hospital because they disturbed other patients.

We now come to the clinical investigation and preventive medicine aspects in the history of our common medical forefather. Waterhouse was probably the best educated physician who had ever come back from Europe to this country. Several years before he wrote the remarkable letter I have quoted, he published an article entitled "Something Curious in the Medical Line," which was an abstract of Jenner's classic inquiry on cowpox. Following the successful vaccination of his children and other members of the household, he arranged with the Board of Health of Boston-despite the opposition of most practicing physicians-to make a public experiment. His well-structured experiment included the use of normal controls and yielded indisputable evidence of the efficacy of the protective value of cowpox vaccination. The broadside issued by the Board of Health of Boston on December 16, 1802 (reproduced in the New England Journal of Medicine, Sept. 23, 1937), was a direct, effective publicizing to the profession and the public of a new advance in public health practice.

This vignette from the archives of the oldest general hospital in Massachusetts in the early days of Harvard provides a fascinating illustration of the antiquity of these major facets in today's quest for better care.

1. Availability of adequate facilities, with advance arrangements for group payment of hospital care.

2. Conditions imposed by philanthropic donors, such as the geographic location of a hospital.

3. University obligations in bedside instruction of students and responsibilities in the training of house officers.

4. Desirability of medical school affiliation for tax-supported hospitals.

5. Role of salaried physicians.

6. Primacy of the patient care function.

7. Need for more emphasis on ambulatory care.

8. Interrelationships of medical service, professional education, and biomedical research.

9. Necessity for effective organization and administration in the care of the sick.

10. Resistant attitudes of practicing physicians.

11. Prompt transmission of newly acquired knowledge to the medical profession and the public.

12. Integration of preventive measures in hospital and public health practice.

Some of these contemporary challenges have already been explored by my predecessors who have also had the privilege of serving as Wilinsky Lecturers.

In these deliberations on the quest for better hospital care, I shall limit myself to three propositions, all of which are self-evident, but not self-starting:

• The quality of hospital care is fundamentally an expression of the continued goodness of the physician.

• The improvement of the standards of care requires better means of measurement.

• The delivery of good care is dependent on the effectiveness of support to the physician and patient, achieved through sound organization and competent administration.

There is still much truth in the ancient quotation from the Isle of Cos that ". . . some patients . . . recover their health simply through contentment with the goodness of the physician." The *caritas* of the physician—his earnest and eager sympathy, his words, his attending these are all essential to the art of ministering to the sick; they earn the grateful respect of patients and their families. But these days we also expect the physician's goodness to include a command of the scientific skills of modern medicine so that he can be ever more useful.

The job of the physician, and of all of us who seek to hold up his hands, is to improve the health of our people. And this means, as the late Alan Gregg expressed it: reduction in the incidence of disease, reduction in the severity of illness, shortening of duration and convalescence, alleviation of pain, more frequent and more nearly complete restoration of function, and postponement of death. To do the job well, it is imperative that the physician have the opportunity and the intent to engage in the continuing discipline of study throughout his professional life.

There is a growing apprehension that the competence of medical practitioners in this country and others deteriorates within a few years after the completion of medical school and postgraduate training. Moreover, the accelerating pace of medical and scientific knowledge widens the gap between what is known and what is done. The phrase "tragedy of unused knowledge" is a literal expression of our failure to sustain the goodness of the physician.

Continuation education is a dominant problem of medicine in our time. Familiar are the discussions on the selection and preparation of students for a career in medicine, the faculty debates on undergraduate curriculum, and the insistence on the assumption of more responsibility by the medical schools for the obligations of training in the internship and residency. There are those who contend that our current system of education and training of doctors of medicine is "wasteful of time, lacking in thoroughness, and confused in objective." In this hour, I gladly abandon these problems of the instruction of medical students with the hope that all those in university circles who are ill at ease with conventional teaching programs will continue to press for change. The segment of the search for better care I deal with here relates to the educational refreshment of practicing members of the profession.

"Lifetime Learning for Physicians," a report issued a few weeks ago by the study director of the Joint Study Committee in Continuing Medical Education, opens with a pertinent quotation from a paper on postgraduate medical education by Dr. Laurence Ellis in the New England Journal of Medicine in 1954.

"My great uncle attended Harvard Medical School by purchasing a series of course tickets for lectures on pharmacology, materia medica, and so forth. Educators shudder at that type of undergraduate instruction today, when bedside teaching and learning by doing are the order of things. But how does the modern general practitioner get his instruction? By lectures, usually poorly delivered, at a time of day when both he and the lecturer are nodding with fatigue. Why is the type of instruction that was outmoded 50 years ago for medical students the best for the physician in practice? The answer is that it is not, but that postgraduate education is 50 years behind the times."

Several months ago, in dealing with this same subject, Sir George Pickering recalled that Sir Joseph Barcroft used to define a lecture as a process by which information is transferred from the notes of the lecturer to the notes of the lecturee without going through the minds of either.

In looking for educational prototypes which have intellectual quality, Dr. Bernard V. Dryer, director of the joint study committee, cites the accomplishments of the Physical Science Study Committee of Educational Services, which have been evaluated as highly significant educational advances. The dedication of Prof. Jerrold R. Zacharias of the Massachusetts Institute of Technology and his colleagues to the task of improving high school teaching of physics-to make the subject appealing to students, to improve the competence of teachers, to provide superior films for expert instruction-has stimulated similar activities in chemistry, biology, and mathematics. Dryer points out that we now have ways and means of utilizing modern technology of communication which can implement Ellis' 1954 proposal that "the best way of bringing medical teaching to the doctor's own doorstep is to develop in the community hospital an approximation of the teaching hospital."

We are at this moment in the midst of a

flurry of demands that the National Institutes of Health and other organizations devise some magic-wand utilization of mass communication to enable all physicians to keep up easily and painlessly with scientific progress.

During the past two decades this nation's investment in medical research has expanded with unprecedented velocity; the expenditures have zoomed from \$45 million in 1940 to approximately \$900 million in 1961. Concurrently, the stream of publications appears to have grown to the proportion of a flood, with many frustrations in attempting to maintain communications between the scientific community and the many medical specialties. It has been reckoned that the 5,000 medical journals published in a single year represent 11 million pages which, if lined up, would stretch from Chicago to Seattle. Continuous increase in the primary publications has been accompanied by more devices of secondary publication, such as abstracts, bibliographies, review papers, and indexes. Our hospitals need far better libraries with more space, better selection of publications, specially trained staff, and modern bibliographic devices. Technological innovations, through the use of electronic computers for medical literature analysis and retrieval systems, to be installed in the new National Library of Medicine, combined perhaps with similar regional resources, offer much hope for more effective systematic access to medical literature.

A recent staff paper at the National Institutes of Health points out that much attention has been given to (a) the incorporation of new knowledge into the educational base for professional degrees, and (b) the advanced training of laboratory investigators in research concepts and techniques in various scientific fields. The most serious inadequacy at the present time is in the educational and training process in communication between the research community and the health practitioners. The rapid pace of development in the biomedical sciences has long since outstripped the traditional devices of attendance at society lectures, perusal of a few journals, and exposure to the promotional literature of the pharmaceutical industry. Our Bethesda folks believe that many new findings which have been developed to the point of actual practice involve limitations and hazards whose

import can only be comprehended through an awareness of modern concepts of physiology, biochemistry, pharmacology, and metabolic processes.

The most realistic answer commensurate with the scope of the problem lies in large-scale continuing professional education through the entire career of physicians who are ready, able, and willing to keep themselves up to date.

What can we do to help the physicians in practice, who represent the living bridge from research to action? They are faced with inexorable, exacting demands of caring for sick people in the home, in the ward, in semiprivate units, and in private pavilions, and many of them want very much to keep on learning about recent advances.

The Dryer report of the Joint Study Committee in Continuing Medical Education envisions the creation of a nationwide "university without walls" in order to help maintain the lifelong competence of the physician. The development of this farseeing scheme would provide opportunities for individual and group learning activities with an organized, sequential, comprehensive curriculum produced by a national faculty. This nationwide program would be implemented with the cooperation of medical societies, hospitals, and government health agencies, and with the reinforcement of university programs. The teaching materials of core curriculums in all medical specialties would include texts, motion picture films, videotapes, and programed instruction through teaching machines, to be used in conjunction with bedside rounds, group clinics, seminars, clinical-pathological conferences, and other devices for active participation of physicians who desire to learn.

The consummation of such an imaginative plan is devoutly to be wished for. The "university without walls" could be realized with generous, sustained support by foundations, government, industry, and all physicians. It could indeed be the much-needed mechanism for "intellectual irrigation distributed from distant reservoirs" to safeguard us against professional drought. A recent editorial in the *British Medical Journal* entitled "Time to Participate" cautions that no amount of money and organization will successfully promote continued education of physicians unless adequate time can be found by practitioners in their busy lives. It is in this respect that I suggest that this yearning for time to participate will prove to be one of the potent stimuli to the establishment of more medical schools and the development of group practice in this country, in order to make it practical for conscientious physicians to cope with the growing frustration of trying to maintain a continuing competence by keeping abreast of scientific advances in medicine.

If I may paraphrase Dr. Benjamin Waterhouse's letter:

We too have felt and lamented the want of a program to which our practicing physicians could repair to see our newly acquired scientific knowledge reduced to practice. . . . Many and various have been the attempts to supply this deficiency, but they have all failed and left only the distant hope of a national program of coordinated activities in continuation education for general practitioners and specialists.

I would add too that it is the hospital, all hospitals, large and small, that must be the central point of local efforts to keep physicians up to date. Sir George Pickering has reminded us: "There is probably no more certain method of hastening the closing of the mind that constitutes intellectual death than 'experience' uncorrected by the kind of interchange with other minds that educational facilities provide. . . ."

In this respect, every hospital, assisted by a vigorous national source of modern audiovisual instructional materials, can serve as the local center for the day-by-day interchange that will contribute most to the continuing goodness of physicians.

The second proposition is that the improvement of care in hospitals requires better means of measurement of quality. Several years ago, Dr. Caldwell Esselstyn challenged a group of young turks in medical administration with this criterion for the evaluation of the quality of medical care ". . . the degree to which it is available, acceptable, comprehensive, documented, and continuous, and, the extent to which adequate therapy is based on accurate diagnosis and not symptomatology."

With this all-embracing definition of quality in mind, W. Palmer Dearing recently used the analogy of the six blind men who tried to describe an elephant. He suggested that each of us identifies "quality" in terms of his own experience and interest; the physician, hospital administrator, prepayment plan executive, and patient all have different approaches involving professional satisfaction, therapeutic success, efficiency, and economy.

Some clues to these different motivations, objectives, and routes can be gleaned from titles of articles in the variegated literature on the subject of quality during the past two decades:

Improving Quality of Care Through-

Training of Personnel Group Medical Care

Regionalization of Hospitals

Sound Principles of Administration

Hysterectomy: Therapeutic Necessity or Surgical Racket?

Unnecessary Ovariectomies.

Hospital Statistics Don't Tell the Truth.

Legal and Moral Aspects of Unnecessary Surgery.

- Why Pick on the Surgeons?
- Statistics Influence Medical Practice.

We Must Ask the Right Questions To Get the Right Answers.

Did They Have Pneumonia-Or Didn't They?

Opinions Are No Basis for Objective Analysis.

Prescribing-An Index to Quality of Medical Care.

Comparative Study of Appendectomy Rates.

The most perceptive guide on approaches to the quality of hospital care was published by Mindel Sheps in 1955, when she was a member of this faculty. Hospital evaluations have served the purpose of licensing or accreditation and stimulating improvement of quality through medical audit and professional service accounting. As indicated by the titles I have quoted from the literature, most of the efforts thus far have been designed to improve medical care rather than to appraise quality as a relative degree of goodness.

The Joint Commission on Accreditation of Hospitals, of which Dr. Wilinsky was one of the founding fathers, inherited most of its present standards of hospital appraisal from the American College of Surgeons (rates for mortality, autopsies, cesarean sections, postoperative infections, and pathological reports on surgical specimens). We have been keenly aware of the need for more criteria related to nonsurgical care.

With the financial support of the Public

Health Service, the American College of Physicians conducted a 3-year study, beginning in 1955, which attempted to devise methods by which the quality of internal medicine practice could be appraised in American hospitals. The proposed "medical care appraisal plan" provides for self-evaluation by staff physicians through an appointed committee and emphasizes that the quality of care should be the object of attention, not the quality of the record. These self-limiting recommendations have not undergone reliable validation studies.

The Veterans Administration hospitals, with almost 120,000 beds for all types and stages of illness, have a deep interest in the improvement of standards and the measurement of quality. The full-time staffs have a special opportunity for refinements of study techniques and for incorporating a tremendous amount of intramural appraisal data for the assessment of old and new indices of quality.

We shall be required to develop practical, reliable, and valid methods of measurement of quality of hospital and medical care. Here lies a fertile field of exploration for qualified clinicians, medical care administrators, public health experts, and statisticians in university centers throughout the nation to determine the degree to which we are now applying existing knowledge to the care of today's patients. Their findings will enable us to achieve superior results by the application of future knowledge to the better care of future patients. The great teaching hospitals have before them the challenge of example.

The third factor in our striving for better care relates to the dependence of the physician on the quality of support he receives through competent administration of a hospital and the need for more involvement of the medical staff. I have long had much puzzlement over the failure of most physicians to appreciate how little control they have over what really goes on between the large number of employees and the vast array of technical complexities involved in the round-the-clock care of the sick. An experimental project using a computer to facilitate certain activities, such as keeping of records, dispensing of medications, control of inventories, laboratory procedures, and admission and discharge arrangements will hopefully

be inaugurated soon in a great hospital in Boston. The task of the systems analyst in preparing machine programing for this brave new world of computer assistance is a dramatic reminder of the many prerequisites for care and the multiple elements of care involving (a) adequacy of facilities and (b) efficiency of administrative organization necessary to carry out the physician's orders.

Dr. Harvey Cushing described what we now call the "hospital complex" when he made acknowledgment, in his magisterial address at the Centenary of the Massachusetts General Hospital in 1921, to the fusion of countless people who help ". . . those who . . . have applied themselves to the forwarding of knowledge; those who have managed the business affairs of the hospital and its relations to the outside world; those, too, who have made the beds, kept the books, answered the phone, cooked the food, done the wash, stoked the fires, scrubbed the floors, and killed the rat. . . ."

The progressive development of a hospital requires the moral and intellectual leadership of the medical staff. Many physicians have not been willing to give their serious and individual attention to the problems of the hospital as a whole and to the administrative aspects which are imperative for good care.

With much insight the sociologists describe the charismatic role of the physician in our society. With far more wit, the canny Professor Bridie, in his charming essay on a proposed Hospital for Diseases of the Umbilicus, to be staffed by members of the Royal College of Omphalology, offers similar explanations as to why the hospital physician, surrounded by adoring acolytes, becomes an orgulous person. About 10 years ago, Stephen Taylor noted that the peculiarities of hospital administration spring, not only from its relation with illness and the emotions which illness arouses, but also from its relation with the most affluent and powerful of all professions in modern society-the medical profession. I am inclined to agree with his conclusion that "in a sense, the hospital administrator is less a master in his own house than any other administrator"-although I am by no means certain that some of my best friends who are deans will yield on this bit of special pleading.

The problem is not new, for we have testimony going back again to colonial days. It is said that George Washington once reported, after a hospital inspection, that he had found no principal director and no subordination among the surgeons. He believed that this led to disputes which would continue until the hospital was reduced to some system. We are still engaged in a similar activity of reducing the hospital to a better system—not so much in subordination as in coordination.

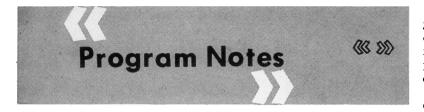
Three years ago George Bugbee gave a thoughtful address from this lecture platform on the dichotomy of hospital organization. I, too, believe that we must reorient our thinking in order to encourage physicians to develop more of the art of leadership in the tripartite responsibilities of trustees, administrator, and medical staff in the hospital of today. We are long overdue in urging physicians to share more broadly in hospital responsibilities in problems of planning, financing, training, raising standards, enforcing discipline, and in properly utilizing hospital beds. We need their collaborative leadership and support in strengthening these meaningful factors in our aspiration for better hospital care.

I would hope that in the hot war now being waged over the medical school curriculum and who on the faculty deserves more of the students' precious time, we may some day praise the dean who will insist that some hours be spared to instruct future physicians on the nature of their total responsibilities in the hospital—the center of better care where they will spend half their professional lives. I would pray too that when the universities will have assumed their proper responsibilities in the training of interns and residents, there will be additional opportunities to indoctrinate young physicians in the greater obligations of active participation in the affairs of the hospital and its relationships to the community. Finally, it may even be possible through these exposures to attract more physicians to the very satisfying specialty of medical care administration. As John Ellis said at a conference in Dundee, Scotland, last summer:

"... It will also allow doctors to bring that knowledge and outlook which no one else can bring to the problems of planning and administration in medicine, and thus make good medical care probable. When students are able to see that doctors of distinction in any and every branch are able and willing to give serious and undivided attention to the problems which affect medicine as a whole, to planning and policy and to administration, then, and perhaps only then, can we expect good students to enter the administrative branch."

These are but a few of the many ways we shall have to go, as we seek better care for patients in our hospitals. May I close with a summation from the excellent little book on "Excellence" by John Gardner.

"The problem is to achieve some measure of excellence *in this society*, with all its beloved and exasperating clutter, with all its exciting and debilitating confusion of standards, with all the stubborn problems that won't be solved and the equally stubborn ones that might. . . . If a society holds conflicting views about excellence—or cannot rouse itself to the pursuit of excellence—the consequences will be felt in everything that it undertakes. The disease may not attack every organ, but the resulting debility will be felt in all parts of the system. Everything that it does and everything that it strives for will be affected."



Hospital bills in the United States averaged \$33.91 per day in 1961, \$2.40, or about 7.5 percent, more than in 1960. They are highest in California, where the average is \$49.26 a day, and lowest in South Carolina, where the average is \$22.29.

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Only one out of five persons receiving care at public expense in New York City's municipal and voluntary hospitals in 1959 was a welfare client. Eighty percent were individuals who could manage their ordinary expenses but whose income and resources were found upon investigation to be insufficient to pay the full hospital bill.

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"Providing U.S. Scientists with Soviet Science Information," a revised edition, published by the National Science Foundation and available free from their publications office, lists firms which publish English translations of scientific literature issued in the Russian language.

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Free hearing tests, offered by Saint Barnabas Medical Center, in a soundproof booth in a Newark, N.J., railway station, attracted 1,100 clients, most aged 40 to 70, in less than 10 days. Tests took between 7 and 8 minutes per person. More than 70 percent had some degree of hearing loss and most were unaware of the loss. About 100 persons came to the rehabilitation center for help and were referred for diagnosis and treatment. There was no followup, according to a report in *Hospital Topics*, September 1962.

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The 700,000 alcoholics who live in New York cost the taxpayers \$50 million a year, estimated the State Co-ordinating Committee on Alcoholism. Alcoholics comprise 8 percent of the first admittances to State mental hospitals and 25 percent of relief cases, the report says, while 50 percent of the jail population is imprisoned for offenses related to alcohol. The report notes that New York's alcoholism is over the national average. About half of the State's alcoholics live in New York City.

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The 25th anniversary of Pennsylvania's clean streams law is observed in a report entitled "People and Water." This year, 71 percent of the State's waste-discharging industrial plants are treating wastes, compared with 8 percent in 1940, and 72.5 percent of the population in residences connected to sewerlines are served by sewage treatment plants, compared with 24.2 percent in 1935.

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Low-level radioactive debris from radioisotopes used in West Coast hospitals and laboratories is to be disposed of in containers off the Pacific Coast in accordance with a plan worked out by the National Academy of Sciences-National Research Council.

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In Washington, Ill., five dentists serve the 40 patients in the local nursing home. Florence L. Baltz, in a report in the *Journal of the Ameri*can Dental Association, states that 67 percent of those 75 years and older have lost all their teeth, and 90 percent of those with teeth have periodontal disease.

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Former Health, Education, and Welfare Secretaries Marion Folsom and Arthur Flemming have been named to a 12-man independent task force to study the best way to provide medical care for the aged. The group, privately financed, will consider the cost estimates and services entailed in medical care for the aged. Migratory workers are the subject of a documentary film, "Seeds of Progress," (60 mm., sound, 60 minutes) available for general or professional audiences at no charge except mailing costs from the Senate Subcommittee on Migratory Labor, G-237, New Senate Office Building, Washington 25, D.C. Phone CApital 4-3121, ext. 3764, and allow 30 days' notice.

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The New York State Medical Society joined the New York State Health Department in a circular appeal to all upstate physicians to report to public health agencies patients in any stage of syphilis, using the CDC confidential case report card. Telephone reports were requested for potentially infectious patients, to facilitate epidemiologic surveys.

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Care for unmarried mothers and their children, including both medical and social services provided by a battery of agencies, is being administered by the Connecticut Health Department, in collaboration with the medical society and voluntary organizations, in five counties.

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Hospital Administrative Services. providing accounting and statistical services in eight States, now offers its facilities on a national basis. with financial support from the W. K. Kellogg Foundation. Data submitted by hospitals are organized with automatic processing equipment into statements for individual hospitals and comparative reports for groups of hospitals. Standard accounting and record systems will be developed by HAS to facilitate comparison and analysis of costs and procedures. Participating hospitals pay a monthly fee, according to size. HAS is sponsored by the Hospital **Research and Educational Trust, 840** N. Lake Shore Drive, Chicago 1, Ill.

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Community health services for arthritis patients, with active public health nurses extending restorative care to patients in rural homes, are outlined in the *Nursing Outlook*, September 1962.