Waterbeds Help Reduce Cessations of Breathing in Premature Infants

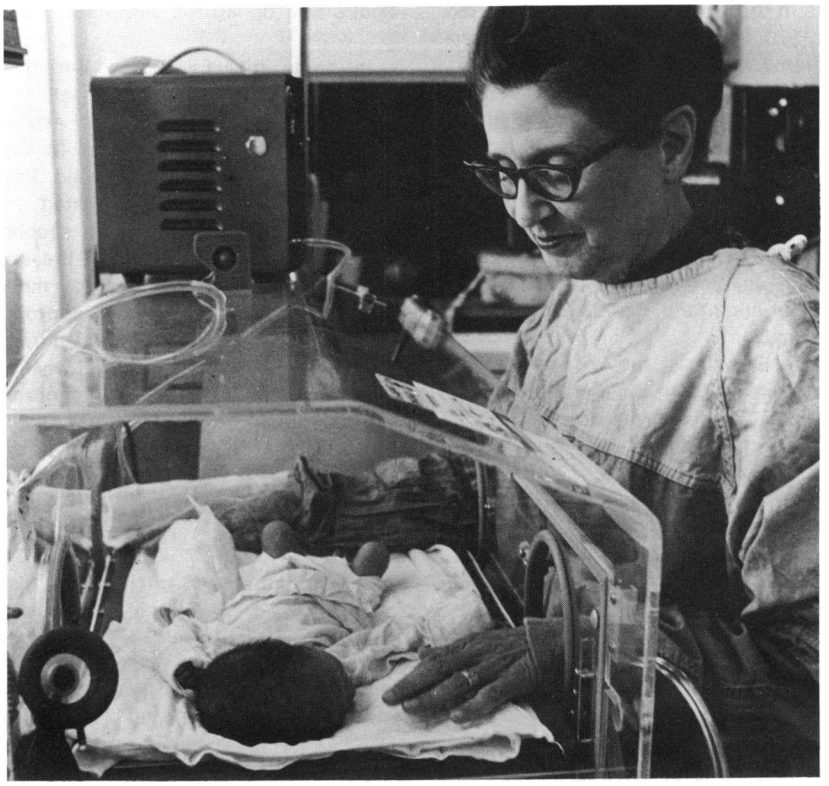
■ Researchers at Stanford University Medical Center have found that placing premature infants on waterbeds significantly reduces temporary cessations of breathing, which are common in premature babies.

The waterbed research has been conducted in the Stanford General Clinical Research Center since 1972 by Dr. Anneliese F. Korner, adjunct professor in the Department of Psychiatry and Behavioral Sciences. The General Clinical Research Center is supported by the Division of Research Resources af the National Institutes of Health.

The Stanford research has demonstrated that premature infants in incubators equipped with waterbeds have significantly fewer episodes in which breathing temporarily stops, that is, apneic spells, than infants in standard incubators. The waterbed studies are the outgrowth of a decade of research by Korner and her colleagues that has shown that movement stimulation is more effective in producing behavioral and developmental changes in newborns than touch, or body contact, which has long been considered the most important form of stimulation for very young infants.

The waterbeds are intended to make up for the movement stimulation normally brought about by the flotation of the fetus in the uterus and missed by the premature baby. Two types of waterbeds are being tested: One allows the infant to experience rocking effects produced by his or her own movements, and the other provides, in addition, mechanically produced oscillations in the rhythm of maternal respirations.

The waterbed, which is the same size as a regular incubator mattress but somewhat deeper, consists of a bag filled with 2 gallons of warm water placed on a plastic tray and covered with a highly elastic membrane. The water temperature is maintained by the incubator's heating system. Oscillation is provided by a compact unit resembling a respirator.



Dr. Anneliese Korner, adjunct professor at Stanford University Medical Center, observes infant sleeping on an oscillating waterbed inside an incubator

The premature infants on the waterbeds have not shown any adverse effects. Their pulse and respiration rates, temperature, weight changes, and oxygen needs are similar to those of infants in ordinary incubators. There have been no indications of motion sickness in any of the infants on the waterbeds.

In a current study, being done in collaboration with Dr. Christian Guilleminault, from the Stanford Sleep Disorder Clinic, the respiratory and sleep patterns are polygraphically recorded during periods in which the same babies are on and off oscillating waterbeds. Preliminary results show that the infants have fewer cessations of breathing when they are on the waterbeds than when they are off.

Studies are planned to determine the differences, if any, in benefits between the mechanically oscillating and the nonoscillating waterbeds. Future studies will also examine whether the movement stimulation provided by the waterbed results in additional benefits to the infants, such as better organized sleep patterns or improved motor and neurological development.

DIALYSIS IS CHEAPER AT HOME

■ The costs of treating victims of chronic kidney disease who require periodic blood cleansing are almost four times as high in the hospital as in the patient's own home. This result, from a study sponsored by the National Institutes of Health of dialysis costs at five major dialysis centers in the United States, was reported in 1976 in the journal "Kidney International."

According to this report, the average cost of one home dialysis treatment is approximately $43, while the average hospital treatment session costs about $159. Over the period of a year, expenditures for dialysis maintenance treatments (three per week) would amount to just under $7,000 in the home and to $24,700 in the hospital.

The authors of the report (Paul A. Hoffstein of the University of Texas Medical School, Dr. Keatha Krueger, director of the Diabetes Program of the National Institute of Arthritis, Metabolism, and Digestive Diseases, and Dr. Robert J. Wineman, associate chief of the Artificial Kidney-Chronic Uremia Program of that Institute) emphasized that their study was not designed to provide a statistical "average" of dialysis costs. Rather, the data are representative of the costs of a variety of dialysis modalities at several locations. As such, the data can be used to derive weekly, monthly, and annual costs for any particular modality.

The authors point out that the dialysis costs reported are for the rates prevailing in the study period, July through November 1973. The costs include personnel, supplies, travel, equipment, and incidental expenses but not physicians' services, radiology, or surgical preparation of patient's arm or leg for dialysis.

In home dialysis, the well-trained patient essentially treats himself, although he may require some assistance from a family member. In the second most economical method, limited care, the patient is treated by nurses or technicians in a special dialysis treatment center, and the average cost is $106. Finally, the most expensive dialysis, costing approximately $190, is that performed during the initial phase (lasting several weeks) of a patient's home treatment program.

The Rural Health Issue of *Public Health Reports*

■ Copies of "Solving Problems of Rural Health" are available free to interested readers. The collection of 13 papers concerned with the delivery of health services and public health problems in rural areas appeared in the July–August 1975 issue of *Public Health Reports.* For a copy of the reprinted issue, write to *Public Health Reports,* 9-53 Parklawn Bldg., Rockville, Md. 20857.

NIH Issues Some Documents Related to DNA Guidelines

■ The Office of Program Planning and Evaluation has prepared Recombinant DNA Research, volume 1. The publication is a public record of correspondence, proceedings of conferences, guidelines (proposed and released), public announcements, and so on, documenting the role of the National Institutes of Health in the development and promulgation of the guidelines of June 23, 1976.

The 600-page document is available in some 660 public libraries throughout the country and is sold by the U.S. Government Printing Office.

Documents Relating to NIH Guidelines for Research Involving Recombinant DNA Molecules, February 1975-June 1976. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, $6.90 (Stock No. 017-040-00398-6).

International Conference on Drug Reimbursement in National Health Plans

■ The procurement, pricing, and dispensing of drugs in national health insurance plans were the subjects of an international conference held in Reston, Va., November 2–5, 1976, supported by the National Center for Health Services Research. Representatives of British, West German, Swedish, Canadian, Australian, and Norwegian drug industries and government health agencies participated in the meeting, which was organized by the University of Minnesota and chaired by Prof. Albert Wertheimer of the university's College of Pharmacy.

Dr. Gerald Rosenthal, director of the National Center for Health Services Research, Health Resources Administration, noted that the United States, the only developed country without national health insurance, was considering coverage for catastrophic illnesses and that such insurance could reasonably be expected to become more comprehensive. He said that the Center, in its Drug Utilization Studies Program, would continue to review the applicable foreign and national experience, would define and support a program of research on drug use and reimbursement, and would serve as an information clearinghouse for drug use studies.

Dr. Mark Novitch, Deputy Associate Commissioner for Medical Affairs, Food and Drug Administration, pointed out that the experience of existing national drug benefit programs in other countries could help answer such questions as: Should drug coverage be comprehensive or limited to the elderly, the indigent, and the chronically ill? Should drug benefits be funded from general revenue or by employee and employer contributions? What data processing systems should be used to reimburse and audit drug claims? What are the best of the alternative methods of controlling costs?

The proceedings of the conference are to be published. Single copies may be requested from the National Center for Health Services Research, Rm. 15-30, Parklawn Bldg., 5600 Fishers Lane, Rockville, Md. 20857, telephone 301/443-2800.

Joint U.S.-U.S.S.R. Study of Penicillamine Treatment for Arthritis

■ The United States and the Soviet Union have begun their first cooperative trial in the study of arthritis, according to Dr. Donald Frederickson, director of the National Institutes of Health, Public Health Service. Physicians in both countries will carry out identical studies on the use of the drug D-penicillamine in rheumatoid arthritis.

The United States and Great Britain have had extensive experience with penicillamine (a natural breakdown product of penicillin), but the Soviet Union has not. Penicillamine was first used in the United States for the treatment of rheumatoid arthritis more than 10 years ago by Dr. Israeli Jaffe of the New York Medical College. In the past 5 years, trials in Great Britain have supported the efficacy of penicillamine for treating serious forms of rheumatoid arthritis.

In the present U.S.-U.S.S.R. cooperative study, the effectiveness of lower doses of the drug will be compared with that of the more usual doses. The participating scientists hope that some of the unwanted side effects may occur less frequently at lower doses.

Penicillamine has been used successfully in treating Wilson's disease, a rare illness of the liver and nervous system in which copper accumulates in the body. D-penicillamine helps to remove the copper. Its action in arthritis, however, does not seem to be related to this property.

The U.S. cooperative trial will be coordinated by Jaffe at the New York Medical College and by Dr. John Decker and Dr. Paul Plotz at the National Institute of Arithritis, Metabolism, and Digestive Diseases. Arthritis clinics at the Columbia-Presbyterian Medical Center, the Hospital for Special Surgery of New York Hospital, and the New York University Bellevue Medical Center will participate in the trial.

In the Soviet Union, the trial will be coordinated by the Institute for Rheumatism of the Academy of Medical Sciences, under the direction of Prof. E. Agababova. Supplies of the drug will be shipped from the National Institutes of Health to the Institute for Rheumatism in Moscow. At the end of the trial (2–3 years), data from both countries will be compared. By having the trial carried out identically in the two populations, the investigators hope to discover whether patients in both countries respond to the drug in the same way.

This joint study of the arithritis diseases is the fourth major collaborative undertaking in the health sciences between the United States and the Soviet Union. Earlier agreements have included studies of vascular diseases, cancer, and environmental health.

Regulations for Providing Mental Health Services in Disasters

■ The Department of Health, Education, and Welfare has published a notice of final regulations for the provision of mental health counseling and training services, including financial assistance, to States and localities at the time of and in the aftermath of a major disaster.

The regulations implement Section 413, "Crisis Counseling Assistance and Training," of the Disaster Relief Act of 1974. In the event of a Presidentially declared major disaster, the National Institute of Mental Health is authorized to provide these services, including financial assistance.

At present, NIMH provides guidance and technical assistance to States and local communities in extending emergency mental health care to victims suffering from emotional trauma in the aftermath of disasters, with emphasis on the special needs of particularly vulnerable groups such as children and aged persons. Services include establishing mental health crisis centers and obtaining expert teams from the government and the private sectors to operate these centers. The act provides, for the first time, the specific statutory authority to undertake such activities.

Federal disaster relief activities are coordinated through the Federal Disaster Assistance Administration of the Department of Housing and Urban Development.

Additional information is available from Calvin Frederick, PhD, Chief, Assistance Section, 5600 Fishers Lane, Room 18-104, Rockville, Md. 20857.

New Manual Gives Guidelines for Plague Control

■ Guidelines and techniques for personnel engaged in plague surveys and control programs are set forth in the "Plague Manual," recently published by the World Health Organization. The manual provides the standardized methodology considered necessary for effective surveillance.

Although annual morbidity and mortality from plague are not great at present, the disease still poses a threat because of the existence of natural foci in many parts of the world. Since conditions may vary from one focus to another, successful control depends on the adoption of an ecological approach to elucidate the problem in specific areas.

The new publication describes the organization and functions of plague survey teams, collection and shipment of specimens, and operation of a central plague laboratory. It also gives specifications for recommended reagents, media, and tests for bacteriological examination of plague-suspect material and describes serologic methods practicable under field conditions.

Chapters on rodent and flea vectors of plague cover ecology, species identification, and preparation of specimens for examination. The manual concludes with an outline of control strategy and a list of specific measures for dealing with bubonic and pneumonic plague.

Plague Manual, by M. Bahmanyar and D. C. Cavanaugh. World Health Organization, 1976 (ISBN 92 4 154051 6), 76 pages. Available from Q Corporation, 49 Sheridan Ave., Albany, N.Y. 12210. Price: dollar equivalent of 20 Swiss francs.

NCI Publications for Physicians and the Public on DES

■ Physicians of the DESAD [diethylstilbestrol and adenosis] Project's Professional and Public Relations Subcommittee have compiled, and the staff of the Office of Cancer Communications of the National Cancer Institute have edited, a pamphlet about diethylstilbestrol.

The pamphlet, entitled "Information for Physicians—DES Exposure *In Utero,*" answers questions that physicians and patients are now asking. The DES-type drugs that may have been prescribed to pregnant women are listed, and a bibliography is included. Among its questions are:

- What is diethylstilbestrol (DES)?
- Why were DES-type drugs used in pregnancy?
- What is the cancer problem associated with *in utero* exposure?
- What noncancerous irregularities occur with this exposure?
- If the patient was exposed to DES-type drugs, what should be done?
- What about followup examinations?
- What is the management of vaginal and cervical irregularities other than clear-cell adenocarcinoma?
- Where do the cancers that have been diagnosed occur?
- What is the therapy for these cancers?

Two other publications are also available. "Questions and Answers About DES Exposure Before Birth" provides more thorough answers to questions that daughters and mothers might ask when DES exposure is confirmed, and "Were You Born After 1940?" encourages DES-exposed daughters to see a physician for an examination.

The pamphlets are available free from Department PH, National Cancer Institute, Bldg. 31, Rm. 10A-17, Bethesda, Md. 20014. Please enclose a self-addressed label with requests.

Educational Materials Available for Community Planning

■ The Pennsylvania Cooperative Extension Service has developed educational materials designed to increase the knowledge and effectiveness of persons planning and developing community health services.

A nine-lesson correspondence course is entitled "Planning and Developing Community Health Services." Each lesson has stated learning objectives, references, and recommended resources. Study questions or worksheets have been included for most of the lessons (price: $6).

A packet, "Health Care and the Public Interest," focuses on some of today's health care issues and highlights what can be done to improve community health services and how individuals and groups can become more involved. Included is a 22-minute (119 frames), color audiovisual presentation (slides or filmstrip), accompanying script and cassette, and supplemental materials. The supplemental materials are geared for presentation by a discussion leader. (Total package with filmstrip, $30; total package with slides $50; filmstrip only, $20).

Issue papers are on topics such as "Alternatives to Institutionalization of the Elderly and Emotionally Disturbed," "Factors Affecting the Cost of Health Care," "Planning and Developing Emergency Medical Services," "New Role in Primary Care: Mid-Level Health Providers," "Factors Influencing Physician Location," "Prepaid Health Insurance," "National Health Insurance," and "Quality Assurance Through Professional Standards Review Organizations" (price $9 for the set of papers).

Because of their low costs, materials are not available for preview.

Requests for any of the materials should be accompanied by purchase orders, checks, or money orders made out to Pennsylvania State University and be sent to William H. Folwell, 104 Ag. Administration Bldg., University Park, Pa. 16802. Prices for bulk orders are available on request.

National Symposium Focuses on Future of American Hospital

■ The American hospital in the next decade—what services will it offer? Will they be affordable? Who will pay for hospital care and how? What effect will technology have on hospital costs and treatment? How will new regulations affect the hospital of the future?

These are some of the questions that were asked, discussed, and proposed as subjects for research during a "thinking retreat" cosponsored by the National Center for Health Services Research (NCHSR), Health Resources Administration, and the American Hospital Association. The retreat was held at Airlie House, in Virginia, December 2–3, 1976.

At the meeting, some 90 experts in health consumerism, research, government, and hospital administration worked at identifying issues that should be addressed if the hospital of the 1980s is to provide organized and responsive health care for the public.

Nine papers were commissioned for the conference in three subject areas —the organization of resources, the changing scope of health care, and accountability and consumerism.

Dr. James A. Campbell, president of Rush-Presbyterian-St. Luke's Medical Center, Chicago, Ill., noted that national expenditures for health care rose from $38.9 billion to more than $118 billion in the decade 1965–75. In 1976 hospital costs continued to be the largest single item in the U.S. health care bill, accounting for $55.4 billion, or 40 percent of the total. Participants at the symposium agreed that the accelerating cost of hospital care was one of the most significant problems facing the health industry in the future.

In a discussion of the changing scope of hospitals, Dr. Gerald Perkoff, director of the Division of Health Care Research, Washington University School of Medicine, St. Louis, Mo., pointed out that increased specialization and technology and the growing emphasis on ambulatory or outpatient care will have a major effect on the hospital of the 1980s. Perkoff sees the hospital as gradually changing from a large institution acting as a receiving and treatment facility to a facility

accepting responsibility for a defined population and seeking out that group to give it health care.

Daniel S. Greenberg, editor of "Science and Government Reporter" (Washington, D.C.), defined consumerism as an organized effort by receivers of medical care to exert effective influence on its availability, cost, and quality. He questioned, however, whether the consumer movement, although a popular subject for the moment, really had a solid base of public support. Greenberg suggested that the term "accountability" refers to requirements established by law, formal regulations, and customs that make the provider of health care responsible for supplying information about the availability, cost, and quality of that care.

The director of the National Center for Health Services Research, Dr. Gerald Rosenthal, summarized the basic issues raised during the symposium. He pointed out that an underlying theme was who actually makes, and who should make, decisions affecting the hospital system—user, payer, or provider. Additional insight is also needed into how decisions are made and how they vary, depending on who makes them.

According to Rosenthal, the symposium revealed that (*a*) questions exist about the basic entitlement that is due a patient within the bounds of public interest, (*b*) there are major implications for hospitals in the shift of decision making from the professional provider to the consumer or user, (*c*) criteria must evolve on which to base decisions on what options will be added to the system (such as new technology or an expanded definition of health care responsibilities), and (*d*) the health care industry should be recognized as an integrated part of the existing economic system.

Dr. Paul Hofmann, chairman of the Council on Research and Development, American Hospital Association, noted that the role and definition of the hospital of the future and the question as to whether the consumer, provider, or government will determine the scope of hospital services were two central issues raised by symposium participants. He expressed the belief that issues identified through the program will enable the American Hospital Association and the NCHSR to establish a research agenda for hospitals by April 1977.

Regional Centers Operating to Aid Planning Agencies

■ Ten Centers for Health Planning are now operating to provide consultation and training assistance to the Health Systems Agencies, the State Health Planning and Development Agencies, and the Statewide Health Coordinating Councils established under the National Health Planning and Resources Development Act of 1974 (Public Law 93-641). The Centers were set up under that portion of the law (Section 1534) designed to provide the health planning bodies with technical assistance.

The new Centers have full-time staffs and use consultants to provide technical assistance. Each Center has an advisory board of 12 members chosen from the staffs of the local and State planning agencies. More than $6 million in contracts have been awarded to the 10 Centers for a 2-year period by the Bureau of Health Planning and Resources Development, Health Resources Administration, which is responsible for coordination of their programs.

Requests for assistance from the Centers should be channeled through the following DHEW Regional project officers:

Region I (Boston University Center for Health Planning): William McKenna, JFK Federal Bldg., Boston, Mass. 02203.
Region II (Alpha Center for Health Planning, Inc.): Florence Fiori, 26 Federal Plaza, New York, N.Y. 10007.
Region III (Health Planning Research Services, Inc.): Jay Halpern, P.O. Box 13176, Philadelphia, Pa. 19108.
Region IV (Health Planning/Development Center, Inc.): Earl Wright, 50 Seventh St. NE, Atlanta, Ga. 30323.
Region V (Midwest Center for Health Planning): Gloria Kronewitter, 300 South Wacker Dr., Chicago, Ill. 60606.
Region VI (Southwest Center for Urban Research): Forrest Stokes, 1200 Main Tower, Rm. 1835, Dallas, Tex. 75202.
Region VII (Region VII Center for Health Planning): Richard Shirley, 601 East 12th St., Kansas City, Mo. 64106.
Region VIII (PACT Center for Health Planning): Carolyn Rimes, 11037 Federal Office Bldg., 1961 Stout St., Denver, Colo. 80294.
Region IX (Western Center for Health Planning): Angus Brownfield, 50 Fulton St., San Francisco, Calif. 94102.
Region X (TAC/X, Center for Health Planning): James Van Hoomissen, 1321 Second Ave., Arcade Plaza, Seattle, Wash. 98101.

Cancer Curriculum Prepared for Use in Public Schools in New York State

■ A curriculum for use in teaching students about cancer has been distributed to elementary and secondary schools throughout New York State. Prepared by Roswell Park Memorial Institute for the New York State Education Department, this curriculum represents the first effort of any State government to mobilize its scientific and medical expertise for the dissemination of information through classroom instruction as a weapon against a specific disease.

The material is intended as a guide for teachers in the development of classroom discussions and activities on the causes, prevention, and treatment of cancer. It can be used as part of a health education program or presented as a single unit of instruction.

Entitled "Cancer Prevention and Control Curriculum," the course outlines are geared to grade levels, beginning with the fourth grade and continuing through high school. The curriculum stresses positive health attitudes and preventive measures such as not smoking cigarettes and obtaining periodic medical examinations.

Accompanying the curriculum is a 118-page teachers manual, which gives more technical information about the origin of cancer, research developments, and treatment techniques. The manual also lists source materials such as films and pamphlets.

For further information, write to Albert E. Bedworth, Associate in Health Education, Bureau of School Health Education and Services, New York State Education Department, Albany, N.Y. 12234.

Worldwide Computer System to Convey Diagnostic Data on Birth Defects Rapidly

■ A worldwide computer system to provide physicians with rapid diagnostic information about known birth defects has been developed in a joint effort by the National Foundation-March of Dimes, the Tufts-New England Medical Center, and the Massachusetts Institute of Technology.

A team of physicians and computer scientists are now conducting clinical trials of the system, which is designed to help doctors everywhere identify rare birth defect syndromes and alert them to unusual patterns in the occurrence of congential disorders. The system is expected to be fully operational after a 6-month test period.

The development and testing team is led by Dr. Daniel Bergsma, vice president for professional education for the National Foundation, Dr. Sydney S. Gellis, pediatrician-in-chief, Tufts-New England Medical Center, and Prof. John J. Donovan, MIT Sloan School of Management.

"There are approximately 1,400 known birth defects," Bergsma commented. "Many are so rare that a practicing physician may not see even one case in his entire career."

The computer will enable a physician to submit his patient's signs and symptoms to the information system. In seconds, the computer can request additional information, display diagnostic possibilities, and supply other useful information on request, such as the probability of recurrence in future offspring.

The computer will be available 24 hours a day. Because it will be hooked into the public telephone system, physicians will be able to dial the central processing unit from almost any computer terminal in any local hospital or other hospital facility, transmit pertinent information about a patient with a birth defect, and read the response displayed on the local terminal.

The information collected, analyzed, and then provided by the computer may one day prevent another tragedy like the thalidomide disaster by alerting professionals to an increase in certain defects and giving them valuable extra time to trace causes before many children are affected.

"The computer stores updated genetic and birth defects data continually," said Donovan. "There are already some 45 new facts entered each week. This provides a constantly updated body of information that is immediately available to the medical community."

The system has multiple uses, including a birth defects registry (which will separately record syndromes that neither the computer nor expert physicians can yet identify as distinct birth defects), a clinical aid to diagnosis, birth defects information retrieval, computer-aided instruction about birth defects, and an early warning system.

"The computer system will not only aid the practicing physician, but will also supplement medical centers that offer full diagnostic services and the evaluation of genetic disorders," Gellis said. "Such centers have great expertise in diagnosis of specific birth defects, but they too will benefit from access to computerized data, especially in the area of rare and unusual defects. The computer will offer a rapid means of arriving at a diagnosis on a sound scientific basis."

National Rape Prevention Center Awards Contracts

■ The National Center for the Prevention and Control of Rape, recently established in the National Institute of Mental Health, has awarded seven contracts for research and development. The contracts provide for organization of regional conferences, development of evaluation models, development of training materials and methods, and collection of information on rape.

The Philadelphia Geriatric Center has been given a contract to develop model rape prevention programs for the elderly living in various types of urban congregate housing, such as public housing projects, housing for senior citizens, boarding homes, hotels for the elderly, and welfare hotels. At least five model prevention programs are being devised and implemented. Results, along with background information and projections of future needs, will be presented in a monograph.

The contract for conferences, awarded to Verve Research Corporation of Bethesda, Md., calls for planning, organizing, and conducting a series of three conferences in each of four regions of the United States. The meetings will be designed to promote research, to advance knowledge, and to mobilize resources on three topics—services for rape victims, the criminal justice system, and special populations at risk.

Development of models for self-evaluation of rape prevention and treatment programs will be undertaken by Management Sciences for Health, Inc., Cambridge, Mass. Specific tasks will include development and field testing of strategies for self-evaluation at eight selected NIMH research sites.

A fourth contract is intended to produce materials and methods for training personnel at medical facilities in the treatment and care of rape victims. The personnel to be trained include physicians, nurses, psychiatrists, mental health and social workers, laboratory and technical personnel, paraprofessionals, and volunteers.

Three of the contracts are concerned with the collection of educational information. These contracts will provide guides to existing information, so that inquiries the Center receives can be answered properly and appropriate referrals made. They will also enable the Rape Prevention Center staff to determine what types of information and research to pursue in the future.

One of these contracts, with the University of Alabama, is to prepare an annotated bibliography and analysis of the literature on rape published since 1965. Another, awarded to the Women's Crisis Center of Ann Arbor, Mich., entails preparation of a guide to audiovisual materials on rape. Under the third contract in this group, Human Resources Management of Washington, D.C., is preparing a comprehensive directory of printed materials developed by rape-related service programs and agencies. The materials will include program plans, brochures, training guides, directories, and bibliographies.

DHEW Report on Medicare Reimbursement for Services Provided by Optometrists

■ The Department of Health, Education, and Welfare (DHEW) submitted to Congress in January 1977 a report concerning the appropriateness of altering Part B reimbursement under Medicare for services provided by optometrists related to aphakia and cataract conditions. The report contains the Department's recommendations and the supportive study conducted by the Health Resources Administration (specifically by its Bureau of Health Manpower) in accordance with requirements in Title I, Section 109, of Public Law 94-182, which was enacted to amend Title XVIII of the Social Security Act.

DHEW recommended in the report, in direct response to the legislative provision, ". . . that those covered services related to aphakia, and within the scope of Optometric practice, be reimbursable under Part B of Medicare when provided by optometrists." The report continued, ". . . that it would be inappropriate to extend Part B reimbursement coverage to include services to cataract patients prior to surgery when provided by optometrists," as well as vision/eye care services more generally, since ". . . resolution of a number of issues should precede further consideration of any extension of reimbursement. These issues include development of an operational definition of cataract, patient health care implications, delivery pattern changes, cost implications, appropriate patient cost sharing, and administrative design and control against abuse."

These recommendations were based on conclusions derived from factual information, analytic findings, and professional judgments assembled during the study effort. As presented in the report, such conclusions extended to considerations concerning the qualifications of optometrists, services related to aphakia and cataract conditions, detection and diagnosis of disease, standards of procedure and instrumentation, quality assurance, access to services, equity, delivery pattern implications, and cost concerns.

The Bureau of Health Manpower had primary responsibility for staffing the conduct of the study, with assistance in specific study areas provided by other components of the Department. Furthermore, in accordance with the legislative charge, a group of nine consultants contributed to the study by reviewing material assembled by the staff; providing information sources and where appropriate, access to relevant material; and serving in a technical advisory capacity. The consultants included three active practicing optometrists, three ophthalmologists, one optometric educator, and two public representatives. Recommendations and considerations advanced collectively by this group are also included in a separate section of the DHEW report.

Part I of the study contains an overview of the background, strategy, and study methodology; a synopsis of existing Medicare provisions pertinent to the query; and a summary of the key findings and conclusions reached during this effort. Detailed chapters, compiled by individual staff members, constitute the second part of the study document. Specific sections include discussions concerning cataract conditions and aphakia; State law and optometric practice; optometric education; access considerations; and potential cost implications of altering current reimbursement under Medicare, Part B.

Report to the Congress Regarding Reimbursement Under Part B of Medicare for Certain Services Provided by Optometrists. Single copies are available from the Division of Associated Health Professions, Bureau of Health Manpower, Health Resources Administration, Rm. 3C-02, Bldg. 31, 9000 Rockville Pike, Bethesda, Md. 20014.

1976 HMO Amendments Will Aid Growth of Prepaid Care

■ Health maintenance organizations (HMOs) will be better able to compete with third-party payer plans, both in benefits offered and costs to the consumer, because of the 1976 amendments to the HMO Act. The amendments (Public Law 94–460), enacted in October 1976, give greater flexibility to the HMOs in their organization and structure and extend the development authorities of the act through 1980.

Since the signing of the original HMO Act in 1973, 25 HMOs have become qualified and 157 grantees have received funds totaling $43.5 million. In the 3-year interval, however, these organizations that are providing comprehensive prepaid care have not developed as rapidly as had been anticipated. Certain requirements made it difficult for developing HMOs to meet the mandates of the law and remain competitive with third-party payer plans.

Other factors also helped to account for their slow growth. Experienced administrators to manage HMOs were scarce; physicians, for the most part, did not understand the concept of the HMO and were skeptical; consumers were reluctant to change from the fee-for-service payment system they were accustomed to; and health care givers and receivers both needed to learn about the cost benefits and other advantages of this alternative system of delivering health care.

Some important changes in the 1976 amendments follow:

• Increasing grant awards from $50,000 to $75,000 for feasibility studies, from $125,000 to $200,000 for planning grants, and allowing up to $600,000 for expansion beyond the $1 million initial grant for the development phase of an HMO.

• Allowing some newly qualified HMOs that were already providing health care 4 years to meet the community rating requirement (a method of determining cost to the consumer) except in limited situations.

• Allowing HMOs to enroll a limited number of nongroup members rather than requiring them to have total open enrollment on a first-come, first-served basis.

• Reducing the percentage of the medical group's services—from 51 to 35 percent—that it is required to provide to HMO members. This change permits the medical group to give up to 65

percent of its services to non-HMO members.

- Requiring employers to offer a qualified HMO as an alternative in their health benefits package if the employer has 25 or more employees living in the service area of a qualified HMO.
- Making supplemental services to enrollees optional for the HMO.
- Extending the period for use of loan funds from 3 to 5 years.
- Permitting development grant funds to be used for the recruitment of physicians.
- Allowing unused nonmetropolitan set-aside funds to be carried over into the next fiscal year.

In addition to the amendments, two other developments are expected to have an impact on the growth of HMOs. Recent rises in the costs of health care have tended to change the attitudes of consumers. HMOs nationally increased their rates only 19 percent in 1976, while many third-party payer plans announced rate increases of 35 to 40 percent. The continuing increase in HMO membership indicates that more Americans are moving from the traditional fee-for-service system to an acceptance of the HMO method of delivering health care. A major reason for the change may be that the HMOs provide about 30 percent more services per dollar than fee-for-service medicine.

Peter A. Kirsch, MS, public health advisor, Health Maintenance Organization Program, Health Services Administration.

DHEW Regulations for State Certificate of Need Programs

■ The Department of Health, Education, and Welfare has published final regulations governing the review of new institutional health services under the National Health Planning and Resources Development Act of 1974, Public Law 93–641.

The law requires each State to establish such reviews to help contain rising costs and promote effective health planning. The regulations specify minimum requirements for State certificate of need programs. These programs seek to insure that only needed health services, facilities, and organizations are offered or developed in the State.

The regulations, published in the Federal Register on January 21, 1977, were formulated after Departmental officials reviewed some 3,000 comments received in response to a Notice of Proposed Rulemaking published in the Federal Register on March 19, 1976.

The final regulations define the terms "health care facility" and "health maintenance organizations," specify when reviews of proposed new institutional health services are required, and define the minimum scope of coverage for State certificate of need programs. "Health care facility," as defined in the regulation, includes hospitals, psychiatric hospitals, tuberculosis hospitals, skilled nursing facilities, kidney disease treatment centers, intermediate care facilities, and ambulatory surgical facilities.

Omitted from review are home health services, whether free-standing or institutionally based, but the Department noted that capital expenditures by a covered health care facility or an HMO for home health service programs are subject to review.

Also omitted from coverage are "organized ambulatory health care facilities" because "serious definitional difficulties made their coverage impracticable," but the Department noted that it will "closely monitor and evaluate the effectiveness of this exclusion against the experience of those States which choose to subject these facilities to review."

Provisions regarding health maintenance organizations have been expanded from those in the March 1976 notice to assure that these organizations, "which provide an important alternative mode of health care delivery, will not be inappropriately discouraged through certificate of need programs."

Issuance of the final regulations will enable States to begin drafting authorizing legislation for certificate of need programs that are required by the law to be "satisfactory to the Secretary." Many States have had no experience with such programs, and others already having certificate of need legislation may have to modify their laws to comply with the act and its implementing regulations.

Additionally, health systems agencies and State health planning and

Abstracts of Evaluations of HSA Programs Published

■ For 3 years, programs of the Health Services Administration ((HSA) have been evaluated by the Agency's Office of Planning, Evaluation, and Legislation. One outcome of these activities is the 126-page "Evaluation Project Abstract Book," recently published by the Office. The collection of abstracts summarizes more than 100 evaluation projects and outlines the dimensions of the results that are expected from HSA's continuing programs.

HSA programs are designed to promote the accessibility, efficiency, and quality of health care to broad segments of the American public and are administered through the Indian Health Service, the Bureau of Medical Services, the Bureau of Community Health Services, and the Bureau of Quality Assurance.

Some of the evaluation studies conducted by HSA relate to program costs, productivity, effectiveness, and information needs. Other studies concentrated on measuring the impact of various programs. One group of studies examined possible socioeconomic effects of national health insurance and health resource distribution. Another group is concerned with studies within the Indian community that will facilitate the implementation of the recently enacted Indian Health Care Improvement Act and the Federal Indian self-determination policy.

Copies of "Evaluation Project Abstract Book" can be obtained from the Office of Evaluation of the Office of Planning, Evaluation and Legislation, Health Services Administration, Rm 14–53, Parklawn Bldg., 5600 Fishers Lane, Rockville, Md. 20857.

development agencies will need to consult the regulations to develop acceptable review procedures and criteria for required reviews of new institutional health services.

The National Health Planning and Resource Development Act is administered by the Bureau of Health Planning and Resources Development in Health Resources Administration.

Study of Federally Employed Physicians and Dentists

■ The Office of Management and Budget, (OMB) recently issued a congressionally mandated study entitled "Recruitment and Retention of Federally Employed Physicians and Dentists." The Federal Government employs approximately 6 percent of the physicians and 6 percent of the dentists in the United States. According to the study, all but a small fraction of these professionals are employed in three agencies—The Veterans Administration (VA), the Department of Defense (DOD), and the Department of Health, Education, and Welfare (HEW). Also, all but a very small fraction of these professionals are employed under compensation systems that provide them bonuses or special pay not received by other professionals.

The OMB researchers found that dental staffing was not a problem. Vacancy rates for both Federal civilian and military dentists are extremely low, and dentists are available to both civilian and military agencies in excess of their needs. Because a fundamental concept underlying all bonuses is that they are to be provided to the extent they are needed to recruit and retain necessary personnel, the study findings suggest that dental bonuses should be reduced or eliminated.

The DOD now has approximately the number of physicians it seeks, the OMB researchers noted. However, a projection model based upon detailed analysis of loss rates on forecasts of new physicians from each accession source indicates that a small decline in the DOD physicians workforce may occur over the next few years. In the 1980s, however, the model indicates that the number of physicians available should substantially exceed the numbers currently employed, in large part due to a new program that provides medical scholarship support in exchange for service in the military. Given the expected tight staffing situation in the next few years, the study proposes for consideration a 3-year extension of legislation providing bonuses for military physicians, after which time the need for a bonus should be reassessed.

Finally, the study disclosed that problems in civilian physician staffing are confined to limited, specific situations, most often involving service in remote locations or the need for special skills. The researchers also noted that over time the basic physician compensation system of the VA has proved fundamentally sound. The study, therefore, suggests the development of a unified compensation system for civilian physicians, modeled on the VA system and including a system of selective bonuses to help solve the limited problems agencies face in filling certain jobs. Use of this unified compensation structure would end the current situation under which Federal civilian physicians may do similar work —or even work side by side—but be paid different amounts because they are employed under different civilian systems. It would result in the phasing out of DHEW's Commissioned Corps.

The study gives data on numbers of physicians and dentists employed by the Federal Government (by agency and by compensation system); on vacancy rates, loss rates, and hiring rates; on foreign medical graduates; and on incomes of physicians and dentists both in the private sector and in Federal employ.

To obtain copies of "Recruitment and Retention of Federally Employed Physicians and Dentists," see PHR Bookshelf offer on the inside back cover.

education notes

Graduate Summer Session of Statistics in the Health Sciences. The 19th Annual Graduate Summer Session of Statistics in the Health Sciences will be held at the Harvard School of Public Health in Boston, June 26–August 5, 1977.

The courses offered will include elementary and intermediate biostatistics, demography, survey sampling, multivariate analysis, statistical epidemiology, analysis of categorical data, health care evaluation, stochastic processes, research design in medicine, and analysis of survival data.

Further information is available from Peggy Morrison, Coordinator, Summer Session of Statistics, Department of Biostatistics, 677 Huntington Ave., Boston, Mass. 02215.

Graduate Summer Session in Epidemiology at University of Minnesota. The Twelfth Graduate Summer Session in Epidemiology, sponsored by the Epidemiology Section of the American Public Health Association, will be held at the University of Minnesota in Minneapolis from June 19 to July 9, 1977.

The session is designed primarily for medical school teachers, but postdoctoral fellows, graduate students, and residents in departments of preventive medicine and other medical school departments may qualify. Similarly, teachers, postdoctoral fellows, and graduate students in schools of public health, dentistry, and veterinary medicine are eligible, as well as qualified personnel of Federal, State, and local health agencies.

In addition to two basic courses and several that have been offered previously, three new courses will be offered: the development of and perspectives in epidemiology, hospital epidemiology and infection control, and the epidemiology of diseases due to drugs and other therapies.

Tuition for the 3-week session will be approximately $350 to $400. A $25 deposit, credited to tuition, should accompany applications.

Further information is available from Dr. Leonard M. Schuman, Director, Graduate Summer Session in Epidemiology, University of Minnesota School of Public Health, A1-117 Unit A Health Sciences Building, 515 Delaware St., SE, Minneapolis, Minn. 55455.