CHAPTER 18

"The time has come for state and county Medical Societies to assume leadership and responsibility for the general health of citizens of New Jersey and thereby preserve the personal and private relationship between physician and patient, which is most desirable for the health needs of the patient." — Dr. William G. Schauffler, Chairman, Committee on Public Health, 1933.

The stock market crash on October 29, 1929, precipitated a financial crisis for New Jersey as for all of America, and led to the gravest economic depression in the nation's history. But it put the spur to plans for financing voluntary family health protection which had been under study by the medical profession for some time. The New Jersey program, in broad outline, became the pattern for the nation-wide Blue Cross and Blue Shield plans for non-profit, prepaid medical care. The phenomenal acceptance and growth of the two plans reflected the desire for the right of free choice of physician and the self-respect and independence of meeting one's own financial obligations. In providing a practical means for family medical care, tailored to the individual desire and ability to pay, the program anticipated by several years aspects of two of President Franklin D. Roosevelt's four freedoms: freedom from want and freedom from fear.

New Jersey also became a leader at this time in assuring that the best possible health protection for qualified applicants resulted from welfare funds.

In the mid-1930's, the state's population was slightly over four million, and by 1938 there were almost 300,000 unemployed. Physicians saw parents postponing remedial surgery or other medical care — "until things get better." Hospitals were in difficulty because many people could not afford to meet the costs of hospitalization. By the end of the decade, the doctors and hospital administrators had made it possible for large numbers of the working middle class to pre-pay hospital care so that it need not be delayed and could be handled financially without prolonged hardship.

Socialized medicine in Europe, since early in the twentieth century, was watched with interest from this side of the Atlantic. In 1916, Dr. Linn Emerson of Orange had foreseen industrial insurance for the United States and believed the Medical Society should prepare for it. It was also the subject of Dr. Philip Marvel's address at a Society meeting in 1917, in which he said, "Effective social insurance without preventive medicine is an impossibility, hence any plan contemplating the former must of necessity establish the latter. . . . Experts have long since been employed to study the maintenance of costly industrial equipment, our people are only now becoming aroused to the neglect and comparative depreciation of *human* machinery."

Noting the unsatisfactory results of social legislation abroad, Dr. Marvel said there was still evidence that accident, health, and old age insurance plans could provide a distinct social uplift to many encumbered with disease and poverty. At the time, 7 to 8 per cent of the working population of the

United States were constantly ill. Many of them had no financial resources and denied themselves prompt medical care.

While this was one aspect of the matter, Dr. Marvel said, "The purpose of social insurance should not be solely to establish a fund that will provide proper care and protection for the insured in hospitals, dispensaries and laboratories; it should reach much further and include social and maternity service and hygienic nursing . . . the prompt supply of necessary appliances and general medical supervision during convalescence."

On the other hand, he saw that no financial settlement could fully offset the anxiety and poverty in continued invalidism or end vagrancy and crime stemming from loss of health and productivity.

Twenty years before they came, Dr. Marvel predicted public health regulations at every level of government as well as group medicine — the general physician with the specialist — with remuneration coming from a fund contributed to by the state, the employer and the employee.[1]

Dr. John Bennett Morrison of Newark was just beginning some twenty years of activities for the Society when he served as chairman of the Committee on Social Insurance in 1917. He found relatively little enthusiasm among industries for compulsory health insurance in New Jersey. Many corporations opposed it, although they were already providing more sickness, disability, death and pension benefits than labor unions sought through legislation. Free choice of physicians was essential, Dr. Morrison said.

As soon as he took office in 1929, President Herbert C. Hoover recommended extensive public works programs and a study of the country's urgent problems. His earlier experience with poverty and disaster, as head of the food and relief committees in Europe following World War I, and his own humane instincts made the health and wellbeing of children a prime concern. Several members of The Medical Society of New Jersey attended the Hoover Child Welfare Conference in Washington in 1931. Governor Morgan Larson promptly responded to the President's request for a similar conference in each state, making New Jersey the first to comply. The medical profession and related agencies carried out the arrangements for it.

Aid for crippled

One of New Jersey's special programs at this time was to help crippled children develop into well-adjusted and self-sustaining adults. The need was recognized in 1926 by Governor A. Harry Moore when he named Joseph G. Buch first director of the Crippled Children's Commission. Mr. Buch sought the assistance of the Medical Society and other agencies to develop a program which would give physically handicapped children a better opportunity for useful normal lives through early surgery, physical therapy, prosthetics, braces and training.

Birth certificates were designated with a separate, confidential section for recording blemishes, prenatal defects and birth injuries, so that remedial measures for the newborn could begin at once. The program for older children and adults was concentrated on education, vocational training and job placement. At the end of the first fifteen years, Mr. Buch told physicians at the annual Medical Society convention that every adequately trained crippled adult in the program had been placed in a job.

The Commission became part of the State Department of Health in 1948, under the revised Constitution of New Jersey.

An extension of the program for the handicapped took concrete form in 1962 when St. Francis Hospital, Trenton, opened the first free clinic in the United States for children with birth defects. Aided by funds from the Mercer County Chapter of the National Foundation, March of Dimes and other sources, Dr. Harold L. Davis, chief of pediatrics at the hospital, and other volunteers from St. Francis, Mercer, Helene Fuld, and Princeton Hospitals, examined children referred from other clinics and doctors. (Specialists in such fields as plastic surgery, rehabilitation, and psychiatry were made available on call when necessary.) The clinic's efforts have resulted in some near-miracles for the one in sixteen children in Mercer County with a birth defect serious enough to shorten and gravely circumscribe life. The clinic also has served as a model for the only three others in the United States.[2]

Help for the indigent

At the time of his inauguration, President Hoover said, "We shall soon, with the help of God, be in sight of the day when poverty will be abolished from this nation." [3]

Instead, an economic depression followed almost immediately and led to the election of President Roosevelt in 1932. He introduced some of the most sweeping and radical social changes since the nation was formed. The federal Emergency Relief Administration went into effect within weeks after he took office.[4] New Jersey's share in E.R.A. grants resulted in benefits to more than a million people in August, 1933. The medical profession was asked to extend its services to the indigent at about two-thirds of the usual fees, with the state meeting the payments through E.R.A. funds. As a result of this program, three-fourths of the available hospital beds in America were filled by patients under municipal, state or federal care.[5]

Dr. Spencer T. Snedecor of Hackensack, chairman of the state Society's E.R.A. Committee, called for a corresponding committee in each county society to prepare a list of physicians willing to accept Emergency Relief clients. Maximum fees of $1 for an office visit, $2 for a house call and $25 for an obstetrical patient had been agreed upon, but in some counties these were to be reduced so that they would equal an amount which was one-half to two-thirds of the prevailing average fee locally.

At the termination of the E.R.A. program in 1936, the Society's Committee on Medical Care of the Indigent met with representatives of the New Jersey Department of Institutions and Agencies and the State Financial Assistance Commission. A medical relief agreement between the S.F.A.C. and the Society was drafted along the lines of the E.R.A. agreement. It provided for the free choice of physician by the patient and the payment of the physician by the municipality, county or state. It further arranged for the supervision of the work by a committee of the county society. The fees were based on the E.R.A. fee table.

A non-profit hospital prepayment plan that started in New Jersey in 1932 was to provide a model for the Blue Cross programs now known around the

world. The initial plan – providing hospitalization benefits – had hardly begun, however, when physicians learned that a proposed federal Social Security program might include medical care. Dr. Lancelot Ely of Somerville, Society president in 1934, sent a strong telegram to Secretary of Labor Frances M. Perkins stating, "The policy of The Medical Society of New Jersey is that, in any medical program for the benefit of the indigent and those in the low income group, the planning and conducting of the work in each state should be in the hands of the medical agencies which were founded primarily for health service, such as The Medical Society of New Jersey and the State Department of Health."[6]

Throughout the development of a national health program with grants-in-aid to states, the Society continued to endorse the State Department of Health as the logical agency to administer such public health funds. Since 1935, federal funds have been made available to states by formula grants, and the Department of Health now carries out forty-five basic programs designed to protect or improve public health.

In 1964, in a review of the intervening years, Dr. Roscoe P. Kandle, Commissioner of the State Department of Health, said, "Roughly 30 to 40 per cent of the department budget, in recent years, has come from such grants. The funds have been dedicated to specific activities, such as maternal and child health, tuberculosis, heart and chronic illness control."[7]

The contrast between the New Jersey hospital prepayment plan and the program contemplated by the federal government was highlighted by Dr. William J. Carrington of Atlantic City when he returned from a national health conference in Washington in 1938. He reported that if the government plan was accepted, Congress would be asked to appropriate $850,000,000 in the first year to increase hospital beds and improve other health facilities. This money was to go to local areas able to provide matching funds. Again Dr. Carrington defended the New Jersey hospital insurance plan which made use of existing facilities and established procedures, allowed the patient freedom of choice, and enabled individuals at all economic levels to contract for a prepayment plan to lessen the unpredictable burden of future medical needs.

Dr. Carrington's personality and accomplishments made him an ideal go-between for the Society. A colleague, summarizing his career at the time of his death in 1947, noted that Dr. Carrington had won top honors in two of three branches of medicine and surgery, and established the obstetrical department of the Atlantic City Hospital. He had been president of the Society and vice president of the A.M.A. He was the author of a popular book for expectant mothers. He was an Army colonel, had been president of Kiwanis International, and displayed prowess in golf, baseball, squash and tennis.

The premise on which the proposed National Health Program was based was that one-third of the population was without adequate medical care. This conclusion, Dr. Carrington said, was reached after a fragmentary survey by W.P.A. statisticians.

Curious about the validity of the federal estimate in New Jersey, he and other officers of the Society issued an appeal through newspapers and radio

broadcasts for information on any individual who could not receive adequate medical care.

A total of 153 letters came from New Jersey's four million residents. The letters were referred to the appropriate county societies where it was found that adequate medical care was available for all of the cases described in the letters, with one exception — a woman in Middlesex County who wanted a criminal abortion. The survey, which cost $1,000, indicated that adequate medical care was available for 95 per cent of the state's residents and that the profession was actively seeking to correct any defects.[8]

In a summary of the findings, Dr. Carrington said that in New Jersey it was apparent there was ample care for the sick, whether they could meet the costs themselves or not. In fact, in caring for the indigent, the medical profession of the state in 1938 had given an estimated $24,000,000 in free service.[9] This report was credited with helping to dissuade federal officials from pursuing the intention to introduce "government medicine."

The Society president, Dr. Marcus W. Newcomb of Browns Mills, had discussed government intervention in medicine in 1936. An astute and colorful member of the state legislature, he saw the threat as postponed rather than removed. "The national government has now provided for federal welfare related to unemployment insurance, old age pensions and benefits, aid to mothers and children . . . crippled children, the blind and the indigent," he said. "Sustained and organized effort on the part of the medical profession, through its national, state and county medical societies to present to the public the pertinent facts . . . apparently has convinced the federal administration of the inadvisability of such procedure at this time; but the threat is not yet removed, and one may question whether developments in the near future may not again bring this question to the fore. . . ."[10]

Both Dr. Newcomb and Dr. Carrington had pointed up the deficiency of the program: it lacked a means for helping the proud, independent, self-supporting, middle class people who wanted no charity but were hard hit by major illness or accidents that caused extraordinary and unpredictable medical expenses.

Society leadership in prepayment plan

The need and the challenge were similar in every state, but it was New Jersey that initiated the acceptable alternative to "government medicine." The Hospital Service Plan, now the New Jersey Blue Cross Plan, provided a contract for prepayment to help cover hospital expenses. A few years later, the New Jersey Medical-Surgical Plan (Blue Shield) provided a prepayment contract to help meet the costs of medical-surgical care.

The Hospital Service Plan (Blue Cross) was instituted by an Essex County organization of hospitals that had been formed about fifteen years earlier at the Society's instigation. The Medical-Surgical Plan (Blue Shield) became available ten years after Blue Cross and was even more intimately connected with the Society — having been devised by a committee of its own members.

The Hospital Service Plan (Blue Cross) began in 1932 when seventeen hospitals in the Essex Hospital Council agreed to put the plan on trial as a means of enabling subscribers to protect themselves against unexpected hospital bills. This was the first multiple hospital plan in the nation. One other plan preceded the Essex County experiment, but it involved only the single hospital connected with Baylor University in Dallas, Texas.

In January, 1933, F. Stanley Howe, secretary to the Board of Trustees of Orange Memorial Hospital, became the first individual to enroll in the experimental program. His premium was about 3 cents a day and provided up to twenty-one days of hospitalization. A short time later, The Bates Manufacturing Co. of West Orange became the first group-plan member, with an employee enrollment of 300. (In 1965 the company still belonged, and its enrollment had grown to 2,000).

In 1936, the Hospital Service Plan (New Jersey Blue Cross) was extended to provide family coverage, and acceptance became more rapid. In two years, membership increased from about 5,000 to 33,000 and by January, 1939, it exceeded 100,000. In 1965, there were 2,700,000 members in New Jersey.

While The Medical Society of New Jersey had a fraternal interest in the Hospital Service Plan, the possibility of also distributing medical care on a voluntary prepayment contractual basis was being considered in New Jersey and other states. In recognition of this, the A.M.A. called a special session in September, 1938, and suggested the possibilities of applying the principles of voluntary indemnity insurance to self-supporting people.

Immediately, the New Jersey Society appointed a fact-finding committee to study cash indemnity insurance and medical costs under the chairmanship of Dr. Hilton S. Read. From the first, the Society's objective had been "to make available to every man, woman and child in New Jersey adequate personal and sympathetic medical care, preventive and curative, at the lowest cost compatible with efficient service." Before the year ended, the committee reported its conviction that some form of voluntary indemnity insurance could be evolved. The Voluntary Health Insurance Committee was then named to serve under the chairmanship of Dr. Edward W. Sprague. Within six months, The Medical Service Plan of New Jersey was presented to the Society and approved, with an appropriation of $5,000 provided for the launching of the plan.

Incorporation papers were signed July 13, 1939, by a Board of Governors appointed by the Society. They were Drs. E. Zeh Hawkes, William G. Herrman, Edward W. Sprague, Elton W. Lance and J. Wallace Hurff. Following the incorporation, the Department of Banking and Insurance ruled that the plan constituted insurance and as such would require adding a new chapter to the state insurance statutes and supervision by the Commissioner of Banking and Insurance. This was accomplished with passage of enabling legislation designated Chapter 74 of the Laws of 1940, and the Medical-Surgical Plan was incorporated March 24, 1942. It was designated the New Jersey Blue Shield Plan in 1951.

The Blue Shield plan required that the subscriber choose a medical attendant who was participating in the program, but like the Blue Cross plan, with its similar requirement for hospitals, professional participation from the outset was virtually complete.

The New Jersey-born medical care plans showed continuing annual growth. By 1965, the Blue Cross plan was operating in all states, seven Canadian provinces, Puerto Rico and other locations outside the United States. The membership of some sixty million in the United States — including 2,700,000 in New Jersey — represented approximately one-third of the total population. The Blue Shield plan, with over fifty million members in the

United States in 1965, included more than two-and-a-half million in New Jersey.

A ruling by the New Jersey Supreme Court in 1964 voided the necessity of Medical Society approval of the trustees of a medical service corporation. The Society and the members who contributed time and effort to the study and planning of the prepayment program then experienced the continuing pride and satisfaction of parents who have reared children to adulthood and seen them taking their place in society. The pride was justified. In its first year, the Medical Surgical Plan had 4,131 members on whose behalf it paid out $5,395 in benefits. By 1965, a membership of over 2,500,000 made it the fifth largest Blue Shield Plan in the United States, and its annual benefit payments had risen to approximately $50,000,000.

One of the leaders in the insurance programs was Dr. Sprague, an outstanding Essex County surgeon. Modest and generous, he gave credit to many helpers and particularly to Drs. Royal S. Schaaf, LeRoy A. Wilkes and Norman M. Scott. Dr. Scott became medical director of the Medical-Surgical Plan and gained nationwide recognition in the new and complex field of health insurance.

John K. Gore of the Prudential Insurance Co. and John S. Thompson of the Mutual Benefit Life Insurance Co., two of the nation's top actuarial experts, contributed their talents as a public service to make the initial study of the feasibility of the multiple hospital insurance plan for Essex County.* Mr. Thompson, who later became president of the Mutual Benefit Life Insurance Co., continued his close association with the Medical Society and the Blue Cross and Blue Shield Plans. He was one of the incorporators of the Medical-Surgical Plan, has served as its secretary from its founding, and as a trustee from its founding until 1965. In appreciation for his work, the Society amended its Constitution in 1947 so that he could be made an honorary member.[11]

Further medical education

All Society members were affected by the Depression, and like citizens everywhere, they found their incomes greatly reduced while basic necessities remained unchanged. Nevertheless they wanted to keep abreast of scientific discoveries and techniques in medicine. With no medical school in the state, there was a particular interest in opportunities for postgraduate studies, refresher courses and seminars.

Dr. Andrew F. McBride of Paterson, while Society president, consulted Rutgers University officials and laid the groundwork for a cooperative arrangement with the Extension Service of the University in 1929. Two courses were offered in April, 1930: one on general medicine, the other on traumatic surgery. They were held in Atlantic City, Bridgeton, New Brunswick, Perth Amboy, Asbury Park, Paterson and Somerville. A fee of $30 was assessed for the eight once-a-week sessions, which were usually held in local hospitals with specialists as lecturers. A minimum attendance of twenty-five was required.

* Their work was facilitated by the earlier studies of German-born statistician Frederick L. Hoffman, who served the Prudential Insurance Co., Newark, N.J., 1864-1934, earning international recognition for his original biometrical studies in the fields of cancer, tuberculosis, malaria, longevity, suicide, nutrition, lead poisoning, and others.

The response was immediate and enthusiastic. In the first offering of courses, 389 physicians enrolled at fourteen centers. By 1932, there were 820 Society members enrolled. Ninety lecturers, prominent in national medical circles, discussed such topics as diseases of the blood, bones, and kidneys, internal and head injuries, and drug therapy. The response was so great that a special state appropriation was made to Rutgers so that the charge for the eight weeks could be cut to fifteen dollars for each physician enrolled.

The Medical Society of New Jersey had scored another "first." Dr. Henry O. Reik proclaimed in 1932: ". . . so far as we can learn, no other state medical society has yet put forth anything approaching in character and quality these postgraduate study courses, making them available to all members of the Society, in every county, and delivering them practically on the doorstep of the subscribing physician."

By 1936, in the face of increased national and regional meetings, and the Depression, the saturation point had been reached; only sixteen lecturers were needed to supply the four centers still holding sessions. In 1937, 328 members were enrolled, but the cost of conducting the five courses amounted to more than the receipts. Enrollments declined and the courses were discontinued in 1938.

However, the educational technique was to prove of increasing importance in succeeding decades as the Society, in cooperation with the State Department of Health, provided free lectures on such special subjects as pre-school-age child supervision.[12]

Supplemental education

From the beginning, the Society had encouraged physicians to meet in local groups at more frequent intervals than the parent Society's scheduled sessions. The county societies were regarded as a means of exchanging practical knowledge and carrying on joint studies, and founders of the Society were assigned to organize these local units. Later, special interest groups developed. In 1959, the half-century accomplishments of one of these, The Essex County Pathologic and Anatomic Society, were related by Dr. Samuel Berg of Newark, whose own marks on history included directing the laboratory investigations on the atom-bomb victims in Nagasaki and the first survey on the harmful effects of radioactive fallout in nearby Nishiyama, Japan.

Another of these special interest organizations, the Academy of Medicine of New Jersey, was formed on February 28, 1911, by several physicians meeting in the Newark Public Library. The Academy was dedicated "to the advancement of the science and art of medicine, to the maintenance of a medical library, and to the promotion of both public health and medical education." Often its leaders were those of the state and county societies, and from time to time this select group pursued special studies, arranged a series of lectures by outstanding specialists, or published articles and addresses.

Another aid to learning was the contribution of medical books. In 1900, the widow of Dr. William Pierson, Jr. offered his 2,000 volumes on medicine for the use of his colleagues. In 1921, the doctor's daughters, Margaret and

Louise, gave the family home in Bloomfield as a perpetual memorial to their father. Here, in 1959, the Academy located after its removal from Newark.

In recent years, maintenance expense, diminished contributions and other difficulties forced officers of the Academy in 1964 to appeal to the Society for financial help to maintain the library, now numbering nearly 50,000 volumes, and its library service which answers 1,000 or more requests each month from physicians. The House of Delegates of the Medical Society granted the request.

Specialists increase

Those who think of medical specialists as a recent phenomenon forget that specialization was not uncommon at least five centuries before Christ. In that epoch, Herodotus, describing medicine in Egypt, wrote, "One physician is confined to the study and management of one disease; there are of course a great number who practice this art; some attend to the disorders of the eyes, others to those of the head, some take care of the teeth, others are conversant with all disease of the bowels; whilst many attend to the cure of maladies which are less conspicuous."[13]

Some specialists emerged from Civil War practice as they did from World Wars I and II. Dr. Ezra M. Hunt gave the trend particular attention in his presidential address in 1864. "The scope of our science in the last half century has become enormously enlarged so that one man cannot now expect in perfection to encircle it," he said. "Only by joining hands can we complete the round. To be great aurists, oculists, stethoscopists, microscopists, dermatologists, toxicologists, orthopedists, obstetricians, physiological, pathological and chemical classifiers of all acute and chronic conditions, surgeons, apothecaries and physicians is asking too much of our three score years and ten. The time is coming when the general practitioner will feel it to be a not unworthy part of his professional duty to serve his patient in divers other cases by directing him to those skilled in a specific branch."[14]

In Minnesota, two brothers gave the group concept impetus as Charles Horace Mayo, specialist in goiter and cataract, with his brother, William James Mayo, a specialist in abdominal surgery, expanded the small clinic opened by their father in 1889 at Rochester, Minn. This center became a mecca for American physicians — including many members of The Medical Society of New Jersey.

Economic necessity led to further group practice in the Depression years, and after World War II, extensive semi-rural developments made centralized medical treatment part of the suburban one-stop shopping complex.

There would always be general practitioners, older men assured each other, and many agreed with Dr. George H. Lathrope of Morristown that no one should be admitted to a specialty until he had at least five years of experience in general practice.[15]

The Medical Society saw the need for standards to determine what constituted a specialist and then to give him proper identification through the Society. Dr. John F. Hagerty of Newark in 1932 appointed a Committee on Credentials of Specialists to be composed of the Society president, first vice president, secretary, chairman of the Welfare Committee, chairman of the Board of Trustees, and the secretary of the State Board of Medical

Examiners. Dr. Edward G. Waters of Jersey City, known alike for his consistent love of simplicity and his skill as a surgeon, already had formulated a plan for the regulation of special practice in medicine and surgery which would protect the people against self-styled specialists by properly identifying the qualified.

A highlight of his plan was to have individuals apply first to the county medical society, providing its officers with suitable evidence of special training and experience, or presenting certificates attesting to completion of postgraduate courses of instruction in specialized fields. After investigation and approval, the county society would then forward the application to the state for certification.

Dr. Willard C. Rappleye, Dean of the College of Physicians and Surgeons at Columbia University, expressed envy that New Jersey had deprived New York of the privilege of starting this movement, revealing that he had for several years been striving to secure the honor for his state.[16]

Self-declared specialists were not the only problem the Society had in the decade of the Depression. Another concerned an election of officers of the Hudson County Medical Society in 1935. Conflicting segments of the Hudson Society carried their differences to the state Society, and then, dissatisfied with the decision of that body, appealed to the Judicial Council of the American Medical Association. The A.M.A. sustained the appeal of the Hudson County group, although noting there had been many irregularities in the case.

It questioned two actions of the state Society. One was that after declaring the Hudson County election of October 5, 1935, illegal, the State Judicial Council named the winning officers, although the Council did not have the authority to do so. The second irregularity, according to the A.M.A. Council, was that the Board of Trustees was given jurisdiction over the controversy although the bylaws of the state Society provided that the House of Delegates should hear and determine all appeals.

Whatever wounds were suffered in the conflict, smiling and competent Dr. Joseph F. Londrigan of Hoboken helped to heal them as he assumed the presidency of the Medical Society in 1944.

A conflict of far longer duration concerned osteopathic medicine. In 1903, the regular practitioners, strengthened by homeopaths, had prevented legislation to license osteopaths. The issues were greatly reduced by 1935, in which year osteopaths were permitted to take regular examinations before the Board of Medical Examiners, providing they met the educational and other requirements. An osteopathic physician has since served on the Board of Medical Examiners, as does one chiropractor, one chiropodist, and one bioanalytic laboratory director.

Scientific exhibits

The interest of Society members in courses of graduate study and specialized practice prompted concentration on a scientific exhibit at the annual meeting of the Medical Society in 1932. Dr. Harrison S. Martland of Newark was responsible for the initial effort, dividing it into two categories: one on anatomic, surgical, pathologic, laboratory and public health exhibits; the other on nine radiologic exhibits. Personal demonstrations were given at

almost every booth, and members felt the quality and teaching value of these scientific exhibits surpassed those of any previous convention.

Dr. Martland himself was an inspired teacher. His scientific curiosity led to his achieving an international reputation as a medical sleuth. Early in his career he traced the cause of radium poisoning in a group of women to their earlier employment as painters of luminous dials on watches. Dr. Martland recognized the dangers of radiation, and his work in atomic safety was accorded repeated acknowledgements by the Atomic Energy Commission. A permanent safety exhibit at Oak Ridge was prepared by him.

Dr. Martland had a bent for medical crime detection work, carrying on original studies on bullet wounds with such precision that he attracted national attention and elevated the medical examiner's office in New Jersey from the non-professional morgue caricatured in mystery novels to the present-day office functioning as a scientific laboratory.

The emphasis Dr. Martland placed on scientific exhibits at the Society's annual conventions, and the recognition they received, stimulated increasingly impressive displays. Dr. Asher Yaguda of Newark announced innovations in 1936 such as a fresh pathology exhibit and motion pictures on several medical subjects. Invitations went to physicians doing outstanding work in various fields, urging them to display the results of their research. The response was gratifying as exhibits became more elaborate in detail.

Industrial health

In every decade, New Jersey's eminence as an industrial state has been maintained and enhanced by technical, mechanical and chemical innovations. Some of these have required special adjustments to protect workers' lives and health.

"Almost every new process in industry takes its toll of human life," said Dr. Max Kummel of Newark in recommending Society endorsement of legislation for extended compensation provisions in 1930. He recalled that in 1923, of twenty-eight men directly exposed to a new ethyl gas, six died of severe lead encephalopathy; four became insane, and the remainder suffered from the effects of poison on vital organs and the central nervous system. A peculiar and fatal form of anemia and necrosis in workers painting luminous dials on watches had been traced by Dr. Martland. Aplastic anemia caused the deaths of workers using a new artificial leather substitute. Manganese poisoning, silicosis and other health hazards were brought to the attention of lawmakers by the Medical Society as new provisions for workmen's compensation were being written in 1939.[17]

Burn treatment

A tragic and unforgettable accident at Lakehurst inculcated lessons in the treatment of burns. It happened in the late afternoon of May 6, 1937, as eager spectators awaited the landing of the Graf Zeppelin *Hindenburg.* Some of the mooring ropes had been lowered when lightning, internal combustion, or some unknown cause sent flames skyward. Within minutes, as helpless landing crews watched in horror, people began tumbling from the dirigible, their clothing aflame. Thirty-six died in the holocaust. Those who survived owed their lives to the prompt attention of medical officers

attached to the air base and of nearby civilian practitioners. As promptly as possible, the victims were removed to hospitals in the area.

As in the explosion at the Lake Denmark naval depot ten years earlier, the medical men at the disaster described the emergency treatment, reporting to their colleagues the important lessons they had learned and suggesting possible techniques for future emergencies of a similar nature. Dr. Otto R. Holters, surgeon at Fitkin Memorial Hospital, Neptune, and Monmouth Memorial Hospital, Long Branch, summarized his experience in combating shock in the *Hindenburg* victims and in the use of stimulants and blood transfusions. He emphasized the need for careful attention to fluid balance and warned that at no time should wet dressings be used for extensive burns such as the *Hindenburg* passengers suffered. He said in conclusion, "Much missionary work must be done to acquaint the lay public with the evils of applying ointment, oils and fats to severe burns. Such abuses of treatment may be the deciding factor in the life or death of the patient." He favored the use of tannic acid powder and agreed with Dr. George Gaumer of Lakewood that as an emergency remedy available to the public, a paste of bicarbonate of soda would probably give a measure of relief and be less likely than salves and ointments to interfere with the subsequent tannic acid-silver nitrate treatment.[18]

The profession and the public

The Society's increased efforts to improve understanding between the public and the profession led to the publication of a booklet distributed in the 1930's entitled "Primer on the Relationship of the Physician and the Public." It was a declaration of what the Medical Society stood for and what it was endeavoring to accomplish.

Its success led to the publication in 1937 of "The Handbook of Procedures in Preventive Medicine." This sixty-page manual, prepared for use by the family doctor, provided a quick index to the essential measures to be taken in preventive health problems that might confront him.

Economic conditions in the 1930's accounted for low marriage rates and low birth rates, and as individuals and government agencies tightened their budgets, the tax burden imposed by the care of the feeble minded was sternly scrutinized. The League of Women Voters urged eugenic sterilization and supported legislation for that purpose. That bill did not succeed, but in 1938, New Jersey physicians saw one of their long-advocated measures adopted when a law was passed requiring pre-marital blood testing and a medical certificate attesting to freedom from syphilis on the part of both prospective partners.

As the Depression decade ended, the hospitalization and medical insurance plans devised by the medical profession of New Jersey had made a permanent contribution to the health and wellbeing of the nation. To many it seemed only natural that the Medical Society, approaching its 175th birthday, should be leading the way in making total government intervention unnecessary and preserving the time-honored physician-patient relationship.

Just ahead was another challenge as great in its way as the difficult years of the 1930's. To some it seemed that World War II might ultimately determine the very survival of the human race.