Current and Future Needs in Geriatric Education

PAUL E. PANNETON, MPH
ELEANOR F. WESOLOWSKI

IN HIS TESTIMONY before the Subcommittee on Human Services and Subcommittee on Health and Long Term Care of the Select Committee on Aging (House of Representatives), in May 1978, Dr. Henry A. Foley, Administrator of the Health Resources Administration, discussed "The Future of Health Care and the Elderly" (*1*). He stated:

> Even more than other segments of the population, the aged are affected by the fact that simple increases in the supply of health professionals do not necessarily result in there being enough trained personnel of the right types in the right places to provide needed services. Of the estimated 25 million Americans currently living in physician shortage areas, including both inner city and rural areas, as well as among special racial and ethnic groups, a disproportionate number are in the older age category. Specialty maldistribution of health personnel, particularly the relative scarcity of primary care personnel, also places a special burden on the aged, whose higher rates of illness and disability cause them to have greater needs for primary care services.

Dr. Foley's observations were based on these facts. Today, about 23 million Americans are 65 years and older—1 person in 10—almost 7 times more than the overall population at the turn of the century, when it was 3 million. Every day about 4,000 Americans reach their 65th birthday, and approximately 3,000 die—a net gain of about 1,000 additional survivors over 65 years old. This trend of increasing survival rates and a near-zero population growth leads to the prediction that by the year 2000 there will be about 33 million "older" Americans, 12 percent of the population. Extrapolating further, it is estimated that by the year 2030 almost 1 out of 5 persons, 20 percent of the population, will be over 65—many in the 70, 80, and 90 age groups. This rapid change in the age configuration is the basis for much current speculation about the changing patterns of economic, social, and health needs of the population as we approach the 21st century.

Among the reported 47 major Federal programs that deliver services and benefits to the elderly are those administered by the Health Resources Administration (HRA), which has several long-range health care goals for the elderly. HRA's overall responsibility is to identify and correct anticipated imbalances, inefficiencies, and deficiencies in the supply, distribution, and use of health care resources.

Background

The Health Professions Educational Assistance Act (Public Law 89–129), enacted in 1963, provided for training of students of medicine, osteopathy, and dentistry (MOD); veterinary medicine, optometry, pharmacy, and podiatry (VOPP); allied health; and public health. In 1964, the Nurse Training Act (Public Law 88–581) provided for training of nurses, and the Allied Health Professions Personnel Training Act of 1966 (Public Law 89–781) gave impetus to the training of teachers, supervisors, administrators, and allied health clinical specialists. Title I of the Health Amendments Act of 1956, "The Graduate Training of Professional Public Health Personnel," had provided for public health training programs.

By the early 1970s the increase in the physician supply had been such that the Congress noted in its passage of the Health Professions Educational Assistance Act of 1976 (Public Law 94–484) that "there is no longer an insufficient number of physicians and surgeons in the United States . . ." Emphasis was now on the geographic and specialty maldistribution of health personnel throughout the country and on a more appropriate meld of personnel to provide quality health care at reasonable cost. A similar increase in all health manpower personnel took place.

Realization that increasing the numbers of health personnel would not solve the health care needs of the

The authors are with the Health Resources Administration, Public Health Service. Mr. Panneton is program specialist—geriatrics, Division of Medicine, Bureau of Health Manpower. Ms. Wesolowski is technical information specialist for Graduate Medical Education National Advisory Committee, Office of the Administrator. Tearsheet requests to Paul E. Panneton, Division of Medicine, Bureau of Health Manpower, Rm. 4–44, Center Bldg., 3700 East-West Highway, Hyattsville, Md. 20782.

population and that geographic distribution was still not being solved led to establishment of the National Health Service Corps (NHSC). Initiated in 1972, the NHSC provides scholarships to students in the health professions in return for a scaled service commitment in designated shortage areas. Included are physicians, nurses, dentists, nurse practitioners, physician's assistants, and expanded-function dental auxiliaries. To date, health professionals have been assigned to 396 sites in 48 States and Puerto Rico. This effort to alleviate the shortage of care must be supported by the community involved and the professional societies.

It was further recognized that because of the great rise in specialties, spurred in part by basic research funding, the number of general practitioners was rapidly dwindling.

These geographic and specialty imbalances were then dealt with as follows:

1. Family practice was developed as a specialty, and residency requirements were established (1969), as in all other specialties.
2. Primary care specialties (family medicine, internal medicine, and pediatrics) received priority attention.
3. Training of new types of health professions personnel (physician's assistants, nurse practitioners) was supported.

Specialty distribution was also given top priority. To determine needed kinds of medical personnel to plan rationally for the future, the Secretary appointed the Graduate Medical Education National Advisory Committee (GMENAC) in 1976 to advise him, among other issues, on the appropriate specialty distribution among practitioners.

Within this framework, geriatric programs are being given their impetus within the Bureau of Health Manpower. Previously, formal geriatric and gerontology training had been sorely neglected, as had concern for the older segment of the population throughout society.

In the past, medical and nursing schools avoided discussions of care for the aged as a career. The prospects, it was believed, were too discouraging, frustrating, unproductive, and hopelessly depressing. In recent years, however, examination of the aging process (gerontology) and of diseases of old age (geriatrics) has led to a renewed interest and hope. Not only have attitudes been changing as more encouraging prognoses become apparent, but programs are being developed in Federal and State agencies, the foundations, and within the private sector, to respond to newer insights. Until recently, formal education in geriatrics was limited. In 1973 the American Medical Association reported that only one geriatrician was formally engaged in medical teaching. The most current Faculty Roster of the Association of American Medical Colleges (1978), which includes more than 49,000 paid medical school faculty educating more than 57,000 medical students, lists only 7 faculty members with a primary specialty of geriatrics and 13 with a secondary specialty of geriatrics. These 20 identifiable faculty members can make little educational impact on the future physicians in the United States, where the average age for women is expected to rise from 77 to 81 years by 2050; for men, from 69 to 71.8.

The 1977–78 Association of American Medical Colleges "Curriculum Directory" shows that only 51 schools (42.9 percent) offered electives in geriatrics (*2*). It was reported that only seven schools required students to visit nursing homes as part of their curriculum.

Most studies conducted over the past years in the United States found student negativism in providing medical services to the elderly. Of the students interviewed at Case Western Reserve University School of Medicine (*3*), 85 percent chose patients with acute illnesses. The students gave "social problems" low priority because of their experience in treating acutely ill inpatients. Wright (*4*) believes that our medical schools have been lax in recognizing geriatric teaching responsibilities. Few courses, or even lectures, that include geriatric concepts are being offered. Young health professionals still seem to find it difficult to face the fact that if they are so fortunate as to survive, they too will become old and in need of care. Dr. Robert N. Butler, Director of the National Institute on Aging, testifying before the Senate Special Committee on Aging in October 1976, said that perhaps the root of our failure to adequately provide for older persons is an attitudinal problem Americans suffer—a personal and institutionalized prejudice against older persons (*5*). He commented that medical students are not exposed to healthy older persons in the same fashion that they are exposed to healthy babies in sunny, well-baby nurseries and clinics. Butler also questioned whether medical students would choose to be pediatricians if they saw only babies suffering from irreversible conditions. Miller (*6*) noted that few physicians are capable of dealing with large numbers of chronically ill persons with substantial enthusiasm.

Now, however, a different attitude is becoming discernible. In 1977, Dr. Leslie S. Libow, chairman, Clinical Section Gerontological Society, and director, Long Island Jewish Institute for Geriatric Care, surveyed almost 400 freshman medical students in 8 medical schools and found that 75 percent of the respondents wanted a full course in human aging and medical problems of the elderly (*7*).

The American Medical Student Association (AMSA) recently formed a Task Force on Aging. The AMSA 1977 president, George Outcalt (*8*), stated "We are led to believe that working with the elderly is depressing, time consuming, and unrewarding. We are never taught the difference between the elderly and the middle aged patients and often see those in their later years without diagnostic and therapeutic measures having been taken because their illness is falsely attributed to old age." Senility is a good example. Definitions of senility are being sharpened. It is now recognized that many of the so-called senile manifestations are actually reversible; that what is needed is a reexamination of the treatment processes and more thoughtfulness in diagnosis. According to Butler (*5*), senility is attributed to old age, although it has often been a result of excessive drugs, lack of proper nutrition, or depression. There are approximately 100, if not more, causes of so-called "senility." This, in itself, is an intriguing diagnostic problem.

In 1972, Libow pioneered post-doctoral geriatric education by incorporating geriatrics in the Internal Medicine Residency Program. The program, consisting of a minimum of 1 year of geriatric training, has been approved by the American Board of Internal Medicine. In presenting a model for a graduate education program in geriatric medicine, Libow describes a system that should include integration of hospitals, nursing homes, and community outpatient programs (*9*).

Health professionals and educators, greatly concerned about the care of the elderly, believe that some countries of Europe are 10 to 20 years ahead of the United States. For example, a geriatric education program was initiated in Scotland at the University of Glasgow in 1965 (*10*). Sir Ferguson Anderson, MD, professor of geriatric medicine at the university, stated that a comprehensive teaching program has gradually evolved, and since 1974 medical students have been required to take 40 hours in geriatric medicine. (It is Butler's hope that Sir Ferguson will be a U.S. Fogarty scholar-in-residence in the fall of 1979.)

Dr. Richard W. Besdine consults with a temporary resident of the Hebrew Rehabilitation Center for the Aged, Roslindale, Mass.

England has 300 established hospital posts in geriatrics. While the United Kingdom has 12 chairs in geriatrics in its medical schools, the United States has only 1 geriatric chair, established in 1977; it is called the Irving S. Wright Professorship in Geriatrics, New York Hospital-Cornell Medical Center. Denmark, Holland, and Israel have geriatric training in their medical schools. As of January 1978, Russia required that geriatrics be taught in its 145 medical schools (*11*).

Bureau of Health Manpower Activities

What, then, is the Bureau doing to assure the needs of the ever-increasing proportion of the population that heretofore has been severely neglected by all sectors of society, including the training of the necessary health care personnel?

Division of Medicine. Section 788(d) of the Health Professions Educational Assistance Act (Public Law 94–484) provides for training in the diagnosis, treatment, and prevention of diseases and related medical and behavioral problems of the aged. To this end, training grants for family practice and internal medicine residencies include elements of programs for the elderly. Each federally funded program must have a planned curriculum that includes such specified topics as management of geriatric patients, recognition and treatment of chronic illness, diagnosis and therapy of mental health problems, rehabilitation, and management of terminal illness. Nutrition counseling and interprofessional relationships among all health personnel are also emphasized. Some grantees have designated that nursing homes shall be training sites. The bulk of the 4,700 trainees in primary care residencies have experience in geriatrics. In addition, some 2,000 medical students and 300 faculty members have received training support in family medicine, including aspects of geriatric care. The latter program is designed to increase faculty competence in teaching skills.

Grants may also be awarded for inclusion of geriatric training for family medicine and internal medicine. There are, however, funding constraints under the present legislation.

Gerontology and geriatrics training in both national and international programs is being developed, and one staff member of the Division has taken a graduate level course in gerontology.

The Division of Medicine also supports more than 40 primary care physician's assistant training programs. One grant recipient, the University of Nebraska College of Medicine, has a 3-year program that emphasizes geriatric education for physician's assistant students. Several other recipients use long-term care and Veterans Administration training facilities.

All of the support described will have an impact on training in geriatrics. Future family medicine practitioners are trained to accept the responsibility for total care of patients within the context of the total environment, including the community, family, or social unit. Paul B. Beeson, MD, professor of medicine at the University of Washington School of Medicine in Seattle, reported in a special issue of the *Internist* on "Meeting the Needs of the Elderly" that "Even now, medical care of the elderly comprises a substantial fraction of the work of most doctors, and, inasmuch as the proportion of the aged in our population is increasing, young doctors now in training, whatever their choice of field, are likely to devote about half their time in the care of people over 65" (*12*).

Area Health Education Centers (AHECs) are designed specifically to provide a more even distribution of health care personnel in medically underserved remote-site (rural) and inner-city areas as well as hitherto neglected ethnic and other minority groups, including their elderly. AHECs are also designed to address the overspecialization aspect of health care delivery. Since AHECs' institution in 1972 in response to a 1970 Carnegie Commission on Higher Education Report, "Higher Education and the Nation's Health: Policies for Medical and Dental Education." (*13*), 27 AHEC sites have been established. A report of the long-term effects of this program will be made to Congress in 1979.

The Bureau has also actively participated in a series of intergovernmental meetings sponsored by the National Institute on Aging (NIA) on planning care for the aged with vice presidents for health affairs of universities. Further geriatric training is one of the goals.

Division of Nursing. The Division of Nursing has several provisions in the Nurse Training Act of 1975 (Public Law 94–364) that give special emphasis to health care problems of the elderly.

Six contracts, a total of $2,030,876, were awarded in fiscal year 1975 for the training of geriatric nurse practitioners. Through nurse practitioner training authority, 13 projects are currently preparing geriatric nurse practitioners. Also, the Division, through advanced training grants, is supporting seven programs with a geriatric nursing focus at the graduate level. Six of these programs are for a master's degree, and the seventh is a combined master's and doctoral degree program.

Another project, located in the University of Colorado Medical Center, Denver, prepares geriatric practitioners in long-term care facilities within a six-State area under the capitation grant program. In addition, 191 nursing schools indicated that they planned to provide remote-site clinical training, most to be in the long-term care facilities.

In addition to sponsorship of continuing education for nursing home nurses, the American Nurses Association has developed a certification program for gerontological nurses, supported by the Division of Nursing.

Gerontological nursing is broader in concept than geriatric nursing. Its overall view is to assess the health care needs of the elderly, to plan the care, and to evaluate its effectiveness. Emphasis is placed on maximizing the older person's independence in everyday living activities, prevention of illness or disability, and promotion and restoration of health. The American Nurses Association is the only professional organization with a formal recognition program for geriatric practitioners. Certification has been given to 217 gerontological nurses who meet the required standards (*14*).

Overall, about 1,000 nurse practitioners have been prepared to date in geriatrics and related fields such as family medicine or adult care.

In nursing research, the Institute of Gerontology at Wayne State University, Mich., is studying job performance of registered nurses and nurses' aides in nursing homes. A contract for a demonstration project to train nurses' aides and orderlies for care of nursing home patients has also been awarded by the Division of Nursing.

Division of Dentistry. The Division of Dentistry is developing, under contract, a methodology for the study of the effect of fluoridation of community water supplies on demand for dental care among older persons. The water fluoridation project has proved to be beneficial to the dental health of young persons, but it might have the paradoxical effect of creating a need for more dental services among older persons due to longer retention of natural teeth.

Another project is designed to develop, implement, and assess a model program for training dental and expanded-function dental auxiliary students in the delivery of primary preventive services in community settings. Two community sites—nursing homes and apartment buildings for noninstitutionalized elderly and handicapped adults—are specifically related to this project. For nursing home patients, four dental teams have implemented a bedside screening, in-service edu-

cation, dental cleaning, scaling, polishing, and referral program.

Division of Associated Health Professions (DAHP). Physical and mental problems of the elderly are frequently multiple and require interdisciplinary services from, for example, physicians, dentists, pharmacists, various levels of nurses, social workers, and physical therapists. Most of these health personnel work independently but nevertheless share tasks relating to patients' histories, physicians' assessments, and followup care.

DAHP geriatric and gerontology support is given to (a) preparation of long-term care administrators, (*b*) assessment of foot problems and related health manpower requirements, (*c*) a study of alternative methods of increasing the geriatric aspects of the pharmacy curriculum, and (*d*) development of an educational program in rehabilitative optometry. In fiscal years 1975–77, allied health special projects grants were awarded for training in geriatric aural rehabilitation, gerontology curriculum development, occupational and physical therapies, and rehabilitation of cardiac patients. Approximately $\$1/2$ million was awarded for these activities that address health and medical needs of the elderly.

Before the HRA reorganization in 1977, the Division of Long-Term Care (DLTC), under statutory authority of the Bureau, provided about $2 million in training support in fiscal years 1976 and 1977 through the Bureau's funding. This support included projects for the development of continuing geriatric education programs for physicians and other health professionals and short-term training for physicians serving as medical directors for long-term care facilities. A contract was awarded through the American Geriatrics Society for publication of a revision of "Clinical Aspects of Aging" (*15*). Special problems of the geriatric patient are the focus. The book is multiauthored, and it has a multidisciplinary approach. Although some of the authors differ on treatment rationales, the book reflects the state-of-the-art in geriatric care today. It includes drug therapy, alternative settings for health care service delivery, nutrition, and the role of the various health professionals in the care of the elderly. Since few health care publications are directed specifically to care of the elderly, this publication's current information can be valuable to individual physicians, nurses, and all related health care personnel.

An estimated 200 or more kinds of health personnel provide service to the elderly. Their skills are needed because a person age 65 or over might have from 10 to 14 minor to major disorders. For example, podiatrists are not only concerned with keeping the elderly ambulatory, but they are also responsible for the early diagnosis of potentially chronic circulatory and metabolic diseases that often affect older people. Optometrists frequently deal with patients over 65 who are suffering from visual impairment that interferes with normal lifestyle. Clinical pharmacists working in extended care facilities are advising physicians about drug interactions and participating in patient education. Audiologists are engaged in detecting deteriorating hearing, which is frequently confused with senility. Nutritionists help plan balanced diets for "Meals on Wheels" for the elderly. A host of other allied health care professionals are of paramount importance in providing care for the elderly. Their training is supported by the Bureau's DAHP. The training includes programs for occupational therapists, occupational therapy assistants, physical therapists, speech pathologists, and vision care technicians. Health educators, health planners, and long-term care administrators also participate in the care of the elderly, individually and collectively.

Since 1974, the Office of Interdisciplinary Programs, currently the Interdisciplinary Programs Branch of DAHP, has funded 18 interdisciplinary team training grants and contracts in the United States. Generally, the projects are located in health science centers; they include various mixes of health professional students and are oriented toward primary care. The training experience is designed to encourage students to become members of interdisciplinary teams in such settings as health maintenance organizations, neighborhood health centers, and rural health clinics. All of these facilities have a geriatric component because they address problems of chronic illness and long-term care for the elderly.

During the past 4 years, the Branch has funded eight projects (five grants and three contracts) that have defined and advanced the concepts of humanistic patient care. For example, the Universities of Pittsburgh and Chicago and New York University have established ethics for grand rounds specifically aimed at considerations of the patients within the framework of human values—the patients and their families, the faculty, and the students. Such considerations include viewing the elderly and chronically ill as total human beings rather than as disease categories, for example, as "that diabetic" or "that cardiac." Pennsylvania State University has introduced the teaching of humanities as they relate specifically to a broader view of the patients and their philosophies. Faculty from the Department of Humanities will be teamed with medical-clinical faculty to relate ethical issues to specific, ongoing patient treatment.

The University of Kansas has established within the total institution a broad philosophy of humanism so that

faculty, students, and patients have a more rewarding and deeper experience The aim is to counteract the depersonalizing aspects of patient care in contemporary teaching facilities and to reduce the feeling of alienation many health profession students and faculty experience in the modern medical education process.

The aim of the New York University Medical Center's program is to present ethical concepts in the context of problematic clinical cases. Advanced students will be exposed to a sequence on the philosophy of medicine dealing with the nature of medical discovery and possible ethical implications of such discovery now and in the future. The University of Pittsburgh plans to offer a multicomponent instructional program in the cognitive aspects of human values, medical ethics, and the medically related humanities (such as philosophy, history, literature, and religion) to students in the School of Medicine, to house staff, and to nurses on the various hospital services.

Technical assistance was provided to the University of Maryland in its development of a humanistic approach, and the effect of this approach is being studied. Thus far, a measurable decrease in anxiety and increased levels in trust among students and faculty have been noted. These changes will be reflected ultimately in the quality of patient care, particularly among the growing segment of older patients who have in the past experienced an attitude of general neglect.

Other Federal geriatric educational activities. During 1978, representatives of the Bureau of Health Manpower (BHM), the Veterans Administration (VA), the National Institute on Aging (NIA), the Administration on Aging (AOA), the Health Care Financing Administration (HCFA), the National Institute of Mental Health (NIMH), and the Institute of Medicine (IOM) conducted joint work groups in clinical geriatrics education. They concluded that there is widespread need for curriculum development for health professions programs in geriatrics. Each agency received multiple requests for financial support. It was agreed that Federal support should be given on a collaborative basis, including substantial contributions from professional and private organizations. Each agency is gearing up to provide additional health care to the elderly. Within the AOA, the new Office of Training and Education on Aging will administer a $22 million budget that stresses multidisciplinary centers. A new initiative of NIMH addresses training of faculty to strengthen training programs in geriatrics. The VA has established six regional education medical centers, which are to devote as much as 50 percent of their efforts to teaching geriatrics through continuing education of all categories of health personnel. The VA also has established 8 regional geriatric education and clinical centers and general fellowship programs at 12 hospitals.

Through inter-agency and intra-agency cooperation and interaction with private efforts (foundations) geriatrics and gerontology education is coming to the forefront.

Beeson considers that "it is proper to consider teaching and research together, because they are so firmly related. The effectiveness of teaching depends on the store of knowledge, and on the interest the subject holds for the teacher. Indubitably, we need to have more teachers conducting research in the field of aging" (*12*).

Foley (*1*) stated that there are improvements to be achieved in care of the aging "that may evolve as a result of the partnership between health manpower training programs and programs to strengthen health planning at the State and local levels. I believe that the network of State and local health planning agencies established under the National Health Planning and Resources Development Act of 1974 will help significantly to rationalize the allocation of health resources, including resources for providing care to the aged."

Funds appropriated for the National Institute on Aging (NIA), the Federal Government's research arm to help the elderly, have increased from $34 million in fiscal year 1977 to $37 million in fiscal year 1978. The fiscal year 1979 appropriation is $56.9 million, a 54 percent increase. HRA is working closely with NIA in support of basic research in geriatrics.

In the non-Federal sector, interest in health care for the elderly is growing. The State of Ohio is one example. Effective July 1978, each college of medicine supported in whole or in part by the State was to create an Office of Geriatric Medicine. Seven Ohio medical schools are affected by this legislation. Two other States, New York and California, are considering similar legislation.

Future activities of BHM. Much Federal legislation has been initiated or is being considered to provide progressive and comprehensive approaches to the special problems of the elderly. The following proposed legislative changes, if passed, will affect the Bureau's health manpower mission:

—Alternatives to long-term hospital care for the elderly (home care, day care centers, or hospices).

—Use of physician's assistants and nurse practitioners and their reimbursement for services.

—Establishment of health maintenance organizations (HMOs) exclusively for the elderly.

—Long-term advocacy programs.

—Possible creation of a position, titled Assistant Secretary for Elderly Health, responsible for all health and and health-related matters involving the "old" (up to 75) and "old-old" (over 75) population.

—Establishment of a national health insurance plan.

—Legislation has been passed for the convening of the Third White House Conference on Aging to be held in 1981. Included in discussions will be educational changes in our institutions that have benefited the elderly population during the 1970s.

The House Select Committee on Aging was told by Libow in May 1978 that a cadre of 8,000–10,000 geriatricians is needed (*16*). This need represents 3.3 percent of the total physicians now in practice. The cadre is broken down by discipline and includes nearly 500 located in medical schools, 7,000 in skilled nursing facilities, and 2,400 in training hospitals.

The various Divisions of the Bureau of Health Manpower will continue to focus on the health needs of the elderly. Programs will focus on improving curriculums by incorporating new concepts developed under the research grant programs. Understanding of the daily living problems and specific illnesses of the elderly and the therapeutic techniques required depends largely on the instruction and followup care provided by nurses. Such understanding is significant because of the greater reliance on out-of-hospital care for older persons and because many of the patients' primary needs are for nursing care as opposed to cure. For example, nurses are the principal providers of care in rehabilitation centers, nursing homes, and home health agencies. Such settings could be developed into model nursing centers, offering unique opportunities to test nursing theories in practice, to promptly apply findings from promising research, and to develop new modes of nursing srevices.

Specifically, the Bureau will be engaged in the following:

—Continued support of interdisciplinary training for care of the elderly.

—Continued support to establish new roles and functions within the associated health professions.

—Encouragement of the development and implementation of clinical training programs, residencies, and preceptorships in extended care facilities.

—Enhancement of the geriatrics content of the basic and clinical curriculums.

—Encouragement and support for short-term training for nursing home workers.

—Stimulation of the supply of selected professions working with the elderly.

—Investigation of alternative delivery systems and resource requirements for meeting the needs of the elderly; for example, home care.

—Encouragement of each health professions school to establish a focal point for coordinating training for gerontology and geriatrics.

Finally, the Bureau of Health Manpower is using its resources, both personnel and financial, to help the elderly of this country live dignified, fruitful, and healthful lives by fostering a greater appreciation of their whole social, economic, and psychological well being.

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