PROJECT VEHTS
(Versatile Employment of
Health-Trained Servicemen)

Nathan (Robert R.) Associates, Inc.

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An R&D Project to Assist Civilian
Hospitals in Hiring and Retaining
Military-Trained Medical Personnel

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I. SUMMARY

The release from military service of numbers of medically trained enlisted men annually in the late 1960's, when a shortage of health care personnel was a matter of national concern, inevitably suggested the possibility of channeling these men into employment in the civilian health sector. These men (call them "medics") represent a wide range of occupations (other than physicians, dentists, and nurses), from highly skilled technical and medical administrative personnel to technicians of various sorts. Their training has been structured, standardized, and rigorous, and their experience, in medical and health care systems of acknowledged excellence -- those of the U.S. Army, Navy, and Air Force -- has included care of civilian dependents as well as military personnel, in general hospitals as well as military installations and battlefields.

The opportunity to convert this manpower asset to civilian use prompted the U.S. Department of Labor in 1967 to commission Robert R. Nathan Associates to conduct a study of veteran medics to determine the extent of transferability to the civilian health sector and the obstacles impeding it. The rate of transferability was found to be low; the interest of the veterans in pursuing health careers was found to be much higher. The principal obstacles were found to be, on the one hand, the inability of the veterans to meet the formal requirements of academic education and credentialing for the jobs for which they were suited and the careers to which they aspired, and on the other hand, the relatively low status, low pay, and poor career prospects of the jobs available to them. The findings prompted a follow-on project to demonstrate how and to what extent veteran medics could be launched on civilian health careers which would make efficient use of their military training and experience for the benefit of the civilian population. Project VEHTS (Versatile Employment for Health-Trained Servicemen) was the result.

The project combined research on the experience with recruitment, placement, utilization and training of medics in health care occupations with a demonstration in one large general hospital (Cook County Hospital in Chicago). The research component was intended to determine the range of possibilities for the transfer of medic's skills and the ways in which it could be accomplished. The demonstration was intended to arrive at a modus operandi in an actual operational situation.

Though the operational situation turned out to be rather more complex than average (because Cook County Hospital was caught up in a round of political problems unusual even for a public hospital), the operating problems of placing medic veterans which Project VEHTS encountered were not unlike those that might be encountered in a typical large general hospital: weakness of hospital personnel administration; diffusion of decision-making in hiring; lack of knowledge and documentation of medic veterans' training, experience, and capabilities in relation to civilian requirements of education and experience; lack of opportunities for continuing education and training as a basis for upgrading in career development. Assiduous cultivation of the medical and administrative staff resulted in a significant number of placements in technical and medical-administrative positions. But in this project (as in the earlier study) it was found that the occupational structure in nursing care (LPN jobs pay too little and medics cannot qualify for RN) severely limits the placement of veterans.

An additional constraint in the latter months of the documentation was a marked change in demand-supply relationships in allied health professions. While this affected Cook County Hospital dramatically and limited placement opportunities, Project VEHTS ascertained that it was very widespread among hospitals as the result of the large out-turn of allied health training programs undertaken in response to the shortages of the late 1960's, on the one hand, and, on the other hand, the slowdown of expansion of hospital staffing under public pressure to restrain hospital costs. This easing of the supply situation and the greater availability of conventionally trained allied health workers aggravated the competitive obstacles to the placement of veterans.

One of these obstacles is the information gap in organization and procedures for placing veteran medics. In spite of the priority emphasis on "jobs for veterans," there

is no systematic means of making available to civilian health hiring authorities information which would enable them to ascertain and to interpret the particulars of military medical training and experience in terms of civilian health occupations. The summary of the medic's military record that he carries with him is insufficient for this purpose; so are the procedures of the public employment service. MEDIHC (a referral service for veteran medics sponsored by HEW in each state) is the most useful system for putting medics and potential employers in communication.

The best results were obtained by one hospital in particular which reviewed and revised its occupational and pay structure to provide more attractive opportunities for veterans and then recruited aggressively, mainly through Transition offices maintained on military bases to counsel and assist (and sometimes train) men about to be released from service in making contact with prospective employers. Recruitment was carried on against specific and definite job openings by an official authorized to offer employment to suitable applicants. The hospital reports that savings from reduced turnover has offset the increases in the pay scale. Another well-known hospital found that by combining recruitment with training of medics for nursing duties it could augment its direct patient care staff in several departments. To do so, it had first to overcome some reluctance on the part of the professional nurses and to offer similar opportunities to subprofessional nursing staff. Medics are being used also in the medical plan of a new town, where they are employed on the medical and surgical services and in the emergency rooms.

Nevertheless, it seems that opportunities for veteran medics are more promising in newer occupations whose occupational structure and credentialing are in a more formative state, such that obstacles can be, if not overcome, at least circumvented. Prominent among these is the occupation of physician's assistant, which is taking form under guidance of educational institutions, the medical profession, and the government. The background of the medic in many cases includes training and experience and working relationships with physicians that can be the foundation for training as physician's assistant. A specialized variant is orthopaedic technician, for which a training program, including veterans, was launched at Cook County Hospital in 1973.

Veterans' experience enables them to be assimilated also into systems for emergency medical care. Medics have

long "moonlighted" in emergency rooms of civilian hospitals. The evolution of a new series of emergency medical occupations is providing opportunities in emergency rooms, trauma centers, and in mobile care on ambulance services. Statewide trauma networks (as in Illinois) have made extensive use of veterans. Through Project VEHTS and Transition, many medics took and passed qualifying examinations for Emergency Medical Technician-Ambulance in 1972-73. This is a field which is expected to expand under federal encouragement.

Another opportunity for veteran medics is in correctional institutions. When Cook County Hospital assumed responsibility for medical services in the Cook County penal system, Project VEHTS provided a number of veterans to staff the services. The success of this effort points the way to expanded uses of veterans in county and state institutions (they have long been used in federal prisons), in step with the movement to upgrade the generally inadequate health care facilities of these institutions.

The emphasis on occupations in formative stages of development reflects the difficulties encountered by veteran medics in meeting the more rigid conditions to qualify themselves in established occupations employing formal systems of credentialing. This may entail licensure by the state, but more often, in occupations for which veteran medics might qualify, it entails "certification" by a professional organization that an individual has completed prescribed accredited education and passed a qualifying examination. Notwithstanding its standardized content and high quality, most military medical training is not accredited, with the result that medics, if they wish to be certified, must repeat all or the greater part in an accredited program. This they are understandably reluctant to do.

There are several approaches to this problem: to "accredit" military medical training so that it can be credited against formal education requirements; to permit veterans to sit for "equivalency" examinations to demonstrate their mastery of some parts of the required education: to permit veterans to sit for "proficiency" examinations to demonstrate their qualifications for certification. Progress is gradually being made in all three approaches, but not enough has yet been made to make very much difference. (The arrangements through Project VEHTS to permit medics to sit for the EMT-A exam is a case in point. Proficiency testing for medical laboratory occupations, sponsored by the medical profession, is another.) Perhaps the most significant move toward

the use of proficiency testing to expand the supply of health care personnel is the provision in PL 92-603 (H.R.1) that HEW shall conduct proficiency examination programs to establish competence of personnel who do not meet the formal criteria, and that no one employing personnel so qualified can on that account be denied reimbursement under Medicare or Medicaid.

It seems likely that 20,000 to 25,000 medically trained service personnel will be released by the military each year. This is about the same number as complete 4-year courses in health occupations, and the same number as complete 2-year courses. This can be a very considerable asset. But civilian placement officers find it difficult to assess the veteran's training and experience according to the civilian occupational structure and standards. This information gap needs to be closed.

The credentialing gap also needs to be closed. Some progress is being made, by AMA approval of military medical education programs in a half-dozen occupations. A move has been made toward providing medics with recognizable documentation of their training in the military.

A number of hospitals have realized the advantages of employing medics, but most have not overcome the inertia of traditional job structure, traditional recruitment methods and sources, credentialing, etc. At present, efforts of various groups and institutions to help veterans meet civilian health criteria and fill civilian health needs lack coherence and fail to make a significant impact on the problem. The 1973 amendments to the Social Security Act, mandating proficiency examinations, may speed the process.

There are impediments on the supply side also. Even in large cities, with relatively large numbers of both openings and veterans, it is not easy to recruit for particular openings at a particular time. Better machinery and better procedures are necessary to intermediate between the health care vacancy and the veterans who might be available to fill it.

There are two veteran medic populations. The smaller consists of men retiring after a career in the service, including technical and administrative experience. They have a high level of competence, and their principal problem is to surmount the barriers of credentialing. The overwhelming

number of veteran medics are one-termers with basic military medical training and wide-ranging diverse experience that is difficult to assess. For them, the effort should be made to provide recognition of their military medical training and experience in civilian programs of education and training for health careers.

II. BACKGROUND, SETTING AND CONDUCT OF PROJECT VEHTS

Background of Project VEHTS

Although thousands of enlisted men return to civilian life each year after serving in the medical departments of the Armed Forces, only a small fraction find work in civilian hospitals. Servicemen believe that low pay and civilian standards for hiring and advancement are among the major barriers that prevent them from transferring from military medical systems to the civilian health field. This was a key finding of the report, Transferability of Military-Trained Medical Personnel to the Civilian Sector, prepared by Robert R. Nathan Associates for the U.S. Department of Labor in 1970.

As a followup to that study, the Office of Research and Development of the Manpower Administration of the U.S. Department of Labor supported a demonstration project, Project VEHTS, to determine how to eliminate or at least reduce the obstacles inherent in existing employment practices in civilian hospitals. The goal was to remove the barriers, especially those arising from educational requirements, credentialing and the refusal by most civilian education and hiring authorities to give due credit for military training and experience. Removing these obstacles will clear the way for a substantial increase in the number of military personnel who continue in medical work as civilians.

It is not enough, however, to hire veterans for entry-level jobs. In the long run, both their interests and those of the hospital require opportunities for career development. The efforts of civilian hospitals must go beyond recruitment to include appropriate placement, efficient utilization, and opportunities for advancement. Without these positive personnel policies, the veteran will enter and soon leave hospital employment, replicating the pattern of high turnover and low productivity found among most hospital systems.

The objectives of the overall project were, first, to design and demonstrate a system of continuous recruitment and placement by a civilian hospital of discharged, medically trained military personnel; and second, to develop and demonstrate the career opportunities for veterans in civilian hospitals through a career mobility program whose components may include new occupational categories, training and educational opportunities, and career ladders.

The immediate objective of Project VEHTS was to determine the problems faced by a major employer -- a large hospital -- in recruiting, placing and retaining veterans who have had military medical training and experience. Additionally, the program proposed to demonstrate ways to solve these problems by testing alternative solutions. The demonstration aspect of the program included assisting veterans to qualify for positions at Cook County Hospital and to obtain the necessary credentials to meet the hiring standards of other civilian hospitals. Intensive efforts were made to arrange and bring into being several career development programs to bridge the differences between capabilities acquired in the military medical services and those required for civilian health services.

The Setting of Project VEHTS

The setting of Project VEHTS was a group of health institutions under the jurisdiction of the Health and Hospitals Governing Commission of Cook County. Cook County Hospital, with 1,500 beds and 5,000 employees, is one of the largest hospitals in the United States. As Chicago's only public hospital, Cook County provides medical services to approximately one-fifth of all the city's hospitalized patients, handles more than one-third of the city's emergency cases, and offers primary care to half a million ghetto poor each year.1/ It is governed jointly with the Oak Forest Hospital, a long-term facility for the chronically ill with 2,000 beds and a staff of 2,000, and with the Cook County School of Nursing, an accredited program preparing professional nurses. The Governing Commission is also responsible

1/ Robert J. Freeark, M.D., "The Plight of the Public Hospital - Case Study Chicago," HOSPITALS, Journal of the American Hospital Association, July 1, 1970, vol. 44, p. 60. See also Pierre de Vise, "The Great Chicago Massacre of 1970," mimeo, undated, p. 8.

for the medical care delivered in Cook County's correctional institutions.

Cook County Hospital is an institution in the throes of renewal and revitalization. In the summer of 1970, after more than 100 years of operation, the hospital, once a prestigious medical facility, faced the prospect of having to close its doors because of the threats of disaccreditation and mass staff resignations. During this time of crisis, the Illinois State Legislature gave the new Health and Hospitals Governing Commission of Cook County complete authority to control the finances and administer the operations of Cook County, Oak Forest Hospital, and the Cook County School of Nursing. In September 1970, Dr. James G. Haughton was named Executive Director of the Health and Hospitals Governing Commission and Director of Cook County Hospital.

As a result of changes in administration, the introduction of innovative programs, improvements in the physical plant, and changes in personnel management, Cook County Hospital achieved a 2-year accreditation from the Joint Commission on Accreditation of Hospitals in August 1971. Several programs significant to veterans, some in progress and others in the planning stage, were listed in the report to the Joint Commission on Accreditation of Hospitals as indicators of the forward strides being made at Cook County Hospital:1/

1. A new Unit Administrator program that includes a college-accredited training course

2. A goal-oriented job classification study to assess the function and performance of all employees of the hospital

3. New programs in the School of Nursing's Department of Education to train personnel in new professional categories, such as patient advocate and outreach worker

4. Reorganization of the emergency, admitting, and outpatient services of Cook County Hospital

1/ Health and Hospital Governing Commission of Cook County, "Accreditation Team Surveys Cook County Hospital," NEWS, August 1971, p. 12.

5. Expansion of the outpatient service and the acute inpatient service at Oak Forest Hospital to accommodate residents of the southern portion of the county

6. A statewide emergency services program which utilizes Cook County Hospital's Trauma Unit as the hub of its operations.

With the strong impetus to improve conditions in the hospital, the Governing Commission and the Cook County Hospitals provided a favorable climate for experimentation and innovation. Indeed, this institutional complex can be considered a "laboratory" for studying various approaches to the improved use of medical manpower, including the use of military-trained manpower.

Dr. Haughton's interest in Project VEHTS reflects his personal background as a Navy doctor and his appreciation of the training and experience veterans receive in the Armed Forces medical departments. From his perspective as a hospital administrator, he can envision the value of this largely untapped labor pool to civilian hospitals. Under the new governance and administrative autonomy, the Cook County Hospitals are free to develop new programs, to modify their own merit system, and to devise an efficient and effective personnel system, including steps to facilitate the hiring and utilization of veterans.

However, as so often happens, efforts to initiate fundamental institutional changes have met with resistance. At Cook County Hospital, despite the intensive cooperative effort in the summer of 1971 at all levels of the staff to obtain approval from the Joint Commission on Accreditation of Hospitals, by fall 1971 there was acute conflict between the administration of the Governing Commission and the medical staff for control of the hospital. During October and November 1971, the crisis was daily front-page news in the Chicago newspapers, sending continual shockwaves throughout the institution and the community. "The struggle," according to the news analysis that appeared in the Chicago Tribune on November 14, 1971, "is over who should run the hospital and what shape it is to take."1/ The pronouncements of the

1/ Ronald Kotulak and Maria Opp, "Tuesday is D-Day for County Hospital," Chicago Tribune, November 14, 1971, p. 8.

various parties to the dispute, headlined day after day, caused psychological and organizational disorientation in the Governing Commission and the hospital. As the year ended, court-stipulated procedures were begun to adjudicate the dismissal of five doctors. The dissension between the warring elements was mitigated. Despite the tumult during that fall, the hospital continued to function and to provide patient care, and Project VEHTS made progress.

When the hue and cry had died down, however, other serious conditions affecting the operation of the hospital came to the fore. On December 3, 1971, an executive directive imposing a job freeze was issued to all division and department heads of the Governing Commission, Cook County Hospital, Cook County School of Nursing, and Oak Forest Hospital. The duration and the extent of the job freeze were not clear, but it became evident that the implications for Project VEHTS were most serious, as many of the efforts of Project VEHTS' staff during succeeding months were frustrated. The impact of the job freeze can be measured by changes in additions to staff. Cook County hirings, which numbered 131 persons per month in July and August of 1971, dropped to 80 in January 1972 and were estimated at 50 in April 1972. During this period of belt-tightening, the bulk of new hirings were interns, externs, residents, and other professionals. In fact, a group of low-level employees, largely attendants and food service workers, were laid off in June 1972. Relatively few positions suited to the skill of the veteran were filled in the spring of 1972. However, important changes heralding a new era of peace and progress were taking place.

"Peace at Cook County Hospital" proclaimed the Chicago Daily News on July 20, 1972, in an editorial commenting on several key appointments that had just been announced. The editorial began:

> The three new appointments to Cook County Hospitals' high command should go far toward healing the breach between the medical staff and the governing commission in over-all charge of county health facilities. The appointments were described as a peace move by Dr. James G. Haughton, the commission's executive director, and the dissident staffers who have been feuding with him and the commission appear to agree.

In another significant development, the Governing Commission approved a 6-percent raise in room rates at Cook County Hospital, effective September 1, 1972. "In-patient care rates will go to $146.88 daily -- $60 of this for room and board. Outpatient and emergency care will cost the patient $28.20 and $26.50, respectively...."[1/] The prospects for an amelioration of the hospital's financial condition appeared to improve.

The combination of commendable new appointments, better staff morale and improved financial outlook changed the atmosphere at Cook County Hospital considerably. With the dissension subdued, the forces for reform and progress began to be felt.

The Illinois Legislative Investigating Commission recommended that Cook County Hospital be more closely affiliated, by some form of merger or partnership, with the University of Illinois Medical School.[2/] The pros and cons of a university-controlled hospital for the delivery of health care to the population served by Cook County Hospital are currently being considered; among the issues which have been raised is the possible conflict between the educational objectives of the school and the patient-care objectives of the hospital.

Internal efforts were also taking place to restructure the hospital. The Health and Hospitals Governing Commission decided to deactivate part of the hospital to compensate for the decline in the average daily census of inpatients from 1,800 in the late 1960's to 1,200 in 1972. The reduction would relieve budgetary pressures, and the smaller scale hospital would in the future be the core of a new satellite system emphasizing ambulatory care.

The first step in achieving the reduction was accomplished in November 1972, after a strike by the registered and licensed practical nurses lowered the patient census drastically. One building which was closed during the strike was not reopened afterward, thus reducing the number of beds from 1,850 to 1,550.

1/ The Sun Times, August 15, 1972.
2/ Report of the Illinois Legislative Investigating Commission, Cook County Hospital, November 1972.

The second step towards a smaller hospital required a reduction in staff to bring the patient-staff ratio closer to acceptable standards. Approximately 1,000 budgeted positions were eliminated in January 1973. Substantial numbers, totaling 506, of practical nurses, student nurses, clerical employees, and service and maintenance workers were affected. The number of physicians and registered nurses remained unchanged.

At the close of the demonstration project in June 1973, activities at Cook County Hospital were no longer front page news, but several noteworthy events occurred. The Governing Commission had agreed to oversee the provision of health services to the Cook County Jail system, and was staffing the facilities in large part with medical corpsmen. In addition, it had negotiated the terms under which it would govern the delivery of medical care at the Martin Luther King, Jr. Health Center, which could presage a role for the Governing Commission in a program of comprehensive health care for Cook County.

III. CONDUCT AND OPERATIONS OF PROJECT VEHTS

The Conduct of the Demonstration

To help the project staff design and implement Project VEHTS, an Allied Health Manpower Advisory Panel was formed, consisting of distinguished experts in the health field. The panel convened twice each year to discuss the immediate and long-run objectives, alternative operational strategies, and technical and institutional problems arising in the operation of Project VEHTS.

The Advisory Panel stressed the implicit as well as the explicit objectives of Project VEHTS. The explicit objective of the project was to demonstrate the transferability of veterans with military training and experience into civilian hospital occupations. However, there were broader implications in the project objectives, dealing with changes in overall manpower utilization and retention in a hospital setting; with expanded access to hospital careers for groups other than veterans, who have to overcome similar barriers and rigidities; and with the development of innovative ways to recruit, educate, train, upgrade, and credential allied health manpower in general. The focus of Project VEHTS was on the corpsman with military medical training and experience, but others face the same barriers as do the corpsman, so that relevant generalizations for a larger population should be one outcome of Project VEHTS. The panel recommended that Project VEHTS develop and test a variety of strategies at Cook County Hospital to accomplish its objectives, and counseled the project staff in ways of overcoming technical and institutional obstacles.

At the beginning of the demonstration in July 1971, the project staff saw Project VEHTS as a catalytic force in a process that would produce a veterans' utilization program

in the Cook County Hospitals. The staff envisioned their role as that of consultant to the Governing Commission, to assist in developing a program for utilizing medical veterans, to be implemented at Cook County and Oak Forest Hospitals. This concept was reinforced by one of the first acts of the Governing Commission with regard to the project: the Director of Manpower Development of the Governing Commission was named the primary liaison person with Project VEHTS.1/

The staff allowed themselves 3 months, from July to October 1971, to become established in the Governing Commission organization, to elaborate the project design, to develop the required contacts and to put together the implementation plan. There was unanimous acceptance in principle of the utilization of medical veterans, but difficulty in pinpointing who would be responsible for implementing it.

After several months, three immediate obstacles were recognized:

1. Most administrators and physicians who were interested in medical veterans were preoccupied either with the acute political turmoil in the hospital or with reforms which had a higher priority.

2. The staff had not been able to identify an administrator at the Governing Commission level, other than the besieged Executive Director, who was willing and able to give impetus to the program.

3. Crucial information necessary for the development of Project VEHTS, such as listings and specifications of job openings, was not available anywhere in the system.

By the end of 1971, the staff had revised their strategy and changed their role from that of consultants to that of operators. The focus of their activities shifted

1/ Unfortunately, the Director of Manpower Development left Cook County Hospital a few months afterwards and all attempts to develop a manpower planning system lay dormant until the closing days of the project.

from the Governing Commission to Cook County Hospital itself. The duties of the two onsite project personnel were clearly differentiated: one assumed primary responsibility for the supply of veterans, and the other for the demand for their services, as defined in the design of the project shown in chart 1.

The Project VEHTS staff member with responsibility for veteran "supply" developed and maintained a series of contacts with agencies that could help locate medical veterans, such as MEDIHC, Transition, Referral, and the Illinois State Employment Service. At the same time, the staff member with "demand" responsibility worked on a series of contacts in the hospital administration, particularly in the personnel office and in several selected departments.[1/] Project VEHTS maintained a file on veterans currently available and on those who would be available in the near future. A system for locating, interviewing, and classifying veterans was developed.

At the outset, a number of barriers were hypothesized to the development of an orderly system for the recruitment, placement, and career development of medical veterans:

1. Resistance by the nursing staff and other professionals to the use of medical corpsmen

2. Licensure and certification requirements

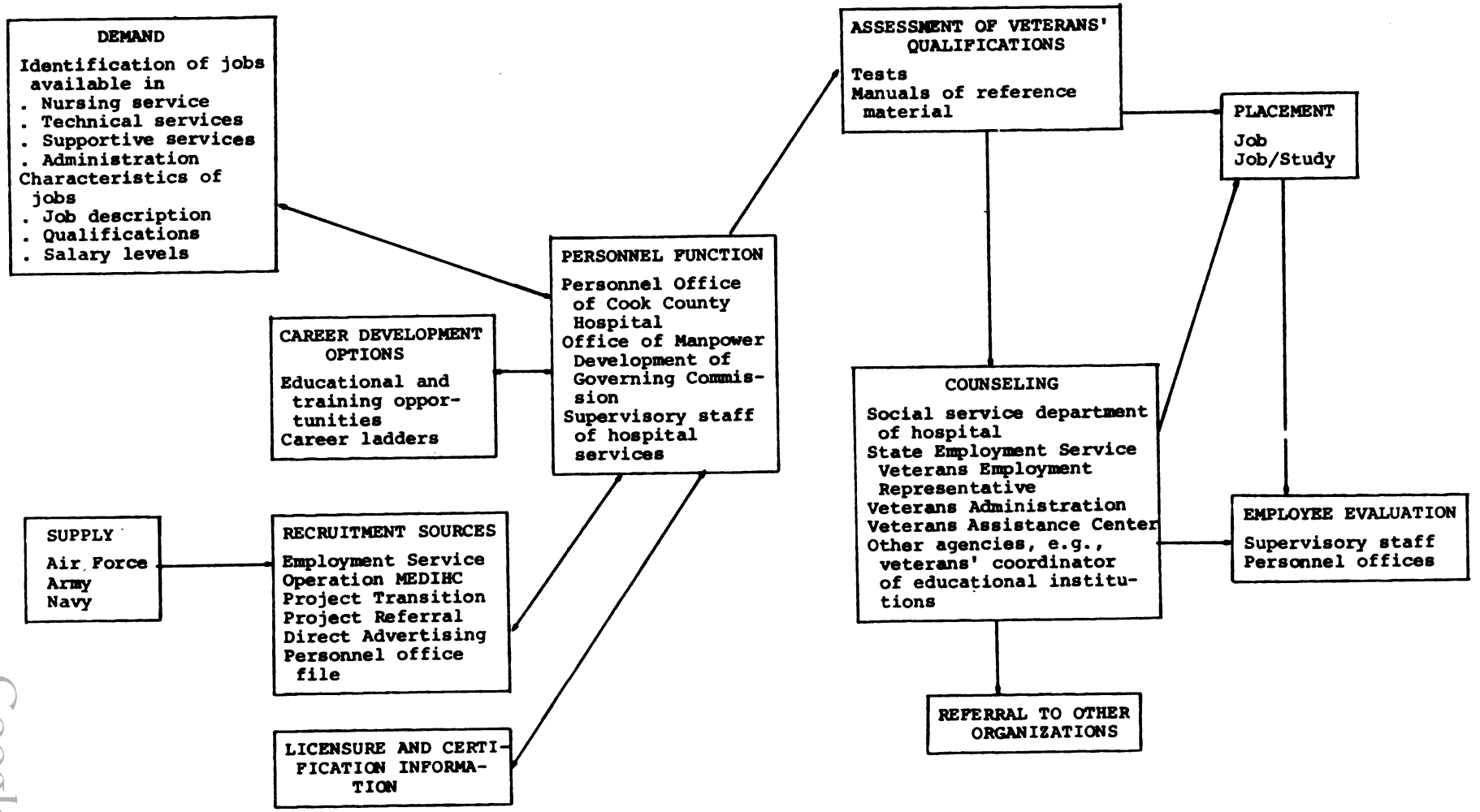
3. Pay level

4. Lack of appropriate training opportunities, particularly for advanced placement.

Other obstacles, however, soon became evident. Most important was the social and political climate in which the hospital found itself in 1971 and 1972. New programs of all kinds were caught in the turmoil of dissension, and in any case, manpower development was not accorded a high priority. A number of political, organizational, and managerial problems had first to be resolved.

1/ This division of work was modified whenever a member of the project staff was assigned to develop a career program, such as the orthopaedic technician training program.

CHART 1. COMPONENTS OF SYSTEM FOR THE RECRUITMENT, PLACEMENT, ASSESSMENT & CAREER DEVELOPMENT OF VETERANS BY COOK COUNTY HOSPITAL



Among other handicaps was the embryonic state of the Personnel Department and the personnel function at Cook County Hospital. The Personnel Department traditionally served a clerical function, simply recording the demands and hiring decisions of the operating departments. The Governing Commission decided to upgrade the services and role of the Personnel Department and Project VEHTS cooperated, but it was not until the second year of the project that the department became a satisfactory source of job information and applicant referral. During the concluding phase of the demonstration, the hospital could identify budgeted positions that were open and that would be coming open, but it was still experiencing difficulty in distinguishing available openings from those that had already been committed to an applicant.

At Cook County Hospital, veteran utilization is most successful when the impulse originates in the medical departments and is reinforced by the Personnel Department, and not the other way round. Several factors may account for this. First, the seat of power is in the medical staff. Second, the personnel interviewer in the Personnel Department is trying for the most part to get what the doctor ordered rather than to develop alternatives. Third, a manpower shortage does not exist, since an average day brings as many as 100 job applicants to the doors of the employment office at Cook County Hospital. Fourth, while a good case can be made that the veteran is a better potential employee than the average person off the street, finding and hiring a veteran entails more work for the Personnel Department. The veteran does not want a routine job; he has skills and he wants to use them. And he does not fit into easily defined job slots in the hospital. Moreover, the more skills he has, the harder it may be to assess them and to place him most advantageously.

Locating the right medic at the right time requires time and effort. Veterans, especially in the first months after they return to civilian life, are highly mobile: they return home; take trips to see friends; look for a job; move to another address. It is hard to keep track of them. Producing a medically trained veteran with scarce specialized skills in a short time may be difficult, if not impossible.

The experience at Cook County Hospital showed that these handicaps could be overcome. As the hospital departments became more familiar with medical veterans, they specifically requested them, and the veteran became a

sought-after commodity. Despite the fact that more time had to be spent in assessing and counseling the medically trained veteran than other applicants, the Personnel Department became convinced of the advantages of medically trained veterans to the institution by the enthusiastic reaction of the medical staff to those veterans who were hired and the credit that redounded to the Personnel Department for referring them.

Under the conditions at Cook County Hospital in 1971 and 1972, the project staff found that Project VEHTS itself had to set up an orderly system for veteran recruitment, placement, and career development, somewhat removed from the innumerable day-to-day crises at Cook County and the Governing Commission. The importance of the people at the operating level of Cook County Hospital, where the hiring decisions were being made, was recognized. Much time and effort were expended in determining the hospital jobs that were open and were authorized to be filled. One member of the Project VEHTS staff spent time walking the halls of the hospital almost every day visiting departments, seeking information on job vacancies, making new contacts, and staying on top of the latest happenings in the hospital. The project staff established a recruitment system that would bring in veteran candidates, and developed interviewing and assessment techniques and a filing and retrieval system that recalled veterans who had been seen earlier and identified where the hospital could best use their talents.

As time passed, several immediate and long-run objectives became paramount. The aim of Project VEHTS was to make placements, to build support for the use of veterans at various levels of the hospital organization, to assist emerging manpower development programs, and to ensure institutionalization and replicability of the project's functions. To achieve these goals, different strategies were followed: a concentrated effort was made to place veterans in middle management positions where they could demonstrate their outstanding capability and influence the hiring of other medically trained servicemen; relationships with a number of department heads were cultivated; a close working relationship was established with the Governing Commission staff involved in special manpower programs; and cooperative arrangements were nurtured with the Personnel Department.

The most successful strategy was to seek out physicians and department heads who were planning program innovations, because these generated fluid situations in which the range and versatility of veterans' capabilities were particular

assets. By working closely with them to identify the needs of the particular program or department, the project staff could determine if a medical veteran with particular training and experience could answer these needs. In most cases, Project VEHTS was able to respond with qualified candidates.

At the close of the demonstration, Project VEHTS achieved a major goal when full responsibility for the recruitment and placement of medically trained veterans was formally transferred to the Director of Recruitment and the Veterans Employment Representative of Cook County Hospital. Medically trained veterans with varying backgrounds had been placed in a number of different hospital positions. Several career opportunities, linked to training programs, had been developed. The formal association with the Governing Commission was ended when Project VEHTS was at a crest. The decision made at that time to use corpsmen to improve medical care at Cermak Prison Hospital reflects the strong conviction of the Governing Commission and of the administrators and medical staff of the Cook County Hospital that veterans with military medical experience are a valuable asset to civilian health care providers, well worth the effort to recruit and retain them.

Operation of Project VEHTS

Operations at Cook County Hospital began in August 1971. To organize initial efforts in a systematic fashion, a list was made of the potential components of a system for the recruitment, placement, and career development for veterans, as shown in chart 1.

The core component was the personnel function which was performed by a number of individuals and organizational units in the Cook County setting -- the newly created Personnel Department of the hospital, the Office of Manpower Development of the Governing Commission, and the heads of departments and other supervisory personnel. Other components were aspects of the personnel function that enable job openings to be identified; recruitment sources to be contacted; applicants to be assessed and placed; and employees to be evaluated and counseled.

At the start, the project staff were concerned to learn as much as possible about each component as it related to

Cook County Hospital, its associated institutions and the Chicago area. To do this, contacts were immediately made in the Governing Commission, in the hospital, and with other organizations. In August and September 1971, all parties interested in veterans at the Governing Commission and at Cook County Hospital met to exchange information.1/ In addition, a working relationship was established with key agencies in the Chicago area whose programs could feed into the system we were designing, such as the Illinois MEDIHC, the Veterans Employment Service and the Illinois State Employment Service.

Informative discussions relevant to Project VEHTS were held with the staff of the American Medical Association, American Hospital Association, Malcolm X Junior College, The Veterans Assistance Center of the Veterans Administration, and the Interim Organization for Chicago Area Allied Health Manpower, "a consortium of health, manpower and educational agencies and community organizations working together to support and strengthen the recruitment, education and effective utilization of allied health manpower in the Chicago metropolitan area."2/ The interim organization, now defunct, provided a channel of communication with 39 diverse local organizations concerned with health manpower.

Project Implementation

Project VEHTS developed an operating system of job identification, recruitment, and referral of veterans, adapted to the circumstances and practices at Cook County Hospital and designed to merge with procedures of the Personnel Department. Briefly, the system operated as follows:

1/ Attending the meetings were the Acting Director of the Cook County Hospital, the Director of Personnel of the Governing Commission, the Director of the Fantus Clinic (Ambulatory Services), the Director of Pharmacy, the Chief Trauma Coordinator, the Project Director of the Job Classification Study, a Cardiopulmonary Technician (who is a veteran), the Assistant Administrator of the Division of Medicine of Cook County Hospital, the Director of Nursing Services, and the staff of Project VEHTS.

2/ The Interim Organization for Chicago Area Allied Health Manpower, Twenty-Five Barriers that Restrict the Effective Recruitment, Training and Utilization of Allied Health Manpower in the State of Illinois, August 1971, title page.

The process began with the identification of job openings and the qualifications required, and included adaptations of the standard steps of recruitment, referral, interview, and followup.

In July 1972, the Cook County Hospital Personnel Department designated one of their personnel interviewers as Veteran Representative for the hospital. Procedures were established for processing veterans, both walk-ins to the Cook County Hospital Personnel Department and referrals from Project VEHTS.

The Cook County Hospital application form makes no provision for recording information regarding military medical training and experience. (This lack of information in part accounts for the stereotype referral of veterans to orderly and attendant jobs.) A special Veteran Supplement (chart 2) to the hospital application form was developed by Project VEHTS in order to record in detail the military background of the applicant. The merits of the Veteran Supplement were demonstrated shortly after it was introduced when an Air Force first-termer, who had been separated from the military and was canvassing personnel departments of various hospitals, applied at Cook County. The Veteran Supplement revealed his military on-the-job training and years of experience in inhalation therapy. He was referred to the department head for an interview and was hired as an anesthesiology technician.

Cook County Hospital expressed interest in filling 50 different types of positions with veterans. (See table 1 for a list of job titles for which Project VEHTS recruited.) Veterans were considered for administrative jobs at every level, as for example, communications and transportation director, administrative assistant in the radiology department, unit manager technician, and ward clerk technician. They were also in demand to fill technical positions, such as orthopaedic technician, EEG technician, pharmacy apprentice, and nurse anesthetist. Veterans were also wanted as supportive service workers, such as food service manager and safety engineer.

Before active recruitment could begin, detailed information was needed about the job duties and responsibilities, the requisite qualifications of the applicant, and the salary level. In many cases, the specifics of the job opening were

Chart 2

VETERAN SUPPLEMENT *

NAME _____

U.S. MILITARY SERVICE:

BRANCH OF SERVICE _____ ARMED FORCE SERVICE # _____

ENTRY DATE _____ SEPARATION DATE _____ LENGTH OF SERVICE _____

MILITARY OCCUPATIONAL SPECIALTY NUMBER _____ CURRENT DRAFT STATUS _____

RANK AT TIME OF DISCHARGE _____ TYPE OF DISCHARGE _____

WERE YOU IN A MILITARY MEDICAL UNIT ? ☐ YES ☐ NO

DD 214 ATTACHED ☐ YES ☐ NO ACTIVE RESERVE ☐ YES ☐ NO

MILITARY EDUCATION & TRAINING:

LIST THE MILITARY SERVICE SCHOOLS COMPLETED.

COURSE TITLE AND NUMBER	YEAR COMPLETED	WEEKS	PLACE OF TRAINING

MILITARY WORK EXPERIENCE:

EXPLAIN DUTIES OF LAST THREE (3) ASSIGNMENTS, STARTING WITH LAST ONE FIRST:

DATE(MONTH & YEAR): FROM: _____ TO: _____

JOB TITLE _____ SUPERVISOR _____

DUTIES _____

_____

_____

_____

DATE: FROM: _____ TO: _____

JOB TITLE _____ SUPERVISOR _____

DUTIES _____

_____

_____

_____

DATE: FROM: _____ TO: _____

JOB TITLE _____ SUPERVISOR _____

DUTIES _____

_____

_____

_____

* VETERANS SUPPLEMENT DEVELOPED BY PROJECT VEHTS, ROOM 248, 1725 WEST HARRISON STREET, CHICAGO, ILLINOIS 60612.

Chart 2

MILITARY MEDICAL EXPERIENCE CHECKLIST

DIRECTIONS FOR COMPLETING CHECKLIST:

THIS CHECKLIST IS DESIGNED TO ASSIST IN IDENTIFYING YOUR AREAS OF EXPERIENCE AND THE LEVELS OF RESPONSIBILITY YOU HAVE HELD IN EACH AREA.

PLEASE REVIEW THE ENTIRE CHECKLIST FIRST, AND THEN CHECK EACH AREA IN WHICH YOU HAVE HAD EXPERIENCE. THEN RECORD AT THE APPROPRIATE LEVEL OF RESPONSIBILITY IN EACH OF THE AREAS CHECKED, THE NUMBER OF YEARS OF EXPERIENCE YOU HAVE HAD.
USE FRACTIONS TO INDICATE EXPERIENCE OF LESS THAN A FULL YEAR, AS INDICATED BELOW.

EXAMPLE

PLEASE CHECK ANY AREA IN WHICH YOU HAVE HAD EXPERIENCE	AREA OF EXPERIENCE	LEVEL OF EXPERIENCE (YRS.) AIDE	TECHNICAL	ADMINISTRATIVE	IN THE AREAS CHECKED INDICATE WHETHER YOU HAVE A LICENSE/ CERTIFICATION IN THOSE AREAS
X	WARD MANAGEMENT	6	12 1/2	1/4	NO

CHECKLIST

PLEASE CHECK ANY AREA IN WHICH YOU HAVE HAD EXPERIENCE	AREA OF EXPERIENCE	LEVEL OF EXPERIENCE (YRS.) AIDE	TECHNICAL	ADMINISTRATIVE	IN THE AREAS CHECKED INDICATE WHETHER YOU HAVE A LICENSE OR CERTIFICATION IN THOSE AREAS
	ADMINISTRATION				
____	Dispensary/ Clinic Administration	____	____	____	____
____	General Administration	____	____	____	____
____	Hospital Administration	____	____	____	____
	ANESTHESIOLOGY				
____	Anesthesiology Assistant Technique	____	____	____	____
____	Inhalation Therapy Technique	____	____	____	____
	CENTRAL SUPPLY				
____	Central Supply Management	____	____	____	____
____	Sterile Central Supply Technique	____	____	____	____
	DENTAL				
____	Dental Equipment Repair Technique	____	____	____	____
____	Dental Health Assistant Technique	____	____	____	____
____	Dental Hygienist Technique	____	____	____	____

Chart 2

CHECKLIST

PLEASE CHECK ANY AREA IN WHICH YOU HAVE HAD EXPERIENCE	AREA OF EXPERIENCE	LEVEL OF EXPERIENCE (YRS.) AIDE	TECHNICAL	ADMINISTRATIVE	IN THE AREAS CHECKED INDICATE WHETHER YOU HAVE A LICENSE OR CERTIFICATION IN THOSE AREAS
	EDUCATION/TRAINING				
____	Teaching	____	____	____	____
____	Training Program Development	____	____	____	____
	EMERGENCY MEDICAL CARE				
____	Ambulance Attendant	____	____	____	____
____	Emergency Medical Care Technique	____	____	____	____
____	Emergency Room Management	____	____	____	____
____	Independent Duty Medical Care	____	____	____	____
____	Military Field Medical Care	____	____	____	____
	FOOD SERVICE				
____	Food Preparation	____	____	____	____
____	Food Service Management	____	____	____	____
	GENERAL CLERICAL				
____	General Clerical Skills	____	____	____	____
	LABORATORY				
____	Blood Bank Technique	____	____	____	____
____	Clinical Bacteriology Technique	____	____	____	____
____	Clinical Chemistry Technique	____	____	____	____
____	Hematology Technique	____	____	____	____
____	Histology Technique	____	____	____	____
____	Medical Photography/Illustration	____	____	____	____
____	Pathology Cytology Technique	____	____	____	____
____	Pulmonary Function Technique	____	____	____	____
____	Tissue Bank Technique	____	____	____	____
____	Tissue Culture Technique	____	____	____	____
____	Virology Technique	____	____	____	____
	MEDICAL RECORDS				
____	Medical Records Management	____	____	____	____
____	Medical Records Technique	____	____	____	____
	NURSING				
____	Dialysis Technique	____	____	____	____
____	Ear, Nose & Throat Assistant Technique	____	____	____	____
____	Electrocardiography Technique	____	____	____	____
____	Electroencephalography (EEG) Technique	____	____	____	____

CHECKLIST

PLEASE CHECK ANY AREA IN WHICH YOU HAVE HAD EXPERIENCE	AREA OF EXPERIENCE	LEVEL OF EXPERIENCE (YRS.) AIDE	TECHNICAL	ADMINISTRATIVE	IN THE AREAS CHECKED INDICATE WHETHER YOU HAVE A LICENSE OR CERTIFICATION IN THOSE AREAS
	NURSING (CON'T)				
____	Nursing Assistant (Aide, Orderly) Technique	____	____	____	____
____	Operating Room Technique	____	____	____	____
____	Opthalmic Assistant Technique	____	____	____	____
____	Optometric Assistant Technique	____	____	____	____
____	Orthopedic Assistant Technique	____	____	____	____
____	Pediatric Assistant Technique	____	____	____	____
____	Physician Assistant*	____	____	____	____
____	Psychiatric (Mental Health) Assistant Technique	____	____	____	____
____	Urology Assistant Technique	____	____	____	____
____	Ward Clerk Technique	____	____	____	____
____	Ward Management	____	____	____	____
	OTHER SERVICES				
____	Medical Equipment Repair	____	____	____	____
____	Medical Social Work	____	____	____	____
____	Medical Supply & Equipment Management	____	____	____	____
____	Sanitation	____	____	____	____
	PHARMACY				
____	Pharmacy Assistant Technique	____	____	____	____
____	Pharmacy Management	____	____	____	____
	PHYSICAL MEDICINE & REHABILITATION				
____	Occupational Therapy Technique	____	____	____	____
____	Physical Therapy Technique	____	____	____	____
	RADIOLOGY (X-RAY)				
____	Nuclear Medicine Technique	____	____	____	____
____	Radiation Health Technique	____	____	____	____
____	Radiation Therapy Technique	____	____	____	____
____	X-Ray Technique	____	____	____	____

IF AN AREA OF YOUR EXPERIENCE IS NOT LISTED ON THIS CHECKLIST, PLEASE PRINT THE AREA OF EXPERIENCE IN THE FOLLOWING SPACES AND NOTE THE YEARS OF EXPERIENCE AT THE APPROPRIATE LEVEL OF RESPONSIBILITY.

____	_____	____	____	____	____
____	_____	____	____	____	____
____	_____	____	____	____	____
____	_____	____	____	____	____

* IF YOU CHECK THIS AREA YOU SHOULD HAVE ASSISTED IN EVALUATING AND TREATING PATIENTS WITH SOME DEGREE OF INDEPENDENCE OF IMMEDIATE SUPERVISION OF THE PHYSICIAN.

Table 1. Project VEHTS Recruitment List, October 1, 1971-June 30, 1973

No. of jobs	Job title	Annual salary ($)
	Cook County Hospital	
1.....	Administrative Assistant, Ambulatory Services[a]	11,300-14,400
1.....	Administrative Assistant, Ambulatory Services[a]	8,500-12,000
1.....	Administrative Assistant, Anesthesiology[a]	11,300-14,400
1.....	Administrative Assistant, Appointments[a]	9,804
1.....	Administrative Assistant, Blood Bank	15,000
1.....	Administrative Assistant, Department of Medicine[a,b]	11,000-12,000
1.....	Administrative Assistant, Education[a]	9,804
1.....	Administrative Assistant, Radiology[a]	15,000-17,500
1.....	Administrative Assistant, Recruiter	12,000
1.....	Anesthesiology Technician[a]	8,468
1.....	Assistant Director, Environmental Services[a]	11,000
1.....	Biochemist[a]	9,800
1.....	Blood Bank Supervisor[a]	Open
1.....	Clerk, IV, Pharmacy[a]	6,100-7,800
1.....	Cytotechnician	Open
1.....	Director, Transportation and Communications[a,b]	11,000-14,000
1.....	Electroencephalograph Technician[a]	7,000-9,800
1.....	Electrocardiagram Technician[a]	7,330
1.....	Food Service Manager[a]	14,000
1.....	Health Advocate[a]	6,200
1.....	Inhalation Therapist. Registered	7,800-10,000
1.....	Laundry Manager	15,000-17,500
3.....	Medical Lab Technician, Level I[a]	6,800
3.....	Medical Lab Technician, II, Hematology	7,332
2.....	Medical Lab Technician, II, Medicine	7,524
1.....	Medical Lab Technician, III, Medicine	8,698

continued--

Table 1. continued--

No. of jobs	Job title	Annual salary ($)
4.....	Medical Lab Technician Supervisor, Blood Bank	11,628
1.....	Medical Records Clerk[a/]	7,300-9,300
2.....	Nuclear Medicine Technician[a/]	8,100
1.....	Nurse Anesthetist	Open
3.....	Operating Room Technician[a/]	7,380
1.....	Orthopaedic Technician[a/]	9,400
3.....	Orthopaedic Technician Trainee[a/]	6,000
1.....	Personnel Analyst	12,000-15,000
2.....	Personnel Interviewer[a/]	9,000-10,000
5.....	Pharmacy Apprentice and Technician[a/]	5,800-6,800
1.....	Position Control Analyst[a/]	10,000-14,000
6.....	Registered Pharmacist	Open
1.....	Safety Engineer[a/]	11,000-14,000
1.....	Security Director[a/]	11,000-15,000
1.....	Supervisor, Acquisitions Pharmacy[a/]	10,500
2.....	Transportation Aide[a/]	5,600
2.....	TB Control Representative[a/]	9,300
1.....	Unit Administrator[a/]	8,400-9,600
2.....	Unit Manager Technician[a/]	8,500
1.....	Urology Technician[a/]	Open
19.....	Ward Clerk Technician[a/]	5,700
1.....	Radiologic Technologist, Registered	9,300
	Health and Hospitals Governing Commission of Cook County	
1.....	Architectural Draftsman	10,000-13,000
1.....	Buyer, Purchasing[a/]	12,000-15,000
1.....	Editorial Assistant[a/]	Open

continued--

Table 1. continued--

No. of jobs	Job title	Annual salary ($)
1.....	Management Analyst[a]	13,000-15,000
1.....	Programmer III[a]	Open
1.....	Project Leader[a]	Open
	Oak Forest Hospital	
1.....	Assistant Security Director[a]	Open
6.....	Attendant[a]	6,200-7,200
1.....	Employment Manager	10,000-12,000
1.....	Executive Housekeeper[a]	10,000-12,000
1.....	Laundry Manager	13,000-15,000
17.....	Licensed Practical Nurse[a]	7,200-9,100
4.....	Occupational Therapy Assistant[a]	6,200-7,200
1.....	Physical Therapy Assistant[a]	6,200-7,400
1.....	Training Analyst, Personnel	8,582
	Presbyterian-St. Luke's Hospital	
1.....	Cast Room Technician[a]	8,500-10,000
1.....	Chief, Instrumentation Technician (Dialysis)[a]	7,300
1.....	Cine-Angio Technician[a]	6,810
1.....	Cardio-Arteriography Assistant[a]	7,500-10,000
1.....	Electrocardiagram Technician[a]	6,800
1.....	Electronic Technician[a]	7,200-8,400
2.....	Interviewer (temporary)[a]	10,200

continued--

Table 1. continued--

No. of jobs	Job title	Annual salary ($)
1.....	Medical Laboratory Technician[a/]	7,900-9,100
4.....	Nuclear Medical Technician	9,340
1.....	Psychiatric Aide	6,800
3.....	Transfusion Therapy Technician (part time)[a/]	2.85/hr.
2.....	Unit Manager[a/]	9,500
1.....	X-ray Technician[a/]	7,500
	Trauma Program, Division of Emergency Medical Services and Highway Safety, Illinois Department of Public Health	
1.....	Trauma Coordinator, Level II[a/]	10,000-13,000
	Michael Reese Hospital	
1.....	Assistant Department Head, Inhalation Therapy	10,000
1.....	Bill Manager, Physicians Service Corporation	9,228
1.....	Catheterization Technician	8,628
2.....	Inhalation Therapist, Registered	8,000-9,800
1.....	Radio-Isotope Technician[a/]	9,900
1.....	Renal Dialysis Technician[a/]	8,628
	Rockford Memorial Hospital	
1.....	Clinical Supervisor, Inhalation Therapy	9,000-10,200

continued--

Table 1. continued --

No. of jobs	Job title	Annual salary ($)
	Cermak Memorial Hospital	
8.....	Medical Corpsman[a/]	9,348
1.....	Medical Corpsmen Coordinator[a/]	11,628

a/ One or more applicants referred to this position.
b/ Position not funded.

not clearly formulated at the start and had to be developed in a series of time-consuming meetings and communications. The discussions centered on the functions to be performed; the qualifications required in terms of education, training, experience and other credentials; and the salary level. Job descriptions were then matched with military medical occupational classifications to determine the appropriate sources of recruitment and the applicable military terminology to describe the typical applicant sought.

At the time the job freeze was imposed at Cook County Hospital in 1972, Project VEHTS explored the employment situation at other hospitals in the Chicago area. Presbyterian-St. Luke's Hospital, located across the street from Cook County, was especially interested in utilizing medically trained veterans in its institution and contacted Project VEHTS periodically with requests for referrals. Michael Reese Hospital responded early in 1973 with several requests for veterans with administrative and technical skills. The efforts of Project VEHTS became known outside the Chicago area; in February 1973, Rockford Memorial Hospital in Rockford, Illinois, asked for help in locating a senior veteran with extensive inhalation therapy experience to be employed as a department supervisor. The Trauma Program of the State of Illinois, a coordinated statewide network of hospitals providing emergency medical services, asked Project VEHTS for referrals, offering an excellent prospect for the employment of medically trained veterans throughout the state. In fact, approximately 40 retired senior enlisted personnel had been hired as trauma coordinators. In the summer of 1973 the Governing Commission asked Project VEHTS to recruit veterans to work as medical corpsmen in Cermak Prison Hospital, part of the Cook County jail system.

Project VEHTS referred men to fill specific job vacancies, as well as men with exceptional qualifications that might be of interest to the hospitals' staff. A total of 310 men were referred to Cook County Hospital and Governing Commission and to other institutions. A number of these veterans seeking health careers in Chicago were brought to the attention of the hospitals' administration because of their outstanding military medical experience, even though their experience was not directly relevant to jobs open at the time. (This practice made hospital personnel aware of the full range of potential in the veteran groups.) One hundred and four applicants were interviewed and 43 accepted jobs ranging in pay from $5,220 to $13,068, with a median salary of $8,482. Table 2 summarizes the recruitment,

Table 2. Project VEHTS Recruitment, Referral and Placement to Cook County Hospitals and Governing Commission and to Other Institutions, October 1, 1971-June 30, 1973

Recruitment source	Job order placed[a]	Applicant referred to Project VEHTS	Applicant contacted by Project VEHTS[b]	Applicant or resume referred to hospital[c]	Hospital interview	Placement	
						Mil. med. exp.	Mil. non-med. exp.
Total.....	244	1,621	771	310	104	37	6
Military:							
Project Transition.....	95	214[d]	214	79	17	6	1
Referral Program.	37	901[d]	105	23	1	0	0
Newspaper ads/ articles.....	3	24	23	3	0	0	0
Civilian:							
ISES.....	25	85	82	45	25	5	4
MEDIHC.....	58	127	99	73	24	9	1
Local newspaper ads.....	26	190	176	62	29	13	0
Unsolicited.....	0	35	32	21	6	3	0
National publicity.....	0	45	40	4	2	1	0

Note: The term Cook County Hospitals refers to Cook County and Oak Forest Hospitals; other institutions include Presbyterian-St. Luke's Hospital; Trauma Program, Division of Emergency Medical Services, Illinois Department of Public Health; Michael Reese Hospital.

a/ Each job order represents one job title and may indicate a number of job openings.

b/ Includes communications by means of letter, telephone, or personal interview.

c/ Candidates were not referred for a variety of reasons: lack of interest in specific job openings in Cook County Hospital or in the Chicago area; lack of qualifications for available job openings; unfavorable personal impression.

d/ A total of 1,289 resumes of veterans seeking civilian employment in the health field throughout the United States were forwarded by Project Referral; however, only 901 of these veterans had military medical experience.

referral and placement efforts from October 1971 through June 1973.

Of the 310 applicants whose resumes were forwarded to the hospitals, 102 were considered unqualified due to lack of experience, education, or other attributes (see table 3). This does not necessarily reflect unfavorably on the men's military training and experience, because job specifications at Cook County Hospital, especially employee qualifications, were initially unstructured and frequently changed from the time of the initial discussion to the time of the hiring decision. In fact, some hiring decisions were held in abeyance pending decisions with respect to hospital reorganization and budget. A significant number of referrals were considered to lack necessary education; often this meant that they were not graduates of formal educational programs but had acquired their skills and knowledge through military training courses and on-the-job experience. In addition, some of those rejected were applicants of superior accomplishments for whom there was no opening at the time.

Recruitment Sources

Simultaneously with developing the demand for veterans in the hospitals, Project VEHTS worked to obtain access to the supply of qualified veterans who had returned to civilian life. The supply can be tapped before or after the men leave the service. A propitious time to approach the serviceman with a job offer occurs as he is leaving the service. First, he is considering the adjustments he must make to civilian life, which include job hunting. Second, he is in a known place and can usually be reached by mail or telephone. For the career man, furthermore, since relocation expenses for family and household goods are paid by the military only once after he separates, there is an incentive to firm up the job situation so that the family can be settled. Third, the resources of the Transition program are readily available to facilitate communication between soon-to-be-separated servicemen and civilian employers.

Transition is a Department of Defense program designed to help military personnel obtain employment, vocational training, or additional education in preparation for their return to civilian life. The operation of the Transition program is highly decentralized. Almost all local military installations have a Transition officer or other official responsible for the program who uses a variety of techniques to assist employers to reach service personnel:

Table 3. Results of Project VEHTS Referrals to Cook County Hospitals and Governing Commission and to Other Institutions, October 1, 1971-June 30, 1973

Results	Total	Number of referrals	
		Cook County Hospitals & Governing Commission	Other institutions
Total referrals.....	310	248	62
Hired.....	43	33	10
Decision on hiring pending.....	27[a/]	24	3
No available position.	28	26	2
Job not funded.....	19	18	1
Position filled by other candidate.....	48	42	6
Candidate unavailable for personal interview.....	16	10	6
Hospitals considered referred applicant unqualified due to:			
Overqualification....	2	1	1
Lack of education....	21	21	1
Lack of experience...	48	28	20
Hours available for work.....	5	3	2
Appearance.....	6	4	2
Applicant unwilling to consider job opportunity or job offer due to:			
Other offer.....	26	21	5
Salary.....	8	5	3
Chicago area.....	13	12	1

1/ As the project was closing, Cook County Hospital requested referrals of medical corpsmen for positions to be filled in the future in jail health services and in TB control.

1. Scheduling of interviews between employers and servicemen: The Transition officer arranges an appropriate time with the employer and then, after individual contacts or publicity in the news media on the military installation, arranges for interested servicemen to meet with the employer.

2. Group job opportunity briefings: The Transition officer arranges with a number of employers to appear before a group of servicemen and discuss specific or general job opportunities in their field. Representatives of the State Employment Services, vocational schools and colleges may also appear. Frequently individual interviews are arranged subsequent to the group briefings.

3. Job fairs: The methods vary, but usually substantial numbers of employers are invited to set up booths and displays in a large meeting room, convention hall, or some multiple-room arrangement on a military installation or in a nearby town. Service personnel soon due to leave military service and veterans in the local area are usually invited to attend. Local Chambers of Commerce, veterans' organizations and State Employment Service local offices often help establish and run the fairs. Group briefings and individual interviews are usually arranged.

4. Direct contact systems: Some installations maintain continuing liaison with employers interested in hiring servicemen. When a serviceman trained in the skills desired by an employer is about to separate, the Transition staff may call or write to the employer, provide resume information, and help the man to get a job and the employer a trained employee.

5. Job availability notices: The Director of Training Programs, Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), has established a worldwide system for informing military personnel about specific civilian job opportunities. An employer completes a simple, single-page Job Availability Notice form for each kind of job he is trying to fill (see chart 3). This information is distributed worldwide to all Transition sites.

6. Training programs: Through Transition, employers may participate in training manpower for their own use. The training may be on-the-job, in formal courses, or in a combination of both. On-the-job-training is a possibility, using the facilities of civilian hospitals within commuting distance of the military base. Special courses to meet an employer's needs may be established, often funded by the U.S. Department of Labor under the provisions of the Manpower Development and Training Act.

Chart 3

TRANSITION Program - OPTION 2
JOB AVAILABILITY NOTICE

COMPANY _____ DATE _____

1. Title of Job _____

2. Description of Duties _____

_____

_____

3. Experience or Training Required (Give Minimum and Preferred) _____

_____

_____

4. Location of Job _____

5. Salary Range _____

6. Advancement Opportunities _____

_____

7. Address of Individual or Office to Whom Inquiries Should be Made for Employment Application or Interview _____

_____

_____

8. Remarks _____

_____

_____

9. Estimated Time Vacancies Will Exist:

____3 Mos. ____6 Mos. ____Year ____Continuous

Note to Employer: Copies of this form will be distributed to TRANSITION installations. Please use typewriter and prepare one clear, legible form for each job type. Address all completed forms to Director, Training Programs, Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), Washington, D.C. 20301.

Despite the assistance of the Transition program, approaching the man shortly before his separation presents some problems. He may be transferred to a separation center for processing and be on the base only for a few busy days, making it happenstance if the recruiter from Project VEHTS visits during that time or if the man has time to act upon information given to him by the Transition officer. Should he be aware of and interested in Project VEHTS, he may be located so far from the job site (in this case, Chicago) that he is unable to present himself for an interview without considerable expense; therefore, it is important that the hospital recruiter visiting the military sites be able to hire, since a personal interview with the hiring authorities is a prerequisite for employment. Another difficulty is that some of the men are psychologically unready to make decisions regarding civilian life and require a period of adjustment and testing the labor market after their service before they can think in these terms. Still, the advantages of reaching the man while in service appeared to be substantial enough to warrant the effort as part of the Project VEHTS demonstration.

For this reason, Transition sites at various military bases were visited.1/ These sites are either in close proximity to Cook County Hospital (or to Washington, D.C.) or are associated with a major military hospital. During these visits, the objectives of Project VEHTS were explained and the cooperation of the Transition staff in identifying qualified and interested servicemen for specific job openings was requested. In each case, Project Transition Job Availability Notices were filed and a procedure was arranged to process future requests from the Cook County Hospitals. At every site, the staff of Project VEHTS was most cordially welcomed and received assurances of continued assistance.

Project VEHTS was also assisted by the national staff of the Department of Defense Directorate of Training Programs

1/ Sites visited included Fort Sheridan, Illinois; Great Lakes Naval Base, Illinois; Scott Air Force Base, Illinois; Chanute Air Force Base, Illinois; Fort Knox, Kentucky; Wright-Patterson Air Force Base, Ohio; Walter Reed Medical Center, Washington, D.C.; the National Naval Medical Center, Bethesda, Maryland; Naval Station, Norfolk, Virginia; Ft. Lee, Virginia; Ft. Eustis, Virginia; Naval Hospital, Portsmouth, Virginia; Langley Air Force Base, Virginia; Ft. Dix, New Jersey; Ft. Meade, Maryland; Anacostia Naval Station, Washington, D.C.

in its willingness to publicize Project VEHTS and the job openings at Cook County Hospital. Through this agency, job opportunities at the Cook County Hospitals were made known to Transition officers at 400 military installations throughout the world. An article about Project VEHTS appeared in the agency's Transitional Manpower Bulletin. Posters supplied by Robert R. Nathan Associates were distributed to all Transition offices. As a result, inquiries were received from Transition officers and veterans located throughout the world.

At each Transition site, the ideas and suggestions of the civilian and military personnel were solicited. One suggestion was that Project VEHTS establish contact with Transition officers at sites in geographic proximity to large military hospitals, thus increasing the likelihood that men with military medical backgrounds would be reached. An examination of the location of major military hospitals that coincided with Transition sites disclosed approximately 10 such installations, and many of them were visited. The objective was to establish clearly marked channels through which the supply of interested and qualified servicemen about to be released would be directed to the Cook County Hospital.

Other useful suggestions were made relating to techniques to maximize the benefits to Project VEHTS from visits to military installations. Included were suggestions that Project VEHTS should: (1) arrange for on-base advertising in the daily bulletin or base newspaper prior to visits; (2) request that project posters be strategically displayed; (3) make available informational brochures and flyers about Cook County Hospital and Project VEHTS; (4) become knowledgeable about the job market in the Chicago area for skills, such as teaching and stenography, that might be important to wives; (5) have every man who is interviewed fill out an application because his qualifications, although not currently demanded, might be needed at some future date; and (6) secure an address at which the man could be reached after he leaves the service.

To tap the supply of medically trained servicemen after their release from the Armed Forces, Project VEHTS used several recruitment sources. Among these was the REFERRAL program, a companion operation with Project Transition in the Transitional Manpower Program of the Defense Department. REFERRAL was designed to provide "counseling and voluntary registration of retiring military personnel into a computerized man-job matching system, into which employers from both the public

and private sectors may submit job requirements."[1] REFERRAL was directed exclusively toward the 65,000 to 70,000 career men who retire each year after having served in the military for 20 to 30 years. The retiring career man himself voluntarily filled out a form which contained the information that was fed into the computer. He was eligible to use Project REFERRAL for a year after retirement.

Another recruitment source for men out of service is the state MEDIHC agency. MEDIHC -- Military Experience Directed Into Health Careers -- is a Federal program conducted by the U.S. Department of Health, Education, and Welfare (DHEW) in cooperation with the Transition office of the Department of Defense (DOD). As part of their separation counseling, Transition officers urge health-trained servicemen to fill out a qualification/referral MEDIHC card which is sent to DHEW regional offices and then forwarded to the MEDIHC agency in the designated state. DHEW administers its part of the program through 53 state MEDIHC agencies and 10 regional offices, with DHEW in Washington, D.C., coordinating the program nationally. MEDIHC agencies are found in a variety of settings; for example, in the state hospital association, in an educational institution, in the state department of public health, or in the comprehensive health planning offices. Each state has a MEDIHC coordinator whose duty it is to "evaluate and match the individual's qualifications and interests with medical educational and job opportunities in his area".[2] Since its inception in 1970 more than 14,000 veterans have been referred by MEDIHC coordinators to jobs or study programs. In fiscal year 1973, 6,100 persons were helped, two-thirds were placed in health jobs and one-third in health occupation education programs.

In Illinois, the Health Career Council of Illinois was the initial MEDIHC agency. In 1973 the Illinois Hospital

1/ Fact-Sheet REFERRAL Program, Office of the Assistant Secretary of Defense, Manpower and Reserve Affairs, Series 1. The computerized portion of the REFERRAL program, conducted by the Office of Centralized REFERRAL Activity in Dayton, Ohio, has been discontinued by the Department of Defense. REFERRAL continues to offer counseling to career men to help them translate their military experience into civilian terms and thus be better prepared to cope with the adjustments required in the transition to civilian careers.

2/ U.S. Department of Defense, The MEDIHC Program, Transition Program Letter 5, May 1973.

Association was designated the MEDIHC agency. The Illinois MEDIHC coordinator has been kept informed by the staff of Project VEHTS of job openings for veterans at the Cook County Hospitals and has proved to be one of the most effective recruitment sources. The newsletter of the Illinois MEDIHC agency which lists available veterans and their qualifications has been distributed to various department and division heads in the Cook County Hospitals. On the theory that many veterans may be willing to move to take advantage of a job offer, Project VEHTS has also been in contact with the Pennsylvania, Ohio, and Wisconsin MEDIHC coordinators and reviews the monthly listing published by them.

The Illinois State Employment Service (ISES) and the Veterans Employment Service within it have also cooperated with Project VEHTS. The State Employment Service, created four decades ago by the Wagner-Peyser Act of 1933, offers job counseling and placement service to veterans and makes referrals to employers. Designated Veterans Employment Representatives are responsible for seeing to the special requirements of veterans. The basic mission of the Employment Service, to provide a labor exchange, has been elaborated over the years and periodically has been refocused to adjust for changing times. At present the Employment Service places a strong emphasis on increasing the number of placements, especially of veterans, and on establishing closer relationships with employers.

Every few days, the Chicago office of ISES receives a form (VES-1) originating in the Department of Defense, giving the names, home addresses, branch of service, military occupation, education, and active duty dates of Armed Forces separatees with addresses in the Chicago area. The data are sorted by home address and distributed to the 40 local offices in and around Chicago so that information related to each separatee is available in the office closest to his residence. The local office contacts the veteran by phone, personal visit, or letter, but relatively few veterans respond to the ISES offer of counseling and job assistance.[1/] Our experience has been that ISES was not organized to identify, or equipped to assess, the technical skills of the

1/ It is estimated that Illinois gets 5.8 percent of the servicemen released annually, i.e., approximately 60,000 in fiscal year 1971 and 40,000 in fiscal year 1972. Of these, ISES received data for three out of five men, and between 800 to 1,500 names a month are routed to the Chicago office.

medically trained veteran, although ISES has the potential to become a valuable recruitment source for the hospitals.

Several other recruitment sources were used. Classified advertisements were placed in military and civilian newspapers. Ads for three responsible, well-paid administrative positions were placed in the Army, Navy and Air Force Times in the November 10, 1971, issue. The response was negligible. In contrast, the series of advertisements which appeared in a large Chicago newspaper resulted in almost 200 contacts with veterans. Telephone and personal interviews screened this number to 62 applicants who were referred to the hospital; 29 were interviewed, and 13 were hired.

A number of veterans have contacted Project VEHTS as a result of newspaper, radio, and television publicity. For example, an item about Project VEHTS that appeared in the December 1971 issue of Soldiers, the Army's official magazine, stimulated a number of inquiries from Army personnel to the Project VEHTS office. Word about Project VEHTS is being brought to veterans overseas by manpower specialists of the Veterans Employment Service of the Labor Department's Manpower Administration. These overseas counselors visit military bases in foreign countries to help servicemen prepare for civilian employment. Each of the counselors has a packet containing information about the project and job opportunities at Cook County Hospital. National and other publicity resulted in 45 inquiries, four referrals, two interviews and one placement.

National recruitment did not prove particularly successful. We cooperated with and sent posters to Transition bases all around the world. The posters and job orders at the bases elicited many responses, but few of these people were actually returning to Chicago. The hospital was not interested in paying travel for veterans, nor were hiring officials likely to consider employing a candidate without a personal interview.

Characteristics of Veterans and Types of Positions Filled by Veterans

The veterans employed through the efforts of Project VEHTS were predominantly Army men; Navy corpsmen made up one-third of the group; and only a few were veterans of the Air Force. They were hired at a median salary of $8,500. Their

annual income ranges from a low of $5,200 to a high of $13,404. Most have had 4 years or more of military medical experience. The overwhelming majority are in their 20's or early 30's and have had some college education. Two-thirds are white. For the most part, the veterans were hired to fill administrative or technical positions; they were not offered the option of professional or subprofessional nursing roles even when there was strong demand for nursing staff.1/ Tables 4 and 5 present selected characteristics of veterans placed and the job titles of the positions they filled.

Of the 43 veterans participating in Project VEHTS, 13 separated from their jobs during the course of the demonstration. Four decided to enroll in full-time studies; three quit in dissatisfaction; two were discharged during the massive reduction in staff at Cook County Hospital in the winter of 1972, and two for unsatisfactory performance; one left to take a better health job with the state and one withdrew from the civilian labor force by reenlisting in the Army. Salary levels were significantly lower among those who were separated than among those who were retained; the median salary for the separatees was $5,700, while among the retained veterans, it was $10,000. (See table 6.) Nine of the 11 placed in jobs paying less than $6,500 separated, but only four of the 32 placed in jobs paying above $6,500 separated. The Project VEHTS experience confirms the importance of attractive jobs at adequate salary levels to interest and keep medically trained veterans in civilian health jobs.

On the other hand, 47 veterans rejected these opportunities and decided that other job offers were more attractive, that they preferred to work some place other than Chicago, or that the salaries the hospitals offered were inadequate.

One person exemplifying the characteristics of veterans placed is the medical laboratory technician, level 1, that Cook County Hospital hired at an annual salary of $6,818. Recently discharged from the Army after 9 1/2 years of service, his training in the Army included the basic medical corpsman 10-week course, the 16-week introductory medical laboratory specialist course, and the 50-week advanced medical

1/ Project VEHTS has been concerned to find civilian settings in which the nursing experience of medics can be tapped. See the discussion of emergency medical technicians.

Table 4. Selected Characteristics of Veterans Placed at Cook County Hospitals and Governing Commission and at Other Institutions, October 1, 1971-June 30, 1973

Characteristics	Total
Total	43
Military service:	
Army	24
Navy	15
Air Force	4
Military medical experience:	
None	6
2 years or less	11
3 to 4 years	10
4 years or more	16
Education:	
High school graduate	16
College:	
2 years or less	20
3 years	2
4 years	3
Post graduate	2
Age:	
Less than 25	16
25-34	19
Over 35	8
Race:	
White	29
Black	14

Table 5. Job Titles of Veterans Placed at Cook County Hospitals and Governing Commission and at Other Institutions, October 1, 1971-June 30, 1973

Institution	Job title[a]
Cook County Hospitals and Governing Commission.....	Administrative Assistant, Ambulatory Services Administrative Assistant, Education Administrative Assistant, Pharmacy Anesthesiology Technician (2) Assistant Director, Security Attendant Electrocardiagram Technician Medical Corpsmen (4) Medical Corpsmen Coordinator Medical Lab Technician Medical Records Clerk Microbiologist Operating Room Technician (2) Orthopaedic Technician (2) Orthopaedic Technician Trainee Pharmacy Apprentice (2) Pharmacy Technician Transportation Attendant Unit Manager (3) Ward Clerk (5)
Presbyterian-St. Luke's Hospital.....	Tranfusion Therapy Technician Cardio-Arteriography Assistant Cast Room Technician Electrocardiagram Technician Manager, Therapeutic Radiology Unit Manager (2)
Michael Reese Hospital.....	Renal Dialysis Technician
Trauma Program, Illinois Department of Public Health....	Trauma Coordinator (2)

a/ If more than one position was filled, the number is indicated in parentheses.

Table 6. Separations and Retentions of Project VEHTS Veterans by Annual and Median Salary

Annual salary ($)	Number of veterans		
	Total	Separations	Retentions
Total.....	43	13	30
Under 5,500.....	2	2	--
5,600-6,500.....	9	7	2
6,600-7,500.....	5	--	5
7,600-8,500.....	4	1	3
8,600-9,500.....	8	1	7
9,600-10,500.....	5	1	4
10,600-11,500.....	3	1	2
11,600-12,500.....	2	--	2
12,600-13,500.....	4	--	4
More than 13,500.....	1	--	1
Median.....	$8,500	$5,700	$10,000

laboratory procedures course. His last assignment in the service was as a senior medical lab specialist; before that he was a noncommissioned officer in charge of laboratory services. Less than 30, single and black, he is enrolled at the University of Illinois Circle Campus to obtain a degree in medical technology and is simultaneously working at Cook County Hospital on the evening shift. He analyzes blood and urine specimens to detect diseased conditions for clinical purposes, using standard laboratory techniques. He draws blood and prepares samples for counting and for analysis.

The orthopaedic technician hired in August 1972 at an annual salary of $9,400 is a 20-year veteran of the Air Force Medical Department who retired from military service in June 1972. For the last 10 years he has specialized as an orthopaedic technician, most recently as a noncommissioned officer in charge of an orthopaedic clinic. While in the Air Force, he took both basic and advanced medical service courses. He also moonlighted as a surgical technician in a civilian hospital. The position of orthopaedic technician is new to the Cook County Hospital system, and the role is still developing. At present, under the supervision of the Director of the Department of Orthopaedic Surgery and other physicians in the department, the technician is assigned to make rounds one morning a week with the surgeon in charge of each ward. He performs such tasks as changing casts, removing casts, setting up and adjusting tractions, positioning patients, etc. In the afternoons the technician is primarily assigned to the outpatient clinic where his responsibilities include again the removal and replacement of casts.

The young man who has been hired by Presbyterian-St. Luke's as a transfusion therapy technician has served in the Army for 3 years, part of the time as a Special Forces medic, and was separated in November 1971. His military training included the basic 10-week corpsman course and the 42-week Special Forces medic course. In the Special Forces course, he was trained to perform independently on the battlefield. In his job at Presbyterian-St. Luke's, he worked at $2.95 an hour in a clinic situation for the Department of Transfusion Therapy, acting as the technician responsible for interviewing and preparing patients as well as actually drawing blood and monitoring the donors' condition. With 2 years of liberal arts college and a career goal to be a physician's assistant, this veteran tried for 10 months to find a toehold in the civilian health field. At the last he was working full time as an aide in a nursing home and part time as a transfusion therapy technician. He reviewed his options and reenlisted.

Orthopaedic technician putting on arm cast in Fantus Health Service Adult Orthopaedic Clinic of Cook County Hospital

The cardio-arteriography assistant is a new position at Presbyterian-St. Luke's Hospital in the Department of Cardio-Respiratory Medicine. It pays $10,100 per annum. The cardio-arteriography assistant is a technical member of the team that monitors the patient's progress before, during, and immediately after heart surgery. While one of the cardio-arteriography assistants is responsible for mechanically injecting into the cardio-vascular system an opaque dye, the other is responsible for adjusting and operating large electronic control panels which are directly connected to the X-ray fluoroscopy units. The movement of the dye through the blood stream is recorded on film to determine coronary obstruction and coronary insufficiency. There is no formal training in the field as the procedures are new and must be learned on the job. Key to the job is an understanding of operating room procedures and a proficiency in medical electronics. The medical veteran who was hired as cardio-arteriography assistant is 25 years old and married. Prior to his military service, he had 3 years of pre-medical college studies. During his 2 years in the Army, he was trained at the basic 10-week medical corpsman school and, in addition, in the 12-week operating room specialist training program.

His Army medical assignment was as operating room specialist, scrubbing and circulating, in general, cardio-vascular, ENT, and orthopaedic surgery.

The administrative assistant in the Pharmacy Department fills a relatively new Cook County Hospital position that pays an annual salary of $10,788. At 39 years of age, he is a retired Navy veteran with 20 years of service. He is married and has two children. He is a licensed pharmacy apprentice. During his Navy years, he graduated from the basic and advanced hospital corpsman schools and the 38-week "Class C" pharmacy technician school. His last assignment before leaving the service was as senior enlisted man in pharmacy services at Great Lakes Naval Hospital, Great Lakes, Illinois. Previously he had been administrative assistant to the chief of pharmacy services in several installations, including a 350-bed hospital in Guam. At Cook County Hospital his duties include supervision of the office and clerical staffs of the department. He is responsible for incoming and outgoing correspondence, for purchasing equipment, and for the administration of the personnel actions affecting department employees. As a civilian, he continues the study habits acquired in the military and is presently attending a junior college.

The medical corpsman coordinator recruited by Project VEHTS for the new corpsman program at Cermak Memorial Hospital of the Cook County jail system is 39 years old and a veteran of 21 years in the Army Medical Corps. During his last 3 years in the service he was noncommissioned officer in charge of 22 corpsmen at the Armed Forces Induction and Examining Center in downtown Chicago where pre-induction physicals are given. His previous assignments included 8 years in dispensary and clinic management and 3 years as the noncommissioned officer in charge of an emergency facility. In his military medical background is 5 years' experience in prison and stockade health services at Ft. Leavenworth, Kansas; Scofield Barracks, Hawaii, and at Fort Knox, Kentucky. Offered a salary of $12,192, he joined the Cermak Memorial Hospital staff 11 days after his retirement from the Army. He is primarily responsible for supervising the military medical veterans who have been hired to participate in the new improved health services of the Cook County jail system. He is concerned with the schedules and assignments of the medical corpsmen and responsible for developing cooperative relationships with the medical, nursing, administrative and security staff of the hospital and jail.

During 1972 three of the five new positions for administrative assistants in Ambulatory Services at Cook County Hospital were filled by ex-military medical personnel. One man is a veteran of 20 years in the Navy; another spent 2 years in the Army and joined Cook County's staff as a Unit Manager over a year ago, and was recently promoted to the administrative assistant position. The third man is 28 years old, and served 5 years in the Navy. Trained as an operating room technician, he also worked as a cardio-pulmonary technician before joining the Ambulatory Services of Cook County Hospital at a salary of $13,068.

Administrative assistant checking X-ray in viewing room of examining rooms in Main Admitting of Cook County Hospital

The administrative assistant in Ambulatory Services acts as administrative coordinator for the main admitting and emergency room areas in the hospital. Reporting to the Director of Admissions of the hospital, he is responsible for the supervision of all non-medical staff in main admitting and emergency, for scheduling physician and triage nursing staff, for determining that the appropriate complement of staff covers the area at all times, and for ensuring that

the daily activity logs are prepared. He observes the flow of patient traffic through the admitting and emergency room areas and takes appropriate action to avoid bottlenecks and breakdown in the delivery of services. The medical veteran's combination of medical and administrative experience serves him well in this setting.

IV. LITERATURE AND PROGRAM SEARCH

To benefit from the knowledge and experience of others in the field, a literature and program search was undertaken. Library research found about two dozen references to the subject in books, magazines and pamphlets, which are presented in the annotated bibliography that appears at the end of this report.

The program study began in August 1971 with a nationwide mailing to all MEDIHC state coordinators, informing them of Project VEHTS and asking for information about published material and programs. Responses mentioned the hospital-based programs for veterans conducted by Johns Hopkins Hospital in Baltimore, Maryland, and Altoona Hospital in Altoona, Pennsylvania.

Johns Hopkins Hospital initiated its corpsman program in 1969 when a nursing shortage compelled the hospital to close down parts of Osler Clinic, an acute illness unit. Since empty beds represent expenses without income, support existed for innovation, including an experimental corpsman program, to resolve the difficulties in providing nursing services at the clinic.

The program operates by periodically recruiting a group of corpsmen. Originally, class size was approximately 50, but recent classes have numbered about 20. A screening procedure and curriculum have been carefully designed, with changes introduced on the basis of each group's experience and performance. By the second week of the 7-week training session the trainee is providing supervised service, with increasing increments of time on the job as the course progresses After training, the corpsmen are assigned in groups of 12 to 15 to the medical team on a single floor of the Osler Clinic and in small numbers to other sections of the hospital.

The negative attitude of the registered nurses was one of the biggest hurdles in the early stages of the program. Fortunately, Johns Hopkins had a few nurses who favored the idea, for it would have been impossible to start and continue the project without them. The attitude of head and floor nurses has shifted to one of considerable enthusiasm as the corpsmen have demonstrated their abilities. The training program is now conducted as part of inservice nursing education. Interest has spread within the hospital. While the first group was assigned only to the Osler Clinic, corpsmen are now being trained and assigned also to surgical, pediatric, emergency, and intensive care units. Among the other favorable results of the program are the cost savings that have been documented and the greater ease in recruiting female nursing staff for wards that have corpsmen on night duty.1/

An unexpected difficulty did arise.2/ The union contended that the veteran program conflicted with promotional opportunities for nursing assistants and charged discrimination against present employees and against women. The dispute was resolved by evaluating the position of nursing assistants, grade 2, and incorporating that classification into the nursing technician (veteran) program; i.e., the veteran program was expanded to include qualified nursing assistants already on the staff. Recruitment has been another problem. Johns Hopkins relies mainly on newspaper advertisements in local and military papers, and on spot announcements and personal appearances on radio and TV programs, with only occasional visits to military bases in the area. There were times when it was not possible to meet the class quota.

The approach of Altoona Hospital to the use of veterans differs from that of Johns Hopkins Hospital. Altoona Hospital conceived its program for veterans in the fall of 1968 and is now employing approximately 60 veterans of the Armed Forces medical departments in a wide variety of professional, technical, and administrative hospital positions. When the program started, the first task undertaken was a review of job descriptions to organize job tasks appropriate to veterans' skills and the hospital's needs. The second major task was to raise salary levels and to establish a grade

1/ William R. Blalock, "Recruiting Ex-Military Corpsmen," Hospitals, December 1, 1971, vol. 45, no. 23.
2/ One anticipated problem that did not materialize was an unfavorable reaction among women patients.

and in-step grade promotion schedule that delineates advancement opportunities. In the opinion of the personnel director, the review and revision of personnel policies at Altoona Hospital, which resulted in pay increases, improved fringe benefits, and orientation and training programs, were necessary to attract veterans.

For Altoona Hospital, visits to Transition sites have been the most successful recruitment device. The personnel director of Altoona Hospital is in a position to make a conditional job offer when he goes to the bases. His procedure is to interview the interested serviceman and have him fill out an application form. When the director returns to Altoona Hospital, the serviceman's references are checked and all the papers are forwarded to the department head for review. If the department head agrees, the serviceman is hired.

The philosophy behind Altoona Hospital's program is that military personnel have skills that are readily transferable with some additional on-the-job training. The traditional view that ex-corpsmen can be used only as orderlies was rejected. Among the new positions created to utilize the special skills developed in the military was the mobile emergency technician. A 2-year work-study training program has been created that prepares corpsmen to serve in mobile emergency units. This outstanding program is the subject of a movie filmed by the U.S. Department of Health, Education and Welfare. Among the measurable indexes of the impact of the improved personnel program at Altoona Hospital, of which veteran recruitment is an important part, is the decline in the turnover rate from 67 percent in 1968 to 17 percent in 1971.

Other programs for veterans in the allied health field do exist. For example, the Hospital Educational and Research Foundation of Pennsylvania (under contract to the Bureau of Health Manpower Education of the Public Health Service) conducted a work-study project in the Philadelphia area. The objective was to place veterans in health jobs with flexible work schedules, permitting them to participate in educational programs that grant advanced standing for previous training and experience.

The Trauma Center Program developed in Illinois in 1971 has made a point of hiring and utilizing medical

Altoona Hospital's mobile emergency unit

veterans. The program, sponsored by the Illinois Department of Public Health, is designed as a delivery system for emergency medical services. It is implemented by a trauma care network which, when completed, will link 40 participating hospitals that are geographically dispersed throughout the state. The objective of the program is to coordinate all facets of emergency medical care for accident victims, including stabilization at the scene of the accident, immediate transportation to a hospital facility prepared to treat the patient, and constant communication between all segments of the system. Each participating hospital has set up treatment facilities and trained staff to respond to the needs of the critically injured.

The Trauma Centers demonstrate the use in civilian medicine of the techniques of evacuation, early resuscitation, diagnosis, and comprehensive treatment developed in Vietnam. Forty-three veterans with extensive military medical experience have been assigned as trauma coordinators to participating hospitals. The trauma coordinators act as spokesmen for the program in the community and coordinate the components of the system -- transportation, communications, facilities, and training of paramedical staff.

Several innovative programs affiliated with Johns Hopkins University have made use of medical corpsmen. The Columbia Medical Plan in the new town of Columbia, Maryland,

and the East Side Medical Clinic in Baltimore use corpsmen in the delivery of primary medical care, and the newly opened Columbia Hospital has staffed its emergency room almost exclusively with medical corpsmen functioning under the direction of a physician.

The system of staff titles at the Columbia Medical Plan and at Columbia Hospital defines three levels of personnel that represent a career ladder. The levels are health specialist, health associate, and health assistant. The health specialist is a physician or an allied health professional; a health associate is either an RN or a medical corpsman with advanced training; and a health assistant is an LPN, a corpsman with minimal training and experience, or a promising entrant into a health career.

The Columbia Medical Plan is using medical corpsmen as health associates in the plan's health assessment and in the surgical clinic. Most initial health assessments for adults are conducted by the health associates. Upon joining the program the new member fills out an in-depth questionnaire. The information is fed into a computer and an abstract summary is printed out and reviewed by the health associate. The results of the abstract summary are validated by the health associate during an interview, in which the applicant is advised of the requisite work-up for a health assessment, e.g., X-ray, laboratory, hearing and eye tests. From this data base, the health associate identifies a list of health problems, designs a treatment flow chart, refers the applicant to the appropriate health specialist, or enters him into the plan without a physician appointment. The plan also uses corpsmen in the surgery clinic where they assist the physician in such duties as suturing and minor surgical procedures.

At the Columbia Hospital, which opened in July 1973, a special program has been developed for using corpsmen in the emergency room, the operating room, and the surgical clinic. In the summer of 1973, six corpsmen functioned in health associate roles and three corpsmen in health assistant roles. The health associates are generally men with 4 years' military medical experience or at least one advanced course in emergency medical procedures. The health assistants have an equivalent of the 91B20 level in the Army; that is, a minimum of 10 weeks' training plus clinical experience.

The health associates, under the supervision of a physician, will take on the responsibility of the initial contact with patients in the emergency room; preparing the medical history, identifying primary complaints, discussing cases with physicians, and under physician supervision, performing some treatment.

An 8-week health associate training program at Johns Hopkins School of Health Services was specifically designed to prepare corpsmen for their roles at the Columbia Hospital. The health associates will spend 4-month rotations in the emergency room, the surgical clinic, and as first assistant in the operating room. In mid-1973 the health associates, both RN's and corpsmen, were paid $4.39 to $5.24 an hour, and the health assistants were paid $3.13 to $3.70 an hour. The program has been favorably accepted, and patients at the Columbia Hospital are reported to be pleased with the kind of care they are receiving.

The East Side Clinic, which is located in one of the lowest income areas of Baltimore, Maryland, and sponsored by Johns Hopkins, has used corpsmen in two roles: family health supervisor and ophthalmologist technician. The family health supervisor supervises a team of health advocates who take an active role in identifying community health problems and bringing prospective clients into the clinic. The family health supervisor is the first person the patient will see in the clinic. He will take the medical history, identify the immediate medical problem, and then refer the patient to a physician. The family health supervisor may participate in treatment, followup or referral. One family health supervisor is a veteran of 23 years who served in the Air Force as a medical service technician at a highly responsible level.

Overshadowing all other current efforts to use medical corpsmen are the dramatic developments of roles for the physician's assistant. A variety of "physician assistant" and specialty programs, many adapted for veterans, are operating in hospitals and educational institutions. In an information bulletin on the current status of the physician's assistant, the AMA points out that

> ...The variety of names used to identify graduates of experimental educational programs for new assistants to the physician partially illustrates the diversity in this field: Clinical Associate, Medex, Child

> Health Associate, Physician's Assistant, Community Health Medic, and Medical Services Assistant, to name but a few. These and other programs listed in this bulletin vary in their length of training and their requirements for entrance; some programs are designed to utilize the background of former military corpsmen and some recruit people with various backgrounds in the health field. [Emphasis added.] 1/

One of the first physician assistant programs originated in the Federal Government. Since the early 1930's, the U.S. Public Health Service has recruited and trained former military corpsmen to function in Federal penal and correctional institutions as physician's assistants under the Civil Service classification of Medical Technical Assistant (MTA). Today, almost 200 MTA's are employed in the 22 hospitals of the U.S. Bureau of Prisons. Eligible applicants must have 3 1/2 years of experience in a medical facility which qualifies them to give nursing care and to perform some nonpatient care technician services. In the past, career military personnel were preferred as recruits, but in more recent time, younger corpsmen whose military medical experience has been largely in direct patient care have been selected.

After hiring, the U.S. Public Health Service trains the MTA for approximately 1 year to enable him to perform duties as a physician's assistant in nursing, laboratory, X-ray, pharmacy, physical therapy, and dental care. While most MTA's receive on-the-job training, a small number participate in a revised curriculum with an expanded didactic component that has been in use since 1968 at the U.S. Medical Center in Springfield, Missouri. The objective of the training programs is to teach excellence in the performance of certain medical skills and to provide fundamental knowledge necessary for understanding and acquiring additional skills. 2/

1/ American Medical Association. "Current Status of the Physician's Assistant," Information Bulletin, January 1972.

2/ E.C. Siegfried, M.D., and L.G. Grossman, "The Physician's Assistant in a Correctional Setting," American Journal of Correction, November-December 1969, p. 22.

Physician's assistant programs are growing by leaps and bounds. By the end of 1971, graduates of PA programs totaled 184.1/ During fiscal year 1973, 300 graduated. "As of July 1, 1973, there were an estimated 800 formally trained physician assistants in the United States, about double the number a year earlier.2/

1/ Malcolm Todd, M.D., and Donald F. Fay, M.P.H., "Current Status of the Physician's Assistant and Related Issues," Journal of the American Medical Association, vol. 220, no. 13, June 26, 1972, p. 1715.
2/ U.S. Department of Health, Education and Welfare, HEW News, August 16, 1973.

V. CAREER OPPORTUNITIES FOR MEDICS

Emergency Medical Technicians

From its involvement with the reorganization of ambulatory care at Cook County Hospital, Project VEHTS became aware of the widespread interest in upgrading emergency medical care and of the possibilities of the use of medically trained veterans as emergency medical technicians.

Accidental injury has been called "the neglected disease of modern society," and emergency medical service has been labeled "one of the weakest links in the delivery of health care in the nation."1/

President Nixon in his State of the Union Message to Congress on January 20, 1972, cited the loss of lives and disability due to accidents and called for an upgrading of emergency medical services. By "improving communication, transportation, and the training of emergency personnel," the President said, "we can save many thousands of lives...." Bills that would improve emergency medical services were passed in both Houses of Congress in the 93rd Congress, and became law in 1973.

On April 10, 1973, the Robert Ward Johnson Foundation and The National Academy of Sciences announced a new program

1/ National Academy of Sciences, Division of Medical Science, Accidental Death and Disability: The Neglected Disease of Modern Society, Washington, D.C., April 1969; and National Academy of Sciences, National Research Council, Roles and Resources of Federal Agencies in Support of Comprehensive Emergency Medical Services, Washington, D.C., March 1972.

in support of regional emergency medical communication systems. The Johnson Foundation will provide and the National Academy will administer grants totaling $15 million starting in January 1974. The funds will be used to initiate and develop regional systems, to purchase communications hardware, to train emergency medical communications dispatchers and emergency medical technicians, and to educate citizens in the use of the emergency system. In the announcement it was pointed out that "90,000 lives could be saved each year by prompt treatment in emergencies" and that an estimated "115,000 people die in this country from accidents each year, and that almost 50 million are injured. Of the more than 700,000 heart disease fatalities, more than half the patients die before they reach a hospital...."1/

With the reorganization and expansion of outpatient services and the growing concern to improve the quality of emergency medical services, a nationwide career opportunity is developing for the veteran who has had 2 to 4 years' service in the Armed Forces medical departments. One can envision the career ladder on the following lines:

Emergency Medical Technician, Ambulance, Level 1 serves as an ambulance attendant, who responds to emergency calls; drives the ambulance; controls traffic at the scene of accident, if necessary; determines the nature and extent of illness or injury and renders emergency care; reassures patients and bystanders; extricates patient; reports to appropriate facility the nature and extent of injury; transports patient, observing patient en route and administering care as directed; and maintains the ambulance and its equipment.2/

Emergency Medical Technician, Ambulance, Level 2 serves as a mobile intensive care paramedic, whose extended functions are akin to those of a medical corpsman in a combat area. In addition to the duties performed by an EMT, Level 1, he may "where voice contact is maintained with a physician or surgeon...administer parenteral or intravenous solutions and injections" and perform other procedures formerly limited to physicians.3/

1/ "$15 Million Health Program Set for Speeding Emergency Care," The New York Times, April 10, 1973.
2/ U.S. Department of Transportation, National Highway Traffic Safety Administration, "Job Description - Emergency Medical Technician - Ambulance," May 1972.
3/ Guidelines for Mobile Intensive Care Paramedics, West Virginia Senate Bill #281, passed March 10, 1973.

Emergency Medical Technician, Emergency Department, Level 3 is employed by a hospital and "may work in the hospital emergency department, in sophisticated medical transport vehicles, in remote health care centers, or in industrial settings. He works with each component of the community's emergency care system: (1) to give appropriate initial medical care at the site of an emergency, (2) to use the emergency communication system efficiently, (3) to manage patient transportation with all support functions, and (4) to function within the emergency medical department."1/

Physician's Assistant, Emergency Department, the top rung of the EMT career ladder, assists the emergency room physician and serves in other areas of the hospital where injured or critically ill patients are being treated.

The development and prospects for emergency medical technicians were discussed with knowledgeable persons in many private and governmental organizations.2/ One of these persons was Mr. Rocco Morando, Executive Director of the Registry for Emergency Medical Technician-Ambulance. The registry was organized in 1970, following the President's Committee on Highway Safety's recommendation that there be an accreditation agency to establish national standards of competence for ambulance crews. The registry administers a test consisting of two parts: a written portion must be passed before a skill demonstration portion is given. Until December 1972 the registry permitted those who "have served a minimum of three months in the emergency ambulance or rescue service within twelve months prior to the date of application, or have served as a military medical corpsman in the field for a minimum of three months within the past six years" to sit for the exam.3/ The registration fee and the entry

1/ American Medical Association, Guide for Program Planning: Emergency Medical Service Technician, Chicago 1972, p. 2.
2/ The organizations included the AMA's Division of Emergency Medical Service; the National Academy of Sciences; the Ambulance Association of America; the HEW Division of Emergency Medical Services; the Registry for Emergency Medical Technician-Ambulance; the American Hospital Association; the National Highway Traffic Safety Administration of the U.S. Department of Transportation; Appalachian Regional Commission; and several state Divisions of Health, Emergency Medical Services.
3/ Registry for Emergency Medical Technician-Ambulance Brochure, Registry-EMT-Ambulance, P.O. Box 29233, 1395 E. Granville Road, Columbus, Ohio 43229.

requirements of the National Registry of Emergency Medical Technicians were raised on January 1, 1973. The fee is $15, and the registry now requires applicants to have "a minimum of six months emergency ambulance or rescue squad experience within the 12 months prior to the date of application, or have served as a military medical corpsman in the field for a minimum of 6 months within the past six years."1/

After discussions with Mr. Morando and consultation with representatives of the military medical departments, Project VEHTS prepared a more explicit statement on the eligibility standard for veterans which was accepted by the Registry. It reads:

> Military medical experience in emergency care and rescue service in which independent judgment is exercised and direct patient care is provided will qualify the medical corpsman as eligible to sit for the EMT-Ambulance Registry examination....Examples of such military experiences are duty as a field medical service technician with the Marine Corps; as independent duty corpsman aboard ship; as company aid man in support of a combat operation; as a medical service specialist whose duties require him to serve as an ambulance attendant in response to accidents; as a medical specialist in helicopter evacuation service in support of combat operations or in support of civilian rescue operations.

A Project VEHTS conference was held in September 1972 2/ on the career opportunities for veterans as emergency medical

1/ Registry of Emergency Medical Technicians, "Entry Requirements Beginning January 1, 1973," brochure.

2/ Conference participants included: Lt. Col. Walter J. Seaman, Transition Program, Defense Department, Pentagon; Forrest E. (Gene) Miller, Transition Office, Fort Bragg, North Carolina; James Gardner, Jr., Division of Institutional Training, U.S. Department of Labor; Robert E. Motley, Rescue and Emergency Medical Services Division, U.S. Department of Transportation; Kenneth D. Mains, Division of Emergency Services, Illinois Department of Public Health; Calvin Belcher, Emergency Care and Communications Project, Southern West Virginia Regional Health Council; Stuart Sergent, Emergency Health Service, State of West Virginia Department of Health; Edward D. Hollander and Harriet M. Kriesberg of Project VEHTS, Robert R. Nathan Associates, Inc.

technicians. As a result, a pilot program was initiated at Fort Bragg, North Carolina, at which eligible servicemen were allowed to take the EMT-A registry exam. The Ft. Bragg weekly newspaper of September 28, 1972, carried a news item that announced:

> Ft. Bragg's Project Transition is offering the EMT-Ambulance Registry Examination to qualified enlisted personnel who have less than six months remaining in the Army, and to people already out of military service.
>
> If you have at least three months experience in emergency care and rescue that required you to make independent decisions, and you have been trained as a medical corpsman, you may be eligible to take the test.
>
> The $10-fee normally charged to get on the register has been paid by the Federal government for the first 100 applicants to qualify from the Ft. Bragg-Fayetteville area. Jobs in this field in civilian life pay from $8,000 to $13,000 a year....1/

Radio spots were also used to alert servicemen to this opportunity.

Eligible servicemen took the EMT-A Registry examination at Ft. Bragg in November 1972 and in January, February, April and June 1973. Forrest E. Miller, Director of Project Transition at Ft. Bragg, arranged the testing program with the indispensable help of Captain Dale Schwicker of the Plans, Operations and Training Division of Womack Army Hospital. In all, 103 servicemen took the test; 83 passed and 20 failed either the written or demonstration phase.2/ The national fail rate is 30 percent, and ranges from 10 to 70 percent in different test sites. The Registry reports that following the announcements of the Project VEHTS-Fort Bragg experiment, they were inundated with inquiries from Transition officers and from individuals located in such distant places as Saigon

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1/ The Ft. Bragg Paraglide, September 28, 1972, p. 13B.

2/ A revised exam with a higher passing score was introduced in March 1973. Most of the failures occurred after this time. Since the exam scores have not yet been validated by an independent criterion nor normed by a representative sample, it is difficult to assess whether the caliber of the failing examinees or of the revised test is inadequate.

and Stuttgart. The demonstration at Fort Bragg has initiated a new program for the Registry; exams have been offered at Scott Air Force Base, Illinois; Lackland Air Force Base, Texas; and the U.S.S. Albany at sea. The Registry is in communication with the Naval Hospital in Guam to arrange for men assigned there to have the opportunity to take the exam. The results at Scott Air Force Base -- 90 of the 97 who took the exam passed -- reinforces the Fort Bragg demonstration.

The objectives of the pilot program with the EMT-A Registry have been attained: to demonstrate that veterans are qualified by their military medical experience for civilian jobs and that they should be allowed to sit for registry exams to demonstrate their competence. Moreover, the men have been successful in locating civilian jobs in emergency medical services; for example, one of the early applicants in the Ft. Bragg pilot program was hired by a helicopter rescue service at $12,500 per annum and two others are working with an ambulance service on the west coast at a starting salary of $9,800.

However, because experience at Cook County Hospital has shown that the medic's military training fails in some cases to satisfy the requirements for civilian employment, Project VEHTS has also been working with the Transition office at Fort Bragg to demonstrate the possibility of supplementary allied health training, to be offered in the last months of enlistment. In conversation with Mr. Robert Motley of the U.S. Department of Transportation, Project VEHTS learned that several EMT training programs have been developed with the support of the National Highway Traffic Safety Administration. A course guide and instructor's lesson plan for a basic 81 hours and another for a 20-hour refresher program for EMT-Ambulance, Level 1, have been prepared and are available through the U.S. Government Printing Office. The American Academy of Orthopaedic Surgeons has published the official textbook for these courses, Emergency Care and Transportation of the Sick and Injured. In addition, a 480-hour course for Emergency Medical Technicians, Level 2, has been prepared and is being tested in different places. The possibility of using the curricula that had been developed under the sponsorship of the Department of Transportation to train servicemen as Emergency Medical Technicians, Levels 1 and 2, before they separated from the military was discussed with the staff of the Transition Program in Washington, D.C., and at Fort Bragg, Fayetteville, North Carolina.

Fort Bragg is a major Army installation with a sizable military hospital on base. Approximately 1,500 servicemen

separate from Fort Bragg monthly, of whom about 75 are enlisted men with military medical backgrounds. As part of the Transition Program, a variety of skill training courses are offered, ranging from an air conditioning mechanic helper to welder. Although almost 50 occupations are covered by the Transition training courses, there was none in the health field. With the assistance of Project VEHTS, the Transition office at Fort Bragg proposed to conduct an MDTA-supported Transition training program, based on the Department of Transportation's recommended 480-hour course for advanced emergency medical technicians. This has been approved by the Departments of Labor, Defense, and Health, Education and Welfare for fiscal year 1974.

For several reasons the career opportunities for veterans in emergency medical services cannot be discribed more specifically. First, no definitive data exist on the present or future labor market demand for emergency medical technicians in ambulance services despite a growing amount of financial support to provide the physical equipment and other appurtenances that a community-wide system requires and despite the oft-stated recognition of the importance of trained manpower.

Second, several states have pioneered by passing legislation that permits mobile EMT's to perform specified functions formerly restricted to the physician, provided they are certified by the state's Department of Health. With each state establishing unique criteria for certification, without arrangements for reciprocity, the employment mobility of EMT's is in jeopardy. One can see rigidities and barriers to the efficient use of manpower already developing, even at this embryonic stage.

Third, an incredible number of Federal, state, local and private agencies and organizations are engaged in some effort related to emergency medical care. Coordination is a herculean task that is vital and should be undertaken immediately. The longer the delay, the more difficult the task.

Fourth, a variety of training and educational programs are developing under the rubric of Emergency Medical Technician. The duration of the course work varies: 4 weeks, 10 weeks, 3 months or 2 years. A consensus should be reached concerning standards of training for different levels of EMT's. Equally important, the number trained should be consistent with the number of job opportunities, as best they can be foreseen.

Dr. Alan S. Kaplan of the Emergency Medical Services Branch of the National Center for Health Services Research and Development, Department of Health, Education and Welfare, helped us to estimate the employment opportunities for emergency medical technicians.1/ Basic to his calculation were certain assumptions concerning the number of emergency medical technicians (EMT-1) needed for adequate ambulance services throughout the United States:

1. Each ambulance in this country should carry at least 2 qualified EMT-1's.

2. Each ambulance should be manned 24 hours a day, 7 days a week. This will require a minimum of 8 EMT's based on an 8-hour shift and 40 hours per week, allowing for vacations, sickness, training and retraining time.

3. Each dispatcher and supervisor should be a trained EMT. Further, on the average, one dispatcher can handle 5 ambulances, with at least, on the average, one supervisor for 10 dispatchers and 20 EMT's. On the average 4 dispatchers are needed per shift, allowing for vacations, sickness, training and retraining time.

4. No figure will be used for EMT instructors as these hours are calculated in item 2 above.

5. While the present turnover rate of ambulance attendants is 40 percent, with EMT's, because of better training, higher pay and greater job satisfaction, the turnover rate should be about 10 percent.

6. Currently and in the foreseeable future, one ambulance is needed per 10,000 population. Current population: 203,185,000. We currently have 25,000 ambulances. The number will probably stay constant.

1/ This office is funding five demonstrations of community-wide model emergency medical services. These demonstrations are located in Jacksonville, Florida, and Athens, Ohio, and their surrounding rural counties; the States of Arkansas and Illinois; and San Diego, California (Riverside and Imperial Counties).

On the basis of these assumptions, Dr. Kaplan estimated that a total of 232,000 persons -- 200,000 trained attendants, 20,000 dispatchers, and 12,000 supervisors -- is needed to man ambulance services with qualified personnel. At the end of 1972, only 33,000 of the 200,000 ambulance personnel currently in the field were registered, awaiting testing or taking training; thus, about 200,000 trained EMT's were needed. With current turnover rates, an overwhelming number of ambulance attendants are replaced every 2 to 2 1/2 years. While many will undoubtedly be recruited from the present labor force, growth and turnover will provide job openings for the qualified veteran.

Emergency medical technicians responding to an accident

Veterans will be able to demonstrate their capability to perform in emergency medical services when the proficiency examination for EMT's is in use. The examination is now being constructed by the University of Alabama Medical Center in Birmingham with the support of the U.S. Public Health Service. It is expected that the validated test with norming data will be ready for use by the end of 1973. All participants in the norming group will have completed the 80-hour Department of Transportation course at a minimum. Use of the EMT proficiency exam will upgrade the quality of care rendered in emergencies when, as is anticipated, Medicare

reimbursement for emergency services is made conditional on evidence of personnel qualification.

In the United States today, ambulance services are in a state of flux. Commercial ambulance firms, funeral parlors, fire departments, rescue squads, police departments and hospitals run ambulances. As the role of ambulance services is better defined, recognizing the importance of emergency medical care as well as transport, standards for equipment and manpower are being raised. The development of community-wide networks of emergency services, in which private and public ambulances are equipped to provide lifesaving care and to communicate through two-way radio and telephone with dispatchers and doctors, promises to elevate the role of the ambulance attendant. The Illinois Trauma Program is one model of an areawide system of emergency medical care. Under the Division of Emergency Medical Services and Highway Safety and the Department of Public Welfare, five regional centers and 43 trauma centers directed by trauma coordinators, all of whom were former medical corpsmen, provide a link between accident sites and hospital facilities that permits the most sophisticated delivery of medical services to injured patients.

Hospital emergency rooms and ambulatory facilities as well as ambulance services are faced with an increasing volume of patients and have been expanding and reorganizing to better cope with their growing workload.1/ National data on the growth of outpatient care reveal that from 1965 to 1971 the number of outpatient units rose 60 percent, while during the same years community hospital admissions rose 14 percent.2/ It is estimated that there were 200 million visits to outpatient clinics and emergency rooms in the United States in 1972.3/ At Cook County Hospital alone, 573,225 outpatient

1/ For a comprehensive discussion of the organization of hospitals and outpatient services, see the study of the School of Public Health, University of California, Los Angeles, Summary Report: The Contemporary Status of Large Urban Public Hospitals - Ambulatory Services, Hospital Research and Educational Trust, Chicago, Illinois, 1972.

2/ See table 4.

3/ Nora Piore, Deborah Lewis, Jeannice Seeliger, "A Statistical Profile of Hospital Outpatient Services in the United States: Present Scope and Potential Role," Association for the Aid of Crippled Children, August 1971, p. 4.

visits were made to the clinics and emergency room. Historically, the outpatient services (as distinct from emergency rooms) were only follow-up activities of the hospital's discharged patients and were conducted on the wards of the hospital. Today, outpatient facilities handle emergencies and serve as alternatives to the overloaded neighborhood practitioner.

Reorganization of emergency and ambulatory care often involves the introduction of triage, which has implications for the medical veteran because the military has used triage for many years, and the civilian systems are all variants of the military practice.1/ Several former medical corpsmen have been appointed to the position of administrative assistant in the Division of Ambulatory Services of Cook County Hospital with responsibility for coordinating the activities that will implement the triage system.

At Chicago's Billings Hospital, a reorganization of the emergency room under the direction of Dr. Peter Rosen introduced a triage system, staffed by six former military corpsmen functioning as emergency room technicians. Dr. Rosen has requested 10 additional corpsmen to provide 24-hour coverage. The triage classifications used at Billings distinguish "the true emergency," i.e., any disease or injury that threatens life or limb; "the urgent case," where life or limb is not threatened but where early attention is required to avoid complications; and "minor complaints, people who don't belong in the emergency room and can be sent to the hospital's ambulatory clinic for less-urgent care."2/ The use of emergency technicians has resulted in 40 percent caseload referral to other hospital departments so that the emergency room can concentrate on its emergency function. The corpsmen are also members of the hospital's disaster squad, prepared to assist at the scene of major catastrophies.

Job opportunities for veterans arise, therefore, from the upgrading of the skills required of qualified ambulance

1/ In fact, triage is defined as "the sorting out and classification of casualties of war or other disasters to determine priority of need and proper place of treatment." Dorland's Illustrated Medical Dictionary, 24th ed., W.B. Saunders Company, Philadelphia, Pennsylvania, 1965.
2/ "Army Medics Find Civilian Jobs in Emergency Rooms," The Chicago Tribune, March 4, 1973.

personnel, and the expansions of manpower requirements with improved community-wide networks of emergency medical services. Moreover, the veteran has the prospect of a career in emergency medicine as more hospitals reorganize outpatient services, including their emergency rooms, in response to the increasing demands of ambulatory and injured patients.

Orthopaedic Technicians and Orthopaedic Physician's Assistants

The interest of Dr. Arsen Pankovich, Head of the Department of Orthopaedic Surgery at Cook County Hospital, in using medics in his department demonstrates another developing career opportunity for veterans with military medical experience. In September 1972, the department had hired one orthopaedic technician who was a 20-year veteran of the Air Force Medical Department.1/ The veteran's performance on the job was so impressive that Project VEHTS was asked to recruit another veteran with this type of skill.

Because relatively few orthopaedic technicians are released each year by the military, Project VEHTS was unable, despite the combined assistance of REFERRAL, Transition, and MEDIHC to recruit a senior, experienced man, as requested by the department. However, three young candidates with 2 to 5 years of military experience as orthopaedic technicians were found after an extensive search of several months' duration. One was hired, a graduate of the Army's 14-week on-the-job orthopaedic technician training program. Since leaving the service, he had spent a year and a half working in a civilian hospital at an attendant level, performing many of the functions of an orthopaedic technician.

While Project VEHTS was working to recruit qualified orthopaedic technicians, Dr. Pankovich, the Department of Education of the Governing Commission, and Project VEHTS discussed a hospital-based training program to meet the manpower needs of Dr. Pankovich's department and of similar departments at other hospitals. The idea of training veterans with military medical experience to assist orthopaedic surgeons is not new. In August 1966, a pilot project was begun at the Pacific Medical Center of San Francisco, California. Methods

1/ For more detailed discussion of the man's background and job duties, see chapter III.

and materials used to train orthopaedic technicians at the San Diego Naval Hospital were incorporated into the civilian program. At the end of the pilot phase, the project was redesigned and a 2-year associate degree program was established at the City College of San Francisco.

Orthopaedic technician removing leg cast, Fantus Health Service Adult Orthopaedic Clinic of Cook County Hospital

It seemed advisable to do some preliminary investigation: first, of the demand for such skills in Illinois, and second, of existing orthopaedic assistant training programs. Questionnaires were prepared and distributed to 301 orthopaedic surgeons and hospital administrators in Illinois and to institutions in the United States conducting training or educational programs that prepare orthopaedic assistants. The questionnaire to orthopaedic surgeons and hospital administrators elicited 138 responses (46 percent). A majority of the respondents indicated a felt need for orthopaedic assistants and expressed a willingness to employ them. Three AMA-accredited educational programs responded to the Cook County Hospital-Project VEHTS questionnaire on orthopaedic assistants. Program officials reported that 80 percent or more of the 41 graduates of the class of 1972 were employed as orthopaedic physician's assistants at initial annual salaries ranging from $7,500 to $9,000.

Sufficient interest was evinced to warrant further investigation. Inquiries were therefore made of the American Academy of Orthopaedic Surgeons (AAOS) and the American Medical Association, which have been working together to actively support the training of orthopaedic assistants. The AMA, in collaboration with the AAOS, established essentials (i.e., minimal requirements) of an accredited educational program for orthopaedic assistants in 1969; since then, the AMA has accredited eight programs. The educational programs prepare the orthopaedic physician's assistants to manage:

> ...equipment and supplies on both traction and cast areas of the hospital. In the operating room, the orthopaedic physician's assistant is prepared to serve as an operating room technician with special knowledge and skills regarding the care of orthopaedic surgical instruments. In the emergency room, the orthopaedic physician's assistant understands the principles of aseptic technique and is able to prepare materials and equipment for minor surgical procedures. Under the supervision of the orthopaedic surgeon, he may apply simple braces and prosthetic devices and carry out minor adjustments and repairs. He is acquainted with the use of a variety of equipment and materials and may make simple splints. The orthopaedic physician's assistant instructs and assists patients in crutch walking and certain types of active exercise.1/

The AAOS, with the AMA, conducted an orthopaedic manpower study in 1970. Orthopaedic surgeons were queried about their practices and their attitudes toward the use of allied health personnel. The study concludes that:

> ...the majority of orthopaedists perceive a need for additional AHP (Allied Health Personnel) in their practices....The current constraints, both on orthopaedic practice and on the extended use of AHP, revolve largely around the medicolegal aspects of practice and the lack of availability of qualified appropriately trained individuals.

1/ AMA Council of Medical Education, "Educational Programs for the Physician's Assistant," September 1972, p. 17.

> Public acceptance and financial considerations do not appear to be a major barrier. The fact that a significant number of orthopaedists, particularly in the younger age groups, feel that increased use of AHP will produce both an increase in the number of patients seen and an improvement or no change in the quality of care delivered would seem to indicate that there will be a general trend in this direction regardless of organizational or governmental direction. The fact that numerous states are changing medical practice and licensure laws to make the extended use of such personnel practical would indicate that the major restraint that must be overcome is the ever threatening liability problem, and until there is relief in this direction, it will continue as a dampening influence on the full utilization of AHP by orthopaedists.1/

Despite the perceived need for such personnel, early graduates of orthopaedic physician's assistant (OPA) programs experienced difficulty in finding appropriate jobs. The American Academy of Orthopaedic Surgeons is concerned about the problem and has established a placement center. There are presently nine OPA programs in operation. This year's total enrollment in the 2-year programs is 187 students, and June 1973 graduates numbered about 100. The employment prospects for prospective graduates looked promising in the spring, but the development of new programs is being discouraged to allow time to analyze the placement problem and to institute necessary changes to produce graduates who are actively sought by orthopaedic surgeons.

After weighing the array of facts collected, Dr. Pankovich of the Department of Orthopaedic Surgery of Cook County Hospital, and Mr. Frank Paink of the Department of Education of the hospital, proposed a 1-year, hospital-based training program for orthopaedic technicians which was formally approved by the Health and Hospitals Governing Commission in April 1973. While it is basically an on-the-job

1/ American Academy of Orthopaedic Surgeons and Council on Health Manpower of the American Medical Association, "Phase 1: Orthopaedic Manpower Study, 1971," Information Bulletin, AAOS Document No. 534-71, pp. 19-20.

training program, regular formal lectures will be held to complement clinical experience, and participants will be tested and evaluated periodically. The orthopaedic technician training is viewed as a pilot effort and will be continued if the graduates perform satisfactorily and are easily placed.

Classes for three trainees were started on July 2, 1973. A total of 15 persons applied for the three trainee positions, among them five medical corpsmen. The selection criteria stipulated that "special consideration be given to servicemen who have had some orthopaedic or related training in the military." Of the candidates selected, one was a Navy medical corpsman with 18 months' cast room experience; another was a veteran with experience as an operating room technician at Cook County Hospital; and the third was a young woman who had assisted in a private orthopaedic practice. Among the runners-up were three medics, currently on Cook County's staff as transportation attendants, who were encouraged to apply next year.

The technician will be trained at Cook County Hospital to function in a hospital setting -- in the emergency room, inpatient hospital room, and cast room. He will be responsible to either the emergency room supervisor, the head nurse or the orthopaedic surgeon. The trainee will receive 25 hours a week of on-the-job experience and 15 hours of classroom and didactic studies. Students will be rotated through the three orthopaedic wards and the outpatient clinic of the Fantus Health Center. Instruction will be given in the following areas:

1. Techniques of patient care
2. Cast and traction application
3. Emergency room technique
4. Introduction to operating room
5. Orthopaedic diseases and injuries
6. Introduction to physical therapy
7. Office procedures and care of cast and supplies
8. Introduction to prosthetics and orthotics.

Ideally, the hospital training program will be articulated in the future with an educational program at a community college so that with some additional college work, the technician could qualify as an orthopaedic physician's assistant.

A career progression in orthopaedics has been developed at Cook County Hospital. Three levels, ancillary to the orthopaedist, now exist: orthopaedic technician supervisor, orthopaedic technician, and orthopaedic technician trainee. A role comparable to one in the military services, and therefore especially suited to medics, has been incorporated into the job classification and pay plan of Cook County Hospital.

Medical Corpsmen in Health Services in Correctional Institutions

In 1971, the American Bar Association asked the American Medical Association to participate in a program designed to "institute and improve medical and health services in the Nation's correctional institutions."1/ To assess existing conditions, the AMA conducted a survey in mid-1972 of the medical care available in U.S. jails. Responses to the 2,930 questionnaires mailed to sheriffs of locally administered jails revealed that 17 percent of them had no medical facilities and that 66 percent had only first-aid facilities. A comparable finding was made in 1970 in a national jail census taken by the Law Enforcement Assistance Administration of the U.S. Department of Justice. With few exceptions, the health services for the 320,000 men, women and children in thousands of correctional institutions in the United States are grossly inadequate. Fewer than 40 percent of the jails in the United States have doctors available to the inmates on a regularly scheduled basis. One in three jails has no doctor providing medical care to inmates at any time.2/

A 1973 review of the sporadic local and state-wide studies of jail health services revealed that "a very significant number of health facilities and programs are unsatisfactory and probably in violation of the Eighth Amendment of the Constitution which forbids cruel and inhuman punishment."3/

1/ American Medical Association, "Proposal for a Program to Improve Medical Care and Health Services for the Inmates of the Nation's Jails and Prisons and Juvenile Detention Facilities," 1973.

2/ American Medical Association, Center for Health Services, "Medical Care in U.S. Jails -- A 1972 AMA Survey," February 1973.

3/ Unpublished study by Seth B. Goldsmith, Sc.D., "Prison Health Care: A Status Report," 1973.

Efforts to remedy the situation have begun, but improved and expanded services require efficient management, better facilities and equipment, and additional qualified manpower. The special attributes of the military-trained medical veteran make him singularly well-suited to provide health services in the environment of jails and prisons. This has long been recognized by the U.S. Public Health Service, which has been responsible for health services in Federal prisons since 1930. "Soon after PHS assumed this responsibility, the concept of using former military corpsmen was introduced."1/

Although the use of medically trained veterans has a long history in the Federal prison system, there has been little use of such paramedical personnel in state and county penal systems. Project VEHTS has participated in a program to improve jail health services in Cook County, Illinois, through the use of medical corpsmen. Spurred by a newspaper expose of conditions in the jail hospital, the Illinois Department of Public Health and the Cook County Board of Commissioners asked the Health and Hospitals Governing Commission of Cook County to assume responsibility for medical care delivered to inmates of the county's correctional institutions.2/

The county jail system encompasses the Cook County Jail, the House of Correction, and the Cermak Memorial Hospital. Cermak is a 110-bed hospital serving the medical needs of the inmates of the Jail and the House of Correction exclusively. The Jail and House of Correction receive an average of 137 men and women daily, have a combined population of approximately 3,500 inmates and an annual turnover of about 50,000. Both institutions have a high percentage of inmates who are being held for trial. The Cook County system, like most county jails, has a constant turnover in its inmate population in contrast to the more stable Federal prison system.

1/ U.S. Public Health Service, National Center for Federal Prisoners, "Basic Curriculum for Physician Assistant Training Program," Springfield, Missouri, undated.
2/ For a report of health care in Orleans Parish Prison in New Orleans, Louisiana and recommendations for an outside agency to deliver medical services to inmates, see Seth B. Goldsmith, Sc.D., "Jailhouse Medicine -- Travesty of Justice?" Health Services Reports, November 1972, vol. 87, no. 9.

At the time of entry the inmates are required to have a health examination and a "bruise check." Supposedly, addicts and people with infectious diseases or severe psychological problems are identified at intake time and assigned either to special areas in the prison or to specific medical regimens.

In the Cook County jail system, about 350 persons, 10 percent of the inmates, are seen at sick call every day. The movement of prisoners from their tiers to the clinic areas causes a great strain not only on the medical staff but also on the security staff who must account for and supervise the movements of the inmates. One of the physicians investigating the correctional institutions for the Health and Hospitals Governing Commission estimated that 60 to 80 percent of the sick call cases are complaints of pain, gastro-intestinal problems, and "nerves," requiring only routine medical treatment. Much of the sick call time is also taken up with scheduling clinic visits and responding to various complaints, such as undelivered medication and sanitation problems. After a procedure or protocol has been established, paraprofessional personnel can be entrusted to handle such complaints.

The Governing Commission officially became responsible for health services at the Cook County jail system on May 22, 1973. Medical responsibilities include the care of seriously ill and injured patients at Cermak Memorial Hospital and outpatient services delivered in the dispensary of the jail and at the clinic and emergency room of the hospital. In the 11-month period from October 1971 through August 1972, there were a total of 3,113 admissions to the hospital and 171,161 emergency and clinic visits.

Based on a survey of the medical delivery system of the Cook County's penal institutions, the Governing Commission was advised and agreed to initiate the use of medical corpsmen in the health services in the intake procedures, at sick call, and in caring for the hospital's inpatients. A job description was prepared and approved by the medical staff of the Cermak Memorial Hospital; the credentials of the corpsmen to perform the duties outlined in the job description were also formally approved by the hospital's medical staff. By mid-June 1973, five corpsmen had been hired and had started working. Their performance was so outstanding that the Governing Commission in August 1973 hired 12 additional corpsmen, with starting salaries from $9,300 to $12,000. By November 1973 a total of 27 corpsmen were

Medical corpsman drawing blood from incoming addict prisoner, Cermak Hospital Laboratory

providing general patient care and working as psychiatric technicians and medical laboratory technicians in the Cook County jail system.1/

A local newspaper account of the corpsmen program at Cermak Prison Hospital reported that:

> Officials at Cermak say they are highly pleased with the work of the ex-GI's who serve as paramedics there. The ex-GI's have handled a number of emergencies, including four heart attacks and an epileptic seizure suffered by prisoners...
>
> The pressure of a crisis was nothing new because almost all of the paramedics are combat veterans...
>
> The more routine duties of the Cermak paramedics include helping examine incoming prisoners and making sure prisoners get the medicine prescribed for them.

1/ For a more detailed description of the men and their duties, see chapter III.

> Dr. Samson Entin, Cermak medical director, [speaking of the medical corpsmen] said...
>
> "They can be the first to pick up a serious illness on a patient and decrease our chances of missing something, because we don't have enough doctors to handle the 50,000 prisoners that pass thru the two jails each year.
>
> "Also they perform medical tasks that previously were left to unqualified guards such as dispensing medicine. At one time, 50 per cent of the medicine never reached the prisoners when the guards were in charge of delivering it. Now 99 per cent of the prisoners get the medicine they're supposed to."

Efforts to improve medical care in the nation's jails are being made in a few areas. Following the 1971 riots in Attica Prison, New York State's Department of Corrections established a medical review board of independent health care professionals. In New York City, jurisdiction of medical facilities in city penal institutions was transferred from the Department of Corrections to the Health Services Administration in February 1972. Los Angeles County has also moved to improve the health services in its correctional systems using specially trained nurses and physician's assistants. In line with the AMA Proposal, the State Medical Society of Ohio has communicated with county medical societies suggesting that they establish a committee on jail medical practices. Both Washington State and Texas have bills in the hopper whose purpose is to reform jail health facilities. California has an upgrading program already functioning that employs physicians, including psychiatrists, as well as psychologists, nurses and medical technical assistants.2/ To reorganize health care to prisoners, the Pennsylvania State Bureau of Corrections has recently chosen a former Navy hospital corpsman to be Chief of Health Care Services. A key aspect of Pennsylvania's planned reorganization is the use of medically trained veterans as "correctional infirmary supervisors" to perform functions now divided between nurses and security guards.

1/ Charles Mount, "Army Veterans Spending Time in County Jail -- as Paramedics," Chicago Tribune, November 30, 1973.
2/ "Treatment Behind Bars," Time Magazine, July 9, 1973, p. 35.

Congressman Koch of New York City has introduced a bill in the 93rd Congress that would create a Federal Prison Review Board to set minimum standards for local correctional facilities and services such as probation, parole, counseling, medical, psychiatric and vocational rehabilitation.[1] The Review Board would hold periodic public hearings and make inspection trips to monitor compliance with the minimum standards. The Federal government would underwrite all or part of the cost of elevating the standards in state and local jails and correctional institutions to meet the minimum prescribed by the Federal Prison Review Board.

The dimension of the demand for paramedical personnel if jail health services were raised to acceptable standards is indeterminate. Assumptions about the standards of health care and the target date to reach the desired level must be made as a basis for the projections. At present, no estimates are available of the number of additional allied health personnel that will be needed under any set of assumptions.[2] In the last analysis, the momentum and scope of the reform effort depend upon the priority that our society assigns to the task.

1/ Correction Services Improvement Act, HR 686, 93rd Congress.

2/ However, if we use the Federal Bureau of Prison model of one medical technical assistant for every 115 inmates and apply it to the jails and correctional institutions in the United States, we estimate that roughly 3,000 medics would be employed in jails.

VI. THE BARRIER OF LICENSURE AND CERTIFICATION

Aspects of Health Personnel Credentialing

In the summer of 1971, the American Medical Association and the American Hospital Association jointly recommended a 2-year moratorium on the licensure of new allied health occupations. Their proposal was seconded by the Secretary of Health, Education and Welfare. The moratorium would allow time to study the various aspects and implications of licensure and other forms of health personnel credentialing, in the hope that these studies would point the way to a more rational and effective system.

Every aspect of health personnel credentialing is being critically scrutinized today, and changes are bound to follow. Several state legislative commissions are now considering revisions that might be made in licensure of health personnel.1/ In addition, there are efforts to bring order into the accreditation process. The Study of Accreditation of Selected Health Educational Programs (SASHEP) has been

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1/ The State of Illinois Health Care Licensure Commission requested a statement from Project VEHTS, presented on November 15, 1972, as part of its hearings on health licensure prior to making recommendations to the Illinois legislature regarding changes in licensure laws and practices. Project VEHTS also presented its views on licensure and certification at a February 26, 1973, conference sponsored by the Texas Project MEDIHC on the subject of "Regulations Affecting Employment of Health Personnel - Implications for Medics." This chapter presents excerpts from both papers, as well as portions of a statement on equivalency and proficiency testing given before the Illinois Health Care Licensure Commission on December 12, 1972.

completed, and attempts to implement the recommendations of the Study Commission have begun. Just under way is a study of the feasibility of a national umbrella organization of associations certifying allied health personnel.1/

This is a period of widespread inquiry, reflecting the rising public concern that it will be unnecessarily difficult and costly to provide comprehensive health care for all Americans in the face of existing credentialing practices. The system of "categorical" certification has been severely criticized as unresponsive, fragmented, uncoordinated, and unaccountable to the public.

Professional associations involved in certification and registration justify the requirements -- typically, graduation from an approved educational program and a passing score on a qualifying exam -- as necessary to assure that the public receives quality medical care at the hands of competent health workers.

The imposition of credentials -- both licensure and certification -- as prerequisites for hiring is defended on the grounds that the credentials, per se, assure expertise and thereby quality; that the performance of the services by personnel without the credentials entails sacrifice of quality. The risks to the patient (and the liability of the provider) are considered to be significantly less if the service is performed by personnel explicitly credentialed to provide it.

This proposition is not self-evident and should be examined. The experience with military medicine is sufficient to question the validity of the thesis. Ten million persons are eligible for care in the Armed Forces medical departments. No one contends that military personnel (and their dependents, where they are cared for by military medical facilities) receive care inferior to that delivered by the civilian system. (We are not considering "battlefield medicine" in this context.) We recognize that the military medical system operates outside the market; the relationship

1/ The study is being conducted by the Institute of Public Administration in collaboration with Robert R. Nathan Associates, under the auspices of the Health Resources Administration of the U.S. Department of Health, Education and Welfare.

between patients and providers are different; the training and assignment of personnel are different; the professional, legal and institutional governance is different; and therefore the credentialing, though well defined, is different.

When one looks at military medicine, the argument that existing civilian practices in licensure and certification are essential to maintain the quality of medical services is subject to question. This is true whether one considers credentialing by licensure (a governmental permit to practice) or by certification (a nongovermental professional seal of individual competence). If, as has been charged, present licensure and certification practices do not protect the public interest and to some degree are against the public interest, changes should be made.

Furthermore, to the extent that they prescribe qualifications beyond those required for satisfactory and reliable performance, the strictures of licensure and certification unnecessarily increase costs for health care by artificially constraining not only the supply of manpower but also the efficient organization and operation of medical delivery systems. If present credentialing practices contribute to rising costs and limited accessibility of health care by impeding the supply, utilization, and distribution of health manpower, changes are urgently required.

The Constraints on Medics

What is the experience of the medic looking for a civilian health job?1/ He finds that his military medical job was an anomaly. The constraints on the full use of his paramedical capabilities arise in the first instance in the

1/ On January 19, 1972, Project VEHTS held a meeting in Washington on the effects of certification and licensure on the utilization of military-trained medical personnel. Participants included Nathan Hershey and Sumner M. Rosen of the Labor Department's Allied Health Manpower Advisory Panel; Alice B. Frazier, National MEDIHC Coordinator, DHEW, and Maryland Y. Pennell, Bureau of Health Manpower Education, PHS, DHEW; Col. Robert S. Kerrigan and Lt. Col. Charles Patch, Office of the Surgeon General, U.S. Army; Jean Linehan, National Committee for Careers in the Medical Laboratory; and Edward D. Hollander, Harriet M. Kriesberg, and Clarence R. Jones of Project VEHTS.

job and hiring specifications. These, in turn, reflect constraints imposed by licensure and by professional organizations, through their participation in the licensing and certification procedures and in the accreditation of educational and provider institutions. The veteran finds that civilian employers are unwilling or unable to explicitly use his skills as did the military.

In 1970, a report prepared by Robert R. Nathan Associates, based on more than 1,200 interviews with medical corpsmen of the Army, Navy and Air Force, was issued by the U.S. Department of Labor.1/ A key finding was that servicemen and veterans believe that low pay and civilian standards for hiring and advancement are among the major barriers that prevent them from moving from military medical systems into the civilian health field.

Corroborating evidence was produced by a study of hiring standards for paramedical manpower conducted by Professors Goldstein and Horowitz of Northeastern University in 1967 and 1968. They found that hiring prerequisites were characterized by arbitrary licensing and unnecessarily high levels of education and training relative to the job functions of these occupations. They also found that the same function was performed by persons in different jobs which had significantly different hiring standards.

They reported that "in very few cases do hospitals regard as too high the standards recommended by the accrediting agencies and professional societies. Most hospitals indicated that the basic aspects of their hiring standards were in effect for many years, some over ten years. And despite this, most considered their hiring standards to be just right, even though the job content of a number of occupations had changed and there was a general shortage in most occupations."2/

There are at least two major problems that civilian hospitals have in recruiting and placing veterans. The first

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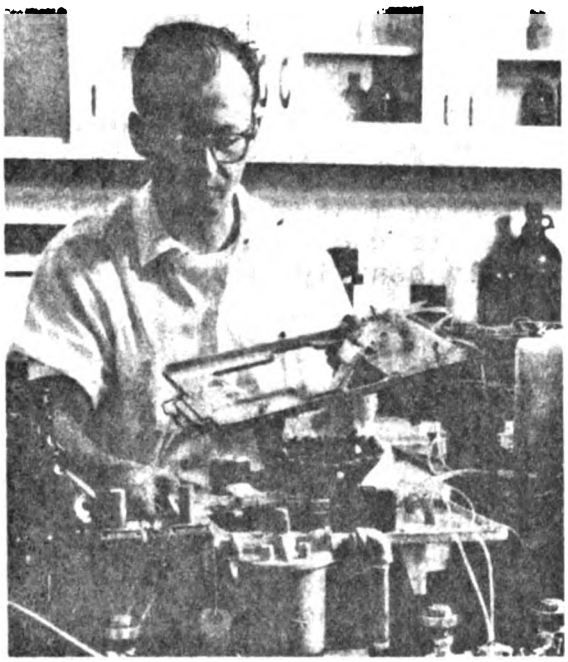
1/ Robert R. Nathan Associates, Inc., Transferability of Military-Trained Medical Personnel to the Civilian Sector, prepared for the Office of Manpower Research, U.S. Department of Labor, Washington, D.C., July 1970.
2/ Harold M. Goldstein and Morris A. Horowitz, "Hiring Standards for Paramedical Manpower," prepared for the Manpower Administration, U.S. Department of Labor, September 1968.

arises out of the characteristics of military men, particularly their nontraditional (though highly structured and standardized) military training and experience and their geographic dispersion. The second develops out of organizational and management characteristics of civilian hospitals, especially of their personnel systems, which often result in diffused hiring authority and inefficient use of veteran manpower. Underlying both problems are the civilian standards for hiring and advancement which rely heavily on certification and licensure.

What is the experience of the medic in the military? Many of the men leave the military medical departments with a broad range of experiences and much potential. A high proportion have served in military hospitals and outpatient facilities, providing care to civilian dependents similar to services rendered in civilian hospitals, as well as treating military casualties. They have been trained by the military to perform the full range of paramedical functions. That they have been well trained was demonstrated by the results of the proficiency examinations for clinical laboratory personnel given by the National Committee for Careers in the Medical Laboratory in November 1971. Military-trained laboratory technicians scored considerably higher than their counterparts trained in civilian programs. For all that, a significant percentage of veterans find that they are unable to transfer their military medical skills to the civilian labor market.

A look at the hospital labor market heightens our appreciation of the difficulties veterans face.1/ We all know of the financial troubles many hospitals have had in recent years. This has serious implications for the medic and for all those seeking health careers. Hospitals are the major employer of health personnel. From 1960 to 1970, the annual rate of increase in hospital full-time equivalent employment trended steadily upward. However, statistics show that "Because of the lower rate of growth of hospital utilization compared to the previous few years, additional hospital employees were not added to the payroll at earlier rates of increase."2/ The annual rate of increase in full-time equivalent personnel averaged 6 percent in the decade of the 1960's. In contrast, hospital employment increased only 3.6

1/ See chapter VII.
2/ "Hospital Indicators," Hospitals, December 16, 1972, p. 26.



Military-trained clinical laboratory technician

percent in 1971 and only 2.9 percent in 1972. Hospital manpower requirements in 1971 and 1972 were strongly affected by the lower level of utilization of hospital facilities and the efforts to control spiraling hospital expenses.

Recently emerging indications of declining hospital manpower needs for additional workers come as a surprise after the years of alarm over manpower shortages. However, the tremendous growth of the health industry in the 1960's has been accompanied by a proliferation of training and educational programs, especially at the junior college level, which have turned out ever-increasing numbers of persons trained in a growing number of allied health fields.

The labor market situation differs for individual occupations and certainly does differ for individual places. It is no longer true that shortages exist everywhere for all kinds of health manpower. We are now in a different ball game. Dr. Joseph T. English, President of the New York City Health and Hospitals Corporation, reported at a meeting of the American Hospital Association held in November 1972 that "...a chronic manpower shortage in the system -- represented especially by a shortage of 2,000 nurses prior to the formation of the corporation -- now is almost entirely eliminated."[1/]

1/ "News," Hospitals, January 1, 1973, p. 111.

The 1972 Manpower Report of the President points out that manpower problems in the health services "reflect a serious maldistribution of personnel and, in probably lesser degree, an inadequate overall supply in major health fields."1/

The constraints that licensure and certification impose on the use of medics vary with the circumstances. It is common knowledge that when and where we have a tight labor market, moonlighting servicemen and other unlicensed personnel do in fact perform tasks defined within the scope of practice of licensed categories.2/ Faced with a critical nursing shortage in 1969, Johns Hopkins Hospital in Baltimore, Maryland, recruited and trained medical corpsmen to avoid closing the Osler Medical Clinic. A study comparing the quality and cost of care at the clinic concluded that "on a 30-bed acute medical floor staffed partly by corpsmen, care of at least equal quality was rendered to more patients, for more patient days, and for greater patient care demands at less direct personnel cost than on the 30-bed acute medical floor staffed partly by private duty nurses."3/ Such acknowledged waiver of some constraints of licensure where it is convenient for all concerned to overlook them is another indication of the inaedquacy of the present system.

Removal of the Constraints of Credentialing

The Federal Government has unfortunately funded programs relating to health manpower, but has failed to exert its full influence on training and educational institutions, on medical care providers and on professional associations to adapt the occupational structure in relation to requirements for accreditation, certification, and licensure in such a way as to foster the rational development and use of manpower.

Pragmatically, one way to help the veteran within the framework of existing credentialing is to modify educational

1/ U.S. Department of Labor, Manpower Report of the President, 1972, p. 129.
2/ E. Martin Egelston and Thomas Kinser, "Exploratory Investigation of Licensure of Health Personnel," American Hospital Association, September 1969.
3/ William R. Blalock, "Recruiting Ex-Military Corpsmen," Hospitals, December 1, 1971, p. 43.

requirements to maximize the recognition given to military paramedical training and experience. Most veterans appreciate their need for additional education to qualify for civilian positions equivalent to those they had in the military. In the responses given by more than 1,200 enlisted Army, Navy and Air Force men surveyed by Robert R. Nathan Associates in 1968 and 1969, relatively few men thought that educational requirements should be changed; instead, they suggested that alternative routes should be provided for them to acquire and demonstrate the requisite knowledge. Since completion of an approved education program is typically required in the certification and licensure process, all actions that give civilian recognition to military training courses are steps toward qualifying medics for civilian health jobs commensurate with their capabilities. Especially worthwhile is the work of the AMA-DOD Subcommittee on Military Allied Education in accrediting military training programs.

Allied health educational institutions should be required to offer tests to candidates for admission to enable them to demonstrate that they have acquired equivalent knowledge or skills and thus to eliminate the necessity for repeating courses whose content has been learned in a nonacademic setting. In California, for example, the law instructs the two California licensing boards with jurisdiction over professional and vocational nursing to deny the application for accreditation and to revoke the accreditation of schools of nursing which do not give to student applicants credit "for previous education and the opportunity to obtain credit for other acquired knowledge by the use of challenge examinations or other methods of evaluation."

Furthermore, professional associations should permit veterans with specialized military medical training to take the requisite examination for certification and licensure. Model legislation to accomplish this objective is suggested by the Council of State Governments:

> Section 1. [Waiver for Experience in Armed Forces.] Nothwithstanding any other provision of law, any person [board, commission, or similar body] who determines the qualifications of individuals for licensure, certification or registration as a member of a health occupation under the laws of this State, or of any political subdivision thereof, shall evaluate the experience of any applicant for licensure, certification,

> or registration, that the applicant gained while serving on active duty in the Armed Forces of the United States, and shall waive any requirements for education or training that the applicant does not otherwise fulfill, if it is determined that the applicant has obtained equivalent qualifications in the pertinent health profession or occupation while serving on active duty as a member of the Armed Forces of the United States.1/

Recently, the National Registry of Emergency Medical Technicians has allowed servicemen with relevant military experience to sit for the registry exam while still in service. What is relevant military experience in this context? The independent duty corpsman aboard ship, the company aid man in support of a combat operation, the medical service specialist whose duties require him to serve as an ambulance attendant in response to accidents, and the medical specialist in helicopter evacuation service all have military training and experience directly transferable to civilian emergency care operations. The first examinees have demonstrated that most eligible servicemen have no difficulty in passing the registry's qualifying examination.

The emerging occupation of emergency medical technician alerts us to another problem. Several states have pioneered by passing legislation that permits mobile EMT's to perform specified functions formerly restricted to the physician, provided they are certified by the state's Department of Health. Servicemen and veterans are characterized by their geographic dispersion. A few servicemen are licensed where they are stationed; unfortunately, when they are released from the military and return home, they still may have difficulty with licensing. Licensure rules and practices that vary among the states, and reciprocity that does not prevail generally, are barriers that turn many veterans away from the health field.

It should be practicable for people to come into the health care system from diverse backgrounds and to demonstrate qualifications equivalent to those acquired through formal

1/ From the 1972 Report on Suggested State Legislation, Council of State Governments, Lexington, Kentucky, 40505.

education. Ideally, hospital jobs would be linked with small increments of training or education so that an individual would gradually be permitted to perform tasks of broader scope and increased responsibility. In evaluating the individual health worker, the emphasis should be on his ability to perform necessary functions rather than on his formal educational accomplishments; that is, the focus should be on outputs -- on worker proficiency -- instead of inputs -- formal coursework completed. Proficiency tests are one device to accomplish this assessment.

The use of proficiency tests in no way compromises the quality of personnel. If present requirements for licensure and certification are translated into equivalent performance criteria, the same standards of competence would be maintained. The use of proficiency examinations, far from admitting incompetent workers to practice, would safeguard the quality of health care at the same time that it increased the supply of qualified health personnel. For this reason PL 92-603 (H.R. 1) provides that the Secretary of Health, Education, and Welfare, in consultation with professional organizations and state health and licensure agencies, shall conduct a program "to determine the proficiency of individuals (who do not otherwise meet the formal educational, professional membership, or other specific criteria [for credentialing in selected allied health occupations]...). Such programs shall include (but not be limited to) the employment of procedures for the formal testing of the proficiency of individuals." Specific mention is made of occupations especially relevant to the medically trained veteran: "practical nurses, therapists, laboratory technicians and technologists, cytotechnologists, X-ray technicians, psychiatric technicians." The law further stipulates that no one employing such persons will be denied payment under Medicare or Medicaid.1/

A strong case can be made for basic changes in state health personnel licensing systems. The first question to be raised concerns the education and training necessary to impart the expertise required for a given function: Have the requirements been determined objectively in terms of the knowledge and skills required? Are requirements included that are not currently related to satisfactory performance? Do the contents of licensure exams provide a meaningful test of

1/ U.S. Congress, Social Security Amendments of 1972, Public Law 92-603, 92nd Congress, 2nd Session, 1972, Sec. 1123(a) and (b).

the individual's ability? If not, what is necessary to modify them? The burden of proof of the appropriateness of credentialing requirements should rest on the regulatory authority, necessitating the authority to demonstrate that the requirements are necessary to ensure quality of health care. (The same inquiries should be directed to professional associations with regard to certification.)

The second question concerns the legal definition of the scope of practice of the particular health profession or occupation. Has it been defined by statute to include tasks for which the prescribed education and training are not requisite? Does it, therefore, prohibit personnel with less than the prescribed education and training from performing the less exacting tasks, for which they may be entirely qualified? Does it inhibit optimum utilization of health manpower and innovative developments in technology, occupations, and delivery of health services? The legislative sanction for use of emergency medical personnel and the evolution of emergency medical occupations in some states are examples of the need for the credentialing system to be responsive to innovations.

Questions like these involve considerations of costs versus risks. Of course, the extent and kind of preparation must reflect the requirements of the functions trained for, in order to minimize risks of underqualified personnel. But overcredentialing is costly both to the public, which has to bear the costs of overpreparation and the costs of personnel shortages, and to the individuals who are excluded by overcredentialing from performing jobs in needed services. In short, credentialing is justified by the public interest in good health care exactly to the extent that it requires a showing of proficiency, however achieved. Obversely, to the extent that credentialing acts to exclude qualified personnel -- as often is the case of medically trained veterans -- it is contrary to the public interest.

The absorption of veterans into the labor force is a national concern, and there is an increasing awareness of the difficulties that returning veterans have had in finding jobs. The unemployment rate among Vietnam-era veterans has dropped recently, reflecting the general economic recovery and the special efforts being made to help them. These efforts are made not only because of the country's deep sense of obligation to the veterans, but also because the nation is prompted to try to recoup for the civilian economy some of the investment in veterans' military medical training.

Moreover, the veterans can be viewed as a prototype for all health personnel who have acquired knowledge and skills through nontraditional routes. Steps taken to facilitate a satisfactory adjustment for the veteran in a health career have meaning for a much larger group and should prepare a path for other persons encountering analogous difficulties.

VII. HOSPITAL LABOR MARKET

In 1971 and 1972, Project VEHTS felt the repercussion of the financial problems of Cook County Hospital. It was suspected that the financial crunch might not be unique to Cook County Hospital, and that the hospital manpower requirements in certain areas and probably in the nation as a whole had changed significantly in the last year. Concerned about the implications for the veteran, Project VEHTS undertook a brief examination of the macroscopic aspects of the hospital labor market for corpsmen and other allied health workers.

Hospital Labor Demand

Hospitals are the major employer of health personnel. From 1960 to 1970, the number of hospital full-time equivalent employees trended steadily upward. Community hospitals, which in 1972 represented 90.6 percent of all AHA-registered hospitals, contained 57.0 percent of all hospital beds, and reported 92.5 percent of all admissions, experienced the most rapid growth in employment.1/ For community hospitals, average employment in 1970 at 1,929,000 was almost 80 percent higher than that of 1960. While employment continued to grow between 1970 and 1972, the annual rate of increase, which averaged 6.0 percent during the 1960's, dropped to 3.6 percent in 1971 and 2.9 percent in 1972.

Table 7 presents selected annual statistics for community hospitals from 1960 to 1972. These figures reflect some of the underlying forces that have had an impact on

1/ The American Hospital Association defines community hospitals as "nonfederal, short-term general, and other special hospitals whose facilities and services are available to the entire community."

Table 7. Selected Statistics for Community Hospitals and Percent Change From Previous Year, 1960-72

Item	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1960-72 Annual	1960-72 Cumulative
Annual average employment															
Full-time equivalents (thousands)....	1,080	1,149	1,207	1,277	1,333	1,386	1,532	1,619	1,717	1,824	1,929	1,999	2,056		
Percent change.	--	6.4	5.0	5.8	4.4	4.0	10.5	5.7	6.1	6.2	5.8	3.6	2.9	5.5	70.3
Admissions															
Total (thous.).	22,970	23,375	24,307	25,267	25,987	26,463	26,897	26,988	27,276	28,254	29,252	30,142	30,777		
Percent change.	--	1.8	4.0	3.9	2.8	1.8	1.6	0.3	1.1	3.6	3.5	3.0	2.1	2.4	26.6
Births															
Total (thous.).	3,678	3,750	3,689	3,623	3,569	3,413	3,261	3,159	3,145	3,190	3,403	3,338	3,119		
Percent change.	--	2.0	-1.6	-1.8	-1.5	-4.4	-4.5	-3.1	-0.5	1.4	6.7	-1.9	-6.6	-1.7	-15.5
Outpatient visits[a/]															
Total (thous.).	--	--	70,727	85,764	91,430	92,631	106,524	109,987	114,097	120,831	133,545	148,423	166,983		
Percent change.	--	--	--	21.3	6.6	1.3	15.0	3.3	3.7	5.9	10.5	11.1	12.5	9.0	136.1
Occupancy rate (percent).....	74.7	74.3	75.1	76.0	76.3	76.0	76.5	77.6	78.2	78.8	78.0	76.7	75.2	0.1	0.1
Average no. of beds															
Total (thous.).	639	659	677	698	721	741	768	788	806	826	848	867	884		
Percent change.	--	3.1	2.7	3.1	3.3	2.8	3.6	2.6	2.3	2.5	2.7	2.2	2.0	2.7	30.6
Average daily census															
Total (thous.).	477	489	509	530	550	563	588	612	630	651	662	665	664		
Percent change.	--	2.5	4.1	4.1	3.8	2.4	4.4	4.1	2.9	3.3	1.7	0.5	-0.2	2.7	30.5
Average length of stay															
Total days.....	7.6	7.6	7.6	7.7	7.7	7.8	7.9	8.3	8.4	8.3	8.2	8.0	7.9		
Percent change.	--	0	0	1.3	0	1.3	1.3	5.1	1.2	-1.2	-1.2	-2.4	-1.3	0.4	3.9
Hospital expenses															
Total ($ mils.)	5,617	6,250	6,841	7,532	8,349	9,147	10,276	12,081	14,162	16,613	19,560	22,400	25,549		
Percent change	--	11.3	9.5	10.1	10.8	9.6	12.3	17.6	17.2	17.3	17.7	14.5	14.1	14.1	27.5

Note: Data for 1960 and 1961 not available.

Source: American Hospital Association, Hospital Statistics 1972, 1973.

hospital manpower requirements. In brief, the long-run shift from inpatient to outpatient services, the reduced length of stay, and the decline in the birth rate have combined to produce a lower level of utilization of hospital facilities in recent years. The underutilization and the generally unfavorable economic conditions experienced in 1971-72 adversely affected hospital budgets with the result that manpower requirements have been adjusted downward and utilization modified.

There clearly has been a change in the use of hospital facilities during the decade. Between 1962 and 1972, annual community hospital admissions rose 26.6 percent. But far more dramatic were the changes in the number of outpatient visits, which rose 136.1 percent -- from 70.7 million visits in 1962 to 167.0 million in 1972. In 1962, inpatient admissions were about one-third as numerous as outpatient visits; by 1972, this ratio dropped to less than one-fifth. There is no reason to expect this trend to stop. For the individual hospital, the expansion of outpatient services relative to inpatient admissions has budgetary implications which in turn influence manpower requirements, both in terms of types of personnel and in numbers employed. This was illustrated at a meeting to discuss the financial plight of New York City's voluntary hospitals where it was disclosed that "The shift in the emphasis of health care from in-hospital to clinic, without a corresponding shift in private health-insurance coverage, is creating deficits so severe that services are being cut....The hospital has reduced its staff by 10 percent in the last year...."[1/]

Other forces, such as the decline in the average length of hospital stay since 1968, have also been at work and have an impact on employment. The average length of stay rose gradually in the 1960's from 7.6 days in 1960 to the peak of 8.4 in 1968. Beginning in 1969, a steady drop occurred -- 8.3 in 1969, 8.2 in 1970 and 8.0 in 1971. By 1972, inpatient stays averaged 7.9 days. Pressures to make hospitalization less costly are partially responsible for the decline in the average length of hospital stay over the last few years. Third-party payers are imposing more stringent criteria for reimbursement formulas.[2/] In some cases,

1/ Nancy Hicks, "Possible Health Crises Resulting from Deficits Seen by Hospital Official," The New York Times, June 25, 1972.
2/ See Daniel Grotha, "The Ralph Nader of Insurances," Saturday Review, July 1, 1972.

hospitals are not only being denied reimbursement for some ancillary services, but auditors are disclaiming charges beyond a certain length of stay. While a post audit is customary, new state programs such as the Illinois Hospital Admission and Surveillance Program (HASP) monitor the length of stay of Medicaid patients while they are in the hospital. The trend of average hospital stay toward markedly fewer days may well continue. Again, these recent developments have manpower implications since "the greater portion of the increase in employment (in the 1960's) reflects the growing number of days of care rendered."1/

The declining birth rate in the last decade has widespread ramifications and implications. In terms of hospitals today, reduced numbers of maternity cases have lowered the occupancy rate and have forced some hospitals to close their maternity wards.

The occupancy rate is an overall indicator of the level of inpatient utilization of hospital facilities. The community hospital occupancy rate during the last decade peaked at 78.8 percent in 1969, and has dropped every year since, hitting 75.2 percent in 1972. The declining occupancy rate in the years 1970-72 reflects the net effect of changes in numbers of beds, admissions, and length of stay, and adds to the financial problems of hospitals.

However, in all but 2 months since October 1972, the occupancy rate has been marginally higher than it was during the comparable month the previous year, indicating that the decline in the occupancy rate may be checked. In July 1973 the occupancy rate was 73.2 percent, in contrast to 71.7 percent in the same month in 1972.2/

Opinions differ about the level of occupancy necessary for optimum utilization. Less-than-optimum and less-than-expected use of inpatient hospital facilities means less income for the hospitals and higher per patient costs. In terms of manpower, productivity can be expected to decline,

1/ Jon D. Miller and Bernard Ferber, "Health Manpower in the 1960's," Hospitals, Journal of the American Hospital Association, February 16, 1971, vol. 45, p.68.
2/ "Hospital Indicators," Hospitals, Journal of the American Hospital Association, October 16, 1973.

as usually happens when facilities are not fully utilized with consequent increases in labor costs for services rendered. Programmed or budgeted jobs can quickly evaporate as the squeeze sets in.

The financial situation at Cook County Hospital is illustrative. The budget for Cook County Hospital, effective November 28, 1972, was based on the assumption of an average daily patient load of 1,400. In fact, the daily census has dropped to 1,100 patients. The drop is attributed to several factors: a shift of population out of the catchment area; reduced maternity cases; increased willingness of other hospitals to serve patients formerly attended at Cook County Hospital; and the recession. This decline produced a financial crisis in the institution which was compounded by the state's delay in reimbursement for Medicaid services rendered the previous year. As a consequence, Cook County Hospital had to impose a hiring freeze and was forced to lay off approximately 8 percent of the total staff. Similar budgetary constraints are faced by many hospitals throughout the country.

Other forces related to the general economic climate have an impact on hospital employment. The relentless upsurge in hospital expenses, which quadrupled from 1960 to 1971, slowed somewhat in 1971 with a 15-percent rise over the preceding year -- the lowest annual increase since 1967 -- and continued its deceleration in 1972 with a 14.1 percent rise. Furthermore, the Economic Stabilization Program in its first 6 months limited the rise in total expenses in community hospitals to 10.4 percent. Beginning in January 1974, the Cost of Living Council proposes to allow an increase of 7.5 percent in a patient's total bill. Hospitals that "decrease costs by holding down unnecessary admissions and reducing the length of stay of the average patient would be allowed to increase their individual bills as much as 20 percent in special circumstances."1/ It has also controlled the increase in expenses per patient-day. It is interesting that "one response by hospitals to the moratorium on price increase was a reduction of their most expensive single budget item -- personnel. Full-time employees in community hospitals dropped....To compensate, hospitals increased their part-time employees...."2/

1/ Richard D. Lyons, "Agency Proposes Rise of $5-Billion for Health Costs," The New York Times, November 7, 1973.
2/ "Hospital Indicators," Hospitals, November 16, 1972, p. 33, and June 16, 1972, p. 19.

Future requirements for manpower in the health service industry can be based on planned expansion (or contraction) in anticipation of increased (or decreased) funds to enable provision of more, different, or fewer services. Only 3 years ago, when Robert R. Nathan Associates reviewed the manpower requirements of the health industry in connection with the study Transferability of Military-Trained Medical Personnel to the Civilian Sector, the unmet demand for allied health workers was indisputable. Furthermore, the anticipated requirements for additional personnel in the years ahead, as measured by reputable investigators, clearly revealed the health industry's seemingly insatiable demand for more manpower.

It is no wonder then that the recently emerging indications of stable or even declining hospital manpower needs for additional workers came as a surprise. For example, the findings of national surveys conducted in 1966 and 1969 show that there was a marked decline in that period in the number of additional manpower needed to provide optimum patient care in hospitals. In 1969 it was reported that 110,000 professional and technical personnel were required to fill budgeted hospital vacancies as well as positions not budgeted, but needed to provide optimum care. Three years earlier, in 1966, hospital administrators reported that they needed 257,200 persons to reach this goal.[1/] Recently emerging indications of stable and even declining hospital needs for additional workers come as a surprise and "concrete evidence," says the AMA, "is accumulating that the supply of nursing and allied health manpower is approaching equilibrium with demand at a rate faster than anticipated."[2/]

Labor Supply

The tremendous growth of the health industry resulting from population increases, the rapid development of private insurance plans, Medicare, Medicaid, and advances in health services and their delivery have been accompanied by a proliferation of training and educational programs which have turned

1/ J.J. Losee and M.E. Altenderfer, "Health Manpower in Hospitals," Washington, D.C., Department of Health, Education and Welfare, Public Health Service, 1970.
2/ American Medical Association, "A Report on Education and Utilization of Allied Health Manpower," June 1972.

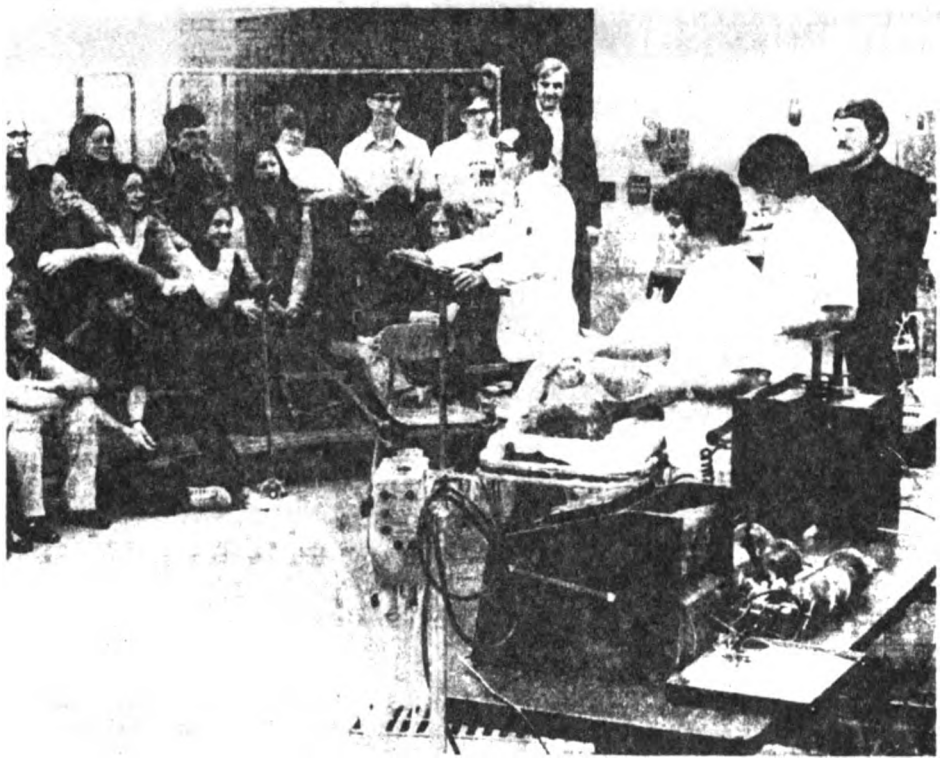
out ever-increasing numbers of persons trained in a growing number of allied health fields. Such programs have been underwritten in large part by the Federal Government.

According to a recent survey of public and private junior colleges, in 1971 there were graduates in 39 allied health occupations.1/ Some of these fields of work were not identified as educational specialties until recently. The number of graduates in virtually all of these health programs has increased annually from a total of 4,365 in the first year of the survey (1959-60) to an estimated 34,760 in 1970-71. For every junior college health field graduate in 1960, there were eight in 1971. In the 12 years covered by the Association's survey, 157,000 students graduated with allied health field specialties from junior colleges. With rising junior college enrollments and continued emphasis on health careers, one can reasonably expect that allied health programs will continue to attract a proportionate number of students, with resultant increases in graduates.

Data from the Association of Schools of Allied Health Professions reveal an impressive growth in the number of graduates from 4-year baccalaureate programs, as well as the introduction of new health disciplines. The total number of 1969-70 graduates, 18,330, was more than triple the 1959-60 level in most of the major programs, and further substantial increases were anticipated.2/ It was estimated that by 1975-76 the graduating classes would number 37,000.

Notable additions to the allied health field manpower supply have also come about as a result of other programs. Institutional and on-the-job training for health service occupations have been emphasized since the inception of MDTA training and have been popular with enrollees. In fiscal year 1970, some 12,300 training opportunities were authorized

1/ United States Department of Health, Education, and Welfare, Public Health Service, "Allied Health Education Programs in Junior Colleges/1970," compiled by the American Association of Junior Colleges, October 1971, DHEW Publication Number (NIH) 72-163.
2/ United States Department of Health, Education, and Welfare, Public Health Service, "Allied Health Education Programs in Senior Colleges/1971," compiled by the Association of Schools of Allied Health Professions, DHEW Publication Number (NIH) 73-241.



Allied health education program being conducted in a hospital setting (Johnstown Tribune-Democrat photo)

for about 40 medical occupations. Authorized training opportunities declined in fiscal year 1971 to 10,783 in 18 occupations. It is estimated that 75 to 80 percent of these training slots were filled. In fiscal year 1972, there were a total of 10,480 training opportunities in 34 health occupations. Approximately 19,000 trainees were enrolled in MDTA health training in 1972. The most numerous authorizations have been for licensed practical nurse, nurse aide (including orderly), and general duty nurse refresher programs. WIN and CEP sponsor their own training programs, including some health occupations, in addition to utilizing MDTA training opportunities. Separations of enlisted personnel from military medical departments have been and will continue to be an important source of potential trained manpower for civilian health services. About 180,000 medics have been released from fiscal years 1966 through 1971; more than 40,000 were released in each of the last 3 years, and Vietnam-era veterans with paramedical skills will still be numerous.

Demand-Supply Relationships

It is difficult to assess the adequacy of the burgeoning supply of allied health manpower in relation to current and anticipated demand. A significant finding of a recent AHA study of shifts in manpower requirements from 1966 to 1969, based on reports of hospitals in seven states, shows that:

> In every category of personnel and in all seven states, the proportion of unfilled positions to filled positions declined between 1966 and 1969. From these data, it appears that the level of activity in health manpower training is responsive to the needs of the industry and is beginning to reduce the volume of unfilled manpower needs. If the number of graduates and other trainees entering the field continues to be larger than the expansion of hospital requirements, it is possible that the manpower shortages of recent years will be alleviated in the foreseeable future.1/

These data reflect present-day needs as reflected in current delivery systems. A detailed examination of the future labor market for health professionals and allied health workers is needed. Future requirements for manpower in the health service industry will be influenced by future policies and programs whose outlines and impacts can only dimly be foreseen; e.g., the introduction of a national health insurance plan, and the organization of health maintenance groups. Similarly, the supply of manpower will be influenced by new efforts, such as area health education centers and programs supported under health manpower training and education legislation. Moreover, the adequacy of the future supply in relation to future demand for health manpower will depend in large part on its geographic distribution, the breakdown among specialties, and the level of utilization.

The 1972 Manpower Report of the President points out that manpower problems in the health services "reflect a

1/ Jon D. Miller and Bernard Ferber, op. cit., p. 70.

serious maldistribution of personnel and, in probably lesser degree, an inadequate overall supply in the major health field."1/ The clamor about manpower shortages in the health industry seems to be somewhat muted in the face of new evidence. Local newspaper stories and journal articles are beginning to appear with reports of diminished hospital utilization and suggestions of a shift from health service manpower shortages to adequate numbers in the supply. As for the well-recognized maldistribution of personnel and the inadequacy of health care in outlying rural areas and in the inner city, it is unclear whether or not increasing overall manpower supply for health services will ease it.

The health industry is too diversified in its occupational structure and too widespread geographically to permit a simple description of the adequacy of its labor supply. The labor market situation for health services may well differ for individual occupations and certainly does differ for individual locations. The industry and the veteran may be best served by pinpointing some of these differences if successful recruitment and placement are to be achieved.

1/ U.S. Department of Labor, Manpower Report of the President, 1972, p. 129.

VIII. FINDINGS AND CONCLUSIONS

Characteristics of Military-Trained Medical Personnel

In the latter half of the 1960's, there were an increasing number of annual separations from the military medical departments. At the peak, reached in fiscal year 1970, about 43,000 medically trained enlisted personnel were released from active duty. The decline, which began in fiscal year 1971 when approximately 42,000 servicemen with military medical experience returned to civilian life, can be expected to continue until the mid-1970's.1/ By that time, barring unanticipated events, most of the adjustments required by the end of the draft and the changing character and force strength of the peacetime volunteer service will have been made. Assuming a military establishment of 2.3 million on active duty (the level as of June 30, 1973), 20,000 to 25,000 medically trained servicemen would proably leave the military each year. A comparison of this group with the number of graduates of civilian educational programs helps to measure the significance of the veteran pool to the civilian health manpower supply. In the last academic year for which figures are available (1970-71), there were 21,595 four-year college graduates and 25,312 two-year college graduates of allied health educational programs.2/

1/ Data on separations of enlisted personnel from military medical departments were obtained from the Office of the Assistant Secretary of Defense; Office of the Surgeon General, Department of the Army; Bureau of Medicine and Surgery, Department of the Navy.

2/ U.S. Department of Health, Education, and Welfare, Public Health Service, Allied Health Education Programs in Senior Colleges/1971, compiled by the Association of Schools of Allied Health Professions, DHEW Publication Number (NIH) 73-241; and Allied Health Education Programs in Junior Colleges/1970, compiled by American Association of Junior Colleges, DHEW Publication Number (NIH) 72-163.

The job-hunting experience of veterans varies with labor market conditions and personal attributes. The severe shortages of health manpower characteristic of the 1960's appear to have passed. Indications of stable or even declining needs for additional health workers have emerged. The younger veteran, aged 20 to 24, is having an especially hard time finding work. In the third quarter of 1973, when 4.8 percent of the total labor force was out of work, 8.7 percent of the younger veterans, representing 126,000 persons, were unemployed. This rate was an improvement over the situation in the first half of 1973, when almost 1 out of 10 veterans aged 20 to 24 was looking for work, but it was about one-third higher than the rate among nonveterans of the same age. The unemployment rate of veterans aged 25 and over in the last few years has closely paralleled that of their nonveteran counterparts and has been much lower than that experienced by the younger veterans.

While many returning veterans have few skills and little training, most of the men from the military medical departments have a broad range of experiences and much potential. They have been well trained by the military in service schools and through on-the-job training in the full range of paramedical functions. The quality of their training is attested to by the quality of military medical care and has been demonstrated by the fact that military-trained laboratory technicians scored considerably higher than their civilian-trained counterparts on the proficiency examinations for clinical laboratory personnel given by the National Committee for Careers in the Medical Laboratory in November 1971. A high proportion of veterans have served in military hospitals and outpatient facilities providing care to civilian dependents as well as military personnel.

Civilian placement officers find it difficult to assess veteran training and experience according to civilian standards. Terminological differences between military and civilian job titles and descriptions are a real barrier to understanding and appreciation. In fact, most employing agencies use an application form that asks one or two questions about military service, but neglects to inquire about the job title, duties performed, the training obtained while in service, or other significant data for assessment. They may not know that the military summarizes the veteran's background on Form DD214, which each veteran receives on separation. The difficulties of the placement officer are compounded by the fact that the three services differ in paramedical job structure, nomenclature, training, and utilization.

Because of the diversity of most veterans' qualifications and the fact that their qualifications do not precisely match the formal requirements for civilian hospital jobs (academic credentials, certification, or licensure), the skills and talents of many veterans are not appropriately evaluated.1/

Men retired after a military career are frequently directed into administrative positions with duties similar to those they performed in the service. Direct transfers are possible in terms of skills acquired in the military for some newer roles, such as triage officer, operating room technician, or renal dialysis technician, that do not require certification. However, a large number of veterans find to their dismay that they cannot qualify for hospital jobs above the entry level. In the view of civilian hiring authorities, they are unfinished products. The question that presents itself is: who shall put on the finishing touches -- the military, the civilian employer, or the academic community? At this moment, no one accepts the responsibility, and this situation redounds to the detriment of the veteran, health care institutions, and society.

Scattered and uncoordinated efforts are being made to overcome this problem. The American Medical Association and the three Armed Forces have organized a joint subcommittee to examine military medical training programs, with the "immediate objective of AMA approval of more military allied medical education programs...."2/ As of November 1973 the AMA had approved military educational programs preparing medical technologists, cytotechnologists, certified laboratory assistants, nuclear medicine technologists, radiologic technologists, physical therapists and physician's assistants. An Air Force Community College at Randolph Air Force Base, San Antonio, Texas, has been established, and one of its objectives is to ensure that graduates of Air Force medical

1/ Robert R. Nathan Associates has prepared a Medical Veteran Utilization Manual under contract with the Manpower Administration of the U.S. Department of Labor. The manual describes the steps and procedures that may be followed by policy-makers, administrators and personnel officers in their efforts to recruit, hire and utilize veterans.
2/ Air Force-Army-Navy-AMA Task Force on Allied Medical Education, Compendium of Military Allied Medical Education (Draft), June 1, 1971, Introduction.

service courses will have certificates and diplomas that are recognized by civilian authorities. The practice of assigning military men to civilian universities for further education is long-standing, but an innovative arrangement for preparing military allied health workers to meet civilian standards was made by the National Naval Medical Center in cooperation with George Washington University in Washington, D.C.[1] While there is no groundswell of veteran hiring, hospitals throughout the country do use veterans on their staffs, despite the lack of recognized civilian credentials. A very few hospitals have demonstrated unequivocally the advantages of hiring veterans, but in many cases the hospitals have failed to take full advantage of the men's training and experience. In other cases, the hospital has utilized their skills sub rosa, underpaying for the services rendered because of the lack of credentials. Some academic institutions permit veterans to take challenge exams for advanced placement, but there is no general, across-the-board acceptance of the practice. At this time, the efforts of different groups and institutions to assist the veteran to meet civilian standards lack coherence and fail to make a significant impact on the problem.

However, on the horizon are the proficiency examinations mandated by the 1972 Amendments to the Social Security Act, which are being developed for occupational and physical therapists, laboratory technicians and technologists, cytotechnologists, X-ray technicians, medical record technicians and physician's assistants. The law stipulates that reimbursement for the services of persons whose competence has been certified by a proficiency exam will not be denied under Medicare and Medicaid on the grounds that "such a person is not qualified to perform such duties and functions."[2] Thus, these tests will eventually provide an alternative credentialing mechanism that can be used to tap the supply of medically trained veterans who have been handicapped previously by their lack of accredited academic preparation.

Despite the sizable number of veterans being released, recruitment is not without difficulty. Hospital location influences the value of different recruitment sources, as demonstrated by the different experiences in recruiting veterans had by Johns Hopkins Hospital in Baltimore, Maryland, and Altoona Hospital in Altoona, Pennsylvania.

1/ Jules Asher, "Navy, GWU Plan Medical Training," The Washington Post, May 5, 1972.
2/ PL 92-603, Sec. 241.

Written inquiries and visits to Transition sites produced relatively few interested veterans for Cook County Hospital. In Phase I, the REFERRAL program had an overwhelming number of referrals, but few qualified applicants who chose to live in the State of Illinois. The Illinois State Employment Service was not organized to provide a continuous flow. In Chicago, MEDIHC proved to be the most effective recruitment source. Local newspaper advertisements uncovered a sizable number of men who had spent 2 to 3 years in the service, but under civilian standards they would qualify only for entry-level positions which do not pay enough to attract them. In brief, local recruitment efforts fail to produce significant numbers of men with requisite skills. National publicity brings inquiries about the program, but few applicants who can be referred. Every source of recruitment could and should be more effective.

Clearly, it takes time and effort to locate veterans with the specialized skills that are in demand. The small number of technically trained veterans who leave the Armed Forces should have no difficulty locating jobs even on their own, although they have to cope with certification and licensure barriers. The overwhelming number of veterans -- Army first-termers with relatively little formal training and wide-ranging, diverse experience that is difficult to assess -- face a different problem: they are blocked under present conditions from entry into health careers without further training or education to upgrade their skills.

These two different populations in the military supply of health personnel -- the career men who have, generally speaking, administrative and technical skills, and the non-careerist, first-termers with varied but limited qualifications -- call for different programs to resolve their difficulties in transferring to the civilian health field. For the first, the attack must be against the credential barriers; for the second, the effort must be directed towards valid recognition of military training and experience by placement officers and academic institutions.

Furthermore, the hospitals and the men face a logistical problem: how to come together for an interview. One of the major problems in any national recruitment effort is that hiring authorities are reluctant to consider any veteran, no matter how qualified, unless they have the opportunity to interview him, preferably without undue cost in time or money. However, servicemen of all levels of competence are located throughout the world. While many begin to

concern themselves about a civilian job before their discharge, few are in a position to present themselves to a prospective employer, a sine qua non of employment.

Job fairs are one means of bringing veterans and employers together. In 1972, a spate of veterans' job fairs were sponsored by state employment services throughout the country. To mount a job fair is a formidable undertaking, requiring considerable advance preparation. For example, on May 9 and 10, 1972, the Illinois State Employment Service held a job fair for veterans in Chicago. About 500 companies with approximately 4,000 job openings participated. Schools and referral services were also represented. Six thousand veterans turned out, and 310 veterans had been either hired or asked to come for a second interview before a disruption sparked by a small group of angry young veterans forced the early closing of the fair on its first day. The second day of the fair was unfortunately not as well attended by employers or veterans.

Job fairs are also occasionally sponsored by the military, enabling interested veterans and servicemen to meet prospective employers by bringing the employer to the military base. At the Ft. Meade, Maryland, Job Fair in June 1972, 56 companies or organizations with job openings, 18 information and referral agencies, and 11 colleges and universities were present. The majority of the men who were interviewed by Project VEHTS had recently left the service, but only five were from medical units. Only one man was both qualified and willing to locate in Chicago. Project VEHTS experience and reports of veteran disenchantment point to the need to evaluate the benefits versus the costs of job fair programs.

In addition to difficulties in meeting potential employers and locational immobility, the men lack accurate and sufficient job information. How does a serviceman know or get to "the right place at the right time?" The questions he has, that usually go unanswered, are "Where are jobs available for the skills I possess?" "What do they pay?" "What am I really qualified to do in the civilian health market, given the training and experience that I have had over the last few years in the military?" "If I'm not qualified as I am, what should I do to become eligible for the job I want?" Up-to-date, area-wide labor market information for allied health workers is sadly deficient.

Hospital Organization and Personnel Management

Constraints on effective hospital recruitment and utilization of military-trained medical personnel arise from the organizational structure and management practices found in many civilian hospitals. Hospitals are being transmuted into component health care centers of a comprehensive health system that embraces preventive, diagnostic, curative and rehabilitative care. The expansion of the hospital's objectives and functions has required more systematic and efficient management. An administrative hierarchy, of which the personnel and labor relations departments are a part, has been incorporated into the unique organizational structure of the hospital. The introduction of administrative personnel and policies requires difficult adjustments on the part of the medical staff who in many cases are not employees of the hospital and are accustomed to operating autonomously.

Physicians are the dominant group in the hospital, controlling the productive function. Supervision of ancillary medical manpower is typically in the hands of the professional staff. The administrative arm, a relatively recent addition, does not control all staff functions. Personnel activities, for example, are often dispersed and conducted at the departmental level. "Hiring, promotions, supervision, and grievance procedures are usually within the jurisdiction, not of central administration, but of the department head as he interprets current professional standards."[1] When the administration attempts to direct the operation of the hospital, it frequently finds itself in conflict with the professional staff. Doctors in the hospital setting guard their independence as a mark of professionalism and status, claiming unique expertise that entitles them supreme authority in patient care. "Belief in the extraordinary character of the work and of the performer sustains the worker's claim that he must be able to exercise his own complex, individual judgment independently of others -- that is, he must be independent and autonomous...it is peculiar to professionalism to assert that such freedom is a necessary condition for the proper performance of work."[2]

1/ Anthony Robbins, M.D., "Allied Health Manpower -- Solution or Problem?" The New England Journal of Medicine, April 27, 1973.

2/ Eliot Friedson, "Professionalism: The Doctors' Dilemma," Social Policy, January/February 1971, p. 39.

Charts 4 and 5 diagram the organizational structure of the Governing Commission and Cook County Hospital and illustrate the complex line and staff structure that exists. One can readily appreciate that the overlapping responsibilities can cause friction and exacerbate conflicting views about the goals and means of the organization.

During Project VEHTS, Cook County Hospital was developing a comprehensive personnel system. Historically, there had been no central personnel department and, before the hospital was removed from the direct control of the County Commissioners, most employment was on a patronage basis. Each department and section of the hospital had hiring authority for employees of that department, and "City Hall" referred friends and supporters. With the formation of the Health and Hospitals Governing Commission in 1971, a major reorganization of the personnel system was planned. The unusual role of the Cook County School of Nursing as responsible agent for all nursing services at the hospital was relinquished. The Nursing School's Personnel Department (formerly a strategem to evade the patronage system in staffing the nursing service) became the nucleus of the hospital's Personnel Department. Early in 1972 a central Personnel Department began to function at Cook County Hospital for the first time. One of its initial tasks was to gain the respect and cooperation of individual departments that historically had been free to go their own way. The hospital Personnel Department had to persuade the department heads that it was a reliable source of skilled personnel.

Efficient personnel management must exist before effective manpower development can take place. Without a well-functioning, centralized personnel department, it is difficult to locate job openings, to obtain job specifications, and to identify the hiring authority. Position control, job descriptions, and other necessary personnel data are lacking. Without accurate projections of manpower needs, neither an efficient recruitment program nor a viable upgrading program can be designed. In the absence of a functioning manpower development and training program, important facets of a career mobility program cannot be developed. Moreover, weaknesses in organization are reflected in other areas. If, for example, the personnel communication system is ineffective, messages concerning personnel requirements or actions are delayed and garbled, with the result that actions are taken that have to be rescinded or actions fail to take place that are expected.

Chart 4. Organization Chart of Cook County Hospital, July 1971

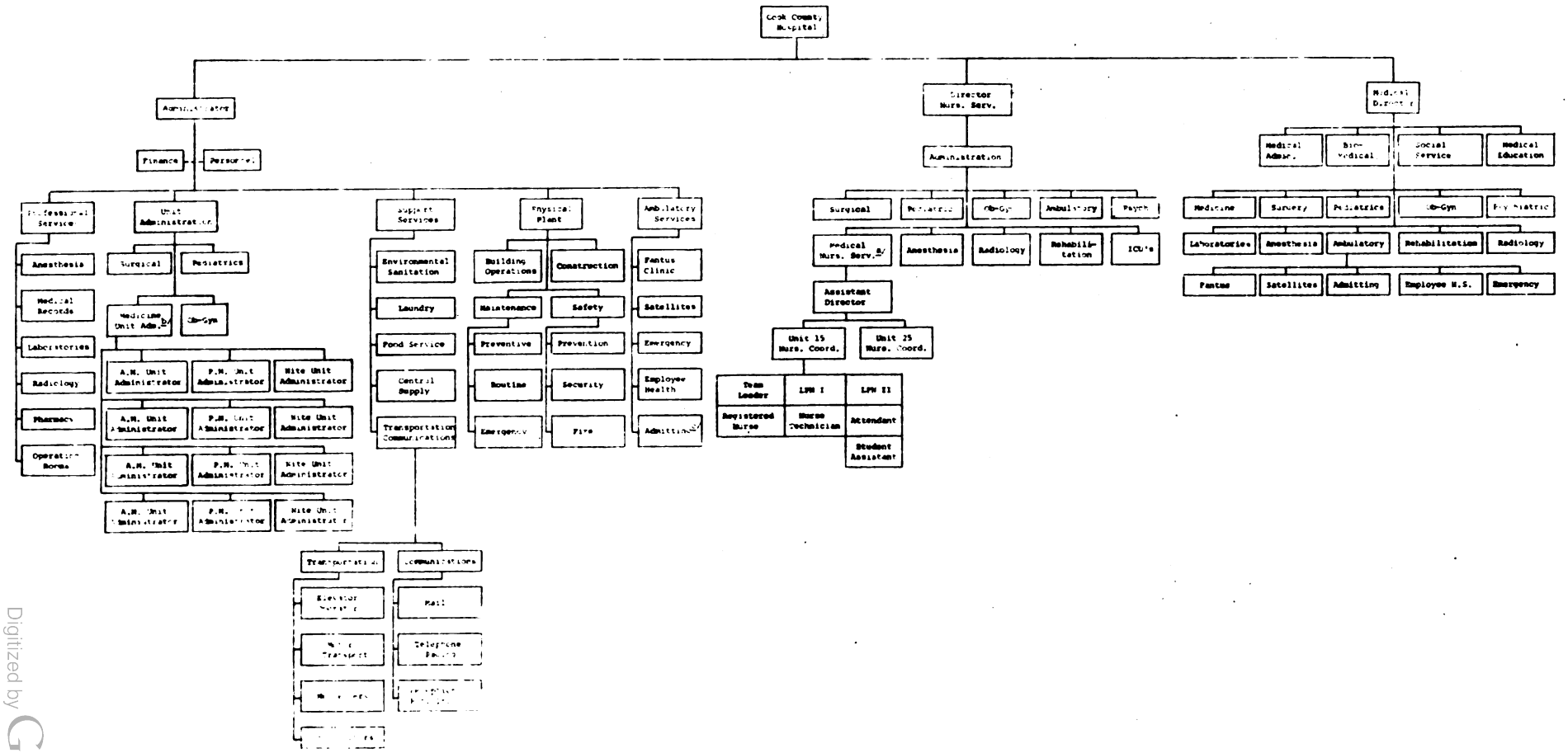
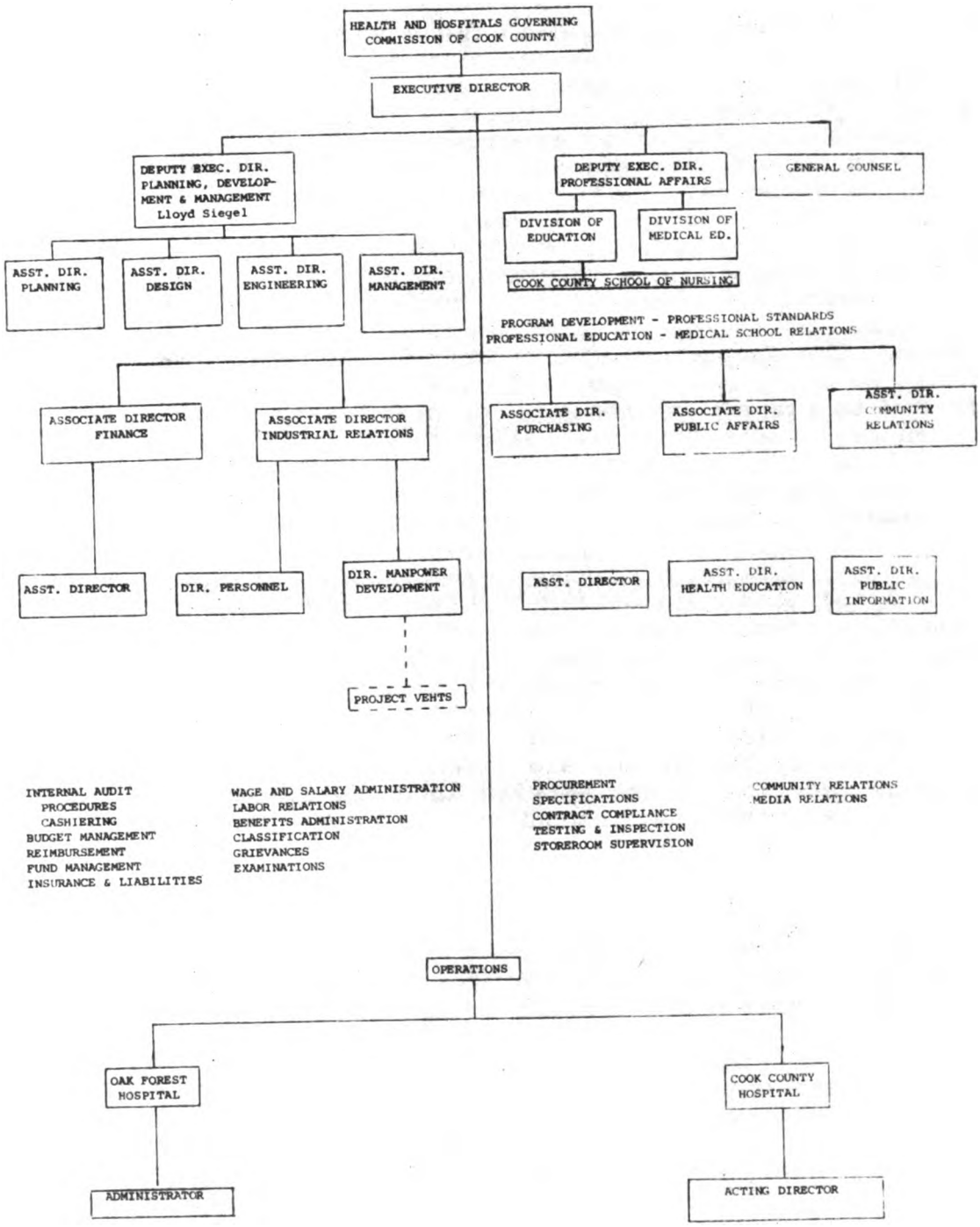


Chart 5



Source: Hospital Newsletter, May 1971, amended June 1972.

Certain conditions are necessary for a hospital-based program like Project VEHTS to succeed. The incentive to introduce the program is found in the hospital's need for additional personnel. The institution must first recognize that it needs additional manpower and must be concerned about finding applicants to fill available jobs. Equally important for a veterans' program is agreement at the highest level that it is to the advantage of the hospital to employ medically trained veterans. Furthermore, top management must be able to transmit this concept and commitment down the line. Department heads and medical staff need to be "sold" on the concept of utilizing the veteran; sometimes it is only necessary to remind the physicians of their own years of military service and of the paramedical assistance that was available to them. The support of the personnel department and those authorized to hire is especially vital. To attract the veteran and to use him optimally, the hospital must offer the veteran employment that will allow him to establish himself in civilian life, and must also provide opportunities for additional training and education so that he can qualify for advancement and thus realize his potential.

A hospital considering the development of a veteran utilization program should adopt certain elements of personnel management as a necessary part of its effort to attract veterans. Veterans have to be sought out. A clear picture of the job requirements, salary structure, training, and advancement opportunities is required. Knowledge and understanding of the military background are essential. A special effort has to be made to fit the veteran into the system and to assure him that within a reasonable time he will be able to perform at a level that is commensurate with his service experience and his potential.1/

Project VEHTS has concluded that a program of veteran recruitment and utilization operates within the context of overall personnel practices and cannot be divorced from general personnel policies and the formal and informal system existing in the institution. Recruiting and using veterans must be an integral part of the orderly personnel procedures that are characteristic of the system. A separate system for recruiting and utilizing veterans apart from the hospital's personnel system is not likely to endure. Only if the veteran

1/ See the Medical Veteran Utilization Manual, prepared by Robert R. Nathan Associates for the Manpower Administration, U.S. Department of Labor.

program is consistent and compatible with prevailing personnel practices is it feasible as a continuing operation. Veteran policies that are too divergent or preferential from general employee policies are likely to result in a backlash. A veteran program that offers advantages from which other employees are excluded will be challenged. It is therefore important that the veteran program be part of a forward-looking, enlightened, and effective personnel policy.

At Cook County Hospital both the formal and informal systems operate in the personnel field, and both must be supportive of a veteran program. Recruitment, screening and hiring of some types of positions are completely within the scope of the employment section, while others are handled in the departments and are processed only in the final stage by the Personnel Department. Although the influence and activities of the Personnel Department have been strengthened by the administrative reorganization, the informal system continues to operate and indeed plays an important role in structuring the internal labor market of Cook County Hospital. The development of the orthopaedic technician training program that began in June 1973 illustrates the important complementary role that the formal and informal system may play in manpower planning and utilization.1/ No effective veteran program can be instituted and maintained without support from both staff and line administrators and the members of the medical staff.

1/ See chapter V.

ANNOTATED BIBLIOGRAPHY

Ad Hoc Committee on Allied Health Personnel. Allied Health Personnel: A Report on Their Use in the Military Services as a Model for Use in Nonmilitary Health-Care Programs. Washington, D.C.: National Academy of Sciences, 1969, 25 pp.

The pamphlet discusses the Armed Forces Medical Services and their personnel, including the mission of the military medical departments, the delivery of health care by the military, and the characteristics of the medical corpsman. Some comments are made about the nation's civilian medical service. Comparison is made between the utilization of health manpower in the civilian and military sectors. The situation of the corpsman in the military environment and as a potential civilian employee in the health field is analyzed. Three approaches to facilitate the transfer of ex-corpsmen into the civilian health field are outlined. The report concludes that the military makes more effective use of paraprofessionals; that civilian medical care delivery is handicapped by certain inherent characteristics; that the military and civilian sectors need new approaches to the delivery of health care; and that both military and civilian health personnel practices should be reviewed. Recommendations are made to best carry out the study's conclusions. Appendixes include a list of those attending the Allied Health Personnel Planning Meeting, March 26, 1968; a list of Enlisted Military Occupational Specialty Titles of the Armed Forces Medical Departments; and selected reports on education for and delivery of health care.

American Medical Association Council on Medical Education. Compendium of Military Allied Medical Education. September 1972.

The compendium catalogs, by military occupation and installation, the allied medical education programs conducted by the Armed Forces that have been accredited by the AMA. It describes the purpose, membership and accomplishments of the Joint Air Force-Army-Navy-AMA Subcommittee on Military Allied Medical Education. A comparison of civilian and military training programs for allied health

occupations is presented in tabular form. Data are provided for a selected number of major military training courses, including AMA accredited and non-accredited programs. The physician's assistant concept is discussed. Information about several programs is given: Army, Navy and Air Force Physician Assistant programs; MEDEX; MEDIHC; and the U.S. Civil Service Commission's veterans preference program. A map indicating the locale of major military medical education centers is included. A descriptive listing of the services available from the Department of Allied Medical Professions and Services is presented. Selected references related to military allied medical education are noted.

American Hospital Association. Army, Navy, and Air Force Medical Training Programs. Chicago: American Hospital Association, 1971, 43 pp.

The booklet presents the medical training programs in each of the three military services, giving brief descriptions of course purpose and content, including the number of hours devoted to each subject area. The programs include basic training, specialist training, and advanced training courses in allied health given by the Army, Navy, and Air Force. It was published at the suggestion of the American Society for Hospital Nursing Service Administrators of the AHA with the following objectives: "(1) to stimulate the interest of nursing service administrators in tapping this manpower pool; (2) to help nursing service administrators, in cooperation with personnel and other hospital departments, to assign these individuals to positions according to their interests and capabilities; and (3) to help nursing service administrators develop orientation and continuing education programs to encourage these individuals to remain and advance in hospital service."

Berlow, Leonard. "How to Recruit Military Personnel for Health Careers." Hospitals, vol. 43 (July 16, 1969), pp. 80-81.

The author attempts to encourage readers to hire the 30,000 to 50,000 qualified military health

personnel leaving the service each year who are going into other fields in civilian life. The article pinpoints the need for the development of better job matching programs and new, sophisticated advertising techniques to attract military health personnel to the civilian health professions.

Blalock, William R. "Recruiting Ex-military Corpsmen." Hospitals, vol. 45 (December 1, 1971), p. 41.

This article recounts the experience of the Johns Hopkins Hospital, Baltimore, Md., in recruiting and training 146 medical corpsmen to alleviate a critical nursing shortage at the Osler Medical Clinic in 1969. A study comparing the quality and cost of care concluded that, on a 30-bed acute medical floor staffed partly by corpsmen, "care of at least equal quality was rendered to more patients, for more patient days, and for greater patient care demands at less direct personnel cost than on the 30-bed acute medical floor staffed partly by private duty nurses." The ultimate effectiveness of the program has resulted in the development of a proposed joint program by the hospital, the Johns Hopkins Center for Allied Health Careers, and local community colleges to facilitate the transference of the corpsmen from their military programs to civilian health careers.

"Can Doctors' Aides Solve the Manpower Crisis?" Medical World News, January 23, 1970, pp. 25-30.

This article describes how the shortage of health manpower has created a role for ex-medical corpsmen as physician's assistants. The discussion includes the use of medics in this capacity, with comments on the acceptability of the programs and the general ideas by HEW officials, the AHA and other professional organizations, and individual physicians. The Medex program at the University of Washington and the Duke University physician's assistant program are discussed in some detail, and 14 of the other 20 programs are listed by location and content.

Cocco, Arthur E., and Gipe, Florence. "The Utilization of Trained Military Personnel in the Baltimore Hospital Area." Maryland State Medical Journal, December 1967, pp. 59-61.

The authors present the results of a survey to determine whether ex-military trained personnel were being utilized in medical institutions in the Baltimore area, and, if not, what special factors limited their employment. The findings indicate that despite the fact that strong motivation exists to remain in the health fields, inadequate salaries deter military trained personnel from continuing these occupations in civilian life. The study further reveals that within the Baltimore area, no presently employed paramedical personnel had been directed to their positions by any of the counselors of the Veterans Employment Service of the U.S. Department of Labor, who work in conjunction with the local State Employment Service officers. Other factors contributing to the low rate of crossover from military to civilian health careers are: lack of recognition in civilian hospitals of experience gained in the military, great emphasis on educational requirements but no recognition of training obtained in military schools, and no systematic effort by organized medicine to channel this manpower flow into needed areas.

"Discharged Military Personnel in Hospital Services." Practical Approaches to Nursing Service Administration, vol. 10, no. 1 (winter 1971).

This article mentions the American Hospital Association publication Army, Navy and Air Force Medical Training Programs and gives further information on military selection process and recruitment suggestions, with special reference to Operation MEDIHC. Eligibility for practical nurse licensure is discussed, with details of a questionnaire sent out to 50 states and D.C. regarding licensure. Out of 49 replies, 33 replied yes or favorable to granting licenses as practical nurses to qualified military trained personnel. The need for utilization of discharged military personnel in outpatient, inpatient, and home care facilities is expressed.

Donovan, Joseph. "Health Manpower Programs: Santa Clara County Medical Society." Physician Support Personnel in the 70's: New Concepts. American Medical Association, Chicago, 1971.

This article reports on the problems and opportunities in the health field for 110 returning medical corpsmen in a study performed under contract to the U.S. Department of Labor by the Santa Clara County Medical Society. The goal of the study was the identification of problem areas and their potential solution. The four areas identified were recruitment of the returning corpsmen; re-education or supplementary education to training already received; employment; and the problem of licensure, certification, and registration.

"Ex-Servicemen Test New Manpower Ideas." American Medical News, vol. 13 (November 9, 1970), p. 13.

Describes how Altoona (Pa.) Hospital utilizes 43 former servicemen in a wide range of jobs, including mobile emergency teams, laboratory technicians, executive housekeeping, and security duties. Mentions restrictions by state law, despite the far-reaching abilities of these employees who have been a real boon in extending emergency room procedures to the scene of accidents. The Altoona Hospital administration believes the military offers an unlimited pool of well-trained personnel. The hospital is innovative with new positions that will utilize veterans' specialized skills and recognizes the importance of developing careers for these employees in the health field.

Flannagan, Lawrence G. "Let Servicemen Continue to Serve -- in Health Fields," Modern Hospital, March 1969, p. 77.

A major source of trained paramedical manpower for civilian hospitals is the military medically trained serviceman about to be released. Altoona (Pa.) Hospital, using the services of Transition Offices at several military bases with hospitals located on the base, contacted by mail servicemen due for separation, held meetings of separating medics at Transition sites

to present the opportunities for civilian health careers, and distributed posters publicizing the need for health-trained personnel in civilian life. As a result of these recruitment efforts, the hospital received a large number of referrals. In the estimation of the hospital administration, the caliber of the military medic is very high, and medics should receive higher than entry salaries. Two questions are raised: "What is the health industry to do to capitalize on this manpower resource? What can be done to overcome the restrictions of state licensing agencies or registering bodies currently controlling many health professions?"

Goldsmith, Seth B. "Can the Military Serve Civilian Needs?" Hospitals, vol. 47, no. 12 (June 16, 1973), pp. 68-71.

The author questions the thesis that military medical corpsmen are a valuable source of health manpower for the civilian health care system. Published studies relative to corpsmen are typically subjective reports of individual experience. Only two scholarly studies on the subject have been prepared, and these have methodological limitations.

J.J. Young's study, "Former Servicemen of the Army Medical Department" (Iowa City: The University of Iowa, 1969), deals only with Army first-termers and does not cover career Army medics nor Navy and Air Force corpsmen. Young's findings demonstrate that a large proportion of veterans with military medical background try unsuccessfully to transfer to the civilian health field.

Robert R. Nathan Associates, in the study, "Transferability of Military-Trained Medical Personnel to the Civilian Sector" (Washington, D.C., U.S. Department of Labor, July 1970), interviewed 1,200 servicemen and veterans by telephone and found that pre-service interest in health careers, being employed in moonlighting health jobs while in service, and competence in technical allied health skills were positively associated with transference to civilian health jobs. The use of the telephone interview as a data collection technique is questioned and the omission of regression analysis to determine the relative significance of the interacting variables is criticized.

Research is needed on the civilian use of medical corpsmen, first, to substantiate the concept that corpsmen are an excellent resource, and second, to provide information on relevant veteran characteristics, such as military medical training, and to develop predictors to help assess servicemen's potential performance in the civilian health system.

Goldstein, Joan. "Medical Corpsmen as a Source of Civilian Health Manpower for New Jersey." Medical Care, no. 3 (1970), pp. 254-60.

The author discusses the problems underlying the cilivian utilization of health manpower available in returning medical corpsmen and the development of new careers that will enable them to fit into the civilian health sector. Discussed are recruitment, screening, and job development. Also identified are educational programs preparing new types of health personnel. The article describes several junior college programs which are available in New Jersey that could attract veterans if previous military training and experience were evaluated and credited. However, for most effective utilization in New Jersey, the author believes that new health personnel roles must be created. In conclusion, the author poses a series of analytical questions for existing or developing programs.

Karpeles, Harry D. and Hirsh, Joseph. "The Military - An Untapped Resource." Hospitals, vol. 45 (September 1, 1971), pp. 60-64.

The authors lay the problem of the critical health manpower shortages at the door of the hospitals, whose rigidity and strict adherence to certification and licensure requirements have barred military trained manpower in the allied health professions. Other constraints they name include inadequate remuneration, the lack of growth potential, and the absence of an effective communications network regarding available positions. The authors contend that the hospitals, as the chief beneficiary of such services, have not extended themselves to provide needed information or incentives for potential recruits. Crucial to the crossover of military medical personnel to the civilian health sector is the exertion of considerable pressure by the hospitals on local and state governments and the Federal Government to reevaluate current licensure requirements; to allocate funds, facilities.

and manpower to expand the educational network required to train personnel for the health care fields; and to create an effective network for employment counseling. The article briefly points out the experience of the North Philadelphia Regional Health affiliates (NPRHA)), a nonprofit corporation (a union of a major state-affiliated university and two medical schools and their hospitals), and its efforts to recruit health manpower from the military. It also mentions the Federal Government's efforts through Project TRANSITION, Project REMED, and MEDIHC, and some of the problems before these programs.

Magnuson, Larry W., and Barnes, Walter C., Jr. "Availability of Military-Trained Environmental Health Technicians to Civilian Health Agencies." American Journal of Public Health, vol. 62, no. 5 (May 1972), pp. 652-654.

Between 1965 and 1969, almost 3,000 preventive medicine personnel were trained by the U.S. Armed Forces. In the same period, the Air Force alone separated 453 technicians and specialists trained and experienced in preventive medicine. As veterans, they represent an untapped pool of skilled environmental health workers.

The authors conducted a survey in February 1971 of all enlisted members of the U.S. Air Force preventive medicine career field and found an overwhelming interest in civilian environmental health positions. The average Air Force preventive medicine technician has completed several service-connected courses as well as several courses sponsored by the Center for Disease Control, and has had extensive in-service experience; he therefore has confidence in his ability to perform the duties of various civilian environmental health jobs. Unfortunately, he knows little about civilian job opportunities or the services available to him through MEDIHC.

The article concludes that it is a challenge to civilian agencies to recruit and utilize the talents of the military-trained environmental health technician.

New Hampshire Health Careers Council. Proceedings of a Conference on the Utilization of the Medically Trained

Veteran. New Hampshire Health Careers Council, Durham, New Hampshire, December 17-19, 1969.

The conference, sponsored by the New Hampshire Health Careers Council, was designed to provide the setting in which an exchange could take place among educators, health care providers, and the military on the subject of the utilization of medically trained veterans in the civilian economy. Papers were presented on the following subjects: optimum health care; the utilization of the veteran by the health care industry; attitude evaluation; new careers for the medically trained veteran; activities of the AMA and the academic community relevant to the discharged military medic; and the impact of licensing and accreditation practices on the availability and mobility of health manpower.

Santa Clara County Medical Society. Final Report, Military Health Manpower. San Jose, Calif.: Santa Clara County Medical Society, June 30, 1970.

The report outlines a project undertaken by the Santa Clara Medical Society under contract with the Manpower Administration of the U.S. Department of Labor to show how returning military corpsmen with medical skills could be utilized to greater advantage in the civilian health field. The purpose, organization, and operations of the project are described. The project contacted 132 veterans of the Armed Forces medical departments. Experiences and findings relating to effective recruitment and counseling are presented. An important part of the program is the development of educational and training programs and job placement for veterans. Efforts to modify licensure procedures were met with limited success. The report contains a discussion of the importance of communication with interested groups and the extent to which the Santa Clara Medical Society made contact with other agencies and organizations at the local, state, and national levels to generate interest in utilizing veterans. A final section of the report describes developments of new health occupations for which the military corpsmen are especially fitted.

Smith, Richard A. "MEDEX." Journal of the American Medical Association, vol. 211, no. 11 (March 16, 1970).

To meet the physician manpower shortage in the State of Washington, especially in rural areas, the State Medical Education and Research Foundation with the School of Medicine of the University of Washington initiated a program, MEDEX (medicine extension = physician's extension), to utilize veterans with military medical experience to extend the capabilities of physicians to provide primary medical care. The military service releases thousands of medical corpsmen each year trained to perform medical services comparable to those of the civilian medical care system, but most medics find that they cannot convert their military medical training and experience into health jobs as civilians. The MEDEX program was designed to adapt the skills medics acquire in military service to civilian needs by supplementary training, first in a 3-month didactic phase based at the Medical School of the University of Washington, followed by a 12-month, preceptorship phase. During the preceptor phase, ten 3-day continuing education seminars are held.

The MEDEX program and other efforts to use corpsmen in civilian medicine have worldwide implications as one possible measure to alleviate global shortages of physicians and other medical personnel.

Turner, Cornelius P., ed. A Guide to the Evaluation of Educational Experience in the Armed Services. Washington, D.C.: American Council on Education, 1968.

This guide was designed to assist college officials in determining the amount and type of credit they should grant to enrolled students for their educational experiences in the school programs conducted by the Armed Forces of the United States. The guide includes two parts. Part I, "Formal Service School Courses," lists 2,178 course descriptions representing 8,811 formal service school training programs which are analyzed, evaluated, and summarized. Each course description contains the following information: title of the training program, length and location of training, brief statements on the objectives of the course, the instructional

program, and the credit recommendations. This edition limits credit recommendations for military courses to those at the collegiate and post-graduate levels. Part II, "Credit and Advanced Standing by Examination," describes two national testing programs -- the General Educational Development Testing Program (GED) and the College-Level Examination Program (CLEP) which enables adults to earn a high school equivalency certificate, qualify for admission to college, and achieve advanced standing. The use of the guide is facilitated by the inclusion of a position classification index for each of the five services and for the Department of Defense.

(Note: The 1974 Guide to the Evaluation of Educational Experiences in the Armed Services has been announced with a planned publication date of March 1974. An added feature of the 1974 edition will be academic credit recommendations to junior colleges for Armed Forces vocational-technical training programs.)

"Time to Recognize the Ex-Corpsman." Journal of Practical Nursing, no. 9 (1969).

The ex-corpsman continues to be isolated from the mainstream of the country's health care delivery system. The National Association of Practical Nurse Education and Service (NAPNES) has worked closely with clinical specialists and has urged state licensure groups to recognize the unique training, experience, and needs of these personnel. The article urges flexibility in the health care community to allow medics to be employed in civilian medicine.

University of Texas, School of Public Health. Operation MEDIHC in Texas. Houston: University of Texas, March 1970-June 1971.

This is a detailed analysis of the MEDIHC project at the University of Texas at Houston in its first year. The development of the pilot project, program experience, and recommendations are given.

Background and problem identification and a summary of the contract are discussed. The report describes how separatees were contacted, counseling programs set up, vocational guidance support given, and an evaluation of counseling and entry into job/education programs made. Management was studied with regard to the individual MEDIHC program and operational guidelines in general. The recommendations included the national MEDIHC program, the Texas MEDIHC with regard to project continuation, and specific problems and issues as experienced in Texas.

U.S. Department of Health, Education and Welfare. Equivalency and Proficiency Testing: A Survey of Existing Testing Programs in Allied Health and Other Fields. Washington, D.C.: U.S. Department of Health, Education and Welfare, no date.

This booklet is a descriptive compilation of existing testing programs in allied health and other health occupations. Discussed in detail are testing programs in the medical laboratory field such as those conducted by the American Board of Pathology and the American Society of Medical Technologists to establish certification; state licensure examinations; and proficiency/equivalency examinations used by Federal and state civil service, the three Armed Forces services, the American Medical Technologists, and the Veterans Administration. In addition, the report describes testing programs in such other health fields as nursing, physical therapy, and dentistry. To aid those concerned with the problem of equivalency and proficiency testing for the health occupations, the booklet provides background information on testing programs in other fields, such as those available for certain occupations by the Civil Service Commission; the "Credit-by-Examination Programs" administered by universities such as Syracuse, Boston, and Cornell; and the College Proficiency Examination Program (CPEP) established by the New York State Education Department. The last section of the booklet includes an annotated subject bibliography that includes 10 specific references to the issue of transferability from the military to civilian health fields.

U.S. Department of Labor, Manpower Administration. Job Descriptions and Organizational Analysis for Hospitals and Related Health Services. Rev. ed., 1971.

Prepared by the U.S. Training and Employment Service in cooperation with the American Hospital Association for the use of public employment offices and hospital personnel administrators, the present volume, a revision of the 1952 edition, contains job descriptions for hospital positions and a narrative description and organization chart for each hospital department. Each job description tells the job duties performed; machines, tools, equipment and work aids used; education, training and experience required; worker traits needed; job status related to other positions; and professional associations active in the occupational field. The book contains a valuable section giving instructions for the preparation of job descriptions. An annotated listing of selected government publications providing occupational and career information is also presented. Use of the volume is facilitated by the index of job descriptions.

U.S. Department of Labor, Manpower Administration. Transferring Military Experience to Civilian Jobs: A Study of Selected Air Force Veterans. Monograph 8, 38 pp., October 1968.

This report, based on a Ph.D. thesis submitted to Cornell University, outlines the problems of transferring military experience to civilian jobs. An extensive questionnaire, included in an appendix to the report, was used to survey a selected group that included Air Force officers and enlisted men, but which did not include medical personnel. A profile of the newly discharged veteran is developed; military training and jobs are discussed briefly; an analysis of the ex-serviceman as a civilian employee, his job hunt, and experiences on the job is given. The conclusion of the study is that skill transfers do take place, but on a selective basis. Several barriers block the progress of transferability of military skills: (1) Differences in job titles and descriptions; (2) educational attainment; (3) job market; (4) seniority, union rules, and other restrictions; and (5) unwillingness to locate

in another part of the country. A number of recommendations are made for joint DOD-Labor Department actions to facilitate transferring military experience to civilian jobs. These involve manpower planning, employment assistance, information programs, and cooperative military and civilian technological development. The concluding chapter reports on Federal Government efforts to assist the veteran by the Veterans Administration and the Departments of Defense, Labor, and HEW. Note is made of special efforts directed at veterans with military training in health occupations through Project REMED.

U.S. Department of Labor, Office of Manpower Research. Transferability of Military-Trained Medical Personnel to the Civilian Sector. Prepared by Robert R. Nathan Associates, Inc., July 1970.

The report presents the findings of a study, conducted by Robert R. Nathan Associates under the auspices of the U.S. Department of Labor, that analyzed the flow of enlisted personnel from the military medical departments to the civilian sector. A major phase of the study was a 1968-69 survey of 1,238 Army, Navy and Air Force enlisted men with military medical assignments. Although there are differences among the services in recruitment, training, and deployment of medical personnel, there were no significant differences in the frequency of actual transfer or in plans to transfer to the civilian medical/health field. The survey revealed that veterans believe that pay levels and aspects of civilian hiring standards, such as educational requirements and lack of civilian acceptance of military training and experience, are paramount obstacles in finding civilian medical/health jobs. The report also describes military paramedical job structures and training. Programs designed to facilitate transference are described. A variety of policies and program recommendations are made to the military and civilian authorities, employers, the education system, and professional organizations to increase the frequency with which veterans of the military medical department elect to enter civilian/medical employment.

Young, James J. Former Servicemen of the Army Medical Department: A Profile and Assessment of an Untapped Resource of Allied Health Manpower. Iowa City, Iowa: University of Iowa, 1969.

This study focuses on the potential utilization of military-trained health personnel following completion of their Army service. It pinpoints the fact that Army men constitute a largely untapped resource for meeting the nation's needs in the allied health manpower professions. It examines in detail the resource base in quantitative and qualitative terms; it develops a profile of the personal characteristics of the men surveyed and their predisposition toward continuing in the health professions upon terminating the service; and it discusses the great degree of underutilization of these specialists by the civilian health industry and the existing barriers to employment which the industry continues to harbor and foster. Finally, the study outlines the incentives which the industry could offer to influence their recruitment in the form of information sharing and educational programs to build upon existing skills, as well as improved certification and licensing requirements, thereby enhancing both the public and private sector by the utilization of these men and women.