A STUDY OF ASSISTANTS TO PHYSICIANS AND DENTISTS IN THE COMMONWEALTH OF VIRGINIA

REPORT OF THE STATE DEPARTMENT OF HEALTH

House Document No. 6

COMMONWEALTH OF VIRGINIA
Department of Purchases and Supply
Richmond
1973
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COMMONWEALTH OF VIRGINIA

MACK I. SHANHOLTZ, M. D.
COMMISSIONER

DEPARTMENT OF HEALTH
RICHMOND, VA. 23219

December 11, 1973

The Honorable Linwood Holton
Governor of Virginia

Members of the General Assembly
of Virginia

Gentlemen:

The State Department of Health is pleased to present the report on A Study of Assistants to Physicians and Dentists in the Commonwealth, as directed by House Joint Resolution 131 of the 1972 General Assembly. This includes the interim report filed with you previously.

The work of this study group represented a well coordinated team effort from varied allied health professions and the group was successful in securing passage of basic legislation in 1973 authorizing the use of physicians' assistants and nurse practitioners. Their recommendations are for continued cooperative planning, especially for the educational programs. This latter is being initiated by the State Council of Higher Education.

Sincerely,

Mack I. Shanholtz, M.D.
State Health Commissioner

Virginia Commonwealth University

Doctor Mack I. Shanholtz, Commissioner
Virginia State Department of Health
James Madison Building
109 Governor Street
Richmond, Virginia 23219

Dear Doctor Shanholtz:

On behalf of the Group of Consultants on Assistants to Dentists and to Physicians appointed to assist you in preparation of a response to the resolution presented to you by the General Assembly, I am pleased to submit our final report for your possible transmission to the Assembly by the indicated date of November 1, 1973.

You will note that the final report consists of the Interim Report which we submitted to you on March 29, which we have labeled Part I, and a second portion which consists of our deliberations since that time, which we have labeled Part II. Included in the latter are a series of recommendations and priorities. We would be pleased to discuss these with you or with any member of the Legislature that you deem appropriate.

I would be remiss if I did not express my personal appreciation to the members of the Committee who worked so diligently on this project. I would also like to single out for special praise, Doctor Hugh Leavell, who served as the secretary of our group. He was responsible for much of the logistics in preparing the report, as well as gathering important data for the Committee's consideration.

Kindly advise me if we can be of any further assistance in this matter.

Sincerely,

John A. DiBiaggio, D.D.S., M.A.
Dean

October 26, 1973

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COMMONWEALTH OF VIRGINIA

MACK I. SHANHOLTZ, M.D.
COMMISSIONER

DEPARTMENT OF HEALTH

March 29, 1973

Dr. Mack I. Shanholtz, Commissioner
Virginia State Department of Health
James Madison Building
109 Governor Street
Richmond, Virginia 23219

Dear Doctor Shanholtz:

As Chairman of your Group of Consultants on Assistants to Dentists and to Physicians, I am pleased to present the attached Interim Report as required by resolution of the General Assembly. The final report is to be made by November 1, 1973.

From the start of its deliberations the Group has kept in very close touch with the State Council for Higher Education which was charged in a companion resolution with making recommendations and arrangements for the education and curriculum development for physician's and for dentist's assistants. We have already seen benefits in this close collaboration.

We have also been gratified by the cooperation of the State Board of Nursing and the State Board of Medicine together with the professional associations concerned. The time spent in ironing out differences and in finding ways of working together has been amply repaid by the General Assembly's and the Governor's action in providing a good legislative base upon which education and supervision of the assistants to physicians and to dentists can be built.

It is clear to your Group of Consultants that there is much more work to be done in this area. We shall do our best to work out further details leading up to recommendations in the report due November 1, 1973.

However, we should point out even at this time that there may be continuing need for this Group, or some similar group.

We are grateful to you for making Secretariat services available from the Office of Comprehensive Health Planning of the State Department of Health, and to Mrs. Faye Peters of the State Council of Higher Education for her very valuable assistance.

Respectfully submitted,

John A. DiBiaggio, D.D.S., M.A.,
Chairman, Group of Consultants on
Assistants to Physicians and to
Dentists

PART I

Summary of Interim Report
July 7, 1972—March 29, 1973

Recognizing the value of primary health care in maintaining growth of non-metropolitan areas, the Rural Affairs Study Commission recommended in 1972 several measures to benefit rural Virginians. Among the important recommendations intended to secure a more equitable geographic distribution of physicians and dentists was that of providing assistants properly trained and supervised, who could relieve the highly trained professionals of time and energy-consuming routine health work.

The General Assembly responded to this recommendation by directing the Commissioner of Health to appoint what came to be called a Group of Consultants on Assistants to Physicians and to Dentists. This was done, and the Group first met in July, 1972, electing its officers.* It decided to concentrate its efforts on the physician's assistant question at the outset as legislation had already been passed to enable the State Board of Dentistry to expand the role of dental hygienists by rules and regulations.

The Group later examined training programs for physician's assistants presently existing or planned in the Commonwealth and gained some background in what was going on in other parts of the country beginning with Duke University in 1965.

There is not much real first-hand experience on which to draw in Virginia, though there was demand on the Board of Medical Examiners for it to set up simple registration under its by-laws. The impression seems clear that physicians in civilian practice feel that expansion of the nurses to develop "nurse practitioner" would provide a more welcome addition to the doctor's team than would adding workers with the military medical corpsman background.

It soon became evident to the Group of Consultants that if assistants to be trained and utilized in Virginia were to be wholly or largely recruited from nursing that the State Board of Nursing felt strongly that this Board must be involved in promulgating and implementing regulations governing the training, supervision and safe use of the assistants. The Board of Medicine had an equally strong feeling that a physician's assistant was logically a medical practitioner and, therefore, subject to the Board of Medicine.

Several luncheon meetings provided opportunities for all sides of the question to discuss their points of view. The value of presenting a united front to the General Assembly came to be realized, and there was agreement that there should be joint responsibility for the two boards. This was embodied in the legislation which was adopted.

A number of problems must be addressed before the report of the Group of Consultants due November 1, 1973. can be made. Several of the questions that remain to be studied are mentioned in the body of this Interim Report, under the heading of "Future Work" of the Group.

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* Dr. John A. DiBiaggio, D.D.S., Dean of the Medical College of Virginia, was elected Chairman of the Group of Consultants, and Dr. Thomas Barker, Dean of the School of Allied Health Professions, was elected Vice-Chairman.

BACKGROUND INFORMATION

During 1970 in the General Assembly Senate Joint Resolution No. 28 was adopted, stating in part:

> Resolved by the Senate of Virginia, the House of Delegates concurring that it is the sense of the General Assembly of Virginia that it should be a policy of the State to operate State programs in such a manner, where feasible, as to encourage orderly population growth in non-metropolitan areas.

This Resolution evolved from the Rural Affairs Study Commission which was established under Chapter 768 of the 1968 session. This Commission, in its first Report in 1969, recognized that the presence of good education and good health services would encourage growth in Virginia's rural areas. The Commission asked the State Department of Health to develop a plan by which better health services might be made available to rural people.

The response of the Department came in the summer of 1971 in a "Report on Health Services for Rural Virginians." The Commission's second Report to the General Assembly (1971), insofar as health is concerned, was based on the Report made by the Department of Health.

Toward the close of the 1972 General Assembly the Rural Affairs Study Commission's major health recommendations were embodied in a series of Resolutions introduced as follows:

House Joint Resolution Number	*Subject*
127	Directing the State Council of Higher Education to develop and recommend criteria for the training of paramedical personnel.
128	To create the Access to Health Study Commission (Regionalization of Health Services)
129	Expressing interest of the General Assembly in greater efforts in health education of consumers.
130	Requesting the Medical Society to study legal issues associated with the practice of medicine, and directing the Virginia State Bar to assist in this study.
131	Directing the State Department of Health to develop criteria and study problems relating to paramedical personnel and to recommend legislation.

Resolution No. 128 was not adopted by the General Assembly, but the others were passed.

It was learned from the patron of HJR 128 that there was no objection to the expressed concept of regionalization of health services. However, this Resolution came up for consideration so late in the session that by then no

funds remained for allocation to the study that was provided for under the Resolution.

The patron said that if useful progress could be made with funds secured from some other source, the study proposed in the draft Resolution should begin as soon as possible.

WORK TO BE DONE UNDER HOUSE JOINT RESOLUTION NO. 131

(See Appendix A)

This Resolution provided that the following work is to be done:

1.0 *Certain problems and issues must be resolved prior to the drafting of legislation*

1.1 The duties which paramedical personnel are to perform must be agreed upon.

Paramedical personnel, as defined in the Resolution, are:

". . . properly trained nurses and medical and dental technicians and assistants . . . (who) can, when working under proper supervision, relieve the physicians or dentists of many of their less complex duties, thus affording them time to care for more patients. . ."

The problem to be solved is that at present inadequate health care is being provided to the residents of many rural and some urban areas of the Commonwealth. The ratio of physicians and dentists to population within such areas is such that there are insufficient numbers of dentists and physicians to serve the people properly without some important changes being made.

Whereas experience has shown that properly trained and supervised paramedical personnel could relieve the physician or dentists considerably, ". . . the present laws permit such duties to be performed only by licensed physicians and dentists, and it is, therefore, desirable that laws be enacted permitting paramedicals to perform such duties."

It may be considered wise to define duties which are to be permitted and those which are to be prohibited, in general terms rather than in detail in the legislation which is to be recommended to define the duties more precisely, as well as to modify the definition of duties from time to time as experience is gained.

1.2 The legal liability of both the supervising physicians and dentists and of the paramedical personnel must be defined in the legislation to be proposed.

There will need to be close liaison and coordination with the Medical Society of Virginia and the Virginia State Bar under House Joint Resolution No. 130, which deals specifically with legal issues.

1.3 The type and methods of supervision of paramedical personnel:

Close attention to supervision must be given, including listing of duties which may require actual "over-the-shoulder" supervision, and to specification of the number of paramedical personnel for which an individual dentist or physician may accept supervisory responsibility, etc.

2.0 *Criteria must be developed prior to the drafting of legislation*

Dictionary definition (Webster's Collegiate Dictionary, Fifth Ed.)

"Criterion: a means of judging — a standard of judging, a rule or test by which anything is tried in forming a correct judgement respecting it. . . Syn. Measure. See standard — that which is set up and established by authority, custom, or general consent, as a model or example . . . test."

The Virginia Board of Medicine and other comparable boards in professions related to paramedical personnel will undoubtedly have much pertinent advice on criteria, including investigation of qualifications, testing, etc.

2.1 Decision must be made as to whether certification or licensing shall be chosen, and what agency or agencies shall be given responsibility for licensing or certification, as well as for suspension or revocation.

3.0 To recommend the necessary legislation to accomplish the objectives which are agreed upon.

4.0 Reporting

Report on HJR No. 131 is to be made to the Governor and to the General Assembly.

4.1 Interim Report—due April 1, 1973

4.2 Final Report—due November 1, 1973

5.0 Responsibility for the Reports

The State Department of Health is directed in the Resolution to:

". . . consider and study the matters hereinabove set forth, to develop criteria, and to recommend the necessary legislation to accomplish these purposes."

5.1 The State Department of Health was directed by the General Assembly to work in consultation with a number of specified agencies, as follows:

School of Medicine of the University of Virginia

School of Medicine of the Medical College of Virginia

School of Dentistry of the Medical College of Virginia

The State governing and licensing boards

The associations of the medical, dental, pharmacy, and nursing professions

The hospital associations

Other interested groups

WORK TO BE DONE UNDER HOUSE JOINT RESOLUTION NO. 127

(See Appendix G)

Training of Physician-Dentist Assistants—HJR No. 127

As soon as decision is reached as to what duties are to be performed by the physician-dentist assistants, work can get under way for training the assistants so that they will be able to perform creditably what the practitioner delegates to them.

House Joint Resolution No. 127 provides for working out and recommending curricula and instruction.

The State Council of Higher Education was directed by the General Assembly to be the responsible agency ". . . to develop and recommend the curricula and the necessary procedures for implementing educational efforts designed to train such paramedical personnel."

To assist the State Council of Higher Education, the General Assembly named the following agencies:

Schools of Medicine

University of Virginia
Medical College of Virginia

School of Dentistry of the Medical College of Virginia

State Department of Health

Any other departments and agencies of the State government whose assistance is needed.

The State Council of Higher Education ". . . is encouraged to counsel with the State Department of Health, but shall in no way interpret this directive as being in conflict with, or a duplication of, the House Joint Resolution directing a State Department of Health to develop criteria and recommend legislation relating to paramedical personnel."

Report is to be made to the Governor and the General Assembly not later than November 1, 1973.

SCOPE OF PERSONNEL TO BE STUDIED

At its first meeting July 7, 1972, the Group of Consultants to the State Commissioner of Health agreed that it would be impossible within the restraints of time and resources to look into more than a small fraction of the 300 or so types of health personnel. It was agreed, therefore, that at the outset discussion would be focused on the types of workers mentioned specifically in House Joint Resolution No. 131 as follows:

> ". . . experience has shown that properly trained nurses, and medical and dental technicians and assistants, hereinafter referred to as 'paramedical personnel' can, when working under proper supervision, relieve the physicians and dentists of many of their less complex duties, thus affording them time to care for more patients. . ."

The groups of health workers to be given priority consideration in the Group of Consultants are then the following:

1.0 Assistants to physicians

1.1 Those who have already attained professional status as nurses, who take further training to qualify as assistants to physicians, who are commonly called "nurse practitioners."

This group may be divided into:

1.1.1 Generalized, or primary care nurse practitioners

1.1.2 Specialized nurse practitioners, working in some special field, such as pediatrics

1.2 Physician's assistants who have not become qualified as professional nurses, but who may have worked in the armed forces as medical corpsmen or who may have secured some similar experience before taking training to become physician's assistants.

This group may be divided as are the nurse practitioners into:

1.2.1 Generalized, or primary care physician's assistants

1.2.2 Specialized physician's assistants, working in some special field, such as orthopedics or urology, etc.

2.0 Assistants to dentists

2.1 Those who have already attained professional status as dental hygienists, who take further training to qualify as assistants to dentists in an expanded role, who might in the future conceivably come to be called, "dental hygiene practitioners."

"Dental Laws of Virginia—1972" provide a basis for the Virginia Board of Dentistry to adopt rules for the practice of an expanded role for the dental hygienist. (54-200.2)*

2.2 The dental assistant's possible future role has not yet been discussed by the Group of Consultants.

* "(54-200.2) Practice of dental hygiene — The function of the dental hygienist is to assist the members of the dental profession in providing oral health care and oral health education to the public. A dental hygienist who has been duly licensed and registered in this State may, under the direction of a duly licensed and registered dentist of this State and subject to such rules as may be adopted by the Board, perform services which are educational, diagnostic, therapeutic or preventive in nature and are authorized by the Board. Such services shall not include the establishment of a final diagnosis or treatment plan for a dental patient."

LEGISLATION

The Virginia State Board of Medical Examiners (name changed in SB 665 of 1973 to Virginia State Board of Medicine) had set up an ad hoc system of "registration" of physician's assistants before the Group of Consultants had been appointed by the State Commissioner of Health. This was recognized to be only a temporary expedient set up under the Board of Medicine's by-laws.

However, it was clear that a way must be found of legalizing the work of the twenty or so nurse practitioners already at work with physicians in the Commonwealth, and the educational programs already in being or planned at the University of Virginia and the Medical College of Virginia, Virginia Commonwealth University. A draft bill was prepared by the Board of Medicine in the spring of 1972 with the assistance of Ted Markow, Assistant Attorney General, so that the Group of Consultants had the benefit of this draft as a basis of discussion at the Group's first meeting July 7, 1972. At the General Assembly's 1972-73 meeting the draft mentioned above was introduced as SB 665 (Appendix E). This bill dealt with various aspects of work of the Board of Medicine, as well as with the physician's assistant.

Another bill, HB 1451 (Appendix F), was introduced in the 1972-73 session, dealing with the expanded role of nurses trained as nurse practitioners to work under the supervision of medical practitioners. Over the years nurses have gradually been delegated numerous activities and duties which had been performed only by physicians in the past. Such delegation had gone to the general satisfaction of both the nurses and the physicians, but it had not been legalized by the General Assembly.

Both SB 665 and HB 1451, in draft form, provided for the promulgation of rules and regulations by the Board of Medicine. However, it was felt by the nursing groups that the State Board of Nursing also should be involved in the regulatory processes which involved nurse practitioners. This appeared at first to be a difficult problem to solve. Yet it was recognized by both nurses and physicians that past experience has shown that if controversial issues can be

solved by the parties concerned before bills come up in the General Assembly, the Assembly will be much more inclined to give favorable action than would be the case if differences were left to be resolved by the Assembly itself.

With the objective of solving the problem, a series of meetings was held December 5, 1972; December 20, 1972; January 24, 1973; and March 19, 1973, by a Joint Subcommittee, made up of:

Advisory Committee on Education for the Health Professions,
State Council of Higher Education

Dana Hamel, Ph.D.
Faye Peters, R.N.

Group of Consultants to the State Commissioner of Health, on
Assistants to Physicians and Dentists

John A. DiBiaggio, D.D.S.
Edward E. Springborn
Hugh R. Leavell, M.D.

The meetings of December 20, January 24, and March 19 were luncheon meetings, with Doctor Hamel as the generous host. The following persons were invited:

State Board of Nursing

Mrs. Helen Weismann, R.N., President
Mrs. Eleanor Smith, R.N., Executive Secretary

Virginia Nurses Association

Kenneth Rinker, R.N., President

State Board of Medicine

George Carroll, M.D., Secretary-Treasurer
Ernest B. Carpenter, M.D., Chairman, Legislative Committee

Medical Society of Virginia

Carl E. Stark, M.D., President

Attorney General's Office

Ted Markow
J. W. Crews

After full and free discussion it was agreed to recommend the following language in HB 1451, as introduced:

". . . rules and regulations jointly promulgated by the Virginia State Board of Medical Examiners and the Virginia State Board of Nursing, which Boards shall be jointly responsible for the implementation thereof."

Both SB 665 and HB 1451 were passed by the General Assembly and signed by the Governor.

RULES AND REGULATIONS

Under the broad heading of "legislation" come the rules and regulations authorized in SB 665 and HB 1451. It was urged strongly on March 19, 1973, in the joint subcommittee previously mentioned and in the March 21, 1973, meeting of the Group of Consultants to the State Commissioner of Health that the Chairman of the Group of Consultants be instructed to write to the Board of Nursing as well as the Board of Medicine suggesting that each of these Boards designate two members to meet together as soon as possible under the

auspices of the Chairman of the Group of Consultants and the Chairman of the Subcommittee on Education for Health Professions of the State Council of Higher Education for Virginia. This meeting would be to begin discussion on implementation of the new legislation.

CURRENT TRAINING PROGRAMS IN VIRGINIA

Perhaps the most important comment that may be made at this time about the 80 or so training programs for physician's assistants in the USA is that *they vary greatly*, running in duration from 12 weeks to five years.

The AMA is playing an important role in working toward standardizing the training and the certification, and in December, 1971, the AMA House of Delegates adopted a policy statement on the "Essentials of an Approved Educational Program" which was prepared by the Council on Medical Education of the AMA in collaboration with the Academy of Family Physicians, the Academy of Pediatrics, the College of Physicians and the Society of Internal Medicine.

An AMA health manpower survey in 1972 showed that 585 physician's assistants were graduated from 30 programs throughout the USA. Of these 461 are employed as physician's assistants; 236 in doctor's offices and 225 in institutional settings. The number of graduates is on the increase. (American Medical News, March 19, 1973).

In September, 1972, a member of the Secretariat to the Group of Consultants visited the Duke University training program, which was the first important one, starting in 1965.

On October 11, 1972, the training programs now in operation or expected to begin soon in Virginia were discussed by the Group of Consultants:

University of Virginia

Pediatric Nurse Clinician — Barbara Brodie, Ph.D.

30 nurse practitioners have been graduated in 2 1/2 years. There has been tremendous interest in this program, with 10 applicants rejected for each one selected; each class has six students (See Appendix C).

Adult Nurse Practitioner — Robert A. Reid, M.D.

Before an applicant may be accepted she must have a job promised after graduation (See Appendix D).

Medical College of Virginia

Nurse Practitioner — Fitzhugh Mayo, M.D. and Leon P. Bloodworth, M.D.

Training funds applied for; classes expected to begin in September. Training is not to be in Richmond, which is considered too atypical.

State Department of Health — Sarah Sayres, R.N., M.P.H.

Training of four public health nurses is being subsidized by the State Office of Comprehensive Health Planning

FUTURE WORK BY THE GROUP OF CONSULTANTS

The present report is an Interim Report, due April 1, 1973. The Final Report is due November 1, 1973. Following presentation of the Interim Report there are a number of tasks which the Group of Consultants will be undertaking before the Final Report is written. Included among the tasks which lie ahead are following:

Need for Physician's Assistants in Virginia

Clearly, there are marked differences of opinion about the need of physician's assistants in Virginia. There is only a very limited experience in Virginia with workers of this type. Those physicians who have worked with medical corpsmen in the armed forces seem to have, in general, quite positive reactions about working with physician's assistants in civilian life.

Some people believe that it would probably be easier to improve rural health care by persuading physician's assistants to live and work in rural surroundings than it seems to be to persuade doctors to live in the country.

These are matters which the Group of Consultants wishes to consider carefully. However, it is not thought that the Group will undertake field studies to elucidate the question. It is hoped, though, that the study conducted by the Medical Society of Virginia with some $50,000 from the Office of Comprehensive Health Planning in Virginia will be released soon * since this study was intended to throw light on the possible future roles of physician's assistants.

* This study has been completed but not yet published.

Malpractice and Malpractice Insurance

HJR 130 of the 1972 General Assembly, requests the Medical Society of Virginia, together with the Bar Association, to study legal issues associated with medicine, particularly in rural areas. Since there are numerous medico-legal problems in the work of physician's assistants, the Group of Consultants plans to discuss these questions with the appropriate persons. Such evidence as is already in hand from studies elsewhere indicate that the medico-legal problems of working with physician's assistants are not extraordinarily difficult, and that the insurance companies which handle malpractice insurance can deal with the physician's assistant's legal problems.

Liaison with State Council of Higher Education
Study of Health Manpower Requirements

The State Council of Higher Education has a fairly large budgetary item for a study of health manpower requirements. A study of the dental hygienist supply and projected needs has been done and other similar studies are to be undertaken.

It will be very important for the Group of Consultants to keep in close touch with these studies, and perhaps to participate in them as resources may become available.

PART II

PART II

Summary

April 1, 1973 — October 31, 1973

Toward the close of the General Assembly session in the early spring of 1973, legislation was passed which made it possible for rules and regulations to be adopted by the regulatory Boards of Medicine and of Nursing concerning assistants to physicians, and the roles of such assistants as members of the health team. The Board of Dentistry was earlier authorized to take parallel action. This was done in March of 1973.

It has not turned out to be an easy task to work from the general authorization provided by the statutes, to the specific rule-making power granted to these Boards; the flexibility which rule-making provides carries with it an added responsibility which sometimes appears burdensome. An additional responsibility arises from the fact that one of the new statutes (See Appendix F, H. 1451) delegates the power of JOINT rule-making and implementation to the Board of Medicine *and* the Board of Nursing insofar as nurse practitioners are concerned. This JOINT obligation is unique to Virginia, apparently. It is expected that this joint obligation will have real value in leading to better team work. However, it is necessitating meetings and discussions which are still in progress. It should be pointed out that those physician's assistants who are *not* qualified in nursing are to be the responsibility of the Board of Medicine; the Board of Nursing is not directly concerned (See Appendix E, S.665).

A series of small meetings of representatives of the Boards of Nursing and of Medicine have been held (May 9, May 29, June 19, July 31, and August 28). The Chairman of the Group of Consultants, Mr. Markow of the Attorney General's Office and one or more directors of nurse practitioners training programs have usually attended these meetings, together with the health representative of the Council for Higher Education.

Problems discussed at these meetings have included:

Standardization

Rules and regulations of other states, such as North Carolina and New Mexico.
Reciprocity between states.
"Grandfather clauses" providing for consideration of previous experience as credit toward "graduation."
Minimum standards for training programs.
Nationwide examinations being developed by the National Board of Medical Examiners.
Nationwide certification every 3-5 years for both administrative purposes and to encourage continuation education.
Approval of the AMA Board of Trustees of the formation of a National Commission on Certification of Physician's Assistants.

Supervision

Recognition of the major elements in supervision, namely, inspection and education of the assistants being supervised.

Definition of certain central concepts, such as:

The practice of medicine and the practice of nursing and concepts.

Diagnosis and therapy, recognizing that definitions as developed by physicians may differ from those developed by nurses.

How to work out compromises between making rules and regulations too general or too specific.

RECOMMENDATIONS IN BRIEF

1. The value of physician's assistants

   Properly trained and well supervised, assistants to primary care physicians or dentists can be of great value in helping to solve the health problems of rural Virginians.

2. Educational standards

   Basic guidelines, such as those being worked out nationally by the American Medical Association and its collaborators, should be followed insofar as this may be feasible.

3. The need for financial support for the training of assistants

   The training of assistants to dentists and to physicians will require financial support of the Commonwealth.

   Some special funds for experimentation in training and evaluation of training will be good investments.

4. Expanded functions for dental auxiliaries

   Rules and regulations regarding rules to be delegated to dental auxiliaries should be reconsidered on a yearly basis.

5. The current study should be continued

   The present study should be continued and broadened.

   The studies of assistants to physicians and to dentists in primary care begun in July, 1972, should be continued and expanded to include other types of assistants and of related allied health workers.

6. Continuing input by a health-oriented committee will be valuable

   The mechanism of having one committee representing the health interests, another correlary committee representing the education aspects, and a third committee or board concerned with regulatory aspects has worked well so far and should be continued.

7. Effective demand for training programs is influenced strongly by the education and previous experience of the dentists or physicians under whose supervision the assistants will work.

   An active program of education and demonstration should be conducted for physicians and dentists in practice, and for students, to familiarize them with potentialities of assistants.

8. Strengthen existing training

   The training already in existence at the University of Virginia, the Medical College of Virginia and at the Eastern Virginia Medical School (Norfolk General Hospital) should be strengthened.

"Due dates" for the Interim Report of this Group and for its Final Report were timed well and fitted in closely with the progress of work. The April, 1973, Interim Report was submitted on schedule and came just at the time when the basic legislation had been adopted. On March 19, 1973, and on March 21, 1973, meetings of two subcommittees and of the entire Group of Consultants were held. The State Board of Nursing and the State Board of Medicine were invited to name two representatives each to begin discussions on rules and regulations for nurse practitioners.

The two State Boards mentioned above responded, and a series of small meetings have been held on May 9, May 24, June 19, July 31, and August 28. At the August 28 meeting it was clear that it was not going to be possible to complete the draft of rules and regulations and get action on it before the date when this Final Report of the Group of Consultants would be due.

The representatives of the Boards have called upon the expertise of other individuals, including representatives of the University of Virginia and the Medical College of Virginia Medical Schools. It is anticipated that representatives of other interested agencies will also be used as consultants, such as those responsible for the operation of nursing homes and hospitals. The representatives of the Board of Nursing and of Medicine have arrived at some fundamental conclusions. However, they feel that they will not complete their deliberations until early December, 1973. This would permit the submission of their final report to the two entire Boards by their December meetings.

RECOMMENDATIONS

1. The value of physician's assistants

   RECOMMENDATION 1:

   Properly trained and well supervised, assistants to primary care physicians or dentists can be of great value in helping to solve the health problems of rural Virginians.

   In recent years assistants to physicians and to dentists have proved their ability to relieve the physician or dentist of many of his more routine duties so that the physician or dentist can devote a larger portion of his time than would otherwise be possible to tasks which cannot well be delegated.

   (For listing of some of the types of assistants which are being utilized in various parts of the country, see PART I under the heading "Scope of Personnel to be Studied")

2. Educational Standards

   RECOMMENDATION 2:

   Basic guidelines, such as those being worked out nationally by the American Medical Association and its collaborators, should be followed insofar as this may be feasible.

   (See "Educational Programs for the Physician's Assistant-February, 1973" American Medical Association, Division of Medical Education Department of Allied Professions and Services.)

   In providing some future possibility of geographic mobility of assistants, a degree of nationwide education and examination should be helpful.

3. The need for financial support for the training of assistants

   RECOMMENDATION 3:

   The training of assistants to dentists and to physicians will require financial support of the Commonwealth.

   Since the numbers trained each year will be limited at the beginning, the per capita cost of the training will undoubtedly be greater than later on when the numbers in classes may be increased.

   Some special funds for experimentation in training and for evaluation of training will be good investments.

4. Expanded functions for dental auxiliaries

   RECOMMENDATION 4:

   Rules and regulations regarding duties to be delegated to dental auxiliaries should be reconsidered on a yearly basis.

   Certain new responsibilities have been delegated in Virginia to dental assistants and dental hygienists under the rules and regulations approved by the State Board of Dentistry during this past year (March, 1973). These newly delegated responsibilities are quite limited, and consideration should be given to reconsideration of rules and regulations regarding duties to be delegated to dental auxiliaries, on a yearly basis. In this way, advantage can be taken of ongoing research on potential duties which could be delegated to individuals employed by the dentist.

5. The current study should be continued

RECOMMENDATION 5:

The current study should be continued and broadened.

Studies by the Group of Consultants to the State Commissioner of Health, and by the Committee on Education for Health Professions and Occupations of the State Council of Higher Education, on assistants to physicians and to dentists and on related allied health personnel should be continued and broadened.

Since the appointment of consultants to the State Commissioner of Health in July, 1972, this Study has been almost entirely restricted to questions about assistants to physicians engaged in *primary care* with little attention being devoted to assistants in specialties, because time and resources were not available to do more. A good deal more work is needed so that attention may be given to assistants in specialties and to related workers in allied health professions.

6. Continuing input by a health-oriented committee will be valuable

RECOMMENDATION 6:

The mechanism of having one committee representing the health aspects, another correlary committee representing the education aspects, and a third committee or board concerned with regulatory aspects has worked well so far and should be continued.

The State Health Commissioner's Group of Consultants has been able to work effectively and profitably with its correlary committee, namely the Committee on Education for Health Professions and Occupations of the State Council of Higher Education. Meetings have been held on various occasions to discuss programs of mutual interest. This Committee on Education for Health Professions and Occupations is established by statute with six ex-officio members:

Chancellor of the Virginia Community College System, Chairman
Chairman, Virginia Comprehensive Health Planning Council
Vice-President, Medical Affairs, Health Sciences Division, Virginia Commonwealth University
Vice-President, Medical Affairs, University of Virginia
Representative, Norfolk Area Medical Authority
Representative, State Board of Nursing
Three members appointed "representative of the interest of the public at large, individuals knowledgeable of and engaged in various health professions and occupations."

Unquestionably, it has been useful to have the two committees working together, each presenting a somewhat different point of view.

The activities of the Boards of Medicine, Nursing and Dentistry regarding promulgation of rules and regulations as they relate to functions of other health personnel should be monitored on an ongoing basis to help provide reconciliation of differing points of view if they exist.

The Council of Higher Education Committee on Education for the Health Professions and Occupations is conducting a rather large study on health manpower needs which will undoubtedly provide very valuable data in terms of number of health personnel required, and the likelihood of utilization by physicians and dentists. Other correlary studies are also necessary. For instance, information is also required on the utilization of health personnel, the quality of services that would be delivered, and the

effectiveness of various systems of health delivery. In other words, an evaluation system to determine not only ongoing needs, but also efficiency of existing programs is mandatory.

7. Number of physician's assistants that are needed

RECOMMENDATION 7:

An active program of demonstration and education should be conducted for physicians and dentists in practice and for students to familiarize them with the potentialities of assistants.

A major problem in planning training for a new type of personnel is that of an equilibrium between supply and demand. If only a few physicians or dentists have seen assistants at work it is difficult for them to have mental pictures of how such personnel might be used successfully without "upsetting the apple cart." Yet those who are responsible for education must make estimates of what the demands are going to be, what skills and knowledge will be required, what student-teacher ratios will be necessary, etc., etc.

Numbers of trained physician's assistants needed.

It is not possible to make accurate measurement just now as to how many assistants would be required if all the civilian posts in which assistants could be used efficiently were to be filled without delay according to a fixed table of organization such as prevails in military forces.

The civilian problem is more that of how much latent interest there may be and how much it may be subject to extension after the usefulness of assistants can be demonstrated. Extension of demand is certainly dependent in a significant degree upon the psychological effect of anxiety about possible replacement and the possible economic problem of competition. Much of the problem might be resolved if practicing physicians and dentists could actually see with their own eyes what assistants could do under proper circumstances.

According to figures supplied by those in charge of training programs in Virginia at present there will soon be student capacity of 45-50 graduates annually in Virginia. So far, essentially all of those trained can find jobs as physician's assistants in larger general hospitals. It is not yet clear how much demand there may be for assistants helping to provide primary care under rural conditions, though the theoretical need for such employment is pretty clear.

The State Council of Higher Education needs the help of health administrators in making estimates. There is some data which the administrator and the educator, working together, may find useful.

For example, the American Medical Association in a Census found a total of 585 physician's assistants on December 31, 1972, who have been graduated from 30 programs in various parts of the country. At the time of the Census 461 were employed as physician's assistants. Some 236 of these were employed in physician's offices, including groups and clinics, and 225 were working in institutional settings.

Of the thirty programs reporting graduates, three were categorized as MEDEX and 18 were oriented toward specialty training.

As an indication of the fact that many of the training programs are

quite new 12 had or will have their first graduates in 1973, and five will have their first graduates in 1974.

An AMA study in February, 1973, showed in 28 training programs, a *student capacity* of 795 for assistants to the primary care physician.

The studies above seem to indicate that vigorous growth is taking place all over the country.

A physician time study made by the Medical Society of Virginia (Appendix H) about two years ago revealed 28 full-time and 8 part-time physician's assistants working with the 1500 physicians in active practice who reported in mail questionnaires (return — 50%).

In this same Virginia study, when physicians were asked what kinds of workers other than physicians could be delegated to perform tasks now done by the physician, the reply, "To the physician's assistant" came with surprising frequency.

The replies in the Medical Society study seem to indicate that:

(a) Virginia physicians have had little opportunity to see the physician's assistant in action.

(b) There is a widespread willingness to experiment with physician's assistants in relieving the physician of routine tasks. (See Appendix I).

8. Strengthen existing training

RECOMMENDATION 8:

The training already in existence at the University of Virginia, the Medical College of Virginia and at the Eastern Virginia Medical School (Norfolk General Hospital) should be strengthened.

Important progress has already been made in the training of assistants to dentists and to physicians in the Commonwealth of Virginia. Full advantage should be taken of this experience, and evaluation should be emphasized as work progresses. (See Appendix J).

PRIORITIES

Certain priorities should be followed in developing the physician's assistant program. Suggested priorities are listed more or less in the order of their importance as seen from the point of view of the Group of Consultants to the Commissioner of Health.

1. The training programs must have ready access to facilities for clinical training.
2. Arrangements for employment after training should be made before the training is begun in cases where this is possible.
3. Highest priority should be given to training assistants to the *primary care* physicians, rather than to specialist's assistants; but the latter should by no means be neglected.
4. Rural areas should have precedence over urban ones; and difficult parts of urban areas should take precedence over urban areas with greater resources.
5. At the outset it seems wise to give priority to nurse practitioner training, as compared with those who have had experience in the Armed Forces and similar situations. This suggested priority is based not on extensive scientific study of the Virginia population, but only on such contacts as the Group of Consultants may have had.
6. The concept of the health team and of the physician's assistant as an integral member of that team should be developed. The need for illustrating the work of the team is especially great during the background professional education of those members of the health professions which have a long history of working together, such as the physician and the nurse.
7. Promulgation of rules and regulations pertaining to training and regulation of physician's assistants who have a background other than in nursing should not be delayed any longer than is absolutely necessary, as there is much fine material in these other groups.

APPENDICES

Appendices relating to both PARTS I and II

APPENDIX A

House Joint Resolution No. 131

Directing the State Department of Health to develop criteria, and study and recommend legislation relating to paramedical health workers.

Offered February 21, 1972

Patron — Mr. Pendleton

Referred to the Committee on Health, Welfare and Institutions

WHEREAS, many rural and some urban areas of the Commonwealth are inadequately supplied with the number of physicians and dentists necessary to provide health care for all of the residents of such areas; and

WHEREAS, experience has shown that properly trained nurses, and medical and dental technicians and assistants, hereinafter referred to as "paramedical personnel" can, when working under proper supervision, relieve the physicians and dentists of many of their less complex duties, thus affording them time to care for more patients; and

WHEREAS, the present laws permit such duties to be performed only by licensed physicians and dentists, and it is, therefore, desirable that laws be enacted permitting paramedical personnel to perform such duties; and

WHEREAS, certain problems and issues must be resolved, and criteria developed, prior to the drafting of such proposed legislation, including, but not limited to, the following: (1) the licensing or certification of such personnel; (2) which duties such personnel should be authorized to perform; (3) the legal liability of both the supervising physicians and dentists, and also of such personnel; and (4) the State agency which should be charged with the duty and given the authority to issue licenses or certificates to such personnel, and prescribe the prerequisites for the issuance of, and the duration of, such licenses, and the duties which may be performed thereunder; now, therefore, be it

RESOLVED by the House of Delegates, the Senate of Virginia concurring, That the State Department of Health is hereby directed, in consultation with the schools of medicine of the University of Virginia and the Medical College of Virginia, Health Sciences Division of Virginia Commonwealth University, the School of Dentistry of such Medical College, the State governing and licensing boards, and the associations of the medical, dental, pharmacy and nursing professions, the hospital associations and other interested groups, to consider and study the matters hereinabove set forth, to develop criteria, and to recommend the necessary legislation to accomplish these purposes.

The above-mentioned State agencies and institutions, and all other State agencies which can render assistance, shall assist the Department in this task.

The Department shall report its findings and recommendations to the Governor and the General Assembly not later than November one, nineteen hundred seventy-three, and shall make an interim report to the Governor not later than April one, nineteen hundred seventy-three.

APPENDIX B

Group Of Consultants To The State Commissioner Of Health On Assistants to Physicians and to Dentists

Medical Schools

University of Virginia

Barbara Brodie, R.N., Ph. D., School of Nursing
Robert A. Reid, M.D., Medical School

Medical College of Virginia, V.C.U.

Warren Pearse, M.D., Dean of Medicine
John A. DiBiaggio, D.D.S., Dean of Dental School, *Chairman, Group of Consultants*
Thomas Barker, Ph. D., Director, School of Allied Professions, *Vice-Chairman, Group of Consultants*
Fitzhugh Mayo, M.D., Professor of Family Practice
Leon Bloodworth, M.D., Department of Family Practice

Medical School of Eastern Virginia

Robert T. Manning, M.D., Dean
Joseph L. Yon, M.D., Dean for Hospital and Professional Affairs

Pharmacy School, MCV-VCU

C. Eugene White, B.S.

State Council for Higher Education

Virginia Community College System

Dana Hamel, Ph.D., Chancellor

Coordinator, Health Professions and Occupations

Larrie J. Dean, B.S.
Faye Peters, R.N., (left Richmond June '73)

Virginia Hospital Association

Stuart Ogren, M.H.A.

Medical Society of Virginia

George J. Carroll, M.D., Secretary-Treasurer, Virginia Board of Medicine
Harold Nemuth, M.D.
Carl E. Stark, M.D.

Virginia Nurses Association

Kenneth Rinker, R.N., President
Barbara Walker, R.N., Executive

Virginia Dental Association

Thomas P. Usher, D.D.S.
Pat Watkins

Regulatory Boards

State Board of Nursing

Eleanor Smith, R.N., M.A., Secretary
Helen Weisman, R.N., M.S., President
Marilyn Boyd, R.N., M.S.

State Board of Medicine

George Carroll, M.D., Secretary-Treasurer
Ernest Carpenter, M.D., Chairman, Legislative Committee

Virginia Board of Dentistry

Robert Minnich, D.D.S.

Virginia Board of Pharmacy

J. B. Carson, B.S.

Attorney General's Office

Theodore Markow
J. W. Crews

Virginia Pharmaceutical Association

Thomas Rorrer, Jr., B.S.
Keith Kellum, B.S.

Office of Comprehensive Health Planning

Secretariats

Edward E. Springborn
Hugh R. Leavell, M.D., Dr. P.H.

APPENDIX C

Pediatric Nurse Clinician Course

University of Virginia
School of Nursing and Department of Pediatrics
Charlottesville, Virginia

Program:	The program is designed to provide the nurse with the necessary skills to provide comprehensive health care to children and adolescents. These skills include general history taking, physical appraisal and recording; identification of acute illness followed by consultation/referral to a physician; management of minor pediatric problems and selected chronic conditions; and teaching well child guidance and health within the family with emphasis in the areas of growth and development and adolescent sexuality. The sixteen week program combines both didactic studies and clinical experience with preceptorship guidance. Emphasis of the first eight weeks is on didactic studies followed by an eight week practicum in a variety of clinical settings including out-patient clinics, private physician offices, rural community health centers, and public health departments.
Classes offered:	Three classes per year; Fall (Master's students only) Winter and Summer
Certificate Awarded:	Pediatric Nurse Clinician Certificate
Graduate Credits:	Nine semester hours of graduate credit from the School of Nursing
Admission Requirements:	Registered nurse, preferably with two or more years of practical experience. Personal interview necessary.
Tuition:	$316.00 for residents of Virginia $641.00 for out-of-state students
Traineeship:	Limited number of traineeships available; includes stipend and tuition

Admission Procedure:

Contact Director of Program
Barbara Brodie, R.N., Ph. D.
School of Nursing
University of Virginia
Charlottesville, Virginia 22903

APPENDIX D

The Adult Nurse Practitioner Training Program
Department of Internal Medicine
University of Virginia School of Medicine
Charlottesville, Virginia

Statement of Robert A. Reid, M.D., Director, October 10, 1972

The adult nurse practitioner training program at the University of Virginia started in 1969. At that time, Dr. James Respess, a professor in Internal Medicine, recognized that it would be necessary for people other than physicians to participate in the primary delivery of health care. He began in that year to systematically train the first of a series of experienced nurses in the skills of history-taking, physical examination, and diagnosis.

In 1971, Dr. Regina McCormack headed a group of physicians who gave the first formal course of instruction to six nurses. Doctor McCormack has since entered private practice, but the principle of the nurse participating in adult care is well established at the University. I have now been hired as director of the program and a second class of six girls is in training. An application has been submitted to Regional Medical Program to support broadening the program focus on adult and ambulatory care. A family nurse practitioner program would include training in the full spectrum of problems seen by the family physician.

Specific goals, findings and plans of our project are listed below:

1. Goal: To demonstrate that nurses are interested in becoming nurse practitioners

   Findings: Our program has not been widely publicized, but we have many inquiries about it. There is without doubt wide interest in the concept of the adult nurse practitioner. It is important to note that our most talented applicants have consistently been girls who come to our program because we do not require a BS in nursing. These girls are mature, experienced nurses and are highly motivated, but have no other avenue open to them which could enable them to increase their skills and responsibilities within a short period of time which they can afford.

   Conclusion, plans: We feel that it is essential to continue to make the course available to non-degree candidates. It must also be kept as short as possible without sacrificing quality of training.

2. Goal: Training nurse practitioners for physicians in the State who are interested in employing them

   Findings to date: There is not an overwhelming demand for adult nurse practitioners within the State. An important prerequisite for application this year has been that of the candidate must have a job waiting for her following completion of the course.

   Graduates this year have been sponsored by or will be hired by physicians in Charlottesville, Lynchburg, Waynesboro, and Norfolk.

   Conclusions, plans: We feel that the prerequisite for sponsorship is wise and will continue it for the present. Trainees who are

not immediately employed as nurse practitioners have some loss of their new skills if they are not allowed to use them immediately after graduation.

3. Goal: Demonstrating the effectiveness of the adult nurse practitioner in ambulatory care

   Findings to date: The pediatric nurse practitioner is recognized as a valuable member of the health care team. The experience in pediatrics is not necessarily applicable to adult medicine, however. The pediatric nurse practitioner is employed primarily in well-patient care and in care for minor problems.

   Our philosophy is that adult nurse practitioners also have a valuable role to play in well-patient care and in triage. However, her most valuable function is the independent management of chronic disease in the adult. Once a physician has established a diagnosis, she must be capable of seeing the patient over an extended period of time between physician visits. She must be expert in observation of disease, alert to potential complications in complex observations, and intimately acquainted with the side effects of a number of potent drugs. Her nursing skills are invaluable to her in this situation and we do not believe that paramedics with a nursing background can be trained easily for this role.

   Conclusion, plans: A demonstration project has been set up within the medical clinic of the University of Virginia to demonstrate the effectiveness of nurse practitioners in caring for chronic disease. The practice of the nurses is compared to that of physicians in terms of efficiency, patient time, patient satisfaction, cost, as well as effectiveness.

4. Goal: Tailoring our program to the needs and interests of the physicians in the State.

   Findings: We have an ongoing program to monitor job interviews of our graduates. Major concerns about the concept of the adult nurse practitioners are as follows:

   1. Concern for the legal issues
   2. Concern that a nurse practitioner cannot pay her own way in practice, but would be a financial burden on the physician
   3. Observation that many graduates feel that they would like more practical experience in the University environment before going out to apply for jobs.

   Conclusions, plans:

   1. We have taken an active interest in the legal status of the nurse practitioner. We feel that there is nothing restrictive in the tradition of nursing practice, and that certification as nurse practitioners should be from *within* the structure of the nursing profession. Laws should be passed to protect the nurse practitioner and her associated physician against malpractice liability and to permit her to prescribe medications.

   2. A demonstration of the financial aspect of nurse practice is under way as described above.

3. We believe that it would be optimal to offer a six month post-graduate practical experience to graduates as an option. Since they would be functioning as nurse practitioners, they would be paid during this period. This "internship" is included in our recent grant application and should be considered for funding by the state legislature.

   We have greatly increased the amount of practical experience in our program and feel that nurse practitioners, like physicians, should be trained by people who are actively engaged in patient care. We are working toward a primary care clinic within the hospital which could be in part staffed with nursing school faculty who would eventually teach the course.

5. Goal: Developing technical methods of ambulatory care which will support the nurse practitioner in her role

   Findings: The adult nurse practitioner is a member of a health team who carries major responsibilities and must communicate effectively with those with whom she works. For this reason, we have been working on methods of communication: applications of the problem oriented record which are specially suited to her use, applications of computerized medical records which could enable her to communicate with a sponsoring physician though practicing in a remote location, and applications of peer review techniques which would enable a physician or her peers to evaluate the problems of her practice.

   Conclusions, plans: The importance of this work cannot be underestimated. There is no question that our practicing nurses have been able to deliver the most effective care where these techniques have been most highly developed within the University. The problems of communication, education, and quality care in nursing practice are virtually the same as those in medical practice.

6. Goal: Enabling graduates of the program to receive academic credit for their study.

   Findings: The nurse practitioners now trained at the University of Virginia receive a certificate of training. There is no academic credit received.

   Conclusions, plans: There is a consensus within the Department of Internal Medicine that this program belongs within the nursing school. However, a number of difficulties would have to be worked out. There is no clinical facility under the nursing school and no practicing nurse practitioners on its faculty. Without these two prerequisites, our program could not be transferred with its present practical emphasis.

APPENDIX E

CHAPTER 529

An Act to amend and reenact §§ 54-273, 54-274, 54-275, 54-276.4, 54-281.2, 54-282, 54-287, 54-290, 54-291, 54-295, 54-295.6, 54-297, 54-298, 54-299, 54-306.3, 54-306.4, 54-307, 54-308, 54-308.5, 54-308.6, 54-310, 54-311, 54-317.2, 54-320 and 54-321, as severally amended, of the Code of Virginia; to amend the Code of Virginia by adding sections numbered 54-281.4, 54-281.5, 54-281.6, 54-281.7, 54-281.8, 54-281.9, 54-290.1, 54-291.1, 54-300.1, 54-300.2 and 54-318.3; and to repeal §§ 54-318 and 54-319, the amended, added and repealed sections all relating to regulation of medicine and other healing arts.

(S 665)

Approved March 20, 1973

Be it enacted by the General Assembly of Virginia:

1. That §§ 54-273, 54-274, 54-275, 54-276.4, 54-281.2, 54-282, 54-287, 54-290, 54-291, 54-295, 54-295.6, 54-297, 54-298, 54-306.3, 54-306.4, 54-307, 54-308, 54-308.5, 54-308.6, 54-310, 54-311, 54-317, 54-317.2, 54-320 and 54-321, as severally amended, of the Code of Virginia be amended and reenacted; and that the Code of Virginia be amended by adding sections numbered 54-281.4, 54-281.5, 54-281.6, 54-281.7, 54-281.8, 54-281.9, 54-290.1, 54-291.1, 54-300.1, 54-300.2 and 54-318.3 as follows:

§ 54-273. Definitions. — When used in this chapter unless expressly stated otherwise:

(1) "Board" means the Virginia State Board of Medicine.

(2) "The healing arts" means the art or science or group of arts or sciences dealing with the prevention and cure or alleviation of human ailments, diseases or infirmities; and has the same meaning as "medicine" when the latter is used in its comprehensive sense.

(3) "Practice of medicine" means the treatment of human ailments, diseases, or infirmities by any means or method.

(4) (Repealed.)

(5) "Practice of osteopathy" means the treatment of human ailments, diseases, or infirmities by any means or method.

(6) "Practice of chiropractic" means the adjustment of the twenty-four movable vertebrae of the spinal column and assisting nature for the purpose of normalizing the transmission of nerve energy. It does not include the use of surgery, obstetrics, osteopathy, nor the administration nor prescribing of any drugs, medicines, serums, or vaccines.

(7) "Practice of naturopathy" means the treatment of human ailments, diseases, or infirmities by means of heat, light, diet, massage, baths and other natural agents, but does not include the use of surgery, the X-ray, X-ray therapy, electrotherapeutics, obstetrics, osteopathy, or the prescribing of any drug or medicine.

(8) "Practice of podiatry" means the medical, mechanical and surgical treatment of the ailments of the human foot, but does not include

amputation of the foot or toes, nor the use of other than local anesthetics.

(9) "Practice of physical therapy" means the treatment under medical prescription and direction of bodily or mental disorders of any person by use of physical, chemical, and other properties of heat, cold, light, water, electricity or sound, and by means of mechanical, electronic and other devices, massage, exercise and other physical procedures, whether such devices and procedures are for therapeutic or for retraining or rehabilitation purposes. The term "physical therapy" as used in this chapter does not include the use of Roentgen rays and radium for diagnostic or therapeutic purposes or the use of electricity for shock therapy and surgical purposes, including cauterization. Nothing in this definition shall be construed to limit or restrict the practice of any person licensed by the Board as other than a physical therapist, nor shall anything in this definition limit or restrict the giving or use of massages, steam baths, dry heat rooms, infra red heat or ultra violet lamps in health clubs and spas, public or private.

(10) "Practice of clinical psychology" means the offering by an individual of his services to the public as a clinical psychologist.

"Clinical psychologist" means a psychologist who is competent to apply the principles and techniques of psychological evaluation and psychotherapy to individual clients for the purpose of ameliorating or attenuating problems of behavioral and/or emotional maladjustment.

§ 54-274. Unlawful to practice without certificate or license; exception. — Except as otherwise provided in §§ 54-276 to 54-276.7, it shall be unlawful for any person to practice medicine, osteopathy, chiropractic, naturopathy, podiatry, physical therapy, or clinical psychology, or any other school or branch of the healing arts in the State without a valid unrevoked certificate or license authorizing such practice issued by the Virginia State Board of Medicine pursuant to the provisions of this chapter and duly recorded as hereinafter provided; and it shall be unlawful for any person who holds a valid unrevoked certificate or license permitting him to practice in Virginia to practice the school or branch of the healing arts for which he holds such certificate or license except within the scope of the definition of such practice contained in § 54-273.

The provisions in this section shall not be construed to prevent or prohibit any person entitled to practice his profession under any prior law on June twenty-fourth, nineteen hundred forty-four, from continuing such practice within the scope of the definition of his particular school of practice contained herein, but in all other respects the provisions of this chapter shall be applicable; nor shall the provisions of this section be construed to prevent or prohibit any person, residing on the border of a neighboring state or the District of Columbia and entitled to practice his profession under the laws of that state, from practicing within Virginia, provided that in Virginia he does not open an office or appoint places to meet his patients or receive calls; and provided that each practitioner claiming exemption under the provisions of this section shall file with the Virginia State Board of Medicine in such manner as it prescribes evidence of his right to such exemption. Upon proof of such right to the satisfaction of the Board and payment of five dollars license fee to the Board it shall enter the name of the applicant in a register kept for that purpose and shall issue to the applicant a certificate of evidence of such registration, and the registration and certification shall be renewed annually on payment of the license fee, under conditions prescribed by the Board.

§ 54-275. What constitutes practice. — Any person shall be regarded as practicing the healing arts and some school or branch thereof within the

meaning of this chapter who opens an office for such purpose, or advertises or announces to the public in any way a readiness to practice in any county or city of the State or diagnoses the condition of, prescribes for, gives surgical assistance to, treats, heals, cures, or relieves human beings, or advertises or announces to the public in any manner a readiness or ability to heal, cure, or relieve those who may be suffering from any human ailment or infirmity, or who uses in connection with his name the words or letters "Doctor," "Dr.," "M.D.," "D.O.," "D.P.M.," "D.C.," "D.N.," "Healer," "Physical Therapist," "R.P.T.," "P.T.," "Clinical Psychologist," or any other title, word, letter or designation intending to designate or imply that he is a practitioner of the healing arts or of any school or branch thereof or that he is able to heal, cure, or relieve those who may be suffering from any injury, deformity, or disease of mind or body.

The provisions of this section applicable to persons shall also, to the extent applicable, apply to groups of persons and corporations.

Except where persons other than physicians are required to sign birth certificates, signing a birth or death certificate, or signing any statement certifying that the person so signing has rendered professional service to the sick or injured, or signing or issuing a prescription for drugs or other remedial agents, shall be prima facie evidence that the person signing or issuing such writing is practicing the healing arts and some school or branch thereof within the meaning of this chapter.

§ 54-276.4. Nurses, registered midwives, masseurs or other persons. — Nothing in this chapter shall be construed to apply to or interfere with nurses, registered midwives, or masseurs who publicly represent themselves as such, within the scope of their usual professional activities, nor to any other persons in the lawful conduct of their particular professions or businesses under State law, while actually engaged in such profession or business. The scope of the usual professional activities of registered professional nurses and graduate laboratory technicians, or other technical personnel who have been properly trained, shall be deemed to include the taking of blood by means of veni-punctures, the giving of intravenous infusions and intravenous injections, and the insertion of Levin tubes, provided these acts are performed under the orders of a person licensed to practice medicine.

§ 54-281.2. Unlawful to practice physical therapy except on prescription or direction. — It shall be unlawful for a person to engage in the practice of physical therapy except as a licensed registered physical therapist, on the prescription or direction of a duly licensed doctor of medicine or osteopathy or podiatric medicine.

§ 54-281.4. (a) A medical physician, an osteopath or a podiatrist licensed under this chapter may be allowed to make application to the Board to employ assistants and delegate certain acts which constitute the practice of medicine to the extent and in the manner authorized by regulations which may be promulgated by the Board. Such acts shall be delegated in a manner consistent with sound medical practice and with the protection of the health and safety of the patient in mind. Such services shall be limited to those which are educational, diagnostic, therapeutic or preventive in nature, but in no case shall they include the establishment of a final diagnosis or treatment plan for the patient, nor shall delegated acts include the prescribing or dispensing of drugs.

(b) No assistant shall perform any acts delegated hereunder except at the direction of the licensee and under his supervision and control. Every licensee who utilizes the services of an assistant for aiding him in the practice of medicine shall be fully responsible for the acts of the assistant in the cure and treatment of human beings.

§ 54-281.5. No licensee shall be allowed to supervise more than two such assistants at any one time.

§ 54-281.6. The Board shall formulate guidelines for the consideration of applications by licensees to supervise assistants. Each application shall include the following:

(1) The qualifications, including related experience, possessed by the assistant;

(2) The professional background and specialty of the licensee;

(3) A description by the licensee of his practice and the way in which the assistant is to be utilized.

§ 54-281.7. The Board shall establish a testing program to determine the training and educational achievements of the assistant or where the Board deems it appropriate it may accept other evidence such as experience or completion of an approved training program, in lieu of testing and shall establish this as a prerequisite for approval of the licensee's application.

§ 54-281.8. The approval of the Board for the utilization of an assistant by a licensee shall expire at the end of one year. The licensee shall make a new application for approval, supplying such information as the Board may require, at the time and in the manner prescribed by the Board.

§ 54-281.9. The board may revoke, suspend, or refuse to renew an approval for any of the following:

(1) For any reason stated in this chapter for revocation and suspension of the license of a practitioner licensed under this chapter;

(2) Failure of the licensee to supervise the assistant;

(3) The assistant engaging in acts beyond the scope of authority to act as approved by the Board;

(4) Negligence or incompetence on the part of the assistant or the licensee in his use of the assistant;

(5) Violating or cooperation with others in violating any provision of this chapter or the lawful regulations of the Board; or

(6) A change in the Board's requirements for approval with which the assistant or the licensee does not comply.

The provisions of §§ 54-281.4 through 54-281.9 shall not be construed to apply to persons licensed as nurses or pharmacists.

§ 54-282. Board of Medical Examiners continued; how constituted. — The Board of Medical Examiners for the State of Virginia is continued and shall hereafter be known as the Virginia State Board of Medicine and shall consist of one medical physician from each congressional district, one osteopath, one podiatrist, one chiropractor, one clinical psychologist and one naturopath from the State at large. The first podiatrist member shall be appointed for a term to expire five years from June thirty, nineteen hundred fifty. The first clinical psychologist member shall be appointed for a term to expire five years from June thirty, nineteen hundred sixty-six.

§ 54-287. Change of residence vacating office. — If any medical physician member of the Board ceases to reside in the district from which he was appointed, except by reason of redistricting, his office shall be deemed vacant.

§ 54-290. Meetings and quorum. — Regular meetings of the Board shall be held at such times and places as the Board shall prescribe, and special

meetings may be held upon the call of the president and any eight members, but there shall be not less than one regular meeting each year. Nine members of the Board shall constitute a quorum.

§ 54-290.1. The Board is authorized to establish an Executive Committee, which Committee shall be composed of the president, vice-president, the secretary and four other members of the Board appointed by the president. In the absence of the Board, the Executive Committee shall have full powers to take any action and conduct any business authorized by this chapter. Four members of the Executive Committee shall constitute a quorum.

§ 54-291. Rules, regulations and bylaws. — The Board may, subject to the General Administrative Agencies Act of the Code of Virginia, adopt such rules and regulations, not inconsistent with the laws of this State, as may be necessary to carry into effect the provisions of this chapter.

No bylaw or rule by which the vote of a majority of the Board is required for any specified action shall be suspended or repealed by a smaller vote than that required for action thereunder.

APPENDIX F

CHAPTER 105

An Act to amend and reenact § 54-274, as amended, of the Code of Virginia relating to unlawful practice of nursing without a certificate or license (H 1451)

Approved March 9, 1973

Be it enacted by the General Assembly of Virginia:

1. That § 54-274, as amended, of the Code of Virginia be amended and reenacted as follows:

§ 54-274. Unlawful to practice without certificate or license; exception. — Except as otherwise provided in §§ 54-276 to 54-276.6, it shall be unlawful for any person to practice medicine, osteopathy, chiropractic, naturopathy, podiatry, physical therapy or clinical psychology, or any other school or branch of the healing arts in the State without a valid unrevoked certificate or license authorizing such practice issued by the Board of Medical Examiners pursuant to the provisions of this chapter and duly recorded as hereinafter provided; and it shall be unlawful for any person who holds a valid unrevoked certificate or license permitting him to practice in Virginia to practice the school or branch of the healing arts for which he holds such certificate or license except within the scope of the definition of such practice contained in § 54-273.

The provisions in this section shall not be construed to prevent or prohibit any person entitled to practice his profession under any prior law on June twenty-fourth, nineteen hundred forty-four, from continuing such practice within the scope of the definition of his particular school of practice contained herein, but in all other respects the provisions of this chapter shall be applicable; nor shall the provisions of this section be construed to prevent or prohibit any person, residing on the border of a neighboring state or the District of Columbia and entitled to practice his profession under the laws of that state, from practicing within Virginia, provided that in Virginia he does not open an office or appoint places to meet his patients or receive calls; and provided that each practitioner claiming exemption under the provisions of this section shall file with the Board of Medical Examiners in such manner as it prescribes evidence of his right to such exemption. Upon proof of such right to the satisfaction of the Board and payment of three dollars license fee to the Board it shall enter the name of the applicant in a register kept for that purpose and shall issue to the applicant a certificate in evidence of such registration, and the registration and certification shall be renewed annually on payment of the license fee, under conditions prescribed by the Board.

Nothing in this chapter shall prohibit, limit, restrict, or prevent the rendering of any medical or health services by a registered nurse or a licensed practical nurse under the supervision of a duly licensed physician; provided, however, that such services are authorized by rules and regulations jointly promulgated by the Virginia Board of Medical Examiners and the Virginia State Board of Nursing, which Boards shall be jointly responsible for the implementation thereof.

APPENDIX G

House Joint Resolution No. 127

Directing the State Council of Higher Education to develop and recommend training curricula, and an implementation plan for paramedical personnel.

Offered February 21, 1972

Patron — Mr. Pendleton

Referred to the Committee on Education

WHEREAS, the furnishing of necessary health care for all citizens in all areas of the Commonwealth will require more nurses and more medical and dental technicians and assistants; and

WHEREAS, nurses, and medical and dental technicians and assistants, hereinafter referred to as "paramedical personnel," could perform many of the functions which presently only licensed physicians and dentists are permitted by law to perform; and

WHEREAS, plans are under way to eventually permit paramedical personnel to be licensed, or certificated, to perform such functions, thereby affording physicians and dentists the opportunity to care for a larger number of patients; and

WHEREAS, such a plan for providing expanded health care services will require a large number of paramedical personnel; now, therefore, be it

RESOLVED by the House of Delegates, the Senate of Virginia concurring, That the State Council of Higher Education is hereby directed to develop and recommend the curricula and the necessary procedures for implementing educational efforts designed to train such paramedical personnel.

The schools of medicine of the University of Virginia and the Medical College of Virginia, Health Sciences Division of Virginia Commonwealth University, the School of Dentistry of such Medical College, the State Department of Health and other departments and agencies of the State government whose assistance is needed, shall assist the Council in this task.

The Council is encouraged to counsel with the State Department of Health, but shall in no way interpret this directive as being in conflict with, or a duplication of, the House Joint Resolution directing the State Department of Health to develop criteria and recommend legislation relating to paramedical personnel.

The Council shall complete this task and make its report to the Governor and the General Assembly not later than November one, nineteen hundred seventy-three.

APPENDIX H

Physician Time Study by the Medical Society of Virginia in Relationship to Physician's Assistants

On August 15, 1973, an interview was held with Dr. Thomas W. Murrell, Jr., to discuss possible ways in which a Study of physician manpower done by the Medical Society of Virginia might be helpful to the Group of Consultants to the State Health Commissioner on Assistants to Physicians or Dentists.

Doctor Murrell pointed out that the Study was authorized by the House of Delegates of the Medical Society of Virginia in a resolution passed October 15, 1968. This resolution provided for obtaining funds from the Virginia Comprehensive Health Planning Council:

> "to study all aspects of physician manpower in this State with special emphasis to determine what work, if any, now being performed by physicians in patient care would be done by others and the training requirements necessary to provide physician's assistants according to proven need."

As a result of this action, funds were requested and received and the Study was carried on over a period of about two years. Doctor Murrell served as Chairman of the Medical Society of Virginia's committee to supervise the Study; Dr. James C. Respess and Lloyd T. Griffith were also members. The Study was directed by Ivan J. Fahs, Ph. D., of Research Coordinators, St. Paul, Minnesota.

The objectives of the Study were stated as follows:

1. To study patient care activities of physician manpower in the Commonwealth of Virginia.
2. To identify tasks of the physician's patient care activities which can be performed by health manpower other than physicians. (It was this objective of the Study which received emphasis in the Murrell-Leavell interview).
3. If the tasks of (2) above can be identified, to determine the training requirements for non-physician manpower capable of performing such tasks. (Due to the lack of available study time this third objective was not examined in detail).

METHODOLOGY OF THE STUDY

1. A Technical Advisory Group was appointed.

2. The relevant literature was searched and a number of items abstracted.

3. A *mail questionnaire* was developed and field tested.

   Questionnaires were mailed to some 3,200 physicians engaged in patient care, with 1,583 usable responses (49.5%) which is quite good for this kind of study. The mailing represented a total *inventory* rather than a sample; a *specific* calendar day was used to gather data rather than a "typical day"; office activities were studied rather than hospital work; and there was an active follow-up of unreturned questionnaires.

4. Individual interviews of physicians in practice by a general practitioner on the Study staff.

   Twenty-four interviews of about an hour's duration each were made, scattered geographically over the Commonwealth.

   The major objective of these interviews was not the collection of statistical data, but rather to assess the "feel" of the respondents to the mail questionnaire, and to obtain some general perspective.

5. Discussion panels made up of selected representatives of health care professions.

   These panels included registered nurses, licensed practical nurses, hospital administrators and medical students. It was not possible to assemble a panel of physician's assistants.

   A continuing panel of physicians met with each of the groups noted above.

DIVIDING THE WORK OF HEALTH TEAM MEMBERS

An extremely important aspect of the study involved securing data about dividing the work to be done by different members of the health team. A basic administrative concept in such division of work is the *concept of optimal* use. Simply stated, each worker should work at tasks for which he has been specially trained, and that he should work most of his time at the highest level for which his training fits him. Particularly, those trained or educated at the highest level of difficulty and judgement should spend a minimum part of their work time at simpler tasks which might be delegated to less highly trained personnel without impairing the efficiency of the results.

Inventory of Personnel Other Than Physicians Working in Private Physician's Offices ***

	Full Time	Half to Full Time	Less Than Half Time	Total+
Secretary/Receptionist	728	117	38	883
Registered Nurse	440	130	71	641
Clerical Office Aide	418	90	125	633
Medical Assistant (trained by M.D. in whose office he/she works)	368	76	36	480
Bookkeeper	367	59	49	475
Licensed Practical Nurse	240	29	7	276
"Other Medical Assistant"*	197	35	21	253
Medical Technologist	162	29	21	212
Radiologic Technologist	122	17	14	153
PHYSICIAN ASSISTANTS **	28	8	—	36
Pharmacist	14	2	4	20
TOTAL	3,084	592	386	4,062

Key: +Total may be slightly high due to possible duplications in part-time workers.

* "Other Medical Assistant" includes various types of aides not included in other categories.

** Respondent was warned "Limit your response to those who have completed a specific curriculum, i.e., graduates of the program at Duke University."

*** Table above represents numbers reported on the 50% of returned questionnaires.

STUDY OF SELECTED TASKS IN HEALTH CARE DELIVERY

The Advisory Group agreed that 39 tasks might be studied to gain essential information about how the out-of-hospital delivery of health care is currently being carried on in Virginia. In selecting these 39 tasks one objective was to develop a list which would include a broad range of tasks which are fairly well agreed upon in definition and which together provide a fairly good cross section of health care. Effort was made to include some tasks which a high proportion of those being studied would probably agree should be carried on only by physicians; some activities which are clearly sufficiently simple and/or routinized so that the high level training of physicians would rarely be needed except in a supervisory capacity; and a third level of tasks which falls between the other two, and which it might not be well to delegate. It was recognized that hard and fast rules of dividing the work into these three major categories would have to vary from place to place and from time to time, depending on environmental factors.

Levels of Tasks in Health Care

According to the degree to which physicians were personally involved, three levels (or categories) of tasks were defined on the basis of responses to the mail questionnaire. The following questions were asked about each of the 39 tasks:

	Level "A"	Level "B"	Level "C"
Do you personally perform this task? (App. B Data Item 4-8)	80% or more	53% — 77%	3% — 52%
Should this task be performed ONLY by physicians? "Yes" answer shown by percentage.	35%	27%	4%
Who does this task for you NOW? What types of health personnel other than M.D.? (Page 94)	(See detailed listing on following pages)		
Who do you think is capable of performing this task?	(See detailed listing on following pages)		

Comments Concerning Each Level

Level "A" Tasks

It is in Level "A" that physicians come nearest to having a sort of "monopoly" at the present time, according to questionnaire respondents. However, as shown by replies to the fourth question listed immediately above, the physician respondents selected the physician's assistant as the professional group of choice to become delegated to perform a number of tasks which are now reserved for the physician. This is both significant and surprising. Surprising because physicians in Virginia have up to now had few opportunities to work closely with physician assistants who have been trained in a curriculum such as that conducted at Duke University in recent years.

Level "B" Tasks

This is a sort of "middle area" between Level "A" and Level "C"

insofar as the work of the physician, the registered nurse and the physician's assistant are concerned.

Level "C" Tasks

At this level, the physician's personal work role diminishes further, with tasks of technologists and secretarial-clerical jobs playing larger roles.

SELECTED TASKS IN HEALTH CARE

WHO PERFORMS THEM NOW? TO WHOM MIGHT THEY BE DELEGATED IN THE FUTURE?

LEVEL "A"

Task No.	Task	Who Performs the Task Now?		
		Percentage of Physicians Now Performing It	Who Does This Task for You Now?	What type of worker might be delegated to perform this Task in the Future?
1	Taking Medical Histories	91%	R.N.	P.A.*
2	Interviewing patients with chronic disease in office	90%	——	P.A.
3	Writing Hospital orders	89%	Others	R.N.**
4	Dictating discharge notes	89%	Others	P.A.
5	Personal counseling	89%	——	P.A. — R.N.
6	Originating prescriptions	88%	——	P.A. — R.N.
7	Suturing minor lacerations	85%	Others	P.A.
8	Prescribing simple remedies (e.g. aspirin, laxatives)	85%	R.N.	R.N.
9	General physical examinations — partial	81%	——	P.A.
10	Injecting intravenous medications	81%	R.N.	R.N.
11	Dictating operative reports	81%	Others	P.A.
12	Diagnosing heart disease *	80%	——	P.A.
13	Calling prescriptions in	70%	R.N. — Secy.	R.N.

KEY: PA Physician's Assistant — of the type being trained at Duke University
RN Registered Nurse
Secy. Secretary
M. Tech. — Medical Technologist
Rad. Tech. — Radiographic Technologist
—— Numbers insufficient to tabulate
*It is surprising that some respondents seemed willing to have P.A.'s diagnose heart disease.

SELECTED TASKS IN HEALTH CARE

WHO PERFORMS THEM NOW? TO WHOM MIGHT THEY BE DELEGATED IN THE FUTURE?

LEVEL "B"

Task No.	Task	Who Performs the Task Now?		
		Percentage of Physicians Now Performing It	Who Does This Task for You Now?	What Type of Worker Might be Delegated to Perform this Task in the Future?
14	Well-baby examinations	79%	—	P.A.
15	General physical examinations — complete	79%	—	P.A.
16	Diagnosing adult pharyngitis	77%	—	P.A.
17	Changing dressings	76%	R.N. — L.P.N	R.N.
18	Doing insurance, pre-employment, pre-camp physicals	74%	—	P.A.
19	Making home visit to patients with chronic disease	74%	P.N.	P.A.
20	Applying casts	72%	Others	P.A.
21	Pre-natal examinations	72%	—	R.N.
22	Diagnosing lymphomas *	71%	Others	P.A.
23	Starting intravenous fluids	63%	R.N.	R.N.
24	Inserting naso-gastric tubes	60%	R.N. — L.P.N.	R.N.
25	Injecting intramuscular medications	59%	R.N. — L.P.N.	R.N.
26	Removing casts	55%	R.N. — Others	P.A.

*It is surprising that some respondents seemed willing to have P.A.'s diagnose lymphomas.

SELECTED TASKS IN HEALTH CARE

WHO PERFORMS THEM NOW? TO WHOM MIGHT THEY BE DELEGATED IN THE FUTURE?

LEVEL "C"

Task No.	Task	Who Performs the Task Now?		
		Percentage of Physicians Now Performing It	Who Does This Task for You Now?	What Type of Worker Might be Delegated to Perform this Task in the Future?
27	Changing male catheters	50%	Other	P.A.
28	Answering the telephone	45%	Secy.	Secy.
29	Deciding who should be seeing next triage	41%	Secy.-R.N.	R.N.
30	Giving oral medications	37%	R.N.-L.P.N.	R.N.
31	Doing routine urinalysis	36%	Med. Tech.-R.N.	Med. Tech.
32	Testing visual fields with charts	36%	R.N.-Med. Asst.	R.N.
33	Making out third party payment forms	29%	Secy.	Secy.
34	Taking electrocardiograms	25%	R.N.-Med. Tech.	R.N.
35	Taking x-rays	22%	Rad. Tech.	Rad. Tech.
36	Making appointments	21%	Secy.-R.N.	Secy.
37	Pulling records	18%	Secy.-Med. Asst.	Others
38	Doing white counts	12%	Med. Tech.	Med. Tech.
39	Doing Sedimentation rates	5%	Med. Tech.	Med. Tech.

Future Roles of the Physician's Assistant in Office Practice

The mail questionnaire replies were not designed to provide much statistical data about the possible utilization of physician's assistants. However, some ideas that may be useful to the Group of Consultants to the State Health Commissioner on Assistants to Physicians or to Dentists, are as follows:

1. Physicians in Virginia are, in general, *unfamiliar with the training and capabilities* of the rather recent group that is commonly known as physician's assistants.

   In the Medical Society of Virginia manpower study, the inventory of workers in physician's offices revealed only 28 full-time and 8 part-time people who could be called physician's assistants under the fairly rigid definition given.

2. The Medical Society Study did not differentiate the nurse practitioner from other types of physician's assistant, such as those who have received training and experience in the Armed Forces. The statement is heard that most Virginia physicians would be more comfortable in working with physician's assistants who are professionally registered nurses who have taken special training to equip them to take greater responsibilities in patient care, than the physicians would be in working with ex-medical corpsmen. There seems to be little data to support this idea. Nevertheless, the idea seems to be present and it must be taken into account. (See Appendix I).

3. The Study demonstrated that physicians in practice are willing to look at the various tasks which need to be performed in health care and to find out which of these tasks may properly be delegated to non-physicians working under medical supervision.

APPENDIX I

Division of Task Responsibility

A study of the division of task responsibilities was made in 1971 in 10 counties of the Charlottesville area by Dr. Regina McCormack of the University of Virginia Medical School in connection with training programs for nurse practitioners. This study consisted of approximately one hundred internists, pediatricians and family practitioners.

Some results of the study are shown in the tabulations which follow.

Physicians definitely do want paramedical practitioners, and only one-third of the physicians studied have a negative attitude toward the concept.

PHYSICIANS' RECEPTIVITY TO PRIMARY CARE NURSE CONCEPT

by specialty

	GENERALISTS	PEDIATRICIANS	INTERNISTS	TOTAL
POSITIVE	51%	55%	44%	50%
NEGATIVE	36%	36%	52%	39%
UNCERTAIN	13%	9%	4%	11%

An important question is who should be trained as the physician assistant. It deserves great emphasis that the male ex-hospital corpsmen are *not* desired by most practitioners, as shown in this table:

DOCTORS' PREFERENCE FOR PRIMARY CARE NURSE VS CORPSMEN

by specialty

SPECIALTY	PRIMARY CARE NURSE	PHYSICIANS ASSISTANT (CORPSMAN)
INTERNISTS	78%	22%
PEDIATRICIANS	100%	0
GENERALISTS	89%	11%
TOTAL	87%	13%

FREQUENCY OF OFFICE ASSISTANT OR NURSES ASSUMING TRADITIONAL PARAMEDICAL DUTIES, BY SPECIALTY

	GENER-ALISTS	PEDI-ATRICIANS	IN-TERNISTS	ALL PHYSI-CIANS
IMMUNIZATIONS AND INJECTIONS	67%	45%	83%	68%
DRESSING CHANGES, REMOVING SUTURES, AND OTHER PRO-CEDURES	77%	69%	58%	71%
ROUTINE OBSERVATION AND VITAL SIGNS	67%	78%	65%	67%
ROUTINE LABORATORY WORK	77%	91%	92%	82%

FREQUENCY OF OTHER RESPONSIBILITIES ASSUMED OFFICE ASSISTANT OR NURSE, BY SPECIALTY

	GENER-ALISTS	PEDI-ATRICIANS	IN-TERNISTS	ALL PHYSI-CIANS
SCREEN PATIENTS VIA PHONE	83%	73%	87%	83%
MEDICAL ADVICE OVER PHONE	42%	73%	35%	70%
SEE PATIENTS WITHOUT M.D.	45%	36%	48%	45%

FREQUENCY OF OFFICE ASSISTANT OR NURSES ASSUMING TRADITIONAL PHYSICIAN ACTIVITIES, BY SPECIALTY

	GENER-ALISTS	PEDI-ATRICIANS	IN-TERNISTS	TOTAL
WELL BABY CARE	33%	55%	——	36%
PRENATAL CARE	31%	——	——	31%
FAMILY PLANNING ADVICE	22%	——	19%	21%
FOLLOWING PATIENTS WITH CHRONIC ILLNESS	25%	36%	22%	27%
FOLLOWING NEUROTIC PATIENTS	43%	73%	61%	51%
DISPENSING MEDICATIONS	18%	27%	5%	17%

As results from the survey became available, the University of Virginia began training adult and family nurse practitioners. Because of the survey data which has been summarized above, nurses were trained to perform procedures usually performed by physicians in the medical clinics at the University Hospital. In 1971, Dr. Regina McCormack began a formal four-month training course in adult primary care. Five registered nurses participated in this program and six more were trained in 1972. The results of this program have been encouraging. Three of the graduates are presently working with private physicians. Four are working in the UVA medical clinic with considerable success. One is working in an OEO clinic. Two have been successful in developing programs at other universities.

Though our graduates have done well as nurse practitioners wherever they have been employed, only a few have been working in rural Virginia where we believe their impact could be the greatest. Our interest in this matter has closely paralleled the interest of the Regional Medical Program. In cooperation with that group and in cooperation with the Virginia Academy of Family Practice and the Norfolk General Hospital, plans have been developed for the next class of 10 students to be trained in adult care, pediatrics, and obstetrics and gynecology. To accommodate this curriculum, the course has been expanded to five months and efforts were made to recruit students who are already active as nurses in rural Virginia. As a result of this recruiting effort, our next class will have five students who are from the western part of Virginia and who will return to practice in that area.

Evaluation of the effectiveness of training nurses in family practice is essential. Two possibilities have been suggested. (1) A nurse might work with a physician in his office performing routine primary care tasks such as pre- and post-natal checks, treatment of stable disease such as hypertension and diabetes, and baby care. (2) A nurse might be most valuable if she were to work with a physician in a site away from the office, either making home visits or seeing stable patients who live in locations relatively distant from the physician's practice. We feel that the

Office of Comprehensive Health Planning should carefully evaluate each of these alternatives in model settings so that physicians in practice may use this experience to make judgements about how to employ nurse practitioners in their practice well in advance of the time that they have to commit themselves to an extra salaried employee. If funding were available, we would propose to study nurses as they function in each of these two settings. The economics of her practice, the types of patients seen, the type of authority most effectively delegated, and patient reactions to her presence would be studied in each case.

APPENDIX J

Present Status of Training of Physician's Assistants in Virginia

The data below were supplied in September, 1973, by Dr. Barbara Brodie of the University of Virginia School of Nursing; Drs. William M. O'Brien and Robert A. Reid of the University of Virginia School of Medicine; and Drs. Fitzhugh Mayo and Leon Bloodworth of the Medical College of Virginia, Virginia Commonwealth University.

From these data it is evident that there are 33 students enrolled at present in training programs for physician's assistants in Virginia, all of these are for nurse practitioners. There are none at present for former medical corpsmen. In the near future it is expected that there will be an annual capacity for 45-50 trainees.

	Graduates of training program to date	Students enrolled during the current year	Student capacity in the near future
University of Virginia			
Program for nurse practitioner			
in pediatrics	63	23	25
in adult medicine	13	0	10-30
in family practice	0	10	10-30
Medical College of Virginia			
Program for nurse practitioner			
in family health care	0	0	10-20
	76	33	45-50

Note: The family nurse practitioner training program at the University of Virginia is conducted jointly with the Norfolk General Hospital.