

REPORT OF THE LEGISLATIVE RESEARCH COMMISSION
TO THE 1971 GENERAL ASSEMBLY

Utilization of Medical Facilities at the
Eastern North Carolina Sanatorium

Raleigh, North Carolina

November 13, 1970

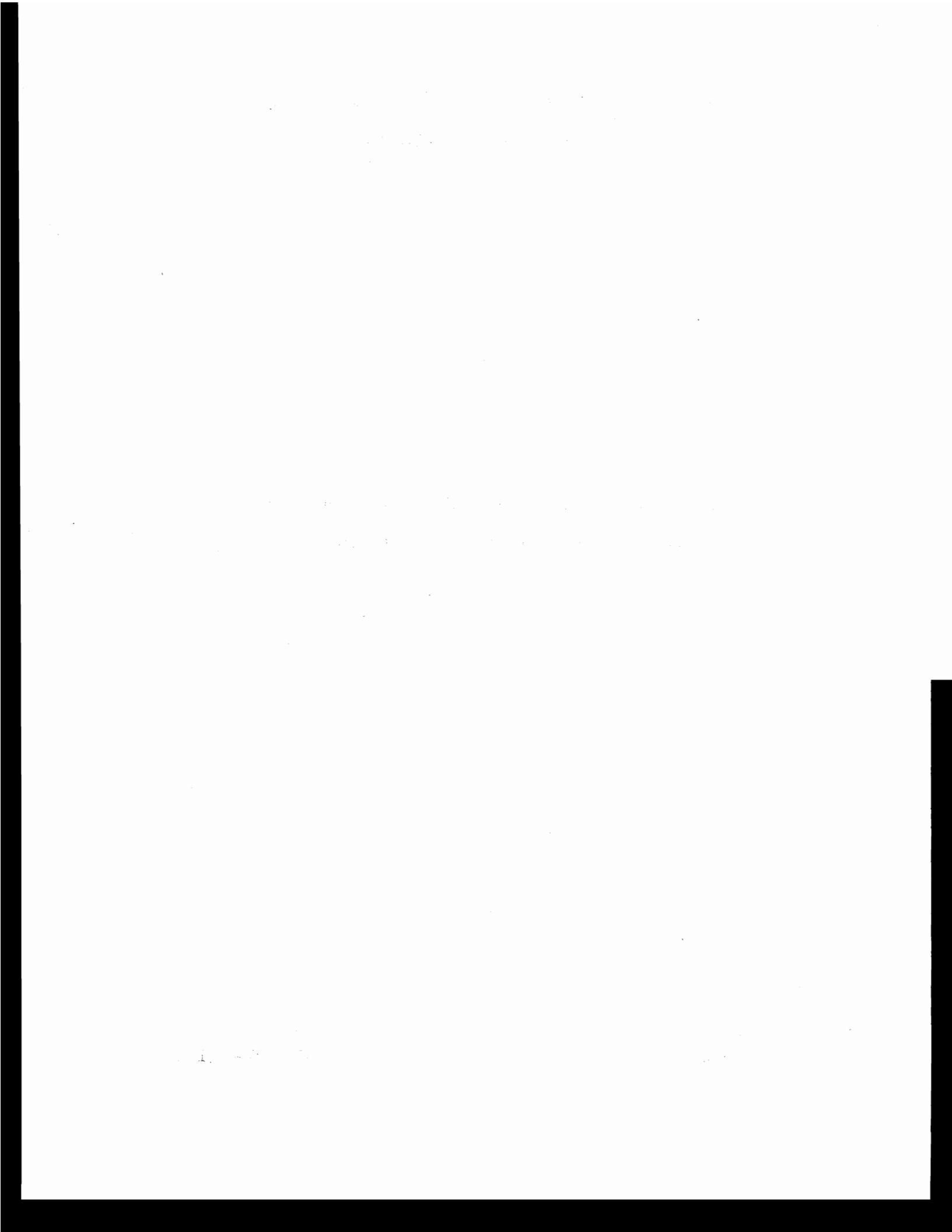


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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities.

2. It is essential to ensure that all data is entered correctly and consistently to avoid any discrepancies or errors.

3. Regular audits and reviews should be conducted to verify the accuracy and integrity of the information.

4. The use of standardized formats and procedures will help in organizing and presenting the data in a clear and concise manner.

5. It is also important to establish a system for updating and maintaining the records over time.

6. The final part of the document provides a summary of the key points and offers some recommendations for further improvement.

7. Overall, the goal is to create a reliable and efficient system for managing and reporting on the organization's activities.

8. The implementation of these measures will ensure that the organization is able to meet its reporting requirements and maintain the highest standards of accuracy.

9. The document concludes by emphasizing the need for ongoing communication and collaboration between all stakeholders involved in the process.

10. Finally, it is hoped that these guidelines will serve as a useful reference for anyone responsible for managing the organization's records.

REPORT BY THE LEGISLATIVE RESEARCH COMMISSION
TO THE 1971 GENERAL ASSEMBLY

Utilization of Medical Facilities at the
Eastern North Carolina Sanatorium

Introduction

The Legislative Research Commission was directed by Resolution 853, adopted June 30, 1969,

"to investigate and report upon the feasibility of utilizing any unused medical facilities at the Eastern North Carolina Sanatorium for the purpose of supplying Eastern North Carolina's unmet medical educational and health needs."

The Resolution authorized the Commission to consult Sanatorium System officials and to utilize the professional services available at the University of North Carolina. The information and recommendations obtained from this study were to be made available to any other Study Commission that may be evaluating the status of the Sanatorium System. Concurrent with our study, Resolution 108 authorized the creation of a Commission to study and report on the operation and needs of the North Carolina Schools for the Blind and Deaf, Sanatorium System and related institutions of declining use. Governor Robert W. Scott appointed Thomas I. Storrs, Chairman. Accordingly, a close relationship with this Commission has been maintained and information gathered in this study has been made available to them. That Study Commission has been informed of our final recommendations.

On February 27, 1970, the Commission's Health Committee called a public hearing. The following persons made presentations:

Mr. Carroll Mann, State Property Control Officer

Mr. Elmer Johnson, Assistant State Planning Officer

Dr. William Harold Gentry, Medical Director of Sanatorium System

Mr. Eugene Keener, State Supervisor of Program Division of Vocational Rehabilitation, Department of Public Instruction

Dr. Eugene Hargrove, Commissioner, Department of Mental Health

Mr. James Monroe, Executive Director, Central Coastal Plain Health Planning Council

Mr. Rufus Swain, Dean of Instruction, Wilson County Technical Institute

Dr. Robert Smith, Acting Director of the Division of Community Health, University of North Carolina School of Medicine

Dr. W. R. Berryhill, Former Dean of the Medical School, University of North Carolina

Background

In the United States at the turn of the century tuberculosis was the leading cause of death and incapacitated many more thousands, but there has been a marked improvement in North Carolina as well as in the rest of the country. Increased surveillance and more effective treatment has reduced the stay of patients in the North Carolina Sanatorium System. As a result, there now exists certain unused patient care space.

The trend toward under-utilization of tuberculosis hospital facilities is most notable at the Eastern North Carolina Sanatorium in Wilson. This institution furnishes tuberculosis and chest-related illness care for thirty-two counties in Eastern North Carolina, which is an area of 14,675 square miles with a population well over a million.

The unused space consists of hospital-type rooms totaling 160 beds and some storage-type spaces. The spaces containing fifty-six

of these beds are of the solarium type with two rooms opening to a solarium porch. The spaces containing one hundred and four beds are of the type that could be used for acute hospital care. The unused space is in two separate wings of the institutional plant separated by administrative offices and related spaces. These spaces are being maintained as a part of the routine housekeeping and maintenance program of the hospital.

Recommendations

(1) Because of the scarcity of health services in Eastern North Carolina, the unused bed space should be utilized to help alleviate some of the identified medical and health care problems of this area.

(2) The School of Medicine at the University of North Carolina should extend its patient care and educational functions in conjunction with Eastern North Carolina health professionals by developing at the Eastern North Carolina Sanatorium a center containing a variety of clinical specialty services as indicated by the medical needs of the area. The details of the development of this extension center should be coordinated with the plans and recommendations of the Study Commission on Schools for the Blind and Deaf, Sanatorium System and Related Institutions of Declining Use.

Appendix A

"Summary report of Unused Physical Facilities, Eastern
North Carolina Sanatorium, Wilson, N.C.," by Carroll L. Mann,
Jr., State Property Control and Construction Officer

SUMMARY REPORT OF UNUSED PHYSICAL FACILITIES

EASTERN NORTH CAROLINA SANATORIUM, WILSON, NORTH CAROLINA

Carroll L. Mann, Jr., State Property Control and Construction Officer

General:

As a result of marked improvement in recent years, in more effective treatment and reduced stay of patients, there now exists certain unused patient care space and facilities at the Eastern North Carolina Sanatorium in Wilson. This unused space consists of hospital type rooms, totaling 160 beds, in two separate wings of a building, separated by the institutions's currently occupied administrative and related offices between. There follows a brief description and comments relating to these facilities.

South Wing - Physical Description

The South Wing is a two-story concrete frame masonry building, totaling approximately 17,400 sq. ft. floor area (8,700 sq. ft. per floor). It was constructed in 1941-42, has been well maintained, and a recent general inspection indicates that it is currently in very good to excellent condition. Typical space arrangement consists of a central corridor with rooms on each side, those on one side opening onto an enclosed porch. Room sizes are typically 12 ft. x 14 ft. and 10 ft. x 14 ft. The principal patients rooms are arranged in pairs, separated by a common bath, with both rooms opening onto a common enclosed porch. Vertical access between floors in this wing proper is by stairs. Elevator access is available only in the Administrative Unit, which is joined to but separates the two wings.

The structure is of load bearing exterior masonry walls, interior reinforced concrete columns and floor slabs, with steel trusses supporting the roof. A line of columns and beams is located along each side of the central corridor. Interior partitions are non-load bearing.

The capacity of this South Wing is 56 beds. Hospital type beds are in place in the rooms.

Spruill Wing - Physical Description

The Spruill Building, or Wing, joins the Administrative Unit on its north side. This wing is three stories in height, consisting of ground floor partially below grade and two floors above. The total floor area of this wing is approximately 40,000 sq. ft. (3 floors at 13,320 sq. ft. each). This wing constructed in 1949-50, is of load bearing exterior masonry walls, with interior reinforced concrete columns, beams, and floor slabs and steel trusses supporting the roof. A line of columns and beams is located along each side of the central corridor. Interior partitions are non-load bearing.

Patients rooms, on each side of the center corridor, are approximately 11/2 feet in depth, but vary in width from 10 ft. to 21 ft., as single, double, three, and four-bed rooms. Four-bed ward rooms are served in pairs by a common bath between. The building has been well maintained, and is currently in very good to excellent condition. In addition to stairs there is a service elevator located in the central portion of this wing.

The capacity of the Spruill Wing is 104 beds. These beds are in place in the rooms.

Current Uses

The two-story South Wing is currently partially in use. The entire first floor is under lease to the Wilson County Mental Health Department. This two-year lease expires in February 1971. The Wilson County Mental Health function is scheduled to move into new quarters, currently under construction at the Wilson Memorial Hospital.

The second floor of the South Wing is approximately 75% vacant at the present time. The Sanatorium is using a small amount of space on this floor for Dentists' offices, laboratory, and a sewing program in Vocational Rehabilitation.

The three-story Spruill Wing is also partially in use at the present time by the Sanatorium. Approximately one-half of the Ground Floor is finished space, which is fully operational as an ongoing Out-Patient Clinic and Occupational Therapy activity necessary to the Sanatorium. The remainder of the Ground Floor is an open Storage space, (concrete floor but otherwise unfinished), which is fully utilized at the present by the Sanatorium.

The first and second floors of the Spruill Wing are unused at the present time.

Administrative Unit

As noted heretofore the South Wing and Spruill Wing are joined to but separated by the three-story Administrative Unit. This Unit contains the Maintenance Shops, Engineer's Office, Drug Room, and Morgue on the Ground Floor; the Lobby, Business and Admitting Offices, Post Office, Administrator's Office and Medical Library on the First Floor; and the Laboratory and part of X-Ray facilities on the Second Floor. This, of course, is the nerve center of the Eastern Carolina Sanatorium, and the operations in this Administrative Unit need to remain as at present.

Comments on Unused Space

It is, of course, quite obvious that the most effective and efficient use of the vacant space in the South Wing and the Spruill Wing is for the bed patients, which is the purpose for which the facilities were designed.

In the event that a changed use required extensive remodeling and rearrangement the interior partitions could be removed in whole or in part, inasmuch as these partitions are non-load bearing. However, the double line of concrete columns running lengthwise along the center portion of each floor must remain. Also the bath facilities between pairs of rooms would present a significant problem if major rearrangements of space were to be undertaken.

If the South Wing were to be operated independently from the Administrative Unit it would be necessary to construct and install an elevator, for proper service to the second floor.

In summation the design, construction, and functional arrangement of the spaces in these two wings is rather rigid in nature, and does not lend itself to significant change without appreciable difficulty. Furthermore the separation of the two wings by the Administrative Unit creates somewhat of a problem, and tends to limit the opportunity for changed use for these spaces.

CIM:mb

Appendix B

Proposal by the School of Medicine
University of North Carolina



THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
SCHOOL OF MEDICINE
Division of Education and Research in Community Medical Care

February 26, 1970

Legislative Research Commission
State of North Carolina

Att'n: The Hon. Kenneth C. Royall, Jr.
Chairman, Health Committee

Gentlemen:

The proposal contained in this letter was developed by the University of North Carolina in response to the joint resolution of the North Carolina State Legislature authorizing and directing the Legislative Research Commission to investigate and report upon the feasibility of utilizing any unused medical facilities at the Eastern North Carolina Sanatorium for the purpose of meeting Eastern North Carolina's medical educational, and health needs. As stated in Section 1 of Resolution 107 in H.J.R. 853, the Research Commission was authorized and directed to conduct an in-depth study of the problem and in doing so to utilize the professional services available at the University of North Carolina.

During the past year faculty members of the University's School of Medicine, in consultation with representatives of other parts of the University, representatives of the State Sanatorium System and from the Eastern North Carolina Sanatorium in particular, and physicians from the eastern part of the state, have undertaken such a study. A series of meetings has been held involving the groups and individuals mentioned, and visits have been made to view the available facilities at the Sanatorium. The outcome of this study has culminated in recommendations which are now respectfully submitted for consideration by the Health Committee of the Legislative Research Commission.

The following considerations have been uppermost in mind in preparing these submissions:

1. The University has skills and expertise in certain clinical areas which are sorely needed in Eastern North Carolina.
2. The location of certain clinical specialist services in a single center can provide much needed services regionally, reaching a large population and thus providing a maximum return for resources expended.

3. The establishment of a community-based University center would provide the area with the opportunity to develop educational programs for local physicians and, at the same time, the opportunity to expose students and house staff to clinical practice at the community level.

After due consideration the proposing group recommends to the Health Committee of the Research Commission that the School of Medicine of the University of North Carolina develop a series of clinical specialty units at the Eastern North Carolina Sanatorium which are designed to serve major health needs in the eastern part of the state and to increase the teaching base of the School of Medicine. The clinical specialties to be included are:-

- A. Radiotherapy
- B. Renal dialysis
- C. Neurology
- D. Rehabilitation
- E. Pediatrics
- F. Otolaryngology

Radiotherapy

At present there are two cobalt units active in the eastern part of North Carolina, in Kinston and in Wilmington. The proposed regional radiotherapy center in Wilson could serve an estimated population of 665,000 in the central and northeastern areas of Eastern North Carolina. About two thousand (2,000) new cases of cancer can be expected in this sized population each year, and at least half of such patients will require radiation therapy alone or in conjunction with surgery, and more will require radiation at some stage of the disease. The proposed center at Wilson in conjunction with the radiotherapy center at Chapel Hill is designed to provide complete radiotherapy services to this number of cases. This service would be of University-Medical Center quality and would eliminate the need to reduplicate the investment of additional hundreds of thousands of dollars and expensive personnel.

Also, medical students, house staff, and faculty would be brought into the community where they would interact with the

physicians of the area to the mutual educational advantage of all involved, this interaction with the community resulting in an increased likelihood of recruitment of physicians to the eastern part of the state.

A detailed analysis is given in Appendix A of staffing, equipment, space, and cost projected over a three-year period. Forty beds and 5,500 square feet of space will be required, and when fully developed four hundred cases, or more, would be treated each year. The initial cost would be \$393,000 in the first two years and \$194,000 in the third year, inclusive of personnel. The value of the Chapel Hill resources to the program in the first year is calculated at \$300,000 to \$350,000 and \$50,000 to \$60,000 in succeeding years.

B. Renal dialysis

The need for community dialysis centers in North Carolina has been documented by the Kidney Disease Planning Board sponsored by the State Board of Health. The proposed center for the Sanatorium follows the guidelines established by this planning body and is fully detailed in Appendix B. Such a center would provide a much needed service for many patients, both young and old, who would otherwise die. It would also provide:-

1. Education and counseling for local practitioners
2. Training for physicians and paramedical personnel such as nurses, artificial kidney technicians, and laboratory personnel
3. Training for home dialysis patients
4. Center-based dialysis for patients who are unsuited for either home dialysis or transplantation
5. A "holding" service for patients awaiting transplantation

The ten-bed center which is envisaged could support thirty to forty patients. A well-trained physician and nursing staff is essential for such an operation, and in addition to bed space a room is required for teaching patients to dialyse themselves and space is needed for equipment storage. A total budget of \$370,000 for the first year and \$325,000 for subsequent years is estimated.

C. Neurologic treatment center

There are many patients in Eastern North Carolina for whom there are additional needs for neurologic care, and many of these needs can only be partially met at the present time in the community hospitals and clinics in this area.

The University of North Carolina's Division of Neurology has supplied staff members for a neurology clinic which has been run regularly for the past six years at Greenville. The vast majority of patients seen, who are referred by physicians from surrounding counties, have not previously had neurologic evaluation at any other institution.

The proposed center would provide treatment and evaluation of patients with cerebrovascular disease, seizures, muscular disorders, Parkinsonism, etc. The program would be developed in conjunction with local physicians who may be able to cooperate in providing these services. This would also provide a teaching program in which it is expected that both medical students and residents would participate.

Twenty beds are required with out-patient facilities, including facilities for physical therapy and occupational therapy, as well as a laboratory for electroencephalography. The details are given in Appendix C.

D. Rehabilitation

The specialist units already described lend themselves ideally to the development of a rehabilitation service.

A service for stroke rehabilitation, various degenerative neurological conditions, and adult cerebral palsy could be developed with the emphasis on physical restoration by means of physical and occupational therapy, training in self-care techniques, ambulation, etc., and on psychological and social rehabilitation and adjustment to handicapping conditions.

The role of rehabilitation in renal dialysis is important and has already been referred to for patients on chronic dialysis at home awaiting transplantation.

Patients treated with radiotherapy and/or surgery frequently require support of a rehabilitative nature to help them function at an optimal level and to adjust to the problems of their disability.

No full details have yet been developed for this service which would require 20-30 beds to be effective. Such a service would be developed in conjunction with the U. N. C. School of Medicine, Division of Rehabilitation, and in association with other rehabilitative services which might develop in the region.

E. Otolaryngology

The close proximity of the Eastern Carolina School for the Deaf and the requests from local practitioners to the University for support in Otolaryngology indicate need and opportunities in this field in Wilson.

Following discussions with the local practitioners, the Division of Otolaryngology at the School of Medicine proposes that an E.N.T. service be developed in Wilson which would make use of ten beds at the Eastern Carolina Sanatorium.

It is proposed that patients from the local area be admitted to these beds and returned there after operation by University staff at the excellent surgical facilities of the Wilson Memorial Hospital. Such a service would involve the local practitioners who would admit their patients and follow them post-operatively.

The Division of Otolaryngology has much experience in community clinical activity of this type and at present provides E.N.T. services in their clinics in Morganton, Tarboro, Wake County Hospital, Dorothea Dix Hospital, and in the Central Prison in Raleigh.

The Division would provide an audiology screening service to the School for the Deaf along the lines it currently provides for the Western Carolina School for the Deaf. Pupils with remediable hearing defects have been discovered there by audiological screening.

The mobility of the E.N.T. Division at U.N.C. is made possible by the University air transportation service which also makes it possible for the surgeons and their staff to transport their own equipment when necessary.

The services provided have not been costed in any detail. From the experience gained from the clinic activities mentioned, it has been calculated that the overall E.N.T. service to the area and the screening of all pupils at the School for the Deaf would cost approximately \$20,000 per annum.

February 25, 1970

F. Pediatrics

At this stage there are no concrete proposals for the development of a pediatric unit at Eastern North Carolina Sanatorium. However, because ten per cent of all the patients treated in the proposed units would be in the pediatric age range (0-15 years), specialist pediatric services would be necessary. It is proposed that these would be provided by the Department of Pediatrics of the School of Medicine. In due course it is hoped that a pediatric unit would be established designed particularly to meet the problems of the region.

These proposals represent prospects for the University's future involvement at the Eastern North Carolina Sanatorium at Wilson, and on behalf of the University and its School of Medicine I wish to express our gratitude for having this opportunity for making our ideas known.

Respectfully yours,

Robert Smith.

Robert Smith, M. D.
Acting Director

RS:nlv

Appendix C

Materials on File with the
Legislative Research Commission

Materials on File with the
Legislative Research Commission

- (1) "Some Observations on the Use of Facilities at the Eastern North Carolina Tuberculosis Sanatorium at Wilson", by Elmer Johnson.
- (2) Letter from Edgar A. Beddingfield, Jr., President, Medical Society of the State of North Carolina.
- (3) Chart on Eastern North Carolina Sanatorium Occupancy 1965-1971.
- (4) Remarks of Eugene R. Keenen, Supervisor of Planning Division of Vocational Rehabilitation.
- (5) "Information and Recommendations to be Considered for Utilization of Unused Medical Facilities at Eastern North Carolina Sanatorium", submitted by Central Coastal Plain Health Planning Council.
- (6) Remarks of Rufus S. Swain, Dean of Instruction, Wilson County Technical Institute.

Appendix D

Resolution Directing the Study

1950

NORTH CAROLINA
GENERAL ASSEMBLY
1969 SESSION

RATIFIED RESOLUTION

RESOLUTION 107

HOUSE JOINT RESOLUTION 853

A JOINT RESOLUTION AUTHORIZING AND DIRECTING THE LEGISLATIVE RESEARCH COMMISSION TO INVESTIGATE AND REPORT UPON THE FEASIBILITY OF UTILIZING ANY UNUSED MEDICAL FACILITIES AT THE EASTERN NORTH CAROLINA SANITCRIMUM FOR THE PURPCSE OF SUPPLYING EASTERN NORTH CAROLINA'S UNMET MEDICAL EDUCATIONAL, AND HEALTH NEEDS.

WHEREAS, it has always been considered to be in the best interest of a State to conserve the health of its citizenry just as it conserves any other natural resource; and

WHEREAS, the State of North Carolina manifests its concern for its citizens' health by maintaining constant vigilance over matters pertaining to the populaces' health by means of research, by means of the establishment and prudent use of medical facilities, and by means of retaining competent personnel to implement necessary health programs; and

WHEREAS, the Legislative Research Commission has heretofore studied and made recommendations on public health by recommending that support should be given to the development of medical school affiliations with community hospitals, and hence medical school extension into community medical care; and

WHEREAS, there now exists in eastern North Carolina certain identifiable unmet medical educational, and health needs;

WHEREAS, there now exists approximately one hundred and sixty (160) modern unused bed spaces at the eastern North Carolina Sanatorium; and

WHEREAS, this Sanatorium, is located on a large and easily accessible campus, adjoining a major north-south, east-west highway;

Now, therefore, be it Resolved by the House of Representatives, the Senate concurring:

Section 1. The Legislative Research Commission is hereby authorized and directed to conduct an in-depth study about the feasibility of utilizing the unused medical facilities at eastern North Carolina Sanatorium for the purpose of providing eastern North Carolina's unmet medical, educational, and health needs. In making this study, the Commission shall consult with Sanatorium officials and utilize the professional services available at the University of North Carolina, including but not limited to the Division of Health Affairs. All information and recommendations made hereunder shall be made available to any other Study Commission that may be studying and evaluating the status of the Sanatorium system.

Sec. 2. The Legislative Research Commission shall report its findings, recommendations, and propose all legislation it deems necessary to implement its findings and recommendations, to the 1971 General Assembly.

Sec. 3. This Resolution shall become effective upon its ratification.

In the General Assembly read three times and ratified,
this the 30th day of June, 1969.

H. P. TAYLOR, JR.

H. P. Taylor, Jr.
President of the Senate.

EARL W. VAUGHN

Earl W. Vaughn
Speaker of the House of Representatives.

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REPORT OF THE LEGISLATIVE RESEARCH COMMISSION
TO THE 1971 GENERAL ASSEMBLY

Feasibility and Advisability of
Licensing Commercial Donor Blood Banks
and Personnel Employed Therein

Raleigh, North Carolina

November 13, 1970

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Appendix B--Recommendations by Ad Hoc Committee on Commercial Donor Blood Bank Operations, chaired by Jacob Koomen, M.D., State Health Director

Appendix C--Materials on File with the Legislative Research Commission

Appendix D--A Joint Resolution directing the Legislative Research Commission to study the question of the Licensing of Certain Clinical Laboratories

REPORT OF THE LEGISLATIVE RESEARCH COMMISSION
TO THE 1971 GENERAL ASSEMBLY

Licensing of Commercial Donor Blood
Banks and Personnel Employed Therein

Introduction

Since the subject of this Resolution was of a highly technical nature, the Committee on Health called a public hearing March 27, 1970, to gain knowledge and understanding generally about blood banking and specifically about commercial blood banking. The following persons made presentations:

1. R. D. Langdell, M.C., Professor of Pathology, Memorial Hospital, Chapel Hill, and representative of the American Association of Blood Banks.
2. Inez Elrod, M.C., Chief of Red Cross Blood Banks for North Carolina.
3. Miss Marue Summerlin, North Carolina Society of Medical Technologists.
4. Charles F. Carroll, Jr., President, North Carolina Chapter of the National Society of Clinical Pathologists.
5. Lucille W. Hutaff, M.D., Professor of Preventive Medicine, Bowman Gray School of Medicine.
6. Edgar T. Beddingfield, M.D., President of the State Medical Society.
7. Lynn G. Maddry, Ph.D., Director, Laboratory Division, State Board of Health.
8. R. A. Groat, M.D., Ph.D., Pathologist.
9. William F. Henderson, Executive Secretary, Medical Care Commission.
10. Jacob Koomen, M.D., Director, State Board of Health.
11. Sidney Eagles, Assistant Attorney General.

Background

As medical care advances, there is a tremendous and increasing demand for blood for transfusions. Since there is no way to manu-

facture artificial blood, it is necessary for healthy people to supply the blood that is needed. An adequate supply of carefully collected, carefully stored, and carefully regulated whole blood is an absolute necessity to modern medical practice. To meet the need for blood, collection and/or distribution centers have come into existence which are commonly called blood banks and are of the following general types:

- A. Hospital Blood Banks: These blood banks are part of the hospital in which they are located. All functions of blood banking are done within the hospital.
- B. Hospital Blood Bank (Red Cross Participants): These blood banks are also part of the hospital in which they are located. Blood is supplied to these hospitals by a regional Red Cross Blood Center.
- C. Regional Blood Centers (American Red Cross): Blood collection and distribution of blood to participating hospitals is done by the regional center. The local Red Cross chapters are expected to provide a major role in recruitment of donors, all of whom are volunteers.
- C. Community Blood Bank: When several hospitals are in an area, they may elect to have a single blood bank to serve all hospitals in the local area.
- E. Plasmapheresis Center: In recent years there has been an increasing need for human plasma. Some of this plasma is used for transfusion purposes, but a large amount is used for commercially prepared reagents. If these centers collect blood which is not used for transfusion purposes, they are not subject to the same regulations as facilities collecting blood for human use.

F. Commercial Blood Bank: There is an ever growing deficit of blood being obtained on a voluntary basis. Therefore this deficit must be met by means other than the voluntary method. Blood banks under these circumstances must obtain blood from some outside source. There are blood banks that are organized primarily to provide blood to hospitals. These banks usually pay the blood donor and charge the hospital for the blood supplied--thus, the commercial aspect of the operation. Those commercial blood banks reported to be presently operating in North Carolina are:

Raleigh Blood Center, Inc.
200 E. Martin Street
Raleigh, N. C.
Mr. Tony Reaves, Manager
(Locally owned)

Durham Blood Center, Inc.
Durham, N. C.
Mr. Tony Reaves, Manager
(Same as Raleigh Blood Center)

National Blood Products, Inc.
Fayetteville, N. C.
Mrs. Anita Carter, Manager
(Parent Company-National Blood Bank of New York,
64 Second Ave., New York City)

National Blood Products, Inc.
218 S. Green Street
Greensboro, N. C.
Mrs. Gale Nelson, Assistant Manager
(Parent Company-National Blood Bank of New York,
64 Second Ave., New York City)

National Blood Bank of Philadelphia
217 N. Main Street
Winston-Salem, N. C.
Mr. James Pruett, Manager
(Parent Company-National Blood Bank of Philadelphia)

Central Blood Service, Inc.
417 S. Tryon Street
Charlotte, N. C.
Mrs. Dorothy Pannell, Manager
(Parent Company-Inter-State Blood Banks,
174 N. Third St., Memphis, Tenn.)

Unfortunately, it is difficult to control the quality of blood donated for transfusion. There are some tests that can be done to give partial protection to both donor and recipient, but they are limited to seeing if the prospective donor is anemic, is free of syphilis, and has normal temperature, pulse, blood pressure and weight. There is no effective and reliable method of determining if a person has recently been in a malarious area, has had hepatitis, or is taking drugs. The only available method for minimizing the frequency of these complications is carefully selecting the donors and taking medical histories of the donors from whom the blood is obtained. There are, however, hopeful signs that an effective and economical test may eventually be developed. Recent use of a new test (e.g. screening for hepatitis-associated antigen) has shown some promise.

Although there are published minimum standards for blood banks and transfusion services, there is at present no effective method to determine if these standards are being met. Partial inspection and accreditation of blood are carried out by several agencies. They are:

A. Division of Biologic Standards, N.I.H.

The sending or bringing of human blood from one state to another is regulated by the U. S. Public Health Service and may be done only by Federally licensed institutions. Licensure is based on Title 42 part 73 of the Code of Federal Regulations.

B. American Association of Blood Banks

A voluntary inspection and accreditation program is provided by the American Association of Blood Banks. The program is based upon the publication: "Standards for a

Blood Transfusion Service" currently in its 5th edition. All functions of blood banking are covered, and the program is described in the publication.

At the present time the following North Carolina Blood Banks are accredited by the American Association of Blood Banks:

Cabarrus Hospital Blood Bank, Concord
Cape Fear Valley Hospital Blood Bank, Fayetteville
Craven County Hospital Blood Bank, New Bern
Forsyth Memorial Hospital Blood Bank, Winston-Salem
Highsmith Rainey Hospital Blood Bank, Fayetteville
Memorial Hospital of Wake County Blood Bank, Raleigh
Moses H. Cone Memorial Hospital, Greensboro
New Hanover Memorial Hospital Blood Bank, Wilmington
Northern Surry Hospital Blood Bank, Mt. Airy
North Carolina Baptist Hospital Blood Bank, Winston-Salem
North Carolina Memorial Hospital, Chapel Hill
Rex Hospital Blood Bank, Raleigh
Rowan Memorial Hospital Blood Bank, Salisbury
Southeastern General Hospital Blood Bank, Lumberton
Stanly County Hospital Blood Bank, Albemarle
U. S. Naval Hospital Blood Bank, Camp Lejeune
Veterans Administration Hospital Blood Bank, Durham
Veterans Administration Hospital Blood Bank, Fayetteville
Watts Hospital Blood Bank, Durham
Wilson Memorial Hospital Blood Bank, Wilson

The hearings on the operation of commercial blood banks did not produce a concensus which the Committee might follow in making a

recommendation. Because of the complex nature of the question, the Committee asked Dr. Jacob Koomen, Director of the State Board of Health, to bring together knowledgeable persons with an interest in blood banking to make recommendations to the committee. He agreed and held a meeting on May 22, 1970. From this ad hoc group came many helpful recommendations which were studied by the Committee on Health. (See Appendix B)

Findings

Commercial donor blood banks are a relatively new venture in North Carolina, and they supply only a small percentage of the blood used in hospitals. Commercial operations are much more extensive in other states. There was a consensus among those participating in and contributing to this study that commercial operations did not at this time need to be separately dealt with in North Carolina.

The great majority of the blood used in North Carolina is collected from volunteers rather than paid donors.

Since there is no presently known effective and economical test for insuring that hepatitis is not transmitted in collected blood, blood collection centers must depend most heavily on the reliability of the medical history obtained from the donor. Because of this fact and the possibility of some emergency developing during the procedure, there seems to be considerable merit in requiring that a physician be responsible for the procedures used in blood banking operations and for taking necessary action in the event of medical problems arising.

Recommendations

The Commission recommends the enactment of the bill set forth in Appendix A of this report in order to implement the findings of the report.

The legislation would provide that all phases of the selection of blood donors and of the collection, storage, processing and transfusion of human blood shall be accomplished at the direction or under the supervision of a physician licensed in North Carolina. Further, the legislation would provide that due care shall be exercised in the selection of donors to minimize the risks of transmission of agents that may cause hepatitis or other diseases.

Appendix A

A Draft Bill

A BILL TO BE ENTITLED AN ACT RELATING TO THE SELECTION OF BLOOD DONORS
AND THE COLLECTION, STORAGE, PROCESSING AND TRANSFUSION OF BLOOD.

The General Assembly of North Carolina do enact:

Section 1. A new Article shall be added to Chapter 90 to be
entitled "Blood Banks" and shall read as follows:

"Article 15B

Blood Banks

§90-220.10. It shall be unlawful for any person, firm or corporation
to engage in the selection of blood donors or in the collection, storage,
processing, or transfusion of human blood, except at the direction or
under the supervision of a physician licensed in North Carolina. Any
person, firm or corporation convicted of the violation of this section
shall be guilty of a misdemeanor.

§90-220.11. In the selection of donors due care shall be exercised
to minimize the risks of transmission of agents that may cause hepatitis
or other diseases.

§90-220.12. Nothing in this article shall be construed to affect the
provisions of G.S. 20-16.2 and G.S. 20-139.1."

Sec. 2. All laws and clauses of laws in conflict with this Act are
hereby repealed.

Sec. 3. This Act shall become effective upon ratification.

Appendix B

Recommendations by Ad Hoc Committee on
Commercial Donor Blood Bank Operations
chaired by Jacob Koomen, M.D., State Health Director



James S Raper, M D
President
Asheville

Lenox D Baker, M D
Vice-President
Durham

Charles T. Barker, D D S.
New Bern

Ben W Dawsey, D V M
Gastonia

Joseph S. Hiatt, Jr., M D.
Southern Pines

J. M. Lackey
Hiddenite

Paul F. Maness, M. D.
Burlington

Ernest A. Randleman, Jr., B. S. Ph.
Mount Airy

Jesse H. Meredith, M. D.
Winston-Salem

NORTH CAROLINA
STATE BOARD OF HEALTH

P. O. BOX 2091
RALEIGH, NORTH CAROLINA 27602

June 16, 1970

Representative Kenneth C. Royall, Jr.
Chairman, Committee on Health
State of North Carolina
Legislative Research Commission
Legislative Building
Raleigh, North Carolina 27602

Dear Mr. Royall:

In your letter of April 10 you asked that I bring appropriate persons together to explore the possibility of making recommendations to your committee about commercial donor blood bank operations. I called a meeting on May 22 and the persons shown on the enclosed list graciously made time to attend. The meeting was marked by a spirit of good will and was productive of worthwhile discussion and a specific recommendation for legislative action.

The following motions were presented and adopted by the group:

A. "That this group recommend to the Legislative Research Commission that legislation be enacted so that all phases of the selection of blood donors and of the collection, storage, processing, and transfusion of blood shall be the responsibility of a physician licensed in North Carolina who has a thorough knowledge of blood bank methods and of transfusion principles and practices."

B. "That in consideration of the foregoing action of this group, this group goes on record deeming it unnecessary to enact any specific legislation to provide for the licensing of commercial donor blood banks and personnel employed therein who draw and handle human blood."

Note that the recommendation for a supervising physician applies to all blood bank operations and not only to commercial donor blood banks.

Two persons (Dr. Groat and Mr. Reaves) voted against the first motion, but Dr. Groat said he would have voted for it except for the phrase following the words "North Carolina". No one voted against the second motion.

Representative Kenneth C. Royall, Jr.

June 16, 1970

Page Two

There were a number of points raised during the meeting, some of which may be of interest to your committee:

1. One of the concerns of those involved with the collection of blood is the possibility of some emergency developing during the procedure. This is one of the reasons that supervision by a physician is required in the standards of the American Association of Blood Banks. The AAMB standards were the basis for the group's first motion.

2. Another concern is the reliability of the medical history obtained from the donor. This is another basis for recommending that all operations be under the supervision of a physician.

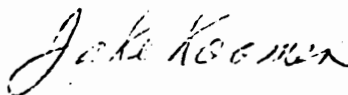
3. A third concern is the lack of an effective test for insuring that hepatitis is not transmitted in collected blood. No recommendation was made for legislation on this matter.

4. The great majority of the blood used in North Carolina is collected from volunteers rather than paid donors. It was stated that this is a tradition which has certain merits.

5. Commercial donor blood banks are a relatively new venture in North Carolina; there are six that have been identified and they supply only a small percentage of the blood used in hospitals. Commercial operations are much more extensive in other states. It was noted that Wisconsin has a law prohibiting the operation of a blood bank for commercial profit. There seemed to be a consensus that commercial operations did not at this time need to be separately dealt with in North Carolina.

I hope the actions of this ad hoc group of persons who were fairly representative of blood banking operations and concerns in the state will be useful to your committee in carrying out its study.

Sincerely,



Jacob Koomen, M.D., M.P.H.
State Health Director

JK/bam

cc: List attached

Dr. Robert W. Prichard
Department of Pathology
Bowman Gray School of Medicine
Winston-Salem, North Carolina 27103

Dr. Inez W. Elrod
Chief
Red Cross Blood Banks for the
State of North Carolina
Box 3507
Charlotte, North Carolina 28203

Mr. Dave Alexander
City Editor
The Greensboro Record
Greensboro, North Carolina

Miss Mary S. Britt
Registrar and Teaching Supervisor
School of Medical Technology
Duke University Medical Center
Durham, North Carolina

Mr. George M. Stockbridge
Health Planning Council for Central
North Carolina
Home Security Building
505 West Chapel Hill Street
Durham, North Carolina

Mr. Tony C. Reaves
Director, Raleigh Blood Center, Inc.
200 East Martin Street
Raleigh, North Carolina

Dr. R. D. Langdell
Department of Pathology
North Carolina Memorial Hospital
Chapel Hill, North Carolina 27514

Dr. Francis K. Widmann
Department of Pathology
University of North Carolina
Chapel Hill, North Carolina 27514

Dr. Albert L. Chasson
Director, Blood Bank
Rex Hospital
Raleigh, North Carolina

Dr. R. A. Groat
Pathologist
1321 North Elm Street
Greensboro, North Carolina

Mr. William F. Henderson *
Executive Director
North Carolina Medical Care Commission
Raleigh, North Carolina

Mr. Russell G. Walker, Jr. *
Assistant Revisor of Statutes
North Carolina Department of Justice
Raleigh, North Carolina

Mrs. Mildred A. Kerbaugh *
Assistant Director
Laboratory Division
State Board of Health
Raleigh, North Carolina

Mr. John Young *
Institute of Government
University of North Carolina
Chapel Hill, North Carolina

Mr. David G. Warren *
Institute of Government
University of North Carolina
Chapel Hill, North Carolina

Dr. Lynn G. Maddry *
Director, Laboratory Division
State Board of Health
Raleigh, North Carolina

Dr. Jacob Koomen *
State Health Director
N. C. State Board of Health
Raleigh, North Carolina

* Did not participate in voting

Appendix C

Materials on File with the Legislative
Research Commission

Materials on File with the Legislative
Research Commission

- (1) Remarks on Blood Banking by Charles F. Carroll, M.D., President, North Carolina Chapter of the National Society of Clinical Pathologist.
- (2) Map Showing Blood Supplied by Red Cross Blood Program.
- (3) "Recommendations of the Legislative Committee of the North Carolina Society of Medical Technologists Concerning the Licensing of Commercial Donor Blood Banks."
- (4) Letter from Stuart M. Sessoms, M.D., Director, Duke University Medical Center.
- (5) "Statement Regarding Proposed Commercial Blood Bank Law", by Lucille W. Hutaff, Professor of Preventive Medicine, Bowman Gray School of Medicine.
- (6) Letter from Lynn G. Maddry, Ph. D., Director, Laboratory Division, State Board of Health, to Jacob Koomen, M.D., M.P.H., State Health Director.
- (7) Remarks by Sidney S. Eagles, Jr., Assistant Attorney General.
- (8) Remarks by Edgar T. Beddingfield, M.D., President, State of North Carolina Medical Society.
- (9) Letter from R.A. Groat, Ph.D., M.D., Pathologist.
- (10) "Standards for a Blood Transfusion Service", American Association of Blood Banks, Committee on Standards, 30 North Michigan Avenue, Chicago, Illinois.

Appendix D

Resolution Directing the Study

NORTH CAROLINA
GENERAL ASSEMBLY
1969 SESSION

RATIFIED RESOLUTION

RESOLUTION 116

SENATE JOINT RESOLUTION 739

A JOINT RESOLUTION DIRECTING THE LEGISLATIVE RESEARCH COMMISSION
TO STUDY THE QUESTION OF THE LICENSING OF CERTAIN CLINICAL
LABORATORIES.

Be it resolved by the Senate, the House of Representatives
concurring:

Section 1. The Legislative Research Commission is
hereby directed to study the feasibility and advisability of the
enactment of legislation providing for the licensing of
commercial donor blood banks and personnel employed therein who
draw and handle human blood.

Sec. 2. The Legislative Research Commission shall
report its findings and any recommendations resulting from this
study to the 1971 General Assembly.

Sec. 3. This Resolution shall become effective upon its
ratification.

In the General Assembly read three times and ratified,
this the ^{1st} day of July, 1969.

H. P. TAYLOR, Jr.

H. P. Taylor, Jr.

President of the Senate.

EARL W. VAUGHN

Earl W. Vaughn

Speaker of the House of Representatives.