CLINIC DIRECTORS COMMITTEE

Building Sub-Committee

Meeting #1 Minutes of March 23, 1965, 4 p.m. Room A387

Present: Richard Anderson, James Carey, Edward Defoe, Glenn Mitchell, John Westerman.

Absent: Joe Aust, Richard Magraw, Edgar Makowski

1. The group discussed the layout of the new clinic building in terms of possible designs and how these designs related to the objectives, functions, and policies that guide clinic operations and educational programs.

2. After reviewing the clinical departments interest in the project, the group considered:

a. The possibility of 10 areas, each with 10 student office-exam rooms, instructor and secretarial offices, waiting room, and consultants office. A primary objective in this plan is to focus attention of the medical student in the function of the building and to advance the idea of the consultant coming to the student, where appropriate.

b. Another suggestion was a general intake area of three clinics, each with approximately 25 exam rooms. The idea here is to set up a large enough area to support a reasonably comprehensive ancillary staff. As in a., the areas would be designated as 1, 2, 3, or A, B, C, not departmental space.

3. More would have to be known about the role of nursing service, affiliations with area op departments, general vs. referral pattern of service, and the willingness of the faculty to participate in a more systematic scheduling procedure.

4. NEXT MEETING, TUESDAY, APRIL 6, 4 p.m. B308 (Director's Office) Conference Room

John Westerman
Chairman

TABLE OF CONTENTS

I. LETTER TO THE CLINICAL MEDICINE AND HOSPITAL SUBCOMMITTEE

The Clinic Directors have been meeting as a group since 1960. From our initial considerations of how to implement the Comprehensive Clinic Program and help the clinic operate more effectively as a unit, many ideas have emerged about the type of facility that would better accommodate our program.

In 1963 the Administrative Committee of the College of Medical Sciences requested the Clinic Directors Committee to formulate ideas and observations into a program for a new outpatient facility.

By 1964 it became apparent that a full-time coordinator would be necessary to help us carry out this assignment. Through the support of the Hill Foundation, such a position was made possible. The Clinic Directors published their findings in a first REPORT OF MEDICAL OUTPATIENT SPACE NEEDS on January 25, 1965.

This report represents a revision of the first report and is published at this time to inform the Learn Committee of the work we have done in space planning. This report also contains the Role, Objectives and Programs statement submitted to the Learn Committee on July 12, 1965.

Our group is looking forward to working with James A. Hamilton and Associates and your subcommittees in integrating the individual needs into a coordinated clinic structure. It is our hope that this report will serve as a useful step in this process.

Respectfully, submitted,

James B. Carey, Jr., M.D.
Chairman, Clinic Directors Group

February, 1966

A. UNIVERSITY OF MINNESOTA

Clinic Directors Group

July 12, 1965

TO: MEMBERS OF THE COMMITTEE FOR THE STUDY OF PHYSICAL FACILITIES FOR THE HEALTH SCIENCES

Enclosed is a statement of the role, objectives and programs of the Out-patient Department. This paper has its origin in various actions and agreements among the clinic directors over the past five years. A preliminary draft of this statement was approved by the clinic directors on June 18, 1965.

JAMES B. CAREY JR., M.D.
CHAIRMAN, CLINIC DIRECTORS GROUP

Dr. Paul Alexander
Dr. Richard Anderson
Dr. Joseph Aust
Miss Annie Laurie Baker
Dr. Graham Beaumont
Dr. Charles Branthaver
Dr. John Brantner
Dr. Shelley Chou
Dr. Donald Creevy
Dr. Edward Defoe
Dr. Arndt Duvall
Dr. Robert Fisch
Dr. Raymon Fusaro
Dr. Glenn Gullickson
Dr. Charles Hewell
Dr. Reynold Jensen
Dr. William Kane
Dr. William Knoblach
Dr. Gerald Koos
Dr. Frank Lassman
Dr. Arnold Leonard
Dr. Richard Magraw
Dr. Edgar Makowski
Mr Glenn Mitchell
Dr. James Moriarty
Mrs. Irmagene Stark
Dr. Paul Strandjord
Dr. Luigi Taddeini
Dr. George Tani
Dr. Robert tenBensel

I. ROLE OF THE OUTPATIENT CLINIC

A. PRESENT

1. The primary purpose of the University Clinics is to serve the welfare of the people of Minnesota through EDUCATION OF THE HEALTH PROFESSIONS in an ambulatory setting. The educational role is concerned with concepts, skills, knowledge and attitudes required for patient care and health maintenance.

2. The clinics serve the state as a BASE CENTER FOR CONSULTATION SERVICE where patients with health problems can be cared for in cooperation with their referring physicians or referring health agency.

3. The clinic attempts to SERVE AS A MODEL FACILITY for patient care which incorporates the latest health care advances into an organized program that is within the scope of the medical center objectives.

4. The clinic provides AN ENVIRONMENT FOR CERTAIN KINDS OF RESEARCH that can best be done on an ambulatory basis. Society expects this kind of research and the University has the resource potential to carry out the investigations.

B. FUTURE

1. Given the roles of patient care and teaching, a future role of the clinics will be to BETTER INTEGRATE THE COMMUNITY RESOURCES needed for the health care of the individual patient or group of patients. This extension should be for the mutual advantage of the clinic and community. This role seems desirable in terms of what we want to accomplish and inevitable in view of the community pressures that are being generated.

2. A future role in research will be to carry out EXPERIMENTATIONS IN PATTERNS OF HEALTH CARE and METHODS OF EDUCATION for the health professions. This research will involve a multi-disciplined approach within the university community and reflects the medical center's concern in this area.

II. GOALS AND OBJECTIVES OF THE CLINIC

A. TEACHING

1. The clinics serve as a unit where students in the health professions learn an integrated, team approach to the care of patients. The patient is the focus of the program, and the importance of the maintenance of health is recognized. Also recognized is the individual physician's responsibility for continuity of care.

2. Through the cooperative care relationship with physicians and other health professionals of the state, the clinic has the goal to work with these people in programs offering A LIFETIME OF LEARNING. The continuation education programs are designed with the objective of meeting the needs of the post-graduate health worker.

3. It is our objective to develop a BETTER MEANS OF MEASURING what we are teaching, how we are teaching, and why we are teaching in the clinics and relate our findings to certain internal and external needs. Our objective would be to tie the teaching efforts to concepts that will serve the student in a variety of health career pursuits.

B. SERVICE

1. The clinics intend to provide EXEMPLARY CARE to the patients, which will combine quality and convenience in a manner which will encourage utilization of our care.

2. The clinics intend to provide EXEMPLARY CONSULTATIVE SERVICES to referring physicians and other health workers.

3. A goal of the clinic will be to ELEVATE THE STANDARDS OF HEALTH PRACTICE in the medical center and the community.

4. An objective of the clinic will be to SHARE THE FINDINGS AND EXPERIENCES of the University Clinics with the community.

5. An objective of the clinics is to closely INTEGRATE ITS ACTIVITIES with other medical center services.

C. RESEARCH

1. An objective of the University Clinics is to ENCOURAGE AND FOSTER RESEARCH OF ALL TYPES by providing a facility which can be used conveniently, efficiently and to the best advantage of the patient and research worker.

2. Most research programs will be those of the individual investigator. A special objective, however, would be to AFFORD THE FACULTY MEMBERS MOST CONCERNED with broad, fundamental aspects of patient care an opportunity to pursue their investigational interests. These interests will include:

a. The definition and exploration of METHODS OF MEASURING THE QUALITY OF HEALTH CARE.

b. Research into PATTERNS OF PRODUCTION, DISTRIBUTION, DELIVERY and CONSUMPTION of health care services.

c. Research concerned with the means whereby health care provided at our medical center can be INTEGRATED MORE CLOSELY with health resources throughout the state.

III. PROGRAMS OF THE OUTPATIENT CLINIC

PRESENT PROGRAMS

A. TEACHING

1. The Comprehensive Clinic Program

This is primarily an undergraduate program centered around the provision of comprehensive care. Comprehensive care includes multi-disciplined diagnostic and therapeutic efforts directed to the patient as an individual with proper regard for his unique personal and social identity. Care is provided by a team of health professionals integrated through the medical student and his staff associate who together assume ultimate responsibility. The program is coordinated through the Comprehensive Clinic Office and the Clinic Directors Group.

This program has been in operation for five years. Each medical student is required to serve six months with the program and in so doing will assume meaningful continuous responsibility for approximately 65 patients. The tutorial relationship is augmented by weekly seminars dealing with case presentations and student-staff discussion of such topics as the doctor-patient relationship, quality control, and community services.

Concurrent with these activities, the student receives carefully planned instruction during three week courses in seven medical sub-specialties. The University teaching staff assumes a heavy responsibility of time and effort in maintaining the program. As will be mentioned, two programs have been added at the graduate and post-graduate level which have increased the faculty staff.

2. Graduate (Specialty) Teaching

In contrast to the undergraduate program, virtually all the graduate training in the clinic is carried out strictly within departmental framework. About 100 resident physicians work with patients in the clinic as part of their training every day. Most graduate programs are three years in length. In a few specialties this training occurs almost solely on the in-patient hospital service. In a greater number, a significant part of the resident's training occurs in the clinic, and in certain specialties, e.g. Dermatology, Ophthalmology, Otolaryngology, Psychiatry, at least one-half of the resident's training is done in the clinic.

In the clinic these 100 residents have responsibility for the care of patients with an appropriate degree of direct responsibility and staff super-

vision as part of their training responsibility. This is largely individual tutorial instruction and centered around patients. This training is supplemented by clinical seminars and didactic presentations to groups.

One of the two programs that have recently been established is the Public Health-Pediatrics residency program designed for the pediatrician who wishes to gain a broad perspective in family public health as well as pediatrics.

3. Post-Graduate Training (Continuing Education for Physicians)

At present, with important exceptions in the undergraduate program and the very occasional incorporation of some clinic exercise in a continuation course, there is no formal program in post-graduate medical instruction in our clinic.

The important exception is the second program that has recently been added. This program offers sabbatical staff appointments for qualified practicing internists, pediatricians and generalists. These are one to three month appointments and involve the instruction of medical students in the outpatient clinics. The practicing physician shares his years of experience with the students and has in exchange an opportunity to refresh himself in an academic setting away from the demands of practice. It is a situation, however, where the practicing physician has to assume responsibility to the teaching program.

4. Teaching in Associated Health Professions

At present many of the students in the health fields in the College of Medical Sciences, such as physical therapists and clinical psychologists, receive an important part of their training in the clinic.

5. Health Education of the Community

Through the medium of the Community Service Conferences, the University medical care team of doctors, psychologists, social workers, speech therapists, etc. have been brought together with their counterparts in the patient's own community. The purpose has been to solve the individual patient problems, and also to demonstrate the effectiveness of this approach to patient care to the university staff, the community health workers, and eventually the health professionals of the state through the publication of these conferences in the State Medical Journal.

B. SERVICE

1. The clinics offer a consultation and referral service for patients and referring physicians.

2. The clinics also offer a diagnostic and therapeutic service for 131,000 patient visits each year, primarily from the state of Minnesota. This service

includes special treatments, community group programs, and preventive medicine programs.

3. The clinics have service programs in 52 general and specialty clinics, which are located in the main outpatient department, and the following areas outside the outpatient department: the Heart Hospital, the Veterans of Foreign War building, the Rehabilitation Centers, Child Psychiatry, Cystoscopy, Radiation Therapy, Otolaryngology, Diagnostic Radiology, and the Cancer Detection Center.

4. There is an acute trauma program operated in the Emergency Room as part of the clinics.

5. The present programs should be competitive with other providers of health care in both quality of care and attractiveness and efficiency of facilities. At present the facilities are able to support the new emphasis given to the clinics only in a marginal manner.

6. The clinics provide a framework of non-physician health care professionals to support the medical center staff and outside physicians in providing organized health care.

C. RESEARCH

Almost all clinical departments in the medical school have one or more research programs in progress in the clinics. All such programs cannot be listed in this report, but a few examples can be mentioned.

1. Some current research is concerned with the improvement of patient care through chart review, an audit system and an assessment of the value of a University-Community interdisciplinary team approach in the diagnosis and management of patients with complex chronic disease problems.

2. There has been a research program to measure the cost of tutorial teaching by medical consultants per patient and per student.

3. There have been and are now in progress numerous drug efficacy studies.

FUTURE PROGRAMS

A. TEACHING

1. The projections of future graduate teaching programs are based on the assumption that there will be a relative increase in emphasis on instruction and the care of pre-symptomatic diseases and preventive maintenance in our population in virtually all the medical specialties. This will necessarily take place in the clinics

2. Projections for the future program in post-graduate training are based on the expectation of a greatly increased role of the medical school with the medical needs of the community and closer involvement with the continuing professional effectiveness of the practitioners of the community.

3. Projections for future programs in teaching associated health professions are based on the knowledge that the professions associated with medicine are growing in numbers and importance and are further based on the expectation that these professions also will require more continuing post-graduate education programs Again it is assumed that the University Medical Center of the future will be assigned this role in society and the clinic is the logical place to carry out much of this work.

4. Some examples of future programs may include:

a. The comprehensive clinic program would like to undertake new methods of instruction, including the use of electronic teaching aids. They would also like to develop more precise measurements about the effectiveness of their programs.

b. A logical extension of the Pediatric-Public Health program would include internal medicine and psychiatry and may lead to the development of a "family specialist."

c. The sabbatical staff appointments of practicing physicians will likely be expanded to accommodate more participants.

d. There is a great need for the public health nurse, general nurse, social worker, psychologist, vocational rehabilitationist, physiotherapist, hospital administrator and other health professionals to participate in and have an awareness of preventive and curative medicine programs. There is a need for interaction among these professionals in their formative training periods.

e. The community service program could be expanded to include other than the neuro-sensory group.

B. SERVICE

1. The overall trend of the programs in the next ten years will be to better organize and integrate the ambulatory care service. This is essential because of the present knowledge of improved methods of health care and of future advances. In the last ten years a trend has developed which has seen the number of outpatient visits in this country increase by 2/3 and it is expected this trend will continue In this region, the University will be expected to develop methods to provide for meeting this challenge and share the information with the community.

2. Outpatient programs of the future will need to be economically self sufficient.

3. Future programs will include the participation of a broader range of health professionals.

4. Future programs will be tied into more effective use of automation such as auto analizers and improved communications systems such as closed circuit television.

5. The future programs will tend to concentrate more on the family as a unit, particularly in psychiatry, pediatrics and internal medicine.

6. There is a need for more participation of the outpatient health care staff in policies and programs for the community.

7. Future outpatient programs will be more integrated with the overall programs and mission of the medical center.

8. Future programs will provide for a more coordinated plan of care within the clinics.

9. Recognizing that the outpatient department has a complicated organization, more emphasis will be put on the better organization of ambulatory health care measures within the medical center.

10. The design of the new outpatient building will need to incorporate and support all of the programs described above and be an important architectural statement.

C. RESEARCH

In the future, all individual or small group research interests appropriately carried out within the clinic activity should be encouraged. However, the major trends or efforts will be directed toward development of better methods of diagnosing disease, implementing care and maintaining health of the patients. Research is a personal concept, and yet we can envision some of the following examples as being representative of future ambulatory research trends.

1. A research program with primary emphasis upon the study of the intellectual, emotional and economic needs of the professionals intimately involved in the maintenance of health and the care of the sick within the community.

2. Future research may involve the study of the evolution of disease which is influenced by environmental factors.

3. Future research should help define or evaluate ways of measuring intellectual and emotional status as part of the history and physical examination.

4. Medicine should embark on applied research programs to measure better ways of incorporating advances of basic sciences into the practice of medicine.

5. Future research programs should help explore and define ways of removing the barriers to the implementation of the preventive medicine concept.

6. The objective of research into the production, distribution, delivery, and consumption of health care service may involve clinical epidemiology programs investigating the population, the patient, the health team workers and involve the disciplines of economics, political science, sociology, law, urban planning and anthropology for example.

UNIVERSITY OF MINNESOTA
College of Medical Sciences

March 31, 1965

TO: MEMBERS OF THE FACULTY:

Many of you have heard of the work of the out-patient clinic directors in making some preliminary plans for a new ambulatory facility. As an initial step in the review of existing programs and planning for a new or improved facility, the directors have adopted a Statement of Principles outlining the educational objectives of the clinics.

Their report is enclosed for your consideration and comment. Some of you have commented about aspects of this project to Mr. John Westerman, who is coordinating the study under a grant from the Hill Foundation. Others have discussed this report with their departmental clinic representative.

Each faculty member has his own background and personal experience against which to judge these objectives. It is my hope that each clinic Department will wish to discuss the Statement at a departmental meeting.

Your interest in this matter is appreciated as we approach the development of this important segment of our education program. Comments and suggestions may be transmitted to members of the Clinic Directors Committee, listed below.

Sincerely,

Robert B. Howard

Robert B. Howard, M. D.
Dean

Dr. Richard Anderson
Dr. Joseph Aust
Miss Annie Laurie Baker
Dr. Graham Beaumont
Dr. James Carey
Dr. Shelley Chou
Dr. Donald Creevy
Dr. Edward Defoe
Dr. Arndt Duvall
Dr. Robert Fisch
Dr. Ramon Fusaro
Dr. Robert Goltz
Dr. Charles Hewell
Dr. Reynold Jensen
Dr. William Kane
Dr. William Knoblach
Dr. Arnold Leonard
Dr. Richard Magraw
Dr. Edgar Makowski
Mr. Glenn Mitchell
Dr. James Moriarty
Mrs. Irmagene Starke
Dr. George Tani
Dr. Robert tenBensel

B. REPORT TO THE DEAN AND FACULTY

PROGRESS IN PLANNING A NEW OUT-PATIENT FACILITY

March 31, 1965

INTRODUCTION AND BACKGROUND

The University of Minnesota Hospitals Out-Patient Clinics have historically played an important role in the service and educational programs of the medical center. This role has been achieved and preserved through a succession of physicians and nurses who have devotedly operated the clinics, often under limitations. The 400 physicians who participate in the clinic each week recognize these limitations as an element having an adverse effect on education and patient care.

Inadequate waiting areas, small poorly ventilated and poorly lighted examining rooms, lack of privacy for the patient and lack of space and privacy for student-staff consultations or instructions are some of the shortcomings of the present clinic area. For 36 years this area has served the purpose for which it was constructed. During these years clinic activity has more than doubled while new functions taken on by the clinics have repeatedly infringed on available space for teaching and patient care. Students, patients, and staff members observing the many public and private medical facilities constructed in the post-war years have a growing awareness of the contributions a building makes to the efficiency and morale of those who receive and provide medical care in it; they have come to expect something more heartening than overcrowded, chair-lined corridors and cheerless offices and consulting rooms as an appropriate milieu for the practice and teaching of medicine which should in all ways set standards.

The hospital and medical school have considered new out-patient facilities during the last few years, but it has been difficult to coordinate the efforts of the hospital, medical school, university, and legislature to make such a building a reality. Meanwhile, increased numbers of undergraduate, graduate and post-graduate students and an increase in patient visits have strained the ability of all parties concerned to carry out properly our mission of teaching, patient care, and research.

A building constructed in 1928 for 60,000 yearly visits cannot accommodate 130,000 visits in 1965, and provide the kind of environment in which the best medicine can be practiced and taught.

CONSIDERATIONS AND OBJECTIVES OF THE COMMITTEE

The Clinic Directors Committee has spent much time considering how patient care and educational programs can be improved. They have made a conscious effort to ignore existing physical limitations and plan imaginatively for what would be needed in a facility to serve the needs of the medical center for the rest of the century. There has been a clear recognition that the planning for bricks and mor-

tar plays a secondary role to the conceptual planning to which they are addressing themselves. The clinic directors have asked themselves this general question in developing plans for the future:

HOW CAN THE MEDICAL CENTER BEST PROVIDE A CLINIC FACILITY TO MEET THE NEEDS OF PATIENT SERVICE, UNDERGRADUATE, GRADUATE, AND POST-GRADUATE EDUCATIONAL PROGRAMS, AND TO FOSTER APPROPRIATE RESEARCH?

Such a facility must fulfill the needs of existing programs and be flexible enough to serve an unknown but changing future. Following are some of the guiding principles important in planning the new out-patient facility.

1) The primary purpose of the University Clinic is to serve the welfare of the people of Minnesota through EDUCATION OF THE HEALTH PROFESSIONS.

   The education of the undergraduate medical student in patient care requires that he have considerable measure of direct, supervised responsibility for patients. A physical setting helpful to this service and to the development of staff-student doctor relationships is required to achieve this goal.

   It must provide facilities for the education of medical students, residents, practicing physicians, and such related professions as nursing, social work, psychology, public health, and hospital administration.

2) The clinic needs to be so designed that the staff can provide EXEMPLARY CARE for patients referred and EXEMPLARY CONSULTATIVE SERVICE to referring physicians.

3) The clinic would allow for the most EFFICIENT USE OF TIME of faculty, students, clinic personnel, and patients.

4) The clinic should be designed to meet the demand for more COMPLETE OUT-OF-HOSPITAL DIAGNOSIS AND TREATMENT resulting from rising hospital costs and the widening scope of medical practice.

5) The clinic will provide for close ASSOCIATION WITH PRACTICING PHYSICIANS and others involved in care of patients through medical consultation, staff association and improved communications between the referring physician, the community and the University.

6) The clinic should provide an ENVIRONMENT CONDUCIVE TO RESEARCH ACTIVITY not only in traditional clinic areas, but also in patient care, medical education, and the relationship to the community in the pattern of rendering health services.

PROPOSAL

The Clinic Directors Committee does not propose then merely a modernized enlarged version of the standard University Out-Patient Department. Rather we

propose a University Medical Facility new in concept and design, planned as a center for education, the care of ambulatory patients and research.

Our faculty has recognized that educational programs developed in years past require continuous review to meet the demands of the day. Physical facilities also require periodic revision. Our common concern for the objectives of the educational program has led us to conclude that a new physical facility is an essential instrument through which the objectives and aims of the educational program can be implemented.

We envisage that such a facility should include:

1) Attractive, functional consultation and examination rooms, stressing flexibility in use of space.

2) Comfortable and cheerful waiting areas allowing easy access to service.

3) Areas suitably designed for individual, group and large class instruction.

4) Offices planned for the teaching and service staff.

5) Utilization of rapid communication, data processing and retrieval, and automation as indicated.

6) Facilities for appropriate laboratory services.

7) Provisions for self-instruction, audio-visual aids, television instruction and exhibits.

8) Research facilities for medical school and ancillary discipline projects.

9) If conditions warrant, patient dining and housing facilities.

10) Adequate, convenient parking for patients and staff.

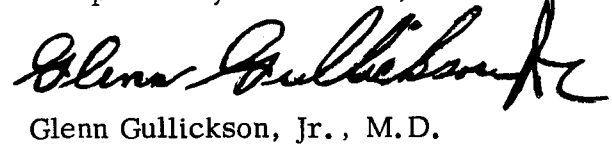
The committee emphasizes that the above listing should not be considered complete or final.

THE OUTLOOK AT THE MEDICAL CENTER

The clinics have been fortunate in the support and attention they have received from the University Hospitals, the College of Medical Sciences, and the University in the past. Without faculty support, recent accomplishments would have been impossible.

This report is being submitted to the medical school faculty to inform them of our deliberations and to engage their interest and support.

Respectfully submitted,



Glenn Gullickson, Jr., M.D.
Chairman, Clinic Directors Committee

C. GUIDING PRINCIPLES FOR THE OUTPATIENT CLINICS AND SUGGESTED FORM OF IMPLEMENTATION

1. PATTERN OF PATIENT CARE

Principle: The University will remain primarily a referral, consultative center for physicians of the region, but will need to be responsive to the needs of the community. As 3rd party reimbursement becomes more prevalent, all patients in the future will be treated as private patients.

Implementation: Each patient should have a responsible physician that he can relate to. Every patient will be used in the teaching program. The following patterns of patient care will be available in the clinics:

a. GENERAL MEDICAL CARE

The medical and pediatric clinics will evaluate and assign the patient to a specialty clinic where appropriate. The personal physician in the medical or pediatric clinic will be responsible for returning the patient to the referring physician. This care will generally be given for a limited period (one year) and does not encompass evening, weekend, home visit, or guarantees of in-patient care. This pattern would follow the Mayo Clinic arrangement (the one we pay lip service to) that all patients referred to the medical center are first worked up in new patient medicine.

b. REFERRAL BY PHYSICIAN TO A SPECIALIST FOR CONSULTATION

This care is a contractual arrangement for a specifically defined problem and involves a report to the referring specialist about the consultation requested.

c. COMPREHENSIVE MEDICAL CARE

This care will be for a limited number of patients/families and encompasses complete responsibility for health maintenance, including 24 hour a day, 7 day a week care. The resources of the medical center limit the number of patients that can be seen in this program, and it should be regarded as a demonstration project for the students. The people accepted in this program would eventually be steered to appropriate community agencies so that new patients could be added.

d. EMERGENCY SERVICE

Anyone who presents himself for emergency care will be seen in the emergency department. Arrangements for followup care will be with the community or one of the programs within the medical center, depending upon the plan worked out with the patient and his physician.

These suggested patterns of care attempt to identify current practices and incorporate future changes. They assume, that with the exception of a small selected group, the university is not in a position to give total comprehensive care in the clinic setting. It is also assumed, that distinguishing patterns of care should be based on the needs of the patient, not an administrative economic classification.

Therefore, in the future all patients will be seen on an appointment basis and have a responsible physician.

2. USE OF SEPARATE FACILITIES

Principle: The same facilities should be used for all patients.

Implementation: Well planned facilities, adequately staffed, operating on an appointment basis, should be able to accommodate the needs of the patient, the students, and the faculty. It is difficult to justify the construction of a state facility with separate facilities based on the patients ability to pay. The reasons for the creation of North Clinic will not be valid in the new facility. Flexibility for arranging to see patients on any non-discriminatory grouping basis is preserved through the scheduling mechanism. If anything, the University has a greater obligation to the county patient.

3. SCHEDULING SYSTEM

Principle: All clinic patients should be seen on a scheduled appointment basis.

Implementation: A scheduled method represents the most efficient utilization of time for the patient, staff, and faculty. There will always be cancellations, no shows, and patients arriving without appointments. These contingencies can be planned for in the scheduling criteria, through the use of a special screening clinic, and any number of other measures. For most of the faculty, such a system involves no greater commitment of time in the out-patient department. It does mean that one must show or find a replacement for the time scheduled. It also means that the clerical work of getting patients in and out of the clinics can be consolidated in one office, instead of having every faculty man act as his own contractor. Adoption of a central scheduling system may also be helpful in an examination of the advantages and disadvantages of a central fee collecting system.

4. ORGANIZATION OF SERVICES

Principle: The organization of the out-patient department should allow for the coordination of the goals of the participating parties.

Implementation: The existing organization represents an adequate pattern of organization. As is typical of hospital-medical school organizations, there are two distinct organizations, the hospital administrative manager and the medical school educational coordinator. The clinic directors act as a liaison body for these two, and in addition are responsible to their individual departments for teaching programs and the quality of medical care. The nursing service director is responsible to the director of nursing service, the hospital administrator, and the medical school educational coordinator. Clinical clerical personnel are responsible to the nursing supervisor. There is no one formula for the organization of a successful teaching out-patient department, but it is hard to conceive of workable pattern that does not involve the coordinated efforts of the clinic directors, department chairman, nursing service, hospital administration, and the medical school educational coordinator. In the long run, the organization will probably be a changing form, depending on the strengths and weaknesses of the individuals involved and the challenges

facing the clinics. One could raise the question of whether 57 highly specialized clinics creates an atmosphere conducive to comprehensive medicine.

5. CONSULTATIONS

Principle: Consultations should be available in all specialties on a daily basis.

Implementation: Consultations in most specialties are now available at any time during hours of clinic operation. Problems arise in two or three man departments or where a one-half day a week clinic is really a one man operation. Attending men can help supplement the smaller departments, so coverage is available at least on daily basis. Individuals, in consideration for setting up special clinics, might also be asked to make themselves available for consultation at least one hour a day. The patient is able to have this service from the rest of the medical community and the University Clinics cannot afford to offer less. Where appropriate, the consultant should go to the patient.

6. CLINIC NURSES ROLE

Principle: Out-Patient Clinic Nursing should be concerned with the application of nursing skills and care.

Implementation: The nurses should not be performing clerical duties. This however, is too negative an approach. The challenge of what a nurse in an out-patient setting could be doing is a difficult and exciting one. Minnesota has the opportunity to define an area and set a standard for the country in what clinic nursing can be. To accomplish this, the nursing staff needs the cooperation and assistance of administration and the medical staff, both to be relieved of old chores and helped with new challenges. To launch into a new area of nursing will require considerable support, but Minnesota has all the potential resources to furnish the needed assistance.

7. A TEACHING CLINIC

Principle: The design and construction of this clinic should reflect the undergraduate, graduate, and post-graduate teaching programs.

Implementation: The future role of the clinic in graduate and post-graduate education is less well defined than the relationship to the medical student. Nevertheless, it would seem well to plan for a more than adequate number of consultation rooms, conference rooms, offices, teaching aids and special education rooms, special procedure areas, observation rooms, etc. This space should be on the periphery of the clinic wherever possible.

8. PATTERN OF SERVICE TO PATIENT

Principle: In general, service should be brought to the patient.

Implementation: It has been mentioned that the consultant should go to the patient where appropriate. The same is true of ancillary services. Radiology is difficult to reconcile with this principle, although studies may show that the new medicine clinic could support a simple chest x-ray machine. It is likely the pattern of out patient department laboratories will change, so that blood will be drawn in the examining room and transported to the laboratory for a series of tests. Transportation problems will be eased if the 600-800

patients a day move around as little as possible. The problem of depersonalization is better handled by the service coming to the patient. Perhaps all clinics could be hooked up to a device in the pharmacy so patients wouldn't have to wait in the pharmacy but could stay in the clinic (or better yet have the prescription waiting by the time they leave the clinic). The important thing is that one keep the patient in mind when planning the facility. University clinics have too often been staff and employee oriented, not concerned with patients.

9. ROLE OF UNIVERSITY EMERGENCY DEPARTMENT

Principle: Hennepin County General Hospital and Ancker Hospital will likely continue to be the primary emergency sources in Minneapolis and St. Paul.

Implementation: The emergency department should remain where it is for the present, because of its location to x-ray, laboratories, and surgery. Designing the Surgical Clinic in the new hospital with the possibility that it may be converted to an emergency department at a later date would provide flexibility and a chance to re-examine the role of the University Department at a later date. In a specialty, referral, teaching hospital, it would be very difficult to superimpose a large general emergency room. The visits to the University Emergency room have increased, but not at the 8-10% a year figure that have characterized other metropolitan teaching hospitals. Much of the load now seen in the department could be taken care of by a spill-over or non-scheduled general clinic. The introduction of an expanded emergency department would disrupt and increase the demand for beds, impose financial problems for the hospital, and cause a demand for a function that the University is not prepared to handle, nor necessarily should assume in this community. This does not preclude the greater use of the existing department for teaching purposes.

10. SPACE THAT CAN BE SHARED

Principle: Wherever possible, space will be shared in the new clinic building.

Implementation: The clinic building must be looked at as a single animal, that breathes, eats, travels, etc. It is not a collection of autonomous clinic units. Therefore, we must plan and build space that can be shared. For instance, all conference rooms ought to be scheduled through one office.

11. SPACE FOR STUDENTS

Principle: Students should have assigned space during their clinic assignment.

Implementation: This space can take the form of combination exam room offices within the clinics or study cubicles adjacent to the clinics. An alternative would be for the students to have offices in the new medicine clinic for the days of their assignment, otherwise using the cubicles.

If the role of the hospital clinics is as defined in #1, it seems that specialization will increase, not decrease. Therefore the issue of the specialist coming to the patient (and students office-exam room) may be analagous to the visit in the home vs. bringing the patient to the facility where an appropriate

job can be done. If it is desireable to have the specialist come to the patient, an attempt should be made to define under what conditions such a procedure would be worthwhile or more valuable than bringing the patient to the specialty area. For instance psychiatric and orthopedic consults might be best done in the general clinic, while eye, ear, nose, throat, etc. would be best done in the specialty clinic.

12. SPECIAL TREATMENT AREA

Principle: Where special equipment and procedures cannot be accommodated in the individual clinic, they should be centralized in a treatment area.

Implementation: Again it is necessary to define what the clinic areas should include, and what is best shared. On one extreme, the drawing of blood could be done in every clinic, while the use of EEG or EKG may not be justified. It is desirable to move the specimen, not the patient and it is desirable to have each area as self sufficient as economically possible, but there will likely be a need for a central treatment area, particularly in a University center where new techniques are of such importance.

13. MEDICAL SCHOOL AND HOSPITAL DEPARTMENTS TO BE LOCATED IN NEW BUILDING

Principle: The new clinic building provides the opportunity to solve some medical center space problems by locating departments in the clinics that are appropriate to the clinic function and the long range medical center plans.

Implementation: More study needs to be done in this area. EYE and ENT have indicated they would be interested in moving their entire departments to the new building, thus freeing up Mayo space for expansion of other departments.

Provisions for some pharmacy space will be necessary. Because medical records activity is more concerned with out patients (500 visits vs. 50 admissions) it may be worth considering moving the entire medical records department and utilizing data processing equipment. Hospital Administration will have to make a judgment about the best way these services should develop. A cafeteria for patients and staff would be desirable, perhaps seating 400-500 people and turning over at least 2 1/2 times through proper scheduling.

14. LOCATION OF PHYSICIAN OFFICES

Principle: Staff offices should not be located in the clinics.

Implementation: Staff offices are a critical need in the medical center. It would be desirable to locate a number of such offices in space adjacent to the clinics. With the exception of one or two offices for full time men in the clinics, experience indicates that the placement of staff offices in this area confuses the function of the building, congestion results, and a jurisdictional battle for office space ensues, usually at the expense of the main job of the clinic-taking care of patients and teaching. A survey of departments would indicate the demand for faculty office space, and the integration of this need would be considered along with the other elements planned for the building.

15. LOCATION OF THE CLINICAL LABORATORY

Principle: The past growth and future projected rate of laboratory space expansion indicates the need for clinical laboratory space that can expand vertically and horizontally.

Implementation: This is a need of the medical center that could be accommodated in the design of the clinic building. Once the side space is defined, an architect can advise as to what can be included. The clinic directors should set a priority on the elements to be included in the building.

16. RELATIONSHIP WITH THE DENTAL SCHOOL

Principle: It would be advantageous to combine the out-patient facility with the clinical facilities of the dental school.

Implementation: The space needs of the clinic building will have to be combined with the space needs of the dental school. An examination of areas that could be shared is necessary. Then the architect, in considering the site size, can advise about the feasability of such a program. More meetings with the dental school are desirable to further define advantages of a combined building.

17. PATIENT CARE RESEARCH

Principle: The area of patient care research will become a larger program and require space. No small animal research will be done.

Implementation: This will require space for interviewers, computers, etc. and involve the participation of other university faculty.

18. HEALTH EDUCATION

Principle: A program of patient health education, as a vehicle for training and a model for other hospitals in the state should be developed.

Implementation: The existing program would be expanded with space for exhibits, films, and meetings with patients.

19. EXPERIMENTAL PATTERNS OF PATIENT CARE

Principle: This facility will be a place where various patterns of care can be rendered to different groups.

Implementation: This involves a restatement of the need to have a building with large conduits for unknown advances, exposed mechanicals, moveable walls etc.

II. INTRODUCTION

"Few would deny that the present clinic system of our urban hospitals is second-rate and that many of the current social and economic issues of medical care could be studied and remedied best in the environment of ambulatory care."

William H. Stewart, M. D.
Surgeon General
U. S. Public Health Service

The reasons for submitting this report to the Clinical Medicine and Hospital Subcommittee at this time are stated in Dr. Carey's cover letter. The elements covered in the report are the overall clinic program, space needs for the individual clinics, the guiding principles of clinic management, statistical data on the clinics, and some financial information about clinic operations. We recognize that further work needs to be done in defining individual clinic programs and combining space requests into an optimal configuration.

This report is not grounded in a single concept of education, research or patient care. Rather, it is intended to be flexible so that the new clinic facility may accommodate a variety of programs and patterns of education, service and research.

The report addresses itself to the question of what needs to be accomplished in order to have these plans become a reality. The section on future steps to be taken attempts to integrate the suggestions of the Clinic Directors group with the work of the Learn Committee. In this regard, we are heartened by the conclusions of the Learn Committee Preliminary Report (pages 5 to 8) on ambulatory care.

It would be impossible to assemble this information without the help of many individuals and sources. First, we are grateful to the Louis W. and Maud Hill Family Foundation whose generous financial support has made possible the editing and publication of this report. Dr. Robert Howard, Dr. N. L. Gault, Jr., and Miss Gertrude Gilman have been most helpful in their support of this project and in supplying data for this report. We are also indebted to Mrs. Judith Furber, former Research Assistant, who assembled much of the data for the report. Finally, we should like to acknowledge the corporate authors of the report, the Clinic Directors. They have devoted much time and effort over the past seven years, to the end that this medical center might achieve its full potential in ambulatory madicine.

John H. Westerman, Research Associate
Kathryn E. Ritzen, Research Assistant

III. FUTURE STEPS TO BE TAKEN

"In the last resort a man rightly prefers his own interest to that of his neighbors."

Justice Oliver Wendell Holmes

A. HISTORICAL SUMMARY

Before we consider the remaining steps along the path to a new outpatient facility, it is appropriate to review the progress that has already been made. The following data (which have been up-dated) were outlined at a Clinic Directors meeting on February 19, 1965 in a presentation to Dr. Howard and Dr. Gault.

1960 PRIORITY GIVEN

The Medical School and Hospital Long Range Planning Committee (a subcommittee of the Administrative Committee of the College of Medical Sciences) recommended to the Dean and University Administration that a new outpatient facility have the first priority for new construction in the College of Medical Sciences. The Dean and University Administration approved the recommendation of the planning subcommittee and included this item in the University request to the Legislature.

1961 BUILDING PLANS SETBACK BY STATE AUSTERITY PROGRAM

The Legislature passed an austerity budget, which provided for only one third of the requested University building needs. No money was alloted for new construction in the College of Medical Sciences.

1961-1962 CONSIDERATION FOR REMODELING

Faced with the difficulty of obtaining legislative funds for a new building, consideration was given to remodeling existing facilities. President Wilson supported the project and indicated that financial assistance was available. Dean Howard met with the Clinic Directors Group in July, 1962, reviewed the University's revised building request and urged that the group continue its efforts to improve the program and facilities in the clinics.

1963 (March) THE MAKOWSKI REPORT

The Clinic Directors, after carefully considering various proposals, rejected the feasibility of an extensive remodeling program. The group concluded that educational and patient care responsibilities could best be met through the construction of a new facility. It was decided to seek means of

implementing the plan for a new facility. Some months later, a decision was made to request foundation support for the planning of a new facility.

1963 (November) ADMINISTRATIVE COMMITTEE ENDORSES REQUEST TO SEEK PLANNING FUNDS

The Administrative Committee accepted the conclusion that remodeling the existing facility was not feasible and granted the request to approach outside agencies for planning funds.

1964 (April) HILL FAMILY FOUNDATION GRANTS PLANNING FUNDS

After reviewing the proposal drawn up by Dr. Magraw and approved by the Clinic Directors, the Hill Family Foundation granted funds which would allow the group to proceed with plans for a new outpatient facility.

1964 (August) PLANNING COORDINATOR SELECTED

Mr. John Westerman was selected to coordinate the plans for a new outpatient facility.

1964 (October) PRESIDENT APPOINTS LONG RANGE PLANNING COMMITTEE

President Wilson appointed a long range planning committee to develop a 20 year program and space report for the health sciences. Dr. Elmer Learn was named chairman of the Committee for the Study of Physical Facilities for the Health Sciences and Mr John Westerman was appointed executive secretary.

1965 (March) CLINIC DIRECTORS MAKE PROGRESS REPORT TO FACULTY

In a report posted to the entire health sciences faculty, the Clinic Directors stated the considerations and objectives in their planning efforts and outlined a proposal for a new facility. The faculty response was favorable to the project.

1965 (July) CLINIC DIRECTORS' ROLES, OBJECTIVES & PROGRAMS PRESENTED TO THE LEARN COMMITTEE

After receiving the endorsement of the Clinical Medicine and Hospital Subcommittee, the Clinic Directors presented their report to the President's Long Range Planning Committee. The Learn Committee accepted and endorsed the report.

1966 (January) LEARN COMMITTEE MAKES PRELIMINARY REPORT TO PRESIDENT WILSON

In a preliminary report on the roles, objectives and programs of the health sciences, the Learn Committee reached conclusions supporting the programs of the Clinic Directors. The Clinical Medicine and Hospital planning reports also endorsed the Clinic Directors' report. While no building priorities have been set at this date, it would appear that a new outpatient-dental facility will have the highest priority.

1966 (February) CLINIC DIRECTORS SUBMIT MORE DETAILED SPACE AND PLANNING REPORT TO LEARN COMMITTEE

By the fall of 1966, Hamilton and Associates (consulting firm retained by the Learn Committee) will assist the Clinic Directors and Clinical Medicine/Hospital planning groups with detailed space and program planning. It will then be possible for an architect to plan the building and construction could begin in the fall of 1967 or 1968 if funding can be found.

B. CONTINUED COOPERATION WITH THE LEARN COMMITTEE AND JAMES A. HAMILTON & ASSOCIATES

On January 10, 1966 Dr. Elmer Learn posted a letter to the Subcommittee Chairmen and members of the long range planning committees. In this letter, Dr. Learn points out nine major steps that should be taken for the fall 1966 report.

The Clinic Directors will continue to work with the Clinical Medicine and Hospital planning groups in developing information and making recommendations that will be necessary before an architect can be engaged.

The Clinic Directors are now awaiting a report from the consultants about how much space is now assigned and used in clinic activities. The next step will be to develop the program statement in more detail and assign square footage figures to the space requests.

C. ALTERNATIVE CHOICES IN PLANNING A NEW OUTPATIENT FACILITY

1. SITE

Ultimate determination of siting will, of course, rest with the architects and long range planning groups. At this time, the most frequently mentioned sites are:

a. The property the University now owns or is about to acquire on Union and Washington streets. This was one of the original proposals for a combined Dental-Medical Outpatient Facility. If additional land were acquired, clinical research facilities could also be included.

b. The Frankfurter parking lot on Essex and Harvard streets in conjunction with converting part of Powell Hall. This site would make it difficult to establish the desired relationship with the dental school, but could tie in nicely to clinical research and in-patient services.

c. Expand present facilities to the fourth floor and take over the Mayo Garage space. While this suggestion would help retain the important relationships with the in-patient services, a new set of problems would be created.

Other sites have been mentioned and an imaginative architect could undoubtedly increase the number of possibilities.

2. RELATIONSHIPS WITH OTHER HEALTH SCIENCE UNITS

A close functional relationship with the hospital is most important to the Clinical Directors group. The provision of comprehensive diagnostic services to the patient is an essential part of this plan. In this regard, the laboratories and x-ray department have kindly consented to include tenative proposals for de-centralized units in this report. In turn, the Clinic Directors recognize the need for a close working relationship with these two departments.

As the School of Dentistry also has building plans, it was thought that more advantageous use of space could be made by joining forces in one facility. This desire still exists. The Schools of Nursing and Public Health are also in need of more space, and in line with the desire to accommodate as many programs as possible within a very limited expansion area, the Clinic Directors would be willing to explore the possibilities of joint facilities with either or both of these units.

A proposal for a clinical research unit has also been made. While it is difficult to evaluate what this facility would entail in the absence of any program planning, it would certainly appear to be another possibility for a close relationship.

3. PHASING OF CONSTRUCTION

Funds, or the shortage of them, often present a problem in projected building plans. There would appear to be two general possibilities in this regard. If a large amount of money and space is available, it would be preferable to build the combination outpatient facility at one time. However, in the event of shortage of funds, space or of both, it would be possible to consider phasing part of the program in a new facility. For instance, one, two or three of the large general departments could initially move to a new structure. When additional funds are available, the other clinics could be transferred over.

IV. GENERAL DESIGN FEATURES

"The clinic directors are an articulate imaginative group. They have an exciting concept which represents a great opportunity for creative architectual design and a great challenge for architectural solution."

Ralph Rapson
Head, School of Architecture
University of Minnesota

1. The space should be multi-purpose to insure maximum utilization (eg., rooms that can be used for examination, consultation and office).

2. Provision of space should be made for future vertical and horizontal expansion. Tentative alternative expansion plans should be considered at the time the facility is built.

3. The exam rooms should have good lighting, wide doors in some areas for wheelchairs, a good communication system to the control desk and adequate soundproofing.

4. It is assumed that the entire building will be air conditioned.

5. The principle of design should center around the patient.

a. There must be easy access to the building. This includes adequate parking and a protected area to load and unload motor vehicles. The need for parking space for patients is so obvious that it should be an item of highest priority on any planning list.

b. The initial impression should give the patient a sense of direction, a feeling of confidence and convey the idea that the staff is interested in the patient.

c. It should be simple for the patient to get to and from his appointment area with no undue delay.

d. The patient will require such conveniences as a dining facility, a coffee shop, attractive, dignified waiting areas, and adequate toilet and coatroom facilities.

6. Lack of good teaching space and provision for teaching aids are two of the present shortcomings in the existing facility. These things must be provided for in the new building, along with space for diagnostic facilities geared to provide rapid service to the clinic physician.

7. The form and design of the building is of major concern to the clinic group. The function of the building is clearly spelled out in the program statement and the clinic group urges that the design form represent the con-

cepts of the occupants.

8. The mistakes of other medical centers have been reviewed. Therefore it is suggested that the following common mistakes be avoided in this facility.

a. Overly strong department or disease identification which ignores both the patient as an individual and the interrelationship with other clinics.

b. Too much emphasis on special purpose features to the exclusion of multiple use of the space.

c. Too much compromising at the expense of teaching space.

d. Lack of a general plan for providing space for special research projects on a temporary basis.

e. Too little attention to future space needs with resultant boxing in of such expensive areas as x-ray and laboratory. This shortsightedness makes future expansion more costly and can permanently destroy important functional relationships.

V. SCHEMATIC REPRESENTATIONS

"The bitter truth is that bad architecture pays too well. Looking at our cities [or medical centers] it is obvious that society is paying the bill."

Ada Louise Huxtable
Architecture Critic
NEW YORK TIMES

The Clinic Directors have translated their major concepts into schematic representations. Mr. Robert Douglass, architect with Leo Daly and Associates, met with the group in 1964-65 and was responsible for drafting the representations on the following pages. They are presented only to illustrate in a pictorial manner what the Clinic Directors have been planning. The circular design is only a convenient form used for illustration purposes; the Clinic Directors are not advocating any particular shape for the building.

The Clinic Directors have taken note of design features in many university teaching clinics in this country. We share Professor Rapson's view that the building of a clinic where comprehensive medicine is practiced and taught with a health team approach, represents a real design challenge. Unfortunately, there is no one clinic building that one can turn to on the national scene as a good example of what the Clinic Directors want to achieve. It might be said the state of teaching clinic design in this country approaches a national disaster. Whether the ultimate shape of the building be round or square, high rise or low rise, single unit or part of a complex, the challenge the Clinic Directors would make to the design architect is: "MAKE IT RIGHT."

FIGURE 1

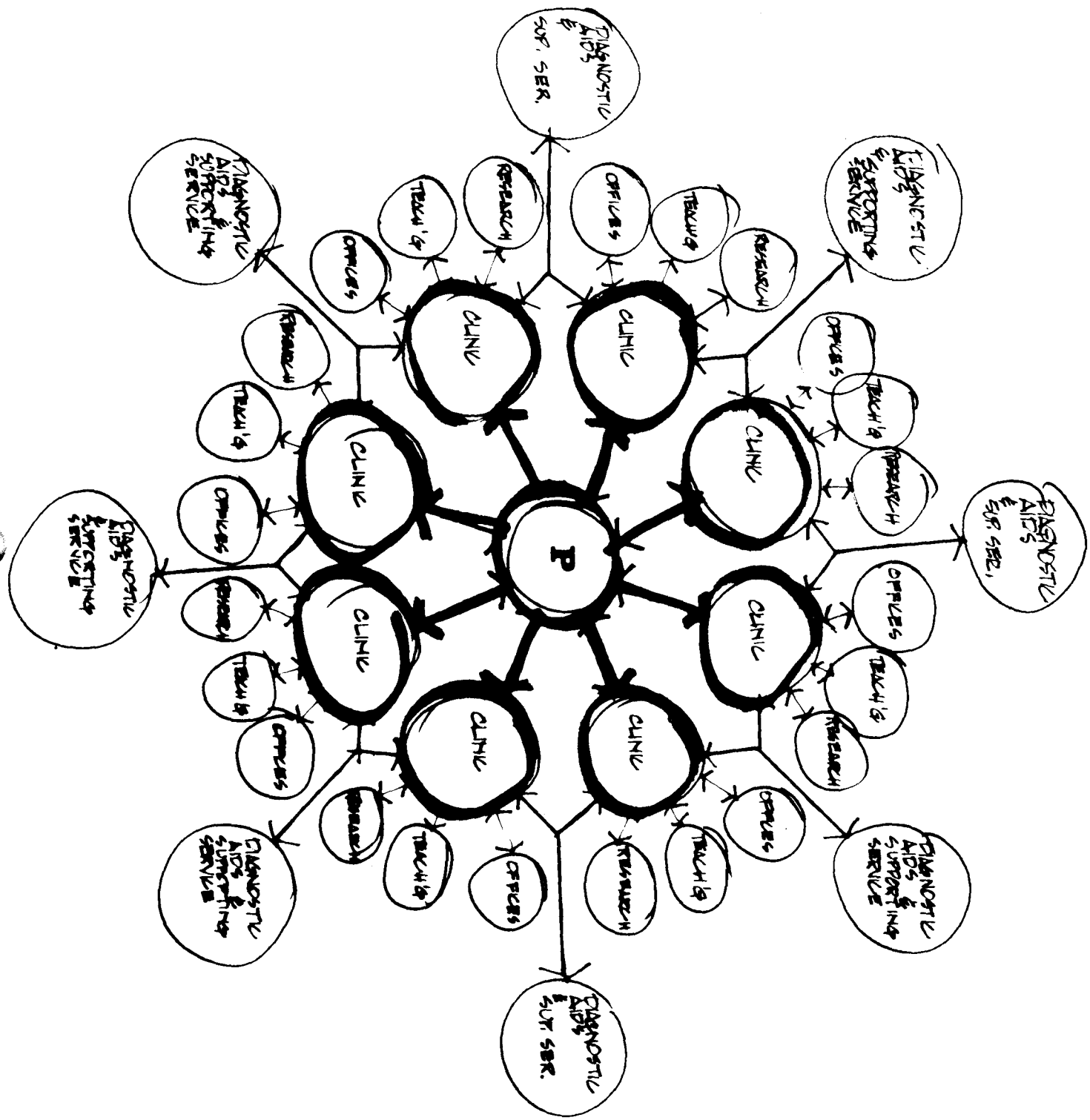

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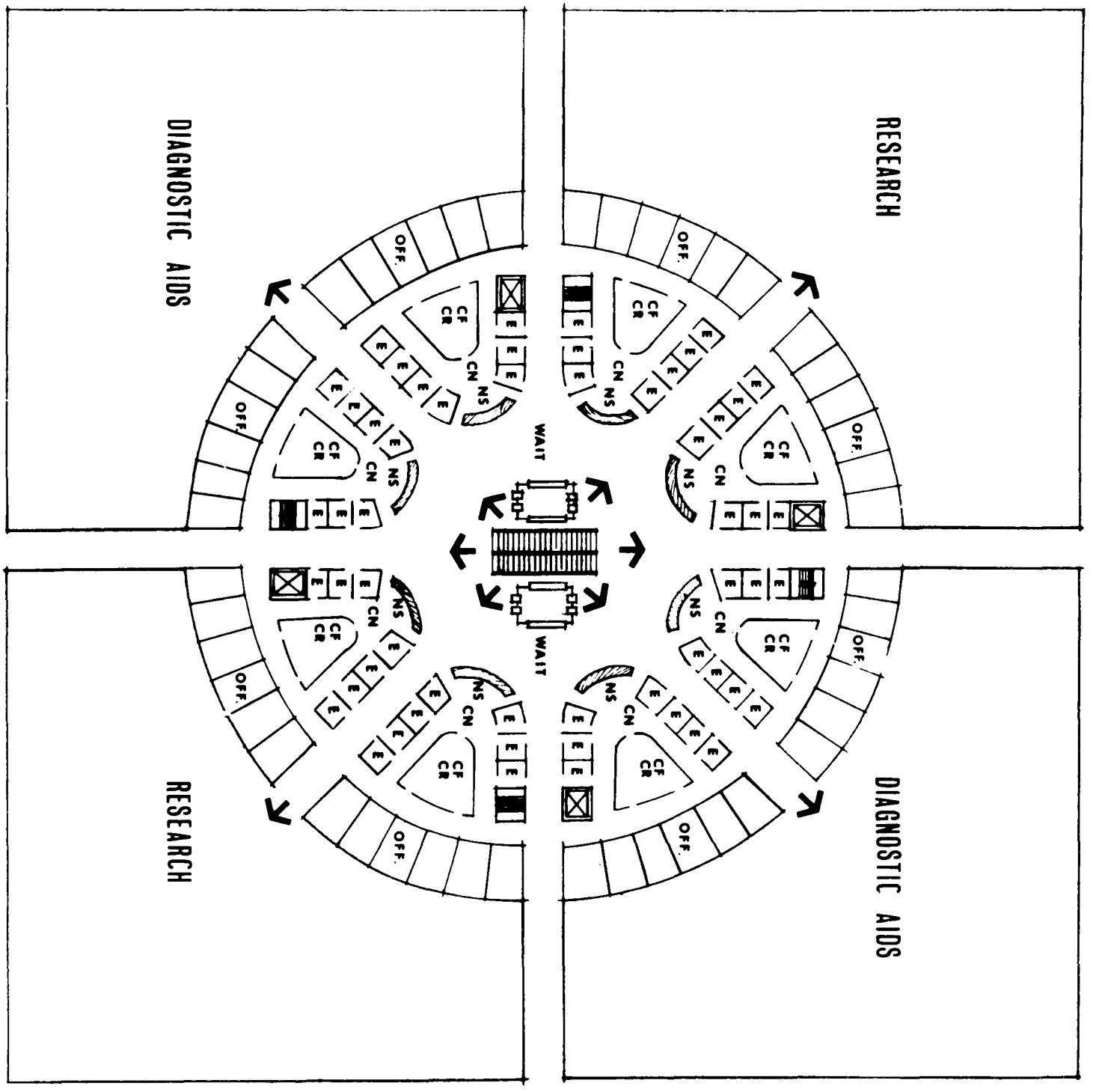
FIGURE TWO

Figure two shows the simple access the patient has to the clinics. The dimensions suggest qualities of human space, indicating the close doctor-patient relationship (designed for the health team concept) and the intensely personal faculty-student educational setting. The center waiting area is quite open. This was done deliberately. Major open space would be a most desirable feature. As the late French architect, Le Corbusier, said: "Space is the foot that walks, the eye that sees, the head that turns."

FIGURE 2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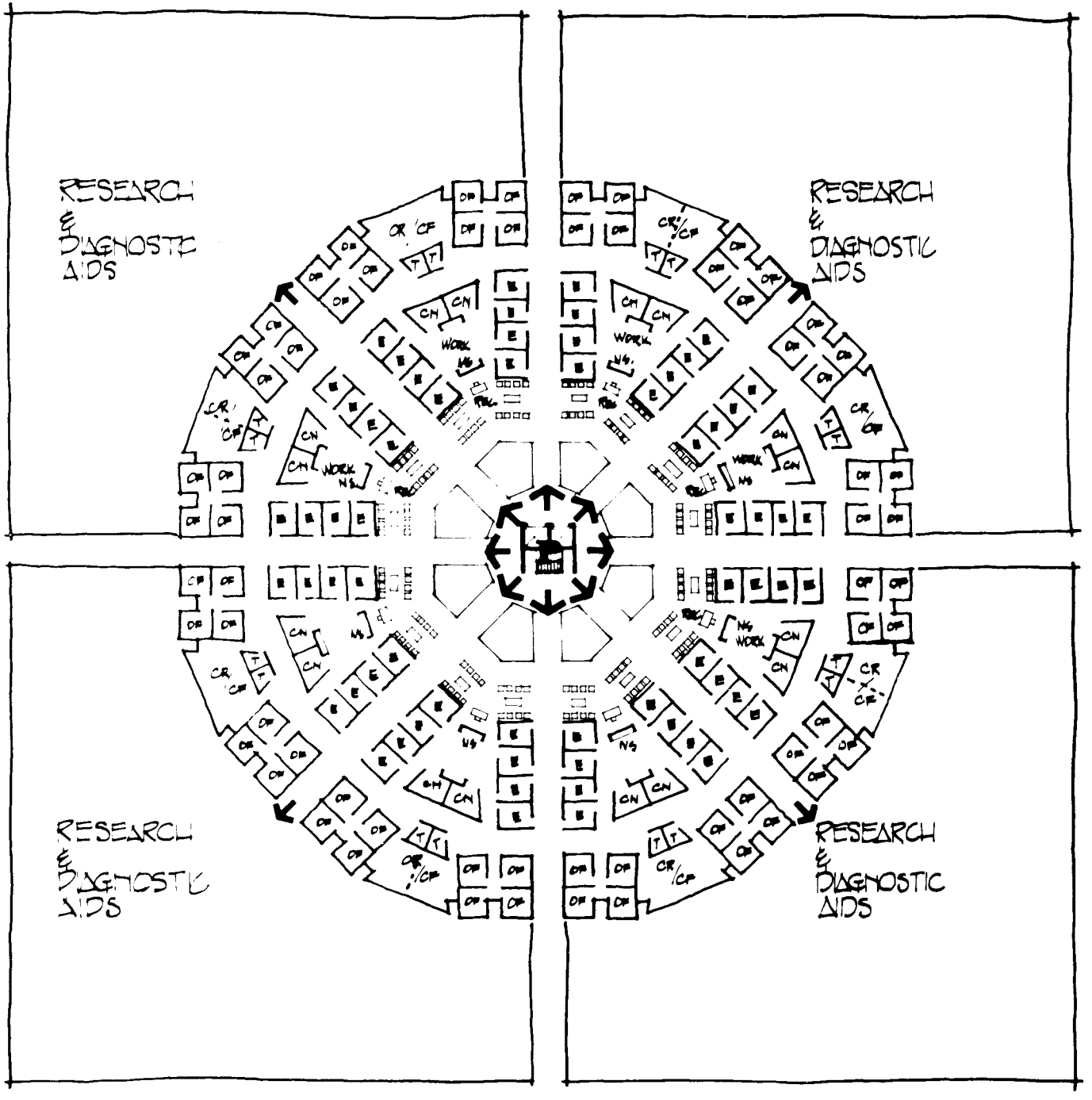


FIGURE 3

SCHEMATIC FLOOR PLAN
BASIC CLINIC SUITES

SUITES	8
EXAM ROOMS	64
CONSULTATION ROOMS	16
CLASS/CONFERENCE ROOMS	8
OFFICES	64

TYPICAL
BASIC CLINIC SUITE

EXAM ROOMS	8
CONSULTATION ROOMS	2
CLASS/CONFERENCE ROOMS -	1 LARGE OR 2 SMALL
OFFICES	8

R. DOUGLASS - DESIGNER

TABLE I

EXISTING MEDICAL OUTPATIENT CLINIC SPACE BY NUMBER OF ROOMS AND SQUARE FEET ASSIGNED TO VARIOUS FUNCTIONS

CLINIC	# OF ROOMS	OFFICE SQ. FT.	MEDICAL SQ. FT.	AUXILIARY SQ. FT.	TOTAL SQ. FT.
AUDIOLOGY	11	155	533	220	908
*CARDIAC-ADULT	16	63	574	317	954
-PEDS	18	510	821	362	1693
COMP-CLINIC	5	276	-	168	444
*CYSTIC FIBROSIS	11	45	77	94	216
*DERMATOLOGY	12	92	418	244	754
ENT	5	316	1164	90	1570
EYE	12	39	1543	270	1852
HOSPITAL SPACE ASSIGNED TO OUTPATIENT - NOT AVAILABLE					
MEDICINE	22	268	1033	786	2087
NEW MEDICINE	16	274	531	607	1412
*NEUROSURGERY	12	46	86	63	195
*NEUROLOGY	15	91	368	163	622
NUTRITION	1	50	-	-	50
*OB/GYN	10	155	533	114	802
*ORTHOPEDICS	11	91	153	190	434
PEDIATRICS	20	931	1160	766	2857
CDS	23	2063	288	560	2911
*PSYCHIATRY	25	592	1104	655	2351
CHILD PSYCH	17	644	622	455	1721
*SURGERY	8	227	614	153	994
*PROCTOLOGY	4	25	92	24	141
*TUMOR	2	17	51	-	68
*VASCULAR	1	-	51	-	51
*UROLOGY	11	68	116	143	327
TOTAL	288+ rooms	7038 sq. ft.	11932 sq. ft.	6444 sq. ft.	25414 sq. ft.

*Clinics that share space. The square footage of these clinics represents the percentage of space according to the amount of time it is used by a clinic.

+ The total of rooms is actually 211, the 288 figure represents the number of rooms by the clinics in any given week, showing 77 rooms as shared space.

TABLE II

MEDICAL OUTPATIENT CLINIC SPACE REQUESTS BY NUMBER OF ROOMS

CLINIC	OFFICES	TEACHING CONFERENCE	EXAM/ TREATMENT	LABS	AUXILIARY	TOTAL
ANESTHESIOLOGY	13	2	10	1	5	31
AUDIOLOGY	19	3	39	-	13	74
CLINICAL LABS	8	2	-	14	10	34
COMPREHENSIVE CLINIC	17	4	-	-	2	23
DERMATOLOGY	14	2	20	2	11	49
ENT	7	2	25	-	4	38
EYE	2	2	20	-	3	27
HOSPITAL ADMINI-STRATION	5	1	-	-	11	17
MEDICINE	4	4	43	1	12	64
NEW MEDICINE	9	22	45	-	13	89
NEUROLOGY	12	2	27	-	11	52
NEUROSURGERY	3	1	9	-	2	15
NUTRITION	2	1	-	-	1	4
OB/GYN	16	2	18	-	4	40
ORTHOPEDICS	5	2	16	-	1	24
OUTPATIENT NURSING	3	1	-	-	-	4
PEDIATRICS	9	2	9	1	7	28
PHYSICAL MEDICINE & REHABILITATION	2	-	5	-	2	9
PSYCHIATRY	48	5	25	-	1	79
CHILD PSYCHIATRY	16	-	16	-	-	32
PSYCHIATRY-DAY CARE	4	-	2	-	6	12
CLINICAL PSYCHOLOGY	2	-	5	-	1	8
PUBLIC HEALTH						
RADIOLOGY	4	1	8	-	12	25
SURGERY	5	2	28	-	14	49
UROLOGY	3	1	12	1	9	26
TOTALS	232	64	382	20	155	853

TABLE III

SUMMARY OF EXISTING AND PROJECTED FIGURES FOR 1971

EXISTING TOTALS		% INCREASE	PROJECTED
STUDENTS	150 (per class)	33%	200
INTERNS	41	15%	47
MEDICAL FELLOWS AT MINNESOTA	198	15%	228
MEDICAL FELLOW SPECIALISTS AT MINNESOTA	138	15%	159
*FACULTY (P. T.)	441	15%	507
PATIENTS: NEW	24,957	25%	31,196
OLD	98,099	25%	122,623
TOTAL	123,056	25%	153,819

SOURCE: DATA FROM MEDICAL BULLETIN, UNIVERSITY OF MINNESOTA, VOL. 37, NO. 1, SEPTEMBER 1965.

* TABLE III OF DEAN HOWARD'S REPORT TO FACULTY SEMINAR, MARCH 19-20, 1965.

VII. SPACE REQUESTS OF INDIVIDUAL AREAS

The following lists of space requests by individual clinic areas are intended to reflect needs for clinic purposes only. In some cases, however, clinics have also specified space needs for departmental offices, taking into account the possibility of having an entire department move into the clinic facility. Nevertheless, the space request totals at the bottom of each individual list and in the comprehensive chart at the end of this section, include only clinic, not departmental, space needs.

AMBULATORY MOTEL-TYPE ACCOMMODATIONS

This would be a unit designed for the use of patients who:

1. Have a number of scheduled visits to the clinics and may require more than one day for a workup. This would also be a convenient service to those patients who travel some distance to the clinics.

2. Come to the radiation therapy clinic for daily treatments.

3. Are now admitted to the hospital but who do not require bedside nursing and who could comfortably be cared for in a facility of this type.

The admission criteria and staffing patterns would have to be carefully worked out. There is precedent for a unit of this type, with both Florida Medical Center and the University of Iowa reporting favorable results with such a unit. Hospital Administration has considered converting part of Powell Hall for such an experiment at Minnesota.

There is no fixed formula to determine the number of units required at this center. The eligibility criteria would influence how many units are needed. As a rough guess, the staff could conceive of a 40-60 room unit, varying from single bed rooms to suites.

ANESTHESIOLOGY

Type of Room or Space	Number of Rooms
1. Faculty offices	10
2. Secretarial offices (or 1 secretarial/1 steno-file room)	2
3. Doctor's office/converting to sleeping room at night if necessary	1
4. Large file area	1
5. Exam rooms	1
6. Treatment rooms (with X-Ray equipment)	1
7. Respiratory Function exam/treatment suite	6
8. Pulmonary function evaluation rooms	2
9. Therapy/Instruction room	1
10. Large conference room (40-50) with visual aids facilities	1
11. Resident room (20)	1
12. Receiving area - control of visitors (could be central for clinic)	1
13. Blood gas analysis laboratory	1
14. Anesthesia storage room	1
15. Equipment storage area	1
	31

Sterilization equipment/facilities

Clinic should be close to Surgical Specialties

Faculty could move if no space is available in vacated areas

Dr. Van Bergen

AUDIOLOGY

Type of Room or Space	Number of Rooms
1. Senior faculty offices	5-7
2. Supporting faculty offices (instructor level)	10
3. Resident audiologists (20)	4
4. Student area (35)	1
5. Classroom (50)	1
6. Seminar room (25)	1
7. Library (20 x 40)	1
8. Case conference room	1
9. Waiting room (children's - 400 sq. ft.)	1
10. Waiting room (adult - 200 sq. ft.) (Both waiting areas could be shared space)	1
11. Secretary area/files (large)	1
12. Coordinator's office	1
13. Language/speech examination and therapy rooms	2
14. Children's section:	
a. Control/exam room 15 x 26	6
b. Individual training rooms 10 x 10	4
c. Group training room 20 x 30	1
d. Electral dermal room & control room	1
e. Electral encephalic & sonic computer room & control	1
f. Observation play room, 1-way glass, wired for sound	1
g. Toilet	1
15. Adult section:	
a. Exam/control rooms 12 x 23	4
b. Individual training rooms 10 x 12	4

AUDIOLOGY (cont.)

Type of Room or Space	Number of Rooms
15. Adult section: (cont.)	
c. Group training room 20 x 30	1
d. Pure tone audiology room 9 x 9 (protected from outer room noises)	6
e. Special exam rooms 9 x 9	3
f. Special control rooms 9 x 9 (e. & f. with air conditioning)	3
g. Hearing aid exam rooms 18 x 18	2
h. Group exam room 28 x 28	1
16. Lab/equipment maintenance room 20 x 20	1
17. Hearing aid inventory/maintenance room	1
18. Equipment storage area	1
19. Clerical storage area	1
	74

No office/exam room combinations

Close proximity to ENT, Neurology, Pediatrics

* This program is broader than clinic services

Dr. Lassman

CLINICAL LABORATORIES

Ideally, the clinical laboratories serving in-patients and out-patients should be centrally located. The facilities should be located geographically to readily permit future expansion. An estimate of laboratory space requirements to serve both in-patients and out-patients as of the year 1975 is presented below.

Chemistry including isotopes	20,000 sq. ft.
Hematology including unit laboratories in Heart Hospital, Masonic, etc. and including Out-Patient unit laboratory	15,000 sq. ft.
Microbiology	7,500 sq. ft.
Immunology	2,500 sq. ft.
Blood Bank	2,500 sq. ft.
Genetics and related facilities	3,500 sq. ft.
Total	51,000 sq. ft.

If this development is not possible at the time the new Out-Patient Facility is constructed, sufficient space must be allocated to permit rapid, high caliber out-patient service. Construction should be planned in such a manner that consolidation of the in-patient and out-patient services could be arranged at a later date.

If the initial allocation of funds is sufficient to provide only out-patient laboratory facilities, this development should include the following areas:

Type of Room or Space	Number of Rooms
1. Specimen Processing and Blood Drawing Area	1
2. Adjacent specimen area toilets	2
3. Data processing area (including satellite computer facilities)	1
4. Reception and waiting area	1
5. Clerk's laboratory	1

CLINICAL LABORATORIES (cont.)

Type of Room or Space	Number of Rooms
6. Multiphasic laboratory screening area	1
7. Routine laboratories	
a. clinical chemistry	4
b. hematology	2
c. urinalysis	1
d. genetics	1
e. immunology and serology	1
f. microbiology	1
g. mycology	1
h. virology	1
i. E.K.G.	1
8. Offices	
a. Staff	3
b. Faculty	3
c. Clerical	2
9. Glass washing and sterilization	1
10. Staff lounge and locker	1
11. Conference room (60 - dividable)	1
12. Laboratory equipment, storage and repair room	1
13. Reagent storage, including solvent storage	1
14. Classroom	1
	34

Drs. Strandjord and Benson

EXAMPLE OF ONE MULTIPHASIC OPERATION

MULTIPHASIC HEALTH CHECKUP
INSTRUCTIONS AND INFORMATION FOR PATIENTS,
PERMANENTE MEDICAL GROUP, OAKLAND, CALIFORNIA

Please read carefully before coming in for your Multiphasic Checkup.

The Multiphasic Health Checkup is a two to three hour multi-test examination arranged in this orderly manner specially for your convenience and to save your time. You will be asked to complete a health questionnaire and certain tests will be done by nurses and technicians. Because of the need to undress partially, women are asked to dress as casually as possible. Do not wear mascara. If you have ordinary glasses in addition to contact lenses, wear your ordinary glasses for this checkup. Results of these tests will be explained to you by your doctor at the time of your physical examination on a later visit. Some of these tests will be new to you since we are continually trying to develop better methods of providing medical care.

Please answer each question on the attached questionnaire with a black pencil at home and be sure to bring it in with you at the time of your Multiphasic Checkup. If it is difficult for you to read, please bring someone with you who can read to you.

Do not have any food or alcohol for at least four hours before your Multiphasic appointment. You may have only plain water during this time. Do not eat during the Multiphasic Checkup unless you are a diabetic.

Phase 1 Please report to the Registration Desk and present your Health Plan Identification Card to the Receptionist.

You will be given another health questionnaire attached to a clipboard, and whenever you have a few minutes between phases, mark the answers on your questionnaire with a black pencil (do not use ink).

Charges for the Multiphasic are as follows:

A, D, J, and S Coverage	No Charge
B, F, and U Coverage	$1.00 registration fee
C, G, and V Coverage	$1.00 registration fee and $2.50 lab fee
Tetanus immunization shot	$ .50 only during this Multiphasic

(Members of Groups 14, 24, 33, 124, 18 and 18-01 have prepaid for this)

Phase 2 Select any available dressing booth. Please undress to the waist and roll your stockings to the ankles. Women should remove girdles. Put on one of the paper gowns on the shelf, wearing it like a coat (open in front). Proceed to Phase 3.

Phase 3 An electrocardiogram (ECG) will be taken of your heart.

Phase 4 You will be given a very sweet sugar (glucose) drink as a test for diabetes. (If you know that you have diabetes, or if you had surgery in which part of your stomach has been removed, please tell the nurse and do not drink the glucose.)

Phase 5 Your weight, height, and several other body measurements will be recorded. You will be asked to remove your shoes.

Phase 6 A chest X-ray will be taken.

Phase 7 For Women Only: Women over age 40 will have a breast X-ray examination for cancer detection.

Phase 8 Return to your dressing booth and dress. Please place your used gown in the waste basket and in consideration of the next person keep the booth neat. Take your things with you and go on to Phase 9.

Phase 9 Your eyes will be tested by reading a chart. If you have corrective glasses, please take the test while wearing your glasses.

Phase 10 Drops will be placed in your eyes and the pressure in your eyes will be measured for glaucoma. A drop then will be placed in the left eye to dilate the pupil for photography, if you have no history of glaucoma.

Phase 11 You will be asked to blow as hard as you can into a machine and the capacity of your lungs will be measured.

Phase 12 Remove your right shoe so you can take a test which is measured by applying pressure on your ankle tendon.

Phase 13 You will have your hearing tested by six different tones (in each ear). As soon as you hear each tone, press the switch. When you stop hearing it, release the switch.

Phase 14 The nurse will assign you to a booth and give you a box with a set of question cards. Please answer each question by taking out one card at a time; drop the card into the middle section if your answer to the question is "yes", and into the bottom section if the answer is "no." Do not bend or write on the cards. When you have finished all cards, take the box to the nurse.

The nurse will call you at the time you are to have your laboratory tests. Leave your question box in your booth if you have not finished, so that you may return to complete it later.

Phase 15 If you have not had a tetanus (lockjaw) immunization shot in the past five years, it is advised that you have a booster immunization for it. Ask the nurse to give you one with a special hypo-spray gun, which does not require a needle. As a part of your Multiphasic Health Checkup, you can receive this tetanus shot for 50 cents, at this time only. (Tetanus toxoid injections you may require at any other time will cost you the regular fee.)

Phase 16 The laboratory technician will draw a blood specimen from your arm.

Phase 17 A cardboard cup for your urine test is available in the toilet. Please read the instructions posted on the wall in the toilet very carefully and collect the urine into the cup midstream. Put the specimen cup, on top of your IBM card, through the sliding window.

Return to the nurse in Phase 14 and complete any questions which she may have for you.

Phase 18 If you have received the second eye drop in Phase 10, a picture of the eye will be taken.

Phase 19 Your pulse and blood pressure will be taken while you are lying down.

Phase 20 Return to the Registration Desk where the receptionist will give you another box of question cards.

In order to be doubly certain of the results of your tests, certain follow-up tests may be advised. The receptionist will give you the necessary instructions for these before you leave. Any additional tests you require will be charged for at the regular Health Plan rates. The receptionist will arrange for your return appointment for your physical examination with the doctor of your choice.

Women are advised to call "GYN Clinic" for a pelvic cancer detection test and pap smear. Men and women over 40 are advised to call "Medical Appointments" to arrange a Sigmo examination for detection of rectal tumors. The GYN and Sigmo examinations cannot be done the same day.

EXAMPLE OF INFORMATION FROM ONE MULTIPHASIC OPERATION

PERMANENTE MEDICAL GROUP - OAKLAND
PRELIMINARY REPORT - MULTIPHASIC HEALTH CHECKUP - 7/28/65

Doe, Jane — Dr. Smith J J
M. R. No. 9876543 Birthdate 05-27 Female Oakl

Anthropometry: 127.5 lb., 64.5 in

**ECG: Lt. Vent. Hypertrophy
**Phonocard: Systolic Basal Murmur
**Supine Blood Pressure: 165/80 Supine Brachial Pulse: 76.

Vital Capacity: 2.3 L 1 sec 3.2 L Total
**Chest X-ray: Cardiac Enlargement Heart/Chest Ratio = .52
Breast X-ray: NSA

Visual Acuity: R.E. 20/40 or better L.E. 20/40 or better
Pupillary Escape: No pupillary escape
Ocular Tension: R.E. Normal
**Retinal Photo: Minimal Diabetic Retinopathy
Hearing: No Clinically Signif. Hearing Defect
Pain Response Test: 21 (Norm. 6-30)

**Urine: PH 6 Glucose Med. Protein 0 Blood 0 Bacilli Neg.
Clinitest 3+4+ Acetone +
VDRL 0 Blood Group AB Latex Agglut. 0
Hemoglobin 12.3 GM (Norm. 12.0-15.2) White Count 9,000

Serum:		(Normal)	Serum:		(Normal)
**Glucose (1 hr.)	215 MG	(Under 205)	Cholesterol	195 MG	(140-270)
**Glucose (2hr.)	170 MG	(Under 151)			
Total Prot.	6.7 GM	(5.8-7.8)	Calcium	9.5 MG	(8.4-10.8)
Albumin	4.0 GM	(3.4-5.0)	Uric Acid	3.9 MG	(3.0-6.3)
Creatinine	.90 MG	(Under 1.3)	SGOT	21 U	(Under 50)

*2 HR. Blood Drawn 10 min. late

**Patient Received the Following (advice rule) Directions:
901-Refer to Medical Drop-In Clinic Stat Because
Urine Sugar 3+4+ and Acetone +
700-2 Hr. Blood Sugar

*Consider Refer to Asympt. Diabetes Study if Follow-Up Confirms Diabetes.

Patient Answered Yes to These Questions on 1964 Form:
249-Had Bad Reaction or Sensitivity to Penicillin?
In The Past Month:
434-Throat Been Sore Almost Every Day?
In The Past 6 Months:
450-Shortness of Breath With Usual Work or Activity?

EXAMPLE OF INFORMATION FROM ONE MULTIPHASIC OPERATION (cont.)

In The Past Year:

476-Repeat Pain, Pressure, Tight Feeling in Chest in Middle of Breast Bone?
478-Repeat Pain, Pressure, Tight Feeling in Chest When Sitting Still?
482-Repeated Pain or Pressure, in Chest When Walk Fast, Left on Rest?
483-Repeated Pain, Pressure or Tight Feeling in Chest Forced Stop Walking?
484-Repeated Pain or Pressure, in Chest Lasting More Than 10 Minutes?
574-Always Have to Get Up From Sleep to Urinate?

** Consider Abnormal, or Possible Variation From Normal
NSA = No Significant Abnormality
* Note

COMPREHENSIVE CLINIC AMBULATORY CARE PROGRAM

(Community Service - Ambulatory Care)

Type of Room or Space	Number of Rooms
1. Director's Office	1
2. Assistant Director's Offices	2
3. Audio-Visual Coordinator	1
4. Educational Psychologist	1
5. Sociologist	1
6. Teaching Room/Library (25)	2
7. Reception Area Receptionist, desk, files	1
8. Secretarial Offices	4
9. Community Service Offices 1 Director 1 Secretary	2
10. Resident Offices	2
11. Instructor Comprehensive Care Office	1
12. Student Center (for close association with patients and clinics)	1
13. Faculty Offices	2
14. Conference Rooms (20-25)	2
	23

Dr. Magraw

DERMATOLOGY

Type of Room or Space	Number of Rooms
1. Faculty Offices - full-time staff	4
2. Faculty Offices - part-time staff	2
3. Instructors Offices	3
4. Residents Offices	3
5. Teaching Room (20-25) (For clinical presentations & conferences) To include teaching aids: lantern slides, motion pictures, video tapes, programmed learning devices, blackboards, microscopes, etc.	1
6. Laboratory for mycology, bacteriology, venereology Must include bench space, storage racks, incubator, refrigerator, autoclave, plumbing, hood, gas and air.	1
7. Laboratory for clinical research Including space for storage, files, desk space for staff and secretary.	1
8. Student rooms (15-20) Space for writing & dictating records, library, conference table.	1
9. Examining Rooms	12-15
10. Minor Surgery Rooms	3
11. Physical Therapy Rooms - Ultra violet therapy (with facilities for light testing), superficial x-ray and grenz ray therapy.	2
12. Photography Room Includes fixed facilities for photography of patients - lighting, cameras. Also view boxes and files for storage of photographs and records. One desk for photographer and/or filing aid.	1
13. Nurses' Office Consider need for social service worker, especially in venereal disease case findings.	1
14. Secretarial and Receptionist Space (and filing space)	1

DERMATOLOGY (cont.)

Type of Room or Space	Number of Rooms
15. Service Room - for storage of supplies, linens, refrigerators for injectables, sterilizers, plumbing for preparation of surgical instruments. Number of rooms depends on design of total clinic. Rooms must be reasonably close to examining, treatment and minor surgery rooms.	1-3
16. Patient's Waiting Room Area (40-50) Could be shared space (Children's Area of Waiting Room)	1
17. Dressing rooms for patients	8
	49

Dr. Fusaro

ENT

Type of Room or Space	Number of Rooms
1. Faculty Offices	4
2. Secretary Offices	2
3. Waiting Room (30)	1
4. Conference Room (50)	1
5. Teaching Room (30) (either 4 or 5 with library facilities)	1
6. Nursing Area/Work Room (coat/storage closets)	1
7. Clinic Coordinator's Office	1
8. Exam Rooms (Private Rooms)	4
9. Exam Cubicles	17
10. Special Procedure Rooms	3
11. Minor Operating Room	1
12. Scrub/Storage Room	1
13. Residents Room (25 with Secretary) No office/exam room combinations Close to Audiology Convenient to X-Ray	1
	38

Dr. Duvall

EYE

Type of Room or Space	Number of Rooms
1. Secretaries' Office	1
2. Residents' Office (8) with Library Facilities	1
3. Student/Conference/Teaching Room (10-16)	1
4. Conference/Teaching/Exam Room (36) - Amphitheatre Type	1
5. Nursing Area	1
6. Waiting/Receiving/Drop Room (40)	1
7. Exam Rooms 24' x 8'	10
8. Long Range Field Rooms 10' x 15'	2
9. Muscle Room	1
10. Tonography/Glaucoma Room	1
11. Photography Equipment Room	1
12. Dark Adaptation Room	1
13. Myography Room	1
14. Electroretinography Room	1
15. Minor Surgery/Treatment Room 16' x 16'	1
16. Orthoptics Room 12' x 12'	1
17. Orthoptic Technician Room	1
	27

Dr. Knoblach

HOSPITAL ADMINISTRATION

Type of Room or Space	Number of Rooms
1. Admissions/Registration	3-4
2. Information Desk	1
3. Cashier	1
4. Financial Records Area	1
5. Computer Room	1
6. Administrator's Office	1
7. Administrative Associate's Office	1
8. Secretary's Office	1
9. Central Appointment Desk	1
10. Check Room	1
11. Employee's Locker Room	1
12. Stenography Pool	1
13. Nursing Supervisor's Office	1
14. Conference Room	1
	17

Mr. Mitchell

Certain other hospital functions may be transferred to the new clinic building. The hospital is not in a position to make any definite commitment at this time. The following list represents some of the possibilities that have been mentioned for hospital supporting services.

A. Dietary

Hospital now has kitchens in Heart, Masonic and main hospital. The outpatient kitchen could be designed to accommodate patients, staff and visitors in this new complex.

The Dining Area might be divided into areas for the above groups, with separate serving lines. Perhaps 500-700 seats would be available, allowing for a 2 1/2 x turnover. In addition, 7-10 partitioned conference dining areas could be planned for conference meals.

Space Requirements

Outpatient kitchen, including receiving, preparation, cooking & baking areas

Dishwashing

Refrigeration

Storage

Offices

Lockers and Toilets

Dining Rooms with Conference Rooms

Coffee Shop

B. Medical Records

This department would be difficult to de-centralize or split. If the bulk of the transport is for outpatients (500 a day vs. 50 admissions) and if the main hospital facilities are not able to expand to provide the desired services, then transfer of the entire department to the outpatient building may be desirable.

Space Requirements

Offices and Conference Room

Record Storage

Work Area and Stenographic Pool

Space Requirements (cont.)

Biometrics and Data Analysis Area

Research Cubicles

Charting Space

Service Desk for Checking Out Charts

Pneumatic Tube Area

Reproduction Area

Lounge and Toilet Facilities

If the dental and outpatient units are combined in one building, it may be appropriate to consider developing a health sciences record department.

C. Pharmacy

Again the decentralization problem is present. In this case, there would appear to be no alternative to offering the ambulatory patients some sort of convenient pharmacy service. There would be the possibility of moving part or all of the pharmacy operation to the new facility. At this stage, it would seem there is more merit in operating a satellite pharmacy in the outpatient area.

The main hospital pharmacy could serve as the place for ordering, storage, and manufacture of pharmaceuticals. The outpatient pharmacists may want to become more involved in the teaching and service programs by working in the clinic area.

Space Requirements

Dispensing Area

Patient Waiting Area

Stock Room

Storage

Vault

Offices

Employee Locker and Toilet Area

HOSPITAL ADMINISTRATION (cont.)

D. Employee Health Service

This department has been written up in the hospital program report. No decision has been made as to the location of this unit.

The following areas will require space and this should be worked out with the space consultants.

E. Housekeeping

F. Central Sterile Supply

G. Maintenance and Operation

H. Social Service - these are not totalled, since they appear throughout the clinic space requests

Comprehensive Clinic

Medical Clinic Area

Pediatric Clinic Area

Obstetrics/Gynecology

Surgery

Neurology

Orthopedics

Maternity & Child Health

Community Service

Cardiac Clinic

Physical Medicine

7th floor - 2 offices
Rehabilitation Center - 2 offices

Psychiatry

One Supervisory Office
11 private offices
One group work office
Two child psychiatry offices

MEDICINE

Type of Room or Space		Number of Rooms
1. Clinic Director's Office		1
2. Secretaries' Office		1
3. Clinic Coordinator's Office (near Clinic Director's Office)		1
4. Visiting Physician's Room (10)		1
5. Student Alcoves (6) including: viewboxes, blackboards, chairs, writing facilities, library		5
6. Treatment/Procedure Room		1
7. Endoscopic Room		1
8. Medical Procedure Room		1
9. Nursing Area		1
10. Social Service Office		1
11. Teaching/Conference Rooms (25)		2
12. Medical Fellow Staff Area (15-20) (Near department)		1
13. Sub-waiting Area (50) with Coat Facilities		1
14. Exam Rooms:	General medicine	10
	Medical Specialties	20
	Cardiac	10
15. Separate Patient Appointment and Physicians' Control Desks		1
16. Central Amphitheatre		1
17. Area for Teaching Machines, T.V. Facilities (possibly)		1
18. Receiving Area for Specimens, X-Rays, Charts, Etc.		1
19. Storage Area for Supplies, Instruments		1
20. Private Laboratory/X-Ray Equipment for Exemplary Care Unit		1
		64

NEW MEDICINE

Type of Room or Space	Number of Rooms
1. Clinic Director's Office	1
2. Assistant Clinic Director's Office	1
3. Secretary's Office	1
4. Clinic Coordinator's Office	1
5. Clinic Coordinator's Assistant's Office	1
6. Social Service Office	1
Interview Rooms	2
7. Sociologist Office	1
8. Statistician's Office	1
9. Public Health Office	1
10. Visiting Staff Area/Coat Facilities, Tables, Chairs	1
11. Resident Room (12)	1
12. Nursing Area/Telephones, Writing Space	1
13. Receiving Area	1
14. Control Desk	1
15. Protoscopy Rooms	4
16. Sub-Waiting Room (20)	1
17. Exam Rooms	40
18. Observation/Consultation/Student Rooms	20
19. Teaching Room (100)	1
20. Demonstration Room (20)	1
21. Medical Procedure Room - Vital Capacities, Wash Basin,	1
22. Library Facilities	1
23. Toilet Facilities for Specimens Easy Disposition	4
	89

NEUROLOGY

Type of Room or Space	Number of Rooms
1. Faculty Offices	3
2. Social Service Office	1
3. Nursing Office	1
4. Secretarial Offices	2
5. Residents Offices/Consult Rooms	5
6. Student-Doctor Consult Rooms	5-10
7. Patient Exam Rooms	25
8. Eye Examing Room 8 x 20	1
9 Conference Rooms (large)	2
10 Library (with X-Ray viewing boxes, stereo X-Ray viewer, programmed learning devices, audio-visual teaching equipment)	1
11. Sterile type treatment room, with adjacent storage of medical supplies	1

The following are areas that could well be included in the Outpatient Facility. However, they are not included in the space figures for the Outpatient Facility at this time.

I. Community Services

1. Office for Director	1
2. Offices for Minn. physicians participating in c.s. program	3
3. Psychologist Office	1
4. Psychologist Clinical Laboratory	1
5. Social Service Office	1
6. Conference Room (60)	1
7. Storage room for video tape equipment, adjacent to Conference Room	1

NEUROLOGY (cont.)

Type of Room or Space	Number of Rooms
II. Laboratory Space and Offices	
A. Electroencephalography - Faculty Office	1
1. Electroencaphalography suite of EEG recording rooms	4
2. EEG technician work area	1
3. Storage area for materials and recorded EEG's	1
4. Typist area adjacent to EEG lab	1
5. EEG reading room	1
B. Electromyography	
1. Faculty Office (adjacent to EMG suite)	1
2. Electromyography recording rooms (10x12)	2
3. Storage area for materials, electron equipment, recordings	1
4. Work area for technicians	1
C. Clinical studies room for collection & storage of specimens	1
D. Clinical Psychology laboratory	

III. Special Equipment

4 Electroencephalographs

2 Electromyographs

Perimetry

Tangent Screen

Visual acuity projector

X-Ray Viewing Boxes and X-Ray stereo viewer

For each room: opthalmoscopes, tuning forks (128 & 564 cycles p/sec), reflex hammers, stethoscopes, etc.

Deep freeze for storage of specimens

ORTHOPEDICS

Type of Room or Space	Number of Rooms
1. Faculty office	1
2. Secretary office (2)	1
3. Residents office (2) (with view boxes, files, dictating facilities)	1
4. Exam/Student/Consultation rooms (double-entrance, Orthopedic exam tables)	12
5. Conference/Library room (8-10)	1
6. Teaching room (60)	1
7. File room	1
8. Cast room (large)	1
9. Brace/Equipment room (large enough for Milwaukee Brace patients)	1
10. Observation corridor (patient walking)	1
11. Clinic Coordinator's office	1
12. Minor Surgery room	1
13. Attending staff office	1
Simple X-Ray (and technician to run it)	24
Clinic convenient to X-Ray Department	
Office area separate from Clinic	

Dr. Kane

OUTPATIENT NURSING

Type of Room or Space	Number of Rooms
1. Director's Office	1
2. Secretary's Office	1
3. Conference Room/Library (12)	1
4. Private Nurse/Patient/Family Conversation Areas in each individual clinic	
5. Area for charge nurse	
6. Social Service Area	
7. Treatment Room:	
Storage for sterile equipment	
Refrigeration	
Counter space	
Storage for supplies, equipment, etc.	
Storage for medications	
Sink space	
8. Storage closet - for linen and clerical supplies	
9. Receiving area - more private than large waiting areas	
10. Public Health Nurse Office	1
11. Exam rooms - large enough so table may be circled during an exam	
12. Nursing Area - part of or visually connected to waiting area	
13. Linen disposal system/area	4

14. General Suggestions:

- Clerical duties divorced from Nursing
- Individual Waiting Areas/Small Rooms
- Varying chairs to accommodate various types of patients
- Space for litter patient and wheel chairs
- Semi-private area for patients to recline/near Nursing area
- Rest rooms - specimen facilities included - large enough to accommodate wheelchairs
- Wide doorways - to admit wheelchairs
- Telephones - low enough for wheel chair patients
- Coat checking areas/with supervision

PEDIATRICS

Type of Room or Space	Number of Rooms
1. Clinic Director's office	1
2. Assistant Clinic Director's office	1
3. Coordinator of Service to Handicapped Child (and one Secretary) office	1
4. Nursing Room	1
5. Visiting Physician's office	1
6. Residents office	1
7. Social Service office	1
8. Psychologist's office	1
9. Audiologist - Speech Therapist Room	1
10. Public Health office	1
11. Office for Sociologist/Anthropologist/Psycho-educational Unit	1
12. Audiologic Testing Room	1
13. Procedure Room	1
14. Waiting Room	1
15. Steno/File Room	1
16. Play Area for Small Children	1
17. Observation Room - 1 way glass	1
18. Treatment Rooms	2
19. Suites of 8 exam rooms each	4
20. Laboratory - similar to private physician's	1
21. Photography Room/Storage for Equipment	1
22. Teaching/Conference Room (large) Teaching devices, T.V. facilities Dictating facilities for students	1

PSYCHIATRY

Type of Room or Space	Number of Rooms
1. Clinic Director's office	1
2. Associate Clinic Director's office	1
3. Rotating Staff offices	3
4. Staff Psychiatrist offices	8
5. Exam Rooms - staff/student (exam/interview) preferably centered elsewhere	20
6. Resident offices	12
7. Senior Resident offices	4
8. Psychologist offices (1 chief) (if Psychologists choose to have their own area)	5
9. Testing/Equipment Room	1
10. Psychiatric Social Work Director	1
11. Psychiatric Social Workers	9
12. Waiting Area (Receptionist)	1
13. Secretary Areas	4
14. Conference Rooms 20'x20' (12)	4
15. Teaching/Library Room	1
16. Family Therapy Rooms 12'x12' (8)	4
	79

Dr. Anderson

CHILD PSYCHIATRY

Type of Room or Space	Number of Rooms
1. Senior Psychiatrist office	1
2. Psychiatry Trainees offices	4
3. Clinical Psychologist Trainees offices	4
4. Psychologist offices	4
5. Social Service offices	2
6. Clinic Coordinator	1
7. Play Therapy Room 14 x 16 (with toys)	2
8. Family & Group Therapy Room (10-12)	1
9. Observation Room	1
10. Resident Office/Exam Rooms	12
	32

Share the following Psychiatry Space:

- Secretarial
- Appointments
- Filing-Records
- Conference Rooms
- Teaching devices, T.V., Recording equipment

Day Care for Children:

- Pre School
- Early School
- Early Adolescent (late adolescent with adults)

Day Care Center developed in vacated space

Dr. Jensen

PSYCHIATRY - DAY CARE

Type of Room or Space	Number of Rooms
1. Psychiatrist office	1
2. Psychologist office	1
3. Work/Testing Room adjacent to Psychologist's Office	2
4. Social Service office	1
5. Receiving Area Facility for coats Phone for Patients' use	1
6. Nursing Area	1
7. Occupational Therapist (near nursing area)	1
8. Kitchen for teaching patient to care for himself	1
9. Lounge/Dining Area (15-30) (with small platform for stage)	1
10. Occupational/Vocational Therapy Room - storage space	1
11. Recreation Room - large (facilities for ping pong, pool, etc.)	1
	12

Flexible space for expansion, adaptability
Offices as hub surrounded by activity
Director's office large enough to accommodate 7-10
Consultation area combined with Psychiatry

Dr. Koutsky

CLINICAL PSYCHOLOGY

Type of Room or Space	Number of Rooms

Data based on present patient and comprehensive clinic student load which utilizes clinic for three half-days a week. All space can be shared space.

1. Clinic Office/Consult Room (large enough to contain 2 staff, 9 students, 1 psychometrist)	1
2. Exam Rooms (large enough for 2 chairs, 1 small desk)	5
3. Clinic Secretary's Office or Area	1
4. Waiting Room Access (about 8 seats required)	1
	8

5. If staff offices are included in Clinic Facility, the following will also be needed:

Director's Office	1
Private Secretary's Area	1
Space for 1/2 time Psychometrist	
Space for part-time consultants (2)	
Storage, supply, file space	

Close proximity to: Psychiatry, Neurology, and if possible, New Medicine

Dr. Brantner

RADIOLOGY

NOTE: It would be preferable if this Department could provide outpatient service by expanding on the existing site. However, in the event part of the service must be located in a separate outpatient facility, the following are some preliminary space estimates.

Type of Room or Space	Number of Rooms
1. Fluoroscopic Rooms	4
2. Toilets adjacent to fluoroscopic rooms	4
3. Radiographic Rooms	4
4. Main waiting Room	1
5. Pediatric Waiting Room	1
6. Developing Room, dark room, film sorter	1
7. Technician Office	1
8. Radiologist Office	3
9. Staff Viewing Room	1
10. Viewing Room with cubicles	1
11. Conference Room	1
12. Film storage	1
13. Toilets	2
	25

Dr. Hewell

SURGERY

Type of Room or Space	Number of Rooms
1. Faculty offices	2
2. Resident offices (2-3)	2
3. Exam Rooms	24
4. Exam Rooms (for Peds Patients) - toys, wall objects	1
5. Minor Surgery Rooms (restricted to local anesthesia)	2
6. Conference/Library Room	1
7. Teaching/Visual Aid Room (50)	1
8. Protoscoptic Room	1
9. Consultation Rooms	10
10. Student Rooms	3
11. Scrub/Storage Room	1
12. Secretary office	1
	49

Viewboxes

Sterilizer/Instrument area

Central Receiving, Admissions, Appointments

Central Chart System

Visual aids in teaching areas

Close proximity to ENT

Department offices stay where they are with expansion.

Drs. Aust, Leonard

UROLOGY

Type of Room or Space	Number of Rooms
1. Chief resident's office	1
2. Attending physician's office	1
3. Exam rooms (with desks 10x12), wash basins, urology exam tables	12
4. Control area	1
5. Nursing area	1
6. Secretary office	1
7. Conference/teaching room, 8 x-ray view boxes, screen, blackboard, shelves for film, lockable storage space	1
8. Storage room	1
9. Sterilization room, storage, kitchen, dishwasher	1
10. Special toilet facilities (2-W, 3-M) Designed like home; tape recorder in children's	5
11. Laboratory with microscope and centrifuge	1
	26

Communications system between desk, waiting room, exam room

Dr. Creevy

COST OF OPERATION

UNIVERSITY OF MINNESOTA OUTPATIENT CLINICS

1955 - 1965

Source: University of Minnesota Medical Bulletins: October 15, 1958; October, 1960; October, 1961; September, 1962; September, 1963; September, 1964; September, 1965.

Cost of Operation	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
Outpatient	$672,898	715,963	798,817	951,347	964,859	1,020,656	1,151,922

1962-63	1963-64	1964-65
1,240,076	1,387,658	1,388,844

On the next two pages is financial information from other teaching hospitals. A similar analysis for the Minnesota clinics might be helpful, in that it would seem worthwhile to know the existing state of finances before embarking on new programs. It is intended that the clinic operation will be self-supporting.

CLINIC AND EMERGENCY SERVICE PATIENTS
VISITS - COSTS - INCOME - LOSS
CALENDAR OR FISCAL YEARS ENDED IN 1964

	VISITS	COST	INCOME	LOSS
University Hospitals of Cleveland	215,411	$ 1,801,602	$ 1,095,734	$ 705,868
The Johns Hopkins Hospital	386,362	3,944,599	2,524,675	1,419,924
The Massachusetts General Hospital	188,595	2,704,038	1,544,386	1,159,652
The Society of the New York Hospital	238,345	2,832,267	1,132,442	1,699,825
Hospital of the University of Pennsylvania	66,516	683,163	439,288	243,875
The Presbyterian Hospital - N.Y.C.	399,373	4,141,738	1,898,200	2,243,538
Strong Memorial Hospital	127,262	1,232,069	671,002	561,067
Yale-New Haven Hospital	142,754	1,931,459	1,183,613	747,846
	1,764,618	$ 19,270,935	$ 10,489,340	$8,781,595

NOTES:

1. Income includes that from patient services plus endowment income, gifts, grants, etc. designated for outpatient services.

2. The Presbyterian Hospital figures are for clinics only.

3. Hospitals reporting on changes in out-patient losses during last 10 years were:

   The Massachusetts General Hospital -- up 141%
   The Presbyterian Hospital ---------- up 140%
   Yale-New Haven Hospital------------ up 100%

CLINIC AND EMERGENCY SERVICE PATIENTS
PER VISITS COSTS
CALENDAR OR FISCAL YEARS ENDED IN 1964

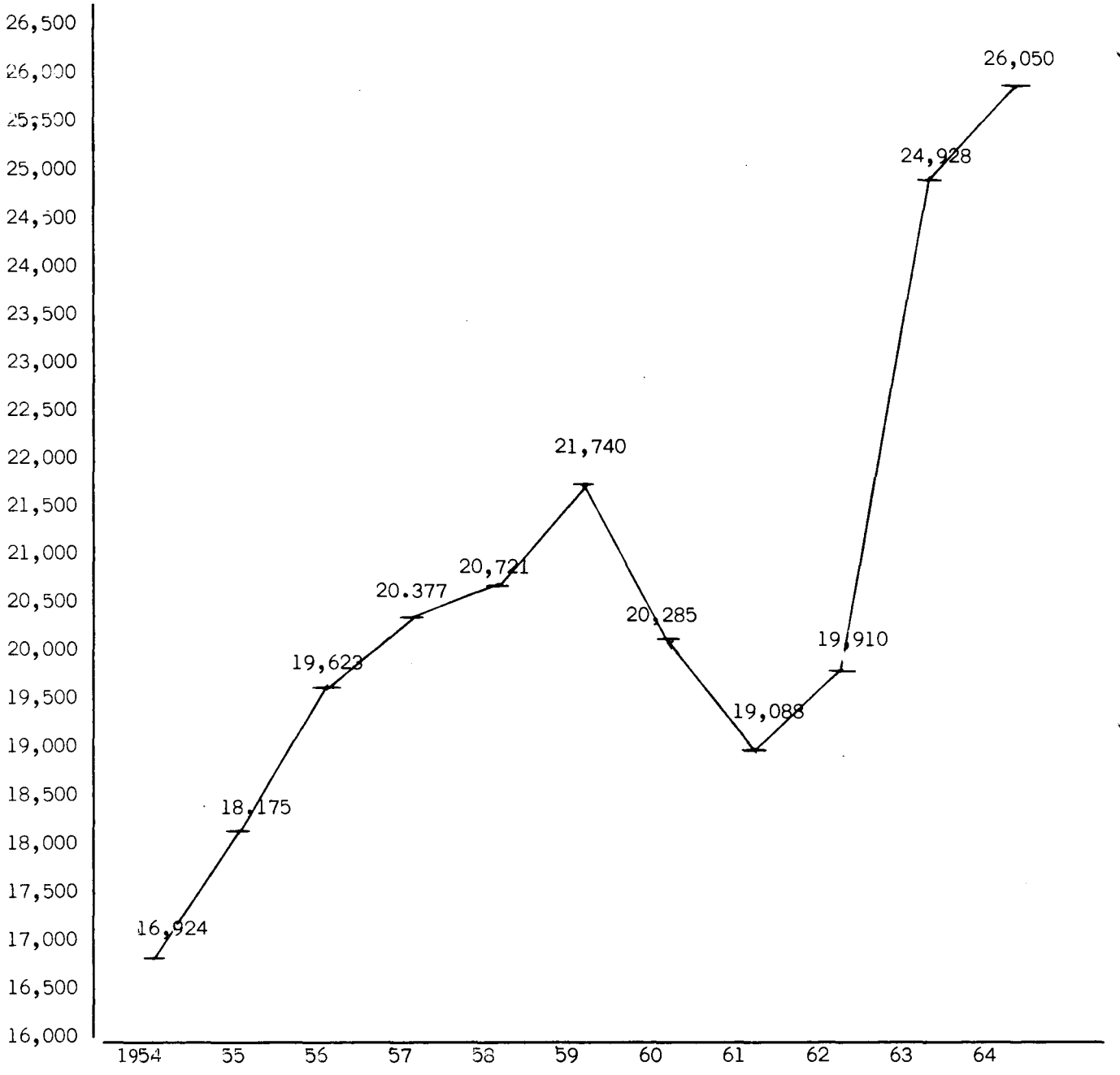
	ROUTINE SERVICES			SPECIAL	TOTAL COST PER
	DIRECT	ALLOCATED	TOTAL	SERVICES	VISIT
University Hospital of Cleveland	$ -	$ -	$ -	$ -	$ 8.36
The Johns Hopkins Hospital	3.54	1.86	5.40	4.80	10.20
The Massachusetts General Hospital	4.71	4.45	9.16	5.18	14.34
The Society of New York Hospital	3.81	4.70	8.51	3.37	11.88
Hospital of the University of Pennsylvania	2.63	2.87	5.50	4.77	10.27
The Presbyterian Hospital - N.Y.C.	3.76	3.76	7.52	2.85	10.37
Strong Memorial Hospital	4.03	2.43	6.46	3.22	9.68
Yale-New Haven Hospital	3.81	5.22	9.03	4.50	13.53
All Hospitals (*)	$ 3.81	$ 3.50	$ 7.31	$ 3.97	$ 11.28

(*) Exclusive of University Hospitals of Cleveland. Separation of total costs were not available. Total cost per visit, including University Hospitals of Cleveland is $10.92

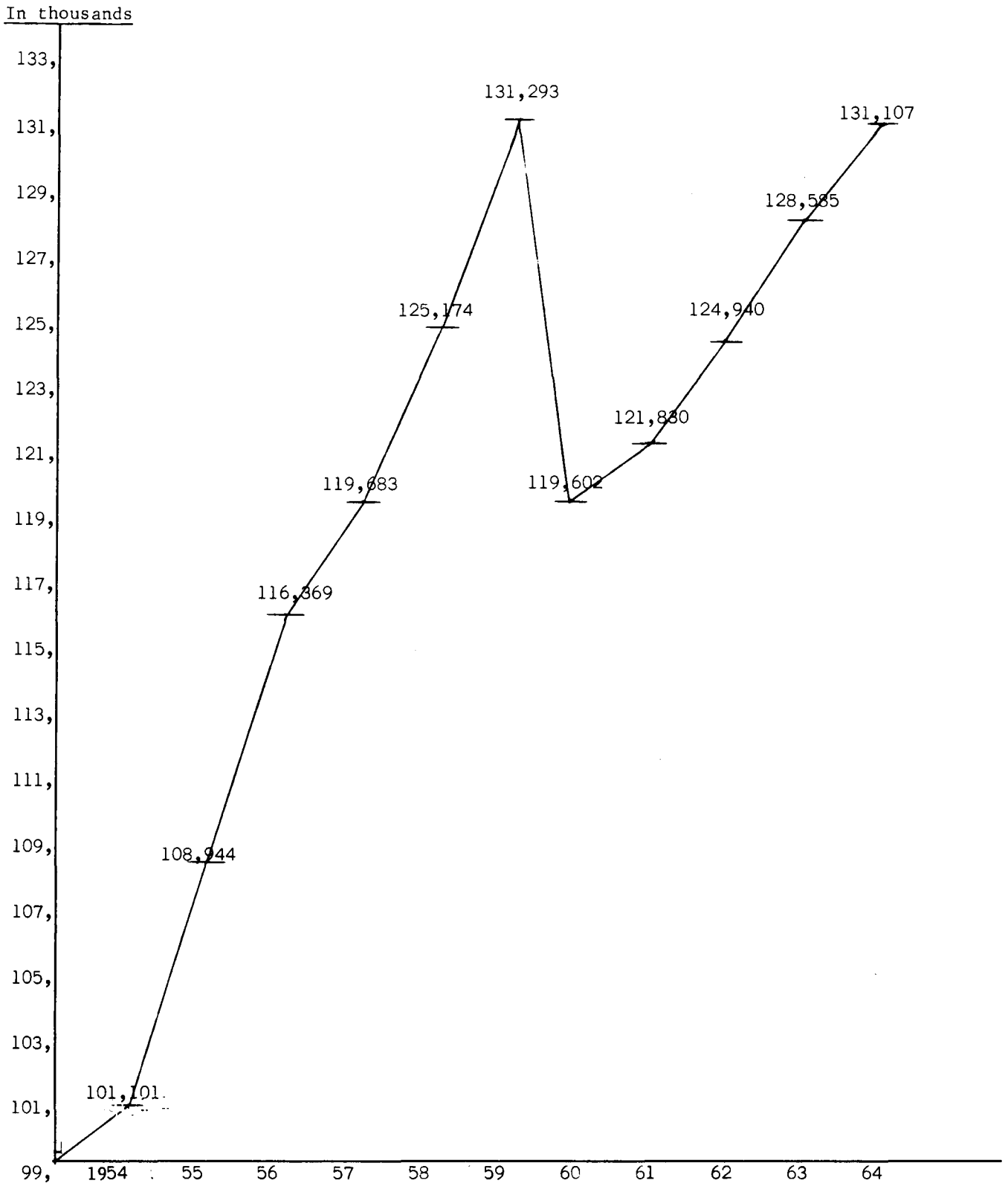
FORTY-TWO YEAR RECORD OF OUTPATIENT VISITS

University of Minnesota Hospitals

1923-24	66,127	1943-44	68,853
1924-25	62,763	1944-45	69,998
1925-26	59,583	1945-56	74,110
1926-27	60,894	1946-47	80,611
1927-28	58,663	1947-48	90,556
1928-29	60,894	1948-49	95,786
1929-30	65,181	1949-50	102,992
1930-31	70,888	1950-51	100,656
1931-32	77,973	1951-52	99,501
1932-33	88,421	1952-53	96,962
1933-34	88,632	1953-54	101,101
1934-35	87,381	1954-55	108,944
1935-36	92,626	1955-56	116,369
1936-37	94,382	1956-57	119,683
1937-38	96,082	1957-58	125,174
1938-39	98,817	1958-59	131,293
1939-40	101,785	1959-60	119,602
1940-41	94,228	1960-61	121,830
1941-42	91,082	1961-62	124,940
1942-43	73,380	1962-63	128,585
1963-64	131,107		
1964-65	123,056		



Total New Patient Visits Over Ten Year Period
from 1953-54 - 64
in the Out Patient Department



Total Out Patient Visits Over Ten Year Period
from 1953-54 - 1964

North Clinic Private Out Patients

the Yearly Period from

1955/56 - 64/65

Year	New	Revisits	Total	Change From Previous Year
1955-56	3,061	15,714	18,775	
1956-57	3,059	17,297	20,356	+1,581
1957-58	2,968	17,763	20,731	+ 375
1958-59	3,269	19,295	22,564	+1,833
1959-60	3,229	17,371	20,600	-1,964
1960-61	3,060	17,378	20,438	- 162
1961-62	2,778	17,415	20,193	- 245
1962-63	3,224	16,586	19,810	- 383
1963-64	3,092	16,369	19,461	- 349
1964-65	2,578	14,602	17,180	-2,281

Since the Boom year of 1958-59 there has been a steady decline---------- the doctors may be using the General Clinic space to see their Private patients or there may actually be a reduction in number of patients. It would be difficult to determine as no census records are available to uniformly distinguish the usage or patient type.

Source: University of Minnesota Medical Bulletins: January 15, 1958; October 15, 1958; October 15, 1959; October, 1960; October, 1961; September, 1962; September, 1963; September, 1964; September, 1965.

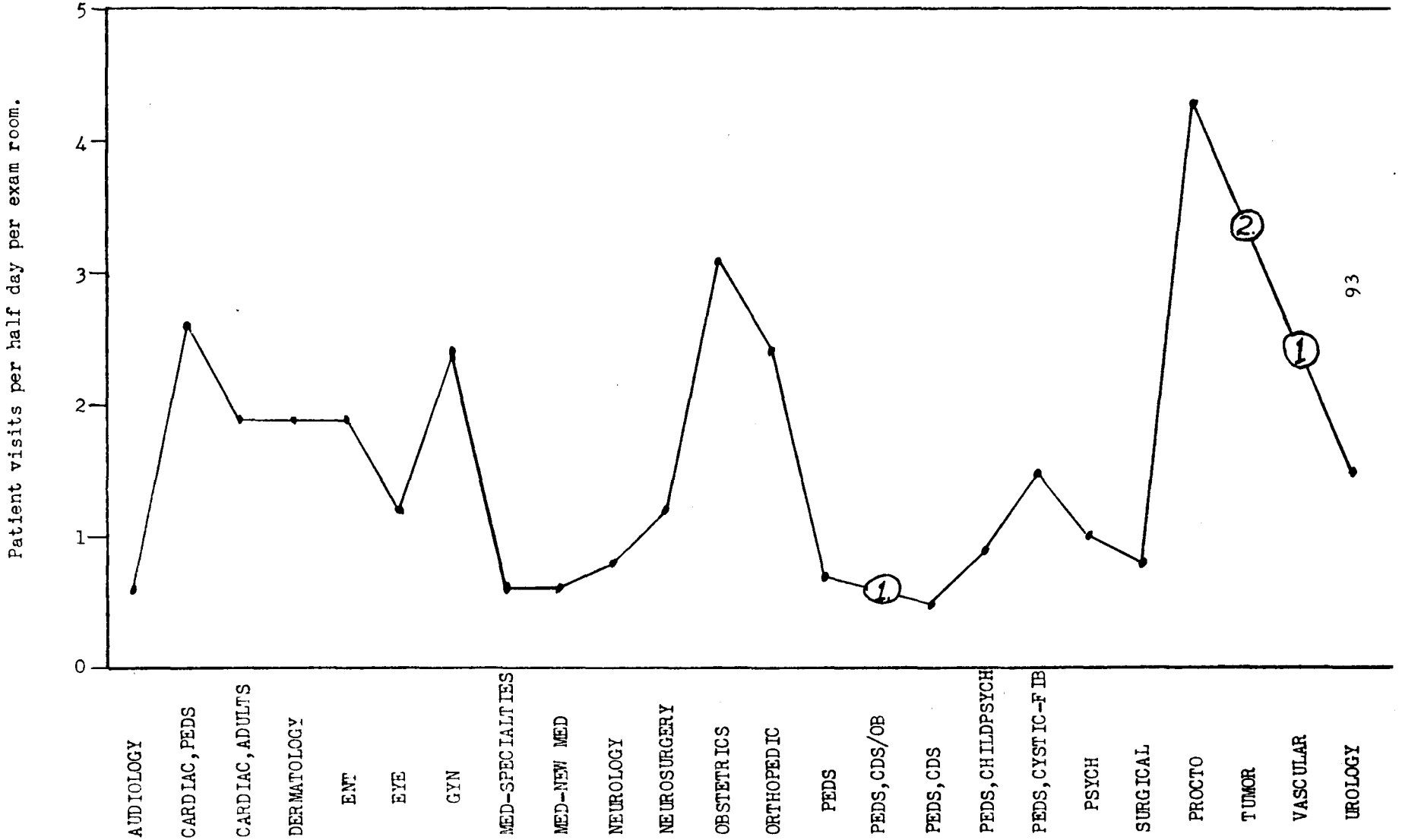
OUT PATIENT CLINIC OPERATING RATIOS, OCTOBER, 1965

Clinics	# of new patients/ week	# of old patients/ week	Total patients per week	Total patients per year	Patients per sq. foot	1/2 Day Meetings per week	Exam rooms available for 1/2 Day, per week	Patient visits per 1/2 Day per room	Teachers	Residents	Patients per teacher per week	Patients per staff (teach & residcombo) per week
Audiology	23	15	38	1,908	2.1	12	60	.6	6	6	6.3	3.3
Cardiac: Peds	8	29	37	1,871	1.1	2	14	2.6	12	12	3.0	1.5
" Adults	3	37	40	1,995	2.1	3	21	1.9	12	12	3.3	2.0
Dermatology	18	57	75	3,727	5.2	5	40	1.9	6	7	12.5	5.7
ENT	22	61	83	4,166	2.6	4	44	1.9	5	4	16.5	9.2
Eye	34	159	193	9,630	5.8	20	160	1.2	19	8	10.0	7.1
Gynecology	10	56	66	3,304	10.3	3	27	2.4	-	9	-	7.3
Med. Spec.	5	208	213	10,670	4.2	31	341	.6	32	10	6.7	5.1
New Med	55	1	56	2,784	2.0	10	90	.6	17	21	3.3	1.5
Neurology	8	46	54	2,712	4.3	6	72	.8	2	1	27.0	18.0
Neurosurgery	2	15	17	872	4.6	2	14	1.2	3	4	5.7	2.4
Obstetrics	10	73	83	4,158	8.6	3	27	3.1	-	4	-	20.7
Orthopedics	9	49	58	2,878	6.6	4	24	2.4	12	5	4.8	3.4
Pediatrics	25	193	218	9,649	3.4	27	270	.7	46	9	4.2	3.5
" CDS/OB												
" CDS	-	35	35	1,756	.6	6	66	.5	3	2	11.6	7.0
" Child Psyc	9	28	37	1,829	2.2	5	40	.9				
" Cystic Fib	1	8	9	455	2.1	1	6	1.5	2	1	4.5	3.0
Psychiatry	9	150	159	7,956	3.4	10	160	1.0	8	20	20.0	5.7
Surgery	10	34	44	2,205	2.2	7	56	.8				
Proctology	15	11	26	1,291	9.2	2	6	4.3	1	1	26.0	13.0
Tumor	2	34	36	1,533	22.6	1	1	36.0	5	10	7.2	2.4
Vascular						1	1					
Urology	5	22	27	1,336	4.1	3	18	1.5	1	4	27.0	5.4
TOTALS & OVER-ALL RATIOS	283	1,321	1,604	78,685	3.2	168	1,558	1.0	187	150	8.4	4.4

OUT PATIENT CLINIC

THIS GRAPH INDICATES PATIENT VISITS PER HALF DAY PER EXAM ROOM FOR EACH CLINIC.
(Patient figures are based on fiscal year July 1, 1963 - June 30, 1964).

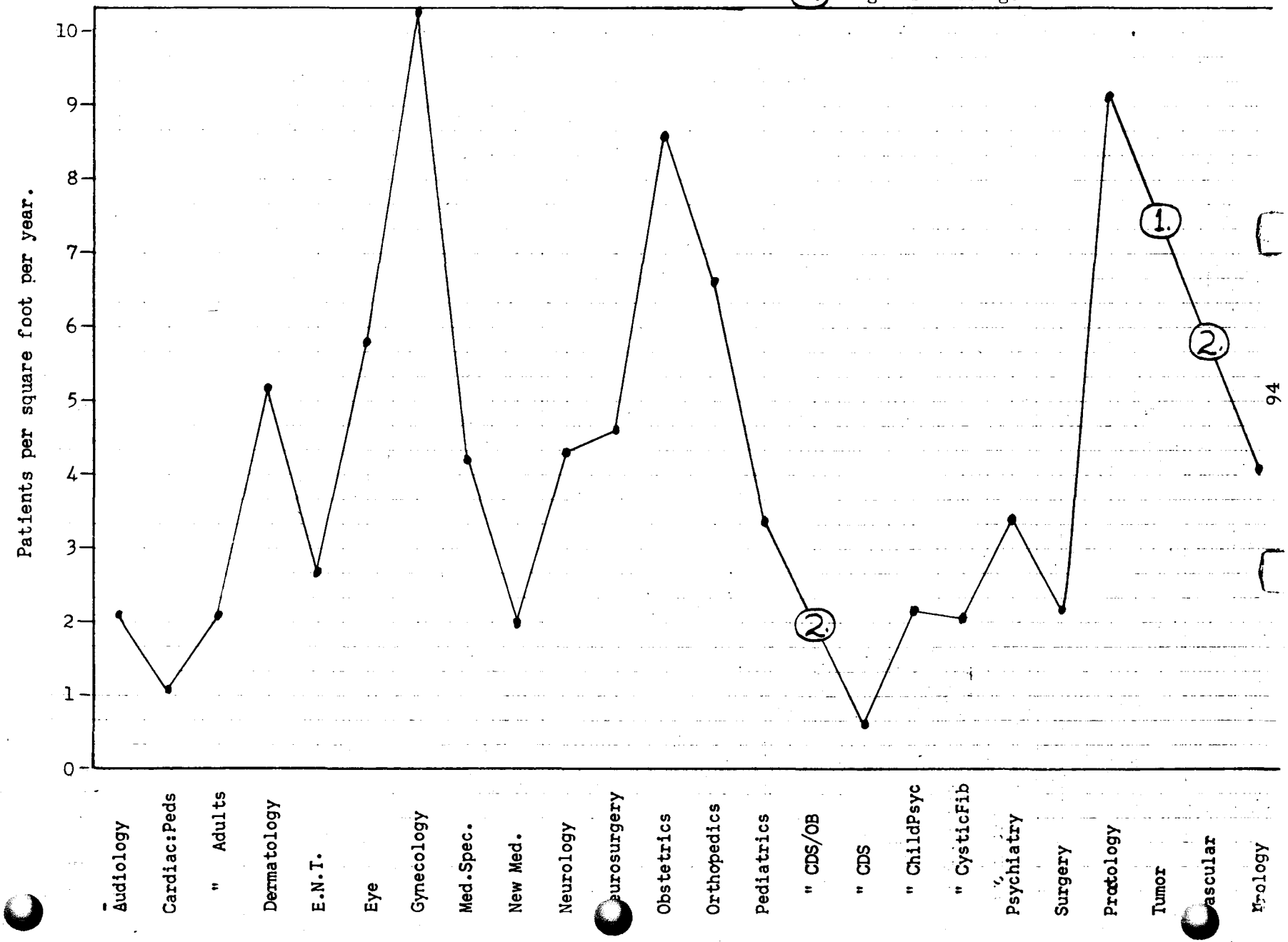
(1.) Figures unknown
(2.) 36.0 is the proper figure for tumor



OUT PATIENT CLINIC

PATIENTS PER SQUARE FOOT PER YEAR FOR EACH CLINIC

1. 22.6 is the correct figure for tumor.
2. Figures missing.



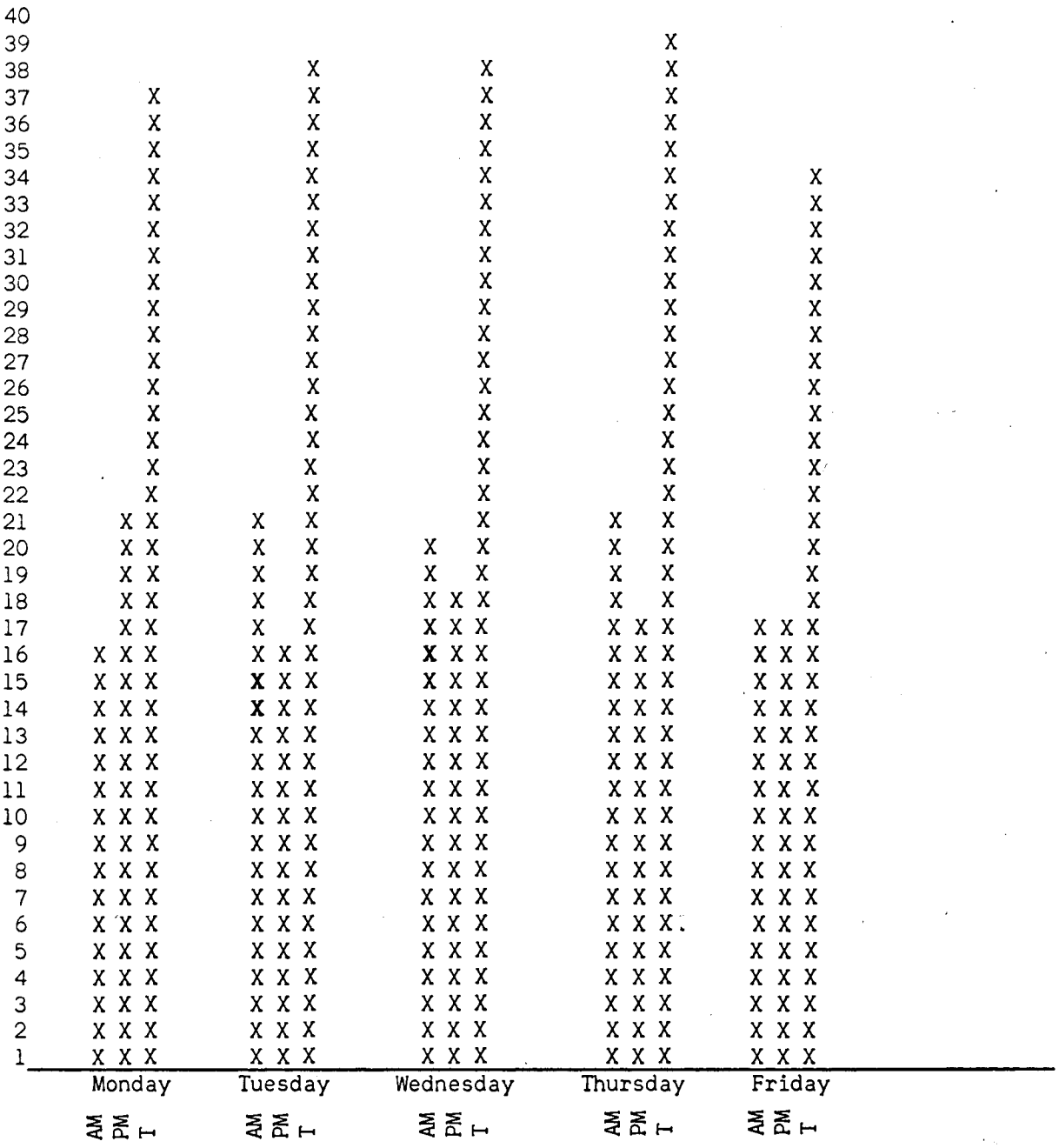
Out Patient Clinic Schedule

Clinic	Monday	Tuesday	Wednesday	Thursday	Friday
Audiology*	x x	x x	x x	x x	x x
Cardiac:					
Adult	x		x		x
Pediatrics	x			x	
Dermatology	x	x	x x	x	
E.N.T.	x		x	x	x
Eye	x x	x x	x x	x x	x x
Orthoptics	x x	x x	x x	x x	x
Squint			x		
Gynecology	x		x		
GynTumor			x		
Med/MedSpec:					
Allergy	x				
Arthritis	x		x		
Cardiac	x		x		x
Chemother.		x			
Chest					x
Diabetic		x			
Gastroscopy			x		
GenMed	x x	x x	x x	x x	x x
Hematology		x			x
New Patients	x x	x x	x x	x x	x x
Gastr/Liver				x	
Neurology:					
Cereb/Vasc	x				
GenNeuro		x		x	
MultiSclero		x			
Seisure				x	
MuscleDisea.		x			
Neurosurgery		x		x	
North	x x	x x	x x	x x	x x
Proctology				x	
Purple		x			
Nutrition	x x	x x	x x	x x	x x

Clinic	Monday	Tuesday	Wednesday	Thursday	Friday
Obstetrics		x		x	
New OB					x
Orthopedics	x	x		x	x
Pediatrics:					
Allergy				x	
CDS	x				
CDS Neuro	x	x	x	x	x
Child Psyc	x	x	x	x	x
Rheumatism			x		
CysFib/Chest					x
Endocrine					x
Gen Peds	x x	x	x x	x	x x
Hematology			x		
Muscle	x				
Neo-Infant	x				
Neurology		x			
New Patients	x x	x	x x	x	x x
Nursery F-U			x		
PKU		x			
Renal					x
Seizure				x	
PhyMed/Rehab	x	x x	x x	x x	x x
Psychiatry	x x	x x	x x	x x	x x
Surgery:					
Blue					x
General	x				
Green				x	
Orange				x	
Plastic			x		
Proctology		x			x
Red	x				
Vascular		x			
White				x	
Tumor				x	
Urology		x	x	x	

* also Sat.morning & Thurs.evening

Weekly Clinic Meetings - Half, Full Days



Tuesday and Thursday Meet for 21 Clinic Morning Sessions as Heaviest AM Schedule
Monday Afternoon has heaviest PM Schedule - 21 Sessions
Thursday is Heaviest Clinic Day with 39 Sessions

COPY

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August 1, 1966

Mr. Hugh Peacock
110 Architecture Building
University of Minnesota

Dear Mr. Peacock:

The Clinic Directors Building Subcommittee continues to plan for remodeling of some existing outpatient clinics. 12.0

After reviewing the enclosed preliminary plans, could you suggest materials to be used to keep remodeling costs low? Evaluation of temporary movable partitions and other materials, with any evaluation of approximate cost of remodeling, will be very helpful.

The Clinic Directors will have a Building Subcommittee Meeting the week of August 8th. I hope you will be able to attend and take part in the discussion of these plans.

Enclosed are:

1. Two preliminary plans for remodeling suggested by Mr. Nelson of Hamilton Associates.
2. A brief description of the proposed Diagnostic Screening Clinic.
3. Two of many possible arrangements of examining rooms for experimental clinic.
4. Sketch of room blueprint, third floor surrounding Northwest court.
5. Detail mechanical blueprints for the third floor, North Clinic Area. – only 1 copy.

If I can answer questions or be of assistance before Mr. Westerman returns, please call me at Hospital extention 2621.

Sincerely,

Mc Brasfield

MB/js

cc: Mr. John Westerman

MINUTES OF CLINIC DIRECTORS MEETING

August 12, 1966

Present: William Kane, Richard Anderson, Annie Laurie Baker, Graham Beaumont, John Brantner, McCollum Brasfield, Sheila Chen, Andy Duvall, Robert Fisch, Eugenijus Gedgaudas, Frank Lassere, Arnold Leonard, Glenn Mitchell, Irmagene Stark, Paul Strandjord, John Westerman, Kathryn Ritzo

Guest: E. Severn Olsen, Chief, Hospital Dentistry

NEXT MEETING: FRIDAY, SEPTEMBER 9, 1966, 4:00 P.M., 510 DENTAL HALL

1. Dr. Kane extended the appreciation of the Clinic Directors group to Dr. Carey for his fine leadership as chairman in the past year.

2. Dr. Kane announced that Gene Johnson would be invited to the next meeting to discuss computer applications to the clinic appointment system.

3. Dr. Kane reported that he had sent a letter to the Medical Staff Hospital Council on behalf of the Clinic Directors, as voted at the last meeting. He also reported that Dr. Magraw has contacted Mr. Hitch of the University of California, who will be guest speaker at a Clinic Directors Seminar some time in October.

4. TEACHING SUBCOMMITTEE

Since Drs. Aust and Makows i both former members of the Teaching Subcommittee, have left the University, Dr. Kane suggested Drs. Crage and Adcock respectively as their replacements on the Teaching Subcommittee. He also requested that Dr. Anderson chair the subcommittee again this year. The results of tests given to the Comprehensive Clinic students this June are now being evaluated. A preliminary conclusion is that greater attention needs to begiven to teaching materials, especially programming materials.

5. DENTISTRY BUILDING SUBCOMMITTEE

Dr. Kane announced that he, along with Mr. Westerman, had met earlier that day with the Dentistry Building Subcommittee and established a liaison between that committee and the Clinic Directors. This is really just the beginning of a dialogue which hopefully will lead to greater cooperation in the future between medicine and dentistry in the outpatient clinics.

6. MULTIPHASIC SCREENING LABORATORY

Next, Dr. Strandjord was asked to give a resume of his multiphasic screening laboratory report, as he had done previously at the Clinic Directors Building Subcommittee meeting. (Refer to the Clinic Directors Building Subcommittee Minutes of August 11, 1966 #5) for the principal outline of the report. Dr. Strandjord noted that at the previous meeting it was suggested that dental and x-ray screening be included, so his report has been revised to include those facilities, but does not include those costs. The costs would best be estimated by Dr. Olsen and Dr. Gedgaudas for their respective units. Dr. Strandjord also pointed out that costs presented are not based on the use of a 20 channel auto analyzer, since that device does not provide the maximum accuracy.

The [illegible] tory, but had several questions [illegible] process would facilitate [illegible] the economic availability of such a program [illegible] attraction for patients around the state to come here. Dr. Chow speculated that the hospital might well have fewer lab requests on in patients who have gone through this battery of tests. While this might be possible, Dr. Strandjord noted that the labs at Duke University, which have a screening unit, bring in as much revenue now as before.

7. RADIOLOGY IN MULTIPHASIC SCREENING

Dr. Gedgaudas began by saying that the inclusion of routine chest x-rays in a multiphasic screening unit would be strictly up to the Clinic Directors' wishes, given the pro's and con's. However, there are several arguments against including it, particularly the rate of return in diseases detected. For example, out of 60,000 chest x-rays performed in the Radiology Department, only 15 revealed cancers, and out of that number detected, there are only two survivors. The yield of tuberculosis and cardiovascular diseases from routine chest x-rays is practically nil. At the same time, Dr. Gedgaudas offered to get in touch with the Radiology Department at Mayo Clinic, to get their opinion on the usefulness of chest x-rays as part of a routine screening. Dr. Gedgaudas did feel, on the other hand, that an x-ray of the abdomen of people over forty would be valuable as a routine.

High costs are another negative factor, principally because staff to read the films costs so much. Dr. Gedgaudas felt that it would be almost impossible to get someone highly competent to do nothing but read chest x-rays, whereas constant film readings would be necessary to have results available as quickly as desired.

If the Clinic Directors did wish to incorporate chest x-rays into the multiphasic screening clinic, the total cost would amount to approximately $26,000 for an immediate outlay for necessary equipment, plus about $25,000 per year for radiological interpretation, plus the salary of an x-ray technician at $356 per month currently. This does not include any cost for operating space and waiting area. Dr. Gedgaudas emphasized that the high cost factor is not the equipment, or the cost to operate it, but rather the high price of staff for radiological interpretation.

8. DENTAL SCREENING

The pro's and con's for incorporating this into the proposed multiphasic tests are much like those for Radiology. The possible cost for giving a panographic x-ray and reading it, exclusive of preparing reports, would amount to about $3 per patient. To do this, four rooms plus two panographic units would be required. Information could then be available within a 12-24 hour period. An alternative would be to have dental students do an oral screening exam, perhaps putting the data on a computer. However, an oral exam is not nearly as complete as a panographic unit.

The research implications of panographic screening would be great. For example, if medical data were related to dental data on 25,000 patients a year, the correlations could well prove to be very helpful.

QUESTION: Would the findings of the dental screening influence the medical management of the patient? This could be of great educational value.

QUESTION: Do you think of a plan as you screen? Yes, in part. But as in the medical clinics, the patient may have his own dentist. Therefore, our plan would be subject to our consultative role.

12.0

August 18, 1966

TO: The Clinic Directors and all members of the Health Sciences Long Range Planning Committee

FROM: John V. Westerman, Chairman, Clinic Directors Building Subcommittee and Executive Secretary, Health Sciences Long Range Planning Committee

SUBJECT: Attached information

Attached are excerpts from a report to the Clinic Directors Building Subcommittee by Dr. Paul E. Strandjord, Associate Professor, Laboratory Medicine. Dr. Strandjord was asked to report to the subcommittee on the possibility of setting up a multiphasic screening laboratory for clinic patients here at the University. His report is divided into three parts: 1) the rationale for such a battery of screening tests, and summary of findings of various screening studies; 2) a review of what's been done in this field elsewhere in the United States, and 3) a possible approach to a screening laboratory for clinic patients at the University of Minnesota. It must be emphasized that Dr. Strandjord's proposal is just one possible approach to what could be done here, not a definitive example of what should be done.

The Clinic Directors Building Subcommittee and the Clinic Directors group itself have endorsed this concept, as Dr. Strandjord reported it, for further exploration and consideration. To keep you abreast of our thinking, this material, which represents Parts I and III of the report, is being sent to you, for your information. A copy of the complete report will be sent to you at a future date.

[illegible]

[illegible]

[illegible] expertise and to [illegible]

3. Increase efficiency of [illegible] would be possible to [illegible] to their management [illegible] enabled to report [illegible] would have considerable [illegible] are free of term [illegible] hospital visits in order [illegible]

5. If the patient volume [illegible] planned polyphasic scree[illegible] routine studies (i.e., [illegible] screening) to be done [illegible] vidual basis.

6. It was felt that the [illegible] clinic at this time would [illegible]

   a. Feasibility and [illegible] ing (relative to its [illegible]

   b. It could lend itself [illegible] screening in influenc[illegible] setting (as distinct [illegible]

The committee was divided [illegible] included in the current [illegible] satisfy at least two basic [illegible] be considered significant, [illegible] uormal findings must be pr[illegible] must be decided before a de[illegible]

   1. What will be the [illegible] we going to have a grou[illegible] we continue as a referra[illegible] care, how large will it [illegible]

   2. What are the trends [illegible] increasing specialty ori[illegible] screening unit have any [illegible]

The committee felt these q[illegible] ments involved before a dec[illegible]

April 7, 1967

TO:" Members of the Clinic Directors Committee

FROM: Peter H. Sammond

RE: Clinic Improvements

Following up on my verbal recommendation to the Clinic Directors Committee meeting of Friday, March 17, 1967, I should like to outline briefly some suggested projects for the clinics. There are some that have occurred or have been suggested to me. However, there are sure to be many more that members of the Committee would like to propose. I would be most grateful for any suggestions as to how clinic environment and service could be improved--both in the short and long range.

I should also like to make a formal recommendation that a small working committee be appointed to assist me in determining priorities and serve as a group with which I can work on operations and remodeling projects. If it is the pleasure of the Chairman and the Committee that the so-called Third Floor Remodeling Task Force, which has already considered some of these questions, continue as the Operations Subcommittee, it would be entirely satisfactory to me.

A list of projects follows:

1. Development of a centralized appointment system for North Clinic and/or the clinics in general.

2. Study of the North Clinic as a general-use multi-purpose area.

3. Refinement, standardization and simplification of registration and charge procedures.

4. Study of room usage (planned for the week of April 10).

5. Selected remodeling
   a. Ob-Gyn Clinic
   b. Surgery Clinic
   c. Tumor Clinic
   d. Dermatology Clinic
   e. Central appointment and registration areas
   f. Other areas

6. Study of different room arrangements, furniture, equipment, materials, communication systems, etc.

7. Study of Outpatient Clinics Organization.

8. Study of Admission Procedures.

9. Study of division of labor within clinics.

10. Development of clinic policies and procedures.

11. Study of Emergency Room operations.

12. Study of need for 24 hour clinic facility.

13. Improvement of communication between clinics, physicians, and physicians' offices.

14. Continued study of the polyphasic screening clinic idea.

15. Development of clinic area and operating procedures as demanded by the new Division of Family Practice and the Comprehensive Clinic Program.

16. Development of computer applications of all kinds but particularly with regard to centralized appointments and polyphasic screening.