UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Parkway
Minneapolis, Minnesota 55455

CANCELLATION NOTICE

The November, 1990 Board of Governors meeting was cancelled because of lack of agenda items.

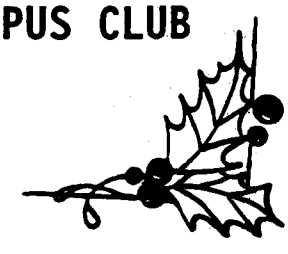
Shannon Lorbiecki
Secretary
Board of Governors

THE UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

BOARD OF GOVERNORS

DECEMBER 19, 1990

THE HOLIDAY PARTY WILL BEGIN IMMEDIATELY AFTER
THE MEETING IN THE LIBRARY OF THE CAMPUS CLUB



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*** Other Items ***

THE UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC
BOARD OF GOVERNORS
DECEMBER 19, 1990
2:30 P.M.
555 DIEHL HALL

AGENDA

I.	Approval of the October 24, 1990 Minutes	Approval
II.	Chairman's Report -Mr. Robert Nickoloff	Information
III.	Hospital Director's Report -Mr. Robert Dickler	Information
IV.	Special Presentation: Dr. Henry Buchwald -Professor of Surgery and Biomedical Engineering	Information
V.	Committee Reports	
	A. Joint Conference Committee -Mr. George Heenan	
	1. Medical Staff-Hospital Council Report Credentials Committee Recommendations	Approval
	2. Making Patient Care Decisions to Forego Life Sustaining Treatment	Approval
	3. Joint Commission Preliminary Survey Findings	Information
	4. Clinical Chief Appointment: Dr. Leo Twiggs, Obstetrics and Gynecology	Approval
	B. Planning and Development -Mr. Robert Latz	
	1. Special Capital Project: Neuroangiography System Replacement	Information
	2. Major Capital Expenditure: CUHCC Computer System	Information

3.	Major Capital Expenditure: Laboratory Computer System Expansion	Information
4.	Development Office Update	Information
5.	Quarterly Purchasing Report	Approval

C. Finance Committee

-Mr. Jerry Meilahn

1.	November 30, 1990 Financial Statements	Information
2.	Renewal Project: Phase II	Approval
3.	Year End Audit Report	Information

VI. Other Business

VII. Adjournment

MINUTES

BOARD OF GOVERNORS
The University of Minnesota Hospital and Clinic

October 24, 1990

Call To Order

Mr. George Heenan called the October 24, 1990 meeting of the Board of Governors to order at 12:35 p.m. in 555 Diehl Hall.

Attendance

Present:	Leonard Bienias David Brown, M.D. Paula Clayton, M.D. Robert Dickler Gordon Donhowe Phyllis Ellis George Heenan Nellie Johnson Bob Latz David Lentz Margaret Matalamaki Robert Maxwell, M.D. Robert Nickoloff Barbara O'Grady Gerald Olson Cherie Perlmutter
Not Present:	Kris Johnson Jerry Meilahn Jan Withers

Approval of Minutes

The Board of Governors seconded and passed a motion to approve the minutes of the August 29, 1990 meeting as submitted.

Special Presentation: Dr. Leo Furcht

Mr. Dickler introduced Dr. Leo Furcht, Professor and Head, Department of Laboratory Medicine and Pathology. Dr. Furcht presented an overview of the Department of Laboratory Medicine and Pathology.

Director's Report

Mr. Dickler reported that admission levels for the first quarter of fiscal year 1990/91 were above budget but below first quarter 1989/90 levels.

Mr. Dickler announced that open enrollment for health plans for State and University employees is underway. There are two plans offered this year which allow employees to see University faculty and use University facilities without a referral; the State Health Plan and Group Health.

Mr. Dickler reported that the Graduate Assistant Insurance is converting to Group Health. Graduate assistants may choose any Group Health facility including the new University of Minnesota Group Health clinic.

Dr. David Brown announced that Dr. George Adams was recommended to the Board of Regents for the position of Chairman of the Department of Otolaryngology.

Joint Conference Committee Report

Mr. George Heenan called on Dr. Robert Maxwell to present the recommendations of the Credentials Committee which were endorsed by the Medical Staff Hospital Council on October 9 and the Joint Conference Committee on October 10. The recommendations of the Credentials Committee were unanimously approved as presented.

Dr. Maxwell presented the Joint Conference Committee's recommendation to approve the leave of absence of Dr. Jeffrey McCullough. Approval was also requested for the appointments of Dr. Marvin Goldberg to chair the Bylaws Committee and Dr. Clark Smith to chair the Transfusion Therapeutics Committee for the upcoming year. The Board of Governors seconded and passed a motion approving these recommendations.

Dr. Maxwell presented the policy "Making Patient Care Decisions to Forego Life Sustaining Treatment" for approval. It was decided to strike all the words from the policy on Page 54 Item 2B after "stated wishes". The Board seconded and passed a motion to approve this policy as presented with the stipulation that the Joint Conference Committee review the policy at their next meeting to assure that Section I.B. is accurate for patients with a living will.

Mr. Greg Hart presented the Patient Rights and Responsibilities Policy and asked for the Board's approval. As required by the Joint Commission on Accreditation of Healthcare Organizations, this hospitalwide policy needs Board endorsement. The Board seconded and passed a motion to approve the Patient Rights and Responsibilities Policy.

Mr. Hart presented the Quality Assurance and Utilization Review Plans for The University of Minnesota Hospital and Clinic to the Board. A motion was seconded and passed to approve the Quality Assurance and Utilization Review Plans.

Dr. Maxwell presented the Medical Staff Bylaws and Rules and Regulations for Board approval. These documents were reviewed in detail by the Bylaws Committee, the hospital legal counsel and administrative staff. A motion was made and seconded to approve the proposed modifications to the Medical Staff Bylaws and Rules and Regulations.

Planning and Development Committee Report

Mr. Robert Latz called on Mr. Greg Hart to present the Quarterly Capital Expenditure report to the Board.

Mr. Hart presented a proposal for expansion of the Cardiac Catheterization Laboratory to the Board. The project involves the addition of a fourth procedure room. The estimated cost for the project, as presented earlier, was $2,800,000. Several variations to facility remodeling are still being considered. A motion was made to approve the project with funding not to exceed $3 million. The Board seconded and passed a motion to proceed with the Cardiac Catheterization Laboratory expansion.

Mr. Al Dees presented for the Board's information a proposal to purchase a Frontal Plane Image Chain Upgrade for the Heart Cath Lab, Room 3 in the amount of $110,000. General Electric has developed an upgraded camera, image intensifier, and TV monitor to improve the fluoroscopic image quality to upgrade the CGR Corporation equipment previously purchased.

Mr. Dees presented a proposal to purchase Image Processing Workstations for CT Section and for MRI Section in the amount of $120,000 each. Extensive image manipulation requires a powerful microcomputer and specially designed software. While the techniques for CT and MRI image manipulation are similar, the computer software required for each modality is unique. Consequently, the Diagnostic Radiology department intends to purchase one workstation equipped to process CT and another for MRI images. This proposal was presented to the Board for information.

Finance Committee Report

Mr. Jerry Meilahn called on Mr. Fearing to give the monthly financial report. Mr. Fearing reported that the Hospital's Statement of Operations for the period July 1, 1990 through September 30, 1990 shows revenues over expenses by $7,117,333, a favorable variance of $5,872,389.

Mr. Fearing reported inpatient admissions for September totaled 1,431 which was 5 below budgeted admissions of 1,436. Overall average length of stay for the month was 8.3 days. Outpatient clinic visits for the month of September totaled 21,326 which was 92, or 0.4%, more than budgeted visits of 21,234.

Mr. Fearing reviewed the First Quarter Bad Debts. Bad debts for the quarter totaled $508,950.28, representing 1,651 accounts. Recoveries during the period amounted to $61,885.06, leaving a net charge-off of $447,065.22. This amount represents 0.50% of gross charges and compares to a budgeted level of bad debts of 0.90% ($781,177).

Mr. Hart presented the 1990-91 Capital Budget to the Board for approval. In August, the Board endorsed a general approach to the reassessment which called for a $20 million reduction in "non-Renewal Project" capital expenditures through 1998. This reduction was to include both major equipment purchases (greater than $600,000) and the annual capital budgets. The original capital plan projected an $8,550,000 annual capital budget for 1990-91. It was recommended that this figure be reduced to $7,000,000. A motion was seconded and passed to approve the 1990-91 Capital Budget as presented.

Mr. Dickler presented an update on planning for the Renewal Project. It would be premature at this time to present a definitive proposal.

The two options which are being explored are an addition to the top of Unit J as was presented at the August meeting and building a freestanding Psychiatry hospital on the triangle site at Fulton Street and East River Road.

Planning for an addition to Unit J has proceeded with the assumption that two floors would be added, one primarily for the inpatient psychiatry program and one shell floor. To add two floors with the project budget, the other three clinical programs and many support departments which were included in the initial renewal project face significant reductions in their programs. Additional savings would be achieved through timing changes.

Current estimates indicate that a building can be put on the triangle site which would meet the inpatient, outpatient, and day hospital needs of the Psychiatry program within the budget for the project. This proposal would include a tunnel to Unit J but would not include parking or funds for departmental offices.

The triangle site proposal would also meet several additional immediate needs including relocation and expansion of the heart cath lab and expansion of the operating rooms. This proposal would not solve bed issues, either bed number or bed type, or several other high technology needs.

Additional discussions and planning with departments included in the project will be completed prior to bringing a recommendation to the Board of Governors.

Adjournment

There being no further business, the October 24, 1990 meeting of the Board of Governors was adjourned at 4:30 p.m.

Respectfully submitted,

Gail Strandemo

Gail A. Strandemo
Board of Governors Office

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Road
Minneapolis, Minnesota 55455

TO: Board of Governors

FROM: Robert Dickler

DATE: December 10, 1990

SUBJECT: Board of Governors Retreat Follow-up

Subsequent to the Board of Governors retreat in October, 1990, substantial activity has occurred to synthesize the deliberations of the Board and to utilize those deliberations as the basis for identifying priority efforts which the Hospital should pursue over the coming months and years. The intent of this communication is to summarize our conclusions and to request consideration, and potential concurrence, of the Board.

First, I would like to personally thank the Board of Governors, and all of those participating in the retreat, for your continued support and guidance in assessing University Hospital's status and the efforts which we should initiate to assure continued fulfillment of our mission. The 1989 and 1990 Board retreats, in aggregate, have provided the periodic refocusing which any organization requires to assure that it is identifying and addressing the changes needed to maintain its ongoing viability. The support and insight of the Board have been essential for these efforts to be successful.

While the deliberations which occurred at the 1990 retreat were far reaching, the appropriate follow-up can generally be divided into actions specific to the task force reports and other institutional issues which were identified. With specific reference to the task force reports, I believe it is fair to conclude from the discussion at the retreat that each of these reports, and their key recommendations, were accepted by the Board. Given this conclusion, the plans being developed focus on task force recommendations and other issues identified in the task force reports. These action plans are summarized in attachment A.

In addition to the institutional issues and opportunities which emerged from the task force reports, three additional areas of institutional priority had varying levels of discussion at the retreat. These areas were (1) the need for a continuing, and more aggressive, program to integrate cost effectiveness, resource utilization, and quality activities; (2) a need to refocus our attention on ambulatory care efforts and structure in the 1990s; and (3) a need to develop a more coherent and consistent long-range planning structure for UMHC.

While there is potential, and real, overlap, between each of these areas, as well as the task force reports, it is our belief - and the sense of the Board discussion - that each of these topics has sufficient urgency and importance to initiate specific efforts. The overlap can be managed as the efforts proceed, presumably through timing and the composition of various work groups. It is also important to note that the need for coordination among and between various activities of the Hospital is a common occurrence and extends to the need to continually coordinate almost all of the Hospital efforts with the Medical School, clinical departments, and other elements of the Health Sciences Center and University.

Attachment B to this memorandum summarizes each of these areas for discussion by the Board, a proposed timetable for initiation of these as focused Hospital activities, and mechanisms for ongoing coordination between these efforts and the Board.

I look forward to discussing these proposals with the Board at our December meeting. In the interim, please feel free to contact me if you have any questions or concerns.

RD/hg

Attachments

Attachment A

The University of Minnesota
Hospital and Clinic
Board of Governors
Retreat Follow-up - Task Force Reports

The three task force reports considered by the Board of Governors at their October 1990 retreat each had a series of recommendations and/or issues which they identified for institutional follow-up and effort. This document will not attempt to identify specific follow-up for each observation and/or recommendations. Instead, it will focus on those elements of the reports which received primary emphasis at retreats of both the Council of Chiefs of Clinical Services and the Board of Governors.

A recommendation consistent across all three reports was the need for a more effective internal structure to manage issues which collectively impact the Hospital, Medical School, and clinical departments. In response to this recommendation, a new group - the Executive Coordinating Committee - was formulated. This committee began meeting in mid-November of 1990 and is still in its initial stages of activity. It is anticipated that this committee will provide an overall coordinating mechanism for expediting response to many of the internal issues facing the Hospital. In certain instances, the Committee will be the primary focus for follow-up on task force recommendations. In these specific instances the Committee will forward their conclusions to the appropriate internal decision-making group and the appropriate Board committees. On other items considered by the Committee, outside of task force follow-up, it is anticipated that reports to the appropriate Board committees will be made beginning in early 1991. A copy of the proposal leading to the formation of this committee is enclosed for the Board's information.

Specific follow-up on the key recommendations of each of the task forces are:

1. Faculty/Medical Staff Recruitment and Retention

   - Incorporation of promotion criteria proposed by the ad hoc Committee on Promotions into the promotion for faculty.

     Follow-up: The recommendation of the ad hoc Committee to develop a clinical track has been endorsed and approved by all necessary elements of the Medical School governance structure as of the Executive Faculty Committee meeting on November 13, 1990. This proposal now needs approval by the University.

     Future Board involvement should be in the form of monitoring and supporting of the process through the Joint Conference Committee. The Joint Conference Committee should determine, through consultation with the Dean, School of Medicine, if specific Board actions - such as resolutions of support - would be helpful.

- Development of a "mentoring" system for young clinical faculty

  Follow-up: This recommendation falls primarily under the purview of the Medical School and clinical departments. Discussion and support to the degree appropriate, should occur at the Joint Conference Committee.

- Greater Assistance to Faculty in Technology Transfer

  Follow-up: Discussion subsequent to the report indicates that this area has a number of elements for potential follow-up.

  A. Communication - The University currently has a substantial capability for encouraging and managing technology transfer. The adequacy of communication regarding this capacity should be explored to determine if utilization of existing resources can be enhanced. A report should be submitted by March, 1991 on this exploration to the Finance Committee.

  B. Awareness - The Board has had limited exposure to this area of activity. Information programs should be scheduled for the full Board in early 1991 regarding both University activity and external technology development activity.

  C. Direct Support - The Hospital does not have a formal mechanism for support of technology development. Options which should be considered include funding, business development, etc.. A formal discussion paper for consideration by the Finance Committee will be developed in spring 1991.

- Central resource to provide recruitment support

  Follow-up: A review of the parameters for such a program is currently being undertaken. This review will be a joint Hospital/Medical School effort. A progress report will be made to the Joint Conference Committee by March 1991.

2. Program Development and Evaluation Task Force

The primary recommendation of this task force was the initiation of a standing committee to undertake evaluation of new program proposals, as well as existing programs. The Committee provided an operative definition for "programs," criteria to be considered, and a listing of existing programs which should be reviewed.

It is currently anticipated that the standing committee will be established in early 1991. Initial efforts of the Committee will be to refine review criteria, establish a budget review mechanism, establish a timetable for review of existing programs, and to develop the resources for specific review (i.e., expert panels). Coordination mechanisms with related activities including UMCA, the Cancer Program, other program activities, and capital planning will also need to be developed. Because of the magnitude of this

effort, it is anticipated that the Committee will stage its activities to focus on large existing and proposed programs in early 1991 with the expansion to all programs in late 1991 and early 1992.

It is recommended that this committee report to the Planning & Development Committee on its activities at least quarterly beginning in early 1991.

3. System & Network Development

- Development of a Group Practice

  The potential development of a group practice has been discussed, on a preliminary basis, by the Council of Chiefs and UMCA. UMCA, to a limited extent, represents the initiation of such activity. Currently, UMCA has been charged by the Council of Chiefs to investigate consolidated handling.

  The generic term "group practice' encompasses so many elements of medical/faculty organization and practice it is anticipated that extensive discussions on the potential restructuring of practice at the University will need to focus on specific aspects, rather than on an all-inclusive organizational structure. A timetable for these considerations has not been established, but it is anticipated that it will be extensive.

  Given the importance of these considerations to UMHC, the Board should monitor these efforts through UMCA reports at the Planning & Development Committee. It is unclear if such efforts will require active Hospital support and this should be determined as their effort evolves.

- Summary of patient requirements of all clinical departments.

  A preliminary survey has been initiated by the Dean, School of Medicine. This material is being analyzed to determine if a viable and useful data base can be developed for planning purposes. A report should be available on this effort in early 1991 and will be directed to the Planning and Development Committee.

- Network & System Strategies

  The task force recommended a series of specific strategies for the metropolitan, out-state, and out-of-state activities. These generally recommend continuing existing efforts with a need to focus, consolidate and emphasize relations with certain providers and insurers.

  Subsequent to the Board retreat selective, exploratory discussions have been initiated with some providers and insurers. A definitive action plan has not yet been formulated and this effort will be undertaken by the Executive Coordinating Committee. It is anticipated that the initial results of the Executive Coordinating Committee deliberations will be available by February 1991 for broader institutional deliberation.

Given the scope and variety of current activities, and the importance of additional strategies, this topic should become a standing agenda item at the Planning & Development Committee. It is anticipated that some elements of these efforts will need to be actively considered by the full board throughout at least 1991.

PROPOSAL

Executive Coordinating Committee

University of Minnesota Medical Center

Background

The University of Minnesota Medical Center is a term often used to encompass the collective activities of the Medical School, University Hospital and Clinic, and clinical departments. Each of these facets of the medical center has multiple decision structures inherent within their organizations. The most prominent of these structures include the Administrative Board of the Medical School, the Board of Governors of UMHC, the Medical Staff/Hospital Council of UMHC, the Council of Chiefs of Clinical Services, the Council of Clinical Sciences, the UMCA Board of Directors, and the Professional Reimbursement Committee of the clinical departments. In addition, there are several subgroups which are relied upon by one or more of these organizational facets for deliberation of significant issues such as the Graduate Medical Education Committee of the Council of Chiefs of Clinical Services.

It is generally acknowledged that while each of these facets of the medical center organization has the ability within its realm of responsibility to affect decision making in an appropriate fashion, significant difficulties have arisen when issues involve multiple, or all, facets of the medical center. Various attempts historically to resolve these coordination problems have had only limited success.

Rapid changes in the health care system have continued to present both challenges and opportunities to the ability of the medical center to fulfill its overall mission. More specifically, concern has primarily focused on the ability of the center to effectively fulfill its clinical responsibilities and to ensure a sufficient base for the service, clinical education, and clinical research facets of the mission, while maintaining overall financial viability within a highly competitive and rapidly evolving health care environment. These external pressures, as well as increasing interdependency among the various facets of the medical center, have indicated the need to develop a more effective and identifiable structure for deliberation and potential resolution of crosscutting issues, determination of future directions, and development of coordinated positions which affect the short and long-term viability of the center.

Proposal

It is proposed that an Executive Coordinating Committee be established. The purpose, authority, membership and structure of the committee would be as follows:

A. Purpose

To address issues and opportunities, to develop plans, to formulate positions, and to influence the decisions of existing organizational structures in those areas of clinical activity (service, education,

and research) where overlap exists between the roles of the medical school, hospital, clinical departments, Medical Staff Hospital Council, UMCA and other relevant organizational elements of the medical center.

B. Authority

The Executive Coordinating Committee does not replace or supersede the authority or responsibility of the existing organizations or departmental officers and administrators. It is authorized, in the areas specified under the statement of purpose, to formulate positions, initiate deliberative efforts, and provide advice and counsel to individuals and/or organizational structures with designated authority and responsibility. It is also empowered to actively advocate and pursue, with appropriate parties and forums, the resolution of crosscutting issues, plans, and policy questions where definitive action is deemed necessary by the Committee.

C. Membership

Dean
Hospital Director
Chair, Council of Chiefs of Clinical Services
Chair, Council of Clinical Sciences
Chair, UMCA Board
Chief of Staff
Up to three additional members appointed by the Executive Coordinating Committee ex officio members for one year terms

D. Structure and Process

1. Meetings - Weekly for one hour

2. Formal agendas and action minutes

3. Periodic reports and agenda items forwarded to constituent bodies

4. Ability to initiate ad hoc committees and study groups

5. Administrative and logistical support from Hospital

Endorsed: September 21, 1990 by the Council of Chiefs of Clinical Services

Attachment B

The University of Minnesota
Hospital and Clinic
Board of Governors
Retreat Follow-up - New Initiatives

During the Board of Governor's retreat in October 1990, three areas for additional focused activity seemed to emerge from the discussion and deliberations. The intent of this document is to briefly discuss each of these areas and to recommend potential future activities.

I. Cost Effectiveness, Resource Utilization, and Quality

One of the themes underlying many of the discussions regarding UMHC and its future viability is the Hospital's overall effectiveness. Within our evolving health care system the question of cost vs. quality, often viewed as value, is becoming an increasingly important consideration in contracting and the development of various components of the health care system.

Efforts to enhance the value of UMHC programs and activities have been an inherent component of management and institutional activity for a number of years. Within the past several years substantial reductions in the budget, renewed emphasis on quality assurance efforts, focused efforts on the process of patient care relating to resource utilization, and other activities have increased the Hospital's overall value. Nevertheless, these efforts have not been part of a coherent effort with ongoing monitoring by both internal governance mechanisms and the Board of Governors.

University Hospital and Clinic remains an atypical and unique institution in the Twin Cities, state and - to some degree - in the country. As one of the most specialized academic health centers in the country, the case mix and patient severity levels are different then the levels found in a majority of other hospitals. However, these factors; along with the educational, research and developmental costs incorporated in the Hospital budget; only provide a partial explanation for the Hospital's cost structure and resource utilization. UMHC remains one of the most expensive and resource intensive hospitals for all types of activity - whether it be for similar cases compared to the community or other academic health centers.

Intrinsic in cost effectiveness and resource utilization is the potential trade-off of changes in the delivery of care with quality. The Joint Conference Committee, as well as many internal groups, have struggled with this question with several conclusions. First and foremost is that quality is related, both inversely and directly, to cost and resource utilization. Furthermore, it is generally agreed that Joint Commission standards are useful only as a beginning to the development of a meaningful quality assurance program which truly enhances quality and demonstrates quality and value to external parties.

It is recommended that this area of ongoing institutional effort become a primary focus of Board oversight and activity in 1991 and thereafter. To initiate this effort, we would propose that the mini-retreat in February, 1991 be utilized to focus on historic, current, and potential efforts. This retreat would form the basis for developing both an internal and broad action plan. Inherent within this plan would be specific targets for cost reductions, strategies for resource utilization changes, responses to the JCAHO survey, and the initiation of a new and expanded quality assurance effort.

II. Ambulatory Care

University Hospital and Clinic has a large and active ambulatory division. With over 300,000 visits per year, major procedure and ancillary service delivery to the ambulatory care patient, a major off-site clinic, substantial involvement in alterntive delivery services, and an increasing demand for ambulatory emphasis in educational programs, additional attention and oversight for these activities is becoming increasingly important.

A number of internal efforts over the past several decades have looked at and recommended changes in ambulatory care structure. While some of these changes have been implemented, fundamental problems relating to the balance between cost and payment, support systems, scheduling, shared governance and risk with the medical staff, adequacy of facilities, and comprehensive program development continue to exist. Recent efforts to recruit a Director of Ambulatory Care were unsuccessful, at least in part due to the absence of a viable structure to deal with this breadth of challenges.

It is proposed that an institutional effort be initiated under the auspices of the Executive Coordinating Committee to address these issues and capitalize on the opportunities for enhancement of the Hospital mission inherent in ambulatory care. For logistical reasons, this effort can probably not be initiated until summer 1991. As this effort is initiated, ongoing reports and recommendations should be made to appropriate Board committees. The primary Board committee for overseeing these activities should be the Finance Committee of the Board.

III. Strategic Planning

While planning is an intrinsic component of all UMHC activities the Hospital - in cooperation with the Medical School and clinical departments - has not developed a comprehensive strategic plan with a 3-5+ year timeframe. This has been a deliberate decision. Underlying this decision has been the belief that efforts which focused on specific strategic issues would be more timely, resource prudent, and effective. This philosophy has generally been validated by recent efforts and the majority of major initiatives at the Hospital and Board level have focused on such strategic issues.

Given the importance, and urgency, of many of these strategic issues, it is recommended that this orientation continue. However, it is becoming apparent that the future effectiveness of many of these efforts would be

enhanced if there were a longer range strategic context within which they were developed. If this perspective is concurred with the question then becomes not if, but when, such a comprehensive effort should be undertaken.

Recognizing the breadth of current efforts, the vacancy in the planning division of the Hospital, and the need to let some current efforts mature, we would recommend that a comprehensive strategic planning effort be initiated in fall 1991. Prior to that time the structure for this effort, and necessary outside resources, should be identified. Depending on these efforts, and Board deliberation, the fall retreat of the Board may be the appropriate forum to initiate this effort. Finally, prior to that time it should be determined if it may be appropriate to structure this effort jointly with the Medical School and/or the broader Health Sciences.

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Road
Minneapolis, Minnesota 55455

December 13, 1990

TO: Members of the Board of Governors

FROM: Shannon Lorbiecki
Administrative Fellow
Secretary to the Board of Governors

We are pleased to welcome Dr. Henry Buchwald as our enrichment speaker this month. Dr. Buchwald is the Professor of Surgery and Biomedical Engineering and plans to speak to the Board about a surgical procedure he pioneered, partial ileal bypass.

This is another in a series of presentations designed to broaden or enhance Board of Governors familiarity with issues that impact The University of Minnesota Hospital and Clinic.

CURRICULUM VITAE

Henry Buchwald, M.D., Ph.D.

Professor of Surgery and Biomedical Engineering
University of Minnesota School of Medicine
Minneapolis, Minnesota 55455

Home Address: 6808 Margaret's Lane
Minneapolis, Minnesota 55435

Date of Birth: June 21, 1932

Marital Status: Married to Emilie D. Bix, June 6, 1954

Children:
Jane Nicole
Amy Elizabeth
Claire Gretchen
Dana Alexandra

Military Service: 1958-1960, Captain, SAC, USAF (Flight Surgeon)

Education:
Columbia College, Columbia University, New York City, 1954 (B.A.)
College of Physicians & Surgeons, Columbia University, New York City, 1957 (M.D.)
University of Minnesota, Minneapolis, Minnesota, 1966 (Biochemistry, M.S.)
University of Minnesota, Minneapolis, Minnesota, 1966 (Surgery, Ph.D.)

Internship: Surgery, Columbia Presbyterian Medical Center, New York City, 1957-1958

Residency: Surgery, University of Minnesota, Minneapolis, Minnesota 1960-1966

Appointments:
Instructor in Surgery
University of Minnesota Medical School, 1966-1967
Assistant Professor of Surgery
University of Minnesota Medical School, 1967-1970
Associate Professor of Surgery
University of Minnesota Medical School, 1970-1977
Professor of Surgery
University of Minnesota Medical School, 1977-
Professor of Biomedical Engineering
University of Minnesota Medical School, 1977-

Licensure and Certification:
Licensed in New York, 1958
Licensed in Minnesota, 1960
American Board of Surgery, 1967

Fellowships:

Helen Hay Whitney Fellowship Award, 1962-1964
American Heart Association Established Investigatorship, 1964-1969

Honors & Awards:

Phi Beta Kappa, Junior Year, 1953
Valedictorian, Columbia College, Class of 1954
Graduated summa cum laude, first in class, 1954
Albert Ascher Green Scholastic Award, 1954
Research Fellowship, Foundation for Allergic Disease, 1956
Alpha Omega Alpha, 1956
Essay Prize, American College of Chest Physicians, 1957
Shering Award, 1957
First Clinical Research Award, Minnesota Surgical Society, 1965
First Prize, Res. Forum, American College of Chest Physicians, 1966
Phi Lambda Upsilon Honorary Chemistry Fraternity, 1966
Samuel D. Gross Award, Philadelphia, American College of Surgeons, 1969
Distinguished Service Award, Association for Academic Surgery, 1976
Program Committee, Amer. Society for Artificial Internal Organs, 1983-1986
Program Committee, Central Surgical Assoc., 1982-1985 (Chairman, 1984-1985)
Program Committee, Society for Clinical Trials, 1984-
Secretary-General, International Study Group on Diabetes Treatment With Implantable Insulin Delivery Devices, 1984-1988
Inventor of the Year Award and induction into the Minnesota Inventors Hall of Fame, 1988
President, Minnesota Inventors Hall of Fame, 1989-1990
The Meritorious Service Award in Research and Development, Medical Alley Association, March 29, 1990

Professional Societies:

Fellow, American Surgical Association
Fellow, American College of Surgeons
Fellow, Society of University Surgeons
Fellow, Central Surgical Association
Fellow, Association for Academic Surgery
Fellow, Epidemiology Council of the American Heart Association
Fellow, Cardiovascular Surgery Council of the American Heart Association
Fellow, American College of Cardiology
Fellow, Society for Surgery of the Alimentary Tract
Fellow, Society for Clinical Trials
Minneapolis Surgical Association
Minnesota Surgical Association
Minnesota Heart Association
American Association for the History of Medicine
Saint Paul Surgical Society, Honorary
American Association for the Advancement of Science
Paleopathology Club
American Society for Artificial Internal Organs
International Study Group on Diabetes Treatment With Implantable Insulin Delivery Devices

Membership - Major Standing Committees:

Chairman, Credentials Committee, University of Minnesota Hosp.
Quality Assurance Steering Committee
Cardiovascular Coordinating Committee
Operating Room Committee
Scholastic Standing Committee
Pharmacy and Therapeutics Committee
Departmental Representative, Utilization Management Committee
All University Patent Committee
All University Senate Committee
University of Minnesota Graduate School Health Sciences Policy and Review Council
Advisory Council, Inventors Resource Center, Minnesota Inventors Congress

Standing Departmental Administrative Assignments:

Director, Graduate Surgical Training
Director, Resident Training Program
Director, In-Training Examination
Member, Board of Directors, Inst. of Basic & Applied Res. Surgery
Secretary, Institute of Basic and Applied Research Surgery

Editorial Boards:

Section Editor, ASAIO Transactions
Chirurgia Generale
Journal of American College of Nutrition
The Journal of Clinical Surgery
Editorial Board, Infu-Systems International
Diabetes, Nutrition, and Metabolism
Archives of Surgery, to be appointed
Obesity Surgery, Associate Editor

Research Interests:

Cholesterol/Atherosclerosis
- Development of the partial ileal bypass operation.
- Principal Investigator, Program on the Surgical Control of the Hyperlipidemias (POSCH).
- Laboratory studies on: mechanisms of cholesterol and bile acid absorption, excretion, dynamics, and kinetics; development of a rabbit model for myocardial infarction and quantitative assessment of atherosclerosis; studies in comparative mechanisms of action of hypocholesterolemic drugs and partial ileal bypass; studies in vein graft atherosclerosis; and studies in immunomodulation of atherosclerosis.

Obesity Surgery

Implantable Devices
- Invention and development of the first implantable infusion pump (Infusaid).
- First implantation of a heparin pump (1975), a chemotherapy pump (1977), and an insulin pump (1980).

Invention and development of a non-clotting catheter with independent inlet and outlet valves (Buchwald/Wigness Catheter).
Invention and development of an active peritoneovenous shunt (Buchwald/Wigness Shunt).
Invention and development of single chamber implantable infusion pump (Buchwald/Dorman Pump).

Patents Emanating From the Implantable Pump Laboratory:

Primary Inventor	Title	File or Patent Date and No.	
Blackshear et al	Implantable Infusion Pump	8 May 73	3,731,681
Dorman	Implantable Drug Infusion Regulator	10 Nov 81	4,299,220
Dorman/Rublein Rohde	Method for Maintaining the Fluidity of Hormone Solutions for Parenteral Administration	22 Dec 81	4,306,553
Blackshear/ Palmer/Rohde	Polyol-Hormone Mixture for Use in Chronic Parenteral Hormone Administration	27 Mar 84	4,439,181
Anderson et al	Implantable Catheter With Non-Adherent Contacting Polymer Surfaces	20 Aug 85	4,536,179
Buchwald et al	Automated Peritoneo-venous Shunt (APS)	9 Sep 86	4,610,658
	APS Divisional Patent	16 Feb 88	4,725,207
Buchwald et al	Compression Pump Catheter	14 Apr 87	4,657,530
Dorman	Check Valve Catheter	14 Apr 87	4,657,536
Wigness/Anderson	Bidirectional Antireflux Vascular Access System	10 Nov 87	4,705,501
Wigness/Dorman	Metabolic Sensor Including A Chemical Concentration Sensitive Flow Controller For A Drug Delivery System	10 Nov 87	4,705,503
Dorman/Buchwald	Pressure Regulated Infusion Pump	12 Jan 88	4,718,893
Dorman/Buchwald	Spring Driven Infusion Pump	20 Sep 88	4,772,263
Wigness	A Buffered Polyol-Hormone (BPH) Mixture For Use in Chronic Parenteral Hormone Administration	21 Nov 83	553,572
	BPH Continuation	19 Aug 87	88,478
Dorman/Wigness	Pressure Activated Obturator Controller for Intravascular Catheter	6 Oct 87	105,740
Dorman/Wigness	Zero Net External Displacement Implantable Pump	17 Nov 87	121,649
Wigness/Rohde	Solvent System for Chronic Vascular Infusion of Hydrophobic Drugs	6 Apr 88	178,139
Wigness/Dorman	Single, Lumen, Bidirectional Check Valve Catheter for Long-Term Intravascular Placement	2 Feb 89	305,971

Visiting Professorships/Lecturer 1979-1989

"Medical Versus Surgical Treatment of Hyperlipidemia" - Visiting Professor Lecture Series, McLaren General Hospital, Flint, Michigan. April 14, 1979.

"The Total Implantable Pump for Intravenous Delivery of Drugs" - The Buffalo Surgical Society, Minneapolis, Minnesota. January 18, 1980.

"Metabolic Surgery — 1980" - University of California, San Diego. February 20, 1980.

"The Jejuno-ileal Bypass Procedure" - Gary P. Wratten Surgical Symposium, Washington, DC. May 9, 1980.

"Reversing Human Coronary Artery Atherosclerosis" - Frontiers of Medicine Series, Chicago, Illinois. June 12, 1980.

"The Artificial Implantable Beta Cell; Future Management of Diabetes by a Currently Available Device" - Minnesota Endocrine Club, Minneapolis, Minnesota. October 20, 1980.

"Intestinal Bypass" - Symposium on "Surgery for Hyperlipidemia and Atherosclerosis", Tokyo, Japan. December 10, 1980.

"Atherosclerosis: A Life and Death Story" - Sun Valley's Northwestern Medical Association Meeting, Sun Valley, Idaho. February 10, 1981.

"Implantable Infusion Pump Management of Diabetes Mellitus and Other Diseases" - Mayo Clinic Saturday Surgery Conference, Rochester, Minnesota. March 7, 1981.

"A Look at Life Styles" - Northern States Power Company, Corporate Affairs Department Management Conference, Minneapolis, Minnesota. March 19, 1981.

"Surgical Treatment of Morbid Obesity" - Harvard Medical School Department of Continuing Education, Spring Advance Course, Boston, Massachusetts
May 13, 1981.

"Surgery for Obesity and Lipid Control" - St. Francis Hospital, Blue Island, Illinois
May 27, 1981.

"Early Results Using an Implantable Insulin Infusion System" - PIMS Quarterly Working Group Meeting, Johns Hopkins University, Laurel, Maryland. September 9, 1981.

"Lipid Metabolism in Obesity" - BSG/Glaxo International Teaching Day, Norwich, England. March 24, 1982.

"Recent Advances in the Treatment of Hepatic Metastases" - Twin City Colon and Rectal Surgery Conferences, Abbott Northwestern Hospital, Minneapolis, Minnesota
April 18, 1983.

"Implantable Infusion Pump - Clinical and Laboratory Perspectives" - Biomedical Engineering Seminar Series, University of Minnesota, Minneapolis. April 26, 1983.

"Implantable Infusion Pump" - Massachusetts General Hospital, Boston. October 3, 1983.

"Partial Ileal Bypass for Hypercholesterolemia" - Department of Surgery Grand Rounds, Long Island Jewish-Hillside Medical Center, New Hyde Park, New York. October 6, 1983

"Reversal of Atherosclerosis in Humans" - Best Foods' Food and Nutrition Advisory Council Meeting, Union, New Jersey. October 20, 1983.

"Experience With an Implantable Pump" and "Atherosclerosis, Hypercholesterolemia, and Partial Ileal Bypass" - Mortality-Morbidity Conference, State University of New York at Stony Brook. January 26 and 27, 1984.

"Functioning and Design of the Implantable Insulin Pump" - American Institute of Chemical Engineers, St. Paul, Minnesota. February 16, 1984.

"Perspectives for the Implantable Infusion Pump" - VA Hospital, Minneapolis, MN
February 16, 1984

"Obesity: Its Contributions to Infertility and Obstetric and Operative Morbidity" - OB/GYN Departmental Grand Rounds, University of Minnesota, Minneapolis.
April 7, 1984.

"Partial Ileal Bypass for Hyperlipidemia" - Symposium on Retardation and Reversibility of Atherosclerosis, D.C. General Hospital, Washington, DC. October 10, 1984.

"Recent Advances in the Treatment of Non-Insulin Dependent Diabetes Mellitus" - St. Mary's Diabetes Care Center Opening Symposium, Minneapolis. Minnesota
October 30, 1984.

"Surgery for Morbid Obesity Jejunoileal and Gastric Bypass" - Controversies and Problems in Surgery Symposium, Montefiore Medical Center, New York, NY
December 5-7, 1984.

"The Insulin Pump" - Association of Surgical Technologists, St. Paul, MN.
December 8, 1984.

"Surgical Therapy of Lipid Disorders" - University of Minnesota Duluth School of Medicine Symposium on Lipid Disorders, Miller-Dwan Hospital, Duluth, Minnesota
February 27, 1985.

"Approaches to Cancer Management in the '80s" - Southwestern Minnesota Medical Society, Brainerd, MN. May 5, 1986.

"Evolving Concepts of Obesity Surgery" - State of the Art Lecture Series, St. Joseph's Hospital, St. Paul, Minnesota. April 2, 1986.

"Management of Morbid Obesity" - Women's Health Conference, University of Minnesota, Minneapolis. August 11, 1986.

"Small Bowel Obstructions" - Grand Rounds, Department of Obstetrics and Gynecology, University of Minnesota, Minneapolis. September 20, 1986.

"Implantable Infusion Pumps - Their Role in the 1990s" - Los Angeles Surgical Society, Los Angeles, California. March 12, 1987.

"Lipid Management" - Saturday Morning Surgical Conferences, The Medical Center of Delaware, Wilmington, Delaware.

"Morbid Obesity and Cholesterol Management" - Robbinsdale Shriners, Robbinsdale, Minnesota. March 29, 1988.

"Metabolic Surgery" - Friday Morning Conference, Bemidji Clinic, Bemidji, Minnesota. August 11, 1988.

"Changing Concepts in Medicine" - School of Dentistry and the Department of Continuing Dental Education, University of Minnesota, Minneapolis, Minnesota.
September 30, 1988.

"Morbid Obesity" - Red River Valley Medical Association, Crookston, Minnesota. November 29, 1988.

"Cholesterol and Your Heart" - St. Paul Kiwanis Club, St. Paul, Minnesota.
March 2, 1989

"Atherosclerosis and the Lipid Hypothesis - 1990" - Alfred A. Strauss Memorial Lecture, Chicago, Illinois, November 21, 1989.

Research Grants:

American Society for Allergic Disease (Histamine Quantification), 1956-1957
American Heart Association (Cholesterol Metabolism), 1964-1971
Graduate School - University of Minnesota (Evaluation of Ileal Bypass Operation), 1966
Graduate School - University of Minnesota (Cholesterol Levels), 1966-1967
National Heart and Lung Institute (Cholesterol Metabolism and Partial Ileal Bypass), 1967-1982
Graduate School, University of Minnesota (Cholesterol Metabolism), 1969-1970
Legislative Grant, State of Minnesota (Management of the Hyperlipidemias), 1969-1982
Minnesota Medical Foundation (Management of the Hyperlipidemias), 1970-1972
Metal Bellows Corporation (Development of an Implantable Infusion Pump), 1970-1985
Minnesota Medical Foundation (Relationship of Hyperlipidemia to Atherosclerosis), 1971-1972
Minnesota Heart Association (Cholesterol and Bile Acid Metabolism) 1971-1973
Upjohn Company (Development of an Implantable Infusion Pump), 1971-1974
National Heart and Lung Institute (Cholesterol and Bile Acid Metabolism), 1972-1977
National Heart and Lung Institute (Xylocaine Infusion by an Implantable Infusion Pump), 1973-1974
National Heart, Lung, and Blood Institute (Multi-Institutional Intervention Trial on Surgical Management of the Hyperlipidemias, the POSCH Trial), 1973-1993
National Institute of General Medical Sciences - NIH (Device for Continuous Infusion Drug Screening) 1976-1978
General Mills Corporation (Cord Blood Study), 1976
National Cancer Institute (Cancer Chemotherapy With a Totally Implantable Pump), 1977-1978
National Institute of Arthritis, Metabolism, and Digestive Diseases (Totally Implantable Artificial "Beta Cell"), 1977-1978
National Institutes of Health (Program on the Surgical Control of the Hyperlipidemias (POSCH)), 1978-1992
General Mills Foundation (Surgical Control of the Hyperlipidemias), 1979
Minnesota Medical Foundation (Surgical Control of the Hyperlipidemias), 1978-1979
Eli Lilly Company (Glucagon Research Program), 1978-1979
National Institute of Arthritis, Metabolism, and Digestive Diseases (Method of Treatment and Nephropathy in Diabetic Dogs), 1978-1982
National Institute of Arthritis, Metabolism, and Digestive Diseases (An Open Loop' Insulin Delivery Device for the Control of Glycemia), 1978-1982
National Institute of Arthritis, Metabolism, and Digestive Diseases (Insulin Infusion in Type II Diabetics by Implanted Pump), 1982-1984
National Institute of Arthritis, Metabolism, and Digestive Diseases (Adjuvants to Partial Ileal Bypass for Lipid Lowering), 1984-1987
The Upjohn Company (Glucregulation in Type II Diabetic Patients with the Comination of the Minnesota Implantable Insulin Infusion Pump and the Second Generation Sulfonylurea, Glyburide (MICRONASE)), 1987-1989
Medtronic, Inc. (Development of Insulin Delivery by the Medtronic SynchroMed™ Infusion Pump), 1988-1990
The Upjohn Compnay (Study to Assess the Effect of Pioglitazone on Insulin Sensitivity), 1989

Residents and Graduate Students Who Have Studied In My Laboratory:

Roger Gebhard, M.D.
Professor of Medicine
Division of Gastroenterology
University of Minnesota
Minneapolis, Minnesota

Marshall Z. Schwartz, M.D.
Associate Professor of Surgery & Pediatrics
Chief, Division of Pediatric Surgery
University of California, Davis Medical Center
Department of Surgery
Sacramento, CA

Philip D. Schneider, M.D., Ph.D.
Associate Professor of Surgery
University of California at Davis
Division of Surgical Oncology
Sacramento, California

John J. Coyle, M.D.
Professor of Clinical Surgery
University of Chicago
Chairman, Department of Surgery
Louis A. Weiss Memorial Hospital
Associate Chairman, Dept of Surgery
University of Chicago
Chicago, Illinois

Ignacio Guzman, M.D., Ph.D.
Professor and Chairman
Department of Surgery
Universidad de Nuevo Leon
Monterrey, N.L., Mexico

Hidreth B. McCarthy, M.D.
Colon and Rectal Surgery
Private Practice
New Orleans, Louisiana

Robert A. Schwartz, M.D.
Assistant Professor of Surgery
SUNY Health Science Center
Syracuse, New York

Richard D. Rucker, M.D.
Thoracic Surgery
Private Practice
Abbott-Northwestern Hospital
Minneapolis, Minnesota

Edmund P. Chute, M.D.
Assistant Professor of Surgery
Department of Surgery
University of Minnesota
Veterans Administration Hospital
Minneapolis, Minnesota

William M. Rupp, M.D.
Surgery
Private Practice
St. Paul, Minnesota

Perry J. Blackshear, M.D., D.Phil.
Associate Professor of Medicine
Duke University School of Medicine
Chief, Section of Diabetes & Metabolism
Investigator, Howard Hughes Medical Institute
Durham, North Carolina

James Grotting, M.D.
Plastic Surgery Practice
Seattle, Washington

Eugenio Guzman, M.D., Ph.D.
Resident
Department of Surgery
University of Minnesota
Minneapolis, Minnesota

Kemp H. Kernstine, M.D.
Resident
Department of Surgery
University of Minnesota
Minneapolis, Minnesota

Christian T. Campos, M.D.
Resident
Department of Surgery
University of Minnesota
Minneapolis, Minnesota

Craig Grorud, M.D.
Resident
Department of Surgery
University of Minnesota
Minneapolis, Minnesota

Diane Stoller, M.D.
Resident
Department of Surgery
University of Minnesota
Minneapolis, Minnesota

Eduardo Esper, M.D.
Resident
University of Minnesota
Minneapolis, Minnesota

Oscar Tijerina, M.D.
Resident, Department of Medicine
University of Minnesota
Minneapolis, Minnesota

Visiting Scientists:

Umberto Fox, M.D.
Professor of Surgery
3rd Clnica Chirurgica Universita
Ospedale Policlinici
Milano, Italy

Antonio Barichello, M.D.
Associate Professor of Surgery
Universidade de Brasilia
Brazil

Marian E. Smoczkiewicz, M.D.
Associate Professor of Surgery
ul Jawornicka 11A/30
Pozna, Poland

Marina Repetto, M.D.
Patologia Chirurgica I
Universita di Genova
Genova, Italy

Juan Pablo Pena, M.D.
Nino Jesus, #80-12
La Joya, Tlalpan, C.P. 14090
Mexico

Engineering Students Rotating Through Laboratory:

Paul Perkins - Currently working at Boeing
Bill Nettekovin - Currently working at St. Jude's
Dave Shelander - Currently working at 3-M
Mike Plumb - Currently working at 3-M
Rich Chapman - Currently working at 3-M
Greg Smith - University of Minnesota
Bill Beling - University of Minnesota
Jodi Thorud - Currently working at 3-M
Geoff Arlt - Medical School
Mike Anderson, University of Colorado

PUBLICATIONS

Henry Buchwald, M.D., Ph.D.

1. Van Arsdel PP, Middleton E Jr, Sherman WB, Buchwald H: A quantitative study on the in-vitro release of histamine from leukocytes of atopic persons. J of Allergy 29:429-437, 1958.

2. Buchwald H: The surgical treatment of coronary heart disease: A review and critique of the literature. Dis of the Chest 36:189-198, 1959.

3. Buchwald H: Postoperative use of percutaneous tracheal stimulation. Surgery 51:760-763, 1962.

4. Buchwald H: The dumping syndrome: An evaluation of pH in its genesis. Surgery 54:483-489, 1963.

5. Buchwald H: Surgical operation to lower circulating cholesterol. Circulation 28(II):649, 1963.

6. Buchwald H: Localization of cholesterol absorption. Circulation 28(II):649, 1963.

7. Buchwald H, Aust JB: Carcinoma of the ethmoid sinuses. Minnesota Medicine 46:758-760, 1963.

8. Buchwald H: A modification of the traditional thiry-vella loop for precise quantitative absorption studies. Proc Soc Exp Biol & Med 115:770-771, 1964.

9. Buchwald H: Myocardial infarction in rabbits induced solely by hypercholesterolemic diet. Fed Proc 23(I):444, 1964.

10. Buchwald H: Lowering of cholesterol absorption and blood levels by ileal exclusion: Experimental basis and preliminary clinical report. Circulation 29:713-720, 1964.

11. Buchwald H, Gebhard R: Effect of intestinal bypass on cholesterol absorption and blood levels in the rabbit. Am J Physiol 207:567-572, 1964.

12. Buchwald H, Aust JB: Use of chemosurgery with Mohs' paste in advanced carcinoma of the head. Am J Surg 108:589-591, 1964.

13. Buchwald H: Vitamin B_{12} absorption deficiency following bypass of the ileum. Am J Dig Dis 9:755-759, 1964.

14. Buchwald H, Varco RL: Ileal bypass in lowering high cholesterol levels. Surg Forum 15:289-291, 1964.

15. Buchwald H: Effect of ileal bypass on arteriosclerosis in rabbits. Circulation 30(III):3, 1964.

16. Buchwald H: Myocardial infarction in rabbits induced solely by a hypercholesterolemic diet. J Atherosclerosis Res 4:407-419, 1965.

17. Buchwald H: The effect of ileal bypass on atherosclerosis and hypercholesterolemia in the rabbit. Surgery 58:22-36, 1965.

18. Carey JB Jr, Buchwald H, Varco RL: Intestinal absorption of bile salts in man and rabbits with ileal bypass. J Clin Invest 44:1033, 1965.

19. Buchwald H, Varco RL: Ileal bypass in patients with hypercholesterolemia and atherosclerosis: Preliminary report on therapeutic potential. JAMA 196:627-630, 1966.

20. Buchwald H, Gebhard RL, Carey JB Jr: Bile salts absorption following intestinal bypass. Surg Forum 17:27-28, 1966.

21. Moore RB, Frantz ID Jr, Buchwald H: Effect of subtotal ileal bypass on in-vivo cholesterol synthesis in humans. Circulation 34(III):173, 1966.

22. Buchwald H: The development of the subtotal ileal bypass operation as a therapeutic approach to hypercholesterolemia and atherosclerosis: A review. Dis of the Chest 51:459-465, 1967.

23. Buchwald H, Gebhard RL: The essential role of bile in the intestinal absorption of cholesterol. Surgery 61:791-794, 1967.

24. Buchwald H, Varco RL: Partial ileal bypass for hypercholesterolemia and atherosclerosis. Surg Gynecol & Obstet 124:1231-1238, 1967.

25. Leonard AS, Levine AS, Wittner R, Buchwald H, Varco RL: Massive small bowel resections: Operative and dietary management. Arch of Surg 95:429-435, 1967.

26. Buchwald H, Frantz ID Jr, Gebhard RL, Moore RB: Ileal bypass versus ileal excision: Effect on cholesterol synthesis and whole blood cholesterol concentrations in the rabbit. Preliminary report. Surg Clin North Amer 47:1353-1362, 1967.

27. Moore RB, Frantz ID Jr, Gebhard RL, Buchwald H: Changes in cholesterol pool size, turnover rate, and synthesis after partial ileal bypass. Circulation 36(II):189, 1967.

28. Lee GB, Frantz ID Jr, Buchwald H: Lipid changes after partial ileal bypass. Circulation 36(II):23, 1967.

29. Buchwald H, Gebhard RL: Localization of bile salt absorption in-vivo in the rabbit. Ann Surg 167:191-198, 1968.

30. Buchwald H: The dumping syndrome and its treatment: A review and presentation of cases. Am J Surg 116:81-88, 1968.

31. Buchwald H, Lee GB, Amplatz K, Moore RB, Frantz ID Jr, Varco RL: Severe atherosclerotic cardiovascular disease in a 14-year old homozygous familial hypercolesterolemic. Minnesota Medicine 51:477-481, 1968.

32. Buchwald H, Frantz ID Jr, Gebhard RL, Moore RB: Effect of ileal bypass versus ileal excision on cholesterol synthesis and whole blood cholesterol concentrations in the rabbit. Surgery 64:126-133, 1968.

33. Buchwald H, Moore RB, Lee GB, Frantz ID Jr, Varco RL: Treatment of hypercholesterolemia: Combined dietary, surgical, and bile salt binding resin therapy. Arch of Surg 97:275-282, 1968.

34. Schwartz MZ, Moore RB, Buchwald H: Cholesterol excretion in the chronically bypassed ileum. Surg Forum 19:306-307, 1968.

35. Gebhard RL, Buchwald H: Cholesterol absorption after reversal of the upper and lower halves of the small intestine. Surg Forum 19:304-305, 1968.

36. Buchwald H, Bertish J, Moore RB: Effect of partial ileal bypass in the infant rabbit. Circulation 38(VI):2, 1968.

37. Buchwald H, Moore RB, Frantz ID Jr, Tuna N, Baltaxe HA, Amplatz K, Varco RL: Correlation of lipid levels and Fredrickson type, electrocardiograms and vectorcardiograms, clinical symptoms, and angiocardiograms in 50 partial ileal bypass patients. Circulation 38(VI):48, 1968.

38. Moore RB, Frantz ID Jr, Buchwald H: Changes in cholesterol pool size, turnover rate, and fecal bile acid and sterol excretion after partial ileal bypass in hypercholesterolemic patients. Surgery 65:98-108, 1969.

39. Buchwald H, Moore RB, Lee GB, Baltaxe H, Amplatz K, Frantz ID Jr, Varco RL: Five years experience with the use of partial ileal bypass in the treatment of hypercholesterolemia and atherosclerosis. IV. Asian-Pacific Congress of Cardiology Proceedings, Israel J Med Sci 5:760-765, 1969.

40. Baltaxe H, Amplatz K, Varco RL, Buchwald H: Coronary arteriography in hypercholesterolemic patients. Am J Roentg 105:784-790, 1969.

41. Buchwald H: Editorial: Ileal bypass in the treatment of the hyperlipidemias. J Atheroscler Res 10:1-4, 1969.

42. Merkel FK, Buchwald H, Najarian JS: The diagnosis and surgical treatment of renovascular hypertension. South Dakota J Med 22:13-18, 1969.

43. Buchwald H, Bertish J, Moore RB: Ileal bypass in the infant rabbit with pediatric clinical findings. Surg Forum 20:394-396, 1969.

44. Moore RB, Frantz ID Jr, Varco RL, Buchwald H: Cholesterol dynamics after partial ileal bypass. Circulation 40(III):149, 1969.

45. Buchwald H, Moore RB, Frantz ID Jr, Varco RL: Serum uric acid, carotene and vitamin A, proteins, sugar, and electrolytes before and after partial ileal bypass for hyperlipidemia. Circulation 40(III):4, 1969.

46. Buchwald H: The visible and palpable stigmata of hyperlipidemia. Dermatology Digest 9:65-70, 1970.

47. Buchwald H: The lipid clinic concept. Hospital Practice, November, 1970, p119-130.

48. Schwartz MZ, Moore RB, Buchwald H: Cholesterol excretion following chronic ileal bypass. Surgery 67:346-349, 1970.

49. Gebhard RL, Buchwald H: Cholesterol absorption following reversal of the upper and lower halves of the small intestine. Surgery 67:474-477, 1970.

50. Moore RB, Frantz ID Jr, Varco RL, Buchwald H: Cholesterol dynamics after partial ileal bypass. Proceedings of the Second International Symposium on Atherosclerosis, ED: RJ Jones, 1970, p295-300.

51. Buchwald H, Moore RB, Frantz ID Jr, Varco RL: Clinical experience with partial ileal bypass in treatment of the hyperlipidemias. Proceedings of the Second International Symposium on Atherosclerosis, ED: RJ Jones, 1970, p464-468.

52. Buchwald H, Moore RB, Frantz ID Jr, Varco RL: Cholesterol reduction by partial ileal bypass in a pediatric population. Surgery 68:1101-1111, 1970.

53. Schwartz MZ, Moore RB, Buchwald H: Cholesterol synthesis and turnover rates following ileal bypass and ileal excision in the rabbit. Surg Forum 21:400-402, 1970.

54. Blackshear PJ, Dorman FD, Blackshear PL Jr, Varco RL, Buchwald H: A permanently implantable self-recycling low flow constant rate multipurpose infusion pump of simple design. Surg Forum 21:136-137, 1970.

55. Buchwald H, Varco RL: A bypass operation for obese hyperlipidemic patients. Surgery 70;62-70, 1971.

56. Buchwald H, Varco RL: VII. Gastrointestinal and Biliary: Human gastric secretory studies following distal small bowel bypass. Current Topics in Surg Res 3:409-415, 1971.

57. Schwartz MZ, Varco RL, Buchwald H: Liver function and morphology following distal ileal excision in the rabbit. Surg Forum 22:355-356, 1971.

58. Blackshear PJ, Dorman FD, Blackshear PL Jr, Varco RL, Buchwald H: The design and initial testing of an implantable infusion pump. Surg Gynecol & Obstet 134:51-56, 1972.

59. Buchwald H, Moore RB, Bertish J, Varco RL: Effect of ileal bypass on cholesterol levels, atherosclerosis and growth in the infant rabbit. Ann Surg 175:311-319, 1972.

60. Schwartz MZ, Moore RB, Varco RL, Buchwald H: Cholesterol dynamics following partial ileal bypass versus partial ileal excision in the rabbit. Surgery 71:547-555, 1972.

61. Knight L, Scheibel R, Amplatz K, Varco RL, Buchwald H: Radiographic appraisal of the Minnesota partial ileal bypass study. Surg Forum 23:141-142, 1972.

62. Buchwald H: Functional surgery of the small intestine. Archives Francaises des Maladies de l'Appareil Digestif, Paris, 1972, 61, n°9, pp 591-592.

63. Steinbach JH, Blackshear PL Jr, Varco RL, Buchwald H: High blood cholesterol reduces blood oxygen delivery in the rabbit. Circulation 46(II):277, 1972.

64. Schwartz ML, Sheldon D, Dorman F, Blackshear PL Jr, Varco RL, Buchwald H, Nicoloff DM: Local anticoagulation of prosthetic heart valves. Circulation 48(Suppl 3):85-89, 1973.

65. Schwartz MZ, Varco RL, Buchwald H: Preoperative preparation, operative technique, and postoperative care of patients undergoing jejuno-ileal bypass for massive exogenous obesity. J Surg Res 14:147-50, 1973.

66. Buchwald H, Lober PH, Varco RL: Liver biopsy findings in 77 consecutive patients undergoing jejuno-ileal bypass for morbid obesity. Am J Surg 127:48-52, 1974.

67. Buchwald H, Gebhard RL, Varco RL: Relative secretion of cholesterol -4-^{14}C in the bile and upper and lower small intestinal washings of the bile fistula rabbit. Surgery 75:266-273, 1974.

68. Steinbach JH, Blackshear PL Jr, Varco RL, Buchwald H: High blood cholesterol reduces in-vitro blood oxygen delivery. J Surg Res 16:134-139, 1974.

69. Buchwald H, Moore RB, Varco RL: Surgical treatment of hyperlipidemias: Part I - Apologia; Part II - The laboratory experience; Part III - Clinical status of the partial ileal bypass operation. Circulation 49(I):1, 1974.

70. Buchwald H, Coyle J, Varco RL: Effect of small bowel bypass on gastric secretory function: Postintestinal exclusion hypersecretion, a phenomenon in search of a syndrome. Surgery 75:821-828, 1974.

71. Buchwald H, Moore RB, Varco RL: Ten years clinical experience with partial ileal bypass in management of the hyperlipidemias. Ann Surg 180:384-392, 1974.

72. Charyulu K, Halberg F, Reeker E, Haus E, Buchwald H: Autorhythmometry in relation to radiotherapy: Case report as tentative feasibility check. Chronobiology, ED: LE Scheving, R Halberg, JE Pauly, Igaku Shoin Ltd, Tokyo, 1974, p265-272.

73. Halberg F, Buchwald H, Charyulu K, Reeker E: Autorhythmometry and cancer of the breast — A case report. Chronobiology, ED: LE Scheving, F Halberg, JE Pauly, Igaku Shoin Ltd, Tokyo, 1974, p293-298.

74. Buchwald H, Varco RL, Moore RB, Schwartz M: Intestinal bypass procedures — Partial ileal bypass for hyperlipidemia and jejunoileal bypass for obesity. Curr Probl Surg, April, 1975, pp 1-51.

75. Blackshear PJ, Rohde RD, Varco RL, Buchwald H: One year continuous heparinization in the dog using a totally implantable infusion pump. Surg Gynecol & Obstet 141:176-186, 1975.

76. Coyle JJ, Varco RL, Buchwald H: Gastric secretion and serum gastrin in human small bowel bypass. Arch Surg 110:1036-1038, 1975.

77. Guzman IJ, Varco RL, Buchwald H: Factors determining weight loss after jejuno-ileal bypass for obesity. J Surg Res 18:399-403, 1975.

78. Rohde TD, Blackshear PJ, Varco RL, Buchwald H: Chronic heparin anticoagulant in dogs by continuous infusion with a totally implantable pump. Trans Amer Soc Artif Int Organs 21:510-515, 1975.

79. Schwartz MZ, Varco RL, Buchwald H: Treatment of heterozygous type II hyperlipidemia by partial ileal bypass in a pediatric population. J Pediatric Surgery 11:411-418, 1976.

80. Prosl F, Rohde TD, Tucker E, Varco RL, Buchwald H: A totally implantable pump for controlled infusion in ambulatory subjects. Medical Instrumentation 10:75, 1976.

81. Coyle JJ, Schwartz MZ, Eisenberg MM, Varco RL, Buchwald H: Fasting and stimulated serum gastrin levels in humans following jejunoileal bypass. J Surg Res 20:365-368, 1976.

82. Pyle RB, Mottl K, Helton WC, Buchwald H, Nicoloff DM: Chronic infusion of lidocaine with an implantable infusion pump device. Medical Instrumentation 10:75, 1976.

83. Coyle JJ, Schwartz MZ, Marubbio AT, Varco RL, Buchwald H: The effect of portacaval shunt on plasma lipids and tissue cholesterol synthesis in the dog. Surgery 80:54-60, 1976.

84. Marubbio AT, Buchwald H, Schwartz MZ, Varco RL: Hepatic lesions of central peri-cellular fibrosis in morbid obesity and after jejunoileal bypass. Am J Clin Path 66:684-691, 1976.

Coyle JJ, Varco RL, Buchwald H: The effect of bile acids on hepatic cholesterol synthesis in the partial ileal bypass rabbit. Surg Forum 27:447-449, 1976.

86. Guzman IJ, Coyle JJ, Varco RL, Buchwald H: Cholesterol metabolism after portacaval shunt and partial ileal bypass in the rabbit. Surg Forum 27:78-79, 1976.

87. Buchwald H, Guzman IJ, Moore RB, Varco RL: Surgical management of hyperlipidemia. IV International Symposium on Atherosclerosis, Tokyo, Japan, August, 1976.

88. Buchwald H, Moore RB, Varco RL: Lipid reduction by partial ileal bypass: A test of the lipid hypothesis of atherogenesis. Lipids 12:53-58, 1977.

89. Feinberg SB, Schwartz MZ, Clifford S, Buchwald H, Varco RL: The significance of pneumatosis intestinalis following jejuno-ileal bypass. Am J Surg 133:149-152, 1977.

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MINUTES
Joint Conference Committee
Board of Governors
December 12, 1990

CALL TO ORDER:

Chairman George Heenan called the December 12, 1990 meeting of the Joint Conference Committee to order at 4:36 p.m.

ATTENDANCE:

Present:
Debbie Day, M.D.
Amos Deinard, M.D.
Robert Dickler
Phyllis Ellis
George Heenan
Robert Maxwell, M.D.

Absent:
Barbara O'Grady
Jan Withers

Staff:
Keith Dunder
Greg Hart
Nancy Janda

APPROVAL OF MEETING MINUTES

The minutes of the October 10, 1990 meeting were approved as submitted.

MAKING PATIENT CARE DECISIONS TO FOREGO LIFE SUSTAINING TREATMENT

In 1986, the Bioethics Committee developed a policy entitled "Making Patient Care Decisions to Forego Life Sustaining Treatment" (4.7). The Joint Conference Committee and the Board of Governors reviewed revisions to that policy in October, 1990. At that time, a question was raised about whether a patient's Living Will or input of the legal guardian would take priority in making decisions on behalf of the incompetent patient.

Mr. Keith Dunder reviewed two wording changes in the policy aimed at eliminating that ambiguity. In the case of the incompetent patient, the wishes of the patient as reflected by the Living Will shall be given priority.

With those wording modifications, the Joint Conference Committee seconded and passed a motion to endorse the policy as presented. The policy will be forwarded to the Board of Governors for approval.

JOINT COMMISSION ON ACCREDITATION OF HEALTHCARE ORGANIZATIONS

The Joint Commission on Accreditation of Healthcare Organizations sent three survey teams to The University of Minnesota Hospital and Clinic during the month of November; one for Ambulatory Care, one for Chemical Dependency and a third for the remainder of the Hospital. A fourth team will be sent to review Home Health Services early in 1991. At the conclusion of each visit,

surveyors reported preliminary findings. Ms. Nancy Janda reviewed those findings for the Committee.

The recommendations are few in number. Notably absent from the list were recommendations related to the monitoring and evaluation of quality of care. Further, it does not appear that Nursing Services, Chemical Dependency and several of the hospital support departments will receive any citations.

Correcting of two of the preliminary findings will be a challenge. The Joint Commission recommends that relevant findings from quality assurance activities be considered as a determination of clinical competence when reappraising, reappointing and reviewing clinical privileges for physicians. Here to fore, quality assurance findings have not been analyzed by individual or employed as criteria for credentialling. Secondly, the Joint Commission commented that the distribution of sample drugs is currently managed in a disseminated fashion, making effective control difficult. Patient information necessary for a drug recall, for example, would be unavailable in any summary fashion.

A March, 1991 receipt of the official survey results is anticipated. Action plans will be developed in response to the findings. A follow-up presentation will be made to the Joint Conference Committee next spring.

CREDENTIALS COMMITTEE REPORT

The Joint Conference Committee reviewed a report from the Credential Committee. The same report had been endorsed by the Medical Staff Hospital Council a day earlier.

The Credentials report included the addition of privileges to perform laparoscopic procedures for two individuals. The Joint Conference Committee discussed the criteria for granting privileges to perform the newly evolving laparoscopic procedures.

Dr. Maxwell reported that the Credentials Committee intends to publish their laparoscopy criteria for the medical staff in early 1991. Those criteria will be shared with the Joint Conference Committee.

Without background, the Joint Conference Committee seconded and passed a motion to endorse the Credentials Committee report as written.

CLINICAL CHIEF APPOINTMENT: DR. LEO TWIGGS: OBSTETRICS AND GYNECOLOGY

Dr. Leo Twiggs has accepted the position of Interim Head in the Department of Obstetrics and Gynecology. Dr. Twiggs replaces Dr. Bruce Work who resigned as Department Head.

Dr. Twiggs has also been recommended to fill the position of Clinical Chief, Obstetrics and Gynecology. Consistent with Article V, Section 5(b) of the Board of Governors Bylaws, the Joint Conference Committee seconded and passed a motion to approve the appointment of Dr. Twiggs as Clinical Chief. The appointment will be forwarded to the Board of Governors for final approval.

Adjournment

There being no further business, the meeting was adjourned at 5:45 p.m.

Respectfully submitted,

Nancy C. Janda
Associate Director

NCJ/gs

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Box 707
Harvard Street at East River Parkway
Minneapolis, Minnesota 55455
(612) 626-1945

December 13, 1990

TO: Members of the Board of Governors

FROM: Robert E. Maxwell, M.D., Chief of Staff
Chairman, Medical Staff-Hospital Council

SUBJECT: Credentials Committee/Medical Staff-Hospital Council Report and Recommendations.

The Medical Staff-Hospital Council on December 11 and the Joint Conference Committee on December 12 have endorsed the attached Credentials Committee Report and Recommendations.

I am forwarding these recommendations to you for your review and approval on December 19. If you should have any questions, please feel free to call on me.

REM/cf
Attachment

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Road
Minneapolis, Minnesota 55455

December 7, 1990

TO: Medical Staff-Hospital Council

FROM: Henry Buchwald, M.D.
Chairman, Credentials Committee

SUBJECT: Credentials Committee Report and Recommendations

The Credentials Committee after examining all pertinent information provided to them concerning the professional competence and other necessary qualifications, hereby recommends the approval of provisional status and clinical privileges to the following applicants to the Medical Staff of The University of Minnesota Hospital and Clinic.

Department of Anesthesiology	Category
Calvin B. Cameron	Attending Staff
Department of Hospital Dentistry	
Rick L. Diehl	Attending Staff
Department of Laboratory Medicine and Pathology	
Howard B. Clark	Attending Staff
Department of Medicine	
Jeffrey H. Albrecht	Attending Staff-ER
Steven J. Bailin	Attending Staff
Philip C. Halverson	Clinical Staff
James T. Lane	Attending Staff
Department of Neurology	
Raul F. Cruz-Rodriquez	Clinical Staff
Michael J. Glantz	Attending Staff
Randall T. Schapiro	Clinical Staff
Lawrence J. Schut	Clinical Staff

Provisional status and clinical privileges continued:

Department of Obstetrics and Gynecology	Category
Deborah A. Thorp	Clinical Staff
Department of Orthopedics	
Timothy A. Garvey	Attending Staff
Serena S. Hu	Attending Staff
Department of Psychiatry	
Sheila M. Specker	Attending Staff
Department of Radiology	
Richard N. Aizpuru	Attending Staff
Lenore I. Everson	Attending Staff
William J. Ford	Clinical Staff
Arthur E. Stillman	Attending Staff
Bertrand L. Gallet	Attending Staff
Department of Surgery	
Edgar A. Pineda	Attending Staff
Department of Therapeutic Radiology	
Kathryn E. Dusenbery	Attending Staff
Kathryn E. Farniok	Attending Staff

The following medical staff have submitted applications and supporting documentation requesting addition and/or deletion of clinical privileges and change in staff category. The Committee has reviewed and considered their requests and hereby recommends approval.

Department of Pediatrics	Category
Robert Wm. Blum	Attending Staff
Add: arterial puncture; pelvic examination	
Delete: IUD insertion; spinal tap; incision and drainage of abscesses; laryngoscopy (emergency); Cardio, electrocardiography; Endo-Met, carbohydrate tolerance testing; comprehensive growth evaluation; Therapeutic Procedures, psychological therapy	
Ann Dunnigan	Attending Staff
Add: new privileges form--no changes	

Addition/deletion of clinical privileges continued:

Department of Pediatrics	Category
Robert W. ten Bensel	Attending Staff
Add: new privileges form	
Delete: spinal tap	
Department of Surgery	
Robert Goodale	Attending Staff
Add: laparoscopic cholecystectomy	
Department of Urology	
John C. Hulbert	Attending Staff
Add: laparoscopic lymphadenectomy	

The following medical staff are completing their provisional status and are eligible for regular appointments as members of the Medical Staff of The University of Minnesota Hospital and Clinic. The Committee has reviewed recommendations concerning their appointment and hereby recommends approval.

Department of Medicine	Category	Date Eligible
Nina DiAngeles	Attending Staff	November 23, 1990
Thomas Ducker	Attending Staff-ER	November 23, 1990
Gary S. Francis	Attending Staff	November 23, 1990
Jody Hargrove	Clinical Staff	November 23, 1990
Robert J. Helgren	Attending Staff	August 28, 1990
Department of Ophthalmology		
Emmett F. Carpel	Clinical Staff	September 28, 1990
Department of Otolaryngology		
David B. Hom	Clinical Staff	September 28, 1990
Department of Radiology		
Becky Carpenter	Attending Staff	September 28, 1990
Barbara Luikens	Attending Staff	September 28, 1990
Departent of Surgery		
Marie Christensen	Clinical Staff	September 28, 1990

The Committee recommends acceptance of the resignations of Medical Staff appointments from the following physicians.

Department of Hospital Dentistry	Category
Charles Wilkinson	Clinical Staff
Department of Medicine	
William B. Kinlaw	Attending Staff
Michael J. Shaw	Attending Staff
Linda S. Snyder	Attending Staff
Christine H. Wendt	Attending Staff

Completion of Temporary Faculty Appointment and Medical Staff Appointment

Department of Medicine	Category
Alvin C. Holm	Attending Staff
Douglas J. Rausch	Attending Staff

HB/cf

UNIVERSITY OF MINNESOTA
TWIN CITIES

Office of the Hospital Attorney
University of Minnesota Hospital and Clinic
Box 708
Harvard Street at East River Road
Minneapolis, Minnesota 55455
(612) 626-5429

December 13, 1990

MEMORANDUM

TO: Members of the Board of Governors

FROM: Keith A. Dunder KAD
Hospital Attorney's Office

RE: Revision to Policy No. 4.7, Making Patient Care Decisions to Forego Life Sustaining Treatment

A revised policy in regard to making patient care decisions to forego life sustaining treatment was developed primarily by the Biomedical Ethics Committee and was approved by the Joint Conference Committee and the Board in October, 1990. However, certain questions were raised by the Board relating to ambiguities in the policy in regard to the weight to be given to the Living Will and/or the direction of a proxy in the case of an incompetent patient. Accordingly, the policy has been revised at Section I(B)(2) and II(B) to more clearly reflect the intent that, in the case of an incompetent patient, the wishes of the patient as reflected in the Living Will shall be given priority.

KAD/ht

Revision of Policy 4.7

Subject:

Making Patient Care Decisions to Forego
Life Sustaining Treatment

Source:

Biomedical Ethics Committee
Medical Staff-Hospital Council

PURPOSE

In some situations it is appropriate to forego (withdraw and withhold) life sustaining treatment. This policy and procedure is adopted to assist patients, patient representatives, and staff in implementing such a decision.

STATEMENT OF PRINCIPLES

1. The patient has the legal and ethical right to and the primary responsibility for self-determination, including the right to forego (withhold and withdraw) treatment. There is no legal or ethical distinction between withholding and withdrawing treatment.

2. When a patient is incompetent to participate in treatment decisions, such decisions will be made by the patient's representative. To the extent possible, the incompetent patient shall be included in these decisions. Decisions for an incompetent patient shall reflect the patient's wishes. If the patient's wishes are unknown, the decisions shall reflect the patient's best interests.

3. Whenever the decision to forego life sustaining treatment is made, the patient shall receive care that maintains dignity, comfort, and hygiene.

4. As with any plan of care, the patient's condition shall be reviewed periodically to assure that the decision continues to be appropriate.

5. When there is a decision to forego life sustaining treatment, even when the patient's or patient representative's decision and the decision making process are consistent with medical, legal, and ethical standards, the patient/patient representative and/or staff may have concerns regarding the appropriateness of a course of action. When this occurs UMHC shall provide mechanisms to address these concerns.

6. The attending staff physician or other health care providers are not obligated to comply with the patient's decision if the treatment would be contrary to professional judgment, standards of clinical practice or the law. In cases where implementing the patient's decision would be contrary to the deeply held moral beliefs of the attending physician or other health care provider, that individual has the right to withdraw from the patient's case. Should such a

conflict occur, the patient shall not be abandoned, but rather shall be assisted in obtaining care that is consistent with the patient's wishes.

PROCEDURES

I. Determining the Decision Maker:

A. Competent Patient

If the patient is competent, all treatment decisions shall be made by the patient. A patient is competent if the patient has the capacity to understand, reflect upon, and reiterate the medical situation, including the consequences of the decision to forego treatment. Competency may be presumed in the absence of any impairment of judgement. Competency usually is determined by the attending physician. The physician may consult other health care providers, family members, or others who know the patient.

B. Incompetent Patient

In those instances in which the patient is not competent to make decisions on his or her own behalf, the decision regarding foregoing life sustaining treatment shall be made by the patient's representative. In the usual order of priority, the following individuals may act as the patient's representative:

1. In the case of a minor, the child's parents or legal guardian;

2. In the case of an adult,

   a. ~~the legal guardian or~~ the proxy if the patient has a valid living will;

   b. the legal guardian with responsibility for health care decisions

   cb. the spouse;

   dc. an adult son or daughter;

   ed. either parent;

   fe. an adult brother or sister;

   gf. other close family members; and,

   hg. close personal friend of the patient.

3. If an incompetent patient does not have a representative to make a decision on the patient's behalf, the attending physician shall contact the Hospital Attorney's Office.

II. The Decision Making Process

A. The attending physician shall ensure that the patient

or the patient's representative making the decision understands the following before the decision to forego life sustaining treatment is made:

1. his or her current medical status, including the likely course of the condition if treatment is withheld or withdrawn.

2. the interventions that might be helpful to the patient, including a description of the treatment options, their risks and anticipated benefits and burdens;

3. the attending physician's professional opinion regarding the preferred alternative; and,

~~B. In the case of the incompetent patient, the decision regarding treatment is consistent with the stated wishes or is in the best interests of the patient, taking into consideration the patient's values, life philosophy and/or spiritual beliefs.~~

B. In the case of the incompetent patient, the decision regarding treatment shall be consistent with the stated directives of the patient as expressed in a living will or, if there is no living will, the decision shall be consistent with other reliable expression of the patient's wishes. If there is no living will or other reliable expression of the patient's wishes, the decision shall be in the best interests of the patient, taking into consideration the patient's values, life philosophy and/or spiritual beliefs.

C. Throughout the decision-making process, the attending physician is encouraged to consult with his or her colleagues and other members of the health care team. The ICU medical and nursing staff can be utilized as a resource for this purpose.

D. When a decision to forego treatment has been made, the attending physician shall communicate the decision to the other members of the health care team.

E. If at any time during the decision making process questions or concerns arise, see Section V.

III. Documentation

When the participants have reached a decision to forego life sustaining treatment the attending physician shall document the decision in the patient's medical record. Documentation should include:

A. Participants in the discussion

B. Who the decision maker is and the rationale for determining incompetency, if relevant.

C. Summary of the information presented and the discussion which led to the decisions.

D. Specific decisions reached including treatment to be continued and treatment to be withheld. Considerations should include, but not

necessarily be limited to, ventilation, blood products, medication, hydration and nutrition, dialysis, and other interventional procedures.

IV. Implementation of the Care Plan:

The care plan shall include:

A. A statement in the chart clarifying the patient's resuscitation status

B. Orders for what specific treatments will be withheld and/or discontinued.

C. Orders for medication

1. The goal of treatment is to relieve pain and suffering to the fullest extent possible consistent with the patient's wishes.

2. Health care professionals must make every effort to relieve the pain and suffering of the dying patient. Relief of pain and suffering may require either intermittent or continued administration of large doses of analgesics and sedatives which, in circumstances other than anticipated death, would be considered inappropriate. Dying patients should be assured the maximal possible comfort even in the face of impending death as heralded by falling blood pressure, declining rate of respirations, or altered level of consciousness. Vital signs may be obtained to assess the patient's status in the dying process, but should not influence decisions about administering medications in the presence of continued pain or other distressing symptoms for which the medication is an accepted treatment. The attending staff physician shall clearly document in the patient's chart all clinical indications for administration of medication, including all dosage changes.

3. Neuromuscular blocking agents are generally excluded from these medications as they have no therapeutic value in relief of pain and suffering and their use precludes assessment of pain and suffering. When ventilator support is decreased or discontinued, neuromuscular blocking agents should not be used.

V. Decisions Which Result in Concern or Conflict

A. When a concern or conflict remains after reasonable attempts to resolve:
- who the decision maker should be,
- the decision making process, or
- the decision and plan of care,
the attending physician, patient/patient representative, or other health care provider shall seek resolution by notifying the Patient Relations Department. Patient Relations will involve other colleagues, arrange an ethics consultation, notify the Hospital Attorney, Hospital Administration, or other departments as necessary. (If a Biomedical Ethics Consultation is necessary, see Policy 15.19.)

B. In rare instances when the attending physician or other health care provider believes that all other resources have been exhausted and disagreement still remains over the appropriateness of the care plan, judicial intervention may be considered. The Hospital Attorney's office shall be contacted.

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Road
Minneapolis, Minnesota 55455

December 13, 1990

TO: Members, Board of Governors

FROM: Nancy Janda

RE: Joint Commission on Accreditation of Healthcare Organizations

As you know, the Joint Commission on Accreditation of Healthcare Organizations conducted three site visits at The University of Minnesota Hospital and Clinic during the month of November.

November 26-27 1990 Hospital Accreditation
November 27 & 28 1990 Ambulatory Care Accreditation
November 1990 Chemical Dependency

At the conclusion of each visit, the surveyors reported preliminary findings. A summary of known recommendations is attached.

I will be at the Board of Governors Meeting on December 19, 1990 to discuss the accreditation findings in more detail.

NCJ/gs

Attachment

Joint Commission on Accreditation of Health Care Organizations

Preliminary Report of Recommendations*

November 26-29, 1990 Site Visit

I. **Anesthesia. The pre-anesthesia evaluation of patients undergoing electroconvulsive shock therapy should be documented in the medical record. (S.A.1.5)**

II. **Risk Management.** Ongoing activities aimed at identifying and reducing risk should be summarized in a risk management plan. The operational linkages between the risk management functions should be specified. (MA1.8, MA1.8.2, MS6.1.7, QA2.3.3, PL1.4.2, PL1.4.3., PL1.7)

III. **QA Results in Credentialling.** Relevant findings from the quality assurance activities should be considered as a determinant of clinical competence when reappraising, reappointing and renewing clinical privileges for physicians. (QA2.5, MS4.2.8.3.3.3., MS5.3.1.5)

IV. **Performance Appraisal. The Board of Governors should verify the competence of individuals who provide patient care services, but who are not subject to the medical staff privilege delineation process. That verification can be accomplished through an annual review of the performance appraisal process and a review of the general results of appraisals (QA2.5.3, GB1.15)**

V. **Safety Management. The objectives, scope, organization and effectiveness of the safety management program should be evaluated at least annually and revised as necessary. (PL1.9)**

VI. **Safety Management. Identified safety management issues and summaries of safety management activities should be communicated to the hospital managers and Board of Governors at least quarterly. (PL1.7)**

VII. **Facility Citations. (1988 edition of the Life Safety Code of the National Fire Protection Association):**

- A one hour fire resistant barrier may be necessary at the Emergency Room ambulance entrance.
- Seclusion rooms in Psychiatry do not afford staff full view of the patient.
- Metal towel bars in Psychiatry should not be removable.
- The Mayo 7 Occupational Therapy space has a dead end corridor of over 30 feet in depth.
- Station 60 and Station 61 have dead end corridors of over 30 feet in depth. A horizontal exit between the units might serve as an egress route if appropriately equipped.

- o Swing doors are preferable to the sliding doors on Mayo 7 and Rehab 6.

- o Combustible material should not be stored in the hallway near the Station 63 entry.

VIII. **Ambulatory Care Sample Drugs. The distribution of sample drugs is currently managed in a disseminated fashion, making effective control difficult. (P.H.4.3.1.10, PH4.3.1.10.1)**

IX. **Ambulatory Care Emergency Drug Carts.** Organization, checking and placement of emergency drug carts should be uniform and consistent to ensure the integrity of the emergency drug system. (ER6.8.4, P.H.2.2.4.1.6.)

* Recommendations likely to be classified as priority or Type I recommendations are bolded. Additional Type II recommendations may be included in final report.

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Road
Minneapolis, Minnesota 55455

December 13, 1990

TO: Members, Board of Governors

FROM: Robert Dickler
Robert Maxwell, M.D.

SUBJECT: Clinical Chief Appointment

You may be aware that Dr. Bruce Work has resigned as Head of the Department of Obstetrics and Gynecology. Dr. Leo Twiggs has accepted the interim headship of the Department.

We would recommend that Dr. Twiggs be appointed Clinical Chief of the OB-Gyn. service, consistent with Article V, Section 5(b) of the Board of Governors Bylaws. A copy of Dr. Twiggs' curriculum vitae is attached.

Thank you for your attention to this recommended appointment.

attachment

CURRICULUM VITAE
Leo B. Twiggs, M.D.

Revised November 16, 1990

Personal

Name	Leo Brookhart Twiggs, M.D.
Business Address	University of Minnesota Hospitals Box 395 Mayo Memorial Building 420 Delaware Street Southeast Minneapolis, Minnesota 55455 (612) 626-4338
Home Address	4200 Fremont Avenue South Minneapolis, Minnesota 55409 (612) 824-6937
Social Security No.	
Date of Birth	December 31, 1946
Place of Birth	Benham, Kentucky United States of America
Marital Status	Married (Martha)

Education

High School	Austin High School Austin, Minnesota 1964
College	University of Michigan Ann Arbor, Michigan 1968, B.S.
Medical School	University of Michigan Ann Arbor, Michigan 1972, M.D.
Internship	Los Angeles County University of Southern California Medical Center Department of Obstetrics and Gynecology 1972 - 1973

Residency

Los Angeles County
University of Southern California Medical Center
Department of Obstetrics and Gynecology
1973 - 1976

Fellowships

Los Angeles County
University of Southern California Medical Center
Clinical Fellow in Gynecologic Oncology
1976 - 1978

Fellow, American Cancer Society

Licensure

Licensed to Practice Medicine in California (G 25909)
Licensed to Practice Medicine in Minnesota (24,415)

Board Certification

National Board of Medical Examiners, #126637
July 3, 1973

American Board Obstetrics and Gynecology, 1979

American Board Obstetrics and Gynecology
with special competence in Gynecologic Oncology, 1981

Professional Background

Academic Appointments

Clinical Instructor
Department of Obstetrics and Gynecology
University of Southern California
1976-1978

Assistant Professor
Department of Obstetrics and Gynecology
Division of Gynecologic Oncology
Department of Obstetrics and Gynecology
University of Minnesota Medical School
1978-1983

Gynecologic Oncology Colsultant
Hennepin County Medical Center
Department of Obstetrics and Gynecology
1978-1981

Associate Professor with tenure
Department of Obstetrics and Gynecology
Division of Gynecologic Oncology
University of Minnesota Medical School
1983-1987

Director, Division of Gynecologic Oncology
Department of Obstetrics and Gynecology
University of Minnesota Medical School
1983 - 1990

Professor
Department of Obstetrics and Gynecology
Division of Gynecologic Oncology
University of Minnesota Medical School
1987 - Present

Professor
Department of Therapeutic Radiology
Division of Radiation Oncology
University of Minnesota Medical School
1988 - Present

Director
Women's Cancer Center
University of Minnesota Hospital
1989 - Present

Interim Head
Department of Obstetrics and Gynecology
University of Minnesota Medical School
1990 - Present

Teaching Responsibilities

University of Minnesota Medical School
Lectures in Cervical Cytology-Phase B, D

University of Minnesota Faculty Member
Multi-Disciplined Cancer Education
Elective: Phase D

Associate Member
Graduate Faculty
University of Minnesota Medical School

Advisor to Martin Jones
Graduate Student U of M
Rural Physicians Associates Program

Administrative Responsibilities

Faculty Member
Academic Grievance Committee
University of Minnesota Hosptal
1980-1982

Candidate Coordinator
Gynecologic Oncology Fellowship
University of Minnesota Hospital
June 1981 - May 1982

Member
Search Committee for OB/GYN Chairman
Hennepin County Medical Center
Minneapolis, Minnesota
1982

Colposcopy Consultant
Brooklyn Center Group Health
Department of Obstetrics and Gynecology
1978-1982

Director
Colposcopy Clinic
University of Minnesota Hospitals
Department of Obstetrics and Gynecology
1978-1983

Departmental Search Committee for Assisant Professor
Department of Obstetrics and Gynecology
University of Minnesota Hospitals
1984

Chairman
Subcommittee on Resident Education
Department of Obstetrics and Gynecology
University of Minnesota Hospitals
1978-1985

Search Committee - OB/GYN Chairman
Hennepin County Medical Center
Minneapolis, Minnesota
1985

Cancer Task Force
University of Minnesota Hospitals
1985

Ad Hoc Committee
Women's Health Center
University of Minnesota Hospitals
1985

Clinical Associates Planning and Marketing Committee
University of Minnesota Hospitals
1985

Co-Director
Upper Midwest Trophoblastic Disease Center
University of Minnesota Hospitals
1981 - Present

Faculty Member
Academic Grievance Committee
University of Minnesota Hospitals
1980-1982

Chairman
Methodist Hospital Gyn/Oncology Conference
Minneapolis, Minnesota
1980 - present

Director
Gynecologic Oncology Fellowship Program
University of Minnesota Hospitals
June 1982 - Present

Tissue and Procedure Review Committee
University of Minnesota Hospitals
1983 - present

Minnesota Section of District VI
A.C.O.G. Membership Committee
1984 - Present

Chairman
Abbott Northwestern Gyn/Oncology Confence
Minneapolis, Minnesota
1984 - present

Governing Body
Home Health Care Committee
1985 - present

Operating Room Committee
University of Minnesota Hospitals
1986-present

Advisory Committee
Masonic Day Hospital
University of Minnesota Hospitals
1987

Search Committee
Operating Room Director
University of Minnesota Hospitals
1987

Credentials Committee
University of Minnesota Hospitals
1987 - present

Quality Assurance Steering Committee
University of Minnesota Hospitals
1987 - present

Medical Staff with courtesy staff privileges
Metropolitan-Mount Sinai Medical Center
Minneapolis, Minnesota
1987 - present

Laser Committee
University of Minnesota Hospitals
1988 - present

Patients First Physician's Advisory Committee
University of Minnesota Hospitals
1988 - present

Professional Education Committee
American Cancer Society
1988 - present

Editorial Board
American College of Obstetricians and Gynecologists
Prologue--Gynecologic Oncology
1988 - present

Intensive/Special Care Unit Advisory Committee
University of Minnesota Hospitals
1988 - present

Co-Chairman
Advisory Committee, Women's Cancer Center
University of Minnesota Hospitals
1988 - present

Executive Committee
Gynecologic Oncology Group
1989 - present

Chairman
UMCA Planning and Marketing Committee
University of Minnesota Hospitals
1989 - present

Education Commission
Prolog Task Force for Gynecologic Surgery and Oncology
1990 - present

Staging and Nomenclature Committee
Society of Gynecologic Oncologists
1989-1992

Grants Awarded

Committee Member
Minnesota Clinical Cancer Education Program - Part II
5R25CA-1952707

Upjohn Grant
Medroxyprogesterone Acetate: A Study In the Treatment of Endometrial Hyperplasia, Protocol No. 80-06

American Cancer Society Grant
Cancer Education Member
2 R25 Ca1952707

American Cancer Society
Institutional Research Grant, 1981
IN 13 T 32

National Cancer Institute
Human Papillomavirus and Malignant Disease, 1984
5R01 CA25462-06

National Cancer Institute Research Grant
Human Papillomavirus and Malignant Disease, 1985
2R01-CA25462-07

American Board of Obstetrics and Gynecology
Institutional Program in Gynecologic Oncology
(3 Fellows every two years)
1989 - 1994
National Institute of Health
Epidemiological Study for Endometrial Cancer
1987 - 1989

National Institute of Health
Prospective Study of Ovarian Carcinoma for Amplified C-Ki-Ras and C-Myc.
1989 - 1994 (submitted)

American Cancer Society
Institutional Application for Clinical Oncology Fellowships
1989 - 1990 (submitted)

Society Memberships

Local

Galens Honarary Medical Society
University of Michigan, 1974

Former Residents in Obstetrics and Gynecology (FROGS)
Los Angeles County
University of Southern California Medical Center, 1975

Minneapolis Council of Obstetricians and Gynecologists, 1978

Minnesota Obstetrical and Gynecological Society, 1979
- Program Chairman 1982-1983
- Program Co-Chairman, 1983-1984
- Board of Governors, 1987 - present
- President, 1989

National

Junior Fellow
American College of Obstetricians and Gynecologists, 1975-1979

Fellow
American College of Obstetricians and Gynecologists
1979 - Present

Society for Gynecologic Urology, 1979

Western Association of Gynecologic Oncology, 1979 - present
- Executive Committee 1983
- President, 1986-1987

American Association of Professors of Gynecology and Obstetrics, 1978

Gynecologic Oncology Group, 1978 - present
- Trophoblastic Disease Committee Chairman, 1984
- Protocol Committee, 1984 - 1988

International Society of Gynecological Pathologists, 1980 - present
Associate Member
- Member, Trophoblastic Nomenclature Committee

International Journal of Gynecological Pathology

Editorial Board, 1984

American Society of Cervical Pathology and Colposcopy
Education Committee, 1980
Nominating Committee, 1984
Program Committee Chairman, 1987
Board Member, 1988
Associate Editor, Colposcopist, 1988

Central Association of Obstetrics and Gynecology, 1980 - present

Society of Gynecologic Oncology, 1982 - present
Program Committee, 1986
Nominating Committee, 1987
Program Committee, 1988

American Society of Clinical Oncology, 1982 - present

Central Travel Club, 1982 - present

American Association For Cancer Education, 1983 - present

Society of Memorial Gynecologic Oncologists, 1988 - present

Continental Gynecologic Society, 1989 - present

Research Activities

1. Urodynamic Testing of Patients Undergoing Pelvic Surgery - Terminated 1981
2. In vivo Stimulation of Pelvic Nerves to Ascertain Innervation of Bladder - Terminated 1981
3. Chlamydia Trachomatis and Its Inter-Relationship to Abnormal Cervical Cytology
4. Medroxy Progesterone Acetate (Provera) Use in Endometrial Hyperplasia
5. Gynecologic Oncology Protocol - Pulse Actinomycin D Therapy for Nonmetastatic Gestational Trophoblastic Disease: Protocol Approved Jan, 1982. Study Chairman
6. Randomized Comparison of M.A.C. versus Modified Bagshawe In Poor Prognosis Gestational Trophoblastic Disease. Study Co-Chairman 1982; Study Chairman 1983.

7. Measurement of Placental Proteins in Trophoblastic Disease-Collaboration with C.W. Horne, M.D., Aberdeen, Scotland 1981-1983

8. Immunoperoxidase Localization in Benign and Malignant Trophoblastic Disease--Collaboration with Robert Kurman, M.D., Georgetown University, 1981-1982

9. Measurement of Prolactin and Human Placental Lactogen In Gestational Trophoblastic Disease-Collaboration with Saul Rosen, M.D. Nat'l Cancer Inst. 1982

10. Steroid Hormone Receptors in Ovarian Carcinoma--Collaboration with Benjamin Leung, Ph.D. 1983 - 1988

11. Vaginal Alpha Interferon in Cervical Precancers. Schering Corporation, 1984 - 1987

12. Chemoprevention of Cervical Cancer with Human Lymphoid Interferon - Collaboration with RJ Kurman, M.D., Georgetown Medical School, Washington 1985 - 1987

13. Intraperitoneal Cis-platinum vs. Intraperitoneal Interferon - Schering Corporation - 1986 - 1988

14. Infectious Morbidity in Gynecological Cancer. Glaxo, 1988

15. Equipment Purchase for Data Management for McKelvey Gynecologic Oncology Registry. Harriet Walker Fund, University of Minnesota. 1987 - present

MINUTES
Planning and Development Committee
December 6, 1990

CALL TO ORDER
Chairman, Robert Latz called the December 6, 1990 meeting of the Planning and Development Committee to order at 12:30 p.m. in room 8-106 in the University Hospital.

Attendance:	Present	Robert Latz, Chair Robert Dickler Clint Hewitt Geoff Kaufmann Ted Thompson, M.D.
	Absent	Leonard Bienias William Jacott, M.D. B. Kristine Johnson Peter Lynch, M.D. Gerald Olson
	Staff	Fred Bertschinger Al Dees Cliff Fearing Greg Hart Nancy Janda Mark Koenig Lisa McDonald Mary Ellen Wells
	Guest	William Thompson, M.D.

APPROVAL OF MINUTES
The minutes of the October 18, 1990 meeting were accepted as distributed.

CAPITAL PLANNING - RENEWAL PROJECT
Mr. Dickler reported that the current plan under consideration is estimated at $35.8 million and is within the projected budget. Feedback is being obtained from the departments involved and there are some significant issues that need to be resolved. The operating room committee requested that another alternative be considered. Dr. Fraley also has concerns about the PWB relocation because the space would be smaller than Urology's planned space and the offices would not be located adjacent to the clinic rooms. The chiefs recommended that we look at the renewal project and address the Urology, OB, Ambulatory Surgery and Operating Room issues. Dr. Thompson reported that there was a consensus among the chiefs to try to address these issues. Mr. Dickler said that the hospital may recommend a change in the budget if necessary to resolve these issues. It is still the hope of administration that a recommendation can be made to the Board at the December meeting.

SPECIAL CAPITAL PROJECT

Mr. Dees presented a proposal to replace the Siemens/Fischer single plane neuroangiographic system which was purchased in 1983 with a biplane unit. The existing system is dated and has poor resolution. Neurosurgery is sending some patients to Abbott which has a more advanced unit. Neurointerventional radiology is an expanding technology used primarily for vascular problems, aneursms, etc. The cost of the system is $1,655,000 with installation and remodeling costs projected at $245,000. The space will need to be remodeled to create a separate room for the peripheral racks resulting in higher installation and remodeling cost than normally incurred. The projected payback period is 3.6 years based on a conservative projection of 208 procedures annually. The equipment is included in the long range capital plan as a major equipment purchase during the 1990-91 fiscal year.

MAJOR CAPITAL

Community Hospital Health (CUHCC) Computer System

Ms. Wells informed the Board of a plan to expend $120,555 to purchase the Experior system. The system was selected because it met CUHCC's billing, scheduling and reporting needs. The system will interface with the hospital programs such as the general ledger and patient accounting systems. CUHCC will be able to increase its billing accuracy and reduce turnaround time. Funds were budgeted in the 90/91 capital budget and the system installation will coincide with the CUHCC opening. Ms. Wells reported that the census is doing well and the new facility is scheduled for completion in March 1991. The staff and the community is very excited about the new building. There will be three major events tied to the opening.

MAJOR CAPITAL EXPENDITURE

Laboratory Computer System Expansion

Mr. Hart reported on the expansion of the Clinical Laboratory Information System (CLIS) with - 2 tandem VLX processors, memory and installation. The CLIS supports information processing and management related to test ordering, processing, analysis, data acquisition, verification, quality control and reports results for over 20 labs. The CLIS is being expanded to maintain adequate levels of service and laboratory productivity. Current response time is in the range of 10 seconds and will become longer when two additional clinical labs are added to the system. Two reconditioned processors have been identified at a cost of $306,000 (including installation). The project was included in the 1990-91 capital budget.

DEVELOPMENT OFFICE UPDATE

Mr. Bertschinger reported two revocable future gifts and first quarter contributions of $146,148. Second quarter will be higher due to more events, including the transplant assistance campaign and the employee campaign.

First quarter events included: luncheons for solicitors for the CWA Local 7200/US West Transplant Assistance Fund campaign, donor recognition event sponsored by Bob and Sue Dickler, Gopher exhibition basketball game and U of M Presidents Club Dinner.

Mr. Bertschinger reported that the annual reports have been distributed to donors. and that responses have been positive. The Employee Campaign letter was sent out as scheduled. A newsletter "Gifted" from the University of Minnesota Foundation and Planned Gift Center will be sent to donors and selected individuals. Copies of the University of Minnesota Foundation annual report were distributed.

Variety Club has received contributions of $2,800,814 toward their $8,000,000 pledge with $75,629 to be disbursed.

QUARTERLY PURCHASING REPORT

Mr. Koenig said that first quarter purchase order activity of $17,936,022 is higher than last year. The increase is due large capital equipment purchases. Purchase awards to other than lower bidder ($10,000 or more) and Sole Source awards greater than $3,000 were summarized.

There was one vendor appeal for the Backbone Network. The top three proposals are still under evaluation and no award has been made.

It was moved and seconded to adopt the first quarter purchase report for 1990.

EXTERNAL RELATIONS UPDATE

Mr. Dickler reported that negotiations continue with the Interstate Medical Center. Legal concerns, management, governance and property acquisition alternatives are being assessed.

Discussions are also being conducted with Riverside about obstetrics and other potential relationships.

Mr. Dickler extended his thanks to Mr. Latz for his leadership on the Planning and Development Committee and Board of Governors since this was his last meeting.

Mr. Dickler also thanked Mr. Kaufmann for his work since he is leaving UMHC.

Mr. Hewitt moved for a resolution by the Committee thanking Mr. Latz for his service to The University of Minnesota Hospital and Clinic. The resolution was adopted unanimously.

ADJOURNMENT

Mr. Latz adjourned the Planning and Development Committee at 1:45 p.m.

Respectfully submitted,

Lisa McDonald

Lisa McDonald
Assistant Director
Planning and Marketing

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Parkway
Minneapolis, Minnesota 55455

December 13, 1990

MEMO

TO: Members, Board of Governors

FROM: Greg Hart GH

RE: Neuroangiography System Replacement

There are currently two rooms in the Diagnostic Radiology Department equipped with neuroangiographic x-ray machines. Due to the age and technological limitations of these systems, radiology staff is not able to produce the type and quality of images required to support new, interventional radiology procedures. Attached is a proposal to replace one of these systems.

This proposal will be presented to this committee, the Finance Committee and the Board for information during December meetings and for approval during January meetings.

Thank you for your attention to this proposal. We look forward to answering any questions you may have.

GH/ad

attachment

PROPOSAL FOR PURCHASE OF NEUROANGIOGRAPHY SYSTEM
DIAGNOSTIC RADIOLOGY DEPARTMENT
THE UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

INTRODUCTION

The University of Minnesota Hospital and Clinic (UMHC) currently has two radiology procedure rooms equipped with single plane neuroangiographic systems. One system was acquired in 1980. The other was acquired in 1983 and upgraded with the addition of a digital biplane module in 1986. These systems are not capable of providing acceptable biplane imaging required for the new highly differentiated adult and pediatric neurointerventional procedures and other neuroangiographic studies which have been and are being developed.

PROPOSAL

Acquire a new biplane radiographic, fluoroscopic, digital neuroangiographic system to replace the Siemens/Fischer system originally installed in 1983.

RATIONALE

A. A new imaging system is required to enable performance of neurointerventional procedures currently required to support the neurosurgical staff including vascular occlusion, vascular recanalization, and vascular perfusion in addition to treating aneurysms, arteriovenous malformations, arteriovenous fistulas, tumors, thrombosis, stenosis, and vasospasm. Currently, these imaging/interventional procedures cannot be performed at UMHC and are being referred to Abbott-Northwestern Hospital (see attached letter from Dr. Roberto Heros, Chief of Neurosurgery).

B. Concern regarding the inadequacy of the existing equipment was voiced by Dr. William Thompson, Chief of Diagnostic Radiology, during his recruitment to the University of Minnesota in 1986. Replacement was postponed, however, pending selection of a new chairperson for Neurosurgery. While that postponement was appropriate, it has impeded Dr. Thompson's ability during the past three years to recruit neurointerventional radiologists.

C. Neurointerventional radiology is an expanding technology. Dr. Heros' projection of 104 - 156 cases requiring 208 - 312 procedures annually is comparable to the growth experienced at Massachusetts General Hospital (MGH). MGH has experienced a 30% growth rate per quarter, moving from 130 procedures in 1988 to 260 in 1989.

D. The projected pay back period is 3.6 years. This is based on 208 neurointerventional procedures annually, the low end of the projected volume, with an average procedure charge of $2,400, coupled with the $200,000 in charges generated annually at present and utilizing a 75% reimbursement rate.

ESTIMATED COST

Biplane neuroangiographic system	$1,655,000
Installation & remodeling	245,000
TOTAL	$1,900,000

The estimated cost for the equipment is based on bids received. This cost does not include a stereotactic module which would add $400,000. If that module is determined to be required for specific new procedures, it will be budgeted for and presented as a separate proposal in a future fiscal year.

The existing room is not large enough to accommodate all of the racks for the peripheral equipment included with this system. Consequently, it appears that x-ray equipment and a reading room located in adjacent space will need to be relocated and the space remodeled to create a separate room for the peripheral racks. Therefore, the estimated installation and remodeling cost is higher than that normally incurred for installation of new equipment.

This equipment is included in the long range capital plan as a major equipment purchase to be made during the 1990-91 fiscal year.

FINANCING

Several financing alternatives are available. The alternative used will be the one which is determined to provide the least costly approach at the time the acquisition contracts are written.

UNIVERSITY OF MINNESOTA
TWIN CITIES

Department of Neurosurgery
Medical School
Box 96 UMHC
B590 Mayo Memorial Building
420 Delaware Street S.E.
Minneapolis. Minnesota 55455

(612) 624-6666
FAX: (612) 624-0644

October 16, 1990

William Thompson, M.D.
UMHC - Box 292

RE: InterventionalNeuroradiology Room

Dear Bill:

This letter is to support in the strongest possible terms your justification of need for an interventional neuroradiology room. As you know, presently our facilities for these procedures are simply inadequate and much below par. In fact the facilities are so inadequate that we are sending routinely our patients for these procedures to Abbott Hospital where they do have first-class facilities.

Currently we are sending at least one patient a week to Abbott and on the average such a patient has at least two different sessions of interventional neuroradiology. Each session may take from four to six hours. In other words, presently our patients are utilizing the facilities at Abbott Hospital for an average of eight to twelve hours a week. This utilization is increasing quite significantly and I project that within six months there will be an average of two to three patients per week at the University Hospital in need of interventional radiology. This means that a conservative projection would be that in six months we would be utilizing this facility, if it were available at the University Hospital, for an average of 12-18 hours per week.

As you well know, I think it is an embarrassment to have to refer these patients to an outside institution for lack of adequate facilities at our own. I hope that you make every effort to correct this major deficiency and I do hope that your efforts are successful. We simply cannot continue to run a first-class clinical neurosurgical service without adequate interventional neuroradiology.

Sincerely,

Roberto C. Heros, M.D.
Lyle A. French Professor
and Department Head

RCH/bm

THE UNIVERSITY OF MINNESOTA
HOSPITAL AND CLINIC
BOARD OF GOVERNORS

Planning & Dev. Committee Review:	12-6-90
Finance Committee Review:	12-19-90
Board of Governors Review:	12-19-90

MAJOR CAPITAL EXPENDITURE REPORT

EQUIPMENT: Interactive Clinic Management Computer System

PURCHASE PRICE: $120,555

DESCRIPTION:

The Community University Health Care Center (CUHCC) must replace its current billing and management reporting system. The IBM computer, purchased in 1978, is at capacity. The software is cumbersome to use and does not interface with the Hospital's mainframes. Also, during the last University audit, recommendations were made that the Hospital develop better audit trails and billing procedures for CUHCC. These deficiencies cannot be corrected with the current computer.

The Experior system was chosen after a thorough review of potential vendors. It will reside on the Hospital's Unisys A15 mainframe and will meet all of CUHCC's billing, scheduling and reporting needs. The system will be able to interface with other Hospital programs such as the General Ledger and Patient Accounting systems. CUHCC will be able to increase Medical Assistance and other insurance billing accuracy and estimates that it will reduce billing turnaround time from 45 days to 30 days.

Funds for this purchase will come from the Hospital's 1990-91 capital budget.

CUHCC plans to have the new system installed in time for the opening of the new facility in March.

Submitted By: Mary Ellen Wells
Title: Assistant Director

Approved By:
Title:

THE UNIVERSITY OF MINNESOTA
HOSPITAL AND CLINIC
BOARD OF GOVERNORS

Planning & Dev. Committee Review:	12/6/90
Finance Committee Review:	12/19/90
Board of Governors Review:	12/19/90

MAJOR CAPITAL EXPENDITURE REPORT

EQUIPMENT: Expansion of Clinical Laboratory Computer - 2 Tandem VLX Processors, memory and installation

PURCHASE PRICE: $306,000

DESCRIPTION:

The Clinical Laboratory Information System (CLIS) supports information processing and management related to test ordering, laboratory processing, analysis, data acquisition, verification, quality control and result reporting for over twenty laboratories located throughout UMHC. Computer support is provided 24 hours a day, 365 days a year, for a workload in the range of 1 million results per month. Updated cumulative summary reports are printed daily for inclusion in the medical record. The CLIS is interfaced to the Hospital Computer System making laboratory results available to Patient Care Units within moments of test completion. Billing data is communicated daily.

The CLIS requires expansion in order to maintain adequate levels of service and laboratory productivity. The demands on the system are such that user response times are reaching unacceptable levels. Current response time is in the range of 10 seconds, even after careful system "tuning" done to minimize response times. Within the next few months two additional clinical labs will be brought up on the system. This will allow for productivity and service increases in those labs, but will add an additional load to the laboratory computer.

Load projections and system performance analysis indicate that an increment of computer capacity involving two additional processor modules is required to provide adequate support. The availability of reconditioned processors has been identified, at a cost (including installation) of $306,000. This project is part of the capital budget planned for 1990-91.

Submitted By: _____ Approved By: _____

Title: _____ Title: _____

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Road
Minneapolis, Minnesota 55455

December 13, 1990

TO: Members, Board of Governors

FROM: Fred Bertschinger

SUBJECT: Development Office Quarterly Report

Attached for your information are summary reports of activities and donations received during the first quarter of FY 1991 (July-September).

If you have any questions about this report, please call me at 626-6008.

Contributions Received
UMHC Development Office
FY 1991

	I 7-9/90	II 10-12/90	III 1-3/91	IV 4-6/91	Totals
Patients Fund	$1,916				$ 1,916
Transplant Ass. Fund	1,830				1,830
Variety Club Pldg	4,460				4,460
Other Funds	138,148				138,148
Totals to Funds	$146,148				$ 146,148

Goal = $1,050,000

Irrevocable Future Gifts	0	0
Revocable Future Gifts	2	

UNIVERSITY OF MINNESOTA
TWIN CITIES

Development Office
The University of Minnesota Hospital and Clinic
Box 612 UMHC
Harvard Street at East River Parkway
Minneapolis, Minnesota 55455

Activities and Events
UMHC Development Office
FY 1991

1990

August 9	Begin first of six luncheons and tours for solicitors for the CWA Local 7200/U.S. West Charity Project.
September 8	Donor recognition event hosted by Bob and Sue Dickler - tour and dinner at UMHC followed by Gopher football game.
September 13	Kick-off for CWA Local 7200/U.S. West United Way and UMHC Transplant Assistance Fund Campaign. Goals of $30,000 and new organ donors.
October 17	U of M President's Club Annual Dinner Meeting.
November 4	Gopher Exhibition Basketball Game to benefit Child/Family Life.
November 15	Philanthropy Day recognition for Dr. Neal Gault and Genevieve Stelberg.

VARIETY CLUB PLEDGE
PLEDGE REDUCTIONS AND DISBURSEMENTS

DATE	CONTRIBUTIONS	RUBEN-BENTSON	DISBURSEMENTS	BALANCE
As Of 09/30/89	1,913,591.06	200,000.00	1,600,000.00	313,591.06
10/31/89	15,556.00			329,147.06
11/30/89	44,441.66			373,588.72
12/31/89	22,865.72			396,454.44
01/31/90	61,025.82			457,480.26
02/28/90	29,963.95	200,000.00		487,444.21
03/31/90	19,200.00			506,644.21
04/30/90	228,555.97		726,725.00	8,475.18
05/31/90	61,424.30			69,899.48
6/30/90	1,070.00			70,969.48
7/31/90	160.00			71,129.48
8/31/90	2,959.53			74,089.06
9/30/90	1,540.50			75,629.56
SUBTOTAL	$2,400,814.06	$400,000.00	$2,326,725.00	$75,629.56

TOTAL CONTRIBUTIONS: $2,800,814.06
TOTAL DISBURSEMENTS: $2,726,725.00
CASH AVAILABLE FOR USE: $75,629.56
$8,000,000
BALANCE TO BE RECEIVED: 5,199,185.94

Contributions from the Variety Club of the Northwest	$1,078,225.00
Contributions to UMHC, credited against the pledge in accordance with the pledge agreement	$1,722,589.06
Total Contributions	2,800,814.06

VARIETY CLUB PLEDGE
DISBURSEMENTS BY PURPOSE
SEPTEMBER 1, 1990

	VARIETY CLUB RESEARCH CENTER	RUBEN-BENTSON CHAIR	OTHER VCCH	TOTALS
ALLOCATION OF $8,000,000 PLEDGE	$2,000,000.00	$1,000,000.00	$5,000,000.00	$8,000,000.00
TOTAL DISBURSEMENTS	($650,000.00)	($400,000.00)	($1,661,725.00)	($2,711,725.00)
* COMMITTED DISBURSEMENTS			($15,000.00)	($15,000.00)
BALANCE TO BE DISBURSED	$1,350,000.00	$600,000.00	$3,323,275.00	$5,273,275.00

* Total committed disbursements for fiscal year 1989/90 is $919,225.
Of the areas to be funded, $15,000 has not been disbursed.
This a Van (VCCH) for $15,000.

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Road
Minneapolis, Minnesota 55455

December 13, 1990

TO: Members, Board of Governors

FROM: Greg Hart

RE: Quarterly Purchasing Report

Attached please find the quarterly purchasing report for the period July - Septmber, 1990. The report will be reviewed at the December Committee meeting. Following the review we will be seeking endorsement of the report.

Please contact me if you have any questions regarding the quarterly report.

/gs

attachments

UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

ADMINISTRATIVE REPORT ON PURCHASING ACTIVITY

PERIOD OF JULY - SEPTEMBER 1990

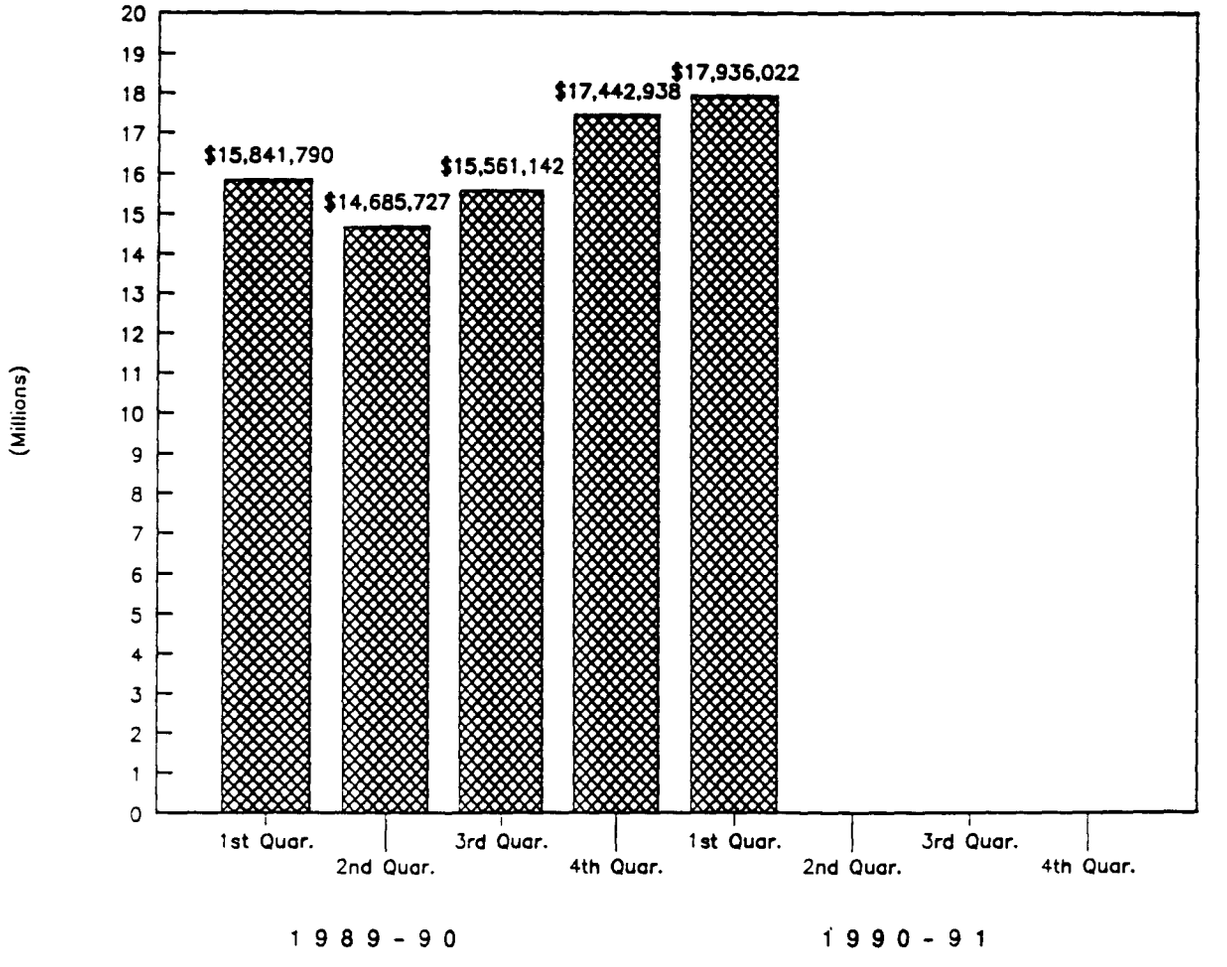
I. PURCHASE ORDER ACTIVITY

II. AWARDS TO OTHER THAN APPARENT LOW BIDDER

III. SOLE SOURCE ACTIVITY

IV. VENDOR APPEALS

PURCHASE ORDER ACTIVITY



FIRST QUARTER, FISCAL YEAR 1990-91, ACTIVITY:

	NUMBER	VALUE
PURCHASE ORDERS	8314	$16,481,273.93
OTHER PAYMENTS	478	$956,109.23
CONFIRMING ORDERS	374	$498,638.71
TOTAL THIS QUARTER*	9,166	$17,936,021.87

II. PURCHASE AWARDS TO OTHER THAN LOW BIDDER ($10,000 OR MORE)

	ITEM	UNSUCCESSFUL VENDOR/AMOUNT	SUCCESSFUL VENDOR/AMOUNT	DEPARTMENT
1.	CO_2 Laser	Surgilase $ 48,000.00	Surgical Lasers $ 64,500.00	O.R.
		The wattage is insufficient for our intended uses.		
2.	Oral Thermometer Kits	Medix $ 13,755.00	Owens & Minor $ 14,760.90	Materials
		Thermometers slide out of the container easily if not held upright when being opened.		
3.	Surgeons' Gowns	Lintex $ 48,915.00 CharmTex $ 34,293.75 Angelica $ 37,665.00	Fashion Seal $ 67,050.00	Materials
		The barrier fabric on the gowns developed pin holes after laundering and sterilizing a minimum number of times.		
4.	Elevator Controls	Lagerquist $ 15,800.00	Otis $ 18,160.00	Maintenance & Operations
		Vendor never provided detailed description of work to be done despite repeated requests.		

III. SOLE SOURCE–$5,000 and Over

	VENDOR	CONTRACT/ P.O. #	VALUE	DEPT.	PRODUCT
*	St. Mary's Medical Center	H108787	$175,000.00	Cardio.	Used Monitoring Equipment
	Triangle Maintenance	H099968	$16,800.00	CUHCC	Custodial Service
	Polymedco	H099919	$17,280.00	Labs	Estradol Kits
	American Red Cross	H099917	OPEN	Labs	Blood & Blood Products
	Amersham	H099992	$21,600.00	Labs	RIA Kits
	Scientific Assoc.	H108782	$8,631.00	Labs	Software
	Alternative Resources	H099908	$13,440.80	Labs	Temporary Employees
	Imre	90–558	$5,148.00	Labs	Prosorba Columns
	Baxter	90–559	$16,810.00	Labs	Haemonetic Cell Saver Paks
	Sachs Group	H108183	$5,000.00	Marketing	Software License Fee
	Medical Transcription Service	H099969	OPEN	Med. Rec.	Transcribing Services
	St. Paul Red Cross	90–504	OPEN	O.R.	Bone Graft Testing & Materials
	Gammex	H108197	$5,573.00	Radiology	Laser Positioner
*	Northern X-Ray	H108791	$94,400.00	Radiology	Computer Upgrade & Monitors
	TOTAL		$379,682.80		

* Over $50,000

IV. VENDOR APPEALS

1. VENDOR NAME/DOLLAR AMOUNT: Americable/$345,990
$334,279
$370,475

NATURE OF PURCHASE: Backbone Network
INTENDED VENDOR/DOLLAR AMOUNT: Not yet finalized.
REASON FOR APPEAL:

Vendor was originally eliminated from further consideration because it was not among the top three in the ratings system used by I.S.D. to rank each bid. The vendor disagreed with the ratings given in many areas, such as fault tolerance, costs, overall and demonstrable solution, delivery, training, and network security. I.S.D. re-evaluated their proposal but found only one area that they were willing to adjust the rating. This one adjustment was not sufficient to change their overall ranking and to be considered further. Vendor was notified of this and has not responded further.

STATUS: The top three proposals are still under evaluation. No award has been made.

THE UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC
BOARD OF GOVERNORS FINANCE COMMITTEE
October 24, 1990

MINUTES

ATTENDANCE:

Present:	Edward Ciriacy, M.D. Robert Dickler Clifford Fearing Nellie Johnson David Lentz Margaret Matalamaki Roger Paschke Vic Vikmanis
Not Present:	Jerry Meilahn Elwin Fraley, M.D.
Staff:	Greg Hart Teri Holberg Nels Larson Shannon Lorbiecki Helen Pitt
Guest:	Al Dees

CALL TO ORDER:

The Finance Committee was called to order by Ms. Margaret Matalamaki on October 24, 1990 at 12:30 P.M.

APPROVAL OF THE MINUTES:

The Board of Governors Finance Committee seconded and passed a motion to approve the minutes of the August 29, 1990 meeting as written.

JULY 1, 1990 THROUGH SEPTEMBER 30, 1990 FINANCIALS:

Mr. Fearing reported to the Finance Committee the month of September inpatient admissions totaled 1,431, which was 5 below budget; average length of stay was 8.3 days; patient days totaled 12,009, which were 740 days above budget. The September average daily census was 411, which was above the budgeted level of 389. Clinic visits for the month of September were reported to be 0.4% over budget.

The Hospital's year-to-date Statement of Operations showed revenues over expenses by $7,117,333 a favorable variance of $5,872,389. Mr. Fearing stated ancillary revenue was 4.2% above budget and operating expenditures through September were reported to be 1.5% below budget.

Lastly, Mr. Fearing reported as of September 30 the balance of accounts receivable totaled $92,348,210 and represented 91.0 days of revenue outstanding.

FIRST QUARTER, 1990-91 BAD DEBTS:

Mr. Fearing reported the bad debts for the first quarter totaled $508,950.28 represented by 1,651 accounts. Recoveries amount to $61,885.06, leaving a net charge-off of $447,065.22. This amount represents 0.50% of gross charges and compares to a budgeted level of 0.90%.

The Finance Committee seconded and passed a motion to endorse the First Quarter 1990-91 Bad Debt report as submitted.

BCBSM 1991 CONTRACT:

Mr. Fearing reported to the Committee for information the status of the discussion with Blue Cross Blue Shield on the 1991 BCBS Aware contract. The 1991 contract Blue Cross proposed had two changes in payment which differed significantly from previous contracts. Those changes were the development of a number of new categories based on the severity index scale and the way Blue Cross pays outliers. Mr. Fearing stated the new categories will benefit UMHC by increasing the Hospital's payments by 2-3%, but the proposed change in outlier payment would decrease the reimbursement level from 85% to 54%. Blue Cross proposes paying at the average payment rate that they make in all other categories, which would bring the Hospital's reimbursement level to 54% and result in an approximate $4,000,000 reduction in reimbursement.

Mr. Fearing will continue to keep the Committee informed on the contract negotiations.

MAJOR CAPITAL EXPENDITURES:

Frontal Plan Image Chain Upgrade

Mr. Dees presented to the Committee, for information, a proposal to purchase a frontal plan image chain upgrade for room 3 in the Heart Catheterization Lab at a cost of $110,000. The decision to upgrade the equipment in room 3 was made after having successful results to a similar upgrade earlier this year in room 2 of the Heart Catheterization Lab.

Image Processing Workstation for CT Section and MRI Section

Mr. Dees presented to the Committee, for information, a proposal to purchase two image processing workstations, one to process CT and another for MRI images, at a cost of $120,000 each. Mr. Dees stated at the present time the Hospital is losing an average of 2-3 cases a day to organizations that have this capability, and that the pay back on this equipment would be at the most fourteen months.

1990-91 ANNUAL CAPITAL BUDGET:

Mr. Greg Hart presented to the Committee, for endorsement, the 1990-91 Capital Budget of $7,000,000. Of the $7,000,000, $5,669,600 will be used for equipment and the remaining $1,330,400 will be used in remodeling.

The Finance Committee seconded and passed a motion to endorse the 1990-91 Capital Budget of $7,000,000 as submitted.

CAPITAL PLAN REASSESSMENT:

Mr. Robert Dickler reported on the capital plan reassessment.

Two options currently being investigated for the $35,000,000 Renewal Project are adding two floors on Unit J, which includes a shell floor, and building a psychiatry hospital at the triangle site on River Road.

Adding one floor to Unit J has been reported to be approximately $16,000,000 with an additional $19,000,000 used for upgrading other programs that were to have new or remodeled facilities in the renewal project. Mr. Dickler reported in order to fund the shell space to Unit J, which is projected to cost $5,600,000, all clinic programs would need to reduce their projects to some degree in order to stay within the $35,000,000 project cost.

The second option consists of building a new facility on the triangle site to house a new inpatient/outpatient day hospital for psychiatry, plus an underground tunnel to connect with the Hospital, at a cost of approximately $17,000,000. The remaining $18,000,000 would be used for upgrading other programs in the renewal project.

Mr. Dickler stated a more definitive recommendation will be presented to the Board later this year.

CARDIAC CATHETERIZATION LAB EXPANSION:

Mr. Greg Hart presented to the Committee, for endorsement, a proposal to add one additional angiographic room to the Cardiac Catheterization Lab. Mr. Hart reviewed the proposal, which had been presented to the Committee for information at the August 29, 1990 meeting. The total estimated cost of the project is $2,990,000. A final project cost will be reported the Committee when remodeling plans are finalized and bids are received.

The Finance Committee passed a motion to endorse the proposal for expansion of the Cardiac Catheterization Laboratory at a cost of approximately $2,990,000.

UNION ORGANIZING ACTIVITY:

Mr. Hart reported to the Committee the University supervisory unit union election results were 620 against and 520 in favor of a union. The University clerical unit has submitted petitions to the Bureau of Mediation Services to call for union elections, but a date has not been scheduled for the election. Mr. Hart will continue to keep the Committee informed of the union organizing activity.

There being no further discussion, the October 24, 1990 meeting was adjourned at 2:00 P.M.

Respectfully submitted,

Teri Holberg

Teri Holberg
Recording Secretary

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Parkway
Minneapolis, Minnesota 55455

December 19, 1990

TO: Board of Governors

FROM: Clifford P. Fearing

SUBJECT: Report of Operations for the Period
July 1, 1990 through November 30, 1990

The Hospital's operations for the month of November reflect patient days, and clinic visits activity above budget. Both ancillary revenue and routine revenue are above budgeted levels for the month.

INPATIENT CENSUS: For the month of November, inpatient admissions totaled 1,527 which was 106 above budgeted admissions of 1,421. Our overall average length of stay for the month was 8.0 days. Patient days for November totaled 11,975 and were 665 days above budget. The most significant areas in which admissions were above budget were in Medicine, Ophthalmology, and Orthopedics.

To recap our year-to-date inpatient census:

	1989-90 Actual	1990-91 Budget	1990-91 Actual	Variance	% Var
Admissions	7,900	7,431	7,853	422	5.7
Patient Days	63,815	59,112	62,119	3,007	5.1
Avg Length of Stay	8.1	8.0	8.0	0.0	0.0
Avg Daily Census	417.1	386.3	406.0	19.7	5.1
Percent Occupancy	71.8	66.9	70.6	3.7	5.5

OUTPATIENT CENSUS: Clinic visits for the month of November totaled 22,426 which was 1,250, or 5.9%, more than budgeted visits of 21,176. Almost all areas had actual visits exceeding budgeted visits. Visits were significantly above budget in Adult Psych, Endoscopy, Medicine, Neurology, and Dental. Community University Health Care Center (CUHCC) visits for the month of November totaled 3,936 which was 296, or 7.0%, below budgeted visits of 4,232, while Home Health visits of 771 for the month were 152, or 16.5%, below budgeted visits of 923.

To recap our year-to-date outpatient census:

	1989-90 Actual	1990-91 Budget	1990-91 Actual	Variance	% Var
Clinic Visits	114,670	110,621	117,889	7,268	6.6
CUHCC Visits	22,070	22,430	20,936	(1,494)	(6.7)
HHA Visits	4,634	4,705	4,022	(683)	(14.5)

FINANCIAL OPERATIONS: The Hospital's Statement of Operations shows revenues over expenses by $8,024,178, a favorable variance of $6,230,480. Patient care charges through November totaled $150,352,275, which was 5.1% over budget. Routine revenue was 3.8% above budget and reflects our favorable inpatient census variance.

Ancillary revenue was $5,766,098 above budget (5.7%) and primarily reflected the favorable variance in both inpatient and outpatient census. Inpatient ancillary revenue averaged $9,762 per admission compared to the budgeted average of $9,810 per admission. Outpatient revenue per clinic visit averaged $262 compared to the budgeted average of $262.

Operating expenditures through November totaled $121,759,384 and were $1,059,904 (0.9%) above budgeted levels of $120,699,480. The overall unfavorable variance is primarily due to recognizing the estimated cost of purchasing tail coverage liability insurance for asserted claims and incidents not reported, and the increased demand for patient services, which is reflected in higher personnel costs and patient care supplies (blood and medical supplies and services).

ACCOUNTS RECEIVABLE: The balance in patient accounts receivable as of November 30, 1990, totaled $98,127,734 and represented 96.4 days of revenue outstanding. The overall increase in our patient receivables in November of 1.6 days occurred primarily in Medicare, Commercial Insurance, Blue Cross/Out of State, and Blue Cross Aware.

CONCLUSION: The Hospital's overall operating position is positive and above budgeted levels for November. While we have seen improvement in our expenditure levels, we are continuing to closely monitor our demand for services and make those operating changes that are necessary and appropriate to bring our expense levels into line with net revenues.

UNIVERSITY OF MINNESOTA HOSPITAL & CLINIC

EXECUTIVE SUMMARY OF FINANCIAL ACTIVITY

FOR THE PERIOD JULY 1, 1990 TO NOVEMBER 30, 1990

	1990-91 Budgeted	1990-91 Actual	Variance Over/-Under Budget	Variance %
Patient Care Charges	$143,018,168	$150,352,275	$7,334,107	5.1%
Deductions from Charges	35,647,531	36,792,071	1,144,540	3.2%
Other Operating Revenue	4,254,992	4,744,925	489,933	11.5%
Total Operating Revenue	111,625,629	118,305,129	6,679,500	6.0%
Total Expenditures	120,699,480	121,759,384	1,059,904	0.9%
Net Operating Revenue	(9,073,851)	(3,454,255)	5,619,596	61.9%
Non-Operating Revenue and Expenses	10,867,549	11,478,433	610,884	5.6%
Revenue Over/Under Expense	$1,793,698	$8,024,178	$6,230,480	

	1990-91 Budgeted	1990-91 Actual	Variance Over/-Under Budget	Variance %
Admissions	7,431	7,853	422	5.7%
Patient Days	59,112	62,119	3,007	5.1%
Average Daily Census	386.3	406.0	19.7	5.1%
Average Length of Stay	8.0	8.0	0.0	0.0%
Percentage Occupancy	66.9	70.6	3.7	5.5%
Outpatient Clinic Visits	110,621	117,889	7,268	6.6%

MINNESOTA
HOSPITAL
ASSOCIATION

"THE RESOURCE-BASED RELATIVE VALUE SCALE"

AN MHA BRIEFING PAPER FOR HOSPITAL GOVERNING BOARDS

NOVEMBER 1990

By: Phillip Stoner, FACHE, Administrator, Falls Memorial Hospital, International Falls, MN

Introduction

A great deal of discontent has surfaced in recent years within Congress and other health care payors in general about the way in which this country pays for its physician services. In 1987 Congress contracted with William C. Hsiao, Ph.D., Economist at the Harvard University School of Public Health, to develop a different method for reimbursing physicians. This method is of interest to hospital boards because similar congressional discontent situation during the first part of the last decade resulted in the Medicare Prospective Payment System being passed with what was, for that particular body, lightning speed. It went through Congress within 90 days as originally developed despite the fact that it was not developed for a reimbursement system at all but merely created by Yale-New Haven Hospital as a method of estimating actual costs for providing different types of services.

Present System

Presently, physicians are reimbursed or paid for their services under a concept called the usual, customary and reasonable method for paying. The UCR method has caused some concern among the insurors and others who pay for physician services as they perceive that the physicians have inflated their charges and they perceive that there is a rigidity to the fee structure such that fees never decrease, even when the costs for providing the service go down. An example of fee rigidity would be in cardiac surgery where over the last ten years the amount of time it takes a cardiac surgeon to perform a coronary artery bypass graft has been roughly halved because of improvements in the techniques with which they perform the procedure. However, during that time the cost of doing the procedure to the patient, or more often the payor, has generally gone up with the cost of inflation.

Additionally, physicians have seen some inequities develop in the system about which they are concerned. New services and procedures tend to be paid at a much higher rate than old services and procedures. For example, the initial office visit for a new patient has been around since the time of Hippocrates and on a comparative basis is reimbursed at a much lower rate than a new procedure such as gastroscopy, the basic fiberoptic technology for which has only been in existence for about

2221 UNIVERSITY AVENUE SE, SUITE 425 • MINNEAPOLIS, MINNESOTA 55414-3085 • PHONE (612) 331-5571 • FAX (612) 331-1001

twenty years. Additionally, cognitive medicine is not reimbursed as well as is procedure-based medicine. What is especially annoying to senior physicians is that their charges are kept at a fixed rate of increase. New physicians starting practice are often paid, at least initially, whatever charge they specify. The effect is that new physicians with no experience are often paid more for the same procedure than are senior physicians who have been performing the procedure successfully for a number of years.

Proposed System

The Resource Based Relative Value System attempts to measure those components which go into a physician's medical care, being: 1) service and procedure time; 2) pre-service and procedure and post-procedure time; 3) intensity of the procedure; 4) practice costs, including malpractice premiums; and 5) the net cost of specialty training. Those five components, which will be discussed more thoroughly a little bit later, are combined into a non-monetary value which can be assumed to represent the total relative value of that service or procedure.

To come up with a price list one would assign a dollar conversion factor to the Resource Based Relative Value Scale number which would convert it into a price. The advantage of this system is that the current UCR system encourages physicians to go into specialties which have a high proportion of well paid procedures. A personal example of this was given to me by a Dean at the New England College of Osteopathic Medicine who once told me that the medical students coming to that college would simply look in the instructors' parking lot and see that the family practioners were driving Chevrolets and the surgeons were driving Cadillacs. They would then ask themselves the simple question of "what kind of a car would I like to drive?" in choosing the specialty into which they would go. RVRBS tries to treat all physicians equally. Another advantage could be that by control of the conversion factor from resource relative value scale to actual price, the government or others could conceivably give physicians incentive to do such things as go into practice specialties which are relatively scarce or go into practice in areas which have a scarcity of physicians.

Historical Perspective

In 1965 Lyndon Johnson enacted Medicare which promised hospitals that they would be paid their reasonable costs for treating Medicare patients. That system lasted until 1982. The 17 year period was characterized by wildly escalating costs, and frantic attempts by government to limit those increases. It was also characterized by a large amount of manipulation of the system by various hospitals which at every step the government attempted to counter. Finally, the government realized that it had no effective way to control hospital costs and in 1982 they enacted the Prospective Payment System under which hospitals were generally paid the same amount of money for a given service regardless of their costs. Since that time the shoe has been on the other foot. Instead of hospitals manipulating the system to diminish their reimbursement. Understandably, the government is somewhat more comfortable with this system than they were with the old system. Also understandably, hospitals' contentment has not increased space.

It is important to understand the way that congress reacted to this situation. After a great deal of agonizing over a long period of years, the Diagnostically Related Group system came to their attention as one way in which they could gain more control over the situation. The system was originally developed for the purpose of analyzing how much of a hospital's resources were utilized on average in treating a certain type of patient. It was never designed as a reimbursement system but congress saw it as an opportunity to pay hospitals on an equal basis and also to put the hospitals at some risk. Longer stays would no longer be profitable. As I mentioned previously, the system was adopted (in congressional terms) almost over night.

Similarly, congress is now paying a great deal of attention to the method by which physicians are reimbursed. Representative Fortney Stack has enjoyed a good deal of media attention while pointing out certain instances of physicians whose procedure-based practices were earning them substantial amounts of money. I remember one example he quoted of an orthopedic surgeon who was earning $600,000 a year. In short, the time seems right for some sort of a change. Resource-based Relative Value Scale will probably be attractive to congress. First of all, it wasn't developed by a physician. Secondly, because it was developed using government funding and any governmental body finds it rather difficult to denigrate studies for which they paid. Thirdly, it offers a chance to have a system which can be explained and which can be controlled.

Components of the Proposed System

1. Service and Procedure Time. There are about 7,000 different services and procedures which physicians currently perform as listed in the Physician's Current Procedure Terminology, Edition 4, which was used in development of this payment method. The developers identify the few things which each type of physician spent the most time on -- for example, appendectomy time for a surgeon or seeing an established patient for a new problem in the case of the family practitioner -- and then extrapolated times for those things which were not performed often enough that they could identify actual times from the literature or from discussion and agreement among members of the profession. The actual time studies would be the most accurate method to do this. However, due to the large number of individual procedures involved this would have delayed the production of the finished report for years.

2. Pre-service and Procedure and Post-service and Procedure Times. These times are more difficult to establish since no quantitative data is available so the developers simply discussed the times with the practitioners and then made an effort to keep the amount of pre- and post-service time consistent between specialties. Work that would be done pre-service might consist of, for instance, reviewing the chart in the case of a family practitioner seeing an established patient for a new problem or conducting and dictating the history and physical in the case of surgeon preparing to do a hernia repair. Post-service time would include for the family practitioner, ordering tests that needed to be done as a result of the information gathered during the patient contact or, in the case of the surgeon, dictating the operating summary and seeing the patient periodically through their hospital stay until discharge and then dictating the discharge summary.

3. Intensity. Unlike the previous two components, there simply is no quantitative measure by which one can measure intensity so it was developed by discussion with physicians comprised of six sub-components -- 1) mental effort; 2) knowledge, judgment and diagnostic acumen; 3) technical skill; 4) physical effort; 5) psychological stress due to uncertainty; and 6) potential risk to the patient or risk to the physician. Because of the ambiguous nature of the phenomenon measured, all the developers could say with certainty was that the method demonstrated internal consistency.

4. Practice Costs, Including Malpractice Fees. Measuring this factor, the developers returned to costs which accountants measure with precision. The importance of measuring these costs is illustrated by the fact that some of them, specially malpractice premiums, can vary by greater than a factor of 10 to 1 depending on the specialty practiced, and the area in which it is practiced. Even such mundane costs as office rental can be twice as much in Chicago as they are in Muncie, Indiana not too far away.

5. Cost of Specialty Training. The developers attempted to account for this by recognizing that physicians who stay in residencies rather than becoming general practitioners after only one year internship are foregoing the difference between the salary they earn as a resident and the net income that they could earn in practicing medicine as a general practitioner. The theory behind this is that if you are going to have anybody stay in cardio-vascular surgery residency for seven years you ought to give him some way of recouping his lost earnings for the six years past the one year residency he could have taken.

The above five components are then put into an equation to come out with a value for each of the 7,000 things that physicians can do as expressed in CPT 4.

Significance

The full significance won't be known for many years, although physicians currently in practice may grind their teeth in frustration if they are of a specialty that would be reimbursed less well than they are currently. For example, for coronary artery bypass graft with three grafts Medicare currently pays $3652 and under the Resource-based Relative Value System as currently described, they would pay $1244. It is still unlikely that very many of them will change their specialty. In my own experience, I only know of three physicians who ever did. For physicians who have a family and responsibilities for child raising it is very difficult for them to leave that for a period of up to four years to acquire a new specialty. However, over the next few years, as the new doctors coming out of medical school look over this information, as well as the instructors' parking lot, some specialties, such as family practice, will see more physicians entering the field feeling that they might get reimbursed better than they are presently. Others, such as cardiac surgery, ophthalmology and radiology are likely to see fewer new physicians going into that specialty. From a hospital's viewpoint, it will take a larger volume of procedures to support a given body of physicians because the reimbursement per procedure will tend to be less and smaller hospitals will have difficulty recruiting some specialists for that reason. The appeal of the circuit rider type physician will probably increase as the result of this also. While this

system as presently envisioned applies only to Medicare patients, it will spread in the future to other payors as well. For example, New York adopted a DRG based system six years after Medicare did and New Jersey had adopted it previous to that.

Similarly, some of the other states will adopt this system universally. Logically it is attractive. If a new type of universal insurance, such as currently has been adopted in Canada, is adopted here then the system will be used very quickly for control of the government's provider costs.

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THE NATIONAL PRACTITIONER DATA BANK: A NEW TOOL FOR QUALITY ASSURANCE

AN AHA BRIEFING PAPER FOR HOSPITAL GOVERNING BOARDS

September 1990

The National Practitioner Data Bank (NPDB) began operation on September 1, 1990, and provides information on malpractice payments and adverse actions affecting physicians' and dentists' hospital privileges and state licensure.

Because trustees are responsible for the oversight of the quality of care in their institutions, it is essential that governing board members understand the operation of the National Practitioner Data Bank and their responsibility in assuring their institution's responsiveness to NPDB regulations. It is important that hospitals comply with the Data Bank regulations now, because this is required by law and failure to comply can result in loss of immunity and increased exposure to liability and fines as outlined in the regulations.

This trustee briefing paper describes the federal mandate by which the National Practitioner Data Bank was created, outlines the regulations that will guide the Data Bank's implementation, and suggests steps that health care institutions can take to ensure compliance with those regulations. The paper also offers suggestions on using the Data Bank as part of the quality assurance process.

AN OUTGROWTH OF QUALITY ASSURANCE LEGISLATION

The National Practitioner Data Bank was created by the Health Care Quality Improvement Act of 1986, which was the federal government's response to public demand for greater assurance for high quality health care and the medical malpractice crisis. The Act has a two-fold purpose:

- To impede incompetent physicians, dentists, and other health care practitioners from moving from state to state while previously damaging or incompetent performance goes unchallenged for want of information.

- To encourage physicians and dentists to participate in thorough professional peer review activities by offering them immunity from private damages in civil suits brought against them because of their participation in professional peer review of individual practitioners. While a practitioner who has received an adverse decision under peer review may still sue his or her colleagues, the Act provides for immunity if the peer review was conducted in the interest of assuring quality of

care, if every effort was made to obtain the facts, and if notice and hearing procedures were followed fairly. Furthermore, such civil suits are discouraged by the probability that courts will award attorneys' fees and court costs to defendants in the event that a suit is found to be frivolous, unreasonable, without foundation, or in bad faith.

In effect, this two-pronged approach is intended not only to encourage the sharing of information about practitioners' damaging or incompetent performance but also to protect those who take disciplinary action to protect patients from such practitioners.

REPORTING REQUIREMENTS

The National Practitioner Data Bank regulations require that the following kinds of information regarding physicians and dentists be reported to the data bank:

- Malpractice payments must be reported by any entity (such as an insurance company or a self-insured hospital) or individual (a self-insured physician or dentist) that makes a payment on behalf of any licensed health care practitioner as the result of a claim or judgment for medical malpractice. This information must be reported both to the Data Bank and to the appropriate state licensing agency. The waiver of an outstanding debt or an "in kind" payment by the practitioner against whom a claim has been made is not regarded as a "malpractice payment" and does not need to be reported.

  It is important to note that malpractice payment information is the only kind of information that must be reported about health care practitioners other than physicians and dentists. In cases involving other health care practitioners, adverse actions may be reported to the Data Bank, but immunity provisions regarding peer review do not apply. This means that there is a risk of liability for individuals who serve on peer review panels for practitioners other than physicians and dentists, and the hospital may choose not to report disciplinary or other adverse actions against these health care practitioners.

- Licensure actions taken against a physician or dentist, based on reasons of professional competence or conduct, must be reported to the Data Bank by the state licensing board.

- Professional society actions taken against a physician or dentist member of a professional society must be reported by that society if the actions resulted from a formal peer review relating to the member's professional competence or conduct.

- Adverse clinical privilege actions must be reported by hospitals and other health care entities, such as health maintenance organizations and certain medical and dental group practices that have formal peer review procedures. The actions are reportable only after all internal hearing and appeal mechanisms have been exhausted.

To be reportable, these adverse actions must reduce, restrict, revoke, or deny clinical privileges to physicians or dentists for a period of 30 days or more; they must be based on a formal peer review process; and they must have been given final approval by the hospital governing body or other appropriate body. The hospital or health care entity then has 15 days to report the action to the state licensing agency, which in turn has 15 days to report the action to the Data Bank.

In addition, if a physician or dentist is under investigation and agrees to the surrender or restriction of his or her clinical privileges before the peer review body makes a final recommendation to the board, this event must be reported as an adverse action. Similarly, a report must be made if the practitioner voluntarily agrees to the surrender or restriction of privileges in lieu of an investigation of his or her professional competence or conduct. Hospitals will want to pay particular attention to this requirement, because, in most states, this represents a change from past reporting practices.

Failure to report malpractice payments and adverse actions can subject a hospital to potentially severe penalties. If the reportable information pertains to malpractice payments that a self-insured hospital makes on behalf of a physician, dentist, or other health care practitioner, the penalty can be a civil money payment of up to $10,000 for each malpractice payment that was not reported. If the information that a hospital or other health care entity fails to report is its own adverse professional review action against the clinical privileges of a physician or dentist, the hospital can lose its immunity protection for formal peer review of physicians' or dentists' professional conduct or competence for as long as three years, and the hospital's name will be published in the Federal Register.

USAGE REQUIREMENTS

In addition to reporting to the Data Bank, hospitals and other health care entities are required to query the Data Bank when reviewing a physician's, dentist's, or other health care practitioner's application for medical staff appointment, re-appointment, or clinical privileges.

Hospitals are required to query the Data Bank regarding each member of the medical staff at least every two years, which is the usual cycle for reviewing and renewing clinical privileges and medical staff membership. A failure to query the Data Bank, according to NPDB regulations, implies that the hospital is already aware of the information in the Data Bank on the practitioner in question, an implication that is likely to put the hospital at risk in possible future malpractice litigation against that practitioner. Finally, if it is proven that a hospital has failed to query the Data Bank at the required time, a plaintiff's attorney is permitted to have access to the information in the Data Bank, given certain other limited circumstances.

ENSURING COMPLIANCE

To give its member hospitals every opportunity to prepare for the opening of the Data Bank, the American Hospital Association acquired advance copies of the National Practitioner Data Bank Guidebook prepared by the Division of Quality Assurance and Liability Management of the U. S. Department of Health and Human Services. These copies, along with sample reporting and querying forms, were sent to all AHA institutional members in June 1990, to give them and their medical staffs an early start on revising existing procedures and establishing new ones to comply with Data Bank regulations.

If they have not already done so, governing boards should now conduct a review of these procedures, not only to be certain that their institution is in compliance, but also to ensure that the new procedures are smooothly integrated into the medical staff credentialing process.

The governing board's review should take particular note of the following:

- Make certain the hospital has designated an authorized representative(s) to both report to and query the Data Bank as required. Because this individual will handle confidential information, it is essential that he or she be well versed in the events that trigger reporting requirements, be thoroughly trustworthy in handling sensitive materials, and be capable of working with medical staff committees responsible for credentialing. In the event that a hospital normally uses a credentials verification service to support the credentialing process, it can consider making the service its authorized agent for querying the Data Bank.

- Review the medical staff bylaws and the credentialing process to ensure compliance with NPDB requirements. Two factors are of special importance to ensuring smooth operations; the first is timing. Because the Data Bank will need from five to as many as 20 working days to respond to a query about a practitioner, an additional time factor will need to be built into the credentialing and recredentialing process. The second issue is fairness. Because immunity is offered only when an adverse judgment is generated by a peer review process that is fair and reasonable, the governing board should again review the notice and hearing procedures provided by the medical staff bylaws with this issue in mind.

- Because Data Bank regulations give practitioners several avenues to dispute the correctness of reports about professional conduct and performance, governing boards should ensure that a mechanism for resolving disputes has been established in their institutions. Practitioners are required to discuss inaccuracies with the reporting entity, prior to petitioning the Secretary of Health and Human Services to intervene. However, governing boards can reduce the likelihood of challenges to the reports issued by the hospital or medical staff by ensuring that the language in these reports is carefully drafted and discussed with the practitioner in question before reports are submitted to the Data Bank.

- Review hospital bylaws and board policies and procedures regarding credentialing procedures to ensure support of the process and appropriate monitoring and compliance with the regulations.

- If a hospital is commercially insured, the governing board should make certain that the insurance carrier understands the NPDB process and the events that trigger the reporting requirement. If the hospital is self-insured, a person who has experience with the claims process must be authorized to handle reporting of claims payments. The same care must be taken in the choice of this individual as is used in authorizing an individual to report to and query the Data Bank about adverse credentialing actions.

- Whether information is being reported to or received from the Data Bank, its confidentiality must be carefully protected. Therefore, the governing board should check that procedures have been established to safeguard the information in all its forms (e.g., hospital copy of the adverse action report, verification document, and querying report) and make certain that these procedures are in effect whether the information is being stored or retrieved.

OTHER RECOMMENDED BOARD ACTIVITIES

In light of the governing board's broad responsibility for quality assurance, it will also wish to consider the following courses of action as it oversees the institution's implementation and compliance with the NPDB regulations:

- Discuss with medical staff leadership the opportunity to use the opening of the Data Bank to strengthen the peer review and quality assurance processes that are already in place. Encourage them to regard the Data Bank and the federal assurance of immunity as valuable supports for their commitment to professional peer review.

- Participate in appropriate state level activities with the state hospital association and the state licensing agencies that will ensure accurate and timely response to NPDB regulations.

- Continue to follow and support ongoing AHA activity as it works with Data Bank staff and federal officials to refine some of the procedures that are either problematic or still undefined.

CONCLUSION

Through the whole process, governing boards are encouraged to take a leadership role, viewing the National Practitioner Data Bank as a potentially valuable tool. Data Bank regulations do not ask that health care institutions make adverse decisions about a practitioner in light of negative information in that individual's file. These regulations do, however, mandate sharing and accessing information about physicians' and dentists' professional competence.

The Data Bank offers an opportunity to make a good decision with all relevant information in hand, with the medical staff and governing board making every effort to analyze the information, and with the practitioner being given every fair and reasonable chance to respond to legitimate concerns.

The implementation of the Data Bank should not create a hardship for hospitals or physicians, although, in some instances, there may be a duplication of effort because of existing state reporting requirements. In any case, penalties will be imposed on those who hesitate to make difficult but necessary peer review and quality assurance decisions. Governing boards can take comfort from the added safeguards that will be established uniformly throughout the country by the introduction of the National Practitioner Data Bank.

RESOURCES

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UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Parkway
Minneapolis, Minnesota 55455

December 18, 1990

TO: Members, Board of Governors

FROM: Robert M. Dickler RD
General Director

SUBJECT: Renewal Project

Enclosed is a memorandum on the Renewal Project for consideration, and possible action, at the December 19, 1990 Board meeting. I apologize for the late submittal of this information. If you have any questions prior to the Board meeting, please feel free to contact me.

RMD/kj

enclosure

UNIVERSITY OF MINNESOTA
TWIN CITIES

The University of Minnesota Hospital and Clinic
Harvard Street at East River Parkway
Minneapolis, Minnesota 55455

December 18, 1990

TO: Members, Board of Governors

FROM: Robert Dickler
General Director

SUBJECT: Renewal Project Recommendations

As you are aware, we have been working for the past several months to reevaluate the scope and facility plans for the Renewal Project. We are presenting recommendations for Board approval this month.

By way of brief background, a decision was made approximately six months ago to put the Renewal Project "on hold." This action was generated by a broader need to reevaluate our overall capital plan. The capital plan reevaluation occurred over the summer, and resulted in recommendations for revision to both long-range capital and operational plans. In sum, those revisions included: (a) targeted improved operational profitability of $4-5 million per year through the end of the decade, (b) a reduction in annual capital budget and major capital equipment expenditures of $20 million over the next eight years, and (c) a reduction in expenditures for the Renewal Project of $30 million. The Renewal Project budget was previously $65 million.

Obviously, a reduction of this magnitude has a significant impact on the scope of the project. Much of the past several month's project activity has centered around the priorities for the project and the commitments that can be made to individual programs in the context of a reduced budget. Many difficult decisions and compromises have been necessary. We now are at the point where we can present what we believe is an appropriate balance among many competing needs and interests. The plan is summarized in the attached Renewal Project Budget and Preliminary Schedule.

There have been several key programs or issues that have driven the recommended project configuration. These are noted in the following paragraphs.

Inpatient Psychiatry

We are recommending that the inpatient Psychiatry program be housed in Unit J, on one of two floors to be added to Unit J as part of this proposal. Inpatient Psychiatry is the largest component of the recommended project, with a cost of $16.4 million. The two floor addition to Unit J costs $22 million, of which $5.6 million is for the shell floor.

The inpatient Psychiatry floor is planned with 58 beds, supporting three major programs or units (an acute unit, a child/adolescent unit, and an affective disorders unit). There has been considerable discussion with regard to the appropriate number of beds for Psychiatry. We are approaching this issue with two strategies for flexibility at this point. First, should Psychiatry's future need for inpatient beds decrease, one of the three units can be converted to a general medical-surgical unit, at a cost of approximately $700,000. Second, given that Psychiatry's census has recently decreased as a positive result of a reduced average length of stay, we are working with Psychiatry to develop two alternate plans for the inpatient Psychiatry units. One plan would utilize the full floor for three inpatient units (58 beds) and one would reduce the finished space by one unit. Were this latter option to be implemented, based upon our assessment of demand 9-12 months from now, it would reduce the cost of the project by $900,000 - $1,200,000. It would be our recommendation if the reduced plan were implemented to preserve the remaining shell space on the Psychiatry floor, for a reasonable period of time, to determine if new facilities and other changes justify completion at a later date for Psychiatry inpatient facilities.

This proposed Project budget also includes $100,000 for short-term improvements to the current inpatient Psychiatry units.

Psychiatry Office/Day Hospital/Clinic

The scope of the commitment made to Psychiatry day hospital renovation in the Mayo building has been decreased by 50%, from four units to two. Space will be reserved for the additional two units should future demand and financial performance justify expansion and further renovation.

The location of the non-inpatient psychiatry program elements remains an open question, requiring further architectural work in consultation with the department. The final answer to this question will be determined within the project's budget constraints.

Rehabilitation

The inpatient Rehabilitation unit will be remodeled in place, at a cost of $500,000, rather than moving the unit to new facilities as previously planned.

The adult rehab therapy units will be moved from Mayo 7 to Mayo 4, at a cost of $1.96 million, to facilitate patient access, reduce travel time, and improve the quality of the environment for patients visiting physical therapy and occupational therapy. A pediatric rehab therapy satellite will be built from existing space in Unit J to improve access for pediatric patients. The main pediatric therapy unit will remain in the Rehabilitation Center.

Obstetrics

The plan for OB remains as previously approved by the Board, with interim remodeling in Mayo and a subsequent move to Unit J. A relocation to Unit J is dependent on agreed upon volume and other objectives being met over the next several years. The included budget for a Unit J relocation ($750,000) is the minimum which may be necessary for such a move. Additional funds for greater remodeling could be dependent on volume and program requirements justifying allocations from other capital budgets.

Urology/Cystoscopy/Ambulatory Surgery/Operating Rooms

This is perhaps the most complicated set of recommendations, and is, in part, a new strategy for the Renewal Project.

This proposal would (a) move Urology Clinic and Cystoscopy to the current Ambulatory Surgery Center and adjacent Colon/Rectal Clinic space in Phillips-Wangensteen, (b) move the Ambulatory Surgery activity to the Main OR in Unit J, with two newly constructed operating rooms, and (c) create future expansion space for two more (totaling four) operating rooms. In addition, funds for temporary upgrade of the current Urology Clinic/Cysto suite are provided, and Urology department offices are remodeled in the Mayo Building.

The expansion of the operating rooms represents a new approach to the Renewal Project; one which, in some ways, adds to the scope of the project. The move of Ambulatory Surgery and the addition of the operating room capacity in the Main OR has significant operational benefit, in terms of FTE savings and creation of needed, larger operating suites to accommodate increasing technology in surgery. We believe these benefits justify an increment to the project target budget. We are therefore recommending a plan with a $37.6 million budget, which is still, of course, significantly below the cost of the original $65 million project.

Shell Space

As noted earlier, the recommended project includes one floor of shell space in Unit J. Creating shell space has been a high priority in all historical Renewal Project planning. There is strong consensus that any vertical addition to Unit J should include two floors to fill out the structure's capacity and avoid duplicating the operational problems and costs of building expansion. The cost of the shell floor is $5.6 million.

Other Programs

Minimal funds remain in the recommended project budget for code upgrades and remodeling of 30-40 departments which previously were to receive funding as part of the Renewal Project. The remaining funds will be directed primarily to building system and code upgrades and remodeling in departments with significant life-safety problems.

Financing

The Renewal Project will be financed from Hospital reserves and/or cashflow. With a budget of $37.6 million rather than the targeted $35 million, additional reductions to the other components of the capital plan will be needed, and/or improved profitability beyond that already targeted will need to be achieved. We believe these to be achievable, and that the $37.6 million Renewal Project budget is necessary to achieve the basic goals for the project.

Summary

This plan directs resources primarily to the four clinical programs which have consistently been identified as priorities in past Renewal Project planning: Psychiatry, Rehab, OB, and Urology. It provides reasonable, though perhaps not ideal, long-term solutions for these programs along with short-term facility upgrades for Psychiatry, Urology/Cystoscopy and Obstetrics. This plan also accomplishes the consistently expressed goal of creating shell space. This proposal exceeds the $35 million target by $2.6 million, largely, however, as a result of a program addition in the Operating Rooms. These recommendations, in total, represent the best balance among many priorities, with a very significant decrease in total cost for the Renewal Project.

In making this recommendation to the Board we recognize that these proposals have not provided the scope and breadth of facility improvements anticipated by the four primary clinical departments involved in the project. Furthermore, a large number of departments and programs in the original budget have been deleted totally from this proposal. While we hope that some of these needs can be met from future improvements in the Hospital's financial performance, no such assurances can be made at this time.

We would, in summary, recommend Board of Governors approval to proceed with the Renewal Project as outlined in the attached schedule, with a budget authorization of $37.6 million. With the Board of Governors approval, we will make a report to the Board of Regents on the status of the Renewal Project.

Thank you for your continuing support and leadership through what has been a difficult process of reassessment of this project.

RD/kj

attachment

RENEWAL PROJECT BUDGET & PRELIMINARY SCHEDULE

12/18/90

PROJECT ELEMENT	LOCATION	ESTIMATE	DESIGN SCHEDULE		CONST SCHEDULE	
			START	COMPLETE	START	COMPLETE
SHELL SPACE	UNIT J 9	$5.62	1/91	5/92	12/91	9/93
PSYCH INPATIENT	UNIT J 10	$16.40	1	5/92	12/91	9/93
PSYCH CLINIC	MAYO 4/6	$0.50	2	8/93	9/93	6/94
PSYCH DAY HOSP	MAYO 3/6	$0.57	2/93	8/93	9/93	6/94
PSYCH OFFICES	MAYO 3/6	OFFICES	TO	BE	DEFINED	
PSYCH TEMP FIX	MAYO 6	$0.10	1/91	3/91	3/91	5/91
REHAB INPATIENT	REHAB 4	$0.50	1/91	6/91	7/91	11/91
REHAB ADLT THER	MAYO 4	$1.96	1/91	11/91	12/91	4/93
REHAB PEDS THER	REHAB 6	$0.00	-	-	-	-
REHAB THER SAT	UNIT J	$0.24	1/91	2/91	2/91	3/91
OB INPT (TEMP)	MAYO 5/6	$0.37	8/90	12/90	2/91	5/91
OB INPT (FINAL)	UNIT J 5D	$0.75	6/91	12/91	1/92	7/92
AM SURG / OR EXP	UNIT J 3	$1.97	1/91	7/91	6/91	7/92
AM SURG SUPPORT	UNIT J/MAS	$0.25	1/91	5/91	6/91	2/92
UROLOGY CLINIC	PWB 1	$0.10	3/92	7/92	8/92	1/93
UROLOGY CYSTO	PWB 1	$0.45	3/92	7/92	8/92	1/93
UROLOGY TEMP FIX	MAYO 5	$0.10	1/91	2/91	2/91	3/91
UROLOGY OFFICE	MAYO 5	OFFICES	TO	BE	DEFINED	
MAYO CODE/ASBES	MAYO	$2.00	1/91	11/91	12/91	4/94
MAYO SYS UPGRADE	MAYO	$2.00	1/91	11/91	12/91	4/94
MAYO MISC RENO	MAYO	$1.1	TO	BE	DEFINED	
RELOCATION COST	VARIOUS	$1.10	TO	BE	DEFINED	
FACULTY OFFICES	VARIOUS	$1.50	TO	BE	DEFINED	
TOTAL		$37.62				

UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

SUMMARY OF ADJUSTMENTS TO THE 1989-90 PRELIMINARY STATEMENT OF OPERATIONS

The preliminary 1989-90 Statement of Operations presented in July indicated that the net revenue over expense for the fiscal year was $6,210,945. At the time preliminary statements were issued in July, the University had not completed it's year-end closing process. During the subsequent closing process, several adjustments were made which have changed the net revenue over expense to $6,572,494. The following is a summary of those adjustments.

Preliminary Revenue Over Expense	$6,210,945
Subsequent Entries Resulting From University of Minnesota Final 6/30/90 Closing:	
Increase in Revenue from Operations	7,529
Increase in Investment Income	478,451
Increase in Accounts Payable	(623,421)
Increase in Accounts Receivable - Reference Lab. Income	498,990
Independent Auditor Adjustments	-0-
Final Net Revenue Over Expense	$6,572,494

Coopers
&Lybrand

certified public accountants

REPORT OF INDEPENDENT ACCOUNTANTS

The Board of Regents
University of Minnesota:

We have audited the accompanying balance sheet of the University of Minnesota Hospital and Clinic (the Hospital) as of June 30, 1990 and the related statements of revenue and expenses of general funds, changes in fund balances and cash flows of general funds for the year then ended. These financial statements are the responsibility of the Hospital's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of the University of Minnesota Hospital and Clinic as of and for the year ended June 30, 1989, before restatement, were audited by other auditors, whose report, dated October 20, 1989, expressed an unqualified opinion on those statements.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the 1990 financial statements referred to above present fairly, in all material respects, the financial position of the University of Minnesota Hospital and Clinic at June 30, 1990 and the results of its operations and its cash flows of general funds for the year then ended in conformity with generally accepted accounting principles.

We also reviewed the adjustment described in Note 2 that was applied to restate the 1989 financial statements. In our opinion, such adjustments are appropriate and have been properly applied to the 1989 financial statements.

Coopers & Lybrand

Minneapolis, Minnesota
October 26, 1990

UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

BALANCE SHEETS

June 30, 1990 and 1989

ASSETS	1990	198 (Resta
General Funds		
Current assets:		
Cash and cash equivalents	$ 23,649,189	$ 14,3
Cash and investments held by bond trustee	666,761	3
Receivables:		
Patient services, net of allowances and uncollectible accounts of $26,912,000 in 1990 and $25,094,000 in 1989	69,450,219	72,5
State appropriations receivable	1,281,378	1,2
Other receivables	818,140	1,8
Due from third-party payors		1,2
Inventories	4,573,855	4,9
Prepaid expenses and other	635,332	6
Total current assets	101,074,874	9
Assets whose use is limited:		
Board-designated cash and investments	119,643,426	99,3
Cash and investments held by bond trustee	19,639,544	18,8
	139,282,970	118,2
Property and equipment, net	167,412,330	175,9
Other assets:		
Deferred third-party reimbursement, less current portion	6,624,547	7,0
Deferred financing costs, net	1,092,412	1,1
Other	350,016	6
Total other assets	8,066,975	8,9
	$415,837,149	$400,2
Restricted Funds		
Investments	6,873,680	5,4
	$ 6,873,680	$ 5

The accompanying notes are an integral part of the financial statements.

LIABILITIES AND FUND BALANCE	1990	1989 (Restated)
General Funds		
Current liabilities:		
Current maturities of long-term debt and capital lease obligations	$ 4,320,342	$ 5,224,624
Accounts payable	22,200,160	18,489,779
Due to University	2,403,012	1,178,072
Due to third-party payors	11,050,775	4,948,885
Accrued liabilities:		
Salaries, wages and employee benefits	17,772,025	17,398,090
Interest	4,971,131	5,085,184
Other	121,278	215,075
Total current liabilities	62,838,723	52,539,709
Long-term debt and capital lease obligations, less current maturities	168,167,333	169,579,548
Fund balance	184,831,093	178,123,411
	$415,837,149	$400,242,668
Restricted Funds		
Fund balances:		
Endowment funds	2,431,714	2,161,348
Specific purpose funds	4,441,966	3,289,413
	$ 6,873,680	$ 5,450,761

UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

STATEMENTS OF REVENUE AND EXPENSES OF GENERAL FUNDS

for the years ended June 30, 1990 and 1989

	1990	1989
Net patient service revenue	$242,942,760	$239,641,252
State appropriations	15,490,602	14,876,957
Other operating revenue	11,292,905	8,279,725
Total operating revenue	269,726,267	262,797,934
Operating expenses:		
Salaries and benefits	151,026,322	144,663,632
Supplies and services	58,019,881	56,557,841
Utilities and communications	6,103,409	5,786,226
Allocation of University general and administrative services	282,374	268,927
Physician and professional fees	12,458,572	12,356,156
Rentals	3,558,885	3,988,366
Depreciation and amortization	17,823,106	17,7[illegible]
Interest	12,527,264	12,[illegible]
Other	12,117,320	14,891,799
Total operating expenses	273,917,133	269,013,277
Loss from operations	(4,190,866)	(6,215,343)
Nonoperating gains:		
Investment income	10,763,360	8,703,583
	10,763,360	8,703,583
Revenues and gains in excess of expenses	$ 6,572,494	$ 2,488,240

The accompanying notes are an integral part of the financial statements.

UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

STATEMENTS OF CHANGES IN FUND BALANCES

for the years ended June 30, 1990 and 1989

	1990		
		Donor Restricted	
	General	Specific	Endo
Balance at beginning of year	$178,123,411	$3,289,413	$2,1
Additions:			
Revenues and gains in excess of expenses	6,572,494		
Unreimbursed University general and administrative services	190,707		
Adjustments to Hospital-shared facilities	(318,065)		
Transfer to finance property and equipment additions	312,546	(312,546)	
Gifts, grants and bequests		1,787,199	
Investment income		286,561	2
Deductions:			
Transfer to other general fund revenue		(608,661)	
Fund balance transfer to University	(50,000)		
Balance at end of year	$184,831,093	$4,441,966	$2,4

The accompanying notes are an integral part of the financial statements.

1989		
	Donor Restricted Funds	
General (As Restated)	Specific	Endowment
$173,965,317	$ 3,977,762	$1,977,422
2,488,240		
168,927		
16,049		
1,164,272	(1,164,272)	
320,606	952,470	
	326,405	188,071
	(802,952)	(4,145)
$178,123,411	$ 3,289,413	$2,161,348

UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

STATEMENTS OF CASH FLOWS OF GENERAL FUNDS

for the years ended June 30, 1990 and 1989

	1990	1989
Cash flows from operating activities and non-operating gains:		
Revenue and gains in excess of expenses	$ 6,572,494	$ 2,488,240
Adjustments to reconcile revenue and gains in excess of expenses to net cash provided by operating activities and nonoperating gains:		
Depreciation and amortization	17,823,106	17,730,892
Unreimbursed University general and administrative services	190,707	168,927
Decrease (increase) in receivables	4,098,249	(4,057,941)
Increase in accounts payable	4,935,321	1,199,428
Increase (decrease) in net amounts due to third-party payors	7,312,485	(5,939,453)
Increase in accrued liabilities	166,085	3,011
Decrease (increase)in inventories	354,411	(178,567)
Decrease in prepaid expenses and other assets	21,803	319,985
Decrease in deferred third-party reimbursement	446,611	666,636
Total adjustments	35,348,778	9,912,918
Net cash provided by operating activities and gains	41,921,272	12,401,158
Cash flows from investing activities:		
Purchase of property and equipment	(6,694,017)	(9,985,739)
(Increase) decrease in assets whose use is limited	(21,366,903)	2,062,755
Other	325,782	(89,904)
Net cash used by investing activities	(27,735,138)	(8,012,888)
Cash flows from financing activities:		
Transfer to University	(50,000)	
Payments on long-term debt	(5,086,090)	(6,325,682)
Payments on capital lease obligations	(49,814)	
Transfer of donor restricted funds to finance property additions	300,000	
Net cash used by financing activities	(4,885,904)	(6,325,682)
Net increase (decrease) in cash and cash equivalents	9,300,230	(1,937,412)
Cash and cash equivalents at beginning of year	14,348,959	16,286,371
Cash and cash equivalents at end of year	$ 23,649,189	$ 14,348,959
Interest paid	$ 12,428,248	$ 12,430,171

Supplemental schedule of noncash investing and financing activities:
Capital lease obligations of $2,819,407 were incurred in 1990 in connection with leasing of equipment.

The accompanying notes are an integral part of the financial statements.

UNIVERSITY OF MINNESOTA HOSPITAL AND CLINIC

NOTES TO FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies:

ORGANIZATION:

The University of Minnesota Hospital and Clinic (the Hospital) is an accounting entity within the University of Minnesota (the University). The Board of Regents of the University has granted the Hospital Board of Governors the authority over matters involving patient care and medical staff affairs. The Hospital Board of Governors also has authority and provides policy review and recommendations in other areas of Hospital operations. The Board of Regents appoints members of the Hospital Board of Governors and retains authority for the Hospital's annual operating and capital budgets, appointment of the Hospital's General Director and approval of the Hospital's overall goals and objectives. The Hospital as a unit of the University is exempt from federal income taxes as an instrumentality of the State of Minnesota under Section 501(c)(3) of the Internal Revenue Code.

NET PATIENT SERVICE REVENUE:

Net patient service revenue is reported at the estimated net realizable amounts from patients, third-party payors and others for services rendered, including retroactive adjustments under reimbursement agreements with third-party payors. Final settlements of estimated amounts are recorded in the period that they are determined.

STATEMENT OF REVENUE AND EXPENSES OF GENERAL FUNDS:

For purposes of display, transactions deemed by management to be ongoing, major or central to the provision of health care services are reported as revenues and expenses. Other transactions are reported as nonoperating gains.

DEFERRED FINANCING COSTS:

Debt issuance costs and bond discounts are deferred and amortized using the effective-interest method over the term of the related bond issue.

DONOR-RESTRICTED FUNDS:

Donor-restricted funds are used to differentiate resources, the use of which is restricted by donors or grantors from resources of general funds on which donors or grantors place

Continued

1. Summary of Significant Accounting Policies, continued:

DONOR-RESTRICTED FUNDS, continued:

no restriction or that arise as a result of the operation of the Hospital for its stated purposes. Restricted gifts and other restricted resources are recorded as additions to the appropriate restricted fund.

Resources restricted by donors for property and equipment replacement and expansion are added to the general fund balance to the extent expended within the period.

Resources restricted by donors or grantors for specific operating purposes are reported in other revenue to the extent used within the period.

ASSETS WHOSE USE IS LIMITED:

Assets whose use is limited include assets set aside by the Hospital's Board of Governors (Board) for future capital improvements, over which the Board retains control and may at its discretion subsequently use for other purposes, and assets held by trustees under bond indenture agreements.

INVENTORIES:

Inventories are stated at the lower of cost or market, with cost determined substantially on the first-in, first-out basis.

PROPERTY AND EQUIPMENT:

Property and equipment acquisitions are recorded at cost or, if donated, at fair value at the date of receipt. Upon sale or retirement of property and equipment, the cost and related accumulated depreciation are eliminated from the respective accounts and the resulting gain or loss is included in the statement of revenue and expenses. Depreciation is computed using the straight-line method based on the estimated useful lives of the related assets. Cost of repairs and maintenance are charged to expense as incurred, while cost of renewals and betterments are capitalized.

Adjustments to property and equipment, and related accumulated depreciation, allocated by the University pertaining to the Hospital's operations is determined annually based on the square footage of the University buildings occupied by the Hospital during the year. Allocation adjustments to property and equipment utilized by the Hospital are recorded through adjustments to the Hospital's general fund balance.

Continued

1. Summary of Significant Accounting Policies, continued:

STATE APPROPRIATION:

The Hospital is appropriated state funds for general operating use. The appropriation is used primarily for operating expenses and is recorded on the accrual basis.

INVESTMENTS AND CASH EQUIVALENTS:

The Hospital, including restricted funds, participates in the University's centralized cash and investment program. All cash and investments are managed by the University. Cash and cash equivalents and Board-designated cash and investments are invested in the University Temporary Investment Pool (TIP) and University Separately Invested Funds (SIF) which consist primarily of foreign and domestic commercial paper, money market mutual funds and short-term U.S. government and agency securities. The Hospital receives income from the University based on its share of units in the investment pools. Cash equivalents and Board-designated cash and investments are valued at market. Trustee-held investments consist primarily of specific money market mutual funds and securities issued by U.S. government agencies invested in University-Held Separately Invested Funds (SIF). Investments held by bond trustee, other than cash equivalents, are held at cost, which approximates market. The Hospital considers cash and all unrestricted and undesignated investments in TIP (which is accessible on a daily basis) to be cash equivalents for purposes of these financial statements.

OTHER OPERATING REVENUE:

Other operating revenue includes interest income on unexpended debt proceeds held by trustee, of $2,379,663 and $2,389,766 for the year ended June 30, 1990 and 1989, respectively. Cafeteria income, nonpatient drugs, silver sales, clinical income, and other miscellaneous revenues are also included in other operating revenue.

NONOPERATING GAINS:

Nonoperating gains primarily includes investment income earned on board-designated investments.

2. Restatement:

The University has restated its prior year financial statements to adjust for accruals of workers' compensation claims. The amount allocable to the Hospital has been estimated on a preliminary basis and is subject to adjustment; however, the Hospital's management believes that such future adjustments, in any, will not be material to the Hospital's financial position. The effect of the restatement of changes in fund balance for the general funds as reported as of June 30, 1989 and 1988 are as follows:

Continued

2. Restatement, continued:

Fund balance at June 30, 1988 as previously reported	$178,315,317
Effect of adjustment on June 30, 1988 fund balance	(4,350,000)
Fund balance at June 30, 1988, as restated	173,965,317
Net increase for the year ended June 30, 1989, as previously reported	4,158,094
Effect of adjustments on net increase	-
Fund balance at June 30, 1989, as restated	$178,123,411

3. Net Patient Service Revenue:

The Hospital has agreements with third-party payors that provide for payments to the Hospital at amounts different from its established rates. Approximately 55% and 58% in 1990 and 1989, respectively, of patient service revenue is subject to these agreements. A summary of the payment arrangements with major third-party payors follows:

- Medicare - Inpatient acute care services rendered to Medicare program beneficiaries are paid at prospectively determined rates per discharge. These rates vary according to a patient classification system that is based on clinical, diagnostic, and other factors. Inpatient nonacute services, certain outpatient services, and defined capital and medical education costs related to Medicare beneficiaries are paid based on a cost reimbursement methodology. The Hospital is reimbursed for cost reimbursable items at a tentative rate with final settlement determined after submission of annual cost reports and audits thereof by the Medicare fiscal intermediary. The Hospital's classification of patients under the Medicare program and the appropriateness of their admission are subject to an independent review by a peer review organization under contract with the Hospital. The Hospital's Medicare cost reports have been audited by the Medicare fiscal intermediary through June 30, 1988 and settled through 1982.

- Medicaid - Inpatient and outpatient services rendered to Medicaid Assistance and General Assistance beneficiaries are paid at prospectively determined rates according to a patient classification system that is based on clinical,

Continued

3. Net Patient Service Revenue, continued:

diagnostic, and other factors. Inpatient capital costs are reimbursed at a tentative rate which is subject to final settlement based on a cost reimbursement methodology after audit. The Hospital's cost settlements have been settled through June 30, 1984.

- Blue Cross - Inpatient services rendered to Blue Cross and Blue Cross affiliate subscribers are reimbursed, on an interim basis, at prospectively determined rates per day of hospitalization. Interim outpatient services reimbursement is on either a fee-screen based level or on billed charges, depending upon the type of service provided. The prospectively determined inpatient per diem rates are subject to length-of-stay limitations and the outpatient billed charge reimbursement is subject to predetermined target rate limitations. Both the inpatient and outpatient limitations are effected as part of a year-end settlement process.

The Hospital has also entered into payment agreements with certain commercial insurance carriers, health maintenance organizations, and preferred provider organizations. The basis for payment to the Hospital under these agreements includes prospectively determined rates per discharge, discounts from established charges, and prospectively determined per diem rates.

4. Assets Whose Use is Limited:

The following is a summary of investments whose use is limited and the primary limitations on their use as of June 30, 1990 and 1989:

	1990	1989
Board-designated investments primarily for new construction, replacement of property and equipment, and retirement of debt. Amounts invested in University TIP and SIF	$119,643,426	$99,339,724
Cash and investments held by bond trustee:		
Cost of issuance fund	-	187,707
Sinking fund	3,936,069	2,723,155
Other funds	16,370,236	16,332,242
	$ 20,306,305	$19,243,104

Continued

5. Deferred Third-Party Reimbursement:

Costs related to losses on abandonment of construction plans were incurred in 1983. In addition, losses on advance refunding of revenue bonds were recognized in 1985 and 1986. A portion of these losses are recoverable from Medicare in future years based on existing regulations. Estimated recoverable amounts have been recorded as deferred third-party reimbursement on the accompanying balance sheets and will be realized in varying annual amounts through 2012. Federal law mandate the Health Care Financing Administration to enact changes in Medicare regulations for capital cost reimbursement. Various proposed regulations are being considered. Final regulations, when enacted, could affect the realization of deferred third-party reimbursement. The accompanying financial statements were prepared based upon the reimbursement laws and regulations currently in effect.

6. Property and Equipment:

The following is a summary of property and equipment as of June 30, 1990 and 1989:

	1990	1989
Land and land improvements	$ 2,817,188	$ 2,879,296
Buildings and fixed equipment	195,002,963	190,151,685
Major movable equipment	81,661,770	74,227,360
Construction in progress	4,182,454	9,057,292
	283,664,375	276,315,633
Less accumulated depreciation	116,252,045	100,371,670
	$167,412,330	$175,943,963

7. Long-Term Debt:

The following is a summary of long-term debt as of June 30, 1990 and 1989:

	1990	1989
General Obligation Refunding Bonds, Series 1986A, due in varying installments through February 1, 2011 with interest at 6.00% to 7.75% payable semiannually	$105,168,143	$107,244,608

Continued

7. Long-Term Debt, continued:

	1990	1989
The Hospital's portion of the University's variable rate demand bonds, Series 1985E, 1985F, 1985G, 1985H and 1985I due in varying installments through October 1, 2017, at annual interest rates from 4.90% to 5.625% in 1990	$ 62,971,365	$ 62,971,365
Notes payable with interest from 5.13% to 6.50% due to the University in varying installments through 1991	1,578,575	4,588,199
Capital lease obligations	2,769,592	
	172,487,675	174,804,172
Less current installments	4,320,342	5,224,624
	$168,167,333	$169,579,548

A summary of principal payments required on long-term debt in future years is as follows:

Year Ending June 30	
1991	$ 4,320,342
1992	3,030,252
1993	3,017,670
1994	3,239,207
1995	3,419,163
Later years	155,461,041
	$172,487,675

The Hospital's long-term debt includes its share of the University's Variable Rate Demand Bonds, Series 1985E, 1985F, 1985G, 1985H and 1985I. The Hospital is indebted directly to the University for this amount and pays all principal and interest directly to the University as required under the terms of the bond indenture agreement. The Variable Rate Demand Bonds are subject to optional tender and mandatory tender by the bondholders in certain circumstances. The Hospital expects that tendered bonds will be resold to the public by a remarketing agent. To provide for the purchase of tendered bonds which are not

Continued

7. Long-Term Debt, continued:

remarketed, the University has entered into a credit agreement with a bank. The full faith and credit of the University is pledged for payment of principal and interest on the 1985 and 1986 Bonds. A portion of these bond proceeds were used to retire the Variable Rate Demand Bonds, Series 1985B, 1985C and 1985D. In prior years, the Variable Rate Demand Bonds, Series 1985B, 1985C and 1985D, were issued for the purpose of advance refunding of Series 1982 Term Bonds and Serial Bonds.

During the year ended June 30, 1986, the University issued General Obligation Refunding Bonds, Series 1986A, for the defeasance of $89,236,139 of General Obligation Refunding Bonds, Series 1985A. Proceeds of the Series 1986A Bonds were deposited with a trustee in an amount sufficient, together with the interest earned thereon, to meet debt service requirements of the defeased Series 1985A Bonds as they become due. The outstanding balances of these advance refunded bond issues defeased in prior years excluded from the balance sheets were $198,846,139 and $199,936,139 at June 30, 1990 and 1989.

8. Pension Plan:

All employees of the Hospital meeting age and length of service requirements participate in civil service (Minnesota State Retirement System - MSRS) or faculty (University of Minnesota) pension plans. The plans require contributions by both the employer and employee. The Hospital's pension expense for the years ended June 30, 1990 and 1989, was $5,429,868 and $4,720,601, respectively, which includes amortization of prior service costs through 2009.

The faculty plan is a defined contribution plan and is fully funded. The MSRS statewide plan is a defined benefit plan and it covers employees of the State of Minnesota, school districts, counties, cities and other political subdivisions. The unfunded vested benefit liabilities of the MSRS plan are not actuarially segregated by employer unit. As of June 30, 1990, University employees represented approximately 28 percent of active plan participants in MSRS. No separate participation level was calculated for the Hospital.

At June 30, the date of the latest actuarial valuation, net assets available for benefits were $1,644,145,000 for the MSRS plan. The actuarial present value of accumulated plan benefits was not calculated. Amounts specifically applicable to the Hospital were not calculated.

Continued

9. Transactions Related to the University:

The Hospital has contracts with the University Medical School for the services and stipends of residents and medical school staff involved with direct patient care, in-service education and administrative duties within the Hospital. Total expense for such services and stipends for the years ended June 30, 1990 and 1989 were approximately $8,532,000 and $7,808,000, respectively.

The costs of certain general and administrative services provided to the Hospital by the University are accounted for as an operating expense of the Hospital. The Hospital has not been required to make a cash transfer to reimburse the University for the entire cost of these services. Unreimbursed University services were $190,707 and $168,927 in 1990 and 1989, respectively. Accordingly, the unreimbursed costs are shown as an addition to the general fund balance of the Hospital. The Hospital is charged by the University departments separate from the allocation of general and administrative services for services and supplies purchased from them. These purchases total approximately $14,000,000 annually.

10. Commitments and Contingencies:

The Hospital has professional liability insurance coverage provided on a claims-made basis including provisions for retrospective premium adjustments. The coverage is provided through RUMINCO, Ltd., a wholly owned subsidiary of the University which was principally established for the purpose of providing liability coverage for the University, including the Hospital. This policy provides coverage with a $1,000,000 per person claim limitation, $3,000,000 per occurrence claim limitation and $5,000,000 aggregate annual claim limitation. Should the claims-made policy not be renewed or replaced with equivalent insurance, claims based on occurrence during its term, but reported subsequently, will be uninsured. Insurance premiums to RUMINCO, totaled $834,945 and $617,226 in 1990 and 1989, respectively. In 1990, the Hospital received a dividend from RUMINCO of $1,965,000 which has been used to offset insurance expense in the accompanying financial statements.

The Hospital contracts with the University for services of medical residents. The University has long held that medical residents are students for social security purposes and therefore has not collected social security taxes from these individuals or remitted to the Social Security Administration the employer share of these taxes. In August 1990, the University was notified by the Social Security Administration that medical residents are not considered by their agency to be students for social security purposes.

Continued

10. Commitments and Contingencies, continued:

If that is the case, the University estimates it would owe approximately $5,000,000, excluding interest, in social security taxes for calendar years 1985 and 1986, representing both the employer and employee share. No assessments or claims have been made for years subsequent to 1986. The amount apportionable to the Hospital, if any, has not been determined. The University is vigorously contesting this assessment. No liability for these taxes has been recorded within these financial statements.

11. Reclassification:

Certain amounts associated with the 1989 financial statements have been reclassified in order to conform to the 1990 financial statement presentation.