

Staff Meeting Bulletin
Hospitals of the » » »
University of Minnesota



The Surgery Committee

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Published for the General Staff Meeting each week
during the school year, October to June, inclusive.

Financed by the Citizens Aid Society,
Alumni and Friends.

William A. O'Brien, M.D.

I.

UNIVERSITY OF MINNESOTA MEDICAL SCHOOL
CALENDAR OF EVENTS

May 12 - May 17, 1947

No. 157Monday, May 12

- 9:00 - 9:50 Roentgenology-Medicine Conference; L. G. Rigler, C. J. Watson and Staff; Todd Amphitheater, U. H.
- 9:00 - 10:50 Obstetrics and Gynecology Conference; L. J. McKelvey and Staff; Interns' Quarters, U. H.
- 10:00 - 12:00 Neurology Ward Rounds; A. B. Baker and Staff; Station 50, U. H.
- 11:00 - 11:50 Roentgenology-Medicine Conference; Staff; Veterans' Hospital.
- 11:00 - 11:50 Physical Medicine Conference; Physical Therapy in Peripheral Vascular Disease; Ernest C. Christensen; E-101, U. H.
- 12:15 - 1:15 Obstetrics and Gynecology Journal Club; M-435, I. H.
- 12:30 - 1:20 Pathology Seminar; Carcinoma of the large intestine; L. F. Sherman; 104 I. A.
- 12:15 - 1:20 Pediatrics Seminar; 6th Floor Seminar Room, U. H. ; NO SEMINAR.
- 12:30 - 1:20 Physiology Seminar; Revival and survival following apparent death; C. Heymans; 214 M. H.
- 12:30 - 2:00 Surgery Grand Rounds; A. A. Zierold, Clarence Dennis and Staff; Minneapolis General Hospital.
- 4:00 - 5:20 School of Public Health Seminar; Minnesota Public Health Conference; Center for Continuation Study.
- 8:00 - Clinical Research Club; Speakers - Wendell H. Hall and Edmund B. Flink; Eustis Amphitheater, U. H.

Tuesday, May 13

- 9:00 - 9:50 Roentgenology-Pediatrics Conference; L. G. Rigler, I. McQuarrie and Staff; Eustis Amphitheater, U. H.
- 8:30 - 10:30 Surgery Seminar; John R. Paine; Small Conference Room, Bldg. I, Veterans' Hospital.
- 10:30 - 11:50 Surgical Pathological Conference; John R. Paine and Nathaniel Lufkin; Veterans' Hospital.
- 12:30 - 1:20 Pathology Conference; Autopsies; Pathology Staff; 102 I. A.
- 2:00 - 2:50 Dermatology and Syphilology Conference; H. E. Michelson and Staff; Bldg. III, Veterans' Hospital.

- 3:15 - 4:15 Gynecology Chart Conference; J. L. McKelvey and Staff; Station 54, U. H.
- 3:30 - 4:20 Clinical Pathological Conference; Staff; Veterans' Hospital.
- 3:45 - 4:50 Pediatrics Staff Rounds; I. McQuarrie and Staff; W-205, U. H.
- 4:00 - 4:50 Surgery-Physiology Conference; Metabolic factors associated with immobilization; Ephraim Shorr (New York Hospital, New York City); Eustis Amphitheater, U. H.
- 5:00 - 5:50 Roentgenology Diagnosis Conference; General Hospital.
- 8:00 - Minnesota Pathological Society; Role of pressoreceptors and chemoceptors in the regulation of respiration; C. Heymans (Ghent, Belgium); Medical Sciences Amphitheater.

Wednesday, May 14

- 8:00 - 8:50 Surgery Journal Club; O. H. Wangenstein and Staff; M-515, U. H.
- 8:30 - 9:50 Psychiatry and Neurology Seminar; at Veterans' Hospital.
- 11:00 - 11:50 Pathology-Medicine-Surgery Conference; Hypernephroma; E. T. Bell, C. J. Watson, O. H. Wangenstein and Staff; Todd Amphitheater, U. H.
- 12:00 - 12:50 Physiological Chemistry Journal Club; Staff; 113 MeS.
- 4:00 - 5:50 Medicine and Pediatrics Infectious Disease Rounds; Staff; W-205, U. H.
- 4:20 - Traumatic and hemorrhagic shock; Ephraim Shorr; Medical Sciences Amphitheater.

Thursday, May 15

- 8:30 - 9:20 Surgery Grand Rounds; John R. Paine and Staff; Veterans' Hospital.
- 9:00 - 9:50 Medicine Case Presentation; C. J. Watson and Staff; Todd Amphitheater, U. H.
- 10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; E-221, U. H.
- 10:30 - 11:50 Surgery X-ray Conference; Daniel Fink and John R. Paine; Veterans' Hospital.
- 12:00 - 12:50 Physiological Chemistry Seminar; Lipid Metabolism; Walter O. Lundberg; 214 M. H.
- 1:00 - 2:00 Fracture Conference; A. A. Zierold and Staff; Minneapolis General Hospital.
- 4:00 - Resistance and susceptibility to experimental shock; Ephraim Shorr; Medical Sciences Amphitheater.

- 4:00 - 4:50 Bacteriology Seminar; Newcastle's disease in poultry; Virginia Scholljegerdes; Confusing diphtheroid bacilli; Patricia Mold; 214 M. H.
- 4:30 - 5:20 Ophthalmology Ward Rounds; Erling W. Hansen and Staff; E-534, U. H.
- 5:00 - 5:50 Roentgenology Seminar; Case Presentation; Stanley C. Peterson and Harold O. Peterson; M-515, U. H.
- 7:30 - Physical Medicine Seminar; William G. Kubicek; 111 MeS.

Friday, May 16

- 9:00 - 9:50 Medicine Grand Rounds; C. J. Watson and Staff; Metabolic derangements in Graves' Disease with particular reference to the myopathies; Ephraim Shorr; Todd Amphitheater, U. H.
- 9:00 - 9:50 Pediatric Grand Rounds; I. McQuarrie and Staff; Eustis Amph., U. H.
- 10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; E-221, U. H.
- 10:30 - 11:20 Medicine Grand Rounds; Staff; Veterans' Hospital.
- 10:30 - 11:50 Otolaryngology Case Studies; L. R. Boies and Staff; Out-Patient Department; U. H.
- 11:30 - 12:50 University of Minnesota Hospitals General Staff Meeting; Lipotropic factors; Elizabeth G. Frame; New Powell Hall Amphitheater.
- 1:00 - 1:50 Dermatology and Syphilology; Presentation of Selected Cases of Week; H. E. Michelson and Staff; W-312, U. H.
- 1:00 - 2:50 Neurosurgery-Roentgenology Conference; W. T. Peyton, Harold O. Peterson, and Staff; Todd Amphitheater, U. H.
- 5:30 - 6:30 Surgery Literature Conference; Clarence Dennis and Staff; Minneapolis General Hospital.
- 8:15 - Experimental hypertension; Ephraim Shorr; Auditorium, Museum of Natural History.

Saturday, May 17

- 7:45 - 8:50 Orthopedics Conference; Wallace H. Cole and Staff; Station 21, U. H.
- 9:00 - 9:50 Neurology Grand Rounds; A. B. Baker and Staff; Station 50, U. H.
- 9:00 - 9:50 Surgery-Roentgenology Conference; O. H. Wangensteen, L. G. Rigler, and Staff; Todd Amphitheater, U. H.
- 9:00 - The application of the vaginal smear method to problems of female sex physiology; Ephraim Shorr; Eustis Amphitheater, U. H.
- 9:00 - 9:50 Medicine Case Presentation; C. J. Watson and Staff; M-515, U. H.
- 10:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; M-515, U. H.
- 10:30 - 12:50 Obstetrics and Gynecology Grand Rounds; J. L. McKelvey and Staff; Station 44, U. H.
- 11:00 - 12:20 Anatomy Seminar; A concomitant change in the mitochondria and the virulence of a transplantable lymphatic leukemia; Richard A. Miller; 226 I. A.

II. THE SURGERY COMMITTEE

Fred Kolouch
Agnes Love

Introduction

The Surgery Committee is an organization of physicians and nurses concerned with the immediate practical problems related to the care of surgical patients.

The need for this committee resulted from the wartime depletion of personnel and material shortages coupled with the increased complexity of surgical care which evoked a difficult situation, causing mutual dissatisfactions between the surgeons and surgical nurses and the other departments of the hospital. At times, under the strained circumstances, optimal patient care was difficult to attain. Psychologically unsound unilateral solutions failed to solve the multitude of inter-related problems of surgical care which jointly involved physicians, nurses, and other hospital employees. Without quite understanding the problems involved, surgeons were fretting because orders were not being carried out while nurses were leaving the hospital exasperated by the impossibility of their tasks. On July 19, 1945, Katherine Densford, Director of Nursing, and Dr. Owen H. Wangenstein, Director of Surgery, mutually and sagaciously concluded that a possible alleviation of many of the difficult interdepartmental situations might result from discussions of the problems by some type of committee of surgeons and nurses who were actively concerned with the care of surgical patients.

Following the suggestion of Miss Densford and Dr. Wangenstein, the committee was organized by Miss Agnes Love and the author with the first meeting being held on July 25, 1945. There was established a continuing committee of representatives of the physicians and nurses in the University hospital Surgical Service whose chief function was to review the situation in the surgical service with a view to improving the care of surgical patients. Representatives were chosen by the groups themselves and included one or more of the following: Resident, Fellow, Intern, Medical Student, Surgi-

cal Supervisor, Head Nurse, Staff Nurse, and a Student Nurse. The committee was to meet every two weeks and call in other related hospital personnel as needed. It was hoped at its incipiency that by means of critical objective investigations and frank discussions of the myriad of problems disturbing both the surgeons and nurses the activities of this committee could aid in the development of bilaterally satisfactory solutions which would enhance the efficiency of the surgical service, improve the care of surgical patients and develop the esprit de corps which should dominate a surgical family.

The following is devoted to the establishment of the basis for the need for such an organization as an adjunct to the administrative personnel of the hospital, as well as the story of its development, its purpose, its method of function, the problems approached, its accomplishments, and its failures, as well as its relationship to the current complexities of surgical therapy.

Historical Development of Need for Integration of Surgical Personnel

Surgery as a therapeutic device, barbaric as it still may seem to some of the esthetes of medicine, has evolved from an empirical, heroic decimation executed amidst pain, shock and infection, by the hands of adventurers, barbers and charlatans, to humane, precise, methodic, effective therapeutic devices which afford relief from distress and pain, prolonging the lives of countless individuals presenting a myriad of pathological states. This transformation from a repulsive, spectacular and only seldom successful technic to its present day respectability and success has been the result of a surgical, cultural development paralleling the rationalization of all physical, biological and medical science. It is nearly impossible to attribute our current surgical victories to any single or even few personalities or scientific discoveries. On the other hand, there are a few milestones forming the foundation for the evolution of our current surgical philosophy and technology which are impressive

and are listed in Table No. 1

Table No. 1
Milestones in Surgical Evolution

1260-1320	Henri de Mondeville - Clean wound treatment.
1543-	Andreas Vesalius - De Fabrica Humani Corporis.
1510-1590	Ambroise Pare - Application of Vesalian anatomy to surgery.
1628	William Harvey - De Motu Cordis.
1660	Athanasius Kircher - Doctrine of "Contagium Animatum."
1665	Richard Lower - First blood transfusion.
1729-1793	John Hunter - Elevated surgery to experimental science.
1759	Albrecht von Haller - Elementa Physiologiae Corporis.
1788	John Howard and Jacobus Tene Tenon - Hospital reform.
1809	Ephraim McDowell - First successful ovariectomy.
1821-1902	Rudolf Virchow - Cellular pathology.
1831	Lotta - Gave saline solution intravenously for treatment of malignant cholera.
1813-1878	Claude Bernard - Experimental physiology.
1846	W. T. G. Morton - Ether anesthesia.
1850	Marshall Hall - Concept of traumatic shock.
1822-1895	Louis Pasteur - Bacteriology.
1859	Florence Nightingale - Notes on Hospitals, Nursing.
1867	Lord Lister - On the Antiseptic Principle in the Practice of Surgery.
1884	Elie Metchnikov - Inflammation.
1886-1891	Von Bergmann - Steam sterilization, general operative asepsis.
1895	Wilhelm Konrad Roentgen - X-ray.
1852-1922	William Stewart Halsted - Precise surgical technic, rubber glove.
1900	K. Landsteiner - Blood groups.
1909	Meltzer and Auer - Endotracheal insufflation.
1910	Paul Ehrlich - Concept of "therapia sterilisans".

Current Surgical Progress

1. Objective pre-operative and post-operative care.
2. Gravimetric water and electrolyte balance.
3. Intestinal suction decompression.
4. Modern chemotherapy.
5. Anticoagulant therapy.
6. Nutritional preparation of patients.
7. Improved anesthesia.
8. Rational shock therapy.
9. Precise surgical technic.
10. Elevation of standards of surgical training.

The evolution of surgery to its present state of perfection characterized by objectivity of performance with a tremendous reduction in discomfort of patients as well as morbidity and mortality has utilized every branch of medical science to reach its current status. It is interesting to note the evolution in the attitude of both surgeons and the lay public toward surgery which has accompanied its

progressive change from a brutal spectacle to a beneficent, therapeutic device. The accomplishments and success of surgery may be evaluated from two viewpoints, that of the surgeon and that of the consumer, the lay public. It must be admitted that, generally speaking, surgeons have not been imbued with any excess of modesty concerning the grandeur of their work and their importance in the

social structure. Fortunately the extreme attitude of Klein of Stuttgart, who described a thyroidectomy performed by him in 1820, is a surgical relic. This man, a blind, egotistical brute, wrote concerning his initial experience with a thyroidectomy in a child as follows:

"The child was placed on a table because I dared not let him sit on the lap of an attendant, since his breathing would have caused motions interfering with operative precision. One assistant held the head, two assistants, one on each side, held the arms, and two, the hands and feet. I stood on the right side, rapidly made two oval cuts over the tumor, and on each side dissected up a flap. From the many large vessels, everywhere cut, there came, as was to be expected, a considerable quantity of blood, but always fingers enough were ready to arrest the hemorrhage. However, in the brief period, over one-half of the blood was lost. The left lobe was quickly cut away; this could be done the more readily, inasmuch as the incisions crossed above the collar-bone. I pulled the tumor with the fingers forcibly upwards and, keeping always on the under surface, using sometimes the fingers, sometimes the knife, and sometimes its handle, separated it from the entire length of the carotid, from the whole trachea and larynx and from below upwards shelled out the right lobe. To do all this required - who would believe it? - one and one-half minutes. Even I would not have believed it, for the time seemed to me very long, especially when I was stripping the tumor from the carotid. But several on-lookers who counted the seconds agreed as to the time elapsed.

"To our amazement, no bleeding followed; even the divided thyroid arteries did not bleed, and except for the hemorrhage from the divided superficial veins very little blood was lost during the operation. We were still more astonished to find the child lying there without a sign of life. I ordered quickly a sponge dipped in cold water to be placed on

the wound and the face to be dashed with cold water; thereupon deep spasmodic breathing took place. I regarded it as a deep swoon. The boy let out a cry only when the first cut was made, at any rate, no one heard any further sound, and this was excusable considering the concentration of the operation. For about three-quarters of an hour the body was rubbed and brushed and splashed, and stimulants and all the reviving means employed; during this time the heart, and occasionally also an artery, could be felt to beat feebly, but the inspirations gradually decreased in frequency, and then without the slightest convulsive movement life was extinguished.

"The necessary routine precautions to be observed in case of possible return to life were prescribed, but the child remained dead.

"At any rate, the connoisseur in passing judgment upon a faultless operation is influenced not by the result but by the artistic manner of its performance; and in the present case I have for myself no reproach, but only congratulation.

"This is the first extirpation of a thyroid gland of this size which has come my way. I have never seen the operation performed; nor have I ever practised it on the dead body, for the opportunity never presented, or else, perhaps I did not embrace it. It would be presumptuous to make generalizations from one case, but I openly confess that I cannot understand why one stands in such awe of hemorrhage and I admit, just as freely, that I was not in the least apprehensive on this score, and that I performed this operation with absolute courage and with the consciousness that happen what might I should certainly be equal to the emergency."

Let the above self-aggrandizing absurdity of Klein, who had little interest in preservation of life in his patients, be compared with an example of the self-critical and humanitarian attitude of the current surgeon towards his

responsibilities as outlined recently by Owen H. Wangensteen in an article titled "The Surgeon's Trust."

"Surgery is an exacting and stern discipline. Let no man who aspires to be a surgeon be unmindful of this admonition. A realistic, critical attitude of self-analysis by the surgeon with reference to accountability for operative failures and post-operative complications is a sine qua non for continued growth and development of the surgeon and betterment of his accomplishment. The irresponsible optimism of the Pollyanish surgeon denies him the improvement and cultivation which comes from a critical review of every failure. At the base of most disappointments lie errors in judgment or execution, some neglect that might have been prevented with adequate forethought and preparation. Only when surgeons have succeeded in eliminating all avoidable causes of death after operation can they be satisfied with their own accomplishment - a laudable but unattainable objective. Yet, the struggle of striving to achieve that which lies beyond our reach makes us better surgeons for the effort. Any record, in which only unavoidable deaths account solely for the mortality, suggests that the surgeon and his associates have done their work well." ... "The success of operations depends upon a harmonious blend of many things. The practical wisdom garnered from experience is in essence an issue resulting from detection, acknowledgment, and correction of error. Though we falter, if we are in earnest in our determination not to fail, success is inevitable. We must learn to count the cost less and value the result more. The surgeon's objective should be the elimination of all avoidable causes of death after operation. The safe conduct of the patient through operation is a matter upon which an instruction can be given more readily than consistently followed." "The fortunes of our patients are determined by the manner in which the formalities of surgery are heeded by the surgeon. The functions of surgery and its future

growth as a benevolent and helpful aid to man suggest that improvement in accomplishment demands that the surgeon be mindful and observant of the stern disciplines of his handicraft."

a more objective example of facing unpleasant surgical facts realistically with the view of correcting errors to improve results was the admission of Dennis and Toon that approximately one-half of the patients dying of bowel obstruction in this hospital in the last five years should be classed under the mortality of treatment.

The psychological attitude of surgeons has considerably improved concomitantly with the progression of their discipline.

On the other hand, the least prejudiced, most critical viewpoint concerning the impact of surgery on society should come from lay opinion, expressed by the beneficiaries of our efforts. The author feels that contemporary art serves as an excellent source for critical lay opinion concerning an era and its views. Unfortunately the graphic verbalization of an art piece is difficult. A brief description of the attitude of artists representative of the eras concerned with the development of rational surgery affords a fairly accurate sample of lay opinion concerning our learned profession. It is interesting to determine the artist's concept of the physician or surgeon and compare it with the principle surgical accomplishments of the era involved.

Pre-Renaissance artists, holding the physician in complete disrespect, enjoyed depicting the gruesome twosome, Death and the Physician. On the other hand, at about this time the basic foundation of surgery, anatomy, was being rationalized by Vesalius and introduced to surgery by Pare. Already Henri de Mondeville had exhibited his deference to nature in the repair of wounds. The great Rembrandt, a commercial artist attempting to please his public, caught a significant aspect of the brutality of pre-anesthetic surgery in his time (1600-1650), depicted by the suffering

of the unfortunate man undergoing a simple procedure called "the foot operation". By this time Harvey had discovered the nature of circulation of the blood and Lower had administered the first blood transfusion.

In 1800 Goya, the satirical Spaniard, in his "De Que Mal Dopira" depicts the physician as a large-eared ass seated at the bedside of a departed patient, pondering the cause of his death. By this time Von Haller had established the science of physiology and John Hunter had elevated surgery from empiricism to the level of a precise experimental science.

Hogarth, 1750, the British satirist, held us in contempt in his "Company of Undertakers," depicting a council of pompous, bewigged, ineffectual busybodies. John Howard and Jacobus Rene Tenon had investigated, during this era, the horrible situation in European hospitals and had made a plea for reform.

Rowlandson's (1815) completely insulting "Doctors Three" depicting a consultation which terminated in a free-for-all fight while death embraced the patient was created just a few years following Ephraim McDowell's first successful ovariectomy.

Eakin's "Gross Clinic" (1875) and "Agnew Clinic" (1889), are classical artistic compliments to two great Philadelphia surgeons of his era. These two paintings are revealing and, if accurate, indicate that the unfortunate citizens of Philadelphia, although treated by surgical princes, were not deriving the benefits of the efforts of Pasteur, Koch, Lister and v. Bergmann. On the other hand, the progressive improvement and complexity in surgery is revealed by the presence of an anesthetist and a nurse in Dr. Agnew's operating theater. These paintings were made at the beginning of the golden era of surgery when it had been finally released from the burden of ignorance, brutality, pain and infection. The art of World War II, depicting the Army Medical Corps in the field, is exceedingly complimentary and represents surgery as a humane, complex, integrated, therapeutic device affording relief, repair and survival to the injured soldier.

Currently, the value of surgery has finally favorably impressed its consumer, the lay public.

Current Complexity of Surgical Care

During this period of evolution from lethal empiricism to the state of current effective surgery, philosophical and technical surgical advances have made this discipline a complicated therapeutic effort, the success of which depends on a fine integration of a multitude of activities in the hospital unit. Our viewpoint has changed from the singular anatomico-pathologic attitude toward the patient with emphasis on the big event, the surgical excision of the diseased organ, to a dynamic, continuous, therapeutic effort carried out pre-operatively, during the operation, and post-operatively, regarding the patient as a dynamic physiologic whole, requiring constant observation and complete care from the time of his first consultation until the end of his convalescence. We have found that the survival of surgical patients can be insured (within the limits of our knowledge and technics) only by a constant careful attendance to all of the details of his treatment. This recent change in surgical attitude can be better illustrated by a comparison of surgical management of two patients who had undergone gastric resection in 1929 and in 1945 respectively, as detailed in Table No. II.

Table No. II illustrates a comparison of the activities attending the care of a patient undergoing gastric resection in 1929 with the current methods employed. The course of events attending gastrectomy in these two patients, the one in his twenties (1929) and the other an octogenarian (1945) vividly illustrate the surgical progress which has been made due to a keener appreciation of the importance of completeness in the approach to surgical problems from the standpoint of preoperative evaluation and preparation, anesthesia, surgical technic, and postoperative care. On the other hand, success, even now, with a speedy uneventful six to seven day post-operative convalescence, is certain only when there is a continuous, harmon-

Table No. II

Gastrectomy for Cancer

	<u>Patient A. Age 27 (1929)</u>	<u>Patient B. Age 83 (1945)</u>
Diagnosis	Multiple gastric ulcers, with benign tumor.	Carcinoma of stomach.
Pre-op. Eval.	Hematology, Blood urea nitrogen, urine, stool, gastric analysis, surgical consultation.	Hematology, Blood urea nitrogen, chlorides, plasma protein, urine, P.S.P., gastric analysis, Electrocardiograph, ven. pr., vit. cap., medical consultation.
Pre-op. Prep.	Sippy diet - 1 month.	High protein diet, 6 liters whole blood, intravenous glucose and amigen, 7 days.
Surgery:		
Anesthesia	Ether, patient cyanotic.	Cyclopropane, curare.
Technic	Vertical incision, catgut	Transverse incision, silk.
Duration	Open anastomosis 2 hrs. 20 min.	Closed anastomosis 4 hrs. 15 min.
Post-op. Care	Proctoclysis - 1 gastric lavage	Intravenous, plasma, glucose, saline. Penicillin. Gastric suction until third day. Ambulatory second post-operative day. Weighed daily. Gravimetric fluid balance.
Post-op. Course	Hiccoughs, ileus, broncho-pneumonia.	Maximum temperature elev. 99.8
Hosp. Discharge	31st post-operative day.	6th post-operative day.

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ious integration of all of the multitude of diagnostic and therapeutic activities indulged in by the hospital departments concerned with the care of the surgical patients. Oversights or errors before, during, or after the operation on the part of any of the personnel concerned can compromise the outcome of the operation. The successful result of a surgical procedure legally and morally remains the surgeon's responsibility. On the other hand, the surgeon can no longer be considered as a man working alone to save patients' lives. He must now be a coordinator of the many hospital departments involved in the care of his pa-

tients. The organizational difficulties accruing from this new role of the surgeon are legion.

An analysis of the current situation quickly reveals the complexities of departmental interrelations attending the care of surgical patients insofar as other hospital departments and non-surgical personnel are concerned. Tables No. III, IV and V indicate the departments of the hospital involved in the care of patient B in 1945. It is impossible to estimate the number of personalities contributing to care of one of these surgical patients but I

think that 75 or 100 would be a conservative estimate. When the success of a technical procedure carried out in a patient depends on the integration of the efforts of, say seventy-five individuals with interrelated problems, each of whom has his own unrelated problems, it is not difficult to understand why the greying temple is an adornment gracing the head of any busy surgeon. The organization of the entire hospital, the effectiveness of the hospital personnel, as well as his own department, must naturally concern the surgeon in his efforts to carry out surgical therapy successfully.

Table No. III

Preoperative Period

Medical Clinic
Surgical Clinic
Admissions
Surgical Nursing, orderlies and aids
Hematology laboratory
Chemistry laboratory
Electrocardiographic laboratory
Department of roentgenology
Medical consultant
Department of Dietetics
Blood bank
Pharmacy
Surgical supply department
Laundry
Surgical staff
Housekeeping
Records.

Table No. IV

Surgical Procedure

Operating room nursing staff,
orderlies and aids
Anesthesia department
Surgeon and assistants
Blood bank
Surgical pathology
Pharmacy
Surgical supply
Laundry

Table No. V

Postoperative Period

Special nurses
Surgical staff
Surgical nurses, orderlies and aids
Chemistry laboratory
Hematology laboratory
Blood bank
Pharmacy
Dietetics
Surgical supply
Laundry
Bookkeeping
Social service
Housekeeping
Records.

- - -

The Relationship of Surgery
and its Attendant Problems to
the Hospital Organization

Approximately 25 per cent of the patients entering this hospital receive surgical therapy. With the evolution of surgery to its present state of effectiveness the care of the surgical patient, we know, affects practically the entire hospital structure. Since the successful outcome of a surgical procedure now entails the coordinate effort of 75 to 100 people representing 15 to 20 hospital departments, by necessity the intricate organization of the hospital staff must be precise. Unable to secure the plan of the organization of the staff of the University of Minnesota Hospitals, the author consulted Malcolm T. MacEachern's epochal volume on Hospital Management to determine the relationship of hospital organization to the problems of current execution of surgical therapy, teaching, and research. According to his plan the governing body consists of the organized medical staff and the director and his assistants working through a joint conference committee and other committees of the governing body. The responsibility for control of the hospital functions is in the hands of the medical director in liaison with directors of nursing and dietetics. Finally, the organization fans out centrifugally to the level of the heads of all of the hospital departments and services. Beyond

this at the periphery where the labor of running the hospital is effected, we find the vast unrepresented intelligent group of workers, the visiting staff, the interns, clinical clerks, technicians, record librarians, stenographers, admitting officers, morgue attendants, social service workers, kitchen staff, dining room help, orderlies, attendants, undergraduate nurses and graduate nurses.

Each surgical innovation, a new laboratory procedure, an additional technic such as weighing patients or administration of a special diet, generated in the mind of the surgeon, is introduced as an order to the nurses on the stations and soon ramifies this entire hospital structure creating problems for all of the involved personnel. The number of innovations arising from the fertile minds of the staff of a University hospital are numberless. The impact of the "hot idea" upon the practical aspects of running the hospital are completely forgotten by the zealous scientists. An example to be cited concerns the use of ultra-violet light to determine by means of fluorescence the integrity of circulation of blood in the legs of arteriosclerotic patients. This technic is valuable and must be used. However, due to the use of the treatment room on Station 22 as a dark room, the maid was unable to wash equipment and the routine of the entire ward was disturbed.

Multiply the ideas by the number of departments and their expanded staffs and resulting chaos is understandable. The combination of the increasing complexity of responsibility for surgical therapy, the research activities of the hospital and the teaching program with the use of fledgling physicians and nurses for execution of certain aspects of patient care all lead to the creation of interminable administrative dilemmas, only the grossest of which can possibly be reviewed and solved by the hospital director and chiefs of services. This leaves a multitude of bad situations affecting both the care of patients and disturbing to the psyche of the involved hospital personnel, creating dissatisfactions leading to personal rebellion with consequent disinterest in the job and ultimate departure from the Univer-

sity set-up.

Although disturbing to all levels of the hospital society from director to the newsboy, the ultimate scapegoat in all of our functional difficulties is the patient. In spite of the number and size of the problems impinged on the hospital organization by the current surgical developments, a means for critical analysis of the mundane practical problems affecting the care of patients and the tempers of the personnel must be developed and utilized. The source for this information lies in the lowest hospital stratum, the workers enumerated above.

Need for Liaison between Surgeon, Hospital Administrator, and Individuals Immediately Concerned with the Problems of Patient Care

M. T. MacEachern, a modern hospital idealist, suggests that the entire hospital group must be motivated by a singleness of purpose; the care of the patient. This involves the diagnosis and treatment of disease, research and teaching. W. Gill Wylie, in 1877, in his treatise on hospitals, listed three legitimate interests in every hospital; (1) Charity, the humanitarian interest, which seeks to make the hospital serve the welfare of the patients; the motive to have that done which will bring immediate personal good; (2) Learning, or the scientific interest, which would use the hospital for the purpose of studying and teaching the science of medicine; the motive being to have that done which in the future will do good to all mankind; (3) The material or economic interest, which would limit the expenses of the hospital; the motive being to make the wisest use of funds. He felt that for accomplishment of the above, the trustees, nurses, doctors and employees should not be in conflict. He also recognized a fourth hospital interest which I am sure has disappeared with time, that is, (4) Selfishness, or the interest of individuals who strive to use the hospital for the purpose of adding to their profits or their reputations.

Certainly today the department of surgery is motivated by interests of

charity, learning, and economics, as well as a certain amount of selfishness related to the desire for good surgical results.

Granted that the motives of our group are sound, the difficulties surrounding our distribution and execution of surgical care indicate that something is awry. As has been emphasized, scientific surgical technology related to: (1) physiological preoperative preparation of patients, (2) refined precise time consuming operative technic, (3) and effective complicated postoperative care has progressed tremendously during the current surgical era. The impact of these changes in surgery on the function of the hospital unit has been great. The surgeons, nurses and hospital administration have had a trying time attempting to harmonize current surgical methods with the existing personnel and physical facilities. The distressing practical problems arising on the wards and in the surgical theater, which are in some instances interfering with optimum patient care, suggest that surgical technology is advancing in the presence of a relatively static surgical sociology.

On the basis of this increased complexity of surgical care, material and personnel shortages, as well as increased costs, the department of surgery has been somewhat curtailed in the execution of its activities. Recently, for example, due to a shortage of surgical nurses, it became necessary to limit surgery only to patients requiring emergency operations. During this period elective procedures were not done and the treatment of several patients with carcinoma had to be delayed. Further, the current lack of sufficient surgical nurses, aids, and orderlies is interfering with pre- and postoperative care of the surgical patients, in some instances with dire results. The solution of these problems resides in the administrative level of the hospital organization and the University. However, the confusion from day to day has a psychological effect on all of the hospital personnel.

The busy surgeon has had little or no concept of this multitude of minor disturbances affecting the practical execu-

tion of hospital technics involved in daily patient care as well as in the pursuit of research and in teaching. However, the surgical executive has become entangled in such a web of integration of hospital personnel in the execution of his technics that by necessity his attitude must change, and he must assume the role of an interested democratic leader in the surgical community if he wishes to do his work effectively. To accomplish this, he must understand the practical problems which surgery imposes upon the hospital group. As a corollary, the hospital administration, the department of nursing, and other personnel must be conversant with the problems related to surgical care and sympathetic with the surgeon's motives and activities.

A valuable source of information concerning these practical difficulties of the hospital resides in the group of individuals immediately concerned with patient care, the residents, fellows, interns, nurses, dietitians, medical students, orderlies, aids, etc. In the organizational plan of hospitals, no method of systematic concourse between this group and the executive level had been developed. Recently the surgical committee was organized to fill this gap in the social structure of the hospital.

The Surgery Committee

Purpose of Organization. This committee of doctors and nurses concerned with the immediate care of surgical patients was organized with one point in view; to improve the care of surgical patients.

Nature of Organization. Representatives of all strata of the medical and nursing surgical personnel were selected to become active members of the committee. Among the surgical staff were the senior resident, a surgical fellow, a surgical intern and a medical clerk. The surgical nurses were represented by the surgical supervisor, her assistant, the head nurses from the various surgical stations, the operating room supervisor, a floor nurse, a treatment room nurse and a student nurse.

It was felt this group should be familiar with all of the practical problems related to the medical and nursing personnel, non-professional employees, the physical plant and equipment involved in the care of the surgical patients. It also served as a means for expression of dissatisfactions on the part of any group, for example, the medical students, interns, or treatment-room nurses. It was hoped that the various representatives would carry the respective problems of their own group to the committee and then follow up the meetings with conversations with the hospital group they represented, in this fashion translating committee conversation into personnel action.

Method of Function. The group would meet at noon on Saturdays at bi-weekly intervals and combine the business of improving the surgical care of patients with a pleasant lunch.

At the initial meeting on July 25, 1945, the purpose of the committee was defined and special emphasis was laid upon improvement in the care of the patients to be the center of our attention instead of personal grievances of the staff. In this fashion a commonness of purpose was developed which prevented the genesis of a bi-weekly gripe session. Miss Love was elected chairman and Miss Tomkins secretary. A complete record of the transactions of the group was kept and copies were forwarded to the Superintendent of the hospital, the heads of surgery and nursing, in order to keep our efforts openly before the administrators of the hospital, the surgical and the nursing services.

Due to the interest and energy of Miss Agnes Love, the first chairman, the committee had an excellent start and began to function effectively as a mechanism for the analysis of problems affecting the care of the surgical patients. Initially, the group hoped to be able to execute reforms, the needs for which were manifest following their analytical activities. It was soon apparent, however, that the committee's real function lay in its recognition of the practical surgical problems and in its advisory capacity to the administrators of the sections of the

hospital involved in the particular difficulty under scrutiny.

The meetings were a paradise of democratic endeavor, all members of the group having equal rights of expression concerning their respective interests in the care of the surgical patients. In this fashion, pertinent criticisms and valuable suggestions were forthcoming from all members of the committee. Following the initial meeting, topics for future discussion were selected and members would be assigned to delve into the background of the particular situation under consideration in order to insure objectivity in the proposed discussion. Following the completion of the investigation and threshing out of the details of a problem, usually members of the committee were appointed by the chairman to attend to the execution of the recommendations of the group. These members would then report on their progress at subsequent meetings.

Nature of Problems Discussed by the Surgery Committee

Generally speaking, the most striking impression gained by the committee was the total ignorance which blanketed our conception of each other's problems. We learned rapidly that the bothersome difficulties plaguing both physicians and nurses were closely interrelated and a just solution could only be developed by frank, open discussion of the issue at hand. The appreciation of the bilaterality of our difficulties rapidly led to a marked improvement in physician-nurse rapport. Further, the extensive ramifications throughout the entire organizational structure of the hospital, of even simple problems, was quite amazing. Our most salient observation was the singular need for a better coordination of the personnel and equipment and physical facilities used for the care of surgical patients.

Specifically, the committee's interests were related to the surgical personnel (doctors, nurses, medical students, orderlies, and aids), the surgical equipment, the surgical wards and operating

rooms, surgical technics, organization of the surgical services, and the relationship of other hospital departmental activities to the department of surgery.

The most pressing problems were discussed first. For example, the surgeons' dissatisfaction with the incompleteness of carrying out of their orders on patients was rapidly explained when on the basis of a time work study on one of the surgical stations, it was discovered that due to the number and complexity of orders, coupled with the nursing shortage, only enough time was available for the nurses on duty to measure and administer medications. If this were done religiously, no baths, no bed pans or any other nursing service could be available for our patients. By routinization of vitamin and penicillin orders, by simplification of charting of medications and by relieving the head nurses of their task as ward telephone operators, considerable improvement in patient care resulted.

Resume of Accomplishments and Failures of the Surgical Committee between July 25, 1945 and November 24, 1945.

The meetings were continued with considerable interest and enthusiasm on the part of all members of the group. Problems affecting patient care, involving physicians, nurses, aids, orderlies, medical students, the hospital administration, central surgical supply, other hospital departments such as pediatrics and medicine, the pharmacy, admissions, record room, social service, the laboratories, housekeeping and others were discussed. Representatives of the above auxiliary groups were invited to attend the meetings as needed. Gradually, however, discouragement and reduced interest dominated the organization as we found our only accomplishments were related to simple changes in routines, but that the majority of the larger issues related to shortages of personnel, equipment and inadequacies in hospital facilities continued unresolved.

On Nov. 24, 1945, enveloped by an atmosphere of frustration, the committee reviewed its activities for the benefit of the hospital administration, recording

accomplishments and failures as well as other new problems particularly related to the surgical supply system. A verbatim copy of the minutes of that meeting follows:

Surgery Committee Meeting

Time of Meeting

Saturday, Nov. 24, 1945, 11:00 A.M. to 12:45 P.M.

Attendance

All representatives, Miss Densford, Mr. Amberg

The meeting was called to order by the chairman, Miss Love.

Purpose of the Meeting

The purpose of this meeting is to review with Miss Densford and Mr. Amberg the accomplishments of the surgery committee.

Accomplishments of the Committee

1. Time has been saved by establishing a simpler routine for the oral medications.
2. Time has been saved in the technique of administering penicillin and by discarding the penicillin sheets.
3. Paraoral medications are being charted in the medication column only.
4. Fluid rounds are made by the physicians alone.
5. Operative permits are being obtained upon admission of surgical patients.
6. Incoming calls to the stations had been reduced, partly as a result of the new p-a system.
7. New postoperative routine sheets have been written.
8. Orientation of the new surgical clerks has been done by Dr. Kolouch.
9. Rounds for student nurses are being made by the physicians.
10. Smaller and more efficient armboards are on each station (but are not being used by all the physicians).
11. There was a reduction of the number of syringes used for drawing blood and thus time has been saved in cleaning syringes.
12. One standard less expensive anti-

septic has been established.

13. Standard equipment has been decided upon for the dressing carriages.
14. A chart arrangement has been decided upon and the charts were neater.
15. Trays for venesection, lumbar block, paracentesis, and thoracentesis has been planned and standard equipment on all the surgical floors.

Non-Accomplishments of the Committee

1. There are still not enough nurses to carry out effectual nursing care.
2. Clerks are not coming to weigh patients.
3. Clerks are not meeting their instructors in the staff room.
4. Interns are not calling admissions to inquire about patients admitted on their services.
5. Recovery room plans have been discarded.
6. There are no ward secretaries.
7. There is no improvement in the wheelchair and stretcher situation.
8. We are still confronted with the orderly problem, primarily because there is not an adequate number of orderlies.
9. We still do not have new dressing carts.
10. There is still no dressing room for clerks.
11. Patients' arms are not being shaved in preparation for I.V. fluids.
12. An automatic buzzer and telephone has not been installed at the main entrance.
13. All gloves are not being put up and sterilized in one central place.

As a result of this report the following problems have been discussed:

- a. That we should have wheelchair and stretcher center. 1st floor Todd Hall was suggested.
- b. That we are very much in need of orderlies. Making the job more attractive for students was discussed but we have been informed that students preferred work in which they can study on the job.
- c. That our main problem dealt with surgical supplies and their preparation. The problems are:

Sterile Trays

1. Trays are not available from the S.S.R. when needed on the stations. Four new trays have recently been prepared for each surgical station for this reason. It means a duplication and reduplication of equipment. Equipment is of no value if it cannot be obtained when needed.

Cleaning of Equipment

2. Equipment cannot be returned to S.S.R. after 2:30 because there is no one to wash it and store it. The equipment must be left on the stations, usually in the corridors because of lack of storage space on the stations. In this way equipment is not put back into service until sometime the next day. This requires more equipment. The surgical stations need 24 hour service from a centrally located S.S.R. Much borrowing is done because of the lack of this service.
3. Work in the S.S.R. would be simplified if towels, abd. pads, fluffs, etc. could be placed in enamel containers. Preparation would be less time consuming and more economical. As it is a pack of fluffs is opened and perhaps only one or two used. The rest must be rewrapped and re-sterilized.
4. The labeling of supplies such as needle trays, funnelts, etc. is not adequate. We need an adequate identifying system.
5. The breakage of funnels in autoclave is astounding because of improper wrapping. We need a metal protector in which to wrap them.
6. Needles and syringes should be prepared for use in the S.S.R. The surgical stations have four treatment room aides doing this act at odd intervals. This could be done much more adequately and sufficiently if one or two aides were assigned to this and take care of all needles and syringes for the house. Mrs. Brown states that she has neither the space nor the help to do this.
7. Many times it is impossible to get drugs or fluids from the drug room because it is closed and there is no one available to take care of the

situation. Have had difficulty getting penicillin. Find one patient's drug has to be used because another patient's dose was increased. Can't get next day's supply because this usually happens over the weekend and the drug room is too busy to send up penicillin when needed.

8. Urology equipment should be prepared in a central supply room because this equipment is used by other departments. The aide who does this work is very irregular and is incapable of putting up equipment enough for the urology department let alone the entire hospital.
9. Mrs. Brown has difficulty with stations in getting supplies back to S.S.R. She wished to have nasal suction sets numbered so she can keep track of them. This has been difficult for Rx nurses because of the tremendous breakage of bottles. Sets have been broken in order to make one complete set. Bottles are not to be returned until all bottles are accounted for. In this way sets accumulate on the stations where there is not storage space.

Oxygen Tents

10. Oxygen tents are not quickly available because of the poor location of the S.S.R. Oxygen tents should be returned to S.S.R. when discontinued and cleaned there. Mrs. Brown does not have the help to do this. As it is they must remain on the station until some one has time to clean it. This time may be great because of inadequate aide help on the stations.
11. Mrs. Brown states equipment such as side boards, cradles, etc. are not being returned to S.S.R. promptly. The stations problem is in getting the equipment because of inadequate orderly service. When they get equipment they tend to keep it rather than wait hours for an orderly to get around to bring it and meanwhile one or two patients have fallen out of bed. We feel all this equipment should be centrally located and checked in and out to stations so that it can be collected and returned to central supply room.
12. Mrs. Brown feels that the stations are not careful in recording the

amount of oxygen used either by oxygen tent or oxygen mask. There is difficulty in teaching all students who come and go - the need for this record although we all recognize its necessity.

13. Many fluffs, and pads are used in some Rx rooms for which many outpatients are not charged.
14. The operating rooms have much infrequently used equipment which the stations are not permitted to borrow. This equipment is duplicated on the stations whereas if it were stored in a central supply room, it would be available to all and at less expense to the institution.

The actual progress of the committee to date has been discussed and discouragement was expressed by many of the members when they considered the actual improvements that have been brought about as a result of the committee action. Some actual improvements on the stations such as simplifying routine medications, standardizing trays, and changing some procedures have been helpful and time saving. However, most of the larger plans involving more than the actual routine on the surgical divisions, have not matured. It was felt that, at present, the value of the committee lay in the fact that the problems on the stations were being discussed by the group which was the most affected by them and that eventually these discussions might stimulate the interest of those who had the power and authority to solve them. It was concluded that our two major problems are lack of space and lack of funds.

The chairman asked for discussion.

Mr. Amberg's comments

1. Expressed appreciation for the works of the committee and hoped that it would continue to function.
2. States that there is to be a more complete central supply service in the Mayo Memorial Building and that until the building is completed there will be no changes in the present system of handling surgical supplies.
3. States that these will be a distribution center for wheelchairs, litters,

shock frames, standards, etc. in the new building with personnel to adequately service the stations.

4. States that there is no saturation point to the number of aides we could employ. If wards' secretaries were employed, the salary would be taken from the nursing budget (which is already very meager).
5. Gave an explanation as to why no more money was allotted to the Nursing budget.
6. Gave permission to design new dressing carts; two for station 21, one for each of the other surgical stations.
7. Suggested that we design a new urology cart.
8. Acquiesced to having all gloves processed in one central place. Turned problems over to Mrs. Lucier.
9. Commented that no decision could be made regarding coverage of drug room on holidays and weekends without Miss Bruce's presence.
10. States that we have too many head nurses and assistant head nurses and that in many hospitals one head nurse administers a 60 bed ward. *See footnote.
11. Stated he would check to see why our new labelling system was not effective.
12. Stated that the hiring of orderlies comes under jurisdiction of the Nursing office.
13. Suggested that perhaps we needed someone from the outside to come in to do a job analysis.

*Footnote: American Hospital Association and National League of Nursing Education, "Administrative Cost Analysis for Nursing Service and Nursing Education", page 72 states, "In the median hospital one head nurse is provided for -----every 19 surgical patients."

Mrs. Lucier's comments

1. Aide salaries have been paid from nursing budget. If we have aides we'll have fewer nurses.
2. No more funds available to pay for staff nursing positions.
3. Feels that rotation system cannot be changed.

Miss Densford's comments

1. Should follow up Mr. Amberg's suggestion to have a job analysis done.
2. Explained rotation of student nurses. They are prepared by planned experience for larger community service as graduate nurses. Student nurses can spend only specified time on surgery therefore the need for graduate staff nurses to carry the tremendous nursing load on our surgical divisions.
3. Explained that the admission requirements of the School of Nursing are the same as those for any professional school.
4. Expressed appreciation for the excellent accomplishments of the very young student nurses during the war.
5. Expressed her feeling that committees such as this accomplish much by coordinated effort.
6. Regarding young students initial experience, expressed opinion that there is a possibility of assigning young students to other services such as obstetrics. This possibility has been considered by the faculty of the School of Nursing.
7. Expressed feeling that committee study station 21.

The chairman expressed thanks to our visitors for attending and contributing to this meeting.

Plans for the next meeting, Saturday, December 1, were made.

The meeting was adjourned.

Respectfully submitted,
Agnes Love.

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Resume of Accomplishments and Failures of the Surgical Committee since Nov. 24, 1945.

At the suggestion of Miss Densford the then disturbing situation on Station 21 was analyzed by the committee on December 1, 1945. The results of this meeting are quoted in toto:

Surgical Committee MeetingTime of meeting

Saturday, December 1, 1945, 11:00 A.M.-
12 N.

The meeting was called to order by the chairman. The minutes of the last meeting were read and approved.

Discussion

At Miss Densford's suggestion, the committee considered the problems involved in the administration of station 21.

Problems on Station 21Physical Facilities

1. Inadequate kitchen for this ward. Refrigeration space insufficient. Need for two people to service kitchen.
2. Inadequate cupboard space: For tongue blades, kleenex, incontinence pads, rectal tray, etc. in large wards. For stationery supplies. For sterile supplies and other equipment in treatment room. For urine hottles, hangers, light cradles, etc.
3. Inadequate linen storage space.
4. Inadequate space and table for charting.
5. Inadequate service room space and facilities.
6. Need for treatment rooms with adjoining examining room for privacy.
7. Need two adequate service rooms: One on each end of ward. The larger of the two existing ones is not large enough.
8. No storage space for litters, wheelchairs, cradles, shockframes, standards.

Ventilation and Lighting

The north rooms are depressing, 212, 210, 208.

Supplies - Equipment

Medical supplies lacking:
Blood pressure cuffs
Sphygmomanometers
Mueller suction.

Service rooms

Equipment old
Not painted
Bedpan sterilizer not repaired
Hopper does not flush adequately
Linen hamper inadequate
Garbage can inadequate.

Other equipment lacking

Litters
Wheelchairs
Shock frames
Standards
Foot stools
Beds - many different styles
Improper type bedside tables
Small sterilizer for hot packs.

Drugs

Indefinite fluid supply
Difficulty in getting medications
Penicillin, etc. especially over weekend.

Care of Patients

Care of postoperative patients
Insufficient equipment (see above)
Up patients sit with anesthetized patients when there aren't sufficient nurses.
Up patients serve food trays and pick them up, run errands.
Necessity of placing students on night duty before having recent day experience on the station.
Senior students are not returned to the station.

Scheduling of Operations

Uneven distribution of operations during week.
As many as 10-12 on Tuesdays and Thursdays. Very few on Monday, Wednesday, and Friday,

Services represented on Station 21

Patients are admitted on eight (8) different services on Station 21.

Neuro-surgery and orthopedics operate M. W. Sat.

General: (Red operate T.Thurs.F.
(Blue
(Yellow
(White
(Plastic

Purple service transfers patients to

other stations postoperatively. Young students are not prepared to give postoperative care to all these various types of surgical patients. Requires great deal of supervision.

21 lacks nursing service to care for neurosurgical patients, especially since their recovery depends so much on nursing care.

Physicians

Rounds

1. There is no definite time for rounds. Each of eight services make separate rounds at different times during day. Suggest specific time.

Orders

2. Verbal orders are given. All orders should be written in detail except in extreme emergency. Date and time.

Monopoly

3. One service or one doctor should not monopolize nurse's time.

Routine

4. Senior and junior fellows write separate and contradictory orders. Should have understanding since it is difficult for nurse to interpret.

Admissions

5. Patients are admitted and do not see intern or staff doctor for many hours.

Responsibilities

6. Delegation of responsibilities not well defined. Need clarification as to who is to be called to see patients. Difficult to locate any one at times.

Minor Surgery

7. Staff is not informed as to hospital policies. Interns wish to do minor surgical procedures on station where there is neither adequate staffing or sufficient supplies.

Fluids

8. Intravenous fluids are often started late in day and they run all night.

Service

9. On a station inadequately staffed it is not possible except in an emergency to have instantaneous service. Head nurse has planned for normal activities which cannot be overridden by each fellow on each service.

Nurses

Need for stable, competent graduate staff.

Aides and Orderlies

1. Need for adequate instruction.
2. Need for more of these workers.

Housekeeping

1. Rooms on 40 are cleaned when some private patients are admitted. Rooms and wards on 21 are seriously neglected. Patients complain about condition of rooms and wards.
2. No one specially assigned to clean rooms on 21.
3. Service room
Room is never cleaned
Ventilation is poor.

Nurse Student

Too many demands on young nurse, because of insufficient help she is unable to practice as taught.

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The problems on Station 21 were solved in part by dividing it into two wards. A partial reduplication of personnel, incomplete reduplication of equipment, the sacrifice of a two-bed ward for a yet uncompleted treatment room and the division of the eight surgical services between the wards has considerably improved patient care. However, personnel and equipment shortages continue to create problems on these as well as other surgical stations.

Although meeting less frequently since then, the surgical committee has accomplished the following changes in minor organizational routines:

1. Improved briefing of the telephone operators and interns in regard to emergency calls.

2. Recording of fluid intakes and outputs on the basis of 24 hours from midnight to midnight.
 3. Male patients to be clean shaven for benefit of the anesthetists.
 4. New suction apparatus developed for Main Operating Room demonstrated to group by Mr. Phelan.
 5. Standardization of catheters and technic of their care on all surgical stations.
 6. Development of printed routines for special nurses caring for gastro-intestinal and neurosurgical patients.
 7. Addition of "ambulatory" and "not ambulatory" to the postoperative order sheets.
 8. Suggested that basic fluids be ordered in evening for next day to enable treatment room nurses to set up fluids early.
 9. Orderly teaching program suggested and recently invoked.
 10. Enforcement of policy of interns and fellows signing prescription blanks and filling in of laboratory requests.
 11. Physicians admonished to index orders and to write orders for laboratory work in order book.
 12. Enforcement of main operating room technic related to masking and covering of heads of all individuals.
 13. Photofluorogram technic discussed.
 14. A new refrigeration bag for ice anesthesia was demonstrated to the group.
 15. Improvements in main operating room instruction of medical clerks suggested.
 16. Simplified colostomy care.
 17. Orthopedic patients to be moved to Main Operating Room in their beds.
 - Required shortening of traction rods by engineers.
 18. Agreed that all patients with nasal tubes have only rectal temperatures taken and patients with combined abdomino-perineal resections of recto-sigmoid have oral temperatures.
 19. Operative schedules to be distributed to all surgical stations.
 20. All postoperative patients were to stand to be weighed unless otherwise ordered.
 21. Novocain to be injected with penicillin.
 22. Convalescent instructions for different types of surgical patients developed.
 23. Improved mimeographed admission, preoperative and postoperative order blanks developed.
- Due to a more practical selection of surgical problems with a contraction of our viewpoint the surgical committee's failures have decreased. Among its recent failures are the following:
1. A plan to increase staff nurses for giving better postoperative care to reduce cost of special nurses for the patients was rejected.
 2. Postoperative recovery ward was first discussed by the committee and later by a special group involving the surgical staff, the hospital administration and the nursing staff. Present lack of adequate physical facilities and nursing staff shortages preclude development of this ward.
 3. Failed to improve technic for weighing postoperative patients.
 4. Inable to secure permission from administration to allow nurses to start intravenous fluids.
 5. Unable to date to correlate hospital admissions with operating

room schedule.

6. Routine bleeding and clotting times and platelet counts not instituted.
7. Nursing shortage still hampers optimal ward care.
8. Proposed scientific job study of nursing service of University Hospital suggested, as yet not started.

Conclusions

The modern complexities of surgery have developed very rapidly with little objective thought being directed by the surgeons toward the impact of their technics on the hospital organization, personnel and facilities. Likewise, hospital administration and nursing are only slowly adjusting to the new needs of surgery. This situation has manifested itself in a chaotic disorganization of purposes on the part of the three involved groups leading to mutual dissatisfactions, bad tempers, frustrations, anxieties and inefficiencies. Fortunately, in spite of all of this, patient care progresses rather favorably. On the other hand not infrequent patient dissatisfaction and discomfort, as well as a certain morbidity and mortality can be attributed to hospital confusion.

The problem involved is one of hospital sociology and I believe can only be solved by frank revelation of the difficulties at hand. Only when the executive level of the hospital organization is cognizant of the nature of the manifold ramifications of the interminable problems involved in current surgical care of patients, can effective improvements in the situation be introduced.

The surgical committee, consisting of representatives of hospital society who are immediately acquainted with these practical difficulties related to patient care, is a means for proximate investigation and a source of objective information concerning hospital deficiencies. The committee's limitations are obvious. It can effect only minor changes in routines. On the other hand, insofar as major hospital problems are concerned, its functions in an advisory capacity for the

benefit of both the hospital and departmental administrators.

The investigations of the group have led to numerous minor improvements in the integration of hospital segments which resulted in an improvement in patient care. Many of the major obstacles to further progress await the expansion of both our physical facilities and operating budget.

The vast reduction in the number of nurses undergoing training and the local emphasis on the commendable program of the training of nurse executives poses a problem. We must in the future develop a new type of nurse concerned with the menial tasks associated with patient care. Perhaps nurse's aids under the supervision of a highly trained nurse could help in the solution of this problem.

Another important item stemming from this group's study is the complete lack of standardization of the personnel and physical facilities for surgical care in an approved hospital. With the increasing demands of surgery on its environment, if we are to do our work successfully, certain minimal standards of ward and operating room organization must be developed.

The meagre studies by the committee suggest that a more scientific objective investigation of the requirements of surgery in the hospital organization be made. This is particularly important if we are to avoid expanding the current confusion as surgery progresses and the hospital encompasses the proposed Mayo Memorial.

The function of the surgery committee as a means for discussion of problems and expression of constructive ideas by a large group of unrepresented hospital personnel concerned with the immediate care of the surgical patients, has been its greatest contribution to the welfare of these patients. This has created in the medical and nursing staff a sense of active participation in the surgical service with the development of effective rapport. An esprit de corps has developed which increasingly simplifies the

solution of mutual problems.

A "Surgical Utopia" can be our goal. It cannot be accomplished without knowledge of the factors blocking its evolu-

tion. It is hoped that the committee will continue its frank investigative efforts, since only through recognition of our defects can we progressively improve and move forward.

III. GOSSIP

Ephraim Shorr, Associate Professor of Medicine, Cornell University Medical College, attending physician New York Hospital, will present the second annual Duluth Clinic Lectures, May 14, 15, 16, and 17 (see enclosed calendar of events). When the Duluth group made this gift to the University, they felt that there was a distinct advantage in having the visitor stay for several days. Everyone agrees. Be sure to hear Doctor Shorr as he has a great deal to offer... ..Neurosurgeon William T. Peyton's daughter Virginia gave birth to his first grandchild, a daughter, May 4. His staff will be pleased to hear of the young lady's arrival as the boss has been preoccupied of late. By general consent, the title of father of the year goes to Curtis J. Lund, who has waited many moons for his son to arrive. Both he and his charming wife continue to receive congratulations. Another addition to the father's list is pathologist Bob Hebbel who acted as baby sitter the other evening, while his wife, the former Beulah Agre, attended the medical technology banquet. Health department officials report twice as many babies born in Minneapolis in 1946 as in any previous year. Additions were largely in the homes of former G.I.'s who came back to assist the old regulars, Charley Rea, Richard Varco, Fred Kolouch and myself...At the annual dinner of the medical techs, the girls scored a hit with their skits. Students have a clever way of taking off their elders and associates, and while it doesn't change things much, it does help to create better feeling. I felt ancient when they announced the winner of the William A O'Brien scholarship award which the students have established in recognition of my connection with the course in its earlier days. Dick Varco gave a fascinating description of the development of cardiac surgery. His wife was amazed at her husband's platform manner and well she might be. It was good! He developed the thesis that only through animal experimentation was it possible for them to operate on children with congenital heart disease. The number of children whose lives were saved by not having to learn on them runs into a considerable number. On May Day, I helped to pay tribute to the Boarding

Mothers and Fathers in St. Paul. These are the good people who take in children and give them a home. At the last session of the Legislature, this method was selected as the ideal way and it was recommended that the building of orphanages could be stopped. Some young looking couples who had been doing this over 25 years were given special mention. They are paid a small fee, but must give up the children when requested. They are objective parents which everyone should try to be. Social workers are accused of putting children in homes rather than placing them for adoption. It is an easier way out. Most amazing was the report which indicates that more parents now come to give up their own children than ever before. This is the sign of the times which is not good....On May 6 to speak at the Rural Church Institute at the University Farm. Ministers and priests listened to discussions on rural life and its problems. There were sharp questions at the end as to the medical profession's attitude on the establishment of public health services, prepayment plans, cooperatives, fees, etc. Most groups hold our profession in awe, resent our aloofness, but know they must secure our services if they wish their programs to succeed. I take quite a heating on the streetcar in the morning on the way to work on the wooden attitude which most doctors display toward their patients. My friends insist that we are interested in things such as tumors, sores, lumps, and infections, but we are not interested in the people who have them. The psychologists point out that studies actually prove the majority of physicians are not interested in people (this includes most of the students we are selecting for medicine). He wonders if in the future there will develop two types of doctors--those who are interested in things and those interested in people. Dr. Edith Potter whose new book on Rh factor is attracting favorable attention will be a University visitor May 15-16, to teach in our Rh Conference for medical technologists...Next Monday, May 12, is Hospital Day and all over the land the good points of hospitals will be stressed, but everything is not right. Nursing is floundering badly to mention just one disturbing element.....