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ABSTRACT

The core surgical clerkship is described as the most intensive clinical experience during the student's first three years, and one which is extremely difficult to examine systematically. The research strategy, methodologies, data collected, and major findings of a study of such clerkships are reported. The data from more than 1000 hours of observation and self-reports of 77 medical students provided a substantial base of descriptive information about the commonality and diversity of experiences. No judgment as to the quality of the experiences has been undertaken; rather, questions about students' activities have developed that have begun a process of examination to determine if such experiences are consistent or inconsistent with good educational planning. Major concerns are outlined regarding equitable distribution of time, student-patient contact without direct supervision, purposes of conferences, roles and responsibilities of faculty toward the medical clerk, procedures that all students should learn, and instructional possibilities in the operating room. It is concluded that these studies are a beginning of a systematic examination to determine whether learning under the circumstances of the core clerkship can be optimized.

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A Preliminary Report

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Studies of Medical Students' Activities on Core Surgical Clerkships:  
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The clerkship as an educational experience has become an established part of the medical school curriculum. It is generally the most intensive clinical experience during the students' first three years and directly follows the basic science core. Although it has critical importance to the development of the student as a physician, it is one of the most difficult segments of the curriculum to examine systematically. A number of significant reasons exists for this situation including the variability of hospital services; diversity of attending faculty and house staff as to their roles, activities and interests; the patient census; the lack of a fund of information common to the first two years of medical education; and the problems of clinical evaluation of students. These factors are compounded by, in many instances, the "institutionalization" of the clerkship experience. That is, many departments have become so accustomed to having the program that faculty often have great difficulty stepping back to determine whether educational goals are clear and logical, if activities are indeed meaningful experiences for students, and what, if any, changes are necessary. Many times specific goals and objectives are not described or even available, making student and faculty expectations, roles, and activities even more variable and learning, potentially, more episodic.

For these reasons, the Core Clerkship Coordinator, Dean for Medical Education, and the Division of Research in Medical Education undertook a series of three studies to simply define "what the students were doing on the clerkships." This paper describes the research strategy, the methodologies developed and used, the data collected, and major findings of the study.

## STRATEGY

The clerkship experience at Case Western Reserve University School of Medicine has been in a process of evolution for over twenty years. The development of the formal model for the curriculum in the early 1950's included the teaching by subject committee and introduction of three phases. (Ham, 1962)

Phase 1 -- Normal Biology of Man

Phase 2 -- Pathologic Physiology and Principles of Medicine

Phase 3 -- Clinical Medicine and Patient Care

In 1964, the Committee on Clinical Teaching reported on the status of undergraduate education to the Committee on Medical Education (CME). The CME then made recommended changes in the third and fourth years which included completion of the basic clinical experience by the end of the third year, and the fourth year as an elective program in advanced clinical science with increased patient responsibility. In 1967, efforts were undertaken to describe specific educational goals and objectives for the introductory and core clerkship using the cognitive, affective, and psychomotor domains. Although significant efforts were made in these directions, not all clerkships were so described and practices continued as previously.

Beginning in the late sixties, serious efforts to increase enrollment were undertaken and class size increased nearly sixty percent over three years. Of necessity, additional hospitals and services were added for clerkships with most being unfamiliar with such educational missions and responsibilities. This created other problems in addition to those previously listed. Student grievances included poor definition of the clerkship experience, lack of appropriate supervision, too much scut-work, and a general lack of confidence in evaluation approaches.

During 1973, a strategy began to evolve concerning the examination of the clerkships. Built from the "discrepancy model," questions concerning the possible lack of congruence between intended and actual experiences began to emerge. Such questions as "what are the students doing?" "how much time do they read?" "how much patient contact are they having?" evolved. Quantification, and not the making of value judgements about the quality of the experiences was the research thrust.

In January 1974, a pilot study of approximately 400 hours of observation of students' activities on the pediatric, medicine, surgery, obstetrics/gynecology, and psychiatry clerkships was completed (Figure 1). The purposes were pre-testing and refinement of forms, data collection procedures, and the development of the necessary logistical supports. The form used (Figure 2) had been carefully evolved with the assistance of several fourth-year students and approved by the clinical faculty. Following the study, the instrument was revised to include students' level of participation in the activity (performing, assisting, observing, and/or discussing) and those persons with whom they were working (Figure 3). These changes were the product of both research interests and the demonstrated capabilities of the observers to validly collect such information.

#### Study 1: Structured Observations of Medical Students' Activities on the Core Surgical Clerkship

Based upon the results of the pilot study, clerkship directors in the Department of Surgery were approached about pursuing an intensive descriptive study of their services. Since this Department had developed an extensive definition of goals and objectives (DePalma 1974) which were being followed at two of the four hospitals, it was felt an analysis of students' activities might be useful to faculty. The intent was not data collection for change applications, but rather description of current experiences.

The purposes of the planned study were to:

(A) observe and record students' activities on the ward and in the operating room;

(B) define the levels of responsibility they exercised in patient contact and with whom (faculty, house staff, nurses, others);

(C) the quantity and varieties of verbal interactions they had in the operating room.

#### Data Collection Procedures

Observers: Thirteen undergraduate pre-medical students were employed as observers and given an eight-hour training session which included four hours of actual observation of medical students, recording of information, and familiarization with all sites, faculty, and procedures. The study was conducted during intersession, January 1975, when the observers were free from academic responsibilities and could follow their assigned surgery schedules.

Sites: The four affiliated training sites participating in this study were a large metropolitan hospital--Site 1, a university hospital--Site 2, a veterans hospital--Site 3, and a community hospital--Site 4.

#### Instrumentation

The forms previously described (Figure 3) were used in this study and a second section was added to include operating room verbal interactions (Figure 4). The observers were required to indicate in fifteen minute units the primary activity which had occurred for the entire period of observation (generally eight hours). In the event they could not make such a determination, they were encouraged to ask their medical student for assistance.

#### Scheduling the observations

The schedule for data collection was developed with the following parameters:

(a) observations would be done during the working day (I = 7 a.m. to 3 p.m.) and evening (II = 3 p.m. to 11 p.m.), for the period January 6 through 31, inclusive.

(b) a 20 percent minimum of the possible student work days would be observed . For example, a site with 4 students would have 80 possible observation periods (4 x 20 days without weekends). Twenty percent of this would be 16 possible observations. As such, the schedule for the four sites was:

Site	Planned Observations	Saturday/Sunday
1	50	Yes
2	53	Yes
3	25	No
4	27	No

The 20 percent minimum was used as a guideline with deviations being made to sample subrotations at different sites a specific number of times. For example, one director wanted one subrotation seen three times at night. This was done but resulted in additional observations to the pre-determined number.

(c) clerkship directors would determine those subrotations to be sampled and the number of desired observations for each (i.e., neurosurgery, ENT, general surgery).

(d) assignments for observers at each site would be random by subrotation and eight hour units throughout the thirty day period. Medical students on the rotation at the assigned time were also randomly selected from available schedules and if, for any reason, they were unavailable, the observer was given alternate names.



Final Schedules

The following table compares the planned and actual observations by subrotation and time (I or II), at each of the four sites.

SITE 1

	Gen. Surg.		Neuro		ER		Ortho		Ped Burns		Clinic		Total
	I	II	I	II	I	II	I	II	I	II	I	II	
PLANNED	8	3	5	5	5	7	2	3	1	0	0	0	50
ACTUAL	10	2	5	2	5	8	1	1	1	1	1	0	44

SITE 2

	Neuro		Anesth.		Plastic		Ortho		ER		Ped Burns		G.S.		Total
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	
PLANNED	2	3	6	0	0	0	0	0	1	4	4	1	15	17	53
ACTUAL	6	1	3	0	1	0	1	0	2	3	2	0	22	5	46

SITE 3

	Major Surg.		Minor Surg.		Total
	I	II	I	II	
PLANNED	11	5	6	3	25
ACTUAL	11	5	5	4	25

SITE 4

	Ortho		ER		ENT		CV-Thor		Gen. Surg.		Total
	I	II	I	II	I	II	I	II	I	II	
PLANNED	4	2	0	0	2	2	5	1	7	4	27
ACTUAL	4	0	1	1	2	0	4	1	6	7	26



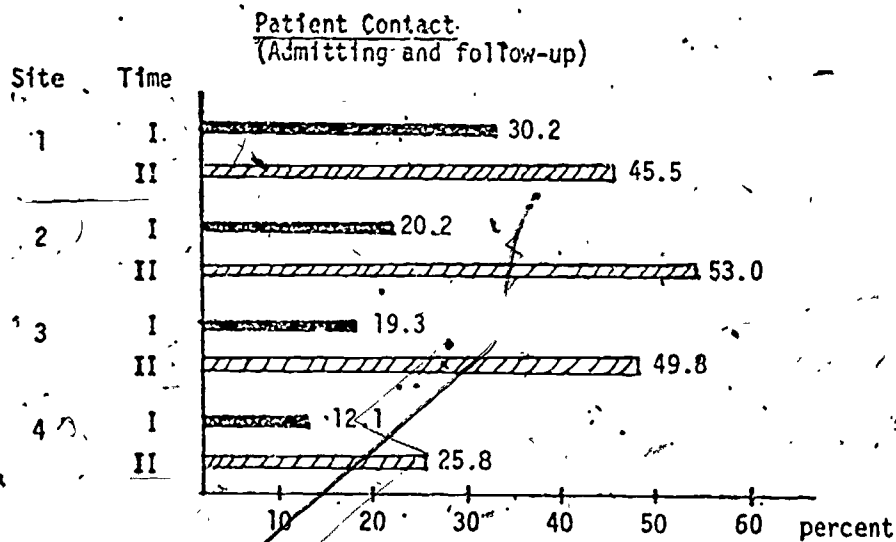
Findings

The data derived from the 1000 hours of observation are presented in selected form since the amount of information is massive and more pertinent (as was intended) for hospital service application.

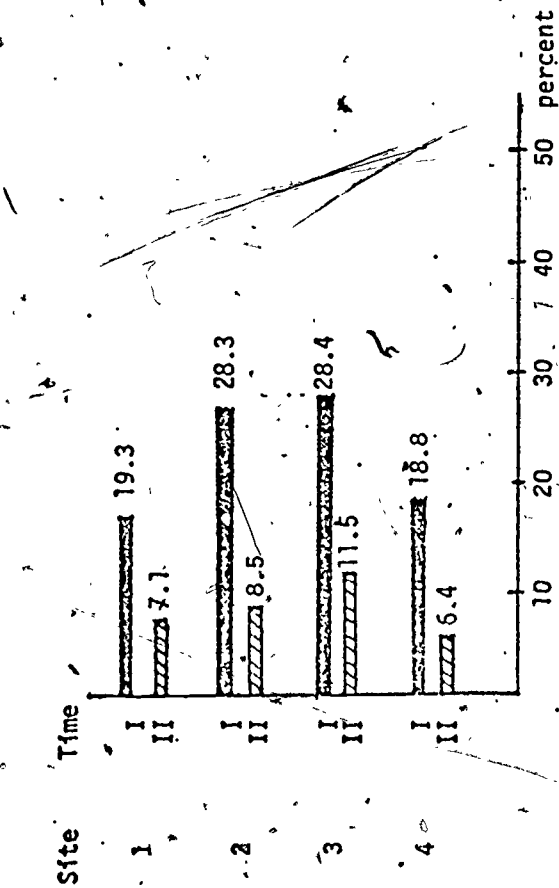
"What are the students doing in specific types of in-patient activities?"

The tables in Appendix A show the number of hours and percent time, per activity for "morning", "evening", and "total" for students observed across the four training sites.

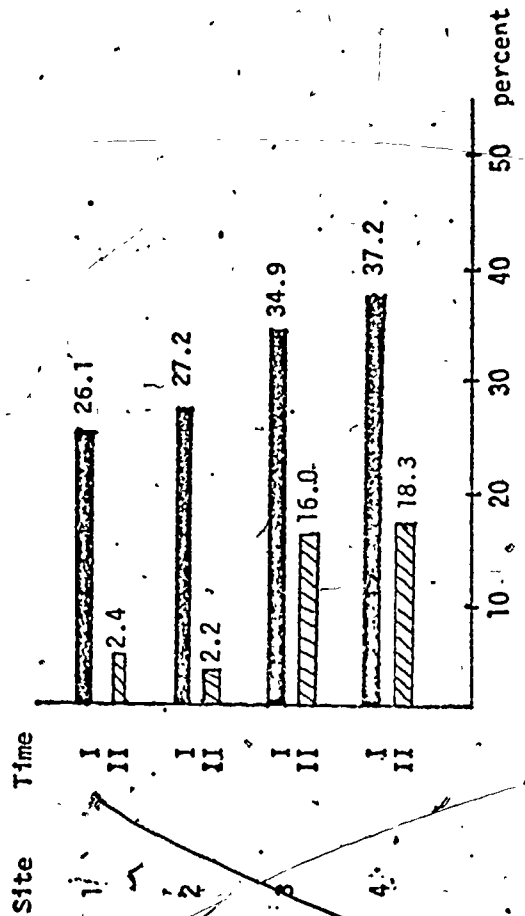
The four major categories of activities defined in the observational study were: patient contact -- scheduled group activities -- surgery -- unscheduled activities. Included in "unscheduled activities" was reading. A comparison of these major categories across the four sites is presented in the following bar graphs.



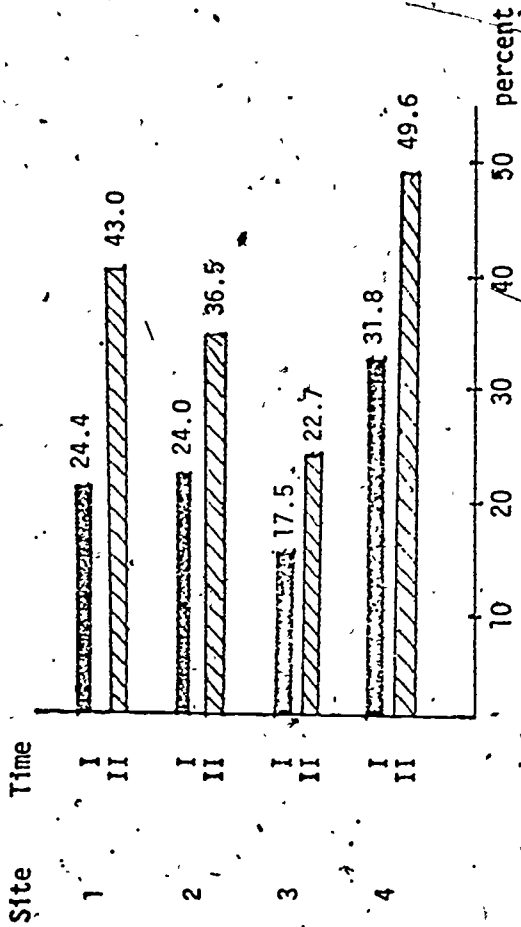
**Scheduled Group Activities**  
(Work rounds, visitant rounds, hospital conferences and student conferences)



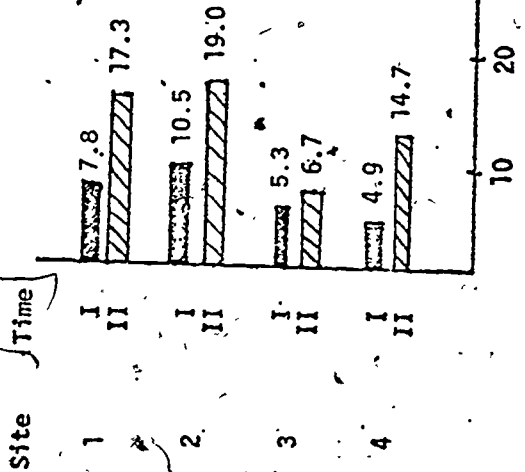
**Surgery**  
(Operating room, pre and post operative care and waiting)



**Unscheduled Activities**  
(Reading, in-transit, meals/coffee, sleeping, errands, miscellaneous)



**Reading**  
(A portion of unscheduled activities)



Students' activities differed in "patient contact" from the morning to evening shifts with the greater percentage at night due to fewer "scheduled" and "surgical" pursuits, and hospital admission procedures. The pattern prevailed across all sites.

"Scheduled activities" differed on the morning rotations because Sites 2 and 3 allotted more time to "work rounds" and "student conferences."

"Visitant rounds" were fairly constant across sites as were "hospital conferences," with Site 1 having fewer student attendees. Overall, similar patterns prevailed for evening activities across sites with services differing in visitant rounds (Site 1 having the lowest of 0.2 percent) and student conferences, (Site 3 having 6.7 percent, and the others of 2 or less percent).

"Surgery activities" tended to occur primarily during the morning rotations as would be expected. Evening surgery did not reach the level at Sites 1 and 2 as did Sites 3 and 4. However, at the latter two sites, the surgery was primarily done, not by faculty, but by residents; and students on these rotations were encouraged to assist them. (Upon questioning the students stated they enjoyed both the experience and the responsibility assumed). The number of students on these clerkships was 4 (as compared with 10 and 11 at Sites 1 and 2), and this may have contributed to closer relationships.

The evening hours were without the structure common to the morning routines. Therefore, more time was spent reading, going to x-ray or labs (in-transit), having coffee/meals or just sitting around talking or doing personal errands (a trip to the bank or to the library). Unscheduled activities prevailed, with more patient-admitting (all sites) and patient follow-up (Sites 2 and 3) than during the day. This generally occurred on the general surgery and emergency room subrotations (see tables in Appendix B).

"In 'patient-contact,' what levels of responsibility are exercised and with whom (faculty, house staff, nurses, others?)"

The summary data describe morning and evening rotations for each site and are presented in tabular form in Appendix C.

It was found that at least 60 percent of students' "patient-contact" was spent performing the admission/follow-up activities (ranging from 64 percent at Site 2 to 91 percent at Site 1). Activities in "assistance" and "observing" were constant except for Site 2 which had a higher percentage in these categories. This was possible due to the high number of clerks (10) on this service and their having greater opportunity to "watch" house staff rather than "perform." Site 3 had a higher incidence of "performance" since there are no interns at this hospital and students fill this role quite readily.

Efforts were made to determine with whom the students interacted during the "patient-contact" activities. The next table presents this information. The vast majority of the time was spent with house staff; with house officers and faculty accounting for 100 percent of all the supervision, discussion, etc. with students. At no time was any other person (i.e., nurse) observed in this capacity.

<u>Hours of Contact With:</u>	<u>Patient Contact</u>			
	<u>SITES</u>			
	1	2	3	4
Faculty	11.00	11.75	1.50	4.00
House Officers	59.25	58.50	18.00	11.25
Nurses	0	0	0	0
Others	0	0	0	0
Student Alone	18.75	45.50	36.00	15.75
<b>TOTAL HOURS</b>	<b>89.00</b>	<b>115.75</b>	<b>55.50</b>	<b>31.00</b>

"What quantity and varieties of verbal interactions occurred in the operating room?"

The purpose of collecting these data was to examine students interactions in the operating room. Were they included in discussions of procedures, anatomy, physiology, or were they ignored? The tables in Appendix D present the cumulative totals of all operating room interactions which were observed at the four sites. Interpretation is difficult and individual critical incidents are much more meaningful to faculty. Many variables tend to interact to make this situation of value to students. It was found that individual personalities, the patient's problem, number of persons in the room were factors that tended to make the situation rather unpredictable. In certain instances, however, consistent patterns of behavior were found, such as the surgeon who consistently failed to note the presence of the clerk. Other surgeons not only were aware of the medical student's presence, but actively engaged in a lively educationally oriented discussion to familiarize the clerk with the many facets of the surgical intervention. Depending on various factors, students also interacted with the residents, and occasionally with nurses and anesthesiologists.

## Study 2: Task Analysis of Medical Students' Activities on Core Surgical Clerkships

The second component of the surgical clerkship study was an analysis of the tasks and activities experienced by third-year medical students at the four training sites. Its objective was to describe the types of experiences and the students' level of participation in the activities.

### Instrumentation

The general surgery task inventory of 319 items, previously used in a house officer survey, served as the model for the data collection. The six clerkship directors were asked to select tasks which they would expect to be experienced by clerks during the two-month rotation on their surgical service. Within this list, high priority tasks were designated. Following final individual review of the inventory by the clerkship directors, they met as a group with the clinical coordinator and the authors to determine the final item selections. The criterion for inclusion was the appropriateness of the task for medical students at this particular phase of their educational experience, and 200 tasks and activities were identified.

A second consideration was the description of the "level of participation" of the clerks in each activity. At the group meeting, it was decided to use the following descriptive categories for the tasks: no experience; only observed; only assisted; observed and assisted; observed and performed with supervision; assisted and performed with supervision; observed, assisted and performed with supervision; performed with supervision; and performed without supervision. For another group of activities such as "attending grand rounds" and "presenting reports in conferences" the two responses were "experienced the activity" or "did not experience the activity."

The revised 200 item inventory was distributed to the clerkship directors for their critique and approval. Based upon their comments a final inventory consisting of 196 items was evolved, the content validity of which had been ascertained by the subject expert consensus--that is, the persons who were directing the educational experience.

It should be stressed that the purpose of the instrument was to describe the overall clerkship activities and not to assess individual student performance or to compare training sites. The emphasis was on providing information concerning the breadth and depth of the surgical clerkship experience without the implication that the clerks should have performed or had contact with all the tasks and activities identified.

Figure 5 and 6 present the cover letter and a sample page of the inventory. The inventory was distributed to each of the medical students who had been assigned to surgical clerkship rotations in the period December 1, 1974 to January 31, 1975. This included the one month in which the observation study was completed. The same inventory was given to the students who had served on the surgical clerkships from February 1, 1975 to March 31, 1975, and April, 1975 to May 31, 1975, and was completed during the final week of their clerkships. The students recorded their responses on optical scanning sheets and were given the option to remain anonymous, and to write suggestions for improvement of the clerkship or any other comments they could offer. The optical scanning sheets were then computer-processed to provide frequency distributions for each item. The subjective comments were transcribed and the data analyzed for each training site for each rotation.



## Student Participation

Of the 91 students assigned to the surgical clerkships for the three rotations, 77 returned completed inventories. Twenty-two were from the first rotation (32 assigned), 29 were from the second rotation (31 assigned), and 26 were from the third rotation (28 assigned). The observation study was a factor in lowering the response in the first rotation, especially at one hospital. In spite of the fact that medical students were told that they were not being evaluated, during the last week some of the clerks at Site 1 failed to complete the instrument. The number of respondents from each site for each rotation is presented in the following table.

### Task and Activity Inventory Respondents

Hospital Site	Rotation 1 12/1/75 - 1/31/75		Rotation 2 2/1/75 - 3/31/75		Rotation 3 4/1/75-5/31/75	
	Respondents Assigned		Respondents Assigned		Respondents Assigned	
1	5	12	10	11	8	8
2	9	12	10	11	10	11
3	4	4	4	4	3	4
4	4	4	5	5	5	5
TOTAL	22	32	29	31	26	28

### Findings

The diversity of the experience reported by students at each of the four training hospitals was very apparent. This was reflected in both the number of experiences and the degree of involvement. A profile was identified for each hospital site which was consistent throughout the three rotations of data collection.

It was anticipated that certain activities would be experienced by all students in all hospitals. However, the only one which was indicated by all 77 students was participation in special "student conferences." All but two persons mentioned they had conferred with peers or physicians regarding patient management. For instance, there were a few students who had not participated in teaching rounds at three of the sites; at one site two students had not engaged in work rounds; and nine students did not attend grand rounds at one site. More than a third of the clerks indicated that they had not been given opportunities to suggest topics for classes or conferences and only about half mentioned that they had presented reports in conferences. Ten percent of the clerks responded that they had not read or reviewed general medical literature during their clerkship and thirty percent indicated that they had had no experience researching the literature regarding a particular patient's problem.

Most of the items referred to specific tasks and to the level of participation in which the students engaged--from no experience to performance without supervision. There were no tasks in which every student reported performance without supervision. All but one or two clerks indicated they had performed unsupervised the ophthalmoscopic and otoscopic examinations, auscultation of heart and lung fields, and palpation of pulses. Eighty-three percent of the students reported they had obtained and recorded medical/surgical histories without supervision, with the remaining students indicating they had performed this task under supervision. One student's experience with the initial physical examination was limited to observation only; the rest of the clerks actually performed the examination, with all but eight doing this unsupervised. Five students reported they had had no experience in taking vital signs at any time in their clerkship. Four of these students had been assigned to the same training site and represented all three rotations. With one exception, the other clerks accomplished this task with no supervision.

There was reported more direct and unsupervised experiences in tasks involving physical examination and work-up, interpreting laboratory results, evaluating signs and symptoms, and patient communication and education. Three-fourths of the students reported they had answered patients' questions and informed patients of procedures without supervision. Most of them indicated experiences in reassuring patients, explaining minor surgical procedures, and instructing patients in care of their incision. However, about a third reported no experience in counseling the patient and/or the family regarding a terminal illness or counseling related to a psychomatic complaint.

Among the six broadly defined objectives for the core surgical clerkship was the acquisition of common psychomotor techniques. Diagnostic manual skills included lumbar puncture, thoracentesis, and arterial puncture; therapeutic manual skills included intravenous cut-down and cardiac resuscitation; adjuvant manual skills included nasogastric intubation and bladder catheterization. The responses to the task items related to these skills revealed that a significant proportion of the clerks at all sites had had no experience whatsoever with these skills including observation; 43 students indicated no experience with thoracentesis; 37 had no contact with an intravenous cut-down; and 27 students responded "no experience" with external cardiac massage. From two to nine students indicated no experience with venipuncture, arterial puncture, catheter insertion, bladder catheterization, nasogastric intubation, tracheal intubation and proctoscopy.

In the observation component of this investigation, it was found that operating room activities occupied from 17 percent to 27 percent of the clerks' time. However, there were many surgical procedures with which most students reported limited experiences. These included aspiration of breast cysts, hemorrhoidectomy, vagotomy, hiatus hernia repair, vein ligation, adrenalectomy, and pancreaticoduodenectomy. Specific items concerning

participation in lung, cardiac, esophageal, urologic, spinal cord, and ophthalmologic surgery for example, revealed few students had been involved in these procedures other than observing, and many indicated no experience.

### Limitations

The accuracy of the students' self-reports concerning those activities which they had experienced and at what level they had participated, is difficult to determine. In several instances, the validity of the responses was questioned, particularly concerning the performance of certain surgical procedures. For example, two students indicated they had performed laparoscopy without supervision, 10 clerks reported they had prescribed medications unsupervised, and 2 indicated they had performed aneurysmectomies under supervision.

Since these were retrospective observations and completed anonymously, checking was not possible. The critical factor was not the identification of these possible "invalid" or "inappropriate" incidents. Rather, the emphasis was on the overall profile of tasks common across the four sites. Such profiles did emerge which were consistent throughout the three clerkship rotations, as well as unique to each.

## Discussion

These studies were directed at the description of the four surgical core clerkships through the regular activities of third year students assigned to them. The intent was to collect information which would define the experience in terms of:

- What the students were doing
- When the activities were being done
- Where they took place
- And with Whom the students were interacting.

Clinical core clerkships are a dramatic change in the educational activities of the medical student. Learning quickly becomes a more personal responsibility without reliance or guidance from "cognitive tests;" it is more episodic and the product of interactions with patients, interns, and visitants; and it tends to be relatively unstructured without the core of information so readily identifiable in previous instructional situations. The "clerkship", depending upon the motivations of individual students can either be a very good, average, or very poor learning experience. However, since not all the responsibility should be the students' exclusively, what are the characteristics of a "good clerkship"? What should the medical students be expected to do and/or learn in these situations?

At the CWRU School of Medicine, the goals and objectives of the core surgery clerkship have been described and implemented to varying degrees in each of the four services. With this as a starting point, research efforts were directed toward the determination of the degree of discrepancy, if any, between what faculty thought students were doing and what was actually occurring. The rationale for this approach was to categorize questions about the purposes and merits of students' activities prior to the introduction to any "change" orientation.

Any examination of the clerkship as an educational pursuit must begin with the premise that "diversity" is commonplace. Not only do patients differ, but also hospital routines, attending faculty, interns, residents, and others. Such diversity, however, should not be equated with overwhelming disequilibrium. Students have, and will probably continue, to learn, to professionalize, and to become practitioners of medicine. The critical concern is whether there is a sufficient guidance system to facilitate the students' development toward these ends. For example, should students know what to expect on a clerkship beyond the schedule of nights on and off? What competencies are to be evolved? What services are they to render and under what circumstances? Undoubtedly, many such questions prevail across clerkships. However, since each site is unique, each must work within its idiosyncratic constraints. Students learning on a service without interns will probably have greater responsibility and learn more through experience than services with interns. Services with male and female patients will provide more learning experiences than those with only males. These characteristics are to be built upon as much as possible and to do this, data about actual activities are of value.

The data from more than a thousand hours of observation and self-reports of 77 medical students have provided a substantial base of descriptive information about the commonality and diversity of experiences across the four sites. No judgement as to the "quality" of the experiences has been undertaken as yet; rather, questions about students' activities have developed which have begun a process of examination to determine if such experiences are consistent or inconsistent with good educational planning. Among the major concerns identified thus far are the following:

\* What is an equitable distribution of time across "patient contact", "structured activities", "surgery", and "unstructured activities"? When does an area become overemphasized (greater than 30% per category)?

\* Should the students be "performing" so much in the area of "patient contact", without direct supervision? Who is available to identify (and correct) constant errors which may be occurring?

\* What are the purposes of conferences? How are topics determined for discussion? Should students be given greater roles in selection?

\* What should faculty roles and responsibilities be, relative to the medical clerk?

\* What procedures should all students learn? Are there any at all?

\* In the O. R., what are the instructional possibilities? Is it merely a passive situation or should more active roles be ascribed to clerks?

Many other questions have evolved. These studies are a beginning of a systematic examination to determine whether learning under the circumstances of the core clerkship can be optimized. At minimum, can the potential of the experience be more clearly delineated so that students can have a greater understanding of what they are to learn, how they may learn it, and those areas for which they are accountable?



SURGICAL CLERKSHIP STUDY  
SUMMARY OF MORNING OBSERVATIONS

ACTIVITY CATEGORY	A2	A hrs	A2	A hrs	A2	A hrs	A2	A hrs	A2	A hrs	A2	A hrs	A2	A hrs	A2	A hrs
I. Patient Contact																
Admitting	11.2	(23.00)	5.8	(15.25)	2.2	(2.50)	3.3	(4.00)	6.4	(4.00)	3.3	(4.00)	6.4	(4.00)	3.3	(4.00)
Follow-up	19.0	(39.25)	14.1	(30.00)	17.1	(19.50)	8.8	(10.75)	14.5	(10.75)	8.8	(10.75)	14.5	(10.75)	8.8	(10.75)
Subtotal	30.2	(62.25)	20.2	(53.25)	19.3	(22.00)	12.1	(14.75)	20.9	(14.75)	12.1	(14.75)	20.9	(14.75)	12.1	(14.75)
II. Scheduled Group Activities																
Work Rounds	7.3	(15.00)	9.0	(23.75)	9.2	(10.50)	3.3	(4.00)	7.7	(4.00)	3.3	(4.00)	7.7	(4.00)	3.3	(4.00)
Visitant Rounds	2.9	(6.00)	2.9	(7.75)	1.8	(2.00)	1.6	(2.00)	2.6	(2.00)	1.6	(2.00)	2.6	(2.00)	1.6	(2.00)
Hospital Rounds	1.2	(2.50)	4.9	(13.00)	4.4	(5.00)	5.5	(6.75)	3.8	(6.75)	5.5	(6.75)	3.8	(6.75)	5.5	(6.75)
Student Conferences	7.9	(16.25)	11.4	(30.00)	13.0	(14.75)	8.4	(10.75)	10.2	(10.75)	8.4	(10.75)	10.2	(10.75)	8.4	(10.75)
Subtotal	19.3	(39.75)	28.3	(74.50)	28.4	(32.25)	18.8	(23.00)	24.3	(23.00)	18.8	(23.00)	24.3	(23.00)	18.8	(23.00)
III. Surgery																
O.R.	25.5	(52.50)	24.8	(65.25)	30.3	(34.50)	34.9	(42.50)	28.1	(42.50)	34.9	(42.50)	28.1	(42.50)	34.9	(42.50)
Pre/Post-Op	0.5	(1.00)	0.3	(.75)	1.1	(1.25)	2.3	(2.75)	0.8	(2.75)	2.3	(2.75)	0.8	(2.75)	2.3	(2.75)
Waiting	0.1	(.25)	2.1	(5.50)	3.5	(4.00)	0.0	(.00)	4.2	(.00)	0.0	(.00)	4.2	(.00)	0.0	(.00)
Subtotal	26.1	(53.75)	27.2	(71.50)	34.9	(39.75)	37.2	(45.25)	30.1	(45.25)	37.2	(45.25)	30.1	(45.25)	37.2	(45.25)
IV. Unscheduled Activities																
Reading	7.8	(16.00)	10.5	(28.00)	5.3	(6.00)	4.9	(6.00)	8.0	(6.00)	4.9	(6.00)	8.0	(6.00)	4.9	(6.00)
In-Transit	2.9	(6.00)	2.8	(7.25)	1.1	(1.25)	0.8	(1.00)	2.2	(1.00)	0.8	(1.00)	2.2	(1.00)	0.8	(1.00)
Meals/Coffee	7.6	(15.75)	4.7	(12.25)	6.2	(7.00)	7.2	(8.75)	6.3	(8.75)	7.2	(8.75)	6.3	(8.75)	7.2	(8.75)
Sleeping	1.2	(2.50)	0.9	(2.25)	1.1	(1.25)	0.2	(.25)	0.9	(.25)	0.2	(.25)	0.9	(.25)	0.2	(.25)
Errands	0.7	(1.50)	1.1	(3.00)	0.9	(1.00)	0.4	(.50)	0.9	(.50)	0.4	(.50)	0.9	(.50)	0.4	(.50)
Miscellaneous	4.2	(8.75)	4.2	(11.00)	2.9	(3.25)	18.3	(22.25)	6.5	(22.25)	18.3	(22.25)	6.5	(22.25)	18.3	(22.25)
Subtotal	24.4	(50.50)	24.0	(63.75)	17.5	(19.75)	31.8	(38.75)	24.7	(38.75)	31.8	(38.75)	24.7	(38.75)	31.8	(38.75)
per Column	100.0		100.0		100.1		99.9		100.0		99.9		100.0		99.9	
hrs. Morning Observ.	64.7	(206.25)	79.6	(363.00)	62.8	(113.75)	65.9	(121.75)	69.4	(121.75)	65.9	(121.75)	69.4	(121.75)	65.9	(121.75)
total hrs. observ.	20.3		25.9		11.8		12.0		12.0		12.0		12.0		12.0	



HOURS OF RECORDED OBSERVATION PER SERVICE

	Date	Pediatrics	Psychiatry	Medicine	Surgery	OB/Gyn
	January					
I	14	11.75	10.25	12.75	11.00	10.00
II	15	12.00	9.75	11.00	9.00	12.00
	--					
III	17	10.00	10.00	11.25	10.00	5.5
IV	18	11.50	12.00	12.00	9.00	8.0
	--					
V	21	10.25	8.50	11.50	12.00	10.75
VI	22	11.75	12.00	10.50	12.00	10.00
	--					
VII	24	10.00	8.75	12.00	12.00	8.50
VIII	25	9.50	9.00	12.00	10.00	8.25
	--					
Totals		86.75	80.25	93.00	85.00	73.00

FIGURE 2

	TIME	1 HOUR	1 HOUR
ADMISSION OF THE PATIENT			
History/Physical Exam			
Procedures			
Diagnostic (lab tests)			
Therapeutic			
Preparation of the Record			
Chart review			
Phone calls			
Other sources			
Writing the record			
INDIVIDUAL PATIENT FOLLOW-UP			
Selected history/physical exam			
Procedures			
Diagnostic			
Therapeutic			
Record keeping			
Errands (performing a carrier or secretary service)			
SCHEDULED GROUP ACTIVITIES			
Work rounds (residents, interns, students)			
Visitant/attendant rounds (visitant, residents, interns, students)			
Hospital conferences (all personnel)			
Student conferences			
UNSCHEDULED GROUP ACTIVITIES			
Student with resident			
intern			
visitant			
nurse			
social service			
peers			
others			
Activities were			
work-related			
other			
ADDITIONAL ACTIVITIES			
Off-ward procedures			
Surgery			
Other special			
Reading			
In-transit (site to site)			
Meals, coffee breaks			
Sleeping			
Miscellaneous			

Observer \_\_\_\_\_

Date \_\_\_\_\_

Student Observed \_\_\_\_\_

Area Assignment \_\_\_\_\_

For individual observed-code participation in activity as:

- a - performing function
- b - assisting in function
- c - observing function

	Participation Code	# of faculty	# of house off.	# of med. stud.	Participation Code	# of faculty	# of house off.	# of med. stud.	Participation Code	# of faculty	# of house off.	# of med. stud.	Participation Code	# of faculty	# of house off.	# of med. stud.				
<b>ADMISSION OF THE PATIENT</b>																				
History/Physical Exam																				
Procedures																				
Diagnostic (lab tests)																				
Therapeutic																				
Preparation of the Record																				
Chart review																				
Phone calls																				
Other sources																				
Writing the record																				
<b>INDIVIDUAL PATIENT FOLLOW-UP</b>																				
Selected history/physical exam																				
Procedures																				
Diagnostic																				
Therapeutic																				
Record Keeping																				
Writing orders																				
Progress notes																				
Errands (performing a career or secretary service)																				
<b>SCHEDULED GROUP ACTIVITY</b>																				
Work rounds (residents, interns, students)																				
Visitant/attendant rounds (visitant, residents, interns, students)																				
Hospital conferences (all personnel)																				
Student conferences																				
<b>UNSCHEDULED GROUP ACTIVITIES</b>																				
Student with resident																				
Intern																				
Visitant																				
Nurse																				
Social service																				
Peers																				
Others																				
Activities were																				
work-related																				
other																				
<b>ADDITIONAL ACTIVITIES</b>																				
Off-ward procedures																				
Surgery																				
Other special																				
Reading																				
In-transit (site to site)																				
Meals, coffee breaks																				
Sleeping																				
Miscellaneous																				



Observer \_\_\_\_\_ Student Observed \_\_\_\_\_  
Date \_\_\_\_\_ Time In O.R. \_\_\_\_\_

1st 2nd

Surgeon	1st Ass't.	2nd Ass't.	Nurse	Anesth.	Other
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STUDENT

Initiates Question to  
Responds to Question from  
Participates in discussion with  
Responds to Instructions from


Participation Code

- a. performing function
- b. assisting in function
- c. observing function

1st 15'

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Medical Students - Time Present

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

2nd 15'

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- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

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3rd 4th

Surgeon	1st Ass't.	2nd Ass't.	Nurse	Anesth.	Other
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STUDENT

Initiates Question to  
Responds to Question from  
Participates in discussion with  
Responds to Instructions from


3rd 15'

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Medical Students - Time Present

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

4th 15'

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- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

SURGICAL CLERKSHIP STUDY  
SUMMARY OF OBSERVATIONS

SITE 1                      SITE 2                      SITE 3                      SITE 4

ACTIVITY CATEGORY	AZ	Bz	A hrs	Bz	A hrs	Bz	A hrs	Bz	A hrs	Bz	A hrs	Bz
<b>I. Patient Contact</b>												
Admitting	29.7		(66.00)	19.8	(19.50)	8.3	(15.25)	13.1	(13.25)			
Follow-up	35.6		(89.75)	19.9	(36.00)	8.5	(15.75)	15.6	(15.75)			
Subtotal	36.3	26.9	(115.75)	30.7	(55.50)	16.8	(31.00)	28.7	(29.25)			
<b>II. Scheduled Group Activities</b>												
Work Rounds	6.1		(19.50)	7.2	(13.00)	3.1	(5.75)	6.4	(6.50)			
Visitors Rounds	2.0		(6.25)	1.5	(2.75)	1.9	(3.50)	2.1	(2.75)			
Hospital Rounds	1.1		(3.50)	2.8	(5.00)	3.7	(6.75)	2.9	(2.50)			
Student Conferences	5.8		(18.50)	10.6	(19.25)	6.0	(11.00)	7.8	(8.75)			
Subtotal	15.0	24.3	(47.75)	22.1	(40.00)	14.7	(27.00)	19.2	(155.00)			
<b>III. Surgery</b>												
O.R.	17.2		(95.00)	20.2	(66.75)	24.6	(46.50)	21.4	(50.25)			
Pre/Post-Op	0.4		(1.25)	0.2	(0.75)	1.1	(2.00)	0.8	(4.25)			
Waiting	0.1		(.25)	1.7	(5.50)	2.2	(4.00)	1.3	(1.75)			
Subtotal	17.7	22.1	(56.50)	27.9	(72.00)	30.7	(56.75)	23.3	(56.75)			
<b>IV. Unscheduled Activities</b>												
Reading	1.1		(35.50)	12.3	(40.75)	5.8	(10.50)	10.0	(15.25)			
In-Transit	2.7		(8.75)	1.8	(3.25)	1.1	(2.00)	2.2	(2.00)			
Meal/Coffee	8.2		(26.25)	5.4	(17.75)	6.1	(11.00)	7.0	(16.25)			
Sleeping	1.1		(3.50)	0.8	(2.50)	0.4	(.75)	0.8	(.75)			
Errands	0.5		(1.50)	1.1	(3.50)	1.0	(1.75)	0.8	(.50)			
Miscellaneous	7.4		(23.50)	4.7	(15.50)	3.9	(7.00)	0.8	(.50)			
Subtotal	31.0	26.8	(99.00)	19.4	(35.00)	19.1	(35.25)	8.0	(7.75)			
<b>TOTALS</b>												
No. Observed	100.0	100.0	(319.00)	100.0	(181.00)	100.0	(184.75)	100.0	(292.25)			
% total obsv.	31.4	32.6	31.4	17.8	18.2	18.2	100.0	100.0	100.0			



SURGICAL CLERKSHIP STUDY  
SUMMARY OF MORNING OBSERVATIONS

ACTIVITY-CATEGORY:	Az	Az	Az	Az	Az	Az	Az	Az	Az	Az	Az	Az
	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs
<b>I. Patient Contact</b>												
Admitting	11.2		5.8		2.2		3.3		(4.00)		6.4	(44.85)
Follow-up	19.0		19.4		17.1		17.8		(10.75)		14.5	(107.59)
Subtotal	30.2		20.2		19.3		21.1		(14.75)		20.9	(152.25)
<b>II. Scheduled Group Activities</b>												
Work Rounds												
Visitant Rounds	7.3		9.0		9.2		3.3		(4.00)		7.7	(53.25)
Hospital Rounds	2.9		2.9		1.8		1.6		(2.00)		2.6	(17.75)
Student Conferences	7.9		11.4		4.4		5.5		(6.75)		3.8	(27.25)
Subtotal	19.3		28.3		28.4		18.8		(73.00)		24.3	(169.50)
<b>III. Surgery</b>												
O.R.	25.5		24.8		30.3		34.9		(42.50)		28.1	(195.75)
Pre/Post-Op	0.5		0.3		1.1		2.3		(2.75)		0.8	(5.75)
Waiting	0.1		2.1		3.5		0.0		(.00)		2.2	(9.75)
Subtotal	26.1		27.2		34.9		37.2		(45.25)		30.1	(210.25)
<b>IV. Unscheduled Activities</b>												
Reading	7.8		10.5		5.3		4.9		(6.00)		8.0	(55.00)
In-transit	2.9		2.8		1.1		0.8		(1.00)		2.2	(15.50)
Meals/Coffee	7.6		4.7		6.2		7.2		(8.75)		6.3	(43.75)
Sleeping	1.2		0.9		1.1		0.2		(.25)		0.9	(6.25)
Errands	0.7		1.1		0.9		0.4		(.50)		0.9	(6.00)
Miscellaneous	4.2		4.2		2.9		18.3		(22.25)		6.5	(45.25)
Subtotal	24.4		24.0		17.5		31.8		(38.75)		24.7	(172.75)
per column	100.0		100.0		100.1		99.9				100.0	
hrs. morning observ.	64.7		79.6		62.8		65.9		(121.75)		69.4	(204.75)
total hrs. observ.	20.3		25.9		11.8		12.0					

SURGICAL CLERKSHIP STUDY  
SUMMARY OF EVENING OBSERVATIONS

ACTIVITY CATEGORY:	A2		B2		A hrs		B hrs		A3		B3		A hrs	
	h	m	h	m	h	m	h	m	h	m	h	m	h	m
I. Patient Contact Admitting Following Subtotal	38.1		25.6		(17.25)		25.3		(17.00)		17.9		(11.25)	
			27.4		(18.50)		24.5		(16.50)		17.9		(5.00)	
					(53.50)				(33.50)				(16.25)	
II. Scheduled group activities	4.0		4.4		(3.00)		3.7		(2.50)		2.8		(1.75)	
			2.2		(1.50)		1.1		(.75)		2.4		(1.50)	
			1.9		(1.25)		0.0		(.00)		0.0		(.00)	
			0.9		(.75)		6.7		(4.50)		1.2		(.75)	
			2.0		(.00)									
					(8.00)				(7.75)				(4.00)	
Subtotal			8.5		(5.75)		11.5		(7.75)		6.4		(4.00)	
III. Surgery	2.2		2.2		(1.50)		14.9		(10.00)		13.1		(8.25)	
			0.0		(.00)		1.1		(.75)		2.4		(1.50)	
			0.0		(.00)		0.0		(.00)		2.8		(1.75)	
					(2.75)				(10.75)				(11.50)	
Subtotal			2.2		(1.50)		16.0		(10.75)		18.3		(11.50)	
IV. Unscheduled Activities	17.3		19.0		(12.75)		6.7		(4.50)		14.7		(9.25)	
			1.5		(1.00)		3.0		(2.00)		4.6		(1.00)	
			8.2		(5.50)		5.9		(4.00)		11.9		(7.50)	
			0.4		(.25)		0.4		(.25)		0.8		(.50)	
			0.7		(.50)		1.1		(.75)		0.0		(.00)	
			6.7		(4.50)		5.6		(3.75)		20.6		(13.00)	
					(24.50)				(15.25)				(31.25)	
			36.5		(48.50)		22.7		(31.25)		49.6		(63.00)	
			100.2		(67.50)		100.0		(67.25)		100.1		(63.00)	
			20.4		(112.25)		37.2		(67.25)		34.1		(63.00)	
			6.7				6.6				6.2			
Subtotal			43.0		(48.50)		36.5		(24.50)		49.6		(31.25)	
TOTALS	100.0		100.0		(112.25)		100.0		(67.25)		100.1		(63.00)	
	35.3		20.4		(67.50)		37.2		(67.25)		34.1		(63.00)	
	11.1		6.7				6.6				6.2			



SITE 1

ROTATION:		BLUE		GOLD		NEURO		EM		ORTHO		PED BURNS		CLINIC		TOTAL
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	
OBSERVATIONS:	PLANNED	8	3	8	3	5	5	5	7	2	3	1	0	0	0	50
	ACTUAL	10	2	4	3	5	2	5	8	1	1	1	1	1	0	44
TIME SPENT																
I. Patient Contact																
	Admitting	6.50	3.75	.75	3.00	3.75	4.50	11.00	31.25		.50	1.00				
	Follow up	12.25	3.00	3.25	3.25	4.00	.50	13.50	3.75			2.25		4.00		65.00
II. Schd. Group Act's																
	A. Work Rounds	6.00	.50	2.50	1.50	5.50	2.50					.25		.75		19.50
	B. Vis. Rounds	1.25				4.50					.25	.25				6.25
	Hosp. Conf.			1.00	1.00	.75				.75						3.50
	C. Stud. Conf.	4.00	2.25	5.25		1.00		1.75		1.00		1.75		1.50		18.50
III. Surgery																
	Pre and Post-Op	31.00		8.25	2.00	2.00				4.25	.50	7.00				55.00
	Waiting	.25				.25					.25	.75				1.25
IV. Reading																
	In-Transit	3.25	2.75	1.25	4.50	4.25	3.50	5.50	5.50	.75	3.25			1.00		35.50
	Meals/Coffee	3.00	1.00	.25	.50	1.00	1.50	.75	.75	.50		.50				8.75
	Sleeping	7.00	1.00	2.00	2.50	3.50		2.00	6.25	.25	.75	.50		.50		26.25
	Errands	.50	.75	.75	.25	1.25										3.50
	Miscellaneous	.75										.75				1.50
	Miscellaneous	3.25	1.00	1.25	.25	1.75		.50	12.25	.50	1.25	.75		.25		23.50
Total Hours		79.50	15.00	26.50	18.75	33.50	12.50	35.00	59.75	8.00	6.75	15.75		8.00		319.00

SITE -2

ROTATION:		NEURO		ANESTH.		PLASTIC		ORTHO		ER		PED. SURG.		GEN. SURG.		TOTAL
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	
OBSERVATIONS:	PLANNED	2	3	6	0	0	0	0	0	1	4	4	1	15	17	53
	ACTUAL	6	1	3	0	1	0	1	0	2	3	2	0	22	5	46
TIME SPENT																
I. Patient Contact																
	Admitting	.75	3.25							10.00	11.50			4.50	2.50	32.50
	Follow-up	13.75	.25	.75				.75		1.50	7.75	7.50		13.75	10.50	56.50
II. Sch Group Act's																
	A) Work Rounds	1.00		2.00		.50		1.75				2.75		15.75	3.00	25.75
	B) Vis. Rounds	1.75	1.50			.75								5.25		9.25
	Hosp. Conf.	1.00	1.25	1.50										8.50		14.25
	C) Stud. Conf.	5.00		7.25		1.00						2.25		14.50		30.00
III. Surgery																
	Pre and Post-Op	6.25	1.50	6.50		4.50						.25		47.75		66.75
	Waiting	.25		.50										1.75		2.50
IV. Reading																
	In-Transit	5.75	1.50	1.50		.50		3.25		.50	1.50	.50		16.00	9.75	40.25
	Meals/Coffee	1.00	1.00			.25				.25	1.25			3.50	1.00	8.25
	Sleeping	1.50	.75	.50				.75		1.00	1.50	1.00		7.50	3.25	17.75
	Errands	1.00												1.25	.25	2.50
	Miscellaneous	.25						.25		.25		.50		1.75	.50	3.50
	Miscellaneous	3.00	1.25											1.75		5.00
TOTAL HOURS		44.25	11.25	23.25		7.50		6.75		14.75	22.50	16.00		150.50	33.25	330.00



ROTATION:		MAJOR		MINOR		TOTAL
		I	II	I	II	
OBSERVATIONS:	PLANNED	.11	# 5	6	3	25
	ACTUAL	.11	5	5	4	25
Time Spent:						
I. Patient Contact						
	Admitting	1.00	8.50	1.50	8.50	19.50
	Follow up	15.00	12.00	4.50	4.50	36.00
II. Sch. Group Act's.						
	A) Work Rounds	9.00		1.50	2.50	13.00
	B) Vis. Rounds	2.00	.75			2.75
	Hosp. Conf.	1.25		3.75		5.00
	C) Student Conf.	8.25	4.50	6.50		19.25
III. Surgery						
	Pre and Post-Op	1.00	.50	.25	.25	2.00
	Waiting			4.00		4.00
IV. Reading						
	Reading	5.75	.00	.25	1.50	10.50
	In-Transit	.50	1.75	.75	.25	3.25
	Meals/Coffee	5.00	2.50	2.00	1.50	11.00
	Sleeping	1.25	.25			1.50
	Errands	.50	.75	.50		1.75
	Miscellaneous	3.25	2.75		1.00	7.00
TOTAL HOURS		72.50	44.00	41.25	23.25	181.00

SITE-4

ROTATION:		ORTHO		ER		ENT		CV-THOR.		GEN. SURG.		TOTAL
		I	II	I	II	I	II	I	II	I	II	
OBSERVATIONS:	PLANNED	4	2	0	0	2	2	5	1	7	4	27
	ACTUAL	4	0	1	1	2	0	4	1	6	7	26
TIME SPENT:												
I. Patient Contact												
	Admitting	.25		2.25								
	Follow up	4.00		.25	3.00	.75		1.50	1.50	4.25	10.75	15.25
II. Sch Group Act's.												
	A) Work Rounds							3.25		.75	1.75	5.75
	B) Vis Rounds	.75						1.25	.50		1.00	3.50
	Hosp. Conf.	1.00				1.50		2.75		1.50		6.75
	C) Stud. Conf.	3.00		2.00		.50		1.75		3.00	.75	11.00
III. Surgery												
	Pre and Post-Op	13.25			1.25	6.25		3.75	3.00	19.25	4.00	50.75
	Waiting	2.50						.25	.25		1.25	4.25
											1.75	1.75
IV. Reading												
	Reading			1.50				1.00		3.50	9.25	15.25
	In-Transit	.25						.25	.25	.50	.75	2.00
	Meals/Coffee	1.50		1.00	1.25	2.75		.75	1.00	2.75	5.25	16.25
	Sleeping									.25	.50	.75
	Errands									.50		.50
	Miscellaneous	1.00		.75	2.50	2.75		11.25	1.25	6.50	9.25	35.25
TOTAL HRS.		27.50		7.75	8.00	14.50		27.75	8.25	44.25	46.75	184.75

ROTATION: TOTAL  
OBSERVATIONS: 46

LEVEL OF RESPONSIBILITY

LEVEL OF RESPONSIBILITY

PATIENT CONTACT

	PERFORM hrs	ASSIST hrs	OBSERVE hrs	DISCUSS hrs	TOTAL HOURS/ % HOURS
Admission	22.50	2.00	4.50		29.00 (.26)
History/Physical Exam	10.00	5.75	.75		16.50 (.15)
Procedures (diag/therap)	3.75	.50	.25	.50	5.00 (.05)
Record Preparation	12.00	.75			12.75 (.12)
Writing the Record					
Follow-up					
Selected Physical Exam	9.25	1.00	.75	1.25	12.25 (.11)
Procedures	9.75	5.25	5.75	2.75	23.50 (.21)
Record Keeping	11.75				11.75 (.12)
TOTAL HOURS/ % HOURS	79.00 (.71)	15.25 (.14)	12.00 (.11)	4.50 (.04)	110.75

PATIENT CONTACT

	PERFORM hrs	ASSIST hrs	OBSERVE hrs	DISCUSS hrs	TOTAL HOURS/ % HOURS
Admission	12.00				12.00 (.23)
History/Physical Exam	.50	.75			1.25 (.02)
Procedures (diag/therap)	.75				.75 (.01)
Record Preparation	5.50				5.50 (.10)
Writing the Record					
Follow-up					
Selected Physical Exam	.75	1.00	.25		2.00 (.04)
Procedures	20.75	1.75	.50		23.00 (.43)
Record Keeping	8.00	.50			8.50 (.16)
TOTAL HOURS/ % HOURS	48.25 (.91)	4.00 (.08)	.75 (.01)		53.00

ROTATION: TOTAL  
OBSERVATIONS: 41

LEVEL OF RESPONSIBILITY

PATIENT CONTACT

	PERFORM hrs	ASSIST hrs	OBSERVE hrs	DISCUSS hrs	TOTAL HOURS/ % HOURS
Admission	10.25	1.50	.75		12.50 (.15)
History/Physical Exam	6.50	1.00	1.25		7.75 (.09)
Procedures (diag/therap)	2.50	.25		1.75	4.50 (.05)
Record Preparation	5.75	.50	.25		6.50 (.08)
Writing the Record					
Follow-up					
Selected Physical Exam	5.75	2.00	3.00		10.75 (.13)
Procedures	15.25	7.00	5.25	.50	28.00 (.33)
Record Keeping	8.75	2.75	1.25	1.25	14.00 (.17)
TOTAL HOURS/ % HOURS	53.75 (.64)	15.00 (.18)	11.75 (.14)	3.50 (.04)	84.00

PATIENT CONTACT

	PERFORM hrs	ASSIST hrs	OBSERVE hrs	DISCUSS hrs	TOTAL HOURS/ % HOURS
Admission	9.50		.75		10.25 (.35)
History/Physical Exam	.25				.25 (.01)
Procedures (diag/therap)	2.50				2.50 (.09)
Record Preparation	1.00				1.00 (.04)
Writing the Record					
Follow-up					
Selected Physical Exam	1.75	2.75	.25		4.75 (.17)
Procedures	4.50	1.75	1.25		7.50 (.27)
Record Keeping	2.00				2.00 (.07)
TOTAL HOURS/ % HOURS	21.50 (.76)	4.50 (.16)	2.25 (.08)		28.25

ROTATION: TOTAL  
OBSERVATIONS: 27

LEVEL OF RESPONSIBILITY

PATIENT CONTACT

	PERFORM hrs	ASSIST hrs	OBSERVE hrs	DISCUSS hrs	TOTAL HOURS/ % HOURS
Admission	9.50		.75		10.25 (.35)
History/Physical Exam	.25				.25 (.01)
Procedures (diag/therap)	2.50				2.50 (.09)
Record Preparation	1.00				1.00 (.04)
Writing the Record					
Follow-up					
Selected Physical Exam	1.75	2.75	.25		4.75 (.17)
Procedures	4.50	1.75	1.25		7.50 (.27)
Record Keeping	2.00				2.00 (.07)
TOTAL HOURS/ % HOURS	21.50 (.76)	4.50 (.16)	2.25 (.08)		28.25

SITE - 1

ROTATION: TOTAL  
OBSERVATIONS: 13

OPERATING ROOM ACTIVITIES VERBAL INTERACTIONS:	NUMBER OF OBSERVATIONS						TOTAL/ % TOTAL	OPERATING ROOM ACTIVITIES VERBAL INTERACTIONS:	NUMBER OF OBSERVATIONS						TOTAL/ % TOTAL
	SURGEON	1st ASS'T	2nd ASS'T	NURSE	ANES*	OTHER			SURGEON	1st ASS'T	2nd ASS'T	NURSE	ANES*	OTHER	
Initiated question to	17	22	15	1	5	11	32 (.27)	Initiated question to	34	26	1				61 (.53)
Responded to question from	18	7	3	1	3	17	49 (.41)	Responded to question from	13	5					18 (.15)
Participated in discussion with	43	20	17	10	13	43	146 (.44)	Participated in discussion with	31	35	2	1	1	3	72 (.61)
Responded to instructions from	29	16	7	1		12	65 (.20)	Responded to instructions from	34	10	1		2		47 (.40)
<b>TOTAL/ % TOTAL</b>	<b>107 (.32)</b>	<b>65 (.19)</b>	<b>42 (.13)</b>	<b>13 (.04)</b>	<b>22 (.07)</b>	<b>83 (.26)</b>	<b>332</b>	<b>TOTAL/ % TOTAL</b>	<b>112 (.56)</b>	<b>76 (.38)</b>	<b>4 (.02)</b>	<b>1 (.01)</b>	<b>3 (.02)</b>	<b>3 (.02)</b>	<b>198 (.17)</b>

SITE 3

ROTATION: TOTAL  
OBSERVATIONS: 16

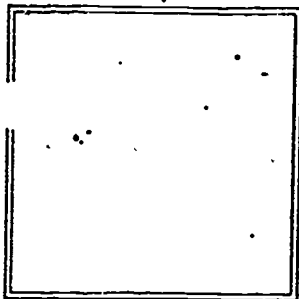
OPERATING ROOM ACTIVITIES VERBAL INTERACTIONS:	NUMBER OF OBSERVATIONS						TOTAL/ % TOTAL	OPERATING ROOM ACTIVITIES VERBAL INTERACTIONS:	NUMBER OF OBSERVATIONS						TOTAL/ % TOTAL
	SURGEON	1st ASS'T	2nd ASS'T	NURSE	ANES*	OTHER			SURGEON	1st ASS'T	2nd ASS'T	NURSE	ANES*	OTHER	
Initiated question to	53	11	3	3	1		71 (.26)	Initiated question to	33	21	3	10	4	9	70 (.59)
Responded to question from	32	6	1			1	40 (.15)	Responded to question from	31	12	3	3	3	1	52 (.19)
Participated in discussion with	59	21	3	10	4	9	106 (.39)	Participated in discussion with	59	21	3	10	4	9	106 (.39)
Responded to instructions from	31	12	3	3	3		52 (.19)	Responded to instructions from	31	12	3	3	3		52 (.19)
<b>TOTAL/ % TOTAL</b>	<b>175 (.69)</b>	<b>50 (.19)</b>	<b>10 (.04)</b>	<b>16 (.06)</b>	<b>8 (.03)</b>	<b>10 (.04)</b>	<b>269</b>	<b>TOTAL/ % TOTAL</b>	<b>175 (.69)</b>	<b>50 (.19)</b>	<b>10 (.04)</b>	<b>16 (.06)</b>	<b>8 (.03)</b>	<b>10 (.04)</b>	<b>269</b>

SITE 4

ROTATION: TOTAL  
OBSERVATIONS: 18

NUMBER OF OBSERVATIONS

FIGURE 5



May 15, 1975

TO: Phase 3 Surgical Clerks

FROM: Clerkship Directors of the Department of Surgery:  
Dr's. Frederick S. Cross, Ralph G. DePalma, Brown  
M. Dobyns, Kent H. Johnston, James C. Jones, Jerry  
S. Wolkoff

At the request of the Clerkship Directors of the Department of Surgery and the Dean for Medical Education of the School of Medicine, a surgical clerkship study is being undertaken by the Division of Research in Medical Education. As part of this study, we are asking you to complete the enclosed task and activity inventory.

The Clerkship Directors of the Department of Surgery have identified those tasks and activities which might be experienced in the surgical clerkships. The information provided by this inventory will help determine if the surgical clerks at the four training sites participated in these experiences. This inventory does not imply that each clerk will have performed or even participated in all of these activities. Its purpose is to assess the clerkship experience, not the student. Each hospital will be identified. The students may remain anonymous if they do not wish to sign the inventory.

Please use the answer sheets provided to record your responses to the items. The answer code is indicated on each page of the inventory. Answer sheet No. 1 is to be used for Items 1 through 100; answer sheet No. 2 is to be used for Items 101 through 196. Please return the answer sheets to the Director of your clerkship.

If you have any suggestions for the improvement of the surgical clerkship, please write them on the blank sheet provided.

Thank you for your invaluable assistance.

FSC/RGD/BMD/KHJ/JCJ/JSW/r1

Case Western Reserve University  
 School of Medicine  
 Department of Surgery  
 SURGICAL CLERKSHIP ACTIVITY/TASK INVENTORY

Use answer sheet No. 1 for Items 1 - 100

DIRECTIONS: For Items 1 through 9 answer "A" if you experienced the activity in your surgical clerkship; or, "B" if you did not experience the activity. Blacken the space under the selected letter on the answer sheet.

A = experienced the activity

B = did not experience the activity

1. Participate in teaching rounds
2. Participate in work rounds
3. Attend grand rounds
4. Attend special student-oriented conferences
5. Suggest topics for classes/conferences
6. Present reports in conferences
7. Read/review general medical literature
8. Research literature concerning a particular patient's problem
9. Confer with peers or M.D.'s on patient management

DIRECTIONS: Use the key outlined below to report your experience in your surgical clerkship with each of the following tasks. Select the category which describes how you most commonly participated. Blacken the space under the selected answer on the answer sheet. Select

A = No experience

B = Only observed

C = Only assisted

D = Observed and assisted

E = Observed and performed with supervision

F = Assisted and performed with supervision

G = Observed, assisted and performed with supervision

H = Performed with supervision

I = Performed without supervision

10. Obtain and record medical/surgical history
11. Make entries on medical records
12. Plan/modify diagnostic procedures according to patient's response/need
13. Assess patient's general appearance