UNIVERSITY OF *Minnesota*

UNIVERSITY HOSPITALS · MINNEAPOLIS, MINNESOTA 55455

August 21, 1969

TO: Mrs. Karen Levin

FROM: Peter H. Sammond

SUBJECT: Patient Care Mock-up Evaluation

I have sent memos to David Preston and Marié Manthey asking their cooperation in the formal evaluation of the Patient Care Mock-up. You have copies of those memos. I wonder if you would consult with them to offer what assistance you can in the coordination of this evaluation.

I would also appreciate it if you could organize the sporatic evaluation of the individual people looking at the mock-up down in the room. By this I mean putting up copies of the TAC evaluation questionnaire and providing forms in a convenient place with convenient ways of writing their comments. I will leave my folder on the mock-up for you to use.

Thank You

PHS/lmc

dictated but not read

UNIVERSITY OF *Minnesota*

UNIVERSITY HOSPITALS · MINNEAPOLIS, MINNESOTA 55455

August 22, 1969

TO: Mrs. Marie Manthey, Chairman of the Nurses Patient Care Unit Study

FROM: Peter H. Sammond

SUBJECT: Evaluation Sheets on Patient Mock-up

I am attaching two evaluation sheets asking specific questions about the patient mock-up. I wonder if your committee could provide us with a formal evaluation of these questions. Perhaps you will wish to coordinate this with Mr. Preston and the entire Patient Care Unit Committee.

Thank You

PHS/lmc
cc:Mrs. Levin and Mr. Preston
dictated but not read

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

July 29, 1969

PROGRAM OF EVALUATION - UNIT MANAGERS'

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical, your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

A. To the left of the door on entering the room you will note a rather large window providing observation of the occupants of the room. There are, however, some conditions where privacy will demand the provision of a curtain for this window.

1. What in your opinion will be the nature of this curtain insofar as easy removal for washing or cleaning and for ease of drawing?

2. Is the window easily reached from both sides for washing?

B. On the wall opposite the door is a large area representing a window to the outside of the building. In its final form this window will be a double-glazed top and bottom pivoted sash with operable blinds between the panes of glass.

1. What in your opinion will be the nature of the curtain for this window insofar as easy removal for washing or cleaning and for ease of drawing?

2. If you have had experience with the type of sash described above, would you care to comment on it as for ease of washing, etc.?

C. To the left of the door under the large window to the corridor you will find a box representing two cupboard compartments. One will contain sterile packs, linens and blankets; the other will contain soiled trays and a soiled linen ring.

1. Would you prefer to draw clean linens from this compartment or from the clean linen area on the floor?

2. Do you feel that provision should be made in the clean cupboard for any items in addition to those listed?

3. In your opinion would distribution of medication from the clean cupboard be practicable or desirable?

D. The lavatory basin unit has a built-in paper towel dispensor and a liquid soap dispensor.

1. Is this unit easily cleaned?

2. Are the soap and towel dispensors easily restocked?

E. Two duplex electrical outlets will be provided on the wall opposite the foot of the beds.

1. Are these outlets in your opinion well positioned for your normal cleaning operations in relation to the entire room?

2. Should there be other maintenance outlets provided?

F. Adjoining the bed is a recessed suction bottle cabinet.

1. Is this unit easily cleaned?

2. Would you prefer to see this cabinet in another material?

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The unit manager who is cooperating in this evaluation is requested to project herself into as many situations as time will permit and record her findings.

4. As indicated in color on the posted print, the architects have made graphic analyses of wheel chair operations within the patient's room, particularly at the lavatory and in the toilet room. Red lines indicated forward movement and green lines back-ward movement. It is suggested that studies be made with a wheel chair to check movements and clearances.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

29 July 1969

PROGRAM OF EVALUATION - NURSES'

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

A. On entering the room you will note that the door has been provided with a special "arm-pull" activated latch.

1. Does this "arm-pull" latch lend itself readily to opening the door from either side while carrying a tray?

2. Is the door too heavy in its swinging action?

3. Can the largest sized bed with traction frames or I.V. stands be easily moved through the door free of obstruction?

4. Will the door stay open most of the time or should it have a closing device on it to keep it closed?

B. To the left of the door is an observation window.

1. Can you readily observe the patients in the room through this window both during the day under daylight conditions and at night under minimum corridor and patient room lighting conditions?

2. Is there need for a curtain or shade at this window?

C. A patient is wheeled through the door and parallel to either bed on a standard litter with side rails.

1. Can this operation be accomplished without repositioning either bed?

2. Can the patient be transferred from the litter to the bed without repositioning either bed?

3. When these operations are completed, remove the litter from the room. Was this total operation, in your opinion, completed with the least amount of infraction by the walls and objects in the room?

D. To the left of the door on the inside of the room is a shelf.

1. Does this shelf present a satisfactory place on which to rest trays of medications, thermometers, etc.?

2. On completion of patient temperature, respiration and blood pressure examinations, does this shelf present a good place to record the results of your examinations?

3. Did you find the level of illumination at the shelf satisfactory for these purposes?

E. The lavatory basin has been placed primarily for the convenience of the patients.

1. Is there sufficient space for you to conveniently wash your hands?

2. Did you find the soap and paper towel dispensers provided readily accessible and are they, in your opinion, the proper kind?

3. In your opinion, should a medicine cabinet be provided?

4. With regard to the variety of age and size of the patients who will use this lavatory basin, is it mounted at the proper height?

F. The toilet room has been placed for the convenience of the patient, and for the staff who will use the water closet for the flusing of bed pans with spray fitting provided.

1. Is the size of the door sufficient to provide access for the functions mentioned above?

2. Is door latch properly placed?

3. Can the door emergency release be efficiently operated?

4. Should this door, in your opinion, have a lock?

5. The size of the room has been established to allow the patient to be assisted to and from the water closet when necessary. Does the size of the room allow for this in your opinion?

6. The water closet will be fitted for bed pan flushing. Are hand spray fitting and the water closet positioned well to carry out the bed pan flushing operation?

7. In your opinion is the level of illumination satisfactory in this room?

8. A grab bar will be placed to the left of the water closet. The position of this bar was dictated by the various age groups who may have to use it. Is it, in your opinion, well positioned?

G. The patient beds (two-bed arrangement) have been positioned with eight feet center to center spacing, leaving five feet between beds.

1. Does this bed position allow space for you to conduct your routine services?

2. Is there sufficient space for yourself and a group of student nurses during a period of instruction?

H. A privacy curtain has been provided. When pulled around the patient:

1. Has your working space become restricted in any way?

2. Will this curtain always be used during patient bed washing and changing or only at night to limit the disturbance of other patients?

3. When not in use does the curtain stack well out of the way of the activities in the room?

I. The over-bed light has been provided with indirect light for general room illumination, down-light for patient's reading illumination, a night light for assistance to the nurse and an indirect, high-intensity examination light.

1. In your opinion, is this fitting properly positioned? Does it conflict with any apparatus attached to the bed?

2. Does the night light give sufficient light for illumination of the patient's face or instrument readings you may want to make, etc.?

3. Will you use the high-intensity exam lamp for patient preparation prior to surgery?

4. In your opinion, does the patient get good distribution of light for reading? Will this light source bother the patient in the adjoining bed?

J. Two dummy panels have been placed on the wall at the right of each bed. These represent bed-head service units. Each of these units will contain coded, quick connect oxygen, vacuum and air outlets, one duplex electrical outlet (on emergency power), and outlets for telephone and patient communications with the nurses' station.

1. Are these bed-head units properly positioned with respect to the beds and to give proper diversity of outlets?

2. Is the height of this unit correct? (standard=5'-0" above finished floor) Does the bed head interfere with any of the outlets or apparatus which will be connected thereto?

3. Is the suction bottle cabinet mounted at an acceptable height?

4. Does the suction bottle fit easily into the cabinet provided?

5. Does it appear that the erection of an oxygen tent or a bed with traction frame would seriously limit the use of any of the outlets?

6. Are there any other services that you would consider mandatory to be included on this panel? (Provisions for physiological and closed circuit TV monitoring are now being studied.)

K. The only night light provided is the one built into the over-bed unit.

1. Is the best position for switching over-bed night light at the bed or door?

2. Do you think there is a need for low-level illumination close to the floor?

3. If you feel other low-level illumination is necessary, where do you think that these would best be positioned?

4. Would night lights be switched on at one point on the floor and stay on all the hours of darkness, or would they be switched individually at each room when required?

5. Should there be a low-level night light in the toilet room?

L. To the left of the door under the large window to the corridor you will find a box representing two cupboard compartments. One will contain sterile packs, linens and blankets; the other will contain soiled trays and a soiled linen ring.

1. Would you prefer to draw clean linens from this compartment or from the clean linen area on the floor?

2. Do you feel that provision should be made in the clean cupboard for any items in addition to those listed?

3. In your opinion would distribution of medication from the clean cupboard be practicable or desirable?

M. On either side of the lavatory unit are located boxes representing closets for patients personal belongings. A luggage compartment will be provided under the lavatory counter.

1. Do you feel that sufficient storage space has been provided for the patient's belongings?

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The nurse who is cooperating in this evaluation is requested to project herself into as many situations as time will permit and record her findings.

4. As indicated in color on the posted print, the architects have made graphic analyses of wheel chair operations within the patient's room, particularly at the lavatory, and in the toilet room. Red lines indicate forward movement and green lines backward movement. It is suggested that studies be made with a wheel chair to check movements and clearances.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

29 July 1969

Mr. Preston
Sarles

PROGRAM OF EVALUATION -- DOCTORS'

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

a. On entering the room you will note that the patient's records (charts) can be placed on the shelf to your left. This shelf is on top of a box representing a two-compartment cupboard. These compartments are to house sterile packs, clean linen, soiled trays and soiled linen.

1. Is the shelf height correct for your convenient review of records (charts)? Yes

2. Is the level of illumination at the shelf acceptable?

NO

b. The lavatory basin has been placed primarily for the convenience of the patients.

1. Is there sufficient space for you to conveniently wash your hands?

Yes

2. Are the soap and paper towel dispensers provided readily accessible?

Yes — but 8" too high

c. The patient beds (two-bed arrangement) have been positioned with 8-foot center to center spacing, leaving 5 feet between beds.

1. Does this bed position allow proper space for the examination of patients?

Yes

2. Is there sufficient space for yourself, residents and student doctors to review a case of special clinical interest? Yes.

d. A privacy curtain has been provided. When pulled around the patient:

1. Has your working space become restricted in any way? N

2. Will this curtain always be used during patient examination or only on occasions such as at night to limit the disturbance of the other patients?

e. The patient examination light is incorporated in the over-bed light. It is an extremely high intensity indirect source that should provide between 60-100 footcandles at the patient.

1. Is the distribution of this light along the length of the patient adequate for all normal examinations that will be conducted at the bed? Yes, except perineal exams

2. Is the quality of the light source adequate as to proper rendition of skin pallor, etc. and the limiting of shadows?
Yes - excellent but a direct down light would help for procedures.

f. Two dummy panels have been placed on the wall at the right of each bed. These represent bed-head service units. Each of these units will contain coded, quick connect oxygen, vacuum and air outlets, one duplex electrical outlet (on emergency power), and outlets for telephone and patient communications with the nurses' station.

1. Are these bed-head units properly positioned with respect to the beds and to give the proper diversity of outlets? I think they should be to the left of the bed head.

2. Is the height of this unit correct? (Standard = 5'=0" above finished floor.) Does the bed head interfere with any of the outlets or apparatus which will be connected thereto? No
Height is correct

3. Does the suction bottle fit easily into the recessed cabinet? —

4. Does it appear that the erection of an oxygen tent or a bed with a traction frame seriously limit the use of any of the outlets provided? N.O

5. Are there other services that you would consider mandatory to be included on this panel? (Provisions for physiological and closed circuit TV monitoring are now being studied.)
As standard items physiologic monitoring is not necessary. Some rooms should have this.

g. On completion of the patient examinations you may want to make notes in the room before leaving.

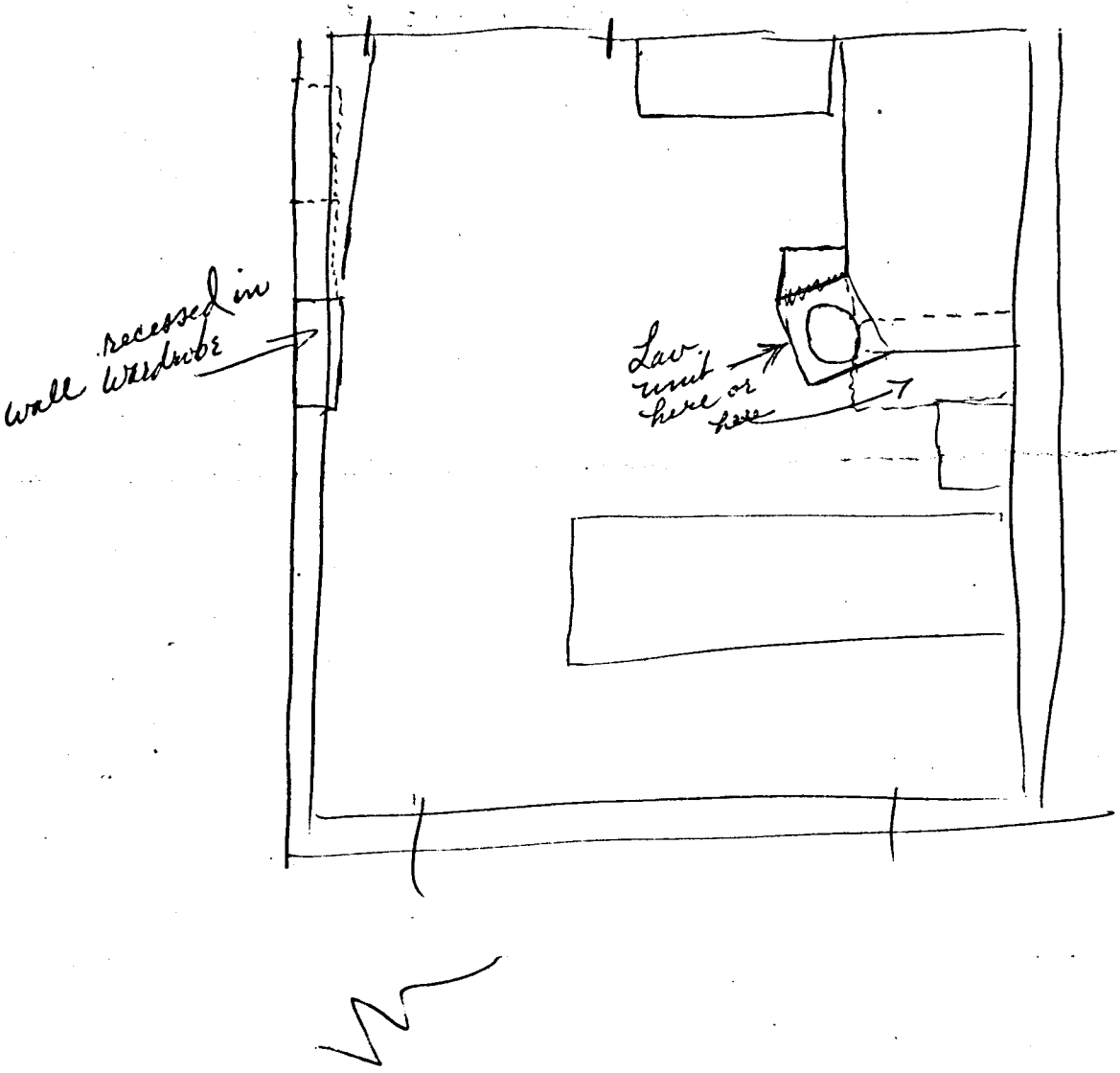
1. Does the shelf inside the door where the patient's records (charts) can be placed lend itself to that use?

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The doctor who is cooperating in this evaluation is requested to project himself into as many situations as time will permit and record his findings.

I like the feeling of privacy created by the cabinet & sink partition — i.e. it cuts off the hallway without restricting the view of a nurse from the door. This unit does consume space, however and is an obstacle to the patient reaching the shower or toilet.

In my opinon the width of the room is adequate. It definitely should not be decreased even one inch. The length of the room also is correct — adequate for rounds, visitors, transfer of patients onto carts. A foot might be sacrificed but should be from the shower room & not the patient area. By the time heating & airconditioning equipment is installed under the window the floorspace will be just about right. ⊛ It is hoped that the final size of a single room will be adequate but not large enough to crowd two beds into.

⊛ A wide windowsill is useful for flowers.


recessed in wall wardrobe
Lav. unit here or here

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

29 July 1969

PROGRAM OF EVALUATION - DOCTORS'

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

a. On entering the room you will note that the patient's records (charts) can be placed on the shelf to your left. This shelf is on top of a box representing a two-compartment cupboard. These compartments are to house sterile packs, clean linen, soiled trays and soiled linen.

1. Is the shelf height correct for your convenient review of records (charts)? No - Too HIGH
2. Is the level of illumination at the shelf acceptable? No - the record would be IN my shADow

b. The lavatory basin has been placed primarily for the convenience of the patients.

1. Is there sufficient space for you to conveniently wash your hands? yes
2. Are the soap and paper towel dispensers provided readily accessible? Yes - How ABOUT A foot FAUCET CONTROL?

c. The patient beds (two-bed arrangement) have been positioned with 8-foot center to center spacing, leaving 5 feet between beds.

1. Does this bed position allow proper space for the examination of patients? IT IS A little close if many people ARE present - >6, perhaps

2. Is there sufficient space for yourself, residents and student doctors to review a case of special clinical interest?

It depends on the NUMBER - VIDE SUPRA

d. A privacy curtain has been provided. When pulled around the patient:

1. Has your working space become restricted in any way?

Yes

2. Will this curtain always be used during patient examination or only on occasions such as at night to limit the disturbance of the other patients?

During PATIENT EXAMINATION

e. The patient examination light is incorporated in the over-bed light. It is an extremely high intensity indirect source that should provide between 60-100 footcandles at the patient.

1. Is the distribution of this light along the length of the patient adequate for all normal examinations that will be conducted at the bed? No

2. Is the quality of the light source adequate as to proper rendition of skin pallor, etc. and the limiting of shadows?

It will depend on what color the room is PAINTED

f. Two dummy panels have been placed on the wall at the right of each bed. These represent bed-head service units. Each of these units will contain coded, quick connect oxygen, vacuum and air outlets, one duplex electrical outlet (on emergency power), and outlets for telephone and patient communications with the nurses' station.

1. Are these bed-head units properly positioned with respect to the beds and to give the proper diversity of outlets?

← HAVING them ALL on ONE SIDE MAY MAKE IT CLUTTERED

2. Is the height of this unit correct? (Standard = 5'=0" above finished floor.) Does the bed head interfere with any of the outlets or apparatus which will be connected thereto?

No

3. Does the suction bottle fit easily into the recessed cabinet?

IT Should.

4. Does it appear that the erection of an oxygen tent or a bed with a traction frame seriously limit the use of any of the outlets provided?

No

5. Are there other services that you would consider mandatory to be included on this panel? (Provisions for physiological and closed circuit TV monitoring are now being studied.)

No, IN VIEW of further provisions being STUDIED

Communication outlets should be on PATIENT'S RIGHT

g. On completion of the patient examinations you may want to make notes in the room before leaving.

1. Does the shelf inside the door where the patient's records (charts) can be placed lend itself to that use?

No - for reasons noted earlier

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The doctor who is cooperating in this evaluation is requested to project himself into as many situations as time will permit and record his findings.

1. Location of sink & luggage unit is bad

2. Why not switch head of bed to opposite wall? Sink & ~~wardrop~~ luggage compartment could be along wall at foot of bed + not projecting out into room

3. ? Window in door

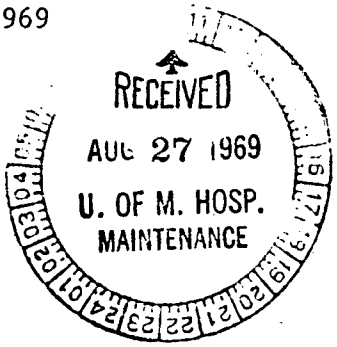
4. Shouldn't the lavatory be in the bathroom?

5. Overhead frame for IV's (as in coronary care unit) is highly desirable

6. Adequate wiring for X-ray equipment?

University of Minnesota
Health Sciences Expansion

29 July 1969



PROGRAM OF EVALUATION - MAINTENANCE

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

A. On entering the room you will note that the door has not been fitted with protective hardware. This will not be the case in the final design, since the door will be protected against wear and scuffing.

Sheet vinyl 1. Should the whole final door in your opinion be formica or sheet vinyl covered?

yes 2. If not formica or sheet vinyl covered, should extra large finger and kick plates be provided?

yes 3. Should these plates extend around the edge of the door?

Have not yet seen hardware Ordered, but not yet rec'd. 4. The arm-pull hardware on the door does the job of unlatching the door, but may be extremely vulnerable to the movement of beds through the door. Would you care to recommend an arm-pull latching unit that in your opinion does the job better?

B. The door and window frames in the mock-up have been made of wood, in their final form they will be of formed steel sections reinforced.

Steel will be suitable 1. Based on your experience, would you care to make any observations relative to the final form of the metal door and window frames?

C. To the left of the door to the room, under the large observation window, you will find a box representing two cupboard compartments through one of which clean supplies will come and through the other soiled goods will be removed. There is little doubt that the doors which will be installed on these cupboards will be subjected to scuffing by various devices being moved through the corridor.

1. Should these doors in your opinion be formica or vinyl covered?

D. On the inside of the room you will note that the box described in item C above projects into the room. It is anticipated that the tops of these cupboards will provide a place to receive trays, write notes, etc.

1. Should the exposed end of these cupboards next to the door to the room be protected in some way against scuffing?

yes. plastic laminate

2. What material in your opinion should the top of these cupboards be?

E. The walls of the mock-up have been "dry-wall" constructed. In the final form they will be three-coat plaster on wire lath. These walls have been painted. However, even with the minimum movement of the beds and equipment in the room, the walls may have become marked and scuffed.

1. Should the walls be covered with sheet vinyl instead of being painted?

yes

2. Although no wall base is installed in the mock-up, one will be provided. In your opinion, what is an appropriate material for the base?

rubber base

3. Traction frames and other equipment may badly gouge the walls. Would you care to make tests on formica and/or vinyl materials applied to these walls? Would a scuff rail provide more protection?

vinyl should suffice

F. Lights occur throughout the room. Downlights have been provided near the cupboards (item D above) in the bedhead light fittings, over the lavatory and in the toilet.

1. Are all of these fittings readily accessible for re-lamping?

yes

2. In your opinion have light switches been well placed to prevent breakage by equipment?

at this time, Switching not complete

Stainless steel

3. In your opinion what should be the material of the light switch and receptacle plates?

G. Two dummy panels have been placed on the wall at the right of each bed. These represent bed-head service units. Each of these units will contain coded, quick connect oxygen, vacuum and air outlets, one duplex electrical outlet (on emergency power) and outlets for telephone and patient communications with the nurses' station.

depends on the connections in the wall

1. Could you gain easy access to all of the services contained in this unit for replacement of defective parts?

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The maintenance man who is cooperating in the evaluation is requested to project himself into as many situations as time will permit and record his findings.

4. As indicated in color on the posted print, the architects have made graphic analyses of wheel chair operations within the patient's room, particularly at the lavatory and in the toilet room. Red lines indicated forward movement and green lines backward movement. It is suggested that studies be made with a wheel chair to check movements and clearances.

UNIVERSITY OF Minnesota

UNIVERSITY HOSPITALS · MINNEAPOLIS, MINNESOTA 55455

August 22, 1969

TO: Mr. David Preston

FROM: Peter H. Sammond

SUBJECT: Mock-up Evaluation Sheets

I am attaching copies of the Mock-up Evaluation which I think should be conducted by engineers, environmental services and members of your Patient Care Committee. I have so designated each at the top. I wonder if you could coordinate this as well as tieing in the nursing input as requested in my memorandum to Mrs. Manthey of today. I recognize that some of the features specifically alluded to in the questionnaire have not been completed in the Mock-up, but they are scheduled to be shortly.

Thank You

PHS/lmc
cc: Mrs. Levin
dictated but not read

E.19

UNIVERSITY OF *Minnesota*

UNIVERSITY HOSPITALS · MINNEAPOLIS, MINNESOTA 55455

September 8, 1969

To: Mr. Peter Sammond, Mr. David Preston

From: Karen Levin

Subject: Nursing Committee on Design Evaluation of Patient Care Room Mock-Up

The following comments are from the Nursing Committee on Design in response to the program of evaluation of the patient care room mock-up prepared by TAC. Although the group agree that the mock-up has served an important function in clarifying their thinking, they have taken the liberty of responding to only the most general questions of the program evaluation since it is difficult to concentrate on design details before the basic concept of the room is resolved. The Nursing Committee on Design has given a good deal of thought to the organization of inpatient care and facilities over the past few months and would like to bring Gordon Freisen's Mercy Hospital in Chicago to the attention of the architects.

Litter: The patient closet prevents the litter from moving easily into position parallel to the bed nearest the hall.

Space Between Beds: The space is adequate for nursing students but it is not adequate for easy movement of the litter into position beside the second bed.

Accessory Panel: Sufficient leeway should be provided between the bed and the panel to prevent the breakage of bottles as the bed is moved up and down. The Committee representative from the cardiac care unit, where this is currently a problem, suggested that a groove on the floor indicating the proper placement of the bed would be helpful. It would be preferable to recess the unit into the wall adjacent to the bed, eliminating breakage problems and providing more unencumbered space. The sphygmomanometer also should not be mounted directly above the bed. The communication segment of the panel should be separate, preferably located on the opposite side of the bed. Extended cords should be kept to a minimum.

Light: The three lights already provided for general illumination, for patient reading, and for assistance to the nurse seem to be adequate. Two low level lights controlled at the door should be located in the patient room and one in the toilet room. The spotlight over the bed for examination has not been provided in the mock-up.

Curtain: Were the curtain runners centered around the bed, the space on either side would be adequate for nursing care but not for patient examination by a large group of students. As now placed the curtain is too close to the bed to be useful on the right side. One definite improvement would be to have the curtain recessed into the wall when it is not in use.

Basin Unit: Placement of the sink in relation to the corridor window and door is not acceptable because it does not provide sufficient privacy. With cabinet space labeled rather than operational it is not possible to determine whether luggage space is adequate. Individual medicine cabinets should be recessed into the wall in addition to the recessed paper towel dispenser.

The basin "island" itself is not acceptable to the Nursing Committee. In addition to the basin being too public, it makes the distance from the patient's bed to the toilet room prohibitive and the distance from the entrance door to the patient unwieldy. The Committee urges that consideration be given to moving the toilet room unit to the back of the patient room, bringing the beds closer to the corridor and eliminating the window to the hall. The Committee indicated that bringing the beds closer to the hall is important to the quality of patient care while the window to the hall is not.

Toilet Room: Aside from the fact that access to the toilet room from the patient bed is poor, the room itself is adequate. The door width is good. However, a sliding door of the same dimension might be more manageable and should be considered. A seat within the shower unit folding down from the wall would also be an improvement. A lock indicating when the toilet room is occupied is a good idea if it can be opened from both sides.

Nurse Server Unit: In addition to the clean and dirty compartment, the nurse server unit requires a small sink built into the work counter, separate from the sink used by the patient.

The work counter should be average height, a bit lower than indicated by the mock-up. Communications facilities for the physician and nurse should be provided. The nurse server unit should be separated from the patient area of the room by a room divider.

The Nursing Committee on Design is willing to consider the more specific aspects of the TAC Program of Evaluation if the information is required at this time. Otherwise, the Committee looks forward to working with a revised patient care room that more nearly complements anticipated patterns of nursing care and provides architecturally for higher quality of patient care.

cc: Mrs. Manthey

KL/cp

UNIVERSITY OF Minnesota

Box 251

DEPARTMENT OF FAMILY PRACTICE AND COMMUNITY HEALTH
MEDICAL SCHOOL · MINNEAPOLIS, MINNESOTA 55455

September 8, 1969

Mrs. Karen Levin
Research Assistant
Health Sciences Planning Office
Box 1 Mayo, University Hospitals
University of Minnesota
Minneapolis, Minnesota 55455

Dear Karen:

Reference is made to your request for an evaluation of the mock-up patient room on the first floor of Powell Hall. My initial impression is that this certainly is a spacious room. There is no question that the attending physician could work very comfortably in it. The only question I would raise is whether he could work with equal comfort in a room somewhat smaller. This is something that I would leave to the judgement of the architects.

Another general comment I would make is that the lighting throughout the room is inadequate. This is true both at the surface of the shelf for reviewing records and it is particularly true over the bed. The overhead light on the wall by the bed certainly provides satisfactory illumination for the patient needs but it does not provide satisfactory illumination for examination of the patient by the physician.

A third comment that I would made relates to the panels on the wall at the right of each bed representing the service units. If it is feasible it would seem more satisfacotyr to separate the telephone from this and bring it to the other side of the bed so that the telephone wires would not be in a position to get inter-mixed with the wires and tubes of the other service units.

The washbasin seems to be quite low, at least for my comfort. This is something that is of minimal importance providing the lowness of it is a definite asset to the patient's comfort. I am not sure that this is so, but again would leave this judgement to the experience of the architect. One other very important comment relative to the washbasin area

is that it faces onto the first patient's section of the room and may be a disturbance of the privacy of the first patient when used by bed patient number two. If possible it would be more desirable to provide more privacy in the area of the washbasin so that both patients in the room could be free of disturbance when the basin is in use.

I have reviewed all of the other questions in your evaluation sheet and find no other areas of criticism at this time.

Sincerely,

B. F. Fuller, M.D.
Professor and Head
Department of Family Practice and
Community Health

BFF/lll

UNIVERSITY OF Minnesota

Box 227

DEPARTMENT OF FAMILY PRACTICE AND COMMUNITY HEALTH
MEDICAL SCHOOL · MINNEAPOLIS, MINNESOTA 55455

September 10, 1969

Mr. David Preston
Associate Director
Box 606 Mayo
University of Minnesota
Minneapolis, Minnesota 55455

Dear Dave:

Regarding the mock-up of the typical patient room, I would like to compliment you on this display and to tell you that I enjoyed the opportunity to look at it.

I was particularly impressed by the entry area. I do think that the shelf could be one or two inches lower and a light could be moved somewhat over the shelf to facilitate this use as a working area for physicians. The patient's bath in this location is somewhat far from the bed but is beautifully located for privacy and use, and I am sure that if I were a patient I would enjoy having this type of bathroom arrangement. I think that this is allowable because the critically ill patients are now being cared for in such areas as coronary care units and intensive care units. However, there are still patients who might be subject to that torture device, the bed pan, in the present room arrangement and I was wondering if it might not be possible to have a hidden water closet adjacent to the bed in the private rooms and adjacent to at least one of the beds in the two bed rooms. For example, the bedside stands could swing out revealing the water closet and the patient could be helped directly from the bed onto the toilet. I think that the saving in owrk and patient discomfort would justify our considering such an additional expense in construction.

I noticed that the mirror as presently located would be very difficult to use as a dressing mirror. However, in walking about the room and looking at the mirror I realized that it could be used to look down the hallway and I remember being a patient and feeling closed in. Therefore, I was wondering if this mirror could not be hinged so that it could be used as sort of a rear view mirror by the patient at times but also swung out to be used as a dressing mirror as it is an ideal location for this if it were only on a hinge.

One thing about hospital rooms, they are frequently difficult to examine patients in because of the light during the day. If the curtains are a bright yellow you cannot tell about the color of a patient's skin -- particularly in cases of jaundice. Also, if there is no opaque shade or curtain, it can be difficult if not impossible to do an adequate eye examination and some endoscopic procedures are more difficult when a room cannot be darkened. Most of our examinations are done during daylight hours and this is a consideration as far as the physician is concerned.

One way to cut expenses is to use only push plates and pull bars on the doors. At night in a hospital the doorlocks can become very noisy and they have no functional use. They are just an additional expense. In fact, I do not think that conventional locks are necessary on either the outer door or the toilet doors in a hospital.

As far as the sink is concerned, I wondered if you had considered the possibility of using only one elbow lever with pre-mixed temperature as they have in the present Rehabilitation Building. I think that they have been pleased with it and it certainly simplifies hand washing for the physicians as you don't have to contaminate anything when you turn on the water. Also, this is a great help with neurologic defects because they do not have to worry about the fact that they are unable to tell water temperature.

I think that it is almsot mandatory that the bedside panel include a position for patient monitoring, as I believe by the time hospital construction is finished that this type of instrumentation will be routine in most hospitals.

The room seems to be very adequate as far as size is concerned and I think that this is appropriate in a teaching hospital although I had the first impression that almost too much space had been allowed. After I had walked around the room a bit and thought about its many functions, I think that the present size arrangements are excellent. I also think that the expanded size would obviate some of the litter transfer difficulties that might otherwise be important in a room arrangement of this sort.

I realize that all of these comments are about very minor matters and there may be good reasons why none of these changes would be practical but I have appreciated the opportunity to look and comment.

Sincerely yours,

John

John B. O'Leary, M.D.
Associate Professor
Department of Family Practice and
Community Health

JBO/111

Emergency Committee

UNIVERSITY OF *Minnesota*

UNIVERSITY HOSPITALS · MINNEAPOLIS, MINNESOTA 55455

September 18, 1969

TO: Administrative Staff

FROM: Finance Committee

SUBJECT: Legislative Appropriations to University Hospitals

The Finance Committee is beginning formulation of requests to the next State Legislature for appropriations to University Hospitals. Of particular concern in the development of this plan is the need for additional direct state appropriations to offset the increasing spread of costs at this hospital as compared with others, and the increasing concern among county and other third party payers with high costs at this hospital. We would appreciate your suggestions as to new approaches to obtaining funds from the state.

Emergency Fund

An approach should be developed as an alternate to the county papers program under which we now function. Since the amount of monies used in this program decreases substantially each year, we are in danger of losing this important source of revenue. Perhaps we should consider eliminating county papers and finding some other base as the means to obtain this important patient care money.

Other possibilities which might be considered are the development of special appropriations for education to University Hospitals or the broadening of the scope of community services to obtain additional funds, now that community services has been established as a program funded directly by the state.

Again, we would appreciate receiving your thoughts relating to this need for increase in direct support.

DRP/cap

4 August 1969

Mr. C. Thomas Smith
Planning Coordinator
University of Minnesota
Minneapolis, Minnesota

Dear Tom;

We are sending you four (4) prints of a revised patient mock-up plan. These reflect some additional information which will assist the evaluation program.

The labelings to be attached to various elements of the room are indicated on one print. We feel that the dummy service panel would be most useful, but at this stage need be no more than a plywood panel with the various outlets labeled. The paper towel dispenser may be either a panel indication or an actual unit. However, if an actual unit is used, recessing is necessary since this would reflect the final installation method. The mirror could be a panel of the indicated size.

On July 30, 1969 we mailed to you a suction bottle cabinet to be installed in the mock-up. We are quite anxious to have this in situ since it is a prototype. An evaluation by the staff will help determine our acceptance of this as a practical item in a patient's room.

We are enclosing evaluation programs for consideration by nurses, doctors, unit managers and maintenance personnel. When the working model is constructed, these programs will be enlarged to include all additional features and aspects incorporated in the unit.

Also enclosed are brochures from Hall Hospital Systems Inc. illustrating a new development in audio/visual systems for patients rooms. Perhaps you would like to put these in the mock-up for staff consideration.

Please let us know if there is any further information required for the mock-up.

Very truly yours,

THE ARCHITECTS COLLABORATIVE Inc.

Olga E. Petters

Olga E. Petters

OEP/bb
cc: Peter Sammond

6 August 1969

Mr. [illegible]
Planning Coordinator
University of Minnesota
Minneapolis, Minnesota

Dear Tom:

We are sending you four (4) prints [illegible] plan. These reflect some [illegible] evaluation program.

The labeling [illegible] attached to various elements of the mock-up [illegible] on one print. We feel that the [illegible] service zone [illegible] useful but at this stage need be no more than a plywood panel with the various outlets labeled. The [illegible] diagram may be either [illegible] indication or an actual unit. However, if an actual unit is [illegible] necessary [illegible] the final installation [illegible] could be a [illegible] of the indicated size.

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We are anxiously [illegible] evaluation [illegible] nurses, doctors, unit managers and maintenance personnel. [illegible] constructed, these programs will [illegible] additional features and aspects incorporated in the unit.

Also enclosed are brochures from [illegible] new development in audio/visual systems for patients' rooms. Perhaps you would like to post these in the [illegible]

Please let us know if there is any further information needed for the mock-up.

Very truly yours,

THE [illegible] ARCHITECTS [illegible]

[illegible]

[illegible]

cc: [illegible]

UNIVERSITY OF *Minnesota*

H.S.Exp
4650.

UNIVERSITY HOSPITALS • MINNEAPOLIS, MINNESOTA 55455

October 3, 1969

Mr. Ken Taylor
The Architects Collaborative
46 Brattle Street
Cambridge, Massachusetts

Dear Ken:

The patient room mock-up evaluation forms have been completed and we are forwarding these questionnaires along with summary comments. In addition, I will try to summarize results of meetings held with the Nursing Planning Committee, Dr. Winchell and Dr. Sauls, regarding the patient unit configuration. It would be helpful if we could meet further with you in the near future to examine these subjects in more detail.

Evaluation of Patient Room Mock-Up - The attached questionnaire responses provide information from doctors, nurses, the environmental services department, and the maintenance department.

Aside from comments providing answers to specific questions, the responses tend to confirm that the size of the mock-up room is adequate. In addition, very favorable response was received to the concept of the nurse server.

The majority of physicians and nurses agree that the location of the bathroom, sink, and wardrobe area does not provide optimum convenience for patients and personnel. It would be preferable if the toilet-shower area were located closer to the patients without the obstacle of the sink and wardrobe to bathroom access. The sink location is somewhat inconvenient for staff and particularly the patient located in the bed adjacent to the outside wall. Its location, requiring users to face the corridor window, does not provide adequate privacy. Again, several evaluators felt that the wardrobe could better be recessed into the wall since its present location serves more as an obstacle than a convenience.

As you are aware, there has been considerable discussion regarding the necessity of a window providing a view of the patient from the corridor. I think that it is generally agreed that this view is desirable in rooms located near the station; these rooms will be used for patients requiring more frequent observation. This ability to visually monitor patients from the hallways is not felt to be necessary for other rooms. The nurses in particular feel that the location of the beds closer to the room entrance would be of more significant import.

I think that this mock-up has provided a very valuable means to focus the attention of those concerned on the patient room elements. It would be of value to consider an additional or modified model incorporating the suggestions of the evaluators.

Patient Care Unit Configuration - As we discussed briefly during your recent visit, there is still considerable concern regarding the patient unit configuration and we would like to discuss this subject further with you. We have reviewed the plans with Jim Stephan, the nursing service planning group, and some of the physicians; all seem to be in agreement regarding certain aspects of the present layout.

Visitor flow, especially relating to control, appears to present problems in the present configuration. With the planned location of the receptionist - secretary office and nursing stations, visitors could walk directly to patient rooms without passing a control or information desk.

The present configuration does not provide visual control of corridors from the nursing stations, and most significantly, does not provide visual control and ready access to rooms located near the station, which could be used for patients requiring closer monitoring by nursing staff.

Although it is difficult at this date to predict the kinds of communications terminals which may be available for stations, we should assume fairly sophisticated and expensive equipment which might be difficult to justify for a twenty bed adult unit. One possible solution might be four patient bays of approximately sixteen beds each with two communication centers between the bays, and sub-nursing stations in each bay. This concept, if feasible, could help solve the problems of visitor control, noise control, station size, and the nursing station location in relation to rooms for patients requiring more extensive nurse monitoring.

These responses to the room mock-up and unit configuration as currently proposed can provide a basis for our future meetings. We are, of course, most concerned with continuing discussions of the unit design.

We look forward to seeing you during your next visit.

Sincerely yours,

David R. Preston
Associate Director
University Hospitals

cc: Mr. Peter Sammond
Mr. C. T. Smith
Mrs. Karen Levin
Mrs. Marie Manthey
Dr. P. Winchell
Dr. H. Sauls
Dr. Lyle French
Mrs. M. McHugh
Dr. Charles Drage
Dr. B. Fuller
Dr. J. O'Leary
Mr. Jack Lawerenz

September 29, 1969

TO: Mr. David Preston, Associate Director, Administration

FROM: Mrs. Margaret B. McHugh, Director, Environmental Services

SUBJECT: PROGRAM OF EVALUATION - UNIT MANAGERS

2. THE PROGRAM OF EVALUATION

A. To the left of the door, etc.

1. This cloth should be of washable, perma-press type material on a traverse rod.

2. Yes - by a women with the use of a step stool.

B. On the wall opposite the door, etc.

1. I would think that the operational control could be quite difficult and would also present problems both cleaning and exchanging.

2. I have not seen an installation similar to this.

C. To the left of the door, etc.

1. I think it would be preferable to draw linen from a compartment such as this.

2. Possibly with consideration given to compartments within compartments.

3. No comment.

4. I disagree with the placement of the clean and soiled compartments adjacent to each other.

D. The lavatory basin unit, etc.

1. The unit presents no cleaning problem.

2. I can see no stocking problem for the dispensers.

3. I disagree with the entire installation of the unit, it appears to be utilizing valuable floor space and presents an obstacle in the center of the room. It obstructs the entrance to the bathroom

and the mirror is not placed in relation to the basin. The unit also makes no provisions for the disposal of waste--I had suggested in an earlier report that the waste basket collection unit be recessed to reduce air contamination.

E. Two duplex electrical outlets, etc.

1. Yes.

2. One of the outlets should be seperate and of sufficient amperage to carry a 20" floor machine.

F. Adjoining the bed, etc.

1. Yes.

2. No.

3. No comment.

4. It would seem advisable to have a dry run by the personnel performing the task. The study would be of value only if the projected size of the room remain stable.

MBMcH:np

September 29, 1969

TO: Mr. David Preston, Associate Director, Administration

FROM: Mrs. Margaret B. McHugh, Director, Environmental Services

SUBJECT: PROGRAM OF EVALUATION - MAINTENANCE

2. PROGRAM OF EVALUATION:

A. On entering the room, etc.

1. Formica

2. Yes

3. Yes

4. Yes

B. Based on your experience, etc.

1. No

C. To the left of the door, etc.

1. Formica

D. On the inside of the room, etc.

1. Yes - stainless steel

2. Formica

E. The walls of the mock-up, etc.

1. No

2. Same as floor with a rounded cove similar to those in the Masonic Hospital.

3. No - rounded coves would take care of it if the equipment is properly installed.

F. Lights occur throughout the room, etc.

1. They appear to be

2. Yes

3. Stainless Steel

G. Two dummy panels, etc.

1. No comment

3. No comment

4. It would seem advisable to have a dry run by the personnel performing the task. The study would be of value only if the projected size of the room remain stable.

MBMCH:np

UNIVERSITY OF Minnesota

Box 227

DEPARTMENT OF FAMILY PRACTICE AND COMMUNITY HEALTH
MEDICAL SCHOOL · MINNEAPOLIS, MINNESOTA 55455

September 10, 1969

Mr. David Preston
Associate Director
Box 606 Mayo
University of Minnesota
Minneapolis, Minnesota 55455

Dear Dave:

Regarding the mock-up of the typical patient room, I would like to compliment you on this display and to tell you that I enjoyed the opportunity to look at it.

I was particularly impressed by the entry area. I do think that the shelf could be one or two inches lower and a light could be moved somewhat over the shelf to facilitate this use as a working area for physicians. The patient's bath in this location is somewhat far from the bed but is beautifully located for privacy and use, and I am sure that if I were a patient I would enjoy having this type of bathroom arrangement. I think that this is allowable because the critically ill patients are now being cared for in such areas as coronary care units and intensive care units. However, there are still patients who might be subject to that torture device, the bed pan, in the present room arrangement and I was wondering if it might not be possible to have a hidden water closet adjacent to the bed in the private rooms and adjacent to at least one of the beds in the two bed rooms. For example, the bedside stands could swing out revealing the water closet and the patient could be helped directly from the bed onto the toilet. I think that the saving in owrk and patient discomfort would justify our considering such an additional expense in construction.

I noticed that the mirror as presently located would be very difficult to use as a dressing mirror. However, in walking about the room and looking at the mirror I realized that it could be used to look down the hallway and I remember being a patient and feeling closed in. Therefore, I was wondering if this mirror could not be hinged so that it could be used as sort of a rear view mirror by the patient at times but also swung out to be used as a dressing mirror as it is an ideal location for this if it were only on a hinge.

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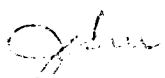
I realize that all of these comments are about very minor matters and there may be good reasons why none of these changes would be practical but I have appreciated the opportunity to look and comment.

Sincerely yours,



John B. O'Leary, M.D.
Associate Professor
Department of Family Practice and
Community Health

JBO/lll

UNIVERSITY OF Minnesota

Box 251

DEPARTMENT OF FAMILY PRACTICE AND COMMUNITY HEALTH
MEDICAL SCHOOL · MINNEAPOLIS, MINNESOTA 55455

September 8, 1969

Mrs. Karen Levin
Research Assistant
Health Sciences Planning Office
Box 1 Mayo, University Hospitals
University of Minnesota
Minneapolis, Minnesota 55455

Dear Karen:

Reference is made to your request for an evaluation of the mock-up patient room on the first floor of Powell Hall. My initial impression is that this certainly is a spacious room. There is no question that the attending physician could work very comfortably in it. The only question I would raise is whether he could work with equal comfort in a room somewhat smaller. This is something that I would leave to the judgement of the architects.

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is that it faces onto the first patient's section of the room and may be a disturbance of the privacy of the first patient when used by bed patient number two. If possible it would be more desirable to provide more privacy in the area of the washbasin so that both patients in the room could be free of disturbance when the basin is in use.

I have reviewed all of the other questions in your evaluation sheet and find no other areas of criticism at this time.

Sincerely,

B. F. Fuller, M.D.
Professor and Head
Department of Family Practice and
Community Health

BFF/lll

UNIVERSITY OF Minnesota

UNIVERSITY HOSPITALS · MINNEAPOLIS, MINNESOTA 55455

September 8, 1969

To: Mr. Peter Sammond, Mr. David Preston

From: Karen Levin

Subject: Nursing Committee on Design Evaluation of Patient Care Room Mock-Up

The following comments are from the Nursing Committee on Design in response to the program of evaluation of the patient care room mock-up prepared by TAC. Although the group agree that the mock-up has served an important function in clarifying their thinking, they have taken the liberty of responding to only the most general questions of the program evaluation since it is difficult to concentrate on design details before the basic concept of the room is resolved. The Nursing Committee on Design has given a good deal of thought to the organization of inpatient care and facilities over the past few months and would like to bring Gordon Freisen's Mercy Hospital in Chicago to the attention of the architects.

Litter: The patient closet prevents the litter from moving easily into position parallel to the bed nearest the hall.

Space Between Beds: The space is adequate for nursing students but it is not adequate for easy movement of the litter into position beside the second bed.

Accessory Panel: Sufficient leeway should be provided between the bed and the panel to prevent the breakage of bottles as the bed is moved up and down. The Committee representative from the cardiac care unit, where this is currently a problem, suggested that a groove on the floor indicating the proper placement of the bed would be helpful. It would be preferable to recess the unit into the wall adjacent to the bed, eliminating breakage problems and providing more unencumbered space. The sphygmomanometer also should not be mounted directly above the bed. The communication segment of the panel should be separate, preferably located on the opposite side of the bed. Extended cords should be kept to a minimum.

Light: The three lights already provided for general illumination, for patient reading, and for assistance to the nurse seem to be adequate. Two low level lights controlled at the door should be located in the patient room and one in the toilet room. The spotlight over the bed for examination has not been provided in the mock-up.

Curtain: Were the curtain runners centered around the bed, the space on either side would be adequate for nursing care but not for patient examination by a large group of students. As now placed the curtain is too close to the bed to be useful on the right side. One definite improvement would be to have the curtain recessed into the wall when it is not in use.

Basin Unit: Placement of the sink in relation to the corridor window and door is not acceptable because it does not provide sufficient privacy. With cabinet space labeled rather than operational it is not possible to determine whether luggage space is adequate. Individual medicine cabinets should be recessed into the wall in addition to the recessed paper towel dispenser.

The basin "island" itself is not acceptable to the Nursing Committee. In addition to the basin being too public, it makes the distance from the patient's bed to the toilet room prohibitive and the distance from the entrance door to the patient unwieldy. The Committee urges that consideration be given to moving the toilet room unit to the back of the patient room, bringing the beds closer to the corridor and eliminating the window to the hall. The Committee indicated that bringing the beds closer to the hall is important to the quality of patient care while the window to the hall is not.

Toilet Room: Aside from the fact that access to the toilet room from the patient bed is poor, the room itself is adequate. The door width is good. However, a sliding door of the same dimension might be more manageable and should be considered. A seat within the shower unit folding down from the wall would also be an improvement. A lock indicating when the toilet room is occupied is a good idea if it can be opened from both sides.

Nurse Server Unit: In addition to the clean and dirty compartment, the nurse server unit requires a small sink built into the work counter, separate from the sink used by the patient.

The work counter should be average height, a bit lower than indicated by the mock-up. Communications facilities for the physician and nurse should be provided. The nurse server unit should be separated from the patient area of the room by a room divider.

The Nursing Committee on Design is willing to consider the more specific aspects of the TAC Program of Evaluation if the information is required at this time. Otherwise, the Committee looks forward to working with a revised patient care room that more nearly complements anticipated patterns of nursing care and provides architecturally for higher quality of patient care.

KL/cp

University of Minnesota
Health Sciences Expansion

29 July 1969

PROGRAM OF EVALUATION - MAINTENANCE

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

A. On entering the room you will note that the door has not been fitted with protective hardware. This will not be the case in the final design, since the door will be protected against wear and scuffing.

Sheet vinyl

1. Should the whole final door in your opinion be formica or sheet vinyl covered?

yes

2. If not formica or sheet vinyl covered, should extra large finger and kick plates be provided?

yes

3. Should these plates extend around the edge of the door?

Have not yet seen hardware ordered but not yet in.

4. The arm-pull hardware on the door does the job of unlatching the door, but may be extremely vulnerable to the movement of beds through the door. Would you care to recommend an arm-pull latching unit that in your opinion does the job better?

B. The door and window frames in the mock-up have been made of wood, in their final form they will be of formed steel sections reinforced.

Steel will be painted

1. Based on your experience, would you care to make any observations relative to the final form of the metal door and window frames?

C. To the left of the door to the room, under the large observation window, you will find a box representing two cupboard compartments through one of which clean supplies will come and through the other soiled goods will be removed. There is little doubt that the doors which will be installed on these cupboards will be subjected to scuffing by various devices being moved through the corridor.

1. Should these doors in your opinion be formica or vinyl covered?

D. On the inside of the room you will note that the box described in item C above projects into the room. It is anticipated that the tops of these cupboards will provide a place to receive trays, write notes, etc.

1. Should the exposed end of these cupboards next to the door to the room be protected in some way against scuffing?

yes. plastic laminate

2. What material in your opinion should the top of these cupboards be?

E. The walls of the mock-up have been "dry-wall" constructed. In the final form they will be three-coat plaster on wire lath. These walls have been painted. However, even with the minimum movement of the beds and equipment in the room, the walls may have become marked and scuffed.

1. Should the walls be covered with sheet vinyl instead of being painted?

yes

2. Although no wall base is installed in the mock-up, one will be provided. In your opinion, what is an appropriate material for the base?

rubber base

3. Traction frames and other equipment may badly gouge the walls. Would you care to make tests on formica and/or vinyl materials applied to these walls? Would a scuff rail provide more protection?

vinyl should suffice

F. Lights occur throughout the room. Downlights have been provided near the cupboards (item D above) in the bedhead light fittings, over the lavatory and in the toilet.

1. Are all of these fittings readily accessible for re-lamping?

yes

2. In your opinion have light switches been well placed to prevent breakage by equipment?

at this time, switching not complete

Stainless Steel

3. In your opinion what should be the material of the light switch and receptacle plates?

G. Two dummy panels have been placed on the wall at the right of each bed. These represent bed-head service units. Each of these units will contain coded, quick connect oxygen, vacuum and air outlets, one duplex electrical outlet (on emergency power) and outlets for telephone and patient communications with the nurses' station.

depends on the connection in the wall

1. Could you gain easy access to all of the services contained in this unit for replacement of defective parts?

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The maintenance man who is cooperating in the evaluation is requested to project himself into as many situations as time will permit and record his findings.

4. As indicated in color on the posted print, the architects have made graphic analyses of wheel chair operations within the patient's room, particularly at the lavatory and in the toilet room. Red lines indicated forward movement and green lines backward movement. It is suggested that studies be made with a wheel chair to check movements and clearances.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

29 July 1969

Dr. Drage

PROGRAM OF EVALUATION - DOCTORS'

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

a. On entering the room you will note that the patient's records (charts) can be placed on the shelf to your left. This shelf is on top of a box representing a two-compartment cupboard. These compartments are to house sterile packs, clean linen, soiled trays and soiled linen.

1. Is the shelf height correct for your convenient review of records (charts)? O.K

2. Is the level of illumination at the shelf acceptable?

OK

b. The lavatory basin has been placed primarily for the convenience of the patients.

1. Is there sufficient space for you to conveniently wash your hands? OK

2. Are the soap and paper towel dispensers provided readily accessible?

O.K

c. The patient beds (two-bed arrangement) have been positioned with 8-foot center to center spacing, leaving 5 feet between beds.

1. Does this bed position allow proper space for the examination of patients?

yes

2. Is there sufficient space for yourself, residents and student doctors to review a case of special clinical interest? yes

d. A privacy curtain has been provided. When pulled around the patient:

1. Has your working space become restricted in any way? NO

2. Will this curtain always be used during patient examination or only on occasions such as at night to limit the disturbance of the other patients? Not used all the time

e. The patient examination light is incorporated in the over-bed light. It is an extremely high intensity indirect source that should provide between 60-100 footcandles at the patient.

Lighting is depicted is not adequate!!

1. Is the distribution of this light along the length of the patient adequate for all normal examinations that will be conducted at the bed? ~~yes~~ NO

2. Is the quality of the light source adequate as to proper rendition of skin pallor, etc. and the limiting of shadows?
~~yes~~ NO

f. Two dummy panels have been placed on the wall at the right of each bed. These represent bed-head service units. Each of these units will contain coded, quick connect oxygen, vacuum and air outlets, one duplex electrical outlet (on emergency power), and outlets for telephone and patient communications with the nurses' station.

1. Are these bed-head units properly positioned with respect to the beds and to give the proper diversity of outlets? yes

2. Is the height of this unit correct? (Standard = 5'=0" above finished floor.) Does the bed head interfere with any of the outlets or apparatus which will be connected thereto? NO

3. Does the suction bottle fit easily into the recessed cabinet?

4. Does it appear that the erection of an oxygen tent or a bed with a traction frame seriously limit the use of any of the outlets provided?
NO

5. Are there other services that you would consider mandatory to be included on this panel? (Provisions for physiological and closed circuit TV monitoring are now being studied.)
NO

g. On completion of the patient examinations you may want to make notes in the room before leaving.

1. Does the shelf inside the door where the patient's records (charts) can be placed lend itself to that use?

yes

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The doctor who is cooperating in this evaluation is requested to project himself into as many situations as time will permit and record his findings.

Bathroom (toilet) to far from bed

Sink could be recessed with mirror above sink

Wardrobe space limits view of patient from hall

Lighting in model room is not sufficient need light on ceiling over bed for examination

Middle Island seem to be one of 4. hindered to many the patient than is acceptable. would think sink, wardrobe space, and luggage space could be recessed in the wall.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

29 July 1969

Dr. P. Lunchall

PROGRAM OF EVALUATION - DOCTORS'

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

a. On entering the room you will note that the patient's records (charts) can be placed on the shelf to your left. This shelf is on top of a box representing a two-compartment cupboard. These compartments are to house sterile packs, clean linen, soiled trays and soiled linen.

1. Is the shelf height correct for your convenient review of records (charts)? No - Too HIGH
2. Is the level of illumination at the shelf acceptable? No - the record would be IN my shADow

b. The lavatory basin has been placed primarily for the convenience of the patients.

1. Is there sufficient space for you to conveniently wash your hands? yes
2. Are the soap and paper towel dispensers provided readily accessible? Yes - How ABOUT A foot FAUCET CONTROL?

c. The patient beds (two-bed arrangement) have been positioned with 8-foot center to center spacing, leaving 5 feet between beds.

1. Does this bed position allow proper space for the examination of patients?

IT is A little close if many people ARE present - >6, perhaps

2. Is there sufficient space for yourself, residents and student doctors to review a case of special clinical interest?

It depends on the number - vide supra

d. A privacy curtain has been provided. When pulled around the patient:

1. Has your working space become restricted in any way?

Yes

2. Will this curtain always be used during patient examination or only on occasions such as at night to limit the disturbance of the other patients?

During patient examination

e. The patient examination light is incorporated in the over-bed light. It is an extremely high intensity indirect source that should provide between 60-100 footcandles at the patient.

1. Is the distribution of this light along the length of the patient adequate for all normal examinations that will be conducted at the bed? No

2. Is the quality of the light source adequate as to proper rendition of skin pallor, etc. and the limiting of shadows?

It will depend on what color the room is painted

f. Two dummy panels have been placed on the wall at the right of each bed. These represent bed-head service units. Each of these units will contain coded, quick connect oxygen, vacuum and air outlets, one duplex electrical outlet (on emergency power), and outlets for telephone and patient communications with the nurses' station.

1. Are these bed-head units properly positioned with respect to the beds and to give the proper diversity of outlets?

← Having them all on one side may make it cluttered

2. Is the height of this unit correct? (Standard = 5'=0" above finished floor.) Does the bed head interfere with any of the outlets or apparatus which will be connected thereto?

No

3. Does the suction bottle fit easily into the recessed cabinet?

It should.

4. Does it appear that the erection of an oxygen tent or a bed with a traction frame seriously limit the use of any of the outlets provided?

No

5. Are there other services that you would consider mandatory to be included on this panel? (Provisions for physiological and closed circuit TV monitoring are now being studied.)

No, in view of further provisions being studied

Communication outlets should be on patients right.

g. On completion of the patient examinations you may want to make notes in the room before leaving.

1. Does the shelf inside the door where the patient's records (charts) can be placed lend itself to that use?

No - for reasons noted earlier

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The doctor who is cooperating in this evaluation is requested to project himself into as many situations as time will permit and record his findings.

1. Location of sink & luggage unit is bad

2. Why not switch head of bed to opposite wall? Sink & ~~worktop~~ luggage compartment could be along wall at foot of bed. ← not projecting out into room

3. ? Window in door

4. Shouldn't the lavatory be in the bathroom?

5. Overhead frame (Gwinchell for IV's (as in coronary care unit) is highly desirable

6. Adequate wiring for X-ray equipment?

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

29 July 1969

Mr. Preston
Dr. Seelig

PROGRAM OF EVALUATION -- DOCTORS'

Typical Patient Room (Mock-up)

1. OBJECTIVES:

This program of evaluation is intended to obtain an assessment of dimensions and spatial relationships of the typical patient room as presented in mock-up form. It should be borne in mind that this room represents the basic patient service module which has contributed to establishing the dimensions of the proposed new Unit C. Since this mock-up is intended to ascertain general relative merits of the room many elements, such as closets, have been defined only by boxed-in units. Evaluation of these elements in detail will be possible at a later date after the construction of a completed working model. Your comments and criticisms of this room towards providing a better area in which to accommodate and treat patients will contribute much to the success of the overall project. Where practical your suggested changes to the mock-up will be incorporated for further evaluation.

2. THE PROGRAM OF EVALUATION:

a. On entering the room you will note that the patient's records (charts) can be placed on the shelf to your left. This shelf is on top of a box representing a two-compartment cupboard. These compartments are to house sterile packs, clean linen, soiled trays and soiled linen.

1. Is the shelf height correct for your convenient review of records (charts)? Yes

2. Is the level of illumination at the shelf acceptable? NO

b. The lavatory basin has been placed primarily for the convenience of the patients.

1. Is there sufficient space for you to conveniently wash your hands? Yes

2. Are the soap and paper towel dispensers provided readily accessible? yes but 8" too high

c. The patient beds (two-bed arrangement) have been positioned with 8-foot center to center spacing, leaving 5 feet between beds.

1. Does this bed position allow proper space for the examination of patients? Yes

2. Is there sufficient space for yourself, residents and student doctors to review a case of special clinical interest? Yes.

d. A privacy curtain has been provided. When pulled around the patient:

1. Has your working space become restricted in any way? No

2. Will this curtain always be used during patient examination or only on occasions such as at night to limit the disturbance of the other patients?

e. The patient examination light is incorporated in the over-bed light. It is an extremely high intensity indirect source that should provide between 60-100 footcandles at the patient.

1. Is the distribution of this light along the length of the patient adequate for all normal examinations that will be conducted at the bed? Yes, except perineal exams

2. Is the quality of the light source adequate as to proper rendition of skin pallor, etc. and the limiting of shadows?
Yes - excellent but a direct down light would help for procedures

f. Two dummy panels have been placed on the wall at the right of each bed. These represent bed-head service units. Each of these units will contain coded, quick connect oxygen, vacuum and air outlets, one duplex electrical outlet (on emergency power), and outlets for telephone and patient communications with the nurses' station.

1. Are these bed-head units properly positioned with respect to the beds and to give the proper diversity of outlets? I think they should be to the left of the bed head.

2. Is the height of this unit correct? (Standard = 5'-0" above finished floor.) Does the bed head interfere with any of the outlets or apparatus which will be connected thereto? No
Height is correct

3. Does the suction bottle fit easily into the recessed cabinet?

4. Does it appear that the erection of an oxygen tent or a bed with a traction frame seriously limit the use of any of the outlets provided? No

5. Are there other services that you would consider mandatory to be included on this panel? (Provisions for physiological and closed circuit TV monitoring are now being studied.)
As standard items physiologic monitoring is not necessary. Some rooms should have this

g. On completion of the patient examinations you may want to make notes in the room before leaving.

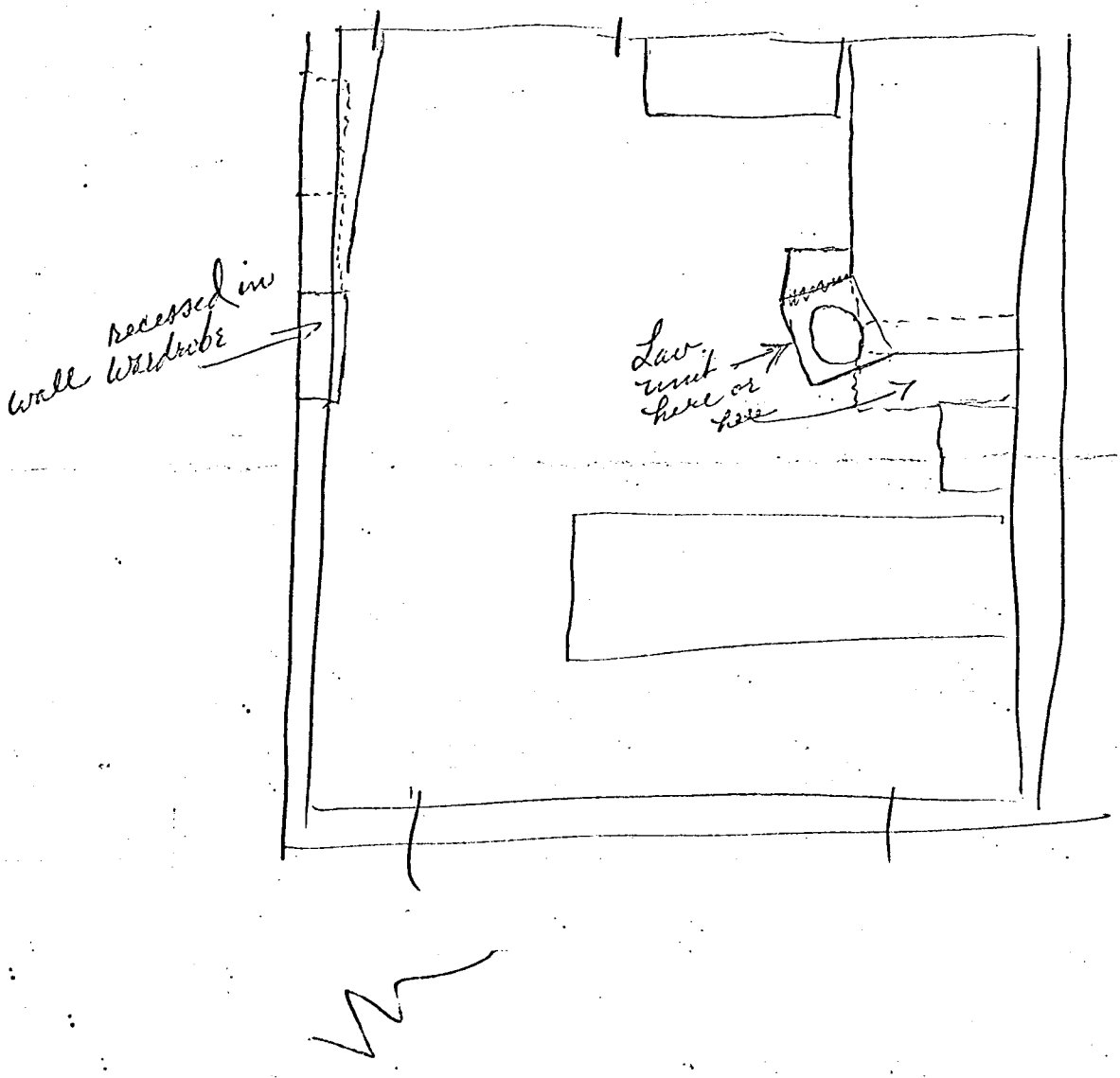
1. Does the shelf inside the door where the patient's records (charts) can be placed lend itself to that use?

3. The above outlined investigations are not intended to be conclusive in themselves, but are to serve as a suggested mode of evaluation to follow. The doctor who is cooperating in this evaluation is requested to project himself into as many situations as time will permit and record his findings.

I like the feeling of privacy created by the cabinet & sink partition — i.e. it cuts off the hallway without restricting the view of a nurse from the door. This unit does consume space, however and is an obstacle to the patient reaching the shower or toilet.

In my opinon the width of the room is adequate. It definitely should not be decreased even one inch. The length of the room also is correct — adequate for rounds, visitors, transfer of patients onto carts. A foot might be sacrificed but should be from the shower room & not the patient area. By the time heating & airconditioning equipment is installed under the window the floorspace will be just about right.@ or It is hoped that the final size of a single room will be adequate but not large enough to crowd two beds into.

@ A wide windowsill is useful for flowers.


recessed in wall wardrobe
Lav. unit here or here