

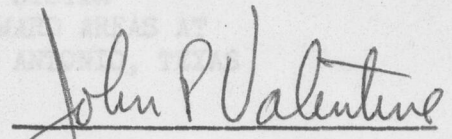


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APPROVED BY THE U. S. ARMY MEDICAL FIELD SERVICE SCHOOL:

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OF FLOOR MAINTENANCE FOR WARD AREAS AT
SAN ANTONIO STATE HOSPITAL, SAN ANTONIO

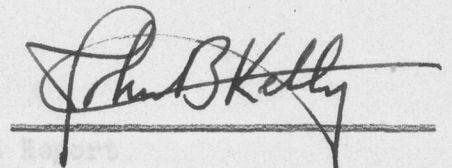

Director of the Program

APPROVED BY THE PROJECT ADVISOR:

A Problem Solving Project Report

Submitted to the Faculty of

Baylor University



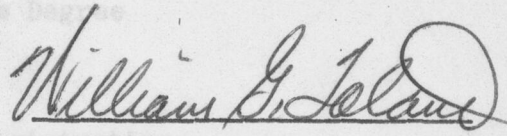
APPROVED BY THE GRADUATE COUNCIL:

Requirement of the

Requirements for the Degree

of

Master of Hospital Administration


Dean of the Graduate School

By

Major Noel E. Flemington, BCAMS

DATE: 8-8-69

Waco, Texas

May, 1969

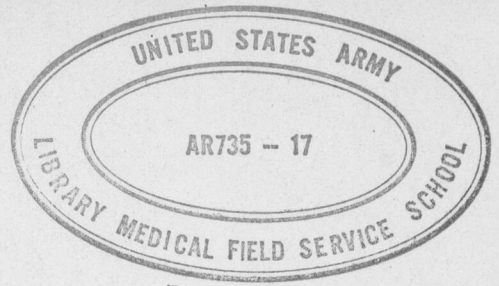


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General Information

approximately 40 percent of the total maintenance budget for a hospital today is in floor care.¹ Although the figure is based on costs incurred in the operation of an average short-term health care facility, not an extended care psychiatric facility, it is here contended that the figure is not unrepresentative of the latter. The short-term facility employs a fulltime house-keeping staff. A portion of the labor costs would be included in the building maintenance budget. Many extended care psychiatric facilities do not employ a housekeeping staff to maintain ward areas, the work being done by the attendants and nursing personnel. However, with 70 percent of their time being used in housekeeping chores, it may be seen that the costs of maintenance programs of short-term facilities and extended care psychiatric facilities may be equated. Substantial costs are sustained through house-keeping in general and floor care in particular.²

¹G. B. Bartlett, "How You Can Maintain Floors Economically," Modern Hospitals, CVI (February, 1966), 150.

²"Housekeeping Problems of a Mental Hospital," Mental Hospitals, I (February, 1959), 57.

CHAPTER I

INTRODUCTION

General Information

Approximately 40 percent of the total maintenance budget for a hospital today is in floor care.¹ Although the figure is based on costs incurred in the operation of an average short-term health care facility, not an extended care psychiatric facility, it is here contended that the figure is not unrepresentative of the latter. The short-term facility employs a fulltime house-keeping staff. A portion of the labor costs would be included in the building maintenance budget. Many extended care psychiatric facilities do not employ a housekeeping staff to maintain ward areas, the work being done by the attendants and nursing personnel. However, with 70 percent of their time being used in housekeeping chores, it may be seen that the costs of maintenance programs of short-term facilities and extended care psychiatric facilities may be equated. Substantial costs are sustained through house-keeping in general and floor care in particular.²

¹C.D. Bartlet, "How You Can Maintain Floors Economically," Modern Hospitals, CVI (February, 1966), 150.

²"Housekeeping Problems of a Mental Hospital," Mental Hospitals, X (February, 1959), 57.

The lack of an effective floor maintenance program will make the existence of a clean and sanitary atmosphere impossible, detract from the appearance of the hospital's interior, and provide inadequate surface protection that would otherwise assist in assuring the floor's expected 20 to 30 years of service.³ Furthermore, without it, the hospital will ultimately be subjected to increased operating costs, patients and staff will be living and working amidst potential accidents and injuries, and cross-infections will multiply at leisure.

The Hospital

San Antonio State Hospital is situated in the southeastern portion of the city at 5900 South Presa Street. The hospital complex houses some 33 main buildings and contains administrative elements, a medical center, rehabilitation therapy center, wards classified according to the type and condition of the patient, employee housing, laundry, power plant and warehousing facilities. The hospital is relatively self-contained, but not self-sustained.

In February of 1968, the Texas Board of Mental Health and Retardation reported that it will replace eleven dilapidated and unsafe buildings at this hospital. The Board was advised that this could be done by phasing out the buildings over a three to five year period and would affect some 1600 beds and the transfer

³Bartlett, p. 150.

of those patients elsewhere. Dr. Manuel J. Otero, Superintendent, was commended by the Board for exceptionally fine work under such difficult circumstances.⁴

The hospital at present has a rated capacity of 2700 beds with current occupancy at approximately 2400 patients. These beds are spread in varying numbers throughout 32 wards.

A recent survey of Texas mental hospitals showed the following nursing status of each patient in all seven of the hospitals surveyed (including San Antonio State Hospital): (1) 6 percent were in bed all or most of the time, (2) 5 percent were unable to walk, (3) 4 percent were deaf or had serious hearing problems, (4) 1 percent were blind, (5) 10 percent were incontinent of urine and feces, (6) 55 percent showed some confusion, (7) 7 percent had convulsions, and (8) 6 percent could not properly feed themselves.⁵

Conditions Which Prompted The Study

The study was implemented for the following reasons:

1. The business manager wanted to know whether or not the procurement of additional supplies and equipment would improve the standard of cleanliness in ward areas.

⁴"Hospital Changes OK'd," The Light (San Antonio), February 11, 1968, p. 11.

⁵Alex D. Pokorny and Shervert H. Frazier, "Texas Surveys Its Mental Hospital Population," Hospital and Community Psychiatry, XIX (March, 1968), 88.

2. The director of nursing requested that consideration be given to implementing procedures in ward areas that would minimize the nursing service housekeeping workload and maximize the utilization of other than nursing service in maintaining the required standard of housekeeping.

Statement of the Problem

The problem is to develop a system of floor maintenance for a geriatric ward at San Antonio State Hospital, San Antonio, Texas.

Objectives

In order to solve the problem as posed and to meet the criteria which have been established to evaluate the solution, the following intermediate tasks must be accomplished:

1. A study of the present situation concerning the utilization of hospital employees in the providing of housekeeping services to ward areas.

2. The establishing of a system of utilizing personnel that will minimize the housekeeping workload of nursing service.

3. A study and review of the present cleaning methods, including detergents, disinfectants, and machines and equipment.

4. The determination of specific procedures for cleaning and caring for floors, and of the machines and equipment used to maintain them.

The problem stems from the following contributory factors:

1. There is no housekeeping staff in ward areas.

Criteria

The following are established as the criteria for this study:

1. The cleanliness and sanitation of floors should be maintained at a high standard to facilitate the care of patients by creating a proper environment.
2. Floor maintenance should be performed under the direction of personnel trained in the proper principles and procedures and capable of providing maximum supervision.
3. The materials and equipment to be used should be proper to the task and limited only by institutional rules, regulations, and limitations which may, through some necessity, be imposed.
4. The organizing process utilized in developing a system of employing patients in floor maintenance activities should consider their conditions, capabilities, and potentials.

Limitations

The business manager stated that primary consideration should not be given to the increasing of personnel within the hospital as a means to solving the problem, but further stated that no financial limitations were to be placed on this study.

Facts Bearing on the Problem

The problem stems from the following contributory factors:

1. There is no housekeeping staff in ward areas.

2. Buildings, for the most part, are old. Some buildings date from 1893 to 1920.

3. Floor surfaces vary in materials used: vinyl tile, asphalt tile, ceramic tile, concrete, and terrazzo.

4. Inefficient cleaning has permitted build up of wax, deep staining, excessive wearing of some surfaces, and a general deterioration.

5. There are insufficient trained employees who can carry out a proper floor maintenance program without centralized control and constant supervision.

1. Condition of the floors.

2. Heavy, pervasive Assumptions and faces.

The following assumptions are made in order to stabilize conditions for the solving of the problem:

1. The patient load and category will show no appreciable change during the period for each ward area (see page 3, paragraph 2).

2. The current utilization of personnel, materials, and equipment in the maintenance of floors in ward areas can be improved in a manner that is acceptable to the administrative and nursing elements alike.

Utilization of patients to perform cleaning functions.

apparent that the field of study could not encompass all 32 wards.

The decision was then Research Methodology of the problem to that of The initial step was a review of the literature to gain a proper orientation to an extended care psychiatric facility and its peculiar problems within the field of this study. Current

literature was reviewed to gain a knowledge of the practices and trends within the housekeeping field in general and floor maintenance in particular.

During the initial visit to the hospital interviews were held with the business manager and the director of nursing to ascertain a more complete picture of the specific housekeeping problems as they existed at San Antonio State Hospital. A conducted tour of most of the ward areas was made, under the personal guidance of the director of nursing, and the following items were noted:

1. Condition of the floors.
2. Heavy, pervasive odor of urine and feces.
3. Storage of cleaning supplies and equipment.
4. Method of daily cleaning.
5. Types of cleaning supplies and equipment used.
6. Absence of trained employees to carry out the cleaning.
7. Utilization of patients to perform cleaning functions.

Nurses and attendants in each of the wards were questioned regarding the frequency and responsibility for floor care in each of the wards.

On completion of the initial visit, it became all too apparent that the field of study could not encompass all 32 wards. The decision was then made to limit the scope of the problem to that of a geriatric unit (Ward L). This situation would typify probably the most difficult circumstances under which floors must be maintained.

Inasmuch as the problem entails the utilization of personnel, materials and supplies, and equipment, it is still necessary, to some extent, to deal with the hospital as an entity.

Prior to the second visit, further literature review was carried out. More stress was now placed on floor maintenance.

During the second, and final, visit to the hospital interviews were conducted as follows:

1. Ward nurses and attendants -- to ascertain if there had been any changes in the methods of cleaning, or in the results, since the first visit (a period of approximately 2½ months had elapsed).
2. Director of Nursing -- to gain any further information on the problem.
3. Housekeeping Supervisor -- to determine the scope of her operation within the administrative portion of the total facility, and what assistance she received.
4. Supply and Purchasing Officer -- to ascertain the scope and type of cleaning materials available and the method of purchase. Also to obtain the same information on floor cleaning equipment.
5. Maintenance Engineer -- to discuss possible problems regarding circuitry load that may be a problem with an increase in the use of electrical equipment.
6. Motor Pool Supervisor -- to learn the extent and frequency of repairs to floor cleaning machines (this is a responsibility of the Motor Pool Maintenance Section).

7. Personnel Director -- to determine the housekeeping responsibilities of various hospital employees from their official job descriptions.

8. Rehabilitation Therapies Supervisor, and Industrial Therapy Supervisor -- to gain information on employment of patients within the facility, attitudes towards patients as workers (with or without pay as an incentive), and whether or not a system for employing patients was actually in effect.

A study was made of the cleaning materials, cleaning compounds, and detergent-germicides that are presently in use, and their effectiveness was determined by observing their application to various areas and surfaces, questioning employees, and from documentary evidence of tests previously implemented by the Director of Nursing.

Data was collected on a geriatric ward (Ward L) and on a rehabilitation ward (Ward 17) to determine the actual daily time spent by nursing personnel in the cleaning of floors. These two wards are representative of the opposite ends of a graduated floor maintenance requirement, based on the type of patients in the various wards.

The final determination was that of comparing the overall present status of floor maintenance with the criteria and with the current practices and trends which appeared in the literature. From this, conclusions were drawn and recommendations made.

CHAPTER II

LITERATURE REVIEW

Introduction

Proper floor care is but one link in the chain of aseptic housekeeping practices that must be followed in any health care facility. Appearance is but a secondary consideration in any floor care program. Primarily, the goal is one of creating a clean environment for the patient.

Until recently, the concept of housekeeping in ward areas of extended care psychiatric units has been that of the nursing service accepting complete responsibility. The nurses, attendants, and patients did all of the required cleaning.

A number of factors have brought about the need for conceptual change. The development of a total housekeeping entity has become necessary and is now used extensively in the field.

These changes of concept have been necessitated by the chronic shortage of nurses and other trained staff on the wards. Nurses and their staff have, in the past, spent too much time in housekeeping and have had too little time to fulfill their prime function -- patient treatment. Further, the trend to greater use of outpatient facilities has tended to leave a greater preponderance of those patients with chronic illnesses who require greater attention and who cannot be utilized in assisting in the house-

keeping procedures. This trend may eventually mean that hospitals such as San Antonio State Hospital will be forced to consider employing a fulltime staff instead of relying on nurses and patients.

The trend towards a separate housekeeping department is further substantiated by the use of increasingly complex and varied disinfecting and detergent agents employed in today's housekeeping programs. Specialization in activities is becoming an inevitable state in order to gain the required extensive knowledge of products, techniques, and procedures.¹

Information within this chapter will be presented so that the current practices and concepts will fall separately into the classifications of (1) personnel, (2) supplies and equipment, and (3) cleaning methods and procedures. In concluding the chapter, important trends that affect the psychiatric facility will be mentioned.

The Personnel Aspect

Although the trend is to a decrease in the availability of patients who are in possession of sufficient mental and physical facilities to carry out the rudimentary cleaning tasks, they will continue to be utilized as long as they are available. Cleaning procedures are still classified as industrial therapy by most of the authorities in the field.

¹Walter E. Barton, Administration in Psychiatry (Springfield: Charles C. Thomas, Publisher, 1962), p. 544.

Much of the literature points to the need for someone on the ward to relieve the nurse of her many administrative duties, and other tasks that do not directly relate to patient care. The Texas Hospital Association has recently produced a report on the study of a Unit Manager, "...in an effort to assist in alleviating the critical shortage of registered nurses and to improve the quality of patient care in hospitals throughout the State."²

In general, the concept of a unit manager has been accepted by the many practicing hospitals as a wise move and contribution to the improving of ward management and efficiency. Most hospitals, in using the unit manager system have placed him (or her) in a line relationship to the housekeeper, or business manager, whilst maintaining a close working relationship with the nursing service.³

Basically, the ward tasks that are involved are: (1) Management of cleaning personnel, (2) supervision of cleaning and maintenance of equipment, (3) answering the telephone, (4) securing and ordering of ward supplies, and (5) routine clerical work.⁴

The selection of a work force is somewhat restricted when patients are to be utilized. Many hospitals also find themselves in the position of having to contend with using below-par workers

²Texas Hospital Association, "The Unit Manager," a project of the Council on Hospital Nursing, February 9, 1967. (Mimeographed.)

³"Housekeeping Problems of a Mental Hospital," Mental Hospitals, X (February, 1959), 57-58.

⁴M. Cooke, "Adopting the Housekeeper in the Psychiatric Hospital," Nursing Times, LXII (June 3, 1966), 736.

to accomplish the housekeeping tasks. In many instances this is due to the inability to pay a wage that will attract the preferred type of worker. Keeping these restrictions in mind, two methods of work assignment are usually considered and analysed. These are the "area" method and the "team" concept.⁵

Some authors contend that a combination of these two methods may well approach the ideal solution to the efficient utilization of a housekeeping work force.⁶

Cleaning Supplies and Equipment

The cost of floor care supplies and equipment is relatively small when compared with the labor costs associated with that same floor care. However, expense and desired results must be carefully considered, because the less expensive equipment and supplies may prove to be the most costly in the final analysis. The product being considered must do an adequate job, have no deleterious affect on the surfaces, and must be reasonably priced. When it comes right down to the selecting of a product which is best to meet a certain situation, the purchasing agent will usually rely on the actual service tests, carried out in the least biased manner possible. Any consideration to changing products should result

⁵ Robert A. Hadden, "The Team Concept," Executive Housekeeper, XII (November, 1966), 28.

⁶ Walter Groose, "Area Assignments Versus the Platoon Plan," Hospitals, XXIX (September, 1955), 124.

from the fact that there is a definite and obvious superiority, in some characteristic, to that being used at present.⁷

The most popular cleaning products, at least from the standpoint of bulk in literature review, are the detergent-germicides. These cleaning products, for the most part, are categorized as phenolics, iodophors, and quarternary ammonia. Preference of product appears to center around the germicidal potential in one situation and the cleaning potential in another. The quarternary ammonia tends to rate slightly higher in most properties that are considered necessary to generalized hospital usage.⁸

Quandaries exist when it comes to decisions on the use of floor polishes, finishes, and sealers. Today, plastic or waxless finishes are composed of polyethylene, polystyrene, resin, and shellac. They are light in color, long wearing, slip-resistant, buffable, and have a very high gloss. They work well on terrazzo, cement, and other stone floors. Many authorities feel that they will eventually replace anti-slip waxes, because of their scuff-resistance and long wear without being slippery.⁹

⁷Bernard Berkeley, "Evaluating Housekeeping Supplies," Hospital Progress, XLI (October, 1960), 74-76.

⁸William G. Mizuno and Austin K. Pryor, "Evaluating Detergent Germicides for Hospital Use," Hospitals, XL (January 16, 1966), 88.

⁹Robert De Rosier, "Report on Wax and Waxless Finishes," Buildings, LVII (July, 1958), 48-50.

The floor care equipment field has become a vast and complex area requiring the buyer to be quite knowledgeable and discerning. Care must be taken to ensure that the right equipment is purchased for the specific job, and used for the job that was intended. The use of a specific machine may not decrease the number of employees, but it will decrease the manhours required to complete a procedure. The potential buyer must be very aware of the requirement, cost, characteristics and potential of the equipment, and the availability of skilled personnel to employ it to the fullest of its capabilities.¹⁰

When the employee is given the responsibility for using high-quality equipment he must also accept the responsibility for maintaining it at peak performance. Having been trained in its proper use, maintenance, and storage is not the final word in a good equipment maintenance program. Regular inspections of the equipment should also be made by the housekeeper or supervisor.¹¹

Cleaning Methods and Procedures

It is ultimately the responsibility of health care facility management to determine the level of sanitation it wants to achieve. The next step in the procedure then becomes the developing of

¹⁰E.C. Deming, "How To Buy Cleaners, Waxes, and Germicides," Modern Hospital, XCIX (September, 1962), 172.

¹¹Deming, p. 138.

methods, procedures, and techniques to maintain this standard.

The implementing of standard procedures lends uniformity to the overall operation. Procedures for floor cleaning should be written down and available to every employee who must carry them out. They must also be maintained by supervisors and other directing personnel. The extent of detail required in these instructions can only be gauged by the level of comprehension of the employee, but must be complete.¹²

Current Trends

The use of carpeting in psychiatric and geriatric facilities is beginning to gain a certain acceptance. Definite advantages over resilient flooring have been noted in the trials carried out, but there also remained certain inherent disadvantages which require very careful consideration being given prior to making the change. In areas where there were a number of ambulatory incontinents, as reflected in Miss Lee's article, in many cases cleaning would not remove the odor of urine and those sections of carpeting had to be completely removed.¹³

The institution must give full and careful consideration to the therapeutic value induced through the addition of carpeting

¹²John H. Brenner, "Five-point Program for Aseptic House-keeping," Hospitals, XLI (December 1, 1967), 87.

¹³Ruth Lee, "The Advantages of Carpets in Mental Hospitals," Mental Hospitals, XVI (November, 1965), 324-325.

(September, 1967), 88.

and weigh it realistically against the increased initial budget, and what would appear to be a continuing increased annual cost of maintenance.¹⁴

CHAPTER III

DESCRIPTION AND SUMMARY

Discussion

The problem of greatest concern within the housekeeping field at San Antonio State Hospital was that of floor maintenance. This became particularly acute within elements such as geriatric wards because it was an unending process. The ambulatory inpatient requires continual observation by a member of the ward staff. Various attendants stated that they attempted to get ambulatory patients into a routine and get them to the bathroom before they walked. However, with no housekeeping staff on the ward, so much of the time was involved in cleaning work that sticking to a routine was nearly impossible. As a result, the patient added further to the cleaning problem.

A study was made to ascertain the actual involvement of the ward staff in floor cleaning procedures during the day shift (see Table I). The attempt was not made to establish the total time required to clean a ward, rather the objective was to determine the involvement of the nursing staff in floor cleaning procedures.

It was found that the manhour expenditure on Ward L was

¹⁴"The Floor Covering Decision," Buildings, LXI (September, 1967), 88.

CHAPTER III

DISCUSSION AND SUMMARY

Discussion

The problem of greatest concern within the housekeeping field at San Antonio State Hospital was that of floor maintenance. This became particularly acute within elements such as geriatric wards because it was an unending process. The ambulatory incontinent required continual observation by a member of the ward staff. Various attendants stated that they attempted to get ambulatory patients into a routine and get them to the bathroom before they soiled. However, with no housekeeping staff on the ward, so much of the time was involved in cleaning work that sticking to a routine was nearly impossible. As a result, the patient added further to the cleaning problem.

A study was made to ascertain the actual involvement of the ward staff in floor cleaning procedures during the day shift (see Table 1). The attempt was not made to establish the total time required to clean a ward, rather the objective was to determine the involvement of the nursing staff in floor cleaning procedures.

It was found that the manhour expenditure on Ward L was the equivalent of four attendants doing no patient care throughout the shift. Even on Ward 17, where all patients were ambulatory

and most could be of some assistance in housekeeping, 2.5 attendants performed only floor care procedures. This must be considered a high rate of misemployment.

TABLE I

WARD STAFF TIME USED IN DAILY
FLOOR CARE

Procedure	Ward L (Hrs.)	Ward 17 (Hrs.)
Dry Mopping	7.00	4.00
Wet Mopping	11.00	6.50
Scrubbing Machine	4.00	----
Vacuum Dry and Wet	2.00	5.00
Wiping Up Spills and Soils	2.00	2.75
Cleaning Bathrooms	6.00	2.00
Total Manhours Used	32.00	20.25

SOURCE: Time Sampling by the student at San Antonio State Hospital.

San Antonio State Hospital follows the normal trend of being understaffed in nursing service.¹ Furthermore, they are required to carry out housekeeping tasks in spite of this shortage. Therefore, to ensure an acceptable level of ward cleanliness, time that should be utilized in patient care must be sacrificed.

¹Walter E. Barton, Administration in Psychiatry (Springfield: Charles C. Thomas, Publisher, 1962), p. 544. The shortage of nursing staff in San Antonio State Hospital was confirmed by the Director of Nursing.

The hospital's personnel officer advised that within the position classifications, as laid down by the Texas Department of Mental Health and Retardation, an attendant is to spend 60 percent of his working shift within the job description, i.e., patient care. Under the present system this is impracticable and impossible.

Patients are utilized in doing most of the actual floor cleaning, but the system which activates this is loose and relatively uncontrollable. Patients who are capable of doing such tasks are dispatched to the various wards by the supervisor of the industrial therapy section. He receives notification from the physician recommending the extent of the industrial therapy in which the patient may engage. The wards make known their requirements, and the supervisor then will attempt to comply with the request.

The hospital has recently undertaken the paying of patients for work done; hence, this supervisor in industrial therapy must also keep a record of time worked by each patient. At the present time the supervisor is paying the patients for work that has taken place under the supervision of another in some remote area. For the patient there is a tendency not to be able to equate the two things, i.e., the work and the pay. It is only through the equating of these two things that the patient gains the realization of an incentive and, hence, reaps the therapeutic value therefrom.

The disadvantages of the present system center around the lack of organized disposition, control, knowledge of the problems in the specific areas to which the patients are dispatched, and

the placing of the burden of responsibility on someone who, in actuality, is a disinterested party to the housekeeping problem.

The hospital does employ a housekeeping supervisor, who at present is only responsible for the administrative areas and buildings. The personnel officer stated that her actual job classification is that of Assistant Building Custodian, Classification No. 8009. The following is quoted from the general description of her position:

The Assistant Building Custodian is responsible to the authorities designated by the Superintendent for the proper cleanliness and sanitation and minor maintenance of the institutional buildings housing administrative personnel, patients, or students...supervises the work of janitors, building maids, or subordinate ward personnel assigned to cleaning and custodial work in a state hospital or special school.²

The housekeeping supervisor at present has a staff of four skilled housekeeping personnel and maintains, with the assistance of housekeeping aides (patients), the following areas: rehabilitation therapies building, outpatient clinic, post office, social service, property office, main administrative area, volunteer building, supply offices, maintenance offices, auditorium, and bowling alley. Her normal personnel request is for approximately twenty housekeeping aides to meet the housekeeping workload of these areas. Under the present system the housekeeper has no advanced notice of the number of aides she will have daily and usually receives fewer than she requires.

² Provided by the personnel director, San Antonio State Hospital. (Mimeographed.)

In order to bring a housekeeping department into full service, consideration must be given to the specific application of personnel on each ward to be directly under the supervision of, and responsible to, the housekeeping supervisor. Without additional personnel being employed, this can only be accomplished through the redesignation of a ward attendant to that of an administrative assistant. He would then cease to be responsible to the nurse in charge of the ward, but would remain responsive to her.

This ward administrative assistant would have the following duties:

1. Supervise, secure and maintain the cleaning equipment within the ward area.
2. Requisition supplies and cleaning materials from the supply warehouse.
3. Train and direct the patients and/or other personnel to be employed in ward cleaning.
4. Maintain daily and periodic work schedules for ward cleaning.
5. Ensure that patients and/or personnel required to do the cleaning are arranged for through the housekeeping supervisor at least twenty-four hours in advance.
6. Maintain the time sheet and record the time worked by each patient. Pay the patients in accordance with the records.

Under the direction of the business manager and housekeeping supervisor, a program, tailored to the functional operation

of the field within which he must perform, should be established.

The ward administrative assistant must be taught:

1. The importance of good interdepartmental relations.
2. His line of authority and liaison responsibilities.
3. The scope of his operations.
4. The skills and procedures of ward cleaning.
5. Personnel management.
6. Work methods.
7. Utilization and care of equipment and resources.

Whereas the present system involves the manhours of the equivalent of four attendants on the day shift devoted to cleaning procedures, this new system would place responsibility on one qualified individual for that same period of time. There would be continuity of performance, not the haphazard utilization of whatever attendant happened to be the most available at the time. There would be a sense of purpose developed within that one individual to specialize and, through specialization, gain an awareness of the importance of the task.

Consideration must also be given to the method of employing the cleaning personnel. The two basic considerations are the "area" and the "team" methods. The first is concerned with the assignment of cleaning personnel to a ward or area with all-inclusive responsibility for every aspect of the cleaning. The second emphasizes the specialization of employment -- a team, with a leader, will undertake a specific housekeeping task and perform throughout the facility. The choice of method will usually be

based on the number of employees who are available with leadership ability, the number of employees, and the size of the facility to be maintained.³

The procedure to be established in the employment of patients would then be as described below:

1. The physician will notify the supervisor of industrial therapy as the patient is recommended for this type of therapy-employment. This will also include the extent of the patient's physical and mental abilities.

2. The supervisor of industrial therapy will daily (or as is appropriate) forward a list of patients, together with their employment capabilities, to the housekeeping supervisor.

3. Ward administrative assistants will forward, daily in advance, a list of their requirements and specify the type of work to be done.

4. The housekeeping supervisor will then fill the requests by distributing the resources available in such a manner as to ensure that the maximum amount of work may be done.

5. Ward administrative assistants will then report each morning to the housekeeping supervisor's office and collect their respective work parties and carry on.

Through liaison between the housekeeping supervisor and the ward administrative assistants, specialization within the

³Walter Groose, "Area Assignments Versus the Platoon Plan," Hospitals, XXIX (September, 1955), 124.

employment of patients can be established, i.e., those that work best at mopping floors, or polishing floors, or washing windows. In this manner a patient could receive a known classification and standard of performance and be transferred at times to different areas or wards and receive the benefit of a change of environment.

A variation of the system just described would place the emphasis on the organization of cleaning teams. These teams would then, in accordance with a pre-arranged work schedule, go from ward to ward doing the detailed cleaning, the minor routine cleaning tasks would remain the responsibility of the ward and one or two patients assigned for that purpose. This method would necessitate re-structuring the concepts of the ward administrative assistant and patient employment as follows:

1. The hospital would be divided geographically into five ward units, plus a unit for the administrative area.
2. Each unit would be provided with a housekeeping team, under the direction of an area administrative assistant. These would be drawn from the overall ward structure.
3. The teams would then be responsible for the more detailed cleaning throughout the whole hospital complex.
4. At the same time, a small team of patients would be assigned to each ward, as required, to carry out the minor cleaning tasks that are of a recurring nature within the daily routine, i.e., wiping up spills, sanitizing and deodorizing bathrooms, etc.

This method would decrease the usefulness of the administrative assistant. He would no longer have the same immediate

supervisory capability, but would have the responsibility for general coordination of the wards within the area assigned. This method would improve the standard of performance by definitely ensuring a continuing cleaning process throughout all wards in each area in cyclical fashion.

Cleaning Materials and Supplies

Up to this point the discussion has only considered the organization of personnel to implement a floor care and maintenance system. Interviews with the supply and purchasing officer, maintenance engineer, motor pool supervisor, and with attendants all bear out the fact that equipment is adequate, but misused and mistreated.

The most popular cleaning products, at least from the standpoint of bulk in literature review, are the detergent germicides. These cannot replace the synthetic detergents or soap compounds in cleaning ability, however they do have a very important role in the sanitation of floors. For the floor that is well cleaned periodically, they will provide an adequate dual-purpose, one-step operation, in maintaining a proper level of daily cleaning and sanitizing.

Tests performed on asphalt tile show plastic (waxless) finishes to be 34 percent less slippery than any form of regular, hard, solvent, or paste wax. The same report ranked plastic finishes as first consideration for terrazzo, concrete, marble and

ceramic tiles, and also highly acceptable for asphalt and vinyl tiles.⁴

A survey of cleaning materials and supplies indicated that three problems existed:

1. The washing compounds, detergents, synthetic detergents, detergent-germicides, and deodorizers all failed to remove the urine and feces odor from the large porch area, second floor, geriatric ward (Ward L).

2. The general purpose detergent for deep cleaning did not appear to be performing in accordance with its specifications.

3. In many instances the wet mops were not properly cleaned after use.

Tests were carried out on products that are at present stocked by the supply and purchasing officer. These tests were to determine whether or not deep cleaning could be accomplished. Two additional products were also tested. The results of these tests are shown in Table 2.

The staff of Ward L have tried all products available to them to remove the strong odor of urine from the porch area. This condition resulted from permitting the accumulation of urine to soak into the floor surface, and into the concrete beneath it. The surface is made of vinyl tile.

It was further observed that in many cases of daily damp mopping the following conditions arose:

⁴Robert De Rosier, "Report on Wax and Waxless Finishes," Buildings, LXII (July, 1958), 48-50.

TABLE 2

RESULTS OF VARIOUS CLEANERS IN
DEEP CLEANING FLOORS

Type	Deodor- izer	Daily Mopping	Deep Cleaning
General Purpose Detergent	No	Fair	Fair: leaves gummy film and requires rinse.
General Purpose Detergent*	No	Good	Good: no germicidal action, only clean- ing.
Heavy Duty Granular Liquid (Chlorinated)**	Good	Good	Good: but not to be used on asphalt tile.
Iodophor	Fair	Fair	Poor: stains some surfaces.
Phenolic	Fair	Fair	Poor: leaves a sticky film.
Synthetic Phenolic	Fair	Fair	Poor: as above.
Quarternary Ammonium (Double Based)**	Good	Good	Fair.

* Previously supplied under contract, but no longer stocked.

** Not stocked by the hospital.

SOURCE: Combined survey, Director of Nursing and the student, San Antonio State Hospital.

1. Improper measurement of the detergent-germicide being used.
2. Solution being used long after it should have been changed for fresh solution.
3. Dirty mops being used. Dirty mops being hung in storage areas without ventilation.

It becomes obvious that no one element within the framework of the existing housekeeping program can be condemned for situations such as stated above.

Consideration must be for the implementation of a complete program being built around the following elements:

1. Careful selection of a detergent-germicide for surface cleaning.
2. A bacteriological monitoring program.
3. Proper equipment to be used in the correct manner.
4. A thorough and constant program of educating and training.
5. Techniques to be used must be those most suitable for the job at hand.⁵

The wet mop can well be classified as the one most important piece of floor care equipment. It may be required for damp mopping operations, wet mopping, flooding the floor for the scrubbing machine, and even the applying of a wax or finish.

⁵John H. Brenner, "Five-point Program for Aseptic Housekeeping," Hospitals, XLI (December 1, 1967), 87.

Dirty, bacteria-laden, odorous mop heads cannot perform the required operation effectively.

Conversations with the supply and purchasing officer, laundry manager, and ward staff revealed the following situation:

1. Mop heads are exchanged weekly at the supply warehouse on a one-for-one basis.
2. In the meantime they are maintained by the ward staff.
3. Daily, detailed cleaning of the mop heads is time consuming and difficult to perform with the available agents.
4. Mops cannot always be kept in ventilated storage areas.
5. Mop heads are exchanged at the supply warehouse, the dirty ones collected there in bulk, forwarded to the laundry, cleaned, and again returned to the supply warehouse for subsequent reissue.

Inherent in the present practice are many disadvantages. All of these center around the excessive handling of dirty mops. This, in turn, increases the opportunity of spreading bacteria and odor over a large area.

The following system would significantly decrease the handling and possible transmission of infectious organisms:

1. The supply and purchasing officer issues a bulk quantity of mop heads to the laundry manager.
2. The wards send their dirty mop heads to the laundry each time they send their dirty linen.

3. The laundry replenishes on a one-for-one basis when they deliver the clean linen back to the wards.

4. The wards continue to carry out daily maintenance procedures on the mop heads, but they will receive laundered mop heads more frequently.

The hospital received 23 single-disc scrubbing machines and an equal number of dry/wet vacuum pick up machines shortly after the commencement of this study. These machines are used in the ward areas and do an exceptionally fine job -- when operated, treated, and maintained properly. They are adaptable to use in small, obstructed bedroom spaces, yet fully adequate for the larger floor areas in the dormitories and corridors.

The present problem is one that is built into the hospital -- the lack of wall outlets to supplement the length of electric cord on the machines. This is being corrected by the maintenance engineer and his staff.

Basically, the same general cleaning procedures and methods apply to a psychiatric facility as to any other health care facility. The normal daily routine for cleaning will apply. However, the major differences are in the frequency and techniques for special cleaning. These differences, specifically within a geriatric unit, are made necessary by apathetic mental patients who are ambulatory, incontinent, and may even tend to be destructive. Emergency cleaning is every employee's responsibility and requires immediate action being implemented.

The following emergency cleaning tools and supplies should be stored in a convenient, central location (a spare maid's cart would be ideal):

1. Paper towels, napkins, or old newspaper.
2. Moistureproof garbage bags.
3. Bactericidal solution.
4. Absorbent granules, which can be prepackaged in small sacks, specially manufactured to deodorize and absorb odoriferous liquids.
5. Small plastic pail.
6. Washable plastic, or hard rubber, dustpan.
7. Large cellulose sponge.
8. Putty knife.
9. Mop head and handle, if space is available.

These supplies should be considered as supplementary to the daily cleaning supplies and are for special types of soil, e.g., vomit, urine, feces, mucus, blood.

The special cleaning procedures shown at Appendix A provide for the utilization of the tools and supplies listed above. Copies of these procedures should be maintained at each location with the supplies. All members of the ward staff should become thoroughly familiar with these procedures so that they are prepared to immediately take action in any of the emergency cleaning situations as they arise. There may be the requirement for any member of the staff to use these supplies.

Inasmuch as each person feels that he has the "one best way" to carry out any cleaning procedure, it becomes necessary for one in a position of authority to lay down the procedures that will be used and have these procedures written out and adhered to by all employees. Only in this way can any standardization of performance be maintained and any uniformity be expected.

Supervisors and team leaders should be trained to impress upon their employees the adherence to these procedures. When dealing with detergents, detergent-germicides, and cleaning compounds and liquids, the employee would do well to ask himself the following questions:

1. Did I use the exact dilution recommended?
2. Did I apply it as long as recommended?
3. Did I rinse when it was specified as necessary?
4. Did I manage to breakdown the usefulness of the whole cleaning process by being careless?

Appendices B, C, and D contain the detailed procedures to be implemented in a floor maintenance system. These procedures should be written up and distributed to all wards. The frequency of cleaning will vary for the type of ward and is one thing which must be determined through the coordinated planning and organizing by the housekeeping supervisor, ward administrative assistants, and the ward nurse.

Equally as important as the procedures instituted for cleaning and maintaining floor surfaces are those procedures which keep the equipment operating at peak performance. Good equipment

must be well cared for and requires the setting up of a maintenance schedule for inspection at regular intervals by qualified maintenance personnel. During the period between these inspections there must be careful daily user maintenance to ensure that the equipment is always operational when required for use. Appendix E lays down simple, yet effective, daily user maintenance procedures.

Consideration was given to the feasibility of introducing the use of carpeting in the main entrance of the geriatric ward, the lounge, and the corridors.

Advantages have appeared in the form of noise reduction, less injuries from falls, less employee fatigue, greater patient interaction, patients' pride in surroundings, and less time involved in cleaning.

Disadvantages showed in the areas where there were a number of ambulatory incontinents. In many cases it was impossible to completely remove the odor of urine. The initial cost of carpeting ranges from 140 to 270 percent of the cost of vinyl tile for the same area, and under the same conditions. Further, the annual maintenance costs, in one study, showed \$251.90 per 1,000 sq. ft. of carpeting, as opposed to \$123.26 per 1,000 sq. ft. of resilient flooring.⁶

The advantages make carpeting an attractive consideration, but within an institution that at present has a great difficulty in ridding itself of undesirable odors, and acknowledging the fact

⁶"The Floor Covering Decision," Buildings, LXI (September, 1967), 88.

that studies have indicated that there can be some difficulty in the complete removal of urine odor, the introduction was not deemed advisable at present.

Summary

Floor maintenance in an extended care facility, specifically within a geriatric unit, is an unending procedure. Ambulatory incontinents necessitate the implementation of a system that provides simple, effective cleaning procedures. For the most part, these procedures should utilize uncomplicated and readily available materials and supplies.

Floor maintenance is a housekeeping function and should ultimately be the responsibility of that department, not of nursing service.

Housekeeping functions within an extended care psychiatric facility are an acknowledged source of industrial therapy, hence many of these functions may be performed by patients under proper supervision.

The primary functions of the ward staff, as such, must be the care of the patient, treatment, and therapy. An average of 32 manhours on each day shift in the geriatric unit (Ward L) at San Antonio State Hospital are utilized in floor care, cleaning, and maintenance. This is an equivalent loss, through misemployment, of four of the members of the ward staff. The loss could be reduced considerably by redesignating an attendant as an administrative assistant responsible for all aspects of the ward cleaning.

Cleaners, detergents, special detergents, and detergent-germicides are generally effective within the range of use that is stipulated by the manufacturer. The proper dilution of solution is critical. Waxes and floor finishes will be chosen by personal preference, but should be closely scrutinized in order to obtain the one that is the least slippery and acceptable to the greatest variety of floor surfaces.

The implementation of proper cleaning and maintenance procedures, combined with the appropriate equipment and supplies, will usually ensure that the required standard of results is produced. This, however, must be combined with the proper training of personnel, adequate supervision, and strict adherence to proper users' equipment maintenance requirements.

definitely specify responsibility, chain of authority, employment of personnel, types of products to be used, detailed procedures for using supplies and equipment, and simple, daily users' procedures for maintenance of the equipment.

Recommendations

In order to implement an effective system of floor maintenance, it is recommended that:

1. The housekeeping supervisor assume her rightful role and be delegated the authority and assume the responsibility for the management functions of housekeeping in ward areas.
2. The employment of ward administrative assistants be

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Responsibility for all housekeeping functions at present rests with the nursing service, not with the housekeeping supervisor. The ward staff cannot do justice to patients and floors at the same time. Patients should take priority.

The patients and floors in ward areas will only receive the appropriate attention when responsibility for them is clearly defined and separated. The system of floor maintenance must definitely specify responsibility, chain of authority, employment of personnel, types of products to be used, detailed procedures for using supplies and equipment, and simple, daily users' procedures for maintenance of the equipment.

Recommendations

In order to implement an effective system of floor maintenance, it is recommended that:

1. The housekeeping supervisor assume her rightful role and be delegated the authority and assume the responsibility for the management functions of housekeeping in ward areas.
2. The employment of ward administrative assistants be

instituted for all wards, duties to be as previously described herein.

3. Procedures for employment of patients be established as previously described herein.

4. The choice of floor cleaners, detergent-germicides, and detergents be governed by Table 2 of this report.

5. A plastic (waxless) finish be used on all ward floors.

6. Floor care procedures be implemented and adhered to as stipulated in Appendices A, B, C, and D of this report.

7. Users' equipment maintenance be performed daily using Appendix E to this report as a checklist.

8. Procedures be instituted to have mop heads cleaned on a one-for-one exchange basis between ward and laundry.

APPENDIX A

SPECIAL CLEANING PROCEDURES

SEMI-SOLID SOIL

1. Spread granules over soil and allow to absorb.
2. Place disposable paper over soil, pick up and place on dustpan.
3. Use putty knife to remove remaining solid soil.
4. Push all remaining granules onto dustpan with knife.
5. Clean surface with sponge and solution from pail.
6. Wipe surface dry with disposable paper.
7. Dispose of soil by flushing down nearest toilet, or put in a treated garbage bag which can be securely closed and deposited in a container for removal.

APPENDIX A

SPECIAL CLEANING PROCEDURES

8. Thoroughly clean and disinfect all equipment after use and return to their proper place, ready for next emergency.

LIQUID SOIL

The same procedure as is shown above.

DRY SOIL

1. Remove as much as possible with putty knife before deepening. This will hold down the odor.
2. Carry out procedures 5 through 8 above.

SOURCE: Helen K. Johnson, Ralph G. Stone and George P. Garrett, "How to Cut Infection Chain in Your Psychiatric Unit," Modern Hospital, CIX (October, 1967), 144.

APPENDIX A

SPECIAL CLEANING PROCEDURES

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5. Clean surface with sponge and solution from pail.
6. Wipe surface dry with disposable paper.
7. Dispose of soil by flushing down nearest toilet, or put in a treated garbage bag which can be securely closed and deposited in a container for removal.
8. Thoroughly wash emergency tools after use and return to their proper place, ready for next emergency.

LIQUID SOIL

The same procedure as is shown above.

DRY SOIL

1. Remove as much as possible with putty knife before dampening. This will hold down the odor.
2. Carry out procedures 5 through 8 above.

SOURCE: Helen K. Johnson, Ralph G. Stamm and George P. Garrett, "How to Cut Infection Chain in Your Psychiatric Unit," Modern Hospital, CIX (October, 1967), 144.

APPENDIX B

FLOOR CARE PROCEDURES:

DAILY CARE

EQUIPMENT AND SUPPLIES
REQUIRED

1	Mopping Unit	1	Dustpan and brush
1	Wringer	1	12-in. Mop
1	Floor machine with buffer	1	Treated dust mop
	Detergent-germicide		Mopstring mop

PROCEDURES

1. Assemble equipment and supplies.
2. Prepare solution for damp mopping. Measure detergent-germicide accurately.
3. Proceed to work area with all tools.
4. Sweep area.
5. Damp mop area.
6. Buff the floor with floor machine.
7. Sweep again to pick up buffing dust, mop strings, etc.

APPENDIX B

FLOOR CARE PROCEDURES:
DAILY CARE

Return all equipment to storage room and carry out cleaning and maintenance procedures before storing the equipment.

SOURCE: W.K. Lee, "Written Procedures for All Jobs," Nursing Hospitals, XLVIII (April, 1960), 63-64.

APPENDIX B

FLOOR CARE PROCEDURES:

DAILY CARE

EQUIPMENT AND SUPPLIES
REQUIRED

1	Mopping Unit	1	Dustpan and brush
1	Wringer	1	32-oz. Mop
1	Floor machine with buffer	1	Treated dust mop
	Detergent-germicide		Measuring cup

PROCEDURES

1. Assemble equipment and supplies.
2. Prepare solution for damp mopping. Measure detergent-germicide accurately.
3. Proceed to work area with all tools.
4. Sweep area thoroughly.
5. Damp mop area.
6. Buff the floor with floor machine.
7. Sweep again to pick up buffing dust, mop strings, etc.

Return all equipment to storage room and carry out cleaning and maintenance procedures before storing the equipment.

SOURCE: W.K. Tew, "Written Procedures for All Jobs," Southern Hospitals, XXVIII (April, 1960), 63-64.

APPENDIX C

FLOOR CARE PROCEDURES:

PERIODIC CLEANING

EQUIPMENT AND SUPPLIES
REQUIRED

1	Double mopping unit	Floor machine
3	Wringer	Dust mop
1	32-oz. mop	Measuring cup
1	24-oz. mop	Cleaning cloths
1	Steelwool pad	Putty knife
1	Buffing brush	Small piece of steelwool
1	Scrubbing brush	Dustpan and brush

Detergent-germicide

APPENDIX C

PROCEDURES

FLOOR CARE PROCEDURES:
PERIODIC CLEANING

1. Assemble
2. Prepare solution for damp mopping. Measure accurately.
3. Proceed to work area with all equipment.
4. Sweep area thoroughly. Pick up trash immediately.
5. Buff using steelwool pad. Place pad on scrubbing brush.
6. Damp mop. Remove gum with putty knife and dark stains with steelwool.
7. Apply one coat of wax or finish very thin. Use clean 24-oz. mop, wring almost dry. Apply with even strokes. Stay at least 12 inches from baseboards.

APPENDIX C

FLOOR CARE PROCEDURES:

PERIODIC CLEANING

EQUIPMENT AND SUPPLIES
REQUIRED

1	Double mopping unit	Floor machine
1	Wringer	Dust mop
1	32-oz. mop	Measuring cup
1	24-oz. mop	Cleaning cloths
1	Steelwool pad	Putty knife
1	Buffing brush	Small piece of steelwool
1	Scrubbing brush	Dustpan and brush

Detergent-germicide

PROCEDURES

1. Assemble equipment.
2. Prepare solution for damp mopping. Measure accurately.
3. Proceed to work area with all equipment.
4. Sweep area thoroughly. Pick up trash immediately.
5. Buff using steelwool pad. Place pad on scrubbing brush.
6. Damp mop. Remove gum with putty knife and dark stains with steelwool.
7. Apply one coat of wax or finish very thin. Use clean 24-oz. mop, wring almost dry. Apply with even strokes. Stay at least 12 inches from baseboards.

8. Buff using regular buffing brush.
9. Sweep area to pick up buffing dust, mop strings, etc.
10. Clean baseboards.

Return all equipment to storage room and carry out cleaning and maintenance procedures before storing the equipment. Return unused portions of cleaning supplies to storage shelf. Do not pour left-over portions of solutions back into original containers.

SOURCE: W.K. Tew, "Written Procedures for All Jobs," Southern Hospitals, XXVIII (April, 1960), 63-64.

APPENDIX B

FLOOR CARE PROCEDURES
STRIPPING AND RE-WAXING

APPENDIX D

FLOOR CARE PROCEDURES:
STRIPPING AND RE-WAXING

EQUIPMENT AND SUPPLIES
REQUIRED

1	Double mopping unit	Wet vacuum pick up
1	Single mopping unit	Patty knife
2	32-oz. sops	Cleaning cloths
1	24-oz. mop	Dustpan and brush
	Floor machine	Warning signs and rope
	Scrubbing brush	Wax or finish
	Buffing brush	Special detergent for heavy cleaning

PROCEDURES

APPENDIX D

FLOOR CARE PROCEDURES:
STRIPPING AND RE-WAXING

1. Prepare solution for scrubbing in one bucket, rinsing water in the other. Measure carefully 4 oz. of detergent to 1 gallon of scrubbing solution.
2. Proceed to work area with tools.
3. Set up warning signs and rope off area. Work so as to always leave a traffic lane.
4. Sweep area to remove loose trash.
5. Dip down scrubbing solution. Be careful not to put down too much water. Avoid splashing baseboards.
6. Scrub with floor machine.
7. Pick up scrubbing solution with vacuum. Inspect for places that need hand cleaning.

APPENDIX D

FLOOR CARE PROCEDURES:

STRIPPING AND RE-WAXING

EQUIPMENT AND SUPPLIES REQUIRED

1	Double mopping unit	Wet vacuum pick up
1	Single mopping unit	Putty knife
2	32-oz. mops	Cleaning cloths
1	24-oz. mop	Dustpan and brush
	Floor machine	Warning signs and rope
	Scrubbing brush	Wax or finish
	Buffing brush	Special detergent for heavy cleaning

PROCEDURES

1. Assemble equipment.
2. Prepare solution for scrubbing in one bucket, rinsing water in the other. Measure carefully 4 oz. of detergent to 1 gallon of scrubbing solution.
3. Proceed to work area with tools.
4. Set up warning signs and rope off area. Work so as to always leave a traffic lane.
5. Sweep area to remove loose trash.
6. Mop down scrubbing solution. Be careful not to put down too much water. Avoid splashing baseboards.
7. Scrub with floor machine.
8. Pick up scrubbing solution with vacuum. Inspect for places that need hand cleaning.

9. Mop down rinsing water.
10. Pick up rinsing water with vacuum.
11. Let floor dry well. A clean, dry mop may be used to speed the process.
12. Clean baseboards.
13. Apply first coat of wax or finish very thin. Use clean 24-oz. mop wrung very dry and apply in even strokes.
14. Let floor dry thoroughly.
15. Buff floor with floor machine.
16. Use same procedure for applying second and third coats.
17. Sweep the area for buffing dust, etc.

Return all equipment to storage room and carry out cleaning and maintenance procedures before storing equipment. Return unused portions of cleaning supplies to storage shelf. Do not pour left-over portions of solutions back into original containers.

SOURCE: W.K. Tew, "Written Procedures for All Jobs," Southern Hospitals, XXVIII (April, 1960), 63-64.

APPENDIX E

USERS' EQUIPMENT MAINTENANCE:

DAILY

MOP BUCKET AND WRINGER

1. Working parts properly oiled, screws and bolts tightened.
2. Clean bucket and wringer after each use.
3. Too much force on wringer will break it.
4. Make sure bucket and wringer are large enough for the mop being used.
5. Remove loose mop strands and other articles caught in the wringer. Leave in release position when not in use.

APPENDIX E

USERS' EQUIPMENT MAINTENANCE:

DAILY

WET MOPS

1. Do not twist or squeeze mop too hard. This is why strands are broken.
2. Send mops to laundry as frequently as possible.
3. Avoid the use of chlorine bleaches, which deteriorate the cotton.
4. Do not leave mop heads in warm, dark places.
5. Rinse after each use. Wash daily if they cannot be laundered.
6. Store in a warm, dry area where air circulates freely.
7. Hang with yarn away from the wall and with strands down.

APPENDIX E

USERS' EQUIPMENT MAINTENANCE:

DAILY

MOP BUCKET AND WRINGER

1. Working parts properly oiled, screws and bolts tightened.
2. Clean bucket and wringer after each use.
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5. Rinse after each use. Wash daily if they cannot be laundered.
6. Store in a warm, dry area where air circulates freely.
7. Hang with yarn away from the wall and with strands down.

PUSH BROOMS

1. Rotate brush frequently so that one side does not become unduly worn.
2. Do not lean heavily on it. Do not let the brush stand on its fibers.
3. Use only for the purpose intended.
4. Use the right brush for the job.
5. Comb brush every week or so to clean in depth.

FLOOR MACHINES

1. Rest the machine on the wheels, not on the brush.
2. Clean machine and electric cord after each use.
3. Mark machine for identification purposes.
4. Wear rubber gloves and rubber footwear when operating on a wet floor.
5. Empty and clean solution tank and lines after each use.
6. Keep check on nuts, bolts, and screws that may become loosened.
7. Use only a suitable wall outlet. Extension cord should be same size as machine, or one size larger.
8. Do not splash water and other liquids on to the machine. Do not use on rough, uneven surfaces.
9. Store machine in a dry, ventilated area.

FLOOR MACHINE BRUSHES

1. Turn the brush into place on the machine by hand.
2. Hang up brush, or lay on its back when not in use.
3. Comb bristles regularly to remove foreign matter.
4. Do not use a brush with a broken adaptor plate.
5. Wash and disinfect brushes regularly, but attempt to keep the wood block dry.

VACUUMS

1. Empty after every use, whether wet or dry.
2. Check the automatic cut off mechanism frequently to ensure water does not enter the motor.
3. Clean tank daily. Every month it should be cleaned with a disinfectant to prevent growth of bacteria and algae.
4. Store vacuum in an open position to allow air in.

SOURCE: "Take Care of That Floor Equipment," Hospital Housekeeping Review, Issue No. 3. (Huntington: Huntington Laboratories, Inc., 1967), p. 34.

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A STUDY TO DEVELOP A SYSTEM OF FLOOR MAINTENANCE FOR WARD
AREAS AT SAN ANTONIO STATE HOSPITAL,
SAN ANTONIO, TEXAS
Major Noel K. Flemington
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ABSTRACT

The report was concerned with the development of a system of floor maintenance at San Antonio State Hospital. The solution to the problem was aimed primarily at that within a geriatric unit, but treated the broader aspect so that it could be viewed within its proper context.

Approximately the past ten years of literature were reviewed in part to ascertain procedures, organizational considerations, and appropriate supplies and equipment to be used. The present conditions at the hospital were observed, investigated, and surveyed. Interviews were held with key personnel concerned with the problem.

All information pointed to the fact that the problem was mainly one of organizations to carry out the housekeeping procedures within the ward areas. Contrary to all available literature, ward nursing staffs were responsible for, and performing, housekeeping duties. There was no housekeeping staff for ward areas.

Floor maintenance supplies and equipment were found to be adequate, but lack of training and proper procedures rendered their use ineffective.

Recommendations were made to include (1) the organization of floor maintenance under the housekeeping supervisor, (2) the redesignation of a member of the ward staff with direct responsibility to the housekeeper, and (3) the implementation of detailed floor cleaning and equipment maintenance procedures.