A study to develop a method of assessing the effectiveness of discharge planning (U) Army Health Care Studies and Clinical Investigation Activity F.

UNCLASSIFIED

D M Green Jul 03 MCSIA-20-08
This study attempts to determine the best methodology for evaluating the effectiveness of discharge planning in a military hospital which would be applicable to any military health care facility.
A STUDY TO DEVELOP A METHOD OF ASSESSING THE EFFECTIVENESS OF DISCHARGE PLANNING IN A MILITARY HOSPITAL

A Graduate Research Project
Submitted to the Faculty of Baylor University
In Partial Fulfillment of the Requirements for the Degree of Master of Health Administration

by

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July 1983
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INTRODUCTION

There has been a recent trend in health care delivery to focus increasingly on discharge planning as an integral component of all types of delivery systems. This trend has emerged as a result of the growing realization by health care providers that in order to be effective, the total patient must be assessed and utilization of available programs must be coordinated to effect optimal provision for patients' needs. There has been a rapid growth in health care costs in recent years, combined with an increase in reimbursement by governmental agencies. This has caused a proliferation of regulations attempting to reduce costs and eliminate duplication while continuing to insure that patients' needs are met. These regulations exert pressure on hospitals to develop or increase discharge planning services. The Joint Commission on Accreditation of Hospitals (JCAH), although not regulatory in nature, places broad emphasis on discharge planning throughout its standards. The compliance with JCAH standards is of vital importance to health care institutions in today's competitive market.¹

As may be anticipated, much energy has been exerted to develop and implement discharge planning programs throughout the health care industry. The Army has been an active
participant in this endeavor, as exhibited by the program initiated at Dwight David Eisenhower Army Medical Center (DDEAMC).

Conditions Prompting This Study

Four conditions prompted this study. First, although much literature and research is available on the implementation of a discharge planning program, a means of measuring the effectiveness of a particular program is not presently available due to the number of variables involved. Secondly, if the benefits of discharge planning can be illustrated by some valid, reliable measurement methodology, greater satisfaction and commitment may be elicited from all participants in the delivery system. Presently, the discharge planning process at DDEAMC is not being optimally utilized. This is indicated by the results of a medical records audit conducted through the Patient Administration Division (PAD) in February and May of 1982 (see Appendixes A and B). Thirdly, in the recent JCAH survey of DDEAMC, the physician surveyor emphasized the importance of the clinical resume including information relative to the condition of the patient at the time of discharge and instructions given to the patient and/or family regarding follow-up care. This supports the theory that the Commission is focusing on discharge planning as an area of importance. It follows that in the future the Commission may expect a health care facility to accomplish this
and to have an established means of documenting discharge planning effectiveness. Fourthly, the Chief of Professional Services, as Chairman of the Medical Care Evaluation Committee, has directed the development of a system for evaluating the effectiveness of discharge planning at DuEAMC.

**Statement of the Problem**

The problem is to determine the best methodology for evaluating the effectiveness of discharge planning in a military hospital. The method should be applicable to any military health care facility. In other words, it should not be so specific to Dwight David Eisenhower Army Medical Center that it cannot be adapted to other Army medical centers or community hospitals.

**Objectives of the Study**

1. To do a literature review of discharge planning.
2. To define the objectives of the discharge planning process as established by the Discharge Planning Coordination Committee.
3. To describe the existing discharge planning process relative to the Discharge Planning Regulation.
4. To assess the satisfaction of discharged patients to determine the perceived quality of the discharge planning provided and their perception of the relative importance of the objectives established.
5. To determine the effectiveness, as perceived by the patients sampled, of discharge planning in accomplishing the objectives established by the Committee.

6. To collect data from a medical records audit regarding the level of utilization of discharge planning form DA 4700, the physician's discharge form (DDEAMC OP 60) and the nurse's discharge form (DDEAMC OP 16). The two latter forms are included in Appendix C.

**Evaluation Criteria for Discharge Planning Process**

1. The discharge planning process must enhance communication and cooperation among major participants.

2. The process must provide the means to accomplish the objectives established by the Discharge Planning Coordination Committee as perceived by the discharged patients.

3. The process must provide adequate documentation in the charts of patients discharged of discharge planning either having been accomplished or not having been indicated.

**Assumptions**

1. Patient perceptions may be subjective but in the study it is assumed that these perceptions are valid and reliable and will continue to be so.
2. Decreased length of stay is not an objective sought through discharge planning in a military hospital due to other factors mandating retention of patients in the system or at least failing to discourage lengthy stays. Such factors include: (a) Retention of patients failing to meet criteria set for transfer to the Medical Holding Company or release to the barracks for full duty, and (b) lack of regulatory pressure to limit a diagnostic category to a specific number of bed days before the institution loses money.

Limitations

1. No additional resources are available for the study or for implementation of the methodology designed. Therefore, the evaluation process must be adaptable to the present operations within the various systems on which discharge planning has an impact (PAD, Community Health Nursing Section, Social Work Service, etc.).

2. The mechanics of the evaluation process must be straightforward and their application be of minimum complexity.

3. Questionnaires require subjective input, so their results are likewise subjective to a degree. Therefore, any measurement tool involving the use of such a mechanism cannot be considered absolute, only a barometer for comparison.

4. The sample of patients interviewed may include a deceivingly low proportion of active duty individuals due to
inability to contact them after discharge, as many of them live in the barracks.

5. The study must be accomplished within the time constraints of the residency.

Literature Review

With the rise in "consumerism" in recent years, health care providers have become increasingly concerned with patient satisfaction as an important aspect of quality assurance. It has been asserted that the need exists to identify aspects of health care that are important to the consumers and that better measures of patient satisfaction must be developed.\(^4\)

"It would still seem that one of the best ways of finding out whether you're doing a good job is to ask people. Despite our growing sophistication we are still influenced by the personal and public opinions of others. If our aim is to produce what pleases, it ought not be too difficult to find out if we have succeeded."\(^5\)

In the 1982 Joint Commission Accreditation Manual for Hospitals, the Commission has identified discharge planning as a major focus in the delivery of patient care. The Commission requires that patients discharged from the hospital who require subsequent nursing care should receive instructions and individualized counseling prior to discharge, and evidence of these instructions should be noted in the medical record.\(^6\) It encourages the initiation of discharge planning
on individual patients as early as such a need is identified. Under the direction of a Utilization Review Committee, criteria for initiating discharge planning may be developed to identify patients whose diagnoses, problems or psychosocial circumstances usually require such planning. The utilization review plan may provide a means for nonphysician health care professionals to initiate preparations for discharge planning.\(^7\)

Such emphasis on discharge planning by the Joint Commission has resulted in the establishment of Discharge Planning Committees in a great number of hospitals nationwide. It follows that if such effort is being expended in that direction, there exists a need for a measure of the level of patient interest in various aspects of discharge planning and also a measure to assess patient satisfaction with regard to delivery of such services. This measure of patient satisfaction would become a part of an evaluation system aimed at insuring the quality of patient preparation for discharge.

The development of such a system requires provider input in order to achieve effectiveness of the system and elicit changes in, or optimization of, physician behavior and organizational performance. Actively seeking provider input and participation will facilitate the provider's commitment to changes indicated through the evaluation, thus making quality improvement a reality.\(^8\) It is thus encouraged for the department heads of at least the medical, nursing, social work and administrative staffs to be included in all discharge planning activities.\(^9\)
Research Methodology

Background and basis for evaluation will be acquired through a thorough literature review.

The objectives of the current discharge planning process will be determined by interviewing the key participants in the process. These interviews will involve physicians in order to gain an understanding of their expectations of and perceived involvement in discharge planning.

An understanding of the operation of the discharge planning process will be attained through attendance at meetings of the Discharge Planning Coordination Committee and at several Weekly Ward Discharge Planning Conferences and by reviewing the DDEAMC Discharge Planning Regulation.

Evaluation of accomplishment of objectives of the discharge planning process as perceived by patients and their perception of the relative importance of the objectives established will be performed by conducting a survey administered to an appropriate sample of recently discharged patients. The survey will include questions based on the objectives established as stated above.

The effectiveness, as perceived by the patients sampled, of the discharge planning process in accomplishing the objectives established by the Committee will be determined by:

1. Computing the percent effectiveness indicated by responses to each survey question.
2. Computing the relative importance assigned each area of discharge planning by the sample surveyed.

3. Multiplying the percent effectiveness of each component by the relative importance of that component as indicated by the survey.

4. Summing up the results of Number 3 above to equal the total perceived effectiveness of the process evaluated according to established objectives.

Relative importance of the objectives established for the process may be perceived differently by the members of the Discharge Planning Coordination Committee and by the patients surveyed. This aspect will not, however, be discussed in the analysis.

In health care, perception of quality by recipients may be quite different from objective measurements of quantifiable criteria established by participants in its delivery. It is the perception with which the industry must concern itself. So, in addition to providing a service for its patients, the health care facility must gauge the effectiveness of this service by assessing patient, not provider, satisfaction. Objectives for effectiveness are therefore established by the providers of the service, and their success in meeting these objectives is measured by patient satisfaction.

Documentation of consideration and/or accomplishment of discharge planning will be evaluated by an audit of patient charts for the use of the discharge planning form. Failure to
utilize this form in cases not requiring discharge planning will be interpreted as a decision not to implement multidisciplinary discharge planning. A safeguard against this assumption being incorrect will be the practice of using the same sample group for the audit and for the survey.

Due to the existing shortage in clerical support in the various clinical departments, charts do not reach the central patient administration area until weeks after discharge. This factor dictates that the sample be randomly selected, using a random number table, from the daily Admissions and Dispositions (A&D) Report and that performance of the chart audit be delayed until the completed charts are available for review. Certain data can be acquired from the central card file in PAD so that the survey can be undertaken within the desired time after discharge.

Objectives for Survey Development

1. To determine the type of survey to be used.
2. To determine the method of analysis of data.
3. To determine data to be collected.
4. To determine sample size requirements.
5. To determine a system of randomization.

These objectives were formulated using the writings of Boyd¹⁰ as a primary resource. This was also the source used in developing the survey criteria and in discussing the advantages/disadvantages of the various alternatives.
Survey Criteria

The survey itself must adhere to the following criteria:

1. Survey formulation should be as uncomplicated as possible.
2. The survey should have the ability to be implemented and administered within existing time constraints.
3. The survey should be comprised of wording facilitating easy comprehension by the patients sampled.
4. The survey should be suitable for rapid analysis and interpretation.
5. The survey should allow for inclusion of subjective comments by patients sampled as a tool for future adjustments in the evaluation process.

Selection of Survey Type

There are two major types of survey that can be used to reach patients after discharge: (1) the mailed questionnaire and (2) the telephone interview. Each of these can be administered using the following types of questions: (1) "Yes/No," (2) multiple choice, and (3) open-ended. All can be adapted to allow the inclusion of subjective comments. Therefore, there are actually six alternatives to be considered when choosing the type of questionnaire to be utilized in this study. Figure 1 may aid in visualizing these alternatives.
Fig. 1. Alternatives

Alternative 1

A mailed "Yes/No" questionnaire would take research to construct. Wording and arrangement of questions is important, but this is true of all questionnaires. The time required by any questionnaire to be returned is variable and often warrants making additional contacts by mail with the individuals surveyed. There is the possibility of never attaining an adequate sample which would necessitate termination of the study or beginning it again. Also, studies that include the mailing of questionnaires require approval by the Clinical Investigations Department. This may delay the study and it does add to the clerical work involved, as it must be submitted in a special format. It is difficult to write a questionnaire that would be easily understood by a group of people widely ranging in intellectual capability. A "Yes/No" questionnaire of any type is easily analyzed.
Alternative 2

A mailed multiple-choice questionnaire is more difficult to formulate. The time requirements and problems as well as ease of comprehension are the same as in Alternative 1. Analysis would require more work.

Alternative 3

A mailed open-ended questionnaire is relatively easy to formulate. It has the same problems relative to time constraints that have been discussed above. The same difficulties as stated in Alternatives 1 and 2 apply to comprehension. An open-ended questionnaire is difficult to analyze.

Alternative 4

A "Yes/No" telephone survey would still require research and work to formulate. A telephone survey does not require institutional approval and awareness of response is present throughout and can be adapted, so ending the study with an inadequate sample is not a danger. During the interview the exact words used can be adapted dependent upon the verbal responses of the person being interviewed. If a meaning is unclear, the interviewer can clarify it. This type of questionnaire facilitates rapid analysis.

Alternative 5

Formulation of a multiple-choice telephone survey is more complex than that of a "Yes/No" survey of the same type.
Time advantage exists as in Alternative 4. It is difficult for an individual to comprehend multiple-choice questions over the telephone. Analysis of multiple-choice answers is more complicated than the analysis of a "Yes/No" survey.

**Alternative 6**

The formulation of an open-ended telephone survey is not as complicated as other types. Time advantages remain the same as in Alternatives 5 and 6. Comprehension of the questions is the same as in Alternative 4. Analysis of open-ended surveys is difficult and requires much work.

The optimal alternative for the type of survey to be utilized in the study is Alternative 4. A chart depicting the evaluation of alternatives according to the relative weights assigned to the criteria (Churchman-Ackoff Technique) by the major participants is included as Appendix D. Positive (1) or negative (0) aspects of each alternative with relation to each criteria are assigned by the surveyor. These values are then multiplied by the relative weight of the respective criteria, these values being summed up by alternative to result in a total value of each alternative.

**Survey Analysis**

The results of the telephone survey will be evaluated as stated in "Research Methodology." Once the percent effectiveness of the total process as perceived by the sample has been determined, hypothesis testing will be used to determine
whether 90 percent of the patients at DDEAMC receive effective discharge planning. The Discharge Planning Coordination Committee is 95 percent confident that the process achieves this level of success.

Hypothesis to be tested: $H_0: \ p \geq .90$

$H_A: \ p < .90$

Test statistic:\[ z = \frac{\hat{p} - p_0}{\sqrt{p_0(1-p_0)/n}} \]

The consequences of a Type II error in this study are more serious than those of a Type I error. A Type II error would result in assuming that the discharge planning process at DDEAMC is 90 percent effective when it is significantly less effective. This would allow inefficiencies to go undetected due to the failure to search for problems in the process itself and/or the method of evaluation.

Once effectiveness has been determined, data collected will be utilized in identifying problems within the system and recommendations will be made for improving either the process or the evaluation tool.

Development of the Survey

Actual data to be collected is based on the objectives established by the participants in the discharge planning process. The objective upon which each question is based is indicated to the right of the question. The questions in a
telephone survey must be arranged in a logical order to facilitate smooth flow of the conversation. The objectives and the survey are included as Appendixes E and F.

The data to be obtained from the A&D Report, the central PAD card file and the chart audit is also included in Appendix F. Comments of interviewees will be recorded during the conversation but will only be used in formulation of future surveys.

Sample Size and Selection Process

There are approximately 1,000 discharges per month at DDEAMC. Based on this population and the formula

\[ n = \frac{Nz^2pq}{d^2(N-1)+z^2pq} \]

the sample size required to determine what proportion of the population received effective discharge planning, desiring a 95-percent confidence interval with \( d = .05 \), is computed as follows:

\[
\begin{align*}
n &= \frac{2000(1.645)^2(.90)(.10)}{(.05)^2(1999)+(1.645)^2(.90)(.10)} \\
&= \frac{487}{5.24} = 92.9 = 93
\end{align*}
\]

Required sample size = 93

The sample will be selected from patients discharged over a two-month period from the daily A&D Report by an orderly assignment of numbers to those patients listed in the "Returned to Duty" and "Discharged from Hospital" categories and applying the random number table to those numbers assigned. Three times the number of patients required will be selected to allow for deletion of those not included in the survey. Patients in the following categories will not
be surveyed for reasons identified: (1) Acute respiratory disease (ARD) patients are being deleted because they require minimal discharge planning and are usually released to duty; (2) psychiatric discharges will not be sampled due to the predominance of these individuals being hospitalized while awaiting separation from the Army and upon discharge returning to their homes of record; also, the Department of Psychiatry has its own process for discharge planning which is performed separately yet meets DDEAMC standards; and (3) patients with lengths of stay less than three days are deleted due to the probability of their illness or problem not requiring discharge planning.

The patients surveyed will be contacted by telephone between one and one-half and two and one-half weeks following discharge. This will give the patient the opportunity to implement instructions given, yet will maximize memory of discharge preparation received.
DISCUSSION

Compliance of Existing Discharge Planning Process with DDEAMC Regulation 40-60

The discharge planning process at DDEAMC has been established in accordance with DDEAMC Regulation 40-60 (see Appendix G) and amended as stated in "Screening for Discharge Planning/DDEAMC Automatic Referral System," also included in Appendix G. The current process, as it exists, complies closely with the regulation.

The standing members of the Discharge Planning Coordination Committee, as stated in the regulation, are the Chiefs of the Department of Nursing, Occupational Therapy Section, Physical Therapy Section, Community Health Nursing Section, Nutrition Care Division and Social Work Service. In addition to these members, the Medical Records Administrator of the Inpatient Records Branch of PAD sits on the Committee and there is added representation from the Department of Nursing, the Community Health Nursing Section and Social Work Service. No representation is required by regulation of the medical staff, and no representation by this group has been evident during the study. The Discharge Planning Coordinator is the Chief of the Community Health Nursing Section; the Chairperson is the Chief, Social Work Service.
The Discharge Planning Coordination Case Managers are the nonphysicians assigned to coordinate with the physician, the patient and his family and other medical and community agencies with regard to discharge planning. A Case Manager is assigned at the Weekly Ward Case Conference to each patient requiring multidisciplinary discharge planning. This individual is usually the representative from the service most closely involved in meeting the particular patient's needs.

The head nurse or his/her designee is the point of contact on the ward for the Discharge Planning Coordinator. On most wards the head nurse retains this responsibility. The Discharge Planning Coordinator maintains weekly contact with the ward through attendance by members of the Community Health Nursing staff at the Weekly Ward Case Conferences.

The Discharge Planning Coordinator receives referrals for community services. However, physician referral is no longer required for discharge planning in most instances due to the extensive listing of diagnoses and situations approved by the Medical Care Evaluation Committee for direct screening (see Appendix G).

The Committee Chairperson prepares and distributes the agenda for each monthly committee meeting, presides over the meetings and provides the recorder for each meeting. He is responsible for the quality assurance activities of the Committee. Presently, these activities consist of maintaining a file on all patients discussed and actions initiated at
the Weekly Ward Case Conferences (see Appendix H). His service (Social Work) interfaces with community agencies when post-discharge problems arise and cooperates to remedy such difficulties. The Chairperson directs audits, monitoring causes for patient readmission within thirty days of discharge. He also submits monthly reports to the Medical Care Evaluation (MCE) Committee and represents the Discharge Planning Coordination Committee at the MCE Committee Meetings.

The Discharge Planning Coordination Case Manager functions as stated in DDEAMC Regulation 40-60. He reviews the medical records of the patient and interviews the patient and his family, if appropriate, in order to determine the discharge needs of the patient. If indicated, the Case Manager establishes contact with the attending physician. When interdisciplinary planning is required, the Case Manager prepares a written assessment of the patient, his problem(s) and his life situation with a recommended discharge plan recorded on the DA 4700 discharge planning form. The actual utilization will be determined by the medical records audit portion of this study. The Case Manager then implements the discharge plan with the approval of the attending physician.

The Discharge Planning Coordination Committee meets monthly to review the entire process. It has organized an interdisciplinary presentation for the physician and nursing staffs on the importance and mechanics of the discharge planning process. The program was videotaped for use on individual wards
or by individual physicians. Discharge planning in-service sessions were given on all the wards by members of the Community Health Nursing staff. The Committee conducts periodic discharge planning record audits, recently involving the use of discharge planning form DA 4700. A great effort has been made to encourage utilization of DA Form 4700 in documenting discharge planning activities.

The Weekly Ward Case Conferences are held basically as outlined in the regulation. There are problems apparent in their actual effectiveness, however, and these problems vary from ward to ward. Attendance and preparedness by the nursing staff is largely dependent upon the workload on the ward on any particular day. Some wards are very dedicated to discharge planning to the extent that the nursing ward discharge planning representative will attend the Weekly Ward Case Conference on nonduty time. Other wards are consistently unable to allot time for the meeting or do not prepare adequately in advance for productive discussion of patients. Some wards do not have a specific individual responsible for attending the meetings. Rarely is the necessary administrative information or the medical records of patients to be discussed brought to the meeting for use by the Community Health Nurse and Social Worker. Any medical staff member with input regarding the patients to be discussed is encouraged to attend the Weekly Ward Case Conference. This practice is the exception, however, as observed during the study. Identification of patients who may need discharge
planning is made as soon after admission as possible, even if probable discharge is too far in the future for specific needs to be determined. As stated earlier the person whose service has the greatest relationship with the needs of a particular patient is assigned as the patient's Case Manager at the Weekly Ward Case Conference.

The last portion of the regulation no longer applies to the process as it operates now due to the newly approved list for automatic screening. No longer must a referral be initiated by a physician nor must he complete and sign Part II of the DA 4700 discharge planning form nor must he write an order for it before it is initiated. Compliance with the remainder of the regulation (the portion referring to the use of the discharge planning form) will be evaluated using the results of the medical records audit.

**Telephone Survey Results and Analysis**

Assessment of the satisfaction of discharged patients to determine the perceived quality of the discharge planning provided and their perception of the relative importance of the objectives established was accomplished by the administration of the telephone survey in Appendix F.

A sample of 94 individuals was interviewed by telephone within one and one-half and two and one-half weeks following their discharge from DDEAMC. The sample consisted of patients discharged over an eight-week period and was not limited to the local area. All interviews were conducted by the same interviewer.
The perceived quality of discharge planning according to the established objectives was determined by questions 1 through 12. The overall quality of discharge planning as perceived by the sample surveyed is represented by the responses to question 13.

The results of the survey indicate that the patients regard the discharge planning process, evaluated according to the objectives established by the Discharge Planning Coordination Committee, as 97.5 percent effective. They generally perceive the discharge planning process, as judged by their responses to question 13, as being 97.8 percent effective.

The computations yielding these results are found in tabular form in Appendix I. No attempt has been made here to illustrate a pattern or trend because the results of the survey are so positive that any pattern shown would be due only to random fluctuations.

These results are now used to determine by hypothesis testing whether, with a confidence interval of 95 percent, 90 percent of the patients at DDEAMC receive effective discharge planning. Upon testing the hypothesis it is concluded that greater than 90 percent of the population is satisfied with the discharge planning at DDEAMC. This is true using both the percent of the sample satisfied with the process according to the specified objectives and the percent generally satisfied with the overall discharge planning they received. The statistical method used in testing the hypothesis is included in Appendix J.
Medical Records Audit Results

The aim of the medical records audit was to determine the level of utilization of the forms provided to document the accomplishment of discharge planning. The use of DA Form 4700 is of primary interest in that its use is dictated by regulation. The medical records of the same patients interviewed telephonically were audited for discharge planning documentation in order to determine whether or not failure to utilize the DA Form 4700 for any given patient was appropriate by regulation (i.e., the patient did not require multidisciplinary discharge planning). The presence of the physician discharge form (DDEAMC OP 60) and the nursing discharge form (DDEAMC OP 16) was also audited to determine communication of discharge regimen from physician to nurse to patient.

The results of the medical records audit indicate that only 16 percent of the charts audited contained the DA 4700 discharge planning form; 46 percent of those were completed. However, only 1.5 percent of charts not containing completed DA 4700 discharge planning forms required interdisciplinary discharge planning coordination. Therefore, the survey indicates 98.5 percent compliance with DDEAMC Regulation 40-60.

The other portion of the audit indicates that the physician discharge form was present and complete in 93.8 percent of the charts. The nursing discharge form was present and complete in 97.5 percent of the charts. The DDEAMC OP 16
requires that the nurse discuss the discharge regimen with the patient before discharge and that the patient sign the form after receiving the instructions. In all cases where the form was present, it was signed by the patient. An updated version of this form has been implemented since the survey (see Appendix K) in order to provide the patient with a detailed copy of his discharge instructions, further improving the process.

Weaknesses in Discharge Planning Process and Proposed Solutions

The discharge planning process will be evaluated using the criteria stated earlier in this document.

First, the discharge planning process must enhance communication and cooperation among the major participants. This goal is achieved among the participants on the Discharge Planning Coordination Committee and those involved in the operation of the process as outlined in DDEAMC Regulation 40-60. However, the physicians should play a major role in actual discharge planning. They determine the patient's length of stay, treatment regimen post-discharge and initiate referrals to individual departments involved. Communication of plans in these areas to the total discharge planning team would greatly improve the efficiency of the planning process and decrease or eliminate duplication of discharge planning efforts. In order to facilitate greater communication, participation by the medical staff on the Discharge Planning Coordination Committee and at the Weekly Ward Case Conferences is imperative.
Optimal communication is also impaired by having too great a variation in nursing representation on many of the wards. If a nurse is only rarely a representative at the weekly meeting and if he/she is given minimal notice, preparation cannot be expected to be adequate and performance of the nurse in the process cannot be developed. Therefore, in order to profit maximally from the Weekly Ward Case Conferences and from the discharge planning process generally, responsibility for discharge planning should be designated to one particular staff member, assigning an alternate to substitute in his/her absence. The alternate should possess a familiarity with the discharge planning status of the patients on the ward so the weekly conferences and discharge planning operations can continue smoothly even in the absence of the primary discharge planning ward nursing representative.

The second criteria is that the process must provide the means to accomplish the objectives established by the Discharge Planning Coordination Committee as perceived by the patients. The results of the survey indicate that the established discharge planning objectives are being accomplished in the perception of the patients. The objectives were achieved to the satisfaction of 97.5 percent of the patients interviewed and overall satisfaction was voiced by 97.8 percent of those sampled. The comments received in conjunction with the survey, included in Appendix L, may be used as valuable input in developing a more effective evaluation
tool in the future. The majority of the negative comments revealed dissatisfaction due to confusion or inconvenience related to the discharge itself, rather than a lack of instructional preparation. These negative comments were far outweighed by praise for the total experience while in the hospital. The comments do indicate, however, that coordination at the actual time of discharge is a factor that should be addressed in any future evaluation tool.

The third criteria is that the process must provide adequate documentation in the chart of discharged patients that discharge planning has either been done or that is was not indicated. The results of the medical records audit in conjunction with the telephone survey results indicate that adequate documentation as required by the Discharge Planning Regulation was present in 98.5 percent of the records. Absence of a physician's or nurse's discharge note in any of the charts is of concern to the author; but although it is of institutional concern, it is more appropriately the responsibility of the individual departments concerned. Therefore, resolution of that problem will not be addressed in this study.

Upon interviewing the major participants in the process during the study, it became apparent that there was a universal dissatisfaction with the DA 4700 discharge planning form. It is true that when a patient is discussed in a Weekly Ward Case Conference, actions taken are entered on the discharge planning form by either the Social Worker or
the Community Health Nurse. However, when a patient is not discussed at a case conference, yet individual referrals are made by the physician or nurse, the form is not consistently utilized and there is no other central location in the chart that can be used to monitor such referrals. Also, the DA 4700 overprint provides insufficient space for adequate documentation. Therefore, the completion of the discharge planning form has become more of a paper exercise rather than a useful planning tool. An effective and more useful documentation policy should thus be sought by the Discharge Planning Coordination Committee.

Weaknesses in the Evaluation Tool (Survey) and Proposed Solutions

It was detected during the administration of the survey that some questions asked were unnecessary and that others could be combined or reworded (refer again to the telephone survey in Appendix F).

Question 5 could be reworded to inquire, "Did you and your family get adequate and appropriate advice on changing your home environment to make your convalescence as smooth as possible?" This wording would allow question 6 to be deleted.

The purpose of questions 8 and 9 could be achieved by deleting question 8 and the words If yes from question 9.

Question 10 did not contribute to the results of the survey and could be deleted without effect.
Survey analysis would be simplified by omitting question 12 and rewording question 11 to ask, "Did you have to be admitted to the hospital since ______ for reasons that you feel could have been prevented by better planning before discharge?"

The telephone survey did not address coordination, or lack thereof, at the actual time of discharge; this was expressed as an area of concern by several of the patients interviewed. Any future survey should address this aspect of discharge planning.

Performance of a telephone survey results in some significant difficulties. There is a great time cost incurred by the actual calling, especially in a military system with limited off-post telephone capability. Misunderstanding due to speech differences between the interviewer and interviewee can also be an impediment to this type of survey. Difficulty with comprehension of questions seems to relate mostly to the questions pertaining to relative importance of the various areas of discharge planning, but this may also be a factor when distributing a questionnaire.

In view of the difficulties mentioned, particularly that of time cost to the interviewer, it would be worthwhile to test the survey on a mail-in basis. The same survey used here with space allowed for comments could be distributed to all patients discharged over a period of time, requesting them to return the questionnaire by mail or on a follow-up visit.
A medical records audit could then be done on those patients returning the survey. Funds would have to be approved for postage costs on questionnaires in order to facilitate participation. Initial time required to have the study approved by the Institutional Review Committee would most likely be less than that spent on a military telephone by an individual conducting interviews, attempting to obtain an off-post line or making long-distance connections.

Audit of medical records also requires a great deal of time. Records often do not reach PAD for one to three months post-discharge. Thus, many records must be sought out on particular wards or in the various clinical departments. This is a problem, however, that must be suffered when conducting any evaluative process involving audit of medical records. Solution of this problem would require another entire study.
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The results of this study indicate that the discharge planning process at DDEAMC is effective according to the criteria established. The following conclusions are derived from the study.

First, the discharge planning process as it exists enhances communication and cooperation among the major participants but the potential exists to improve greatly upon this communication mechanism by the inclusion of the medical staff in the total discharge planning process.

Secondly, the discharge planning process at DDEAMC does provide the means to accomplish the objectives established by the Committee. However, the study also indicates that these objectives should be broadened to encompass the concerns patients related during the interviews but which did not fall within the scope of the specific questions asked. Therefore, adjustment of the evaluation tool is required.

Thirdly, the process provides for the documentation of discharge planning having been accomplished or having not been indicated. The study also revealed, however, a dissatisfaction with the vehicle of this documentation by some of the major participants in discharge planning.
Fourthly, further study is required to determine whether the time cost of the survey could be reduced by administering the survey in questionnaire form on a mail-in basis rather than by conducting a telephone survey.

**Recommendations**

It is the opinion of the author of this paper that Dwight David Eisenhower Army Medical Center conducts effective discharge planning and that the tool used in making this determination was appropriate. It is also apparent at the conclusion of this study that the opportunity exists to improve upon the process and that the evaluation tool can be refined to produce an even more accurate determination of effectiveness. The results of this in-depth study incide that these goals may be better achieved by carrying out the following recommendations:

1. Revise DDEAMC Regulation 40-60 to include physician representation on the Discharge Planning Coordination Committee and at the Weekly Ward Case Conferences.

2. Seek command support in encouraging physician participation in the discharge planning process.

3. Identify consistent discharge planning nursing representatives and alternates on each ward to facilitate continuity and quality in the planning process.

4. Reevaluate objectives to include concerns expressed by the patients interviewed to determine whether those concerns are valid.
5. Review the documentation process to develop a comprehensive method of discharge planning documentation that is meaningful and useful to all the major participants in the process and revise the regulation to reflect the resultant changes.

If discharge planning is tailored to the needs of both patients and members of the health care delivery team, cooperation and participation will be enhanced, therefore maximizing the effectiveness of the process.
APPENDIX A

PATIENT DISCHARGE PLAN (SAMPLE FORM)

AND

AUDIT OF ITS USE
This form is to be used for all patients requiring multidisciplinary discharge planning coordination to insure that health care services provided during and after hospitalization are of the highest quality to patients and their families.

PART I: Patient Identification Information (Please print in ink)
1. Patient's Name ____________________________ 2. Age ___ 3. Sex ___ 4. Date Admitted ______________
5. Home Address ____________________________ 6. Telephone ____________________________
7. Military Sponsor: Name __________________ Grade _____ SSN ____________________________
8. Consultations Requested-SF 513 (Please List) ____________________________

PART II: Physician Section
1. Name (Please print) __________________ Dept/Service __________ Date ______________
2. Initiate Discharge Planning Coordination (Check One) _______ Yes _______ No ________
3. Patient's Diagnosis ____________________________ Signature __________________

PART III: Patient's Section
1. I hereby authorize the release of medical information relevant to discharge planning to the following agencies: __________________________________________
2. Signature ____________________________ 3. Date ______________

PART IV: Discharge Planning Coordination Committee Section
1. Services and/or referrals needed (Please List) ____________________________
2. Actions Completed (Date & Initial) ____________________________
3. Date Discharged ______________

PART V: Discharge Planning Coordination Case Manager Section
1. Posthospitalization Follow-up Report (Date & Initial) ____________________________

Signature ____________________________ Date ______________

DA FORM 1 MAY 78 4700
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<th>RESPONSE</th>
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<td>2. If form is present, was Section II completed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. If Section II was completed, was Discharge Planning initiated?</td>
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APPENDIX B

RESULTS OF PATIENT ADMINISTRATION DIVISION SURVEY
OF PATIENT DISCHARGE PLAN FORM
### PAD Staff Member  
#### PAD Survey of Patient Discharge Plan Form 4700  
**Date:** 12 Feb 82

#### Criteria

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<tr>
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<td></td>
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<td>TOTAL</td>
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<td>100</td>
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<td>3. If Section II was completed, was Discharge Planning initiated?</td>
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<td></td>
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</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
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<td>66</td>
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APPENDIX C

PHYSICIAN'S DISCHARGE FORM (DDEAMC OP 60)

AND

NURSE'S DISCHARGE FORM (DDEAMC OP 16)
FINAL DIAGNOSES:

OPERATIVE PROCEDURES:

COMPLICATIONS:

CONDITION ON DISCHARGE (ABILITY TO RETURN TO WORK. FOR MILITARY PATIENT GIVE PROFILE AND ANY LIMITATIONS.):

MEDICATIONS AND FOLLOW-UP CARE REQUIRED:

PHYSICIAN'S SIGNATURE

(Continue on reverse side)

PATIENT'S IDENTIFICATION (For typed or written entries give Name—last, first, middle
grade, rank, rate, hospital or medical facility)

REGISTER NO.

WARD NO.

PROGRESS NOTES
STANDARD FORM 509 (Rev 11-77)
Prepared by GSA/FOR.
FPRR (4) ORR 100-1108-8
509-110
PATIENT DISCHARGE NOTE/PLAN

Does the patient and/or significant other verbalize knowledge of:

1. Health status at time of discharge: YES  NO
   Write in patient's own words

2. Diet Regime: YES  NO  Dietary Consultation: YES  NO
   Type of Diet
   Foods to Avoid
   Foods permitted

3. Medications: YES  NO  N/A
   Given Instructions: YES  NO  Verbal

4. Activity: YES  NO  Written
   Mode: Ambulatory  Wheelchair  Litter
   By Self  with significant other  To duty  To home
   To VA  Other

Limitations/Restrictions
PATIENT DISCHARGE (Cont'd)

<table>
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<tr>
<th>DATE</th>
<th>HOUR</th>
<th>A.M</th>
<th>P.M</th>
</tr>
</thead>
</table>

5. Follow-up Appointment(s): YES NO A/A

Physician/Clinic

Date and Time

Individual to contact if questions or crises

6. Special Instructions and/or Treatments:

7. Referrals:

8. Medical/Drug Alert: YES NO N/A

Type

9. Other

Signature: (Patient/Significant Other)

Signature: (Nurse)

DATE: TIME:

April 1979
APPENDIX D

EVALUATION OF SURVEY ALTERNATIVES
EVALUATION OF SURVEY ALTERNATIVES

Relatively Weighted Criteria

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<td>.6</td>
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<td>.2</td>
<td>.6</td>
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<td>1</td>
<td>1</td>
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<td>Alternative 5</td>
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<td>1</td>
<td>.2</td>
<td>.6</td>
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<td>1</td>
<td>1</td>
<td>0</td>
<td>2 + 4 + 4 + 0 = 10</td>
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1 = Most Positive
0 = Most Negative

*Optimal Alternative
APPENDIX E

DISCHARGE PLANNING OBJECTIVES
OBJECTIVES OF DISCHARGE PLANNING

The following objectives are listed according to the discipline most directly involved in fulfilling them. They are all interrelated, however, and fulfilling them requires cooperative effort.

I. Nursing: To provide adequate information on illness, medication and diet to enable the patient and his family to adapt to any changes in lifestyle and progress to his optimal activity level.

II. Physical Therapy:
   A. To instruct patients and their families in the use and care of required equipment (wheelchairs, braces, prostheses, etc.) and advise them on adapting the home environment to meet the patient's needs.
   B. To train the patient and his family to carry out home programs in physical therapy.

III. Social Work/Community Health Nursing: To anticipate and provide for appropriate community services for each patient after discharge.

IV. Physician: To provide each patient with adequate knowledge and awareness of implications of current illness/injury requiring hospitalization to motivate both patient and family to adhere to prescribed regimen in order to preclude future preventable admissions for the same illness.
APPENDIX F

TELEPHONE SURVEY

AND

REQUIRED AUDIT DATA
Hello, I'm [redacted], a [redacted] at Eisenhower Army Medical Center. I'm doing a survey aimed at finding out whether patients and their families get all the information and help they need before discharge to make recovery at home as smooth as possible. I'd like your help in this survey which would mean your answering a few questions over the phone. If you decide to take part, your answers will be anonymous and will in no way affect your future care at Eisenhower. Will you agree to help in this survey?

1. Do you feel you got good enough teaching on your illness while in the hospital to make your recovery after discharge as easy as possible?
   Yes___ No___ N/A____
2. Do you feel you were taught well enough about your medications?
   Yes___ No___ N/A____
3. Do you feel you were taught well enough about your diet?
   Yes___ No___ N/A____
4. Did you and your family get all the equipment you needed to make your convalescence as smooth as possible?
   Yes___ No___ N/A____
5. Did you and your family get advice on changing your home environment to make your convalescence as smooth as possible?
   Yes___ No___ N/A____
6. If no, do you feel you needed such advice?
   Yes___ No___ N/A____
7. Did you get good enough instruction on any special activity programs to follow per Physical Therapy?
   Yes___ No___ N/A____
8. Did you feel you needed any community services after discharge?
   Yes___ No___ N/A____
9. If yes, did you get the community services you felt you needed? III
   Yes   No   N/A

10. How often do you have to come back to the hospital for follow-up IV
    related to the illness for reasons predicted before discharge?
    0    1    1

11. Did you have to go to the hospital since ___________ with IV
    the same diagnosis for reasons that you feel could have been prevented
    by better planning before discharge?
    Yes   No   N/A

12. If yes, did you have to be admitted for it? IV
    Yes           No

13. In thinking of your recent hospital experience, would you say that I-IV
    you were satisfied overall with the discharge planning at Eisenhower
    Army Medical Center?
    Yes   No

I'm going to mention some things considered to be part of discharge planning
and I'd like you to rate them according to how important you think each is
with "1" being not important and "5" being very important.

*14. Teaching on illness  1 2 3 4 5  1
   1 2 3 4 5  1
   1 2 3 4 5  1
   1 2 3 4 5  III
   1 2 3 4 5  II
   1 2 3 4 5  II
   1 2 3 4 5  1
   1 2 3 4 5  IV

*Indicates questions to be asked of postpartum patients although wording will
be adapted. Questions not asterisked would be deleted from the interview as
not applying to postpartum discharges.
DATA TO BE OBTAINED FROM
MEDICAL RECORD SOURCES

The following data will be obtained on each individual surveyed. After transfer to computer cards, any relationship to identity (name, Social Security number) will cease.

AGE
SEX
DUTY STATUS
DIAGNOSIS
LENGTH OF STAY
PHYSICIAN
WARD
4700 PRESENT Yes_____ No_____ COMPLETED Yes_____ No_____

PRESENCE AND COMPLETION OF PHYSICIAN DISCHARGE NOTE/PLAN (DDEAMC OP 60) Yes_____ No_____

PRESENCE AND COMPLETION OF NURSING DISCHARGE NOTE/PLAN (DDEAMC OP 16) Yes_____ No_____
APPENDIX G

DISCHARGE PLANNING REGULATION

AND

AUTOMATIC REFERRAL SYSTEM
REGULATION 40-60
Change Number 1

DEPARTMENT OF THE ARMY
HEADQUARTERS, DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
FORT GORDON, GEORGIA 30905

26 May 1982

Medical Service
DISCHARGE PLANNING COORDINATION COMMITTEE

DDEAMC Regulation 40-60, 10 May 1982, is changed as follows:

1. Paragraph 3a (4) reads: The Discharge Planning Coordinator Case Manager will be the non-physician health care provider assigned by the committee to coordinate with the physician, patient, his family, and other medical staff and community agencies as the discharge plan is formulated and implemented; should read: The Discharge Planning Coordinator Case Manager will be the non-physician health care provider assigned at the Weekly Ward Conference to coordinate with the physician, patient, his family, and other medical staff and community agencies as the discharge plan is formulated and implemented.

2. File this change sheet in front of publication for reference purposes.

The proponent of this regulation is the Chief, Social Work Service, DDEAMC. Users are invited to send comments and suggested improvements to the Commander, DDEAMC, ATTN: HSHF-SW.

FOR THE COMMANDER:

CHILDS H. LEWIS
LTC, MSC
Adjutant General

DISTRIBUTION:

1 Copy to Cdr, HSC, Attn: AG Publications
Ft. Sam Houston, TX 78234
1. PURPOSE: This regulation outlines procedures for accomplishing discharge planning through a coordinated team management approach to provide continuous support to the physician patients care plan.

2. GENERAL: Early identification of patients who would benefit from a coordinated team management approach in the delivery of their care is essential. Multidisciplinary discharge planning and follow-up care is of particular importance to the hospitalized patient whose disability, disease, and/or life circumstances indicate a need for posthospitalization home health care, nursing home placement, or outpatient treatments.

3. PROCEDURES:

   a. The Discharge Planning Program and its policies and procedures will be developed, implemented, and monitored through coordinated interaction of various health care professionals participating as members of the medical center Discharge Planning Coordination Committee, hereafter referred to as the Committee.

   (1) Standing members of the committee are the Chiefs (or their representatives) of the following activities: Department of Nursing, Occupational Therapy, Physical Therapy, Community Health Nursing, Food Service, and Social Work Service.

   (2) The Discharge Planning Coordinator will be the Chief, Community Health Nursing.

   (3) The Chairperson of the Discharge Planning Coordination Committee will be the Chief, Social Work Service.

   (4) The Discharge Planning Coordinator Case Manager will be the non-physician health care provider assigned by the committee to coordinate with the physician, patient, his family, and other medical staff and community agencies as the discharge plan is formulated and implemented.

*This regulation supersedes DDEAMC Regulation 40-60 dated 6 Feb 81.
(5) The head nurse on the ward will be the point of contact for the Discharge Planning Coordinator.

b. The Discharge Planning Coordinator will:

(1) Maintain contact at least on a weekly basis through case conferences and consultative contacts with the medical staff on each ward to assist in the early identification of patients requiring a coordinated team management approach to discharge planning.

(2) Receive patient referrals from attending physicians when they order discharge planning.

(3) Determine, in collaboration with the other participants at the ward conference, who the case manager should be on each case presented.

c. The Committee Chairperson will:

(1) Prepare and distribute an agenda for each monthly committee meeting.

(2) Preside over committee meetings.

(3) Record the minutes of the meeting.

(4) Direct quality assurance activities of the committee.

(5) Represent the committee at Medical Care Evaluation Committee meetings and submit monthly reports to the MCE Committee.

d. The Discharge Planning Coordination Case Manager or Discharge Planning Coordinator, when a case manager is not assigned will:

(1) Review the medical record of the patient and establish contact with the attending physician.

(2) Interview the patient.

(3) When indicated, interview family members and/or others significant to the patient.

(4) Prepare a concisely written initial assessment of the patient, his problem(s), and his life situation with a recommended discharge plan recorded on DA Form 4700.
(5) Implement the recommended discharge plan with the approval of the attending physician.

(6) Make posthospitalization follow-up contact with the patient (in person, by telephone, or through a letter) within ten working days after the patient's discharge from the hospital to insure that the discharge plan was implemented successfully and assess need for additional service requirements.

e. The Discharge Planning Committee will:

(1) Meet on a monthly basis to review the overall discharge planning program.

(2) Develop inservice training strategies for physicians and other hospital staff.

(3) Evaluate discharge plans recommended, conduct audits at least annually, and develop other methods to determine the effectiveness of the program.

f. The Weekly Ward Case Conferences will:

(1) Have as standing participants, the Community Health Nurse, the Head Nurse, and a Social Work Service representative.

(2) Any medical center staff member providing health care to a patient on a particular ward may attend the ward conference to exchange pertinent information related to the discharge planning for the patient.

(3) Identify patients in need of discharge planning as soon after admission as possible.

(4) Clearly designate Case Manager for each patient needing coordinated discharge planning.

g. Referral of patients for discharge planning:

(1) Referral will be initiated by the attending physician who will:

   (a) complete and sign Section II of DA Form 4700 (Inclosure 1)
   or

   (b) write physician's orders for discharge planning in the patient's chart.
(2) Will be initiated as soon after admission as possible to allow adequate time for the non-physician health care providers to accomplish discharge planning goals.

(3) The ward secretary will complete the patient's identification information sections on page 1 of DA Form 4700.

(4) The head nurse, with assistance as needed from the Discharge Planning Coordinator, will complete Section III of DA Form 4700.

(5) The Discharge Planning Coordinator or assigned case manager will complete Section IV of DA Form 4700 and secure the patient's signature on DA Form 4700 authorizing release of medical information relevant to the discharge planning.

(6) Discharge Planning referrals by physicians should usually include but not be limited to the following categories of patients:

   (a) the elderly who live alone
   (b) teenage parents
   (c) myocardial infarction
   (d) cerebral vascular accident
   (e) cancer
   (f) elderly orthopedic patients, to include amputees
   (g) multiple sclerosis
   (h) arthritides
   (i) head or spinal cord trauma
   (j) neurological conditions with severe dysfunction
   (k) renal dialysis
   (l) children with serious illness, injury, or psycho-social problems
   (m) chronic mental disorders
DDEAMC Regulation
Number 40-60

10 May 1982

4. REFERENCES:


b. HSC Pamphlet 20-1, dated October 1976 (with Change 1 dated Jan 77).

c. DDEAMC Regulation 15-1, dated 23 February 1979 (with Changes 1 through 5).

The proponent of this regulation is the Chief, Social Work Service, DDEAMC. Users are invited to send comments and suggested improvements to the Commander, DDEAMC, ATTN: HSHF-SW.

FOR THE COMMANDER:

1 Incl

as

CHARLES H. LEWIS
LTC, MSC
Adjutant General

DISTRIBUTION:
B
1 Copy to Cdr, HSC, Attn: AG Publications
Ft. Sam Houston, TX 78234
This form is to be used for all patients requiring multidisciplinary discharge planning coordination to ensure that health care services provided during and after hospitalization are of the highest quality to patients and their families.

**PART I: Patient Identification Information (Please print in ink)**

1. Patient's Name
2. Age
3. Sex
4. Date Admitted
5. Home Address
6. Telephone
7. Military Sponsor: Name
   Grade
   SSN
8. Consultations Requested-SF 513 (Please List)

**Part II: Physician Section**

1. Name (Please print)
   Dept/Service
   Date
2. Initiate Discharge Planning Coordination (Check One)
   Yes
   No
3. Patient's Diagnosis
   Signature

**PART III: Patient's Section**

1. I hereby authorize the release of medical information relevant to discharge planning to the following agencies:

2. Signature

**PART IV: Discharge Planning Coordination Committee Section**

1. Services and/or referrals needed (Please List)

2. Actions Completed (Date & Initial)

3. Date Discharged

**PART V: Discharge Planning Coordination Case Manager Section**

1. Posthospitalization Follow-up Report (Date & Initial)

(Continue on reverse)
SCREENING FOR DISCHARGE PLANNING
DDEAMC AUTOMATIC REFERRAL SYSTEM

The desirability of implementing an automatic referral system for discharge planning was discussed by the Discharge Planning Coordination Committee. The committee reviewed categories of patients that might be included in such a system and prepared the list which is shown below to be presented at the Medical Care Evaluation Committee Meeting on 2 December 1982. If approved, these categories of patients would be referred automatically to the Discharge Planning Coordination Committee for screening. If discharge planning coordination needs to be implemented, the committee member will contact the patient's physician with recommendations for disposition.

1. The elderly who live alone
2. Terminal patients
3. Cerebral vascular accident
4. Chronic mental illness
5. Single patients to include orthopedic patients
6. Traumatic poststroke
7. High risk cases with progressive, debilitating disease
8. Chronic renal failure
9. Spinal cord trauma
10. Clinical conditions with severe restriction of activity
11. Death of patient's immediate family
12. Special health problems with serious acute illness
13. Chronic progressive disease
14. Bedridden handicapped child
15. Multiple social problems
16. Chronic mental illness
17. Adult patients unable to care for self
18. Patient transferred from a nursing home or another MTF
19. Chronic Obstructive Pulmonary Disease
20. Complicated fracture
21. Terminally ill patients
22. Patients prescribed 6 or more medications
23. Sudden death resulting from acute childbirth, birth defect, or death
24. Coronary artery bypass patients
APPENDIX H

WEEKLY WARD CASE CONFERENCE WORKSHEET
APPENDIX I

COMPUTATION OF SURVEY RESULTS
## Nonadjusted Effectiveness Indicated by Responses to Survey Questions

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<th>Total</th>
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<td>(1) 36</td>
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<td>13</td>
<td>90</td>
<td>2</td>
<td>92</td>
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*Of the 84 individuals who did not receive advice on changing the home environment to meet the patient's needs, none required such information.
## COMPUTATION OF THE RELATIVE IMPORTANCE ASSIGNED EACH AREA OF DISCHARGE PLANNING

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<thead>
<tr>
<th>Value</th>
<th>Response</th>
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<th>Relative Weight</th>
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<td>.14</td>
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<td>2</td>
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<td>63</td>
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442.5 1.01
PERCENT EFFECTIVENESS INDICATED
IN EACH QUESTION

(Listed by areas evaluated for patients' perceived relative
importance and by objectives established)

<table>
<thead>
<tr>
<th>Question #</th>
<th>Objective</th>
<th>Percent Effective</th>
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<tr>
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<td>II</td>
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</tr>
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<td>11</td>
<td>IV</td>
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</tr>
<tr>
<td>12</td>
<td>IV</td>
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<td>13</td>
<td>I thru IV</td>
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*Overall perception of effectiveness
<table>
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<th>Objective Component (by Question #)</th>
<th>Percent Effectiveness</th>
<th>Relative Importance</th>
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<td>92.9 x .14</td>
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<tr>
<td>17</td>
<td>100 x .10</td>
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<td>18</td>
<td>91.3 x .07</td>
<td>6.39</td>
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<td>20</td>
<td>97.9 x .12</td>
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</table>

97.5
APPENDIX J

HYPOTHESIS TESTING
HYPOTHESIS TESTING

Assumptions: The sampling distribution of \( \hat{p} \) is approximately normally distributed in accordance with the central limit theorem.

Hypothesis: 
- \( H_0: p \geq .90 \)
- \( H_A: p < .90 \)

Test Statistic: 
\[
z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0q_0}{n}}} 
\]

Distribution of the Test Statistic: If the null hypothesis is true, the test statistic is approximately normally distributed with a mean of zero.

Decision Rule: Let \( \alpha = .05 \). Critical value of \( z \) is 1.645. Reject \( H_0 \) unless \( z \) computed \( \geq 1.645 \).

Computed Test Statistic:
\[
z = \frac{.975 - .9}{\sqrt{(\frac{.9)(.1)}{94}}} = 2.42
\]

Statistical Decision: Accept \( H_0 \) since 2.42 \( \geq 1.645 \)

Administrative Decision: The conclusion is that >90% of the population is satisfied with the discharge planning at DDEAMC.

Using the same means of computing the overall general satisfaction of patients with the discharge planning process (not according to the objectives established, but using only their responses to survey question 13), \( H_0 \) is also accepted as indicated below:

Computed Test Statistic:
\[
z = \frac{.978 - .9}{\sqrt{(\frac{.9)(.1)}{94}}} = 2.5
\]

Statistical Decision: Accept \( H_0 \) since 2.5 \( \geq 1.645 \)

Administrative Decision: Same as above
APPENDIX K

UPDATED VERSION OF NURSE’S DISCHARGE FORM (DDEAMC OP 16)
MEDICAL RECORD — SUPPLEMENTAL MEDICAL DATA
For use of this form, see AR 40-400; the proponent agency is the Office of The Surgeon General.

<table>
<thead>
<tr>
<th>REPORT TITLE</th>
<th>PATIENT DISCHARGE NURSING NOTE</th>
<th>OTSG APPROVED (Date)</th>
</tr>
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</table>

1. HEALTH ON DISCHARGE IN (patient's/significant other's) OWN WORDS

2. DIET ______________________ WRITTEN INSTR GIVEN yes/no CONSULT yes/no
   ENCOURAGE __________________ AVOID ______________________

3. MEDICATIONS none/as below

<table>
<thead>
<tr>
<th>NAME</th>
<th>DOSE</th>
<th>TIMES</th>
<th>SPECIAL INSTRUCTIONS</th>
</tr>
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<tbody>
<tr>
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</tr>
</tbody>
</table>

4. MEDICAL/DRUG ALERT TAG no/yes for ______________________

5. ACTIVITY RESTRICTED no/yes to ______________________

6. SPECIAL INSTRUCTIONS/TREATMENTS no/as below

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW OFTEN</th>
<th>HANDOUTS PROVIDED</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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</tbody>
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7. FOLLOW UP APPOINTMENTS/REFERRALS no/as below

<table>
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<tr>
<th>PHYSICIAN/CLINIC/AGENCY</th>
<th>WHEN</th>
<th>PHONE NUMBER</th>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. WHERE TO CALL IN CASE QUESTIONS/PROBLEMS ARISE ______________________

9. DISCHARGED TO ______________________ WITH ______________________ VIA ______________________ AT ______________________

10. I HAVE BEEN INSTRUCTED IN THE ABOVE INFORMATION. I UNDERSTAND THESE INSTRUCTIONS AND HAVE BEEN FURNISHED A COPY OF THIS FORM.

X RELATIONSHIP ______________________

PREPARED BY (Signature & Title) ___________ DEPARTMENT/SERVICE/CLINIC ___________ DATE ___________

Nurses signature on reverse

PATIENT'S IDENTIFICATION (For typed or written entries give: Name - last, first, middle; grade: date; hospital or medical facility)

- HISTORY/PHYSICAL
- FLOW CHART
- OTHER EXAMINATION OR EVALUATION Nurses Notes
- DIAGNOSTIC STUDIES
- TREATMENT

DA FORM 4700 DDEAMC OP 16 1 Mar 83
APPENDIX L

PATIENT COMMENTS RECEIVED DURING SURVEY
PATIENT COMMENTS RECEIVED
DURING THE SURVEY

The comments voiced by patients during the survey are listed here briefly (phrases are included exactly as stated).

"I was frustrated--after my regular doctor left, there was no continuity. I saw six doctors before I finally saw Dr. ______ who was very nice. My meds changed and they need to talk to you about that. I didn't have any confidence in those other doctors."

"I was told by the doctor at 0730 that I would be discharged that day. The doctor had to be paged four times before the doctor reappeared. I didn't get notified of my discharge before that day. I wasn't asked if I needed help at home after discharge." (Cardiology patient; limited activity)

"There was confusion about leaving."

"I was discharged at the last minute. One doctor said I needed to stay a few more days; another, that I was ready to go home. I haven't done well at home and think I may have come home too early. The doctors should get together. I think the disagreement may have hurt my recovery."

"He was in the hospital for a long time. Before the planned discharge date, he suffered a setback that I thought would keep him in longer; but on Tuesday, they said he would
PATIENT COMMENTS RECEIVED DURING SURVEY (continued)

come home on Friday. There was much preparation that had to be made at home since he is so sick. He's had some problems since he came home but information on the hospitalization isn't available to the local doctor yet. He has to depend on what I say was done. Besides that, the staff at the hospital was fantastic.

"I think there must be a better way than having to walk all the way to Medical Hold to have papers signed when you're in pain."

"I was discharged in the A.M. by the doctors before breakfast. The nurse said I was going home too early--several people said that... kept on ward against orders...apparently not coordinated...had to wait til 7 P.M."

"I had to wait all day (0900-1700) for a bed. When I got one, then the work-up (lab, etc.) started."

There were also thirty-four (34) comments of praise of the discharge planning or the care at DDEAMC in general.
FOOTNOTES


2 Ibid., p. 113.

3 Martin Pfotenhauer, Joint Commission on Accreditation of Hospitals Summation Conference, Dwight David Eisenhower Army Medical Center, Fort Gordon, Georgia, 13 May 1982.


7 Ibid., p. 194.


12 Ibid., p. 188.
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Bristow, Opal; Stickney, Carol; and Thompson, Shirley. Discharge Planning for Continuity of Care. New York: National League for Nursing, 1974.


Pfotenhauer, Martin. Joint Commission on Accreditation of Hospitals Summation Conference, Dwight David Eisenhower Army Medical Center, Fort Gordon, Georgia, 13 May 1982.


Schrager, Jules; Hallman, Marc; Myers, Diane; Nichols, Rosemary; and Rosenblum, Lee. "Impediments to the Course and Effectiveness of Discharge Planning." Social Work in Health Care 4 (Fall 1978): 65-79.


Interviews

Appleby, Howard A. Chief, Physical Therapy Section, Dwight David Eisenhower Army Medical Center, Fort Gordon, Georgia. December 1982.

Gorman, Carole A. Chief, Community Health Nursing Section, Dwight David Eisenhower Army Medical Center, Fort Gordon, Georgia. September and December 1982, May 1983.


END DATE

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