UTILIZATION MANAGEMENT MANUAL

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Submitted by the ZdravReform Program to:
  AID\ENI\HR\HP

AID Contract No. CCN-0004-C-00-4023-00
  Managed by Abt Associates Inc.
  with offices in: Bethesda, Maryland, U.S.A.
  Moscow, Russia; Almaty, Kazakhstan; Kiev, Ukraine
Table of Contents

I. Introduction ....................................................................................................................... 1

II. Developing a Resource Budget
A. Introduction .................................................................................................................. 2
B. Methods for Developing a Global Budget ................................................................. 3
C. Managing Under a Global Budget .............................................................................. 5

III. Organizing a Resource Management Committee Structure
A. Introduction .................................................................................................................. 5
B. Committees Which Set Standards and Criteria .......................................................... 6
C. Sub-committees Which Oversee the Implementation of Standards and Criteria ........ 7
D. Sub-committees Which Conduct Retrospective Reviews of Health Care Delivery ........ 7
E. Summary ...................................................................................................................... 8

IV. The Utilization Control Process
A. Introduction .................................................................................................................. 8
B. Principles of Operating a Resource Management System .......................................... 8
C. Initial Evaluation .......................................................................................................... 9
D. Outpatient Specialty Care and Consults .................................................................... 10
E. Outpatient Hospital Care/Ambulatory Surgery ......................................................... 12
F. Inpatient Hospital Care .............................................................................................. 14

V. Critical Pathways .......................................................................................................... 19

VI. Summary ..................................................................................................................... 20

Figure 1 ............................................................................................................................
Exhibit 1 ...........................................................................................................................
i
Exhibit 2 ........................................................................................................................... ii
.Introduction

The allocation of resources is one of the most important functions of a managed care organization. The process has a number of elements. First, resources are allocated during the budget development process. In most cases, actuarial analysis and historical experience are brought to bear in order to distribute resources on a prospective basis. Estimates of expected consumption of resources are made, unit costs are set and budgets are developed.

The second element of the resource allocation process is the organizational structure that sets standards of care and manages the resource allocation process. Most often this element takes the form of work groups which develop the standards and criteria which are then used by the clinical and financial management staffs. As the health care provider organization gains experience, these work groups will examine the results of the resource management efforts and refine these standards and criteria. A portion of these changes will be the result of improvements in estimates of the volume of services to be used under the standards developed by the work groups. The remainder will be the product of improvements in the quality and efficiency of care. As time goes on, medical practice improvements will become the source of the majority of savings generated by the resource management process. Work groups should be charged with reviewing the experience of the system on a frequent periodic basis. Adjustments in medical practices and the allocation of resources should occur as the outcome of these reviews.

The next element of the resource allocation process is control of the consumption of resources. This process is usually called utilization management or utilization review or utilization control. It is this step to which the bulk of this handbook will be devoted. There are two major categories of control techniques: the mechanical steps of approving the referral of a patient from the point that entry into a health care system is initiated to another location where more specialized and/or inpatient care is provided, and the process or clinical pathway that is used to determine the most appropriate course of care. There are a number of steps in this process, all of which are focused on making sure that the expenditure of the additional resources is both clinically and financially appropriate. In cases where clinical and financial interests conflict the clinical analysis, of course, should be paramount. However, where options exist, it is desirable that financial considerations become a part of the decision making process.

The last element of the resource management process is the information system (MIS) which enables the tracking of the use of resources on a regular and structured basis. The MIS should track the actual vs. expected consumption of resources. The results of the resource consumption analysis should be used to develop budget assumptions for subsequent periods, analyze the results for specific groups of providers, manage risk and incentive pools and identify areas where one or more work groups should focus their efforts to redefine the critical paths that are necessary to provide quality, cost-effective care.
Figure 1 describes the resource management process. It is an iterative process which should be in constant motion. The focus should be on the results of care rather than the resource management process itself. Good results will foster good management of resources.

This Handbook is intended to provide the reader with a collection of tools that individual provider networks and systems can pick and choose from to assist them in managing their resources. The procedures illustrated herein should be adapted to local circumstances. Different risk/incentive arrangements and compensation methodologies will require different approaches to resource management. The reader is advised to experiment with several different approaches before settling on a specific resource management structure. This structure should be evaluated periodically so that the practical lessons of experience can be used to improve the results of the process.

I. Developing a Resource Budget

. Introduction

The goal of this chapter is to provide a brief introduction to the concepts of budget development, particularly as they relate to utilization management. Most modern managed health care organizations use a system of global budgeting - setting a budget based on per capita costs or
revenue rather than line-items. The per-capital budget can be sub-divided by sub-organization unit. This is called the decentralization of budget responsibility.

The alternative to a global budget is a line-item budget. Under this form, revenue is received and monitored using line-item budgets - so much for office supplies, food, medications, as opposed to so much for an inpatient day or a type of outpatient service. Line item budgets are usually fixed for a specific period of time and are not as easy to modify when unexpected changes in volume occur. Global budgets are developed based on an organizational unit and allow management flexibility in re-programming funds based on unexpected changes in volume.

Global budgets are more likely to be developed on a “top down” basis. The sources of funds indicate how much is available on a per capita basis. Management then develops a tentative budget based on a variety of factors such as history, demographic characteristics of the covered population and the types of services available within the health care system. As the budget period proceeds, management monitors the use of resources against the amount planned. Both shortfalls and surpluses initiate an adjustment process. The key element in global budgeting is the flexibility to modify the budget of the organizational unit without the need to go back to the authority level that approves the original budget. Line item budgets, on the other hand, often require approval for re-budgeting from the authority level. This constrains line management from making timely resource management decisions which could have a positive impact on the most efficient use of resources.

A. Methods for Developing a Global Budget

1. Historical - This method is still commonly used. It relies on past experience without critical evaluation. History does allow for using past experience in determining future cost. However, it does not help when structural adjustments are being made in the mechanisms by which services are delivered nor does it take into account changing demographics, benefit packages or improvements in medical procedures. Any errors in past allocations of resources are compounded.

2. Actuarial - This method takes historical data and makes adjustments based on projections of changes in the delivery system, medical procedures, demographics and schedules of benefits. It avoids many of the traps of historical data but, of necessity, it makes projections which could or could not turn out to be valid. It is best used when clinical management has full flexibility to make changes in how care is provided and to switch resources around to accommodate these changes. The actuarial method will also reflect trends in enrollment such as aging, changes in the incidence of various disease categories and provider compensation. Expected vs. Actual analyses are essential to the successful use of this method.
3. Time study - There are some activities within health care systems which can be predicted using time study techniques. These data are best used when staffing out various functions such as office visits and staff support. Time studies help determine the number of staff members of various types that are needed to provide a service. However, they are most amenable to static situations where there is no modification of the basic type of activity. For example, if the role of general practitioners is being expanded, a time study of current practices would not be very useful. Time studies should also be used for very narrowly defined activities such as the drawing of a blood sample for a panel of clinical pathology laboratory tests.

Each of the above methods can be used as part of a “top down” budget development process. No one method is sufficient in a dynamic environment. Capitation is the most common type of format that can be used to express a global budget. Whether or not a capitation is adequate from the perspective of a provider organization should be based on an analysis of the costs of providing the expected range and volume of services. This means that a provider organization must compare its costs of providing the expected services with the amount being offered as a capitation. All types of costs must be considered including the resources providing equipment and other types of assets through a budget process. Capital expenditures should be spread across the useful life of the asset. Changes in the volume of services provided should take into account the fact that existing mixes of services might require adjustments over time to more effectively use resources. Therefore, to the extent possible, costs should be converted to variable and semi-variable. Fixed costs should be limited to non-discretionary expenditures such as buildings, equipment and an essential management core. Other costs should be expressed as semi-variable even if, in the short run, there is little discretion in making provider level adjustments. In time, policlinic and hospital level management will find it useful to have the data necessary to best use the staff in the most cost effective manner.

When reviewing the capitation, the fund holding organization should review the adequacy of the capitation. Although there might be less flexibility in the near term due to resource shortages, this exercise will help in identifying areas where particular attention should be paid during the capitation management process. The organization receiving the capitation must develop tentative budgets which define how it expects to provide the range of services specified under the capitation. If possible, the amount of the capitation should be negotiated based on the costs of providing the services. Once agreement is made between the purchasing and fund holding organizations, sub-organization budgets should be similarly developed.
B. Managing under a Global Budget

Once the budget is agreed upon, the following steps should be followed in managing the resources of the provider organization.

0. Maintain information needs on a systematic and regular basis - establish a management accounting reporting system which integrates the budget for each subunit.

1. Get performance reports based on each area of budget responsibility

2. Emphasize procedure costing to improve accuracy of future budgets.

3. Link cost with outcomes - these will be very rough estimates at first, but the process will yield more accurate data over a period of two to three years.

4. Develop data necessary to define inter-facility payments. It will take two to three years to get a final product, but this is an essential step to the development of incentive systems. Develop an effective utilization management system.

5. Keep track of costs by demographic categories. There should be less emphasis on epidemiological data for cost management purposes.

6. Develop a procedure coding system and use it consistently. The procedure costs should be based on inputs of labor and related overhead costs.

7. Establish a performance budgeting system based on an analysis of budget vs. actual costs.

8. Monitor shifts in patterns of patients among providers. Eventually this will lead to the optimization of costs and revenue.

IV. Organizing a Resource Management Committee Structure

. Introduction

This chapter will cover the form and functions of committees that participate in the management of resources. Committees have three basic functions:

1. The setting of standards and criteria for care

2. The implementation of standards and criteria

3. The retrospective review of the results of the resource management process.
Because of the dynamic nature of the resource management process, physician participation on committees should not be solely a management role. Practicing physicians can add much to both the development and implementation of standards of care. The efficiency of resource management efforts has improved more from changing standards of care than from the implementation of operational approval barriers. Active physicians provide more timely input into the committee process resulting in a more immediate improvement in resource management efficiency, and also bring their experience with patients to the committee resulting in timely feedback on the results of new initiatives.

B. Committees Which Set Standards and Criteria

The primary committee which oversees the setting of standards and criteria is the Quality Evaluation Committee. This Committee receives the results of the deliberations of each sub-committee and uses these documents to evaluate current standards for effectiveness and utility. The sub-committees provide information to support this function in the following manner:

1. Concurrent Review - Provides the results of each hospitalization event in terms of expected vs. actual length of stay, patterns of ancillary utilization, diagnostic procedures used, and physician profile evaluation.

2. Medical Care Evaluation - Provides reviews of results using current standards and criteria using quantitative and qualitative analysis, analysis of practice variations, results of remedial action programs and implementation of new procedures and equipment.

3. Facilitation - Provides input on the effectiveness of pre and post hospital stay testing and diagnosis to evaluate the utility of new and existing protocols.

The input of each of these sub-committees can be the basis for the initiation of new standards and criteria or the modification of existing standards and criteria. Standards and criteria should be based on the results of actual practice experience as modified by an evolutionary process which improves system of care delivery efficiency and quality.
C. Sub-committees Which Oversee the Implementation of Standards and Criteria

The major effort in the improvement of resource management is the control of hospital admissions and length of stay along with the monitoring of referrals to specialists. The majority of this area is handled by the concurrent review and medical care evaluation sub-committees. Concurrent review oversees the admission certification process, the assignment of an initial length of stay and the continued review of stay procedure. The sub-committee should be looking at both the administrative efficiency of these functions as well as the performance of individual physicians or classes of physicians. The medical care evaluation sub-committee should be concerned with the impact of the concurrent review processes on the quality and effectiveness of medical care. Medical care evaluation should establish objective criteria, measure actual practice against the criteria and take appropriate action to correct identified problems. The sub-committee should also have a procedure for following up on these actions to assure the maintenance of high quality care.

D. Sub-committees Which Conduct Retrospective Reviews of Health Care Delivery

The entire resource management process should be analyzed on at least a monthly frequency. Issues which arise as part of this analysis should be addressed as soon as possible. The following sub-committees should be involved in retrospective reviews:

0. Medical care evaluation - This sub-committee should be conducting diagnosis specific reviews of care which enable the analysis of care for both quality and resource use efficiency for ninety percent of care over a three year period. The reviews should focus on both the overall quality of care along with identifying individual physicians and hospitals which need to make changes in their practices.

1. Surgical case review - The review activities of this sub-committee focus on the comparison between pre-operative diagnoses and indications and the final results of the corresponding surgical procedures. The techniques used include tissue reviews where tissue was removed and the analysis of the use of blood-transfusions. The sub-committee should report periodically on the results of the work of individual physicians and facilities.

2. The Facilitation sub-committee is involved in the evaluation of new practices in reducing length of stay using out-patient services for both the pre-admission and post discharge period.
Substitution of lower cost services provided to patients using out-patient settings can be a major tool in increasing the efficiency of resource management programs.

E. Summary

The committee structure described should be adjusted to meet the needs of each administrative unit. The unit should continuously evaluate the effectiveness of the structure. Membership on each committee should involve as many physicians as possible. In this way, changes in practice guidelines and criteria are transmitted directly to those actually seeing patients thereby providing them with the latest advances in technique and efficiency. At the same time, standards and criteria should be continually evaluated by practicing physicians so that changes can be reviewed promptly. To the greatest extent possible, any physician that is involved in the standard and criteria setting process should be involved in actual patient contact for at least part of their normal duties.

IV. The Utilization Control Process

A. Introduction

The utilization control process is composed of two major sub-areas – resource management and resource monitoring. This section will deal with the resource management process. Resource management begins when a patient seeks care. Based on the initial evaluation of the patient, usually by a primary care physician, one of several avenues of specialized care can be pursued. The avenues that will be discussed in this handbook are:

0. Outpatient specialty care and consults

1. Outpatient hospital care including ambulatory surgery

2. Inpatient hospital care

3. Low intensity facility care

A. Principles of Operating a Resource Management System

1. Managing to the most effective setting - The patient should be referred to the setting which provides the most appropriate care for the patient’s medical needs. Not every patient should be referred to the most expensive venue for care.
The resource management system should initiate referral care at the lowest level and move the patient to more intense levels of care based on continuing evaluation of the patient’s medical condition. Services such as pre-surgical testing for elective procedures should avoid the use of inpatient facilities.

2. Continuity of care - As the patient moves from one setting to another their medical record should follow them to assure that each subsequent provider of care is aware of the patient’s entire medical history. Continuity of care also facilitates the avoidance of unnecessary duplication of care, particularly diagnostic radiology and pathology. Specialty referral care providers and hospitals should report findings and results back to the referring provider for follow-up care and to update the medical record.

3. Referrals should be made for specific services, not for an open ended course of care. If the specialty care provider is not able to assist the patient, the primary care physician that made the original referral should initiate any subsequent referral. Specialists should not have the authority to refer the patient to another specialist except under conditions of a medical emergency.

4. Providers should only be at risk for the types of services over which they have control of the volume and/or intensity of service.

5. Patients that receive specialty care on an emergency basis without prior resource management approval should have the hospital contact the resource management program within twenty-four hours of admission.

6. Discharge planning should be initiated at the time of admission to facilitate the earliest possible move from acute care to extended care.

Using the above principles, a patient seeking care should encounter a resource management process which has the following steps:

**B. Initial Evaluation**

0. Upon presenting to a physician, the patient should be evaluated for the need for emergency care. If they are emergent, appropriate care should be provided with the patient becoming subject to the concurrent review process described below.
1. If the patient is not emergent, the patient should be evaluated for one or more of the following services:

- Medical Treatment
- Physical Therapy
- Surgical Procedure
- Laboratory
- Consults
- Imaging Studies
- Non-surgical Procedure
- Medications
- Nutritional Support

2. For the services that require prior authorization, a referral approval process should be initiated.

C. Outpatient Specialty Care and Consults

0. Prospective Review

Prospective review is applied to outpatient specialty care and consults on a limited basis. The threshold for review is based on the value of the proposed procedure or type of care, the level of availability and access of care, and the setting for the proposed care. Routine consults, for example, are often excluded from the resource management process because the administrative burden for carrying out a prospective review of such referrals exceeds the potential cost savings. Instead, primary care physicians complete a form such as Exhibit 1 and submit it for use in the retrospective review process. The primary care physician applies available indicators for the diagnosis and has the say on whether the referral will take place.

For those procedures which are expensive or difficult to obtain within a reasonable distance of the patient’s home, a form similar to Exhibit 2 should be completed. This form should be completed and submitted to the appropriate subcommittee in the resource management program.
If the proposed referral for specialized services or a consult meet the criteria, an approval is granted with notifications to both the primary care physician and the specialist or consultant. If the request is not approved, a notice denial is issued to both the primary care physician and the patient along with a notice of right to an appeal. The appeal is then heard and, if extenuating circumstances are presented and accepted, a notice of approval would be issued.

1. Concurrent Review

Once a referral is made, a monitoring process should be developed. This process may be as short as a report back to the primary care physician about the patient along with a set of recommendations or, in the case of an extended referral, periodic reports back to the primary care physician. The Concurrent Sub-committee should also periodically review extended outpatient referrals and consultants for progress and whether maintaining the referral is medically appropriate.

2. Retrospective Review

The record on all types of outpatient referrals and consults should be reviewed on a quarterly basis. The records of individual physicians should be reviewed to establish patterns and identify cases where referrals fall outside normal ranges. In such cases, the appropriate sub-committee should develop a program of corrective action which will educate physicians in the more effective management of resources. In addition, the process of granting and approval of referrals may be modified to prevent recurrence of inappropriate outpatient referrals.

3. Summary

The key elements in this process are:

4.1 The patient may not see a specialist or consultant without cost unless they go through an approved referral control procedure.

4.2 The specialist or consultant should not agree to see the patient unless the notice of approval has been received.

4.3 Approval should not be denied unless there is no reasonable way that the criteria for approval cannot be met.

4.4 To foster continuity of care and reduce the potential for duplication of care, the primary care physician should be kept aware of the results of the referral.

4.5 Communication between primary care physicians and specialists is an essential element for the effective management of resources.

E. Outpatient Hospital Care/Ambulatory Surgery
1. Prospective Review

Prospective review is applied to outpatient hospital care/ambulatory surgery on a limited basis. The threshold for review is based on the value of the proposed procedure or type of care, the level of availability and access of care, and the setting for the proposed care. Only expensive diagnostic tests or tests which are difficult to access should be subject to prospective review. The intent in the former case is to assure that high cost procedures are utilized only when medically necessary. In the case of procedures where there is a shortage of capacity, the purpose of prospective review is to manage the availability of a scarce resource. When surgery is involved, the intent of prospective review is to assure that the procedure is both medically necessary and is being provided in the least expensive setting. Recent advances in medical treatment have shown that many procedures can be safely and economically provided in a setting which precludes the need for an inpatient stay. The primary care physician and/or the utilization management staff should have indicators available which assist in the determination of whether the procedure/surgery is medically appropriate and where the procedure/surgery is best provided.

To complete the referral process for outpatient hospital care/ambulatory surgery, a form similar to Exhibit 1 should be completed for any procedure/surgery which is determined to require prior approval. The form should be submitted to the appropriate sub-committee in the resource management program. If the proposed referral for outpatient hospital care/ambulatory surgery meets the criteria, an approval is granted with notifications to the patient, the primary care physician and the facility. If the request is not approved, a notice of denial is issued to both the primary care physician and the patient along with a notice of right to an appeal. The appeal is then heard and, if extenuating circumstances are presented and accepted, a notice of approval would be issued.

Where the patient is emergent and there is not time to carry out a prior approval process, the patient should be provided with all medically necessary care and a pre-service certification granted retroactively. The case should be reported to the appropriate sub-committee within 24 hours of the initiation of treatment.
If care is prolonged, the concurrent review process should take over the case after receipt of the initial notice. Once care is completed, the medical necessity should be reviewed for compliance with appropriate criteria.

2. Concurrent Review

Once a referral is made, the care should be monitored. If multiple procedures or surgeries are indicated, the second and subsequent events should be subjected to continued evaluation for ongoing medical necessity. Periodic reports should be sent to the primary care physician. The Concurrent Sub-committee should also periodically review extended outpatient procedure referrals for progress.

3. Retrospective Review

The record on all types of outpatient hospital services/ambulatory surgical referrals should be reviewed on a quarterly basis. Individual physician records should be reviewed to establish patterns and identify cases where referrals fall outside normal ranges. In such cases, the appropriate sub-committee should develop a program of corrective action which will educate physicians in the more effective management of resources. In addition, the process of granting and approval of referrals may be modified to prevent recurrence of inappropriate outpatient hospital/ambulatory surgery referrals.

4. Summary

The key elements in this process are:

4.1 The patient may not receive specified outpatient hospital or ambulatory surgical services without cost unless they go through an approved referral control procedure.

4.2 The hospital or ambulatory surgery center should not agree to see the patient unless the notice of approval has been received.

4.3 Approval should not be denied unless there is no reasonable way that the criteria for approval cannot be met.

4.4 To foster continuity of care and reduce the potential for duplication of care, the primary care physician should be kept aware of the results of the referral.
4.5 Communication between primary care physicians and facilities is an essential element for the effective management of resources.

F. Inpatient Hospital Care

1. Prospective Review

The most important area of resource management is the control of access to inpatient care. Patients are can come to an inpatient facility in two ways: as elective admissions and as emergency cases. Emergency cases are handled under concurrent review procedures. Therefore, prospective admission control is one of the principle areas of concern for resource management activities.

An inpatient admission should be based on an evaluation of the patient to determine if specific clinical criteria have been met. The process begins with a written request on a form similar to that shown in Exhibit 2. Upon receipt, the utilization management staff should review the medical record against diagnosis specific criteria to determine if the clinical criteria have been met. If they have been met, an approval notification is issued with copies to the referring physician, the primary care physician, the facility and the patient. If the criteria have not been met, the referring physician, the primary care physician and the patient are notified and given the opportunity to present extenuating circumstances which would allow the case to meet minimum admission criteria.

There are twelve basis categories of admission criteria:

- Cardiology
- Cardiothoracic Surgery
- General Surgery
- Hand, Plastic & Reconstructive Surgery
- Neurosurgery
- Obstetrics & Gynecology
- Ophthalmology
- Orthopedic Surgery
- Otolaryngology, Dental & Oro-Maxillo-Facial Surgery
- Podiatry
- Urology
Vascular Surgery

Each category has criteria divided into has three components:

- Indications for the surgery and/or procedure: reasons for consideration of surgery or procedure.
- Support of indications: validation by imaging, clinical findings and/or symptoms.
- Clinical management: alternatives tried prior to consideration of surgical and/or procedure intervention.

1.1 Indications

In order for a surgical or procedure intervention to be approved, the appropriate indications for that surgery or procedure must be listed by the requesting physician. If the indications do not match one of those listed for the surgery or procedure, the case is referred for medical peer review to evaluate for extenuating circumstances. If the indications match, the case should then be reviewed for validation of indications.

1.2 Support of Indications

Validation is accomplished using one or more of the following:

- Imaging - visual findings
- Symptoms - patient described
- Clinical findings - by exam or testing

Imaging is important because if a diagnosis cannot be confirmed by imaging, there is not enough evidence to support an indication. Symptoms such as pain, dizziness, tingling, and weakness are much more subjective and should be documented to support the indication. Clinical findings which use laboratory results and direct examinations may be used to support some indications.
1.3 Clinical Management

In some cases, even if the requested surgery or procedure meets confirmed clinical indications, other treatments should be tried before using an inpatient intervention. These treatments include medications, non-invasive therapies and less intensive surgical interventions. Medication can be used to treat illnesses and ease symptoms. Non-invasive therapies can include changes in life style, physical therapy and changing certain medications. Less intensive surgeries would involve a more conservative approach to the patient’s needs.

1.4 Physician Review

There are a number of instances where the application of criteria will not be sufficient to properly manage a proposed inpatient intervention. These cases will require direct physician review. They include rare diagnoses, comorbid conditions and when criteria are not met.

1.5 An Example of Indicators for Surgery

1.51 Requested surgical procedure: Prostatectomy

1.52 Indications:

· Age of patient - under 75
· Prostate less than 100 grams
· Age adjusted laboratory results

1.53 Symptoms: Obstructive symptoms

1.54 Test findings:

· Bladder residual
· Renal failure

1.55 Medication inter-reactions:

· Some cause urinary tract blockages
Some cause misperceptions of bladder fullness by patient

Some decrease prostate size

A different set of indicators might be used to deal with patients over age 75. The key technique of applying indicators is to gather enough data so that the most informed decision can be made. If medication interactions are suspected, the conditions for which the patient is taking those medications should be evaluated to make sure that the findings which might support the removal of the prostate are not falsely supporting a diagnosis which results in surgery. This might include selective cessation of selected medications to determine if they are the source of the indication rather than actual pathology within the patient.

Once prior authorization is approved, services can be initiated.

The patient is admitted to the hospital with a specific proposed length of stay. This length of stay should be based on each diagnosis and proposed type of intervention. It does not mean that the proposed length of stay is a minimum. It is up to the concurrent review process to determine what will be the actual length of stay and any adjustments to the treatment process.

2. Concurrent Review

 Concurrent review is the continual application of the indicator system described above for two types of cases: cases that went through the prospective review process and cases that came into the hospital as emergency cases. Regardless of the source of the case, the concurrent review process should begin as soon as the patient enters the hospital. The key questions to be asked include the following:

- Does the patient still meet the criteria for admission?
- Where is the patient on the clinical pathway?
- What is the discharge plan for the patient?

If a continued stay is still justified, the patients admission will be re-certified as meeting criteria and a new proposed length of stay indicated. This review of the stay should take place at least 24 hours prior to the time that the original length of stay would have expired. If an inpatient stay beyond the original length of stay is authorized, the attending physician is required to submit a treatment plan.
No extension of stay should extend beyond seven (7) additional days without senior physician approval.

If the continued stay is not justified or if the original emergency admission was not justified, the patient and the admitting physician should be notified immediately. An appeals process should be available to allow for extenuating circumstances with a decision rendered by 0900 the following day. Stays beyond that time will be subject to additional charges. The patient may be offered other services which will allow for improved use of treatment resources.

Once the patient has been discharged, the concurrent review process continues by evaluating progress under the approved discharge plan. This plan may be modified as often as is necessary to assist in avoiding any medically unnecessary re-admissions. Cases which meet a pre-set threshold will be referred to a case management department for continued review of post-inpatient treatment.

3. Retrospective Review

Retrospective review operates at three levels - case specific, monitoring of patterns and individual physician performance. The purpose of retrospective review is to facilitate changes in the ways that care is provided.

3.1 Case Specific

Cases can be review singly or by diagnosis to identify the results of current protocols and to make adjustments in the ways that care for that type of case will be provided in the future. A review of a single case will occur when there is a concern about the cost of a specific case or where the performance of a specific physician is a matter of concern. Diagnosis reviews should be done routinely so that treatment protocols can be validated and updated. Diagnoses associated with at least 85 percent of the total number of cases should be reviewed at least once every three years.

3.2 Provider Specific

Physicians or physician groups should be monitored on a regular basis to profile their performance on specific types of cases. The review committee should identify criteria which should be used to determine the physicians and/or the types of cases which should be reviewed.
Comparison of performance among physicians is an important tool for both the improvement of resource management and quality of care. Such reviews will also identify physicians or groups of physicians that require additional training or attention during the pre-certification or concurrent review processes.

To carry out effective retrospective review, the review committee will require the collection of specific data items. Preset standards should be developed for each type of case in terms of expected use of specific types of resources. These include use of hospital days and the amount of services used within those days, ancillary services such as diagnostic studies, the number of consultations ordered and the outcome for the treatment episode. Cases should be evaluated against these preset standards. The review committee should set points which will trigger case or physician specific retrospective reviews. The cases so identified are considered outliers, i.e., beyond the normal expected range of care.

Retrospective studies were originally conceived to make sure that treatment was not habitually low. The studies are also used to monitor for excessive admissions and re-admissions under DRGs and finished case rates. Retrospective review have some impact on admissions by identifying types of cases and/or physicians that should be subjected to additional attention by the resource management process. Retrospective reviews will have little or no impact on lengths of stay except as they relate to adjustment of initial length of stay determinations. Finally, these reviews will have a long-term impact on physicians by informing them that even though there was no immediate impact on their behavior, there can be long term implications for their compensation and the amount of latitude they have in treating future patients.

V. Clinical Pathways

Clinical pathways offer another tool in the resource management process. Users can use them to identify key components of cost including resource mix, how often a unit of service is used, who received the services and the cost per unit of service. The clinical pathway provides the physician with a structure way of resolving resource management questions. It looks at the admission process, the patient's condition including the results of diagnostic tests, treatment modalities which can be considered, medication allocation and discharge planning.

The objective data provided under the clinical pathway technique also address benchmark variations in care. The data indicate those situations where deviation from the benchmark is appropriate based on specific indications and criteria. It is important the treatment benchmarks be case severity adjusted.
There often will be situations where the benchmarks are not appropriate to the condition of the patient. The clinical pathway offers a clear-cut method for changing the course of care in a controlled and quality assuring manner.

**VI. Summary**

The resource management process is an integral part of managed health care systems. Its composition includes several techniques such as pre-certification of specialty, diagnostic and inpatient services, concurrent review of ongoing services, retrospective review of the use of services and clinical pathways. Experience has shown that although the resource management process has administrative costs, that these costs will be more than covered by the amount of resources saved. Further, studies have shown that resource management does not adversely impact quality of care and, in fact, may substantially enhance quality. Cost reductions will be largest during the initial period. Most promising are changes in the methods of care that are shown as clinical pathways and case management for its impact on high cost cases.

Intense Utilization Review will have a significant impact on the volume of inpatient physician services. Outpatient physician services may also decrease as a result of resource management but not nearly as much as for inpatient physician services. Retrospective review will identify services which are candidates for reduction and will foster a substantial impact on procedure modification.

There is a close relationship between quality of care and resource management. Adverse occurrences provide data to evaluate the performance of hospitals and physicians. These include the outcomes associated with various modalities of care, readmission rates and the incidence of complications. Quality of care is impacted by the attention to detail which is an integral part of the resource management process. Finally, the resource management process requires the collection of data which is essential to maintaining an effective quality assurance process.
Exhibit 1

Physician Referral Authorization Form

This form is to be completed for each referral which the Policy Handbook (should be locally developed) states that prior approval is required. All copies of the form should be forwarded to the Resource Management Committee (RMC) for their review and action. If the referral is approved, a copy should be provided to the patient, the referral specialist, and the primary care physician. The original should be retained by the RMC.

Case Information

Patient Name ________________________________________________________________

Address ___________________________________________________________________

Name of Polyclinic/Primary Care Physician ______________________________________

Diagnoses __________________________________________________________________

Proposed procedures/consultations _____________________________________________

Number of procedures/consultations requested ____________________________________

Attach any supporting documentation

Action Record

Approved _______ Disapproved _______ Held pending clarifications

Number of procedures/consultations approved ________________________

If disapproved, reasons _____________________________________________________

____________________________________________________________________________

Revised procedure/consultation codes, if appropriate _____________________________

Reporting requirements ________________________________________________________
Authorized Signature
Exhibit 2

Inpatient Services Authorization Form

This form is to be completed for each request for authorization for inpatient admission. For elective admissions, the form should be submitted at least five working days in advance. If the patient has been admitted as an emergency case, the form should be submitted within 48 hours of the time of admission. All copies of the form should be forwarded to the Resource Management Committee (RMC) for their review and action. If the admission is approved, a copy should be provided to the patient, the hospital, the specialist, and the primary care physician. The original should be retained by the RMC.

Case Information

Patient Name _________________________________________________________________

Address _____________________________________________________________________

Name of Policlinic/Primary Care Physician _________________________________________

Name of Specialist ____________________________________________________________

Diagnoses ___________________________________________________________________

Proposed procedures/number of inpatient days _____________________________________

_____________________________________________________________________________

Attach any supporting documentation.

Action Record

Approved _______________ Disapproved _____________ Pended for clarification ______

Number of Days Authorized _________________________________________________

If disapproved, reasons _______________________________________________________

_____________________________________________________________________________

Reporting requirements ________________________________________________________
Authorized Signature