

GAO

Report to the Chairman, Subcommittee
on Defense, Committee on
Appropriations, U.S. Senate

May 1993

DOD HEALTH CARE

**Further Testing and
Evaluation of
Case-Managed Home
Care Is Needed**



Human Resources Division

B-252933

May 21, 1993

The Honorable Daniel K. Inouye
Chairman, Subcommittee on Defense
Committee on Appropriations
United States Senate

Dear Mr. Chairman:

The Congress, in October 1992, authorized the Department of Defense (DOD) to establish a program for individual case-managed home care of military beneficiaries with extraordinary medical or psychological disorders. In 1986 and again in 1988, the Congress had directed DOD to conduct demonstration projects to test whether home care, combined with case management, is a cost-effective way of providing health care for beneficiaries with chronic or catastrophic medical problems. In 1990, these beneficiaries accounted for only about 2 percent of patients receiving care under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). However, these beneficiaries accounted for about 48 percent of the program's approximately \$2.3 billion in costs.

This report responds to your request that we determine if the home health care demonstration projects yielded sufficient information to enable DOD to identify adequate methods for administering a permanent home health care benefit. To do this, we focused on the information developed under the demonstrations pertaining to (1) how to identify CHAMPUS beneficiaries who would benefit from home care, (2) how to prevent overuse of the benefit, and (3) when and how to provide case management. In addition, we evaluated the reasonableness of CHAMPUS's estimates of cost savings under the demonstrations. Finally, we explored the potential overlap between the new CHAMPUS home care benefit and the Coordinated Care program currently being phased in DOD-wide.¹ Our scope and methodology are described in appendix I.

Background

The military health care system is comprised primarily of CHAMPUS and the direct care hospitals and clinics of the Army, Navy, and Air Force. This system provides comprehensive medical care to active duty military members and nonactive duty beneficiaries (dependents of active duty

¹Under this program, which is being phased in, military hospital commanders will be responsible for providing and paying for all medical care of beneficiaries in their service areas, including those covered under CHAMPUS. Placing control, fiscal responsibility, and accountability for beneficiary care at the local military hospital level is designed to provide incentives to manage resources more effectively.

members, retirees and their dependents, and survivors of deceased members). Active duty military members are required to obtain medical care from the direct care system, which has military medical facilities worldwide. Nonactive duty beneficiaries may receive medical services outside military medical facilities under CHAMPUS if services are not available within the direct care system or if military medical facilities are not located nearby.

CHAMPUS benefits were designed to be similar to benefits provided by comprehensive medical insurance plans. The basic CHAMPUS program covers both inpatient and outpatient medical care. This basic program does not have a formally defined home health benefit, but covers certain home health care equipment, services, and supplies, such as respirators and hospital beds, intermittent skilled nursing care in the home, intravenous medications, and nutritional solutions that are administered in the home. However, the basic program does not generally cover, beyond specified limits, services provided by home health aides or home nursing and physical, occupational, and speech therapy.

With developing medical technologies, chronically and catastrophically ill beneficiaries can frequently receive medical treatment at home. For example, children with chronic respiratory problems, who require a ventilator and nursing assistance, can often return home if the family is provided a ventilator, visits by a nurse, and associated supplies.

Case management can make it easier for beneficiaries to obtain and use needed home health care equipment, services, and supplies. Under case management, an individual—the case manager—provides information and coordinates services. Case management varies in both form and scope. For example, case management may deal only with a patient's medical needs or it may address the total needs of the patient and his or her family. Similarly, case management can be limited to the process of arranging initial services or can be an ongoing process for the duration of the illness.

To test whether case management coupled with expanded home health care benefits could reduce medical costs and improve services to CHAMPUS beneficiaries, the Congress, in 1986 and 1988, authorized DOD to conduct demonstration projects. Both demonstration projects target military beneficiaries with catastrophic medical problems, but specifically exclude patients with mental health disorders. The original 1986 Home Health Care demonstration project (hereafter referred to as the 1986 project) is available only to dependents of active duty military members and

dependents of members who died in the service. To be eligible for the 1986 program, the patient must be one who, in the absence of case-managed home health care, would remain hospitalized. Each patient's home care must be cost-effective, that is, it must cost no more than hospital care. From 1986 through 1990, one CHAMPUS nurse performed all case management. In January 1991, however, CHAMPUS assigned this responsibility to its fiscal intermediaries.² Home care under the 1986 project, which is still under way, is available nationwide, except in those areas covered by the 1988 project described below. Appendix II describes the 1986 project in more detail.

After CHAMPUS officials expressed concern that some beneficiaries who could benefit from home care could not qualify under the restrictive requirements of the 1986 project, the Congress authorized the expanded 1988 Home Health Care Case Management Demonstration project (hereafter referred to as the 1988 project). Under the 1988 project (1) eligibility was expanded to include military retirees and their dependents; (2) case-managed home care was no longer required to be in lieu of continued hospitalization, but could also be provided to prevent recurrent inpatient admission or frequent emergency room visits; (3) case-managed home care was no longer required to be cost-effective on a case-by-case basis as long as the project showed savings in the aggregate; (4) the case management function was subcontracted out to case management organizations accountable to CHAMPUS's fiscal intermediaries; and (5) home care was initially limited to three geographic areas (Washington state; the Washington, D.C., area; and the Fitzsimons Army Medical Region).³ In June 1992, home care was expanded to a fourth geographic area—Tidewater Virginia. In addition, the Navy hospital in Charleston, South Carolina, has specifically incorporated the 1988 project's structure into its direct care operation in order to provide home care to beneficiaries in the hospital's service area. The 1988 project is described in more detail in appendix III.

In May 1992, DOD reported to the Congress cumulative savings under the two demonstration projects, totalling about \$39.3 million: \$13.8 million under the 1986 project and \$25.5 million under the 1988 project. Average per-case savings for the approximately 268 beneficiaries who have received or are receiving services under the 1986 project are reported to

²Fiscal intermediaries are CHAMPUS contractors that handle CHAMPUS beneficiaries' claims for care received within a certain geographical area.

³The Washington, D.C., area includes Maryland and Northern Virginia. The Fitzsimons Army Medical Region includes Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, Utah, and Wyoming.

be about \$51,500; average per-case savings for the 1,474 beneficiaries who have received or are receiving services under the 1988 project are reported to be about \$17,300.

Results in Brief

Neither of the demonstration projects has yielded sufficient information to identify an effective structure for administering a permanent home health care benefit. Specifically, the projects have not yielded sufficient information to identify adequate methods to

- identify potential home health care recipients,
- prevent program abuse, and
- determine when and how case management should be provided.

Claimed savings under both projects are significantly overstated. Savings have clearly resulted from the 1986 project but, in our sample cases, were overstated by about 31 percent. Because appropriate methods were not used to estimate savings under the 1988 project, however, the extent of that project's savings, if any, is not clear.

Finally, DOD is currently implementing a Coordinated Care program that will require military treatment facilities to address many of the same problems facing CHAMPUS as it implements the home care program. These problems include the need to determine the most cost-effective plan of care. Because of the potential overlap between these two programs, DOD needs to determine the extent to which the administration of the home care benefit can be integrated into the Coordinated Care program.

Case Identification Methods Not Adequate for a Permanent Benefit

The earlier that patients potentially requiring high-cost medical care are identified, the greater the likelihood that home care and case management can be used to achieve savings. The methods used to identify potential home care recipients under the 1986 project, however, are neither timely nor comprehensive. Although CHAMPUS officials believe the 1988 project shows improvement in both respects, all beneficiaries who could benefit from case-managed home care are still not being identified. One alternative that may improve identification is a hospital preadmission screening mechanism, used by a number of private insurers.

Under the 1986 project, CHAMPUS told its fiscal intermediaries to screen patient claims files to (1) identify each patient who had more than 30 days

of inpatient care or had reached the catastrophic cap⁴ and (2) send a letter to the patient notifying him or her of the demonstration project. Focusing on patients who have been in the hospital at least 30 days could prevent patients from entering home care as soon as possible. In addition, civilian hospitals frequently do not submit their claims to CHAMPUS until after the patient is discharged. Patients are no longer candidates for home care after they have been discharged, however, because home care is available under the 1986 project only to patients who, in the absence of home care, would remain in the hospital. Finally, basing identification on claims review misses patients in military hospitals because military hospitals do not make claims to CHAMPUS. To help compensate for these problems, CHAMPUS increased its efforts to inform health benefits advisers at military hospitals and discharge planners at frequently used civilian hospitals about the demonstration.

Recognizing the continued weaknesses in the identification methods used under the 1986 project, CHAMPUS (1) issued guidelines that identified by diagnosis the types of medical cases that could benefit from home care and case management and (2) developed a new identification procedure for the 1988 project. Initially, CHAMPUS told its fiscal intermediaries to place staff at each military treatment facility so as to screen patients and to contact nearby civilian hospitals to identify potential home care patients. CHAMPUS, however, found this approach too costly and eliminated the on-site staff. Instead, case management coordinators, working for CHAMPUS's fiscal intermediaries, tried to get health benefits advisers and discharge planners at military and civilian hospitals to voluntarily notify them of all CHAMPUS admissions. Although CHAMPUS believes this method of case identification is more timely and comprehensive than that used under the 1986 project, its effectiveness has not been measured. There are no real incentives, one case management coordinator said, for hospitals to immediately notify the fiscal intermediaries of all CHAMPUS admissions. Hospitals cannot be relied upon, another case management coordinator said, to notify CHAMPUS when beneficiaries are admitted.

Preadmission certification can provide an effective means for identifying potential candidates for home care.⁵ CHAMPUS contractor officials from both

⁴As of October 1, 1987, a cost cap, or upper limit, was placed on out-of-pocket costs for CHAMPUS-covered medical bills in any fiscal year. The limit that an active duty family has to pay is \$1,000; the limit for retirees and their families is \$7,500.

⁵Preadmission certification is a cost-containment mechanism used by a number of private insurers and, in some cases, Medicare and Medicaid, to ensure the appropriateness of medical services before they are provided. Beneficiaries or their physicians are typically required to contact their insurers at the time of the nonemergency admission to the hospital to certify that payment will be made by the insurer to the beneficiary or hospital.

projects said that to identify potential home care recipients, officials' private sector clients use information obtained through hospital preadmission certification programs. Preadmission certification, these contractor officials said, gives them timely and comprehensive notification of patients with potentially catastrophic illnesses; the officials can then evaluate these patients for potential home care placements.

DOD established a CHAMPUS preauthorization program in May 1992. Under the program—the CHAMPUS Regional Review System—hospitals are required to obtain prior approval from CHAMPUS contractors for certain types of nonemergency admissions, such as for pneumonia and coronary artery bypass graft. These admissions are not necessarily the type most appropriate for home care. DOD did, however, require potential contractors to demonstrate that they could provide, if required, case identification (and case management) services to beneficiaries who could benefit from home care and case management. About 75 percent of private sector employers now purchasing health insurance for their employees, an official of the Health Insurance Association of America estimated, also want a hospital preadmission certification component included in their overall health care package. In commenting on a draft of this report, DOD said that it is the Department's intent to expand the preauthorization requirements of the CHAMPUS Regional Review System so as to identify potential cases under the recently enacted CHAMPUS case management benefit. CHAMPUS plans, an official said, to explore the feasibility of hospital preadmission certification as a way to identify cases for home care.

Controls Not Adequate to Prevent Abuse

CHAMPUS has not developed adequate controls to prevent abuse and limit the "woodwork effect" if a permanent case-managed home care benefit is patterned after the structure of the 1988 project.⁶ This effect—problems in controlling access to home care benefits—has repeatedly been identified under the two largest federally supported home care programs, Medicare and Medicaid, because of the lack of effective controls over access to the benefits. Because of the more restrictive nature of the 1986 project, the potential for abuse, while still existing, is an acceptable risk.

⁶The "woodwork effect" refers to the tendency of beneficiaries to substitute paid services for unpaid services provided by family or friends when paid services are made available. In addition, beneficiaries may seek services that they were previously willing to do without if the services are made available at little or no cost.

Approaches to Controlling Access to Home Care Services

Two basic approaches have been used in other programs to establish controls over home health benefits. One approach bases access to the benefit on a defined medical need. The Medicare program, for example, limits its home health benefit to beneficiaries who are confined to their residences (homebound); need part-time or intermittent skilled nursing care, speech therapy, or both; and under a physician's care.

The other approach bases access to the benefit on a determination that the benefits will be cost-effective when compared with the alternative course of treatment. For example, the Medicaid program limits access to its home- and community-based services (HCBS) waiver program by requiring that the program result in less cost than would care in a nursing home. The HCBS program also has a medical needs-based control. A determination must be made that without HCBS, the beneficiary would be in a nursing home.

Problems in Controlling Access to Home Care Under Medicare and Medicaid

Our reports have documented problems in controlling access to home care benefits under both Medicare and Medicaid.⁷ For example, we reported in 1981 that about 27 percent of the visits reviewed at 37 home health agencies and paid under the Medicare program were questionable or improper.

One of the factors contributing to abuse of the Medicare benefit is the limited nature of the benefit. Many people need care or assistance at home with their activities of daily living but do not need the part-time or intermittent skilled nursing care required to qualify for Medicare home health care. There is a natural tendency for providers to stretch the benefit so as to provide services to such people. A similar risk would exist under a permanent CHAMPUS home care benefit, and effective internal controls need to be developed to minimize such abuse.

In April 1987, we reported that it will be difficult to evaluate the cost-effectiveness of HCBS waiver programs because it is hard to determine the extent to which the services prevented or delayed nursing home admissions. This is important because services provided to beneficiaries who would not have entered a nursing home represent additional costs to

⁷Medicare Home Health Services: A Difficult Program to Control (GAO/HRD-81-155, Sept. 25, 1981); Medicare: Need to Strengthen Home Health Care Payment Controls and Address Unmet Needs (GAO/HRD-87-9, Dec. 2, 1986); Medicaid: Determining Cost-Effectiveness of Home and Community-Based Services (GAO/HRD-87-61, Apr. 28, 1987); and Medicare: Increased Denials of Home Health Claims During 1986 and 1987 (GAO/HRD-90-14BR, Jan. 24, 1990).

Medicaid. These costs could offset any savings realized by providing HCBS at a lower per capita cost than nursing home services.

We reported, however, that developing the information necessary to assess whether HCBS was actually cost-effective would be difficult and expensive, as well as require controlled studies to quantify differences between HCBS users and similar nonusers. Instead of requiring such studies, HCFA evaluated the cost-effectiveness of the waivers by assuming that all HCBS recipients would otherwise use nursing home care. We noted then, as we do elsewhere in this report (see pp. 9, 13, and 15), that such assumptions are unrealistic.

In one test of whether carefully managed community-based long-term care could help control overall long-term care costs, the National Long-Term Care Channeling Demonstration was completed in 1986. Like the CHAMPUS demonstrations, the channeling demonstration was expected to achieve its effects principally by substituting community care for more expensive institutional care.⁸

Unlike the CHAMPUS demonstrations, however, the channeling project used an experimental design to compare channeling's outcomes with what would have happened in its absence. Eligible participants were randomly assigned to a treatment group or control group, with the control group's relying on whatever services were available in the community absent the channeling project.

The channeling project found that HCBS did not keep frail elderly out of hospitals or nursing homes. Because nursing home and hospital use were not reduced by channeling, costs increased by 14 to 28 percent to pay for the alternative long-term care services. Like the other HCFA demonstrations, the channeling project had difficulty in identifying people at high risk of being institutionalized.

Controls Under 1986 CHAMPUS Project Appear Reasonable

The 1986 CHAMPUS project uses controls closely paralleling those under the HCBS program. Like the Medicaid program, it requires that home health care be in lieu of a higher level of care, but substitutes hospital care for the nursing home requirement imposed under Medicaid. In addition, the project requires that the services be determined cost-effective on a case-by-case basis.

⁸Participants were those at high risk of entering a long-term care facility. They had to be at least 65 years old, with a specified level of disability, unmet needs for two or more services, or a fragile informal support system such as few or no informal caregivers.

There is some risk of abuse under these controls because of the reliance on physician certification that the patients would otherwise require hospitalization. The significant potential cost savings from home care, compared with hospitalization (see pp. 12-15), however, justifies taking the risk. In addition, CHAMPUS appears to be applying its internal controls in authorizing benefits under the 1986 project. From the project's inception through January 1991, 29 percent of the requests for home care benefits were denied because the care would not have been in lieu of hospitalization, the care was determined not to be cost-effective, or the care was available under the basic CHAMPUS program or CHAMPUS's Program for the Handicapped.

Adequate Controls Lacking Under 1988 CHAMPUS Project

The 1988 project, however, has neither medical need-based controls nor a workable cost-effectiveness requirement. The requirement that care be in lieu of hospitalization was relaxed under the 1988 project to expand project access to patients who were not hospitalized but who were, in the case manager's judgment, at high risk of recurrent hospitalizations or emergency room visits. CHAMPUS delegated to its fiscal intermediaries the responsibility for developing and implementing screening methods to identify potential home care candidates. Although the fiscal intermediaries used a variety of measures—such as diagnosis, length of stay, and claims—to help identify potential candidates for home care, access was required to be based on a determination that the home care would be cost effective.

As discussed on pages 13 and 15, however, the cost of alternative treatment is largely speculative when the care does not have to substitute for hospital care and poses too great a risk of abuse without accompanying medical need-based controls. It would be too easy to develop an alternative plan of care that would make home care appear cost-effective. For example, as discussed on page 13, the intermediaries routinely assumed that the alternative plan of treatment for home care candidates was hospitalization even when the patient was already at home.

CHAMPUS now requires preapproval of treatment plans to determine the medical appropriateness and cost-effectiveness of the proposed care, including confirmation that negotiation of rates with health care providers has taken place. In addition, CHAMPUS officials are developing more specific written guidance for its contractors on what medical needs and cost-effectiveness controls to use to prevent abuse under the 1988 project.

CHAMPUS is also now carrying out quarterly on-site reviews of contractor performance to further tighten the 1988 project's controls. Because the CHAMPUS beneficiaries in our sample cases were selected for home care in 1989 or 1990, we were unable to determine the effectiveness of CHAMPUS's recent program improvements.

Insufficient Information to Determine When and How Case Management Should Be Used

CHAMPUS has not developed sufficient information under the demonstrations to distinguish (1) when case management is needed, (2) the type of case management services needed, and (3) the most efficient way to provide case management services. Developing such information could enable CHAMPUS to better ensure that beneficiaries' home care needs are met in the most cost-effective manner.

Not everyone discharged to home care from a hospital needs case management.⁹ Some patients and their families need only information, and can act as their own case managers. Under the CHAMPUS home care demonstrations, however, all patients receive case management services even if they are able to access services on their own.

For example, a terminally ill cancer patient was able, under the basic CHAMPUS program, to access the nursing care and medical equipment needed to support the patient at home. After these arrangements were made, the patient was offered case management services under the 1988 project. During the subsequent 9-month period under CHAMPUS case management, the patient continued to receive home care services. During this period, CHAMPUS paid an additional \$10,500 to the case manager for case management services. CHAMPUS case management services were discontinued after 9 months when the patient requested that case management be ended and CHAMPUS determined that the patient's needs were covered under the basic CHAMPUS benefit. The patient continued to receive needed home care services for another 9 months, without any case management. Although CHAMPUS claims savings of about \$77,000 through case management, the \$10,500 of case management costs increased rather than reduced the cost of home health care provided to the beneficiary.

In other cases, CHAMPUS paid for additional case management services when the home care agency included case management in the services provided. For example, hospice care was authorized as an exception to

⁹Health Care: Home Care Experiences of Families With Chronically Ill Children (GAO/HRD-89-73, June 20, 1989).

benefits for a significant number of patients under the 1988 project.¹⁰ CHAMPUS paid for additional case management even though case management is, by definition, a part of hospice care and provided by the hospice. Our June 1989 report on the home care experiences of families with chronically ill children stated that "some parents...seemed inundated with case management." CHAMPUS, however, does not consider the availability of case management from other sources before authorizing case management under the demonstration projects.

In those cases where case management services are needed, the intensity of the services needed varies. For example, some patients need help with arrangements for home health care, but have little ongoing need for case management. Such patients may have all of their case management needs met by a hospital discharge planner or social worker or through telephone case management. Others, however, have extensive and complex needs for health care and support services; on-site case management may be needed to help ensure that such medically fragile patients can remain at home.

CHAMPUS's case management under the demonstrations, however, was not, in all cases, tailored to meet the individual needs of the patient. For example, the 1986 project relied almost exclusively on case management conducted over the telephone.¹¹ Because of the requirement that care under the 1986 project be in lieu of hospitalization, the cases frequently involve technology-dependent children or patients needing intensive rehabilitation for serious injuries or trauma. Arranging home care for such patients can be complex, requiring coordination of multiple suppliers of home care equipment, services, and supplies. Except for a few neonatal and pediatric cases specifically authorized to receive more intensive, on-site case management, all cases under the 1986 project were case managed by telephone.

Similarly, the type of case management performed under the 1988 project was initially inflexible. Two case management contractors used only intensive on-site case management; a third used only telephone case management. DOD recognized that case management should be tailored to meet the needs of patients, officials said, and began fine tuning the 1988 demonstration to determine the best approach to case management based

¹⁰A regulation authorizing hospice care as a CHAMPUS benefit is in final clearance within DOD, prior to publication of a Notice of Proposed Rulemaking.

¹¹From the demonstration's inception until January 1991, a nurse working for the Office of CHAMPUS did case management services. Responsibility for these services has since been contracted out to CHAMPUS's fiscal intermediaries, but the intermediaries continue to rely almost exclusively on telephone case management.

on the individual case needs. For example, one of the contractors who initially used only on-site case management is currently doing telephone case management for less complicated cases. A June 1992 report by a DOD contractor, Lewin-ICF, similarly recognized that telephone monitoring is often sufficient and recommended that CHAMPUS use on-site case management only as needed.

The type of case management used is important because telephone case management is significantly less expensive than on-site case management. Case management costs for the contractor in the South Central region, who used only telephone case management under the 1988 project, a CHAMPUS official said, averaged \$887 per case compared with \$1,857 for the contractor in the Western region and \$2,205 for the contractor in the mid-Atlantic region, both of whom performed on-site case management. CHAMPUS should rely on telephone case management unless (1) there is a documented need for more intensive on-site case management or (2) there are differences in the quality of the services provided (that is, if patients' needs are not being met under one type of case management).

Finally, CHAMPUS has not adequately analyzed the alternative ways of providing case management services; that is, in-house, as initially done under the 1986 project or through contracts with private case managers, as done under the 1988 project. Providing case management in-house would appear to have cost advantages, but CHAMPUS is concerned about the availability of staff for case management under an expanded program. During the 1989-90 time period, CHAMPUS employees carried out centralized telephone case management at an average cost of about \$1,100 per case for the highly complex cases under the 1986 project. Although CHAMPUS officials confirmed that case management costs under the 1986 project have significantly increased since CHAMPUS contracted out the case management function to their fiscal intermediaries, these officials were not sure of the exact costs since the contract with one fiscal intermediary had not yet been finalized.

Claimed Savings Are Overstated for Both Projects

DOD overestimated savings under both the 1986 and 1988 projects. An appropriate basis was used to prospectively estimate savings under the 1986 project; our retrospective review of 14 random cases, however, found actual savings to be about 31 percent lower than DOD's estimates. The methods DOD used to prospectively estimate savings under the 1988 project were not appropriate; the methods used by a CHAMPUS contractor to determine cost-effectiveness were also flawed. In addition, CHAMPUS

identified project management costs under the two projects, but did not subtract such costs from the cost-avoidance estimates for either project to arrive at an overall estimate of savings.

Retrospective Review Shows Lower Savings Under 1986 Project

Because the 1986 project required that home care be in lieu of continued hospitalization (the likely alternative course of care), it is appropriate to prospectively calculate cost savings based on the estimated cost of continued hospitalization under CHAMPUS's basic program. Our retrospective review of 14 randomly selected cases confirmed savings in all but 2 cases, in which unexpected rehospitalization of the patients occurred. All 14 patients had been discharged to home care from the hospital, and physicians usually certified that their home care continued to be in lieu of hospitalization. Our analysis indicated, however, that actual savings were about 31 percent lower than CHAMPUS's estimate of the savings in these 14 cases.

Inappropriate Basis Used to Estimate Savings Under 1988 Project

CHAMPUS inappropriately calculated savings, for all cases under the 1988 project, based on the estimated costs that would be incurred if the patients remain in the hospital. In those cases for which continued hospitalization is not the likely alternative course of care, savings should be based on what would most likely happen in lieu of the case management treatment plan—outpatient and home care services under CHAMPUS's basic program and possibly periodic rehospitalizations. However, CHAMPUS estimated savings based on the costs of continued hospitalization. This resulted in a significant overstatement of savings in many cases.

To determine the appropriateness of CHAMPUS's savings estimates, we reviewed 34 randomly selected cases; in 15 of the 34 cases, the patient was at home at the time of the case manager's initial evaluation and treatment plan. This made cost comparisons based on hospital costs clearly inappropriate. For example, an 11-year-old diabetic was at home under her family's care when she entered home care under the 1988 project. The case manager worked with the family in an attempt to identify community support services, but no services were identified. Eventually, the case manager developed a plan of treatment calling for placement of the child in a residential adolescent treatment program for 6 months to 1 year. The plan, however, was not implemented, and the case was subsequently closed when the patient's medical condition stabilized. The CHAMPUS case manager claimed savings of about \$10,000 in hospital costs, even though

no health care services were provided and the treatment plan was never implemented.

In other cases, the costs for patients being discharged from the hospital to case-managed home care under the 1988 project were improperly analyzed as though the patients would have remained in the hospital without the case management intervention. In one case, a pregnant woman with a history of high-risk pregnancies was hospitalized due to hemorrhaging and the danger of preterm delivery of her baby. Although the patient's physician and case manager agreed to a home care plan involving a home health aide, the patient rejected the proposal. The patient decided that a stranger in the home would increase her emotional stress and that a family member could provide any needed assistance. The patient's physician decided to discharge the patient since the patient's condition had stabilized and the physician could monitor the patient through weekly outpatient visits to his office. The case manager closed the case. CHAMPUS inappropriately claimed savings of about \$14,000 in hospital costs for this case.

In another case, a stroke victim was discharged to home care but most of the planned home health care services were never used. Because family members were willing to assist the patient, the home health aide, the only service not covered under basic CHAMPUS benefits, was never used. Although the case manager authorized physical therapy, the home health agency eliminated this therapy after it determined that the services were not needed. The speech therapy provided to the stroke victim was covered under CHAMPUS's basic program. The CHAMPUS case manager inappropriately claimed savings of about \$30,000 in hospital costs even though the case was closed because of the patient's stable medical status.

Project Management Costs Not Subtracted

CHAMPUS's April 1992 report to the Congress did not subtract the project management costs for the 1988 project from the estimated cost avoidance to arrive at an overall savings estimate.¹² Project management costs between fiscal years 1988 and 1991 totalled about \$9.2 million. If these costs were subtracted from CHAMPUS' claimed cost avoidance of \$25.5 million, the overall savings would be reduced to \$16.3 million. However, for the reasons discussed above, even these savings would be an overstatement.

¹²Project management costs were also not considered under the 1986 project, but amounted to only about \$200,000 for fiscal years 1989 and 1990.

Limitations in Contractor's Evaluation of Cost-Effectiveness

A June 1992 report by Lewin-ICF concluded that home care under the 1988 project was cost-effective overall although DOD's estimate of savings was significantly overstated. Our review of the contractor's report, however, identified several concerns about the study methods that cause us to question the validity of the Lewin conclusions. The following are our specific reservations about the conclusions:

- Lewin-ICF evaluated a judgmental sample of selected high-cost cases rather than a random sample of home care cases, and excluded from the evaluation about 40 percent of the universe of home care recipients under the 1988 project.¹³ This biased the sample toward those cases most likely to produce cost savings.
- Lewin-ICF retrospectively assessed cost savings by having physician reviewers predict the likely course of treatment that would have occurred in the absence of the 1988 project. Lewin-ICF recognized that this is not an appropriate method, but had to use it because CHAMPUS had not established a control group to permit a valid retrospective comparison of costs under the project and under the basic program. Because, as Lewin-ICF notes in its report, "it is impossible to foretell the exact course of a person's illness and what would have happened without case management intervention," estimated savings could be overstated or understated.
- Lewin-ICF asked physician reviewers to classify the savings under the cases reviewed as none, small, moderate, or large, but provided no criteria for categorizing the savings. This could cause inconsistencies in the way reviewers classified savings under similar cases.
- Lewin-ICF provided physician reviewers no information on the home care services available under the basic CHAMPUS program, further limiting the physician's ability to predict a likely course of treatment in the absence of the 1988 project. In other words, the physician reviewers did not always know whether the course of treatment followed differed from the course of treatment that would have been allowable under the basic CHAMPUS program. As a result, the reviewers could not adequately determine whether any savings occurred.

¹³CHAMPUS asked Lewin-ICF to evaluate home care recipients under four diagnostic groups: (1) rehabilitation, (2) AIDS/oncology, (3) high-risk neonates, and (4) high-risk obstetrics. Cases not falling into one of the diagnostic categories—about 40 percent of the cases—were excluded from the cost-effectiveness evaluation.

Relationship Between Home Care and Coordinated Care Programs Unclear

Because of the potential overlap between the CHAMPUS case-managed home care benefit and the DOD-wide Coordinated Care program, DOD will need to integrate the administration of the home health care benefit into the Coordinated Care program. Like home care, Coordinated Care will need to identify high-cost patients, including CHAMPUS beneficiaries; case manage their care; and identify the most cost-effective treatment plan.

Currently, DOD's hospital commanders do not control beneficiaries' access to home care or outpatient care delivered in civilian settings under CHAMPUS, nor do commanders have fiscal responsibility for any civilian care, inpatient or outpatient. In some cases, incentives exist for hospital commanders to push costly care out of their facilities and into the civilian sector. Coordinated Care gives military hospital commanders the responsibility and accountability for the cost and quality of, as well as access to, medical care for all beneficiaries in their areas, including those using civilian providers under CHAMPUS. Essentially, Coordinated Care will transform military health care into a system of managed care similar to health maintenance organizations. Coordinated Care involves (1) providing a case manager, through whom all medical care is provided or referred, (2) seeking out cost-effective alternative health care settings, (3) establishing strong utilization review and quality assurance programs to assure that only appropriate, high-quality care is given, and (4) providing financial and other incentives to promote the delivery of cost-effective care.

Clearly, there are potential overlaps between the administration of the new CHAMPUS case-managed home care benefit and the Coordinated Care program. For example, a primary care case manager will be assigned to each enrollee under the Coordinated Care program. Providing separate case management services to Coordinated Care enrollees under the home care program would be unnecessary duplication.

In several areas that have been testing managed-care programs, overlaps in administering the home health care benefit already exist. For example, officials at Evans Army Community Hospital, Fort Carson, Colorado, are using hospital staff to identify candidates, coordinate case screening with CHAMPUS's designated fiscal intermediary, and either case-manage the patient themselves or coordinate with the fiscal intermediary to refer the patient to one of CHAMPUS's case management organizations. The primary reason officials send cases to the fiscal intermediary, they said, is that they do not have the authority to grant exceptions to benefits. If local hospitals had this authority, the officials would, they believe, be better able than

CHAMPUS's fiscal intermediaries and case management organizations to identify, screen, and case-manage home care patients.

A slightly different approach is being tested in Charleston, South Carolina. Under the Navy Catchment Area Management Project, fiscal intermediary staff work on-site at the Navy hospital with hospital staff to identify and screen candidates and to refer cases to a CHAMPUS case management organization.

Finally, because the military hospital commanders will be responsible for determining the most cost-effective way of providing services, they, like the CHAMPUS home care program, will need to develop methods for comparing costs under alternative treatment plans.

Conclusions

Home care can be beneficial to the patient and is clearly less costly than hospital care for many patients who would otherwise remain in a hospital. For other patients, however, who would not remain in the hospital even if home care was not available, the cost advantages of home care are more difficult to determine. Home care may reduce the number or length of rehospitalizations. Predicting the likely course of treatment for potential home care recipients has, however, historically been difficult and there are inherent risks in creating a new case-managed home care benefit without carefully defined controls to limit overuse of the benefit. Without such controls, the new benefit may, in addition to satisfying unmet needs for assistance, substitute for services previously provided by friends and families or available under the CHAMPUS basic program.

These risks are reduced, but not eliminated, when access to home care services is linked to a need for hospital care. As long as the patient is in the hospital, all needs are met by the hospital; therefore, there is little risk of a home care program's substituting for services that otherwise would be provided by family or friends.

Moving beyond the tight controls under the 1986 project, however, creates greater risks. While there are clearly patients not served under the 1986 project who could benefit from case-managed home care, effective controls need to be developed before such action is taken. The 1988 demonstration did not identify controls to provide reasonable assurances that program goals and objectives are met and that resources are adequately safeguarded and efficiently utilized. Further testing and

evaluation are needed before DOD implements a permanent case-managed home care benefit beyond the scope of the 1986 project.

DOD needs to determine how the administration of the CHAMPUS case-managed home care program fits into the new Coordination Care program. Specifically, DOD needs to determine how identification and case management of home care cases can be structured to avoid duplication of effort.

Recommendations

We recommend that the Secretary of Defense, before implementing a permanent case-managed home care benefit,

- evaluate alternative identification methods, such as hospital preadmission certification, to target potential recipients of case-managed home care;
- develop specific medical or cost controls to limit access to case-managed home care to patients for whom there is a reasonable likelihood that the care will be cost-effective;
- determine (1) when CHAMPUS case management is needed, (2) when on-site rather than telephone case management is appropriate, and (3) the most efficient way to provide case management services; and
- determine how the administration of the CHAMPUS home care benefit fits into DOD's overall Coordinated Care program.

Agency Comments

In a letter dated March 24, 1993, the Acting Assistant Secretary of Defense for Health Affairs stated that the Department generally concurred with our findings and recommendations. Specifically, DOD agreed that (1) case identification under the demonstration projects are not adequate for a permanent benefit, (2) effective internal controls on access to home care services are necessary, (3) controls under the 1986 project were reasonable, and (4) the relationship between home care and the Coordinated Care program was unclear.

DOD said that it will continue the development of a benefit that is cost-effective, but not so tight as to restrict appropriate access. Guidelines for the new home care benefit are to be published in early fiscal year 1994. These guidelines will, DOD said

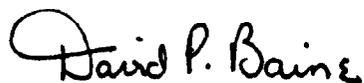
- implement a comprehensive preauthorization requirement to identify potential cases for case-managed home care under the basic program case management benefit;

-
- carefully define eligibility for home care based on medical necessity and cost-effectiveness;
 - explicitly address the need to consider the availability of services through other sources and the use of telephonic versus local on-site case management; and
 - fully assess the relationship between case-managed home care and the Coordinated Care program.

We are sending copies of this report to the Secretary of Defense; the House Committee on Appropriations; the House and Senate Armed Services Committees; the Director, Office of Management and Budget; and other interested parties.

Please contact me on (202) 512-7101 if you or your staff have any questions concerning this report. Other major contributors are listed in appendix IV.

Sincerely yours,



David P. Baine
Director, Federal Health Care
Delivery Issues

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Abbreviations

CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
DOD	Department of Defense
HCBS	home- and community-based services
HCFA	Health Care Financing Administration

Scope and Methodology

To determine whether CHAMPUS had identified an appropriate structure for a permanent case-managed home health care benefit, we (1) reviewed the management of CHAMPUS's 1986 Home Health Care and 1988 Home Health Care Case Management Demonstration projects and (2) obtained information on efforts by military hospitals to provide home health care services.

We conducted fieldwork at the Office of the Assistant Secretary of Defense (Health Affairs), Washington, D.C.; CHAMPUS, Aurora, Colorado; Blue Cross and Blue Shield of South Carolina, Florence, South Carolina; Wisconsin Physicians Service, Madison, Wisconsin; Coordinating Center for Home and Community Care, Inc., Millersville, Maryland; IntraCorps, Inc., Towson, Maryland; Parkside Health Management Corporation, Park Ridge, Illinois; Evans Army Community Hospital, Fort Carson, Colorado; Wilford Hall Air Force Medical Center, Lackland Air Force Base, Texas; and the Naval Hospital, Charleston, South Carolina.

In reviewing CHAMPUS management of its 1986 and 1988 demonstration projects and in obtaining information on efforts by military hospitals to provide home health care services, we

- examined laws, policies, regulations, procedures, contracts, and reports pertinent to the home health care demonstration projects;
- analyzed 48 randomly selected home health care case files (not projectable to the universe) on CHAMPUS beneficiaries who received home health care under DOD's demonstration projects during 1989 and 1990;
- interviewed project management officials in the Office of the Assistant Secretary of Defense (Health Affairs) and CHAMPUS;
- conducted site visits and interviewed contractor personnel responsible for CHAMPUS beneficiary screening and referral, case management, claims processing, and project evaluation;
- interviewed and obtained documentation from officials at an Army, an Air Force, and a Navy hospital on their home health care activities; and
- reviewed literature reporting the results of research on home health care and case management.

We carried out our review between January 1991 and September 1992 in accordance with generally accepted government auditing standards.

Original Home Health Care Demonstration Project

Purpose: To provide chronically or catastrophically ill CHAMPUS beneficiaries with a cost-effective alternative to hospitalization.

Start Date: July 1, 1986.

Eligible CHAMPUS Beneficiaries: Dependents of (1) active duty service members and (2) members who died in the service.

Geographic Availability: Nationwide, except in areas targeted by the expanded Home Health Care Case Management Demonstration Project. (See app. III.)

Project Management: CHAMPUS and its fiscal intermediaries, that is, Blue Cross and Blue Shield of South Carolina, Wisconsin Physicians Service, and the Uniformed Services Benefit Plan, Inc.

Project Requirements: All requests for home care must be pre-authorized by a designated case manager. The case managers may authorize limited benefits that are not normally covered by CHAMPUS, such as extensive home visits by a nurse, as long as they are considered necessary for the management of the case and the cost of home care is less expensive than the cost of covered inpatient care. When home health care is approved, it may only be authorized for the period of time the patient's physician certifies the beneficiary would otherwise be hospitalized.

Case Identification: CHAMPUS fiscal intermediaries monitor beneficiary claims; when an eligible beneficiary exceeds 30 days of inpatient care or reaches the catastrophic cap, a letter is sent notifying him or her about the home health care demonstration. CHAMPUS, in addition, does outreach activities—such as visits to and speeches at military hospitals and civilian health care organizations that deal with CHAMPUS beneficiaries—to enhance the case identification process.

Case Management: The case manager does telephone case management from a central location. To establish a comprehensive plan of care that meets a patient's needs at less cost to the government, the case manager strives to provide individualized management of these needs by working with the patient, family, and providers and by coordinating funding sources.

**Appendix II
Original Home Health Care Demonstration
Project**

From the demonstration's start date in July 1986 through 1990, case management authority was held by CHAMPUS. Beginning in January 1991, this authority was contracted out to CHAMPUS fiscal intermediaries.

Home Health Care Case Management Demonstration Project

Purpose: To test the extent to which case management can affect the cost of care for CHAMPUS beneficiaries with extraordinarily complex, potentially high-cost, conditions.

Start Date: July 1, 1988.

Eligible CHAMPUS Beneficiaries: Military retirees and dependents of (1) retirees, (2) active duty members, and (3) members who died in the service.

Geographic Availability: From the July 1988 demonstration start date through 1991, the project's benefits were available in (1) the Washington, D.C., metropolitan area (including Maryland and Northern Virginia), (2) the Fitzsimons Army Medical Region (Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, Utah, and Wyoming), and (3) the state of Washington. In January 1992, a fourth area—Tidewater Virginia—was added.

Project Management: CHAMPUS manages the demonstration through various contractors. For the Washington metropolitan area, CHAMPUS contracted with Blue Cross and Blue Shield of South Carolina for case identification and claims processing. Blue Cross and Blue Shield of South Carolina then subcontracted with Acumenetics, Inc., the Coordinating Center for Home and Community Care, Inc., and IntraCorps, Inc., for case management services. Acumenetics, Inc., is no longer a program participant. To manage the Fitzsimons Army Medical Region (except Kansas and Missouri) and the Washington state areas, CHAMPUS initially contracted with Blue Cross and Blue Shield of Washington/Alaska for case identification and claims processing. Blue Cross and Blue Shield of Washington/Alaska then subcontracted with IntraCorps, Inc., for case management services. Blue Cross and Blue Shield of South Carolina currently handles case identification and claims processing for CHAMPUS. IntraCorps is still the case management subcontractor.

To cover Kansas and Missouri, CHAMPUS contracted with Wisconsin Physicians Services to handle case identification and claims processing. Wisconsin Physicians Service previously subcontracted with Baxter Health Care Corporation for case management services. Currently, Wisconsin Physician Services contracts with Parkside Health Management Corporation for case management services. To cover the Tidewater Virginia area, CHAMPUS contracted with Blue Cross and Blue Shield of South Carolina for case identification and claims processing. Blue Cross

and Blue Shield of South Carolina then subcontracted with Hines and Associates for case management services.

Program Requirements: Like the Home Health Care Demonstration Project, all requests for services under the expanded Home Health Care Demonstration Project must be preauthorized by the case manager. In addition to regular CHAMPUS benefits, the case manager may also authorize benefits that are not typically covered by CHAMPUS, such as home visits by a health care aide, as long as such exceptions are considered necessary for the implementation of the case management treatment plan.

Unlike the Home Health Care Demonstration Project, the case management treatment plan under the expanded demonstration is not required to be in lieu of continued hospitalization. In addition, the authorizing legislation specifically stated that the case management treatment plan is not required to be cost-effective on a case-by-case basis as long as the demonstration project shows savings in the aggregate. However, CHAMPUS regulations stipulate that beneficiaries should only be accepted into case management when there is a reasonable expectation that the case management treatment plan is cost-effective compared with the basic CHAMPUS program. The case manager and primary care physician are required to update the case management treatment plan every 30 to 90 days.

Case Identification: CHAMPUS contractors Blue Cross and Blue Shield of South Carolina and Wisconsin Physicians Service employ case management coordinators who identify potential home care candidates among CHAMPUS beneficiaries. Their primary method of identification is to request civilian and military hospitals in the target areas to phone in all CHAMPUS admissions with selected diagnoses. If the case management coordinator subsequently determines that case management may be appropriate, the beneficiary is referred to the subcontracted case management firm.

Case Management: CHAMPUS case management subcontractors—Coordinating Center for Home and Community Care, Inc.; IntraCorps, Inc.; Parkside Health Management Corporation; and Hines and Associates—employ case managers to perform either centralized telephone case management or more intensive on-site case management. Typically, the case manager contacts the patient, the family, and the patient's doctor to determine if case management would be helpful. If so,

the case manager assesses the patient's needs and prepares and implements an individualized case management treatment plan.

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