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Improving the Accuracy of Payment Classifications Through Use of a Case Management Protocol

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ABSTRACT

Objectives: The purpose of this study is to determine if a Case Management Protocol (CMP) improves the accuracy of assignment of Medicare patients to the appropriate payment classification.

Methods: MetaStar, Wisconsin's Quality Improvement Organization (QIO), invited Wisconsin hospitals to participate in this project; 19 hospitals did so. A CMP enables physicians to enter an order in the medical record to "admit the patient under the case management protocol" when it is not obvious to the physician whether the patient should be admitted as an inpatient or placed in an outpatient status. A trained case management professional accesses the documentation in the medical record and makes a recommendation to the physician as to the appropriate status. The decision is ratified by the physician in the form of a signed order.

Results: In comparing 1-day inpatient stays as a percentage of all hospital stays in a group of hospitals that considered the use of the CMP, to that same percentage in the hospitals that did not consider the use of a CMP, there was a reduction of 1-day stays for the former group that was significantly ($P<.01$) greater than for the latter group; the decrease in target payments for the former group also was significantly greater than that for the latter group ($P<.01$).

Conclusion: The use of a CMP to assign Medicare patients to appropriate payment classifications is an effective method of increasing the accuracy of such assignment.

BACKGROUND

Medicare pays for hospital services based on the financial classification of the patient. Under Medicare rules, the financial status is determined by an order placed in the patient's record by the admitting physician. An inpatient order results in payment under the Resource-Based Relative Value Scale (RBRVS), the payment program based on Diagnosis-Related Groups (DRGs). An order for outpatient services results in payment under the Ambulatory Payment Classification or Observation Services payment program.

The RBSVS, implemented in 1983, reimburses for inpatient care for medical conditions and surgical procedures that should consume similar amounts and types of resources. For example, a payment for treatment of congestive heart failure is the same regardless of the services received and days spent in the hospital.

Observation Status is designed for short stays for patients anticipated to respond quickly to therapy, or to establish a diagnosis and course of treatment when it is not clear that an inpatient level of care is required.

The Centers for Medicare & Medicaid Services (CMS) is concerned that payment intended to cover a multiple-day stay is provided for 1- or 2-day stays. Further, they are concerned that a large number of 1-day stays are billed to Medicare as inpatient, when Observation Status would be the more appropriate financial classification. This inappropriate classification therefore unnecessarily depletes the Medicare trust fund. In addition, patients are concerned that the limited number of Medicare inpatient benefit days might be consumed by 1-day stays when they should instead be billed as outpatient, which would not consume these benefit days.

By contract with CMS, on a quarterly basis, the Texas Medical Foundation issues a report called FATHOM (First-Look Analysis Tool for Hospital Outlier Monitoring). The data provide a comparison of acute care Medicare reimbursed hospitals at risk for payment error using Medicare discharge data. CMS selects target areas to include 1-day stays that are tracked at the hospital level. This provides the QIO the ability to compare hospitals within its state across tar-

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Glossary of Terms

Case Management/Utilization Management (CM/UM)–These terms have identical meaning in this article. Case management is a more recent term. The goal of case management is to assist health care professionals in the efficient use of hospital resources to care for the patient. The assignment of payment classification (inpatient vs outpatient) is an area of particular interest to the case manager. Case/utilization managers are professionals with clinical backgrounds trained in the use of criteria to identify the appropriate payment classification.

Case Management Protocol (CMP)–For the purposes of this article, a CMP is a protocol that enables the physician to enter an order in the medical record to "admit the patient under the case management protocol" when it is not obvious to the physician whether the patient should be admitted as an inpatient or placed in an outpatient status. A trained case management professional accesses the medical record documentation and makes a recommendation to the physician as to the appropriate financial status. The physician, in the form of a signed order, ratifies the decision.

Centers for Medicare and Medicaid Services (CMS)–Formerly known as the Health Care Financing Administration (HCFA), CMS is the federal agency within the Department of Health and Human Services that is responsible for administering the Medicare, Medicaid, SCHIP (State Children's Health Insurance), HIPAA (Health Insurance Portability and Accountability Act), CLIA (Clinical Laboratory Improvement Amendments), and several other health-related programs.

Quality Improvement Organization (QIO)–The QIO is an entity that contracts with CMS under Title XI of the Social Security Act to ensure the quality of care for Medicare beneficiaries. MetaStar is the Wisconsin QIO. One of the functions the QIO performs is to assist health care professionals in reducing payment error through the appropriate assignment of payment classifications.

get areas and in outlier groups. The QIO can also see how its state compares to other states.

According to the FATHOM reports, Wisconsin is a relatively high user of 1-day inpatient stays when compared to other states and territories. Most recently, in the third quarter of Fiscal Year 2007 (April-June), Wisconsin ranked 16th of 53 states and territories in the percentage of Medical DRGs that were 1-day stays. Wisconsin's percentage was 12.4, as compared with a national median of 10.8%.

In 2003-2004, CMS funded an unpublished study that employed the use of a CMP promoted by the Florida Medical Quality Assurance, Inc (FMQAI), Florida's QIO.[1] That study, using 20 pilot hospitals and 20 controls, demonstrated a 3-fold reduction in denials of payment for 1-day stays that should have been billed as Observation. Several Wisconsin hospitals familiar with the experience in Florida, along with MetaStar's Hospital Payment Monitoring Program Advisory Group, recommended to MetaStar that a study similar to the Florida study be undertaken here in Wisconsin. The concept of the CMP was discussed at statewide meetings attended by hospital financial management and case management professionals.

METASTAR ASSISTANCE PROVIDED HOSPITALS

MetaStar invited all Wisconsin hospitals that are reimbursed under the Medicare DRG reimbursement system to join in the CMP project. The purpose of the project was to encourage the hospitals to consider the use of the CMP. Nineteen of Wisconsin's 67 DRG-reimbursed hospitals elected to join the project.

MetaStar worked with this group of hospitals to:

- design a CMP appropriate to each facility, working individually with hospitals and with the hospitals as a group. Figure 1 represents the CMP process. Hospitals were encouraged to include the following hospital entities: medical staff leadership, hospital leadership, case management/utilization management, health information, compliance, patient care, business office, and information services.
- assist individual hospitals in establishing a need for the protocol through a criteria-level review of selected 1-day hospital admissions. Selected 1-day stays included chest pain, congestive heart failure, arrhythmias, dehydration, esophagitis, gastroenteritis, digestive disorder, and medical or non-surgical back pain. MetaStar staff reviewed a sample of 20 admissions from each of the 19 hospitals that elected to join the project, using national criteria (InterQual™). The percent of admissions found not to meet inpatient-level criteria ranged from 33% to 78%. Hospitals were encouraged to concentrate on these conditions to initiate the use of the CMP.
- discuss progress during onsite hospital visits. Such visits were typically attended by medical staff leadership. Without exception, medical staff leadership favored the use of the CMP to allow physicians to concentrate their efforts on evaluation and treatment of their patients.
- conduct monthly webcasts about CMP development and education of case management, patient care staff, physicians, and patients themselves about appropriate Medicare financial status. Hospitals had the opportunity during the webcasts to share lessons learned, discuss barriers, and share successes.

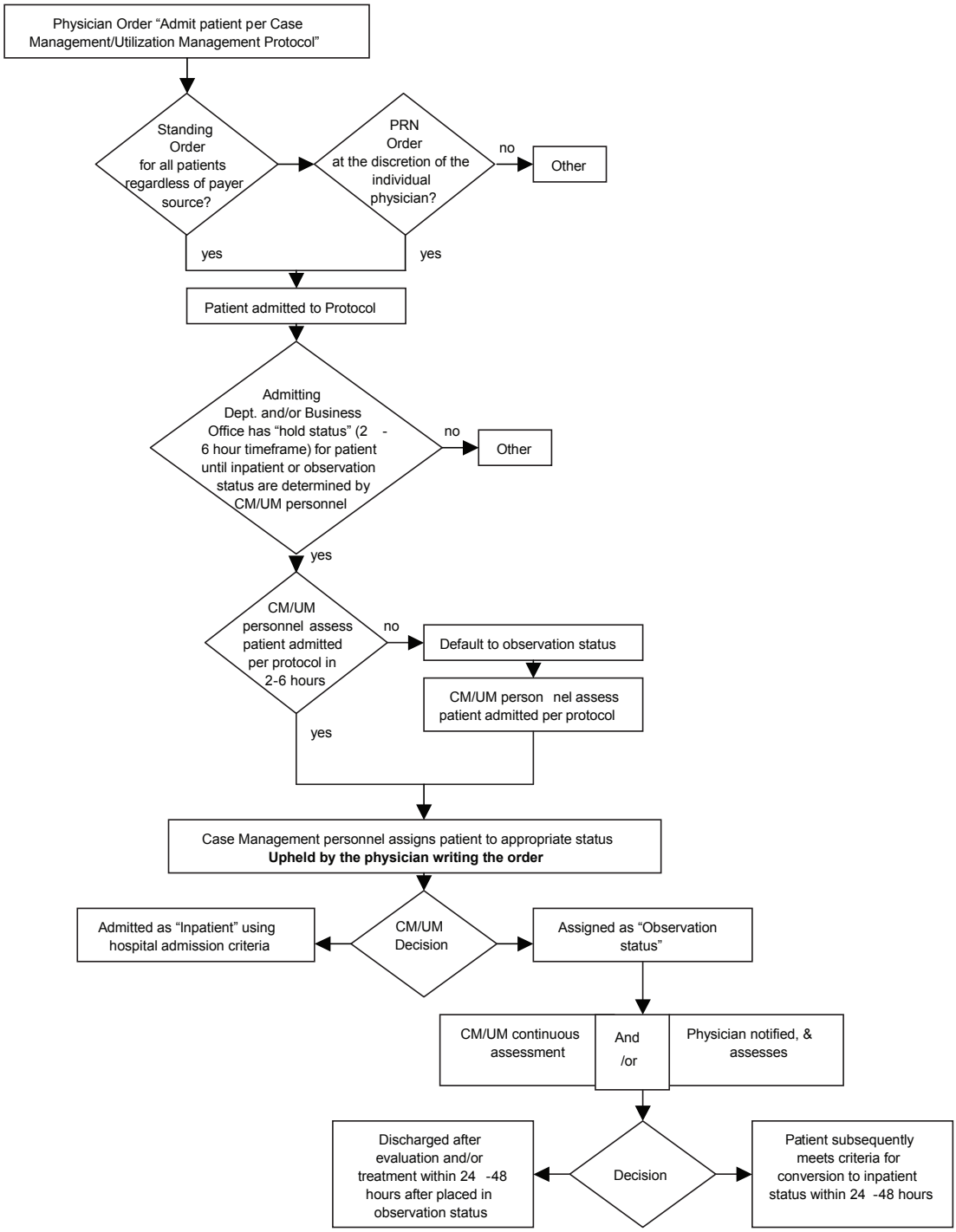

Figure 1. Admission per case management protocol.

- provide presentations by MetaStar's Medical Director to the medical staff, when invited, on a variety of utilization topics, including the CMP.

Ultimately, 9 of these hospitals actually used the CMP, either full-time or part-time, giving the physician the ability to request a review by case management. The Florida QIO found that the CMP was used about 30% of the time. We found that Wisconsin hospitals' experience was consistent with this finding.

RESULTS

We employed a series of pre-post comparisons. We compared (1) the rate of 1-day medical DRG stays as a percentage of all medical DRG stays between when we

Table 1. 1-Day Medical Diagnosis-Related Group (DRG) Stays as a Percent of All Medical DRG Stay

	Case Management Protocol Participants	Nonparticipants
Quarter 4 (FY 2006)	13.2% (1587 / 11,987)	13.0% (2379 / 18,364)
Quarter 3(FY 2007)	11.8% (2251 / 17,765)	12.7% (1356 / 11,471)
Relative Improvement	10.6%	2.3%

Table 2. Sum of Target Payments for 1-Day Medical Diagnosis-Related Group Stays

	Quarter 4 FY 2006	Quarter 3 FY 2007	Change in Reduction from Baseline
CMP Participants	$5,968,453	$5,383,920	9.8%
Nonparticipants	$9,369,495	$9,356,223	0.14%

started (4th quarter 2006) and ended (3rd quarter 2007) for the 19 hospitals that participated in the study and the 48 hospitals that did not, and (2) the sum of 1-day medical DRG stays as a percentage of all medical DRG stays between the same quarters for the same groups of hospitals. Hospitals that did not participate were essentially unchanged. The CMP participants showed significant decreases ($P<.01$) in both the percentage of 1-day stays (Table 1) and the sum of target payments for 1-day medical DRG stays (Table 2).

DISCUSSION

As mentioned, MetaStar staff determined that of the charts reviewed, 33%-78% of the admissions did not meet inpatient-level criteria, (ie, were inappropriate). Such a high rate of inappropriate admissions has substantial negative effects: decreased hospital/physician payment, potential allegations of fraud, and repayment of received DRG reimbursement. The inappropriate assignment of an inpatient status unnecessarily consumes patients' inpatient benefit. If all of a Medicare Beneficiaries' inpatient days are consumed, the patient may be liable for any further inpatient days. Hence it is important to find methods by which patients can be assigned efficiently and accurately to the appropriate payment classification.

Using a 2-tailed T-test, the decrease in 1-day stays as a percentage of medical DRG stays for hospitals participating in this study, as compared with nonparticipants, is significant at $P<.01$; the difference in target payments is also significant at the .01 level. Of course, these results do not show that any particular classification or group of classifications was appropriate, as medical records were not reviewed as part of the follow-up.

What we can conclude is that use (or at least consideration) of a tool like the CMP, or a similar tool, is apt to lead to a decrease in admissions. In view of the large number of inappropriate admissions discovered at baseline, we believe it is likely that the tool was effective in preventing unnecessary admissions. If so, the decrease in payments to participants as compared to nonparticipants indicates that the CMP could hold substantial benefits for the Medicare trust fund. Use of the CMP also would be expected to decrease the number of inpatient denials and of repayments to Medicare from retrospective review.

An appropriate follow-up study would be to review the charts of participating hospitals during the follow-up period to see whether the proportion of inappropriate admissions decreased after use or consideration of the CMP. MetaStar has no plans to conduct such a study at this time.

It should be noted that this is not a quality of care issue. Patients who are admitted unnecessarily do not benefit from the admission, and run the risk of increased expense and iatrogenic complications.

The use of the CMP should be of particular interest to admitting physicians. Medical staff leadership at participating hospitals uniformly praised the use of the CMP, as it enabled them to focus on the diagnosis and treatment of their patients, without being distracted by coding issues.

Those desiring more information on the CMP may contact Bill French, MetaStar's Vice President of eHealth Services.

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REFERENCE

1. Michelman M, Collier P, Dion C. Reducing Unnecessary Admissions via a Case Management Protocol. Presentation at the QualityNet Conference, September 21, 2004; Baltimore, MD.

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