Beginning Oct. 1, the Centers for Medicare & Medicaid Services (CMS) will penalize hospitals whose readmission rates for congestive heart failure (CHF), acute myocardial infarction (AMI, or heart attack), and pneumonia exceed the national average by withholding a percentage of these hospitals’ total Medicare payments. Major insurers are following suit, announcing penalties for preventable readmissions.

Medicare spends $17.4 billion a year on readmissions, according to a study published in the New England Journal of Medicine (Jencks, S., et al., "Rehospitalizations Among Patients in the Medicare Fee-for-Service Program," April 2009). Research by Thomson Reuters indicates that a hospital with Medicare inpatient operating payments of $250 million per year will face penalties amounting to $2.5 million if its readmission rates for CHF, AMI, and pneumonia exceed the national average by 1.4 percent (Healthcare Reform: Pending Changes to Reimbursement for 30-Day Readmissions, Aug. 31, 2010). The effect on hospitals will be more severe if its private insurers impose penalties of their own.

An example of readmission rates for an actual 300-bed hospital compared with the national average can be seen in the exhibit on page 59. Hospitals can view similar data on their readmission rates on the Hospital Compare website (www.hospitalcompare.hhs.gov).

Learn more about the high cost of readmissions at hfma.org/hfm.
Why Readmissions Occur

Activities related to patient discharge—including the level of patient education provided regarding the discharge plan, execution of the discharge plan, and coordination of care after discharge—can be strong predictors of whether a patient will be readmitted to the hospital. When an avoidable readmission occurs, it can often be pinpointed to one of three failures in the patient discharge and post-care process. By taking a close look at these three primary reasons for avoidable readmissions—and developing preventive action around these categories—hospitals can begin to prevent such readmissions and protect patient safety as well as revenue.

Poor execution of the discharge plan. All patients who are discharged from hospitals are given discharge instructions—but whether these instructions make it out of the plastic “personal belongings” bag provided by the hospital is another story. According to the Agency for Healthcare Research and Quality (AHRQ), a lack of communication and care coordination after discharge increases the potential for medical errors and adverse events that may result in rehospitalization (Kripilani, S., “Care Transitions: Perspective,” December 2007, webmm.ahrq.gov).

For example, the patient’s primary care physician may not be aware that the patient was hospitalized. The patient may lack the transportation necessary to keep a postdischarge appointment with his or her physician—or the patient may not even have a primary care physician. According to a study published in the New England Journal of Medicine, fewer than 50 percent of the patients studied had visited with their primary care physician prior to readmission (Jencks, S., et al., “Rehospitalizations Among Patients in the Medicare Fee-for-Service Program,” April 2009). This is a significant—and modifiable—risk factor for readmission.

In the case of AMI patients, cardiologists may rely on primary care physicians to provide timely follow-up care, so that opportunities to alter patient’s care management plans based on their

Patients who have been discharged often do not understand the early warning signs that warrant a call to a physician or home health nurse.

AT A GLANCE

Hospital leaders who are considering initiatives to reduce readmissions by improving discharge processes and post-discharge care should begin with five action steps:

> Ascertain the hospital’s Medicare 30-day readmission rates from July 1, 2011, to June 30, 2012.
> Based on these numbers, estimate the potential readmission penalties the organization may face.
> Identify a clear strategy or program for the organization to reduce 30-day readmissions and avoid Medicare penalties.
> Determine the overall direct and indirect costs of this strategy or program.
> Calculate the potential ROI of the initiative.
health status after discharge may be missed (National Healthcare Quality Report, 2010, www.ahrq.gov/qual/nhqr10/nhqr10ch6.pdf). Patients with pneumonia, for example, who do not meet Medicare homebound requirements for home health care may feel as if they have to “fend for themselves” upon discharge. When these patients experience side effects to their medications, they are more likely to stop taking the medications altogether, increasing the risks of reoccurrence and readmission.

**Lack of patient education.** Patients all too frequently mismanage their own postdischarge care for three reasons:

> They face challenges with their medications.
> They do not understand the nature of chronic conditions.
> They do not know who to call with questions regarding their health.

Studies show that 19 percent of Medicare discharges are followed by an adverse event within 21 days. Two-thirds of these adverse events are preventable drug events (Report to the Congress: Promoting Greater Efficiency in Medical Care, MedPac, 2007). When a patient is knowledgeable about the drug therapy that has been prescribed and has access to adequate outpatient medication reconciliation, the risk of drug duplication or adverse drug interactions is decreased (National Healthcare Quality Report, 2010, www.ahrq.gov/qual/nhqr10/nhqr10ch6.pdf). Adequate post-discharge management of high-risk medications, in particular, is an effective approach to reducing the risk of readmission (Allaudeen, N., et al., “Redefining Readmission Risk Factors for General Admission Patients,” The Journal of Hospital Medicine, February 2011).

Due to staffing challenges and discharge timing in the hospital setting, attempts to educate patients...
Medical home care models address the lack of coordination of postdischarge care that can lead to preventable readmissions.

regarding medications during the discharge process may not be sufficient, particularly because patients are often overwhelmed with information on the day of discharge. Once patients have been released, our current healthcare delivery system does not foster further patient education. Primary care offices have limited time or resources to educate patients about their medications and chronic conditions, while changes in payment have led home health agencies to focus on a “teach and street” approach. Consequently, patients who have been discharged often do not understand the early warning signs that warrant a call to a physician or home health nurse—knowledge that could help prevent readmission or a trip to the emergency department.

Poor coordination of postdischarge care. There is a strong correlation between 30-day readmission rates and nursing home stays. When the quality of nursing home care or care from home health agencies does not meet a patient’s needs, or when a patient does not have appropriate access to primary care, these factors drive rates of both admission and readmission. Inadequate care after discharge is often a result of a lack of care coordination (e.g., the hospital may fail to share a list of the medications prescribed to a patient upon discharge with the patient’s primary care provider).

Action Steps for Hospitals
Hospitals can pursue several strategies to reduce hospital readmissions related to these three areas. For example, strategies related to improvements in care coordination, patient coaching before and during an inpatient stay, and telehealth have been identified by the Healthcare Intelligence Network (hin.com) as three ways to reduce readmissions and improve the patient experience (see the exhibit on page 60).

Revamping discharge processes. Programs that have proven to be effective in tightening the execution of the discharge plan in hospitals are not always effective in ensuring the plan is followed when the patient returns home or is admitted to another healthcare facility. Improving the quality of patient education and postdischarge care through initiatives such as Project BOOST (Better Outcomes for Older Adults through Safe Transitions) and Project RED (Re-Engineered Hospital Discharge) originated in the hospital setting. Project BOOST is a national initiative developed by the Society of Hospital Medicine to improve the quality of postdischarge care (www.hospitalmedicine.org). Under Project RED, a nurse discharge advocate follows 11 specific steps that have been proven to improve the discharge process and reduce preventable readmissions (www.ahrq.gov/news/kt/red).

Using coordinated care models. Coordinated care models are designed to provide interdisciplinary care coordination to high-risk chronically ill patients. Some models target time-limited postdischarge care for patients transitioning to different care settings, while others offer longitudinal care that can extend for months or years, or until a patient is deceased or can no longer live at home or in the community. These models are designed to monitor and assess a patient’s health status, educate the patient about managing his or her condition, and manage services.

For example, the Transitional Care Model, in which the patient’s home is the primary setting for care and advanced practice nurses coordinate care, and the Care Transitions Program, administered by the CMS Innovation Center, generally aim to provide the following:
> Improved care coordination between the hospital and posthospital settings and providers
FEATURE STORY

- Enhanced education of patient and family caregivers
- Follow-up monitoring of a patient’s health status after discharge
- Care from a transitional coach or team to manage clinical, psychosocial, rehabilitative, nutritional, and pharmacy needs after discharge

These programs address the three causes of readmissions discussed previously.

**Adopting home-based primary care.** This model provides longitudinal primary care and care coordination in the home for patients with complex, chronic, and often progressive diseases who have problems with daily living activities. Home-Based Primary Care (HBPC), operated throughout the state of Virginia, offers physician-led, interdisciplinary care (including care provided by physicians, nurses, pharmacists, rehabilitation therapists, psychologists, dietitians, and social workers) to frail, older veterans. Many of these veterans have multiple chronic illnesses, such as heart disease, diabetes, heart failure, cancer, chronic lung disease, and dementia. On average, care is delivered in the home three times per month to HBPC-enrolled veterans, with veterans remaining in the program for roughly one year. Veterans are not required to be strictly home-bound or to require skilled nursing care to receive HBPC services (www.aahcp.org/presentations2007/Home_Care_VA_AAHCP.ppt). This type of program addresses the lack of coordination of post-discharge care.

**Implementing medical homes.** A medical home model of care provides patients with access to a personal primary care physician or specialist and an administrative team that coordinates and facilitates care and provides guidance. Integrated health care is expected to enhance patient adherence to recommended treatments and help avoid hospitalizations and unnecessary office visits, tests, and procedures. Medical home care models address the lack of coordination of post-discharge care that can lead to preventable readmissions.

In one study, hospitalizations among patients with congestive heart failure who were monitored by home-based telemonitoring were reduced by 43 percent.

**Using home telehealth to coordinate care.** Another option is home telehealth, which makes use of technology to enable continuous, remote care delivery or monitoring between a healthcare provider and a patient from the patient’s home. Home telehealth generally involves the collection and transmission of clinical and vital sign data through electronic information processing technologies, such as messaging devices. Home telehealth brings patients and providers in different—and sometimes remote—settings together for the collection of patient data to monitor patients’ health status and provide patient education. Home telehealth can be used as a component of care coordination to increase its effectiveness in certain circumstances.

The goal of telehealth is to reduce unnecessary hospital stays and avoid costly and debilitating complications from patient illness by facilitating continual interactions between physicians and patients. Telehealth monitoring of people with chronic conditions allows providers to identify acute episodes early and then target more affordable interventions in an outpatient setting. In one study, hospitalizations among patients with congestive heart failure who were monitored by home-based telemonitoring were reduced by 43 percent (Cordisco, M., et al., “Use of Telemonitoring to Decrease the Rate of

When coupled with care coordination provided via programs such as the Readmissions Avoidance Program, telehealth has the potential to address all three of the causes of readmissions discussed in this article. This approach provides the flexibility to determine whether patients who have a history of readmissions would benefit from telehealth.

The cost of telehealth programs should be an important consideration. In a study published July 25, 2011, by the *Archives of Internal Medicine*, the cost of an advance practice nurse to lead one hospital’s telehealth program was $1,126 per patient, but the approach reduced hospital costs by just $524 per patient (Voss, R., et al., “The Care Transitions Intervention: Translating from Efficacy to Effectiveness”).

**The Value of Improved Discharge Care**

HFMA defines value as quality divided by cost. In the readmissions scenario, value can be defined as the number of hospital readmissions reduced by a hospital within a given period multiplied by the DRG or payment rate of these readmissions. This is, in fact, the savings that Medicare or private payers will realize and is directly linked to efforts to improve the quality of discharge processes and post-discharge care by the hospital. The value increases in direct proportion to the number of readmissions saved by the hospital.

There are some factors that contribute to improvements in quality of care but that are not necessarily reflected in the above equation. We call these factors intangible values.

For example, a reduction in readmissions will provide greater access to care for other patients by freeing up beds. Reduced readmissions might also prompt a hospital to consider opening other service lines. And research has shown that readmissions that occur after patients have received intensive, postdischarge care and care coordination typically involve shorter lengths of stay than if such efforts had not taken place. This finding reflects an improvement in quality that will lead to reductions in hospital costs. Each of these benefits also has the potential to improve patient and employee satisfaction.

**Suggested Hospital Strategy**

Hospital leaders who are considering initiatives to reduce readmissions by improving discharge processes and postdischarge care should begin with five action steps:

> Ascertain the hospital’s Medicare 30-day readmission rates, which can be found at www.hospitalcompare.hhs.gov.
> Based on these numbers, estimate the potential readmission penalties the organization may face, understanding that penalties will increase to 3 percent of all Medicare payment by 2014.
> Identify a clear strategy or program to reduce the organization’s 30-day readmissions to avoid Medicare penalties.
> Determine the overall direct and indirect costs of this strategy or program.
> Calculate the initiative’s potential ROI.

Reducing preventable readmissions will significantly affect the bottom line and quality scores of hospitals as Medicare and other payers apply readmission penalties and publish data related to hospital readmissions—and will improve value for payers, purchasers, and the communities an organization serves.

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