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Assistant Secretary for Planning and Evaluation
Office of Disability, Aging and Long-Term Care Policy



HOSPITALIZATIONS OF NURSING HOME RESIDENTS: BACKGROUND AND OPTIONS

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Office of the Assistant Secretary for Planning and Evaluation

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INTRODUCTION

Long-stay nursing home residents are frail and have multiple chronic illnesses and high levels of cognitive and functional impairment (Jones, Dwyer, Bercovitz, & Strahan, 2009). More than one-fourth of long-stay nursing home residents are hospitalized each year and hospitalization rates are rising (Grabowski, O'Malley, & Barhydt, 2007). Many of these hospitalizations may be potentially avoidable (Walsh et al., 2010). These potentially avoidable hospitalizations are costly to Medicare and, to a lesser extent, Medicaid. In 2005, \$2.6 billion was expended by Medicare and Medicaid on acute hospital costs for potentially avoidable hospitalizations among dual eligible nursing home residents (Walsh et al., 2010). On average, Medicare paid approximately \$7,600 and Medicaid paid about \$300 for each of these hospital stays.¹

These hospitalizations also impose a high personal cost on nursing home residents, causing disruption, risk of complications and infections, and likelihood of reduced functioning on return to the nursing home (Ouslander et al., 2010). Nursing home residents are especially vulnerable to the risks that accompany hospitalizations and transitions of care, including medication errors and hospital-acquired infections. Hospital episodes are even more difficult for patients with dementia, who become disoriented in new, confusing settings. Preventing potentially avoidable hospitalizations of nursing home residents is thus an important quality-improvement initiative from the standpoint of the residents and their families, and also may yield cost reductions.

A key problem affecting potentially avoidable hospitalizations among nursing home residents is the *misalignment* of economic incentives in the financing and delivery of nursing home services. To develop a deeper understanding of the issue and to identify a broad spectrum of possible policy changes for policymakers to consider, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) conducted a literature review and contracted with RTI International to convene a technical expert panel (TEP) to discuss options for changing economic incentives as a strategy for reducing potentially avoidable hospitalizations among nursing home residents. The TEP was convened on March 2, 2011. The list of TEP members is presented in Appendix A. The purpose of the TEP was to examine the factors affecting potentially avoidable hospitalization of nursing home residents, and to identify possible policy initiatives that would change the economic incentives affecting the decision to hospitalize residents.

This report focuses on potentially avoidable hospitalizations of long-stay nursing home residents. Re-hospitalizations of post-acute care residents is also a concern, but it is not the focus of this report. ASPE is interested in understanding the factors affecting hospitalizations, especially those that can be affected by public policies. The first two parts of this report present background information on avoidable hospitalization of

¹ These calculations do not include other potential costs associated with hospitalization, including physician services, post-acute care costs following the hospitalization, medication costs, and potentially higher long-term nursing home payments for beneficiaries who stabilize at a higher level of care (Walsh et al., 2010).

nursing home residents and current economic incentives related to Medicare, Medicaid, and other state and federal policies. The third section presents possible ways to re-align the incentives to support reductions in potentially avoidable hospitalizations. These options are presented here to stimulate discussion and do not necessarily represent the views of ASPE. They reflect, in part, the ideas raised during the TEP meeting. The final section summarizes the report and draws implications for policy.

BACKGROUND

Medicare and Medicaid are the major sources of financing for the medical and long-term care services provided to nursing home residents (Jones et al., 2009). Many Medicare beneficiaries are also eligible for Medicaid (“dual eligible” beneficiaries). Medicare covers physician and hospital care and short-term post-hospital skilled nursing facility (SNF) care, while Medicaid pays the deductible and coinsurance for dual eligibles for Medicare-covered physician and hospital care, and covers long-stay services in nursing homes for certain low-income beneficiaries or people who have very high medical and long-term care costs.

Generally, nursing homes serve two sometimes overlapping populations: short-stay and long-stay residents (Grabowski, 2007). SNF residents who are admitted after at least a 3-day hospitalization for post-acute care are considered short-stay residents. Medicare pays for SNF services as long as the resident continues to need daily skilled care, up to a maximum of 100 days, but the average length of stay is about 30 days (Gage, Morley, Spain, & Ingber, 2009). At the end of an SNF stay, residents may return to the community, be discharged back to the hospital, or continue their stay in the nursing home as long-stay residents. Many post-acute, short-stay residents (such as those undergoing rehabilitation following a hip replacement) have aggressive care-plan goals aimed at returning home.

Medicaid covers most long-stay residents, who have health maintenance goals and need assistance with activities of daily living (ADLs). Moreover, about 50 percent of long-stay nursing home residents have dementia, and many of the others have some level of cognitive impairment (Alzheimer’s Association, 2007; Centers for Medicare & Medicaid Services [CMS], 2008). In addition to functional limitations, long-stay residents usually have multiple chronic medical conditions.

Defining Potentially Avoidable Hospitalizations

Researchers studying potentially avoidable hospitalizations among nursing home residents use many different definitions of the conditions that are potentially avoidable or which could be treated in a nursing home if more highly-trained staff were available. It should be noted, however, that all of these definitions are based on expert opinion and are not based on empirical studies of what hospitalizations are actually “potentially avoidable.”

Most studies define potentially avoidable hospitalizations based on medical diagnoses (Walsh et al., 2010). Several studies use a list of “ambulatory care sensitive” (ACS) conditions for which good community primary care can potentially prevent the need for hospitalization. The Agency for Healthcare Research and Quality (AHRQ) developed the ACS list for the general population, not necessarily for the frail elderly in nursing homes (AHRQ, 2001). The list of conditions for adults aged 65 or older includes

congestive heart failure, hypertension, angina, chronic obstructive pulmonary disease, diabetes, asthma, gastroenteritis, urinary tract infections, dehydration, and bacterial pneumonia.

Other studies of potentially avoidable hospitalizations identify certain conditions common among nursing home residents (Kramer, Eilertsen, Goodrich, & Min, 2007; Bishop, Meagher, Perloff, & Zolotutsky, 2010; Walsh et al., 2010). These conditions include heart failure, electrolyte imbalance, respiratory infection, sepsis, and urinary tract infections (Kramer et al., 2007). Researchers chose these five conditions using clinical judgment to determine the conditions where effective nursing care and facility-wide infection-controls could prevent hospitalizations. One study combines elements of the ACS condition list and common conditions in nursing home residents (Bishop et al., 2010). Another study excludes conditions that may possibly have been avoided, such as sepsis, but that once they occur require hospitalization (Walsh et al., 2010). This study also identifies conditions that, though avoidable, cannot be identified reliably using claims data, such as over or under-use of anticoagulation therapy.

Clinical factors complicate identifying when changes require hospitalization. Nursing home residents have multiple comorbidities, making clinical management more difficult. For example, when residents with limited function from advanced chronic heart failure and chronic obstructive pulmonary disease develop shortness of breath, sophisticated diagnostic skills are required to determine whether this is an exacerbation of the chronic disease, acute infection, or some other process. In addition, most nursing home residents suffer from cognitive impairment, which diminishes their ability to communicate symptoms and participate in decision making. Instead of complaints of burning and frequency of urination, for example, the first sign of a urinary tract infection might be increased agitation or a fall, complicating prompt diagnosis and treatment.

Three Clinical Categories

Although the various research studies available define potentially avoidable hospitalizations differently, these hospitalizations can be grouped into three clinical categories: preventable but requiring hospitalization once they occur; preventable, but discretionary hospitalization once it occurs, and futile care. The first category includes *preventable conditions* that would not have been as likely to occur if high quality care were provided. However, should they occur, they almost always warrant a hospitalization. An example is sepsis: a severe infection often caused by failure in a facility's infection-control system that results when nursing staff do not recognize an infection before it becomes severe. Because sepsis is potentially life threatening, a resident diagnosed with sepsis should always be sent to the hospital. Some researchers have included sepsis as a preventable condition for an avoidable hospitalization because it is an indication of poor quality of care within the nursing home.

In the second category, *discretionary hospitalizations* are for conditions that are sometimes manageable within the nursing home with experienced staff, primarily

registered nurses (RNs), supported by available and capable medical care providers. The conditions leading to these discretionary hospitalizations may have been preventable or may have developed even with excellent care. A study comparing outcomes for patients treated for infections in nursing homes instead of hospitals found no significant differences in outcomes (Boockvar et al., 2005). Pneumonia is the most common condition associated with potentially avoidable hospitalizations. If preventive measures are in place for pneumonia, or the pneumonia is identified early, it may be safely treated in a nursing home with oral antibiotics and other measures. If intravenous antibiotics are needed, nursing homes and the treating physician have some discretion about whether to provide that care in the nursing home or in the hospital. The physician makes the decision based on information from the nursing home regarding the resident's condition and on the availability of the staff in the nursing home to handle the care.

The third category, *futile care*, includes care that neither extends life nor improves quality of life for residents who are near the end of life. Advance care planning documents, such as "do not hospitalize" directives, are helpful when the question of transfer to a hospital arises. The Physician Orders for Life Sustaining Treatment form and related tools have been developed for people with serious illnesses to document personal preferences and to translate these preferences into medical orders (Meier & Beresford, 2009).

Rates of Potentially Avoidable Hospitalization among Nursing Home Residents

Several studies have analyzed overall and potentially available hospitalization rates of nursing home residents. These studies suggest that many hospitalizations could be avoided. Studies found a wide range of potentially avoidable hospitalization due to methodology and definition of conditions. Most studies use the list of ACS medical conditions in hospital claims to estimate the number of potentially avoidable hospitalizations of nursing home residents. For example, Grabowski, O'Malley, and Barhydt (2007) found that 23 percent of the roughly \$972 million spent on nursing home hospitalizations in New York State in 2004 was attributable to ACS conditions. Carter (2003) found that 25 percent of hospitalization of Medicaid nursing home residents in Massachusetts were high-discretion admissions and might have been potentially avoidable. Intrator and Mor (2004) found that 37 percent of long-stay nursing home resident hospitalizations during a 6-month period were for an ACS condition and were potentially avoidable. Walsh and colleagues (2010) found that 42 percent of hospitalizations of dually eligible beneficiaries in Medicaid nursing home stays were potentially avoidable in 2005.

Two studies conducted retrospective medical chart review to determine appropriateness of hospitalization. Saliba and colleagues (2000) found almost 40 percent of hospital admissions of nursing home residents to be inappropriate. In a

recent study of nursing homes in Georgia, Ouslander and colleagues (2010), found that more than 60 percent of the hospitalizations were “definitely” or “probably” avoidable.

A limitation of all studies is that they examine hospitalizations after they have occurred and without observing the patient at the time the decision was made. Given that they do not examine information available at the time the decision to hospitalize was made, these studies may indicate the upper bound of potentially avoidable hospitalizations. Also, they do not examine the outcomes of cases in which the decision was made *not* to hospitalize nursing home residents.

Influences in Deciding to Hospitalize

Once a condition has developed, non-clinical factors also can influence the decision to hospitalize. These include availability and training of RNs for frequent clinical assessments, resident and family member preferences, and physician availability and preferences. Difficulties in communication between family and clinical staff or between physician and nursing staff, may increase the likelihood of hospitalization.

Preferences and goals of residents and family members are major considerations in decisions to hospitalize (Buchanan et al., 2006). Several studies found that residents who have completed advance care planning documents have lower hospitalization rates than residents who do not complete these documents (Dobalian, 2004; Lamberg, Person, Kiely, & Mitchell, 2005; Zweig, Kruse, Binder, Szafara, & Mehr, 2004). Nursing home residents enrolled in hospice have a lower probability of hospitalizations in the last 30 days of life compared with residents dying without hospice (Miller, Gozalo, & Mor, 2001; Gozalo & Miller, 2007). In some cases, family members of nursing home residents may wish to override patient preferences or in the absence of detailed advance directives, assume that a hospitalization is best for their loved one.

Physicians play a major role in the decision to hospitalize a resident in a nursing home. Most physicians seeing residents in nursing homes have patients in multiple facilities and maintain a community practice as well. These physicians often prefer to admit residents to the hospital, rather than treat them in nursing homes for several reasons (Levy et al., 2006). For example, a physician may prefer to have the resident at the hospital where the physician is seeing other patients or where test results might be obtained more quickly or where higher levels of medical technology are available.

Physician decisions regarding hospitalizations are highly dependent on communications received from the nursing home staff. First, delays in accessing the physician can result in missed opportunities to intervene early in conditions that might have been manageable in the nursing home had the intervention occurred. Second, the physician relies on information received from nursing home staff; if the staff prefer that residents be hospitalized instead of cared for in the nursing home--for whatever reason--their communications with the physician will likely reflect this preference.

Another factor affecting the decision to hospitalize concerns the availability and skill level of staff. Although nursing homes are required to have a RN on staff 8 hours a day, the RN may serve primarily in an administrative role, and many nursing homes do not have an RN on site during off hours. Moreover, the staffing requirement does not vary with the number of residents in the facility. On the night shift, many facilities may have only a licensed practical nurse (LPN) on site. LPNs have limited training in identifying medical symptoms and managing complicated care-plans. There is evidence that residents of nursing homes that make greater use of LPN staff were at greater risk of hospitalization (Carter & Porell, 2003).

Providing care to acutely ill nursing home residents in lieu of a hospitalization requires frequent clinical assessment, timely laboratory tests and X-rays, and, often, intravenous therapy. Reviews of the literature report inconsistent effects of nursing home staffing on hospitalizations (Konetzka, Stearns, & Park, 2008; Grabowski et al., 2008). However, several studies found that increasing the RN staffing to 30 minutes per resident per day resulted in better clinical outcomes, including decreased hospitalizations (Dorr, Horn, & Smout, 2005; Horn, Buerhaus, Bergstrom, & Smout, 2005). In a study on the effect of nursing staff on hospitalization, Decker (2008) found that, for long-stay residents, an increase in RN hours per bed was related to a reduction in the probability of a hospitalization. Konetzka, Spector, and Limcangco (2008) found that higher RN staffing improved outcomes for infections and other conditions associated with avoidable hospitalization, whereas increases in other staffing did not have the same effect (Konetzka Stearns, & Park, 2008).

CURRENT ECONOMIC POLICIES AFFECTING HOSPITALIZATIONS OF NURSING HOME RESIDENTS

Providers, including nursing homes, adjust how they provide care according to the set of economic incentives they face, including reimbursement, benefit design and regulations (Konetzka & Werner, 2010). This section discusses four categories of current economic incentives and how they affect the hospitalization rates of nursing home residents. These economic incentives are as follows:

- Public reporting;
- Federal and state regulations on staffing;
- Payment incentives; and
- Cost-shifting incentives between Medicare and Medicaid.

Public Reporting of Consumer Information

Families select a nursing home for a loved one based on several factors, including quality, location, religious affiliation, bed availability, and recommendation from a health care professional. Consumer choices are aided by the availability of public information about nursing home quality. If consumers make their choices based on information about publicly reported indicators of nursing home quality, providers have an incentive to improve quality in those measures to attract residents. CMS's Nursing Home Compare website provides information on a variety of quality measures, including nursing home staffing, measures derived from the Minimum Data Set, and health and fire safety inspection results for virtually every nursing home in the country. Currently, the rate of potentially avoidable hospitalization is not used as a quality measure for nursing homes on the Nursing Home Compare website.

Studies on the impact of public reporting on quality are mixed (Stevenson, 2006; Mukamel, Wiemer, Spector, Ladd, & Zinn, 2008). Since quality measures began being publicly reported, improvement in quality has been demonstrated for several of the measures reported (Zinn, Spector, Hsieh, & Mukamel, 2005; Mukamel et al., 2008). Castle (2005) suggests that placing quality information on Nursing Home Compare motivates providers to improve quality. However, not all publicly reported quality measures have improved over time. For example, there has been only a modest increase in total direct care staffing and almost no increase in RN staffing since staffing information began being posted on the website. In addition, nursing home quality measures have shown little impact on nursing home occupancy rates (Stevenson, 2006), and consumers and discharge planners are reported to make little use of the website (Shugarman & Brown, 2006), decreasing its effectiveness as an economic incentive.

Federal and State Regulations on Staffing

Federal standards specify certain requirements for staffing in nursing homes, but do not specify minimum numbers of staff per resident. The Omnibus Budget Reconciliation Act of 1987 requires that nursing facilities have licensed nurses on duty 24 hours a day, an RN on duty at least 8 hours a day, 7 days a week, and an RN as director of nursing. However, these requirements are not adjusted for facility size, number of residents, or case-mix. Instead, the law requires that the facility have “sufficient” staff to provide nursing and related services to attain or maintain the “highest practicable level” of physical, mental, and psychosocial well-being of every resident. Neither federal law nor regulation provides specific guidance as to what constitutes sufficient staffing. Most states have established minimum staffing requirements for nursing facilities. Higher staffing levels in nursing homes have been found to be associated with fewer hospitalizations (Kramer et al., 2000; Kramer & Fish, 2001).

Reimbursement and Coverage Incentives

Medicare and Medicaid cover different types of care; hence providers face different incentives related to this coverage. Medicare pays for hospital care, physician services, diagnostic tests, and limited SNF services in nursing homes following hospitalizations, but does not cover long-term care in nursing homes. Long-term care, which is primarily assistance with ADLs and monitoring of health conditions, is covered by Medicaid for more than two-thirds of nursing home residents (American Health Care Association, 2011). Medicaid is available for residents who meet their state’s income, asset, and nursing home level-of-care eligibility requirements. If they are not Medicaid eligible at admission, long-stay nursing home residents often spend down their assets and become eligible for Medicaid as well (Lee, Kim, & Tanenbaum, 2006; Waidmann & Liu, 2006; Mehdizadeh, Nelson, & Applebaum, 2006). Both Medicaid and Medicare coverage and reimbursement issues affect rates of potentially avoidable hospitalization of nursing home residents.

Medicaid Coverage and Reimbursement Issues

As state Medicaid programs account for more than 50 percent of nursing home expenditures and pay for almost 70 percent of bed days (Grabowski, 2007), Medicaid payment design is central to the economics of nursing homes. States have considerable flexibility in the design of their Medicaid programs, including broad discretion in developing payment policy. Intrator and colleagues (2006) found that hospitalization rates varied by state and concluded that state Medicaid nursing home payment rates, reimbursement systems, and other payment policy have important influences on hospitalization rates of nursing home residents.

Medicaid reimbursement policy affects both the level of payment and how the rates are structured. Studies have found that higher Medicaid nursing home payment rates are correlated with fewer hospitalizations (Intrator, Zinn, & Mor, 2004; Intrator et al.,

2006; Gruneir, Miller, Intrator, & Mor, 2007). The effect of the payment rate probably occurs through its impact on nursing home staffing. With more staff, particularly RNs, nursing homes are able to provide a higher level of nursing care to acutely ill residents. In states that had lower reimbursement rates, nursing homes also had lower staffing levels (Grabowski, 2007). Increased RN staffing was associated with lower hospitalization rates, but increased nursing assistant and LPN staffing was not. In addition, facilities in states with the highest Medicaid reimbursement rates were more likely to hire nurse practitioners or physician assistants (Intrator et al., 2005), which was associated with lower rates of potentially avoidable hospitalizations.

A second aspect of reimbursement policy that affects rates of hospitalizations of nursing home residents is whether adjustments are made to Medicaid payment rates based on case-mix. Under case-mix adjusted systems, nursing homes receive higher reimbursement for sicker residents and lower reimbursement for less impaired residents. Medicaid case-mix adjustment payment policies are associated with increased acuity of nursing home residents (Feng, Grabowski, Intrator, & Mor, 2006; Feng, Grabowski, Intrator, Zinn, & Mor, 2008). Controlling for resident and facility characteristics, residents in states with case-mix reimbursement systems were 30 percent less likely to be hospitalized (Intrator & Mor, 2004). However, in an analysis of potentially avoidable hospitalizations limited to Medicaid-covered stays among dual eligibles, Medicaid case-mix reimbursement was not a significant predictor of these hospitalizations (Walsh et al., 2010).

A third aspect of Medicaid reimbursement policy is whether the state has a pay-for-performance or value-based purchasing system that pays a bonus to nursing homes that demonstrate exceptionally high quality or show the greatest improvement in quality (Cromwell, Trisolini, Pope, Mitchell, & Greenwald, 2011). In 2007, six states (Georgia, Iowa, Kansas, Minnesota, Ohio, and Oklahoma) had implemented a pay-for-performance program for nursing homes (Arling, Job, & Cooke, 2009; Briesacher et al., 2009). All six states have direct care staffing as a quality measure, but none use hospitalization rates.

Finally, Medicaid coverage of a nursing home bed while the nursing home resident is hospitalized, known as bed-holds, has been found to be associated with higher hospitalization rates of nursing home residents in some, but not all studies. Bed-hold policies are designed to prevent hospitalized residents from losing their place in the nursing home while they are in the hospital. In states with bed-hold policies, it was estimated that the hospitalization rate was 36 percent higher than in states without such payment arrangements (Intrator, 2006). The bed-hold policy may inadvertently create incentives to hospitalize residents as the nursing home receives partial per diem payments without providing services when the resident is hospitalized (Gruneir et al., 2007). On the other hand, some studies have not found that bed-hold policies are associated with potentially avoidable hospitalizations (Walsh et al., 2010).

Medicare Coverage and Reimbursement Issues

Medicare is the primary payor for hospital care, physician services and for post-acute care. Medicare reimbursement for nursing home care is limited to post-acute care stays under the SNF benefit. This coverage is triggered by a hospital inpatient (not observation) stay of 3 or more days. As Medicare SNF reimbursement is generally more generous than Medicaid-covered nursing home reimbursement, Medicare-covered days are preferred to Medicaid-covered days by nursing homes. Higher Medicare payments provide an incentive to nursing homes to hospitalize long-stay residents on Medicaid so that they will return to the facility for SNF services that are paid by Medicare.

Medicare limits reimbursement for on-site visits to nursing home residents by physicians, nurse practitioners, or physician assistants to one visit per day, and requires that the medical necessity of each visit must be clearly documented. This reimbursement limitation may interfere with close monitoring of changing clinical condition and compounds the incentive for physicians to send their nursing home patients to the hospital where medical monitoring is readily available and may be more convenient for the physicians.

In July 2009, the Federal Government announced a Medicare and Medicaid value-based purchasing demonstration in three states (Arizona, New York, and Wisconsin) that uses avoidable hospitalizations as one measure of nursing home performance. In addition to staffing, quality measures, and survey deficiencies, the demonstration also uses appropriate hospitalizations that will make up 30 percent of an overall quality score. As the value-based purchasing program must be budget neutral, the financial awards are funded by the savings from reduced hospitalizations and subsequent SNF stays (CMS, n.d.). The value-based purchasing program is expected to provide incentives for nursing homes to reduce the number of avoidable hospitalizations when the program is implemented nationally.

Cost-Shifting between Medicare and Medicaid

The interplay between the federal Medicare and state-administered Medicaid programs in the nursing home market has important implications for hospitalization patterns of nursing home residents (Grabowski, 2007). For nursing home residents who are dually eligible for Medicare and Medicaid, Medicare is the primary payer for acute medical services, and Medicaid is the secondary payer for costs of copayments, coinsurance, and deductibles for Medicare services. Most states limit the amount they pay for coinsurance for Medicare physician and other Part B services (Mitchell & Haber, 2004/2005) and thus bear little of the shared cost when nursing home residents receive Medicare services. However, Medicaid pays for the bulk of the cost of care for nursing home residents by paying for room/board and custodial care.

When dually eligible nursing home residents are hospitalized, expenditures for care shift from Medicaid to Medicare. Medicare payments increase as a result of paying

for hospital costs and SNF services, while the Medicaid program saves money each day by not having to pay for nursing home costs while the resident is in the hospital, even in states that partially reimburse nursing homes to hold beds for residents' return. Thus, there is little financial incentive for state Medicaid programs to invest in initiatives to reduce hospitalizations among this population.

Nursing homes adjust their approach to caring for residents taking into account these policy incentives and constraints. For example, if the cost to nursing homes of caring for residents who develop medical problems is greater than the Medicaid per diem rate, the nursing home has a financial incentive to transfer the resident to the hospital even if they have the technical capability of providing the care in the facility. If the state pays a higher case-mix adjusted rate for residents who need greater nursing services, the nursing home has less of an incentive to transfer residents to the hospital. Similarly, if the state pays the nursing home to hold beds for hospitalized residents, the likelihood that the facility will hospitalize the residents is greater because the nursing home will receive revenue when the resident is in the hospital and the bed is empty (Grabowski, 2007). Finally, if nursing home residents qualify for Medicare SNF services after their hospitalizations, nursing homes receive higher payments from Medicare than they receive from Medicaid, increasing their revenue.

Capitated Financing and Blending Medicare and Medicaid Funding

Under capitated financial arrangements, health plans accept a fixed amount of money for which they agree to provide all covered services. Thus, in theory, capitated health plans have the financial incentive to reduce unnecessary services, including avoidable hospitalizations. A few programs have blended Medicare and Medicaid funding sources and have accepted financial risk to manage combined acute and long-term care services, thus internalizing all of the costs and eliminating the incentive to cost-shift between the two programs (Verdier, 2010). Programs that have combined Medicare and Medicaid funding and assume risk for acute and long-term care services demonstrate some success in reducing hospitalizations.

In addition to capitated financing for the general Medicare population under Medicare Advantage, CMS has developed Special Needs Plans (SNPs) to focus on particular populations. These include Institutional SNPs (I-SNPs), which enroll nursing home residents and beneficiaries in the community who are similarly impaired, Chronic Condition SNPs (C-SNPs), and Dual Eligible SNPs (D-SNPs). Fully Integrated Dual Eligible SNPs (FIDE-SNPs), which include both Medicare and Medicaid capitation and focus on dually eligible beneficiaries, are a D-SNP subtype. The Medicare Improvements for Patients and Providers Act of 2008 requires new D-SNPs to have contracts with state Medicaid agencies, and requires existing D-SNPs to contract with state Medicaid agencies, if they wish to expand (Grabowski, 2007). The Affordable Care Act (ACA) requires D-SNPs to contract with state Medicaid programs beginning in 2013 (Pub.L. 111-148; Section 3205).

The Program of All-Inclusive Care for the Elderly (PACE) is authorized as a Medicare provider type under Section 1894 of the Social Security Act and a voluntary state option under Section 1934 of the Act. PACE organizations enroll only individuals who meet their states' eligibility criteria for nursing home level-of-care and provide a comprehensive, fully integrated benefit inclusive of all Medicare and Medicaid-covered services, either directly through employed staff or through contracts with other providers (Walsh, Khatutsky, & Johnson, 2008). PACE sites serve nursing home eligible individuals with the goal of keeping dually eligible beneficiaries in community settings, with services provided by an interdisciplinary care management team and adult day care centers. A small percentage of PACE enrollees do become nursing home residents, and continue to be managed by the PACE program. Dually funded by Medicare and Medicaid, PACE providers assume financial risk for acute and long-term care services for participants. An early evaluation of the program found no overall cost savings (White, Abel, & Kidder, 2000). However, in the initial 12 months following enrollment, spending was about 40 percent lower than projected for Medicare costs and there were fewer hospitalizations, but spending was about 80 percent higher for Medicaid costs. PACE was found to be associated with improvements in quality of life by keeping people out of hospitals and nursing homes.

Evercare, which started as a CMS demonstration, is a Medicare I-SNP that accepts capitated risk for the Medicare costs of nursing home residents, which gives it the incentive to reduce hospitalizations (Verdier, 2010). The goal is to reduce hospital transfers by intensive management of chronic conditions to prevent flare-ups and to manage acute illnesses in the nursing home (Kane, Keckhafer, Flood, Bershady, & Siadaty, 2003). Nurse practitioners provide care to nursing home residents who choose to be part of Evercare. They work closely with nursing home staff to coordinate care, perform assessments, manage medication, and document in medical records. Each nurse practitioner has a caseload of about 100 patients and usually works in one or two nursing homes.

As part of a managed care-plan receiving capitated payments, Evercare directly pays for physician services and is not limited to the Medicare fee-for-service rules allowing reimbursement for only one medical visit per day (from either a physician or nurse practitioner). Nurse practitioners collaborate with residents' attending physicians and specialists as needed. By working closely with physicians, nurse practitioners are able to assure them of continued care management should residents have a change of condition, making the physician more comfortable with keeping the resident in the nursing home. Evercare is also not limited by the 3-day prior hospital stay requirement before paying nursing homes a higher skilled care rate. In lieu of hospital care, Evercare provides an additional payment to the nursing home for Intensive Service Days that is intended to cover additional staffing resources for acutely ill patients who otherwise might be transferred to the hospital. Evercare also talks with residents and family about advance directives and hospice, which may reduce hospitalizations for futile services near end of life.

Evaluations of Evercare demonstrate reduced hospitalizations and also maintained quality equal to, or better than, the comparison group (Kane, Flood, Bershadsky, & Keckhafer, 2004). Much of the savings result from the use of advance directives and *preventing* adverse conditions from occurring. Quality differences included a lower rate of preventable events and lower mortality.

Minnesota Senior Health Options (MSHO) is a FIDE-SNP managed care initiative that combines acute and long-term care Medicare and Medicaid funding within one capitated delivery system (Grabowski, 2007). MSHO began in 1997 as a demonstration targeting the dually eligible population (Grabowski, 2009). Medicare and Medicaid funding streams were combined in a capitated payment to manage the care for people who lived in the community or nursing homes. Acute, primary, and long-term care, as well as care coordination are provided. An analysis of the program in the nursing home population found that MSHO patients had fewer hospitalizations and hospital days, and fewer avoidable (defined as ACS diagnoses) hospitalizations than the comparison group (Kane, Homyak, Flood, Bershadsky, & Zhang, 2004). Despite these findings, there were no overall cost savings: Medicare costs were 44 percent higher for nursing home residents in MSHO, and Medicaid costs were 7 percent higher (Kane, Homyak, Flood, Bershadsky, & Zhang, 2004). Quality of care was not a focus of the evaluation.

STRATEGIES FOR REDUCING POTENTIALLY AVOIDABLE HOSPITALIZATIONS

Reducing avoidable hospitalizations of nursing home residents could save Medicare expenditures for hospital costs and possibly SNF costs after a resident returns to the nursing home. However, if residents are cared for in the nursing home, Medicaid bears the majority of the costs of care provided and nursing homes would probably have to increase RN staff and forego the higher payments from Medicare for SNF services. If hospitalizations are reduced, misalignment of economic incentives happens when Medicare recognizes savings, but both state Medicaid programs and nursing homes realize increased costs.

There are several approaches that have been discussed for reducing potentially avoidable hospitalizations: sharing Medicare savings with states or providers; integrating Medicare and Medicaid funding and financial mechanisms; and developing direct incentives related to reimbursement, staffing, and public reporting.

Establish Shared Medicare Savings Programs

Medicare could share savings from reduced hospitalizations by establishing economic incentives to change behavior. Sharing Medicare savings from reduced hospitalizations with state Medicaid programs or with nursing homes would provide incentives for states and nursing homes to increase efforts to reduce potentially avoidable hospitalizations. Shared-savings could be one-sided risk sharing, where an entity shares in the savings but not in any losses; or two-sided, whereby an entity would share in both the savings and potential for losses. In July 2011, CMS issued a State Medicaid Director letter telling states of new opportunities for re-aligning financial incentives between states and the Federal Government.

A value-based purchasing or pay-for-performance program that shares Medicare savings with providers (Cromwell et al., 2011) is an example of shared-savings incentives. Results from CMS's Nursing Home Value-Based Purchasing Demonstration are not yet available, however there are some preliminary results regarding improvements in individual participating nursing homes. For example, one nursing home reduced hospital re-admission rates due to congestive heart failure from 25 percent to under 5 percent in one year (Newcombe, 2010). The ACA (Pub.L. 111-148) requires CMS to submit a Report to Congress outlining a plan for a nursing home value-based purchasing program to be implemented nationally.

Some state Medicaid programs have also implemented pay-for-performance initiatives with nursing homes. These initiatives have included small percentage payment rate increases for attaining standards (usually 1 percent to 3 percent). Few studies have been done and there is little evidence to date that pay-for-performance

improves quality of care in nursing facilities (Petersen et al., 2006; Briesacher, 2009; Georgia Department of Community Health, 2007; Kane et al., 2007; Lindenauer et al., 2007; Cooke et al., 2009; Werner, Konetzka and Liang, 2010).

Shared-savings and other forms of value-based purchasing have shown some promise in other settings and are consistent with Medicare's objective to simultaneously improve quality and reduce expenditures (Cromwell et al., 2011). Developing shared-savings and pay-for-performance programs have several technical components: determining whether to reward attainment of certain performance thresholds versus rewards for improvement, or both, selecting and specifying quality measures, and establishing the payment structure. In considering implementation of value-based purchasing as a way to reduce potentially avoidable hospitalizations in nursing homes, the following issues could be considered:

- Under most pay-for-performance demonstrations, the economic incentive is a *one-sided* risk sharing whereby the nursing homes have the potential to share in savings but are not penalized if costs increase. However, penalties as well as financial rewards could be part of any shared-saving system design.
- Most nursing homes care for relatively few residents; the average nursing home only has about 100 beds. Small numbers of residents and hospitalizations at an individual nursing home may cause significant statistical issues in assessing performance at the individual facility level. Statistical power may not be enough to reliably determine what the potentially avoidable hospitalization rate is within a one-year time frame.
- Substantial time lags are involved in Medicare claims-based hospitalization measures because of how long it takes providers to submit claims and for CMS to process data. A lag of 18-24 months between the beginning of the performance period and the payment of the quality incentive is not unusual in pay-for-performance programs. Long time lags between performance and incentive payments could weaken the impact of the value-based purchasing system on provider behavior.
- Pay-for-performance programs typically reward facilities that were already high performers prior to the implementation of the incentive system. While lower-rated facilities that improve performance substantially may also receive incentive payments in some program designs, poorer performing nursing homes--which may be the source of most avoidable hospitalizations--may not even try to improve because the standard is too high for them to achieve.
- Calculating Medicare savings is complicated for a number of technical reasons. Tying incentive payments to increasing reductions in hospitalizations could result in a diminishing pool of money over time from which reward payments would be made. As potentially avoidable hospitalizations are reduced over time, the potential to further reduce hospitalization rates would decline. Moreover, unlike a

demonstration where only a few facilities participate and many facilities could function as a comparison group to determine savings, a national program including all facilities would eliminate the comparison group, making it difficult to determine if savings were achieved. This could be addressed by calculating savings against a projected trend line of Medicare expenditures over time, but there would be disagreements as to the appropriate trend line.

- Reducing potentially avoidable hospitalizations is complicated and may be difficult for nursing homes to accomplish, especially since family members and physicians play such an important role in deciding to hospitalize nursing home residents. It may take stronger economic incentives than sharing Medicare saving to motivate facilities to make the investments necessary to reduce Medicare expenditures.

Integrate Medicare and Medicaid Funding

Economic incentives exist for cost-shifting between Medicare and Medicaid, which are the two major payers of acute and long-term care services, respectively. Economists recognize two major principles to correct the current incentive system. The first is to integrate Medicare and Medicaid funding within a single organization, which will eliminate cost-shifting because there would be only one payer. The second is to develop financial mechanisms that reverse incentives regarding hospitalization of nursing home residents. The TEP discussed two possible programs that integrate Medicare and Medicaid at the program level, three existing capitated managed care programs, and a new shared-risk concept of an accountable care organization (ACO).

Integrate Medicare and Medicaid at the Program Level

At the program level, there are two opposite strategies to integrating Medicare and Medicaid to eliminate incentives to cost-shift between programs. One strategy is to federalize Medicare and Medicaid acute health care and long-term care services for dual eligible beneficiaries. In this model, the Federal Government would be primarily responsible for the major programs for older people and people with disabilities, including Medicare and Medicaid (for dual eligibles). Both policy coordination and program implementation across programs could be easier if they are all at the federal level. Although not a new idea, federalizing all acute and long-term care services for dual eligibles would require a large increase in federal spending and would be a major expansion of the federal role. This incremental cost could be reduced by giving states responsibility for some other programs of roughly equivalent cost.

There are a number of challenges to this approach. It might be difficult for the Federal Government to design long-term care programs that take into account local preferences and values. Medicare would probably have to cover all long-term care services that states currently provide, including home and community-based services, and would have to assume responsibility for all dually eligible beneficiaries--not just

those in nursing homes. If Medicare-covered only dual eligibles in nursing homes, states could have an incentive to institutionalize dual eligibles receiving services in the community.

An alternative approach is similar, but in reverse. States would assume risk and responsibility for acute health care and long-term care services for all dually eligible beneficiaries. Medicare would pay states a capitated amount to cover all Medicare acute care benefits for dual eligibles. However, this would be a major increase in financial risk for states. In addition, the culture of Medicaid is very different than that of Medicare; for example, most Medicaid beneficiaries have limited freedom of choice of providers and may be required to enroll in managed care-plans, whereas Medicare beneficiaries have complete freedom of choice. In the current economic climate, states are not in the financial position to assume the risks associated with an integrated system although Vermont is considering such an arrangement (Medicare Payment Advisory Commission, 2011).

Promote Enrollment in Integrated Funding Programs

CMS is currently encouraging various approaches to align disparate incentives faced by providers who care for the same beneficiaries, using both managed care and other approaches. Hospitalizations could be reduced by encouraging enrollment in certain high quality PACE, I-SNPs, and FIDE-SNPs, although how to promote enrollment is not clear. In any managed care arrangements, Medicare and Medicaid recognize savings by transferring risk to a managed care entity. Managed care-plans that integrate Medicare and Medicaid will have the greatest impact on reducing hospitalizations of nursing home residents. This integration is aided by the ACA, Section 3205, that requires D-SNPs to have contracts with their state Medicaid programs by 2013 as a way to increase access to FIDE-SNPs (Pub.L. 111-148). In addition the Federal Coordinated Health Care Office and Center for Medicare and Medicaid Innovation in CMS are partnering with 15 states to develop new models to integrate care for dual eligibles (CMS).

Encouraging dually eligible beneficiaries to enroll in a managed care-plan could help to reduce avoidable hospitalization of nursing home residents. As an I-SNP that targets nursing home residents, the Evercare model has showed promise in controlling avoidable hospitalization. Medicare beneficiaries choose to participate in Evercare and other I-SNPs; Medicare has limited ability to mandate enrollment. CMS is involved with a number of different initiatives to increase enrollment of dual eligible beneficiaries in high quality, fully integrated entities. Other approaches to increase enrollment could also be explored.

Use Non-Capitated Managed Care Approaches

ACOs are a possible means to reduce hospitalizations of nursing home residents using a non-managed care approach. Still under development, ACOs are groups of providers that work together to treat individuals with multiple chronic conditions across

care settings and who will share in savings achieved by the ACO overall. Thus ACOs provide an incentive for functional service integration, without integrating payment across providers (as in a managed care-plan) or Medicare and Medicaid. In addition, ACOs have the potential to improve coordination and communication among providers, to improve care to beneficiaries, and to help lower costs.

Unlike a Medicare Advantage Plan or SNP, providers in an ACO are paid on a fee-for-service basis by Medicare. If the ACO exceeds certain benchmarks established by CMS, the participating providers will share in the savings--or be held accountable for increased expenditures.

ACOs are new entities that to date have not focused on nursing home residents or inclusion of nursing homes as part of an ACO. Working with nursing homes in the area, physicians in an ACO might be more responsive to keeping nursing home residents out of the hospital, or hospitals might provide an RN to help the nursing home care for acutely ill residents rather than sending them to the hospital. ACOs could establish nurse practitioners in nursing homes, similar to Evercare, to monitor residents' conditions and to provide care in lieu of hospitalization, and could facilitate access to specialty medical staff. Electronic health records shared between an ACO and a nursing home would help facilitate communication and lessen the need for transfer to the hospital. The nursing home, as part of an ACO, would be eligible for shared-savings or held accountable for higher expenditures.

Direct Incentives

A variety of options exist to establish direct incentives for nursing homes to reduce potentially available hospitalizations. Direct incentives are approaches designed to address specific elements that contribute to hospitalizations or providing an incentive directed at reducing hospitalizations. These include public reporting of hospitalization rates, improving staffing levels in nursing homes, modifying the 3-day hospitalization requirement for Medicare SNF benefits, providing education and care tools, and changing state Medicaid coverage of bed-hold days in nursing homes.

Include Potentially Avoidable Hospitalization Rates on Nursing Home Compare Website

The Nursing Home Compare website reports on nursing home performance and is intended to provide valuable information to consumers regarding nursing home quality of care. Nursing Home Compare includes individual measures (such as use of restraints, catheters, or percent reporting pain) and a Five-Star summary rating. New measures of hospitalization rates and re-hospitalization rates are under consideration and could also be incorporated into the Five-Star rating system. The advantages of this approach are that it is relatively easy and low cost, that some providers will respond and that it provides important information to consumers, discharge planners and others who assist consumers with selecting nursing homes. However, there are also

disadvantages, including that consumers need to be educated that lower hospitalization rates are desirable, not all consumers or those who advise them use Nursing Home Compare to select nursing homes, and that the evidence is mixed regarding the industry response to public reporting.

Improve Nursing Home Staffing

Increase RN Staffing

Increasing the nursing staff ratio in nursing homes could reduce potentially avoidable hospitalizations by supplying additional personnel to provide care. Increasing RN staffing might be especially important because of their greater clinical skills. Several studies suggest that RN staffing is more important than other types of staff in predicting overall quality of nursing home care (Institute of Medicine, 2000). Increasing staffing levels could be accomplished by including case-mix adjusted staffing levels as part of value-based purchasing standards. Nursing homes that demonstrate higher ratios of RNs to residents would be eligible for financial awards.

Efforts to implement higher staffing could face substantial barriers. Increasing staffing could be expensive to Medicare and Medicaid and the costs could easily exceed the savings from reducing potentially avoidable hospitalizations, even if overall quality improved. Nursing homes contend that current staffing levels are the result of low Medicaid payment rates and that additional staffing is not possible without higher reimbursement. Moreover, relatively little empirical evidence is available on how many RN staff per resident is optimal. Increasing the number of RNs in nursing homes also would be difficult given the general shortage of RNs, and the fact that RN nursing home wages are lower than RN hospital wages (U.S. Bureau of Labor Statistics, 2011).

Increase Use of Nurse Practitioners

The availability of nurse practitioners has shown to be effective in reducing potentially avoidable hospitalizations. In addition, some studies have concluded that the savings from reducing such hospitalizations could pay for a nurse practitioner in every nursing home (Ouslander, 2010). Increased use of nurse practitioners could be achieved by subsidizing their direct employment by nursing homes, Medicare Part B payment changes to remove current barriers, or as part of shared-savings approach similar to ACOs.

Currently, depending on state scope of practice, Medicare recognizes nurse practitioners as providers who can bill Medicare Part B for clinical services, similar to physician services. A nursing home that hires nurse practitioners could bill for those services allowable by Medicare, or individual nurse practitioners could develop a practice serving nursing home residents. However, Medicare allows only one billable visit per day to a resident. Because that restriction counts services from either a physician or a nurse practitioner, the nurse practitioner is in competition with physicians for billing Medicare. Evercare does not have this problem because Medicare pays

Evercare a capitated amount, which frees the health plan to pay physicians and nurse practitioners as it chooses. A possible strategy is to have a change in medical condition that may trigger a potentially avoidable hospitalization be a requirement to allow daily attendance by a nurse practitioner in addition to visits by the physician. The added cost to Medicare Part B for nurse practitioner services would be less than the cost of a hospitalization (Ouslander, 2010).

The challenge is to allow greater responsiveness to clinical needs without enabling over-use or fraudulent billing. A disadvantage of this strategy is that nursing homes may be rewarded for residents acquiring conditions that could have been prevented with better quality of care. More empirical evidence is needed to develop this strategy and to consider the feasibility of a policy change. Success in reducing avoidable hospitalization, however, takes more than just having a nurse practitioner in the nursing home. For example, the Evercare model includes ensuring a quality assurance system in the nursing home, working closely with nursing home staff, and working collaboratively with physicians. However, stationing a nurse practitioner in a nursing home alone does not provide the entire package of tools that are core to the Evercare model and would not be expected to provide the same results.

Modify Medicare 3-Day Hospitalization Requirement

Under current law, Medicare SNF coverage is available only to beneficiaries who have a 3-day prior hospitalization and who need skilled care. Medicare reimbursement levels far exceed those of Medicaid, creating a strong incentive for nursing homes to increase the number of Medicare residents. If the nursing home decides to care for acutely ill residents in the facility rather than discharge them to the hospital, more resources, including more RN time, would be needed to care for the residents. If the nursing home decides to hospitalize them, fewer nursing home resources are expended, and when the residents return to the nursing home after at least a 3-day hospitalization, Medicare pays the higher SNF rate, increasing facility revenues. Thus, the policy provides an incentive to nursing homes to hospitalize residents as a way to maximize revenues and decrease nursing home expenditures.

One option that has been discussed to change this incentive would be to add an additional pathway to Medicare SNF coverage that did not require a 3-day hospitalization. In its place could be a requirement for documentation that the resident needed daily skilled care. If they met the skilled care requirement, the resident could be eligible for Medicare coverage and the nursing home could receive the appropriate Medicare payment rate. In this option, Medicare would save the cost of the hospital stay; Medicaid would not be paying for the nursing home stay; and the nursing home would receive higher payments for the higher level of staffing and resources needed to care for the resident.

Although this scenario looks like a win for all parties, it poses problems. Most importantly, the change of condition assessment might lead to an exaggerated documentation of conditions that would result in some nursing homes receiving SNF-

level payments when that level-of-care is unwarranted, raising Medicare expenditures. Triggering the SNF benefit might cause the resident to use up the limited SNF benefits (limited to 100 days), especially if a new spell of illness does not occur. In addition, nursing homes may try to care for residents without adequate RN staffing or may keep residents who would have been better served in the hospital. More study is needed regarding the conditions under which the 3-day hospitalization requirement might be modified.

Another option might be to modify the 3-day hospitalization requirement for Medicare coverage for skilled nursing care for selected nursing homes that demonstrate optimal nurse staffing and quality assurance system. The nursing homes could be selected through the value-based purchasing system. Needless to say, there would be substantial operation challenges in modifying the 3-day hospital stay requirement.

Provide Education and Care Tools

Education and training of nursing home staff and access to clinical protocols could reduce potentially avoidable hospitalizations. An intervention designed to train nursing home staff in identifying, assessing, and managing conditions could prevent conditions from becoming severe enough to require hospitalization, improve advance care planning and palliative care, and reduce potentially avoidable hospitalizations by 17 percent (Ouslander et al., 2011). An emphasis on avoiding hospitalizations would also require use of clinical pathway tools and quality indicators to help ensure that residents who are too sick to be managed in the nursing home are appropriately transferred to the hospital. Quality-improvement intervention tools and strategies are available to assist nursing home staff in early identification, assessment, communication, and documentation about changes in resident status.

Tools and training materials could support appropriate clinical monitoring and intervention, advance directive planning and implementation, and palliative care. Tools could assist certified nursing assistants in identifying changes in clinical status and reporting them to nursing staff. Change in condition protocols help licensed nursing staff identify critical vital signs and laboratory results and guide staff on when to communicate with physicians. Clinical paths for treating mental status change, fever, symptoms of lower respiratory infections, congestive heart failure, urinary tract infections, and dehydration could guide staff in making the decision whether to hospitalize. Tools to promote effective communication with residents and their families about advance directives could help residents consider palliative care and hospice (Ouslander et al., 2011).

Some hospitalizations of nursing home residents occur at the end of life, and some portion of hospitalizations represent futile care. Studies suggest that enrollment in hospice by nursing home residents may lead to reduced hospitalizations (Miller et al., 2001; Gozalo & Miller, 2007). In addition, nursing home staff need training in how to work with residents and their families to develop and implement advance directives consistent with residents' preferences. Nursing home staff could be trained to better

communicate with families to explain when additional hospitalizations would not benefit a resident. Education for families is as important as it is for staff. End of life initiatives need to be cast in terms of making sure that residents have a plan for end of life care.

Change Medicaid Coverage and Payment Policies

Medicaid, not Medicare, is the main source of financing for nursing homes. Thus, Medicaid policies have potentially big effects on nursing home behavior, but with the exception of quality standards, federal law gives very broad authority to states to design their own programs. Although payment rate, bed-hold payments and case-mix systems are factors in avoidable hospitalizations (Grabowski et al., 2008), the Federal Government has limited authority to require a state to change reimbursement systems. However, some TEP members felt that CMS could suggest that states take potentially avoidable hospitalization rates into account. CMS could also develop a specific demonstration grant program to test different incentives for states to change state policies.

CONCLUSIONS

Potentially avoidable hospitalizations among people using nursing homes are important because of the financial costs to Medicare and Medicaid and the adverse impact on the individuals involved. These hospitalizations, whether due to conditions that could have been prevented in the first place, that could have been managed within the facility, or involving futile care at the end of life, offer opportunities for improvement in nursing home quality of care as well as the promise of substantial cost savings. Initiatives to reduce potentially avoidable hospitalizations of nursing home residents, however, are unlikely to succeed unless they take into account the economic and financial incentives facing providers, consumers, state Medicaid programs, and the Medicare.

The current economic incentives are not aligned, most dramatically between Medicare and Medicaid. Hospital costs accrue primarily to Medicare, whereas efforts to reduce hospitalizations would require increased Medicaid expenditures. Thus, state Medicaid programs have little incentive in the fee-for-service system to invest in initiatives that would reduce Medicare-covered potentially avoidable hospitalizations.

Experts have identified a number of possible options to better align the economic incentives and to motivate providers to reduce potentially avoidable hospitalizations. The options to reduce these hospitalizations by aligning the economic incentives can be divided into three broad categories.

First, shared Medicare savings programs could be established, either with states or with providers, through value-based purchasing. Shared-savings approaches reward efficient service provision by allowing providers to receive a bonus payment if they reduce Medicare expenditures and achieve high levels of quality or improvement in quality. These approaches require careful attention to the details of implementation, including setting expenditure targets and thresholds for quality measures, developing a means to measure costs or quality, and structuring the shared-savings or rewards for quality and efficiency.

Second, funding of Medicare and Medicaid for dually eligible beneficiaries could be integrated through several mechanisms. Medicare and Medicaid services and funding could be integrated at the program level by having either the Federal Government assume responsibility for medical and long-term care services or for states to assume responsibility for all medical services. These are not new ideas, but are radical and highly unlikely.

Integration of Medicare and Medicaid for dually eligible beneficiaries through managed care programs or accountable care organizations is more likely to be implemented. States and the Federal Government could promote enrollment in integrated funding programs, such as PACE, Evercare or MSHO, and increase state development of FIDE-SNPs. By combining Medicare and Medicaid funds into one

funding pool, health plans have strong incentives to reduce potentially avoidable hospitalizations and not to cost-shift between payers. Recently identified accountable care organization also could be used to target avoidable hospitalizations of nursing homes residents.

Third and finally, direct incentives to reduce potentially avoidable hospitalizations include strategies designed to address specific elements of the financing and delivery system that contribute to hospitalizations or provide an incentive directed at reducing hospitalizations. For example, public reporting, such as Nursing Home Compare, could include new measures of hospitalization or re-hospitalization (measures currently under development) for both Medicare SNF and long-stay nursing home residents. It might also be possible to incorporate hospitalization rate information into the Five-Star Rating System, as is done with the Nursing Home Value-Based Purchasing Demonstration.

Other possible direct incentives include:

- Improving staffing, especially RNs and nurse practitioners. There is evidence that increased RN and nurse practitioner staffing can improve clinical quality and may reduce hospitalizations. This could be financed through mechanisms such as shared-savings.
- Modifying the Medicare 3-day prior hospitalization requirement. Under current law, Medicare beneficiaries must be in the hospital for at least 3 days in order to qualify for Medicare SNF coverage. If carefully designed to avoid inappropriate use/over-use, modifying or eliminating this requirement would allow nursing home residents to access SNF level-of-care (and to temporarily allow the nursing home to access the higher SNF benefit per diem rates) without having to go to the hospital first.
- Allowing more nurse practitioner visits to nursing home residents. Current Medicare regulation permits only one physician or nurse practitioner visit per day to a nursing home resident, creating competition between nurse practitioners and physicians. Allowing more nurse practitioner visits in lieu of hospitalization could allow better monitoring of acute changes in a resident's condition and savings to Medicare.
- Providing education and care tools. Nursing home staff, including RNs and certified nursing assistants, need additional training and care protocol tools to help identify clinical issues requiring timely medical follow-up, to prevent clinical problems, and to work effectively with residents and families on advance directives.
- Encouraging states to use mechanisms that have been observed to decrease hospitalization rates such as higher Medicaid nursing home rates, use of case-mix reimbursement, and elimination of bed-hold payments.

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APPENDIX A: TECHNICAL EXPERT PANEL PARTICIPANT LIST

Hospitalizations of Nursing Home Residents Technical Expert Panel March 2, 2011

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