# ISSUE BRIEF

**MARCH 2010**
**NUMBER 7**

## Quality's New Frontier: Reducing Hospitalizations and Improving Transitions in Long-Term Care

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*This brief reviews recent efforts to measure and reduce potentially avoidable hospitalization and improve care transitions for individuals who use long-term care, including residents of nursing homes and people in home- and community-based service settings. We describe three areas in which progress is needed: (1) validated measures of avoidable hospitalizations and care transitions for use in long-term care; (2) wider adoption of evidence-based care models and interventions that work in these settings; and (3) payment reforms that give providers a financial incentive to measure and improve performance. We conclude with questions deserving more research to fill gaps in knowledge on how best to improve care quality.*

### Quest for New Measures

In the search for effective strategies to increase quality of care and decrease costs, policymakers have focused on decreasing hospitalizations, through care coordination and disease management. They have also experimented with reducing readmissions to hospitals shortly after discharge, by improving transitions from hospital to home. However, most of the focus to date has been on individuals with chronic diseases who do not have major disabilities and live in their own homes. These efforts are not designed to improve care quality for frail elderly people and adults with disabilities who receive long-term care in the community or in an institution.

Leaders in the fields of long-term care and quality of care measurement recognize the importance of avoiding unnecessary hospitalization and improving coordination with other parts of the health system. A new organization, the Long-Term Quality Alliance (LTQA), brings together providers, experts in quality measurement, researchers, and consumers to make tangible quality improvements through widespread adoption of new quality measures, including potentially avoidable hospitalizations and care transitions. In 2009, the Brookings Institution, on behalf of LTQA's leadership, commissioned Mathematica Policy Research to identify concrete steps to help achieve this goal.

### What's Needed to Improve Quality?

Preventing unnecessary hospitalization is increasingly regarded as an important attribute of care quality for people receiving long-term services and support. For example, nursing home residents who transfer to a hospital are at increased risk of infection, often returning to the nursing facility more impaired and confused than when they left. One study estimated that 40 percent of all hospital admissions among nursing home residents with stays of 90 days or more could have been avoided. Another found that nearly 30 percent of hospital admissions among nursing home residents with stays of at least 120 days could have been prevented or treated in the nursing home instead. We lack studies on the extent of unnecessary hospitalization among people receiving long-term services and supports in home- and community-based settings, but the federal government is supporting several efforts to fill this gap.

Because nursing home and home- and community-based program staff have day-to-day contact with patients, they may have more opportunity than physicians or home health nurses to detect changes in a patient's condition and intervene before a hospital admission or other crisis occurs. But these providers' performance on a related quality of care indicator

has not been measured or publicly reported, nor have they had strong incentives to improve.

## Measuring Current Performance

During the past decade, researchers have developed and validated measures for avoidable hospitalization, readmissions, and care transitions in acute and post-acute care settings. The Agency for Healthcare Research and Quality (AHRQ) developed Prevention Quality Indicators (PQI) to measure the extent to which good outpatient care prevents the need for hospital care. The National Quality Forum has endorsed quality measures for hospitals to monitor rates of 30-day readmissions and assess how well patients are prepared to manage care after discharge. However, it has not endorsed measures for preventing avoidable hospitalizations and care transitions in long-term care, nor are such measures widely used by providers and payers to assess quality. For example, the federal government's Nursing Home Compare website has no measure of hospital readmissions as there is on the Hospital Compare site.

These measures are lacking partly because of disagreement on how to define potentially avoidable

hospitalizations for chronically ill people in long-term care settings. Researchers and quality experts have identified various illnesses and conditions that clinicians believe could be treated outside the hospital (see Table 1). Some measures adjust provider rates for patients' severity of illness, while others do not. There is also debate on whether certain conditions, such as respiratory infection, can be treated more easily in nursing homes than in home- or community-based settings. Potentially avoidable hospitalizations may also be measured differently for people with or without an advance care directive, which affects whether someone with a terminal condition is transferred to a hospital.

Despite all these differences, there is broad agreement that most cases of dehydration and respiratory and urinary tract infections are responsive to appropriate care in a home or institutional setting and therefore represent potentially avoidable acute care episodes. Mathematica recommended that the LTQA endorse a definition of potentially avoidable hospitalizations based on these conditions and start measuring and comparing rates among long-term care providers across settings. Tests now in progress of existing measures with Medicaid

| TABLE 1 | | | |
|---|---|---|---|
| **MEASURES OF POTENTIALLY AVOIDABLE HOSPITALIZATIONS IN USE OR UNDER DEVELOPMENT** | | | |
| **Sponsor** | **Population** | **PAH Conditions** | **Risk Adjustment** |
| Centers for Medicare & Medicaid Services (CMS)-sponsored Evercare Evaluation | Long-stay nursing home residents | Dehydration, hypertension, pneumonia, urinary tract infection | 16 variables used to adjust rates, including physical function and diagnosis information |
| CMS Value-Based Purchasing Demonstration for Nursing Homes | Long- and short-stay nursing home residents | Anemia, congestive heart failure, electrolyte imbalance, respiratory infection, sepsis, urinary tract infection | Each measure has 2–6 clinical covariates. Also uses functional level, prior hospitalizations, and demographic variables. |
| AHRQ HCBS Measures of PAH | Medicaid HCBS waiver enrollees | In development | In development. Age and sex at a minimum. |
| AHRQ Prevention Quality Indicators (PQIs) | Community-dwelling adults, not designed for long-term care; focus is on ambulatory care sensitive conditions | 13 of 14 Adult PQIs are potentially relevant to the long-term care population (excluding low birth weight) including diabetes, congestive heart failure, dehydration, hypertension, urinary tract infection, angina, and asthma. | Age and sex |
| CMS-sponsored evaluation of Money Follows the Person (in development) | Long-stay nursing home residents who transition to the community | Admission to hospital or emergency room for pressure ulcer, infection (including urinary tract infection, respiratory, other), acute psychiatric episode, medication errors, cognitive condition, diabetes mismanagement, and fall or injury. | In development, but will include demographics and claims-based indicators of chronic conditions and severity. |

Note: The AHRQ PQIs are the only measures the National Quality Forum has endorsed.

## What Works in Practice

A growing body of evidence documents effective strategies for reducing potentially avoidable hospitalizations and repeated visits to the emergency room for older adults with chronic conditions. Some programs designed to improve care transitions for this population also demonstrate success in reducing readmission rates and improving the ability of patients and family members to manage post-hospital care.

The most successful programs combine multiple strategies, including provider and patient education, care management, coordination of acute and primary care, and greater use of skilled staff. However, most of the evidence on effective interventions does not come from programs serving older adults and physically disabled people using long-term care services and supports. Only a few evaluations have focused on programs aimed at nursing home residents or those enrolled in capitated managed long-term care plans. No reliable studies have examined the effect of interventions to reduce hospitalizations among older adults and people with disabilities in fee-for-service home- and community-based settings.

The few studies of programs in nursing homes and managed long-term care plans suggest that certain factors are key to keeping people out of the hospital. For example, hospitalization rates are lower in nursing facilities with greater physician and nurse practitioner oversight of care than in those with less medical supervision. Using advanced practice nurses with specialized geriatric training also appears to lower hospitalization and nursing home use rates for people enrolled in capitated managed long-term care plans. To improve care transitions, exchange of information, coordination among providers, and medication education are important regardless of care setting. But people using long-term services and supports need extra help, particularly education and counseling for family members who provide informal care, to make effective transitions.

A promising pilot in Georgia reduced hospital admissions for nursing home residents by 50 percent over a six-month period. It did so by enhancing communication about changes in residents' conditions among nursing home providers and staff, primary care clinicians, and hospital staff. It also implemented common "care paths"–recognized treatment guidelines for conditions that commonly cause avoidable hospitalization. The project also improved educational materials for residents and families on advance care directives, palliative/comfort care, and hospice benefits. However, these interventions must be accompanied by incentives to use them or they will be of limited effectiveness.

On the basis of these findings, Mathematica recommended that LTQA actively promote widespread use of evidence-based practices for reducing avoidable hospitalizations and improving care transitions in long-term care. LTQA could create a web-based quality improvement clearinghouse to disseminate information to providers on evidence-based practices. For strategies that work well in other settings but have not yet been tested in long-term care, LTQA could develop pilots to test adaptations of the interventions. For example, transitional care programs that reduce hospital readmissions for people discharged to their homes could be adapted for people leaving nursing homes.

## Financial Incentives for Providers

Some providers want to improve quality of care for its own sake, to better serve their patients. Others need financial incentives. The Medicare Nursing Home Value-Based Purchasing demonstration, which began in 2009, is testing the extent to which higher payments to nursing homes spur improvement on a number of quality measures, including potentially avoidable hospitalizations.

Even with higher payments, nursing homes may spend more than the amount of these payments to implement staffing and other changes needed to reduce transfers to hospitals. Extra payments may not offset overall revenue reductions. Several studies have shown that current federal and state reimbursement policies actually give nursing homes incentives to hospitalize patients. For example, when Medicaid nursing home residents transfer to hospitals for three or more days, the nursing home usually receives a higher Medicare payment when the resident returns. In most states, the nursing home also receives a Medicaid bed-hold payment that covers part or all of the empty bed cost while the resident is hospitalized.

Changes in Medicare and Medicaid policies should align payment policies to give providers consistent signals regarding care practices.

Even more fundamental changes in financing may be needed to reward or compensate providers that do the right thing and penalize those that don't. For example, some argue that capitated payments covering both acute and long-term care are necessary. The Evercare health plan, operated by UnitedHealth Group, serves people who live in a long-term care facility or have severe chronic conditions and live in the community. Registered nurses and care managers (social workers) with specialized geriatric training provide enhanced primary care, develop personalized care plans, coordinate care, and communicate regularly with patients. An evaluation showed that Evercare reduced total hospitalizations by 45 percent. Some believe this result is largely due to Evercare's bearing the full financial risk for Medicare hospital costs—in other words, financial incentives were aligned so that plans would make more money by keeping patients out of hospitals and nursing homes. Even if integrated care models like Evercare are not feasible on a broad scale, nursing facilities and community-based long-term care providers need to be able to share in the savings created by reducing hospitalizations.

## Developing a Research Agenda

Well-designed demonstrations and evaluations are needed to test new approaches for preventing avoidable hospitalizations for people using home- and community-based services. We also need to explore how to adapt effective interventions from other settings to the long-term care field, scale up the most promising practices, and change underlying financial incentives.

Further research could inform the following longer-term questions:

- How should measures of preventable hospitalization and benchmark rates differ by long-term care setting or model? What are the appropriate benchmarks for comparing provider performance? What are the lowest achievable rates of potentially avoidable hospitalizations in each setting or care model?

- How should acute care transition measures be modified to assess the ability of family members and other informal caregivers to help improve transitions for people using long-term services and supports in the community?

- Which interventions or care models reduce avoidable hospitalizations and rehospitalizations, and facilitate successful care transitions? What practices do the top performers use? Are these approaches widely replicable, or do they only work under certain conditions?

- How can payment policies help ensure that those with ability to reduce hospitalizations also have tools and the financial incentives to do so? How large must financial incentives be to promote widespread adoption of effective practices? Would penalties for poor performance work as well as or better than payment rewards? Would providers improve faster if avoidable hospitalization rates were posted on government websites like Nursing Home Compare?

Progress is needed on many fronts, including wider use of existing measures of potentially avoidable hospitalizations, broader implementation of effective interventions, and general adoption of innovative payment policies. The LTQA is poised to help by bringing together providers, consumers, health plans, federal and state officials, and researchers to integrate these strategies and align efforts on a common goal–improving quality of care for people who use long-term services and supports.

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