Pittsburgh Regional Healthcare Initiative

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Cost and Quality

The double-bind in long term care

As Pennsylvania's long-term care facilities face simultaneous demands for decreased cost and increased quality, PRHI's Pete Carlson offers a perspective on how such a double-bind might be

Long-term care needs a long-term fix. This is especially true in Pennsylvania, with the nation's second highest elderly population and fourth highest per capita spending on long-term care. Because it relies on nursing homes as the primary provider of long-term care and services, Pennsylvania spends about 40 percent more than other states on its frail elderly.

Seventy percent of the 80,000 nursing home residents in the state rely on Medicaid to pay for their care, but that program is running at a $15-a-day shortfall in Pennsylvania—or $279 million a year for the nursing home residents on Medicaid.[1]

Governor Rendell estimates that the state's Medicaid program will be $400 million in debt next fiscal year. The Bush Administration proposes to trim another $60 billion from federal Medicaid spending nationwide over the next decade. These looming cuts will increase the pressure on long-term care facilities to reduce costs.

Simultaneously, these facilities face increasing pressure to improve the quality of their care. Nursing homes are required to report on a growing number of dimensions of quality of care, and much of this information is now available to the general public to promote competition among providers. Last year, the Centers for Medicare and Medicaid Services (CMS) launched a new website (www.medicare.gov/NHCompare/home.asp) that allows anyone with access to the internet to compare the performance of different nursing homes on a wide range of quality measures.

Dilemma extends to nursing

The pressure to both cut costs and improve quality creates a real dilemma for most long-term care facilities, especially when it comes to the nursing staff. While they represent the largest category of expense, nurses are also the main determinant of quality of care. A 2001 CMS study analyzing the relationship between nurse staffing levels and quality of care found strong evidence that if staffing falls below a certain threshold, the quality of care begins to deteriorate.

For nurse aides, who provide most of the hands-on care to residents, researchers found that the threshold level was between 2.8 to 3.2 hours of care per resident per day, depending on how many residents can perform some functions on their own. The study estimated that 91 percent of nursing homes were staffing below that threshold level in 2000, when the national average was 2.0 nurse aide hours per day.

Complicating this picture is the high rate of turnover among the nursing staff, averaging 49 percent for registered nurses and 71 percent for nurse aides nationwide. The vacancies and the operational instability they create further decrease the quality of care and add costs. Nationally, the total cost of the turnover of nurse aides is estimated at over $4 billion a year, or an average of $250,000 annually for each nursing facility. It costs about $5,000 to replace a nurse aide and about twice that to replace a nurse, considering the costs of advertising, interviewing, training, and using agency nurses during the vacancy.

Nurses and nurse aides represent the largest expense—but are the main determinant of quality.

Poor quality costs more

But poor-quality care is also expensive. Consider these common complications:

- **Pneumonia.** The average cost of treating pneumonia, the leading cause of hospitalization and death among nursing home residents, adds $458 to the cost of care when treated in the nursing home, $1,486 when treated in the emergency room, and over $7,000 when the resident is admitted to the hospital.
- **Pressure ulcers**. The costs of treating a pressure ulcer range from $4,000 to $40,000 for newly developed ulcers. The cost of specialized beds and mattresses to prevent pressure ulcer development can also be high, ranging from $40 to $85 per day for low air-loss beds.
- **Falls.** In a 100-bed nursing home, between 100 and 200 falls are reported each year. Four percent of these falls result in injury, such as a fracture, and each injury adds $5,325 to the cost of care.

Poor quality care can also lead to lawsuits, which are

Observations at several facilities confirm that staff spend from 1/3 to 1/2 of their time in activity that adds little value to residents.

Getting rid of unnecessary steps will free staff members to spend more time with residents.

on the rise in nursing homes, causing malpractice insurance rates to rise by 51 percent in recent years. A 2003 study found that the average recovery amount for paid claims, resolved both in and out of court, was about $406,000 per claim. The researchers estimated that expenditures on lawsuits represent about 2.3 percent of total spending on nursing home care nationwide.

Creating real change

Many quality improvement efforts in nursing homes over the past few years have emphasized resident-focused care and creating a more home-like environment. This culture change movement has led to significant improvements in resident satisfaction, as well as staff satisfaction, leading to lower turnover. However, these approaches have not led to significant reductions in costs. As cost pressures mount, there is some question whether these efforts will continue to spread to other nursing homes or be sustained.

In Pittsburgh, the Jewish Association on Aging (JAA) is experimenting with a model designed to simultaneously improve the quality of resident care, reduce costs, and improve staff satisfaction and retention. The model is an adaptation of the Perfecting Patient Care™ system developed by the Pittsburgh Regional Healthcare Initiative (PRHI), based on lessons learned from other industries and from the experience of PRHI in other healthcare institutions. (See article, below.)

The JAA approach is to start at the point of care, focusing on the needs of residents and their families, and systematically eliminate whatever is getting in the way of delivering the highest quality of care at the lowest possible cost. The management team is both driving and supporting these efforts by setting overall direction and high expectations, establishing priorities, removing obstacles, tracking progress, identifying what's working and what's getting in the way, sharing lessons learned, and providing necessary training.

Based on initial observations and experience elsewhere, the staff spend from one-third to one-half of their time in activity that adds little value to residents. By involving staff in getting rid of unnecessary steps that waste their time and effort, they will be free to spend more time with residents in value-added activities, which will increase both resident and staff satisfaction.

To evaluate the impact of these efforts, JAA has established baseline measures in resident, family, and staff satisfaction, key quality indicators such as falls and pressure ulcers, and staff turnover. They plan to calculate the savings achieved from improvements in quality and from reductions in turnover to identify what changes make the biggest difference in reducing costs, and to identify how improvements in quality affect overall financial performance.

This experiment should yield new insights into how nursing homes can get out of the double bind of lowering cost while improving quality.

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