

Briggs® National Quality Improvement/ Hospitalization Reduction Study

January 2006

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Briggs Corporation

Co-sponsored by:
National Association for Home Care & Hospice
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Knowledgeable Answers. Proven Solutions.

7300 Westown Parkway
West Des Moines, IA 50266

Dear Health Care Professional:

Vision and passion are at the core of every successful home care agency. These values are demonstrated by each agency's continual commitment of improving the lives of patients they care for every day.

The one area most agencies struggle with is also the only outcome measure that has never improved—the percentage of patients who were hospitalized. The national rate of 27.98% represents 1,034,034 home care patients hospitalized. We recognized the significance of this trend, as well as the potential for improvement. A reduction in the hospitalization rate of just 3% represents 110,129 fewer patients hospitalized and a Medicare savings of \$2.7 billion dollars.

To achieve that goal, it was critical to identify the best practices the most successful agencies used to lower unplanned and/or preventable hospitalizations. By studying agencies with hospitalization rates below 19%, we could determine what practices made them successful in reducing hospitalizations.

As the sponsor of the Briggs® National Quality Improvement and Hospitalization Reduction Study, I am pleased to provide this information to you. We would like to thank the National Association for Home Care (NAHC) and Fazzi Associates for co-sponsoring the study with us and the agencies that participated by sharing their insights and best practice strategies. It was truly a collaborative effort. Detailed in the report are the fifteen strategies identified and the results of the study.

We share your vision and passion in enabling the patients you serve to remain safe and independent in the comfort of their homes and encourage you to review the strategies in this report and adopt them in your agency as appropriate. Utilize your partners, other agencies and providers in health care settings and state and national associations for support. It is our firm belief, that together, we can reduce unplanned hospitalizations and help the entire home care field improve the quality of care provided to patients throughout the country.

Sincerely,

Merwyn E. Dan, Chairman and CEO
Briggs Corporation

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Executive Summary

There is one Home Health Compare measure that has not improved since CMS began publicly reporting quality scores for home care agencies. It is the “percentage of patients who had to be admitted to the hospital.” Unplanned or preventable hospitalization was 28 percent when CMS first began reporting this measure on November 3, 2003. It is 28 percent today.

Hospitalization rates of 28 percent mean that every year, more than one million patient episodes result in unplanned hospitalizations. While it must be acknowledged that many patients may need to be hospitalized, it is a universally accepted fact that with the proper interventions, many others could have avoided hospitalizations. It is a reality that has significant implications for patients and their families. It is a reality that causes great stress and frustration to home care agencies and their staff. And it is a reality that has led CMS to target this critical measure as one of the key measures that they are committed to improving.

Recognizing the critical nature of the problem and the serious implications that high hospitalization rates pose to the future of community based home care services in this country, Briggs Corporation, along with the National Association for Home Care & Hospice and Fazzi Associates, initiated a national study to identify best practices for improving hospitalization rates in home care agencies. The study was conducted by Fazzi Associates, a national consulting, benchmarking and best practice research firm that has conducted extensive national studies on an array of home care related issues.

Identifying Best Practice Agencies for the Study

Called the Briggs National Quality Improvement/Hospitalization Reduction Study, the study focused on generating insights on the best ways for agencies to improve their hospitalization rates. Using a best practice format, the study began by identifying the best practice agencies in the country; the 10 percent of agencies who were most successful at reducing hospitalizations.

Using the March 3, 2005 Home Health Compare scores, researchers identified the 707 agencies whose scores placed them in the top 10 percent. These were agencies whose average score was 19 percent or lower while the national average was 28 percent.

The agencies in the top 10 percent were found in all regions of the country and in 48 states (see Table 1). They included all sizes although a disproportionate number were smaller agencies. They were hospital-based and freestanding, urban and rural, profit and proprietary (see Table 2 for a breakdown by characteristics).

Note: As can be seen from Table 1, there seems to be a disproportionate percentage of eligible agencies on the West Coast, Florida being an exception on the East Coast. Four East Coast states had no one eligible: Delaware, Massachusetts, New Hampshire and Vermont with other Eastern states having low percentages of eligible agencies. There are some compelling arguments being made that the Home Health Compare scores may be unfairly biased causing negative scores in a number of states. Among the factors identified included how individual states use their Medicaid Programs, the role and impact on hospitalization rates caused by high percentages of Managed Care penetration, high availability of hospital beds/10,000 residence or unique physician practices in certain states. These were all factors beyond the scope of the study.

Table 1
Number of Agencies Most Successful at Reducing Hospitalization by State

State	Total	State	Total	State	Total	State	Total
AK	5	ID	9	MT	12	PR	2
AL	6	IL	21	NC	5	RI	2
AR	5	IN	12	ND	10	SC	1
AZ	11	KS	15	NE	12	SD	17
CA	116	KY	1	NH	0	TN	7
CO	14	LA	6	NJ	1	TX	56
CT	4	MA	0	NM	8	UT	10
DC	1	MD	2	NV	9	VA	10
DE	0	ME	4	NY	6	VT	0
FL	102	MI	22	OH	16	WA	15
GA	11	MN	17	OK	6	WI	12
HI	3	MO	21	OR	23	WV	8
IA	13	MS	4	PA	32	WY	2

Table 2

Characteristics of Agencies Most Successful at Reducing Hospitalization

Type	%	Status	%
Hospital Department	36%	For Profit	28%
Hospital Affiliated	26%	Non-Profit	66%
Freestanding	20%	Government	6%
Other	17%		
Size	%	Location	%
<\$3M	79%	Urban	30%
>\$3M	21%	Rural	43%
Mix Urban/Rural	27%		

The Process

Before initiating the study, a National Advisory Committee made up of leaders throughout the country was formed. These were people who have had extensive experience in home care and clearly understood the various factors that influenced hospitalizations. Their goal was to oversee the project and to help ensure that the process used and practices and strategies reviewed were, in fact, legitimate approaches worthy of more in depth analysis (*see National Steering Committee, page 39*).

The study involved five systematic phases. Phase I involved identifying and recruiting eligible agencies. Phase II was a national effort to identify potential practices and strategies, as well as probing questions for each practice or strategy to be studied.

One of the unique aspects of Phase II was the process used to identify “potential best practices.” Rather than guessing or taking the views of a small number of people, a major effort was made to ask interested people throughout the field to recommend what they believed to be the most promising practices.

A special National Quality Improvement/Hospitalization Reduction Study web site was developed. Using listservs from NAHC and Home Health Line, plus individual efforts by most of the home care state associations, agency leaders and staff were invited to go to the web site to make recommendations of strategies that they felt should be considered as part of the study.

In developing the web capacity, researchers had hoped to get upwards to 100 agencies to participate. The response was stunning! Nearly 400 agencies participated, generating a broad list of recommendations. Researchers conducted a theme analysis of the responses leading to the identification of eighteen distinct strategies. These strategies were then reviewed by the National Steering Committee at a two-day planning committee meeting in Chicago.

What emerged from the planning meeting was a consensus on fifteen separate strategies, plus a list of potential probing practice questions for each strategy. Strategies to be reviewed ranged from fall prevention programs to disease management programs, to strategies with discharge planners and emergency rooms, to targeted telehealth strategies.

Phase III was a survey of participating agencies to identify which of the practices identified in Phase II were “intentionally” used by respondents to reduce their hospitalization rates. Table 3 provides a summary of the fifteen practices and the percent of agencies using each practice.

Phase IV was an in-depth analysis of how agencies actually implemented their intentional practices or strategies. Phase V was the distribution phase. As defined by three sponsors, reports, presentations and information on the findings of the study are now being made available throughout the field.

Table 3
Strategies Used and Percent of Agencies Using Strategy

Strategy	%	Strategy	%
Fall Prevention	66%	Physician Relationships	37%
Front Loading Visits	64%	Data Driven Services	36%
Management Culture and Support	61%	Safety and Risk Assessment Management	33%
24 Hour Availability/ Response Program	59%	Hospital Relationships with Discharge Planning Staff	20%
Medication Management	59%	Hospital Relationships with Emergency Room Staff	8%
Case Management	52%	Telehealth	8%
Patient/Caregiver Education	48%		
Special Support Services	47%		
Disease Management Program	38%		

Five Major Findings

There were five major findings that emerged from this study. The first and biggest finding relates to the strategies identified and the practices used to implement those strategies. The other findings relate to specific aspects of the study and shared perspective. The following is brief summary of each finding:

1. Best Practice Agencies Used One or More of Fifteen Identified Strategies:

One of the earliest findings from the study related to which strategies were most often intentionally used by successful agencies. Based on national input generated in Phase II, fifteen strategies were identified. The remainder of this report provides a summary of those strategies along with important information related to each strategy.

2. Most Strategies Did Not Cost Successful Agencies Extra Money:

What was clear was that strategies or practices used by successful agencies were commonly found in most agencies. Fall prevention programs, twenty-four hour response services, patient care education, strategic physician relationships, safety risk assessments, etc. are strategies used by most agencies. What made the best practice agencies stand out was not that they used these strategies, but rather “how” they implemented them. Many of these agencies had developed unique protocols that led to better outcomes.

3. Successful Agencies Were Intentional:

Successful agencies were not passive. Best practice agencies actually identified practices that they thought had the potential of reducing unplanned or preventable hospitalizations and implemented them in a very clear and methodical manner.

4. Three Strategies Were Used by Over Sixty Percent of Respondents:

As can be seen in Figure 3, fall prevention programs (66%), front loading services (64%) and management culture and support (61%) were clearly preferred strategies. Two other strategies, medication management (59%) and twenty-four hour response (59%), were used by a significant number of best practice agencies.

5. Most Successful Agencies Used More Than One Strategy:

Best practice agencies tended to use multiple strategies to reduce hospitalizations. The average number of strategies “intentionally” used by agencies was 6.4 strategies.

If there was one other finding that is a “big picture” finding, it is this: the home care field clearly has strong role model agencies, agencies that have strategically and intentionally identified best practice strategies for reducing unplanned and/or preventable hospitalizations. These agencies have implemented those strategies in a way that has gotten high quality results. Their Home Health Compare scores are a testament to their success.

An Industry Taking the Lead

What is clear from this study is that there are agencies, many, many agencies that have made the goal of reducing hospitalizations a focal point for their quality improvement efforts. These agencies have not only been successful at reducing hospitalizations and generating lower (better) Home Health Compare scores; they have established a standard for the entire home care field.

The Briggs National Quality Improvement/Hospitalization Reduction Study is more than an effort to identify best practices used by the nation’s most successful agencies. It is a national effort directed at giving the home care field the opportunity to take charge of this challenging issue, and to use and share the knowledge, expertise and experiences of the nation’s best agencies in educating the entire field on successful options that work. In short, the Briggs Study is an effort directed at helping the home care industry accomplish one very specific goal: to finally reduce the percentage of unplanned and/or preventable hospitalizations in this country.

Overview of Report and Terminology

The remainder of this report provides a more in-depth overview of each of the fifteen strategies. They are presented in the order of which they are used by the participating agencies with the first strategy (Fall Prevention) being the strategy used by the highest percentage of participants.

Each finding is broken into six distinct sections. The following is a summary of each section along with a definition of that section. The sections are:

Definition:

This is the exact definition used to define the strategy to participating agencies. Agencies responded and provided further information about the specific strategy if they “intentionally” used this strategy to reduce hospitalizations in their agencies.

Percentage Using Strategy:

This is the percentage of agencies who report to having “intentionally” developed programs or services based on this specific strategy.

Percent of agencies are agencies that have used this strategy for twelve months or longer. Because Home Health Compare represents twelve months of data, we made the decision to only include agencies that use the practice for the twelve months or more. If the agency reported using this strategy less than twelve months, they were not included in this percentage. They are, however, listed in the Additional Consideration section.

Why This Strategy Is Important:

As we explored various strategies, the rationale for why agencies opted to develop strategies in a particular area became clear and in many cases was well substantiated. We provide an overview for why those agencies who opted to use this strategy felt that that efforts made in a particular area were clinically and programmatically warranted.

Recommendations:

The recommendation section of each strategy provides a brief set of recommendations as to how the strategy should be implemented, best practices that should be considered and other relevant information related to implementation.

Additional Considerations:

In many cases, respondents provided detailed information that helped clarify various aspects of the strategy or demonstrated some cross-strategy relationships. These insights are provided in this section.

Resources:

Additional information, further reading or complete text of sources cited.

Fall Prevention

Definition:

A strategy which uses specific interventions to help specific patients or all patients avoid the risks for falling in an effort to reduce hospitalizations.

Percentage Using Strategy:

66% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

For the elderly in particular, falls create a cascade of medical problems that can lead to a loss of independence and an increased risk of illness or injury.

While the risk factors for falls are many and varied, they mark a turning point in an older person's health and well-being, bringing about a decline in function and general well-being. Falls are the primary cause of accidental deaths for people 65 and older. One in three elderly people living in the community and 60 percent of nursing home residents fall each year. And as one ages, the chance that a fall will result in serious injury and death only increases, a statistic that spans all racial and ethnic groups. In 2000 alone, direct medical cost totaled \$179 million dollars for fatal and \$19 billion dollars for nonfatal fall injuries.¹

Even mild falls cause significant psychological reverberations in the elderly, the most prominent of which is increasing self-restriction of activities. The very fear of future falls often leads to dependence and increasing immobility, followed by a slow loss of physical strength and function and, in turn, a greater risk of falling.²

Older people are often unaware of their risks of falling, and neither recognize risk factors nor report these issues to their physicians, which makes pro-active risk-modification programs essential.³ Programs by home health agencies and elder advocates that treat the underlying causes of falls and help older adults regain strength and balance can maintain healthy and normal levels of function, enable clients to live independently longer, and reduce health care costs.⁴

Recommendations:

Develop or begin using a formal Falls Prevention Program for *all* patients served by your agency. The program should provide those doing the assessment with a tool and systematic means for determining the risk factor for each patient. For those

“On admission we do a risk factor assessment for falls and anyone who ranks high-risk receives both physical therapy to improve balance and strength and a risk-assessment of the home. The focus on this issue has really improved patients well-being.”

*Marjorie Jones
St. Francis Medical Center*

patients who are found to have a high risk of falls, initiate immediate preventative measures. The fall assessment should be included in the first visit.

Additional Considerations:

Among the National Hospitalization Reduction Study's participating agencies, Fall Prevention Program is the top strategy used among this best practice group. In addition to the 66% who reported using the strategy for one year or more, 17% of agencies reported initiating this strategy within the past twelve months.

Of those agencies that have used the strategy for twelve months or more, 76% of agencies using a Fall Prevention Program analyze specific types of data related to falls (i.e. audits, incident reports, adverse event outcome reports) to identify specific populations or characteristics of patients likely to be hospitalized. If a patient is assessed as having a high potential for falling, 84% of those using a Fall Prevention Program follow specific fall prevention interventions. Those interventions include:

- Add disciplines to the plan of care, 29%
- Provide teaching tools to the patient and/or caregiver, 28%
- Case conference, 25%
- Provide emergency response system, 12%
- Other, 6%

Resources:

Center for Disease Control and Prevention/National Center for Injury Prevention and Control. <http://www.cdc.gov>

Managing Fall Risk at Home: The Connecticut Collaboration for Fall Prevention, CCFP October 2005. <http://www.fallprevention.org/index.htm>

Delmarva Foundation for Medical Care under contract with the Centers for Medicare and Medicaid Services (CMS), [Acute Care Hospitalization Toolkit](#) in PDF

National Guideline Clearinghouse: Clinical practice guideline for the assessment and prevention of falls in older people.

http://www.guideline.gov/summary/summary.aspx?doc_id=6118&nbr=003968&string=home+AND+health

National Osteoporosis Foundation: Fall Prevention.

http://www.nof.org/patientinfo/fall_prevention.htm

Front Loading Visits

Definition:

A strategy whereby the agency increases the visit frequency or services at the beginning of care in order to reduce the potential for unplanned hospitalizations.

Percentage Using Strategy:

64% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

The physical, medical, emotional and psychological needs of patients are most acute when they return home, most often from stays in the hospital. Patients are most likely to feel most vulnerable and less sure of their capacity during the initial days or weeks after returning home. Increasing visits during the initial stages increase the likelihood that the agency will be able to deal with emerging, non-emergency medical needs and increase the patients' capacity to self-regulate and manage their own issues. This strategy helps to provide patients and their family members with the confidence needed to manage issues as they emerge rather than turning to hospitals and emergency rooms. Frequent visits by nurses and ancillary providers permit close monitoring of a patient's needs and ensure timely care designed to increase both the patient's comfort level and functioning.

Agencies must recognize that the greatest care needs and highest levels of emotional vulnerability of patients occur during their initial days or weeks of services.

Restoring physical health and enhancing comfort, rather than simply treating individual diseases, should be one of the core goals of health care for the elderly. Hospitalization leads to loss of functional independence in 25% to 50% of all older persons and only a third resume pre-hospital levels of functioning by three months. Home care agencies have a singular opportunity to introduce interventions aimed at restoring health and improving clinical outcomes.⁵

Restorative care programs and the use of comprehensive services to evaluate patient problems, understand needs for care, help arrange for services and plan follow-up enable elders to remain comfortably at home following a hospitalization or acute illness and reduce the chances of re-hospitalization.⁶ Elders who receive intensive services after hospitalization have shorter home care episodes and a generally lower use of services in other areas than those receiving traditional care, a finding by Mary E. Tinetti that points to the cost-effectiveness of the restorative model.

Restorative care, such as physical, occupational and speech therapy and social service consultations, enhance the health outcomes and day-to-day lives of older persons. Finally, more intensive services up front may be associated with a decrease in emergency department visits and hospitalizations further down the road.

Recommendations:

Agencies must recognize that the greatest care needs and highest levels of emotional vulnerability of patients occur during their initial days or weeks of services. Increasing the number of visits during the initial phases of service reduces the likelihood of a medical crisis and helps build the confidence and caring capacity of the patient and/or their family. Evaluate the care planning process used by clinicians for all of the patients receiving skilled services in your agency. Using clinical judgment, develop a comprehensive and collaborative care planning process that provides consistent and frequent visits and telephone encounters at the start of a care episode. The services provided to each patient should reflect the patient’s individual goals and the physician’s orders.

Additional Considerations:

Front loading visits/services is the second most common strategy used by participants of the National Hospitalization Reduction Study. 64% of participating agencies state that this strategy is intentionally used to reduce hospitalizations. An additional 6% of agencies report implementing this strategy within the past year. The time period when intensified services are most often provided are the first two weeks of services (see chart), according to the agencies using this strategy for a year or more.

Not only are nursing visits front loaded but all disciplines may be intensified. With 36% of agencies guided by an acuity scale and 30% guided by a specific protocol, intensified services are provided to patients with:

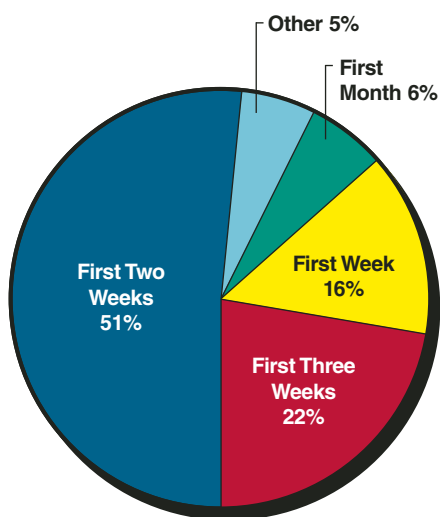
- Unstable health status, 24%
- High acuity, 19%
- No caregiver support, 18%
- Frequent past hospitalizations, 18%
- Skilled care needs, 10%
- A specific diagnosis, 9%
- Other, 3%

Front loading services are part of the plan of care for patients at resumption of care as well as the start of care for 74% of agencies using this strategy to reduce hospitalizations.

Resources:

Additional Reading: Quality of Health Care for Medicare Beneficiaries: A Chartbook Focusing on the Elderly Living in the Community, Sheila Leatherman and Douglas McCarthy, UNC Program on Health Outcomes, School of Public Health, University of North Carolina at Chapel Hill.

http://www.cmwf.org/usr_doc/MedicareChartbk.pdf



Management Culture and Support

Definition:

A strategy whereby the agency's senior managers are directly involved in monitoring and ensuring that the agency initiates strategies to reduce unplanned hospitalizations.

Percentage Using Strategy:

61% of participants have used this strategy for one year or more.

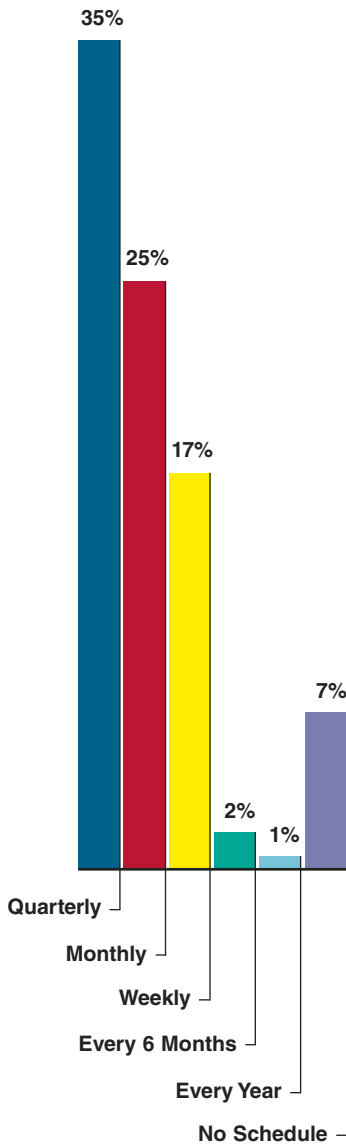
Why This Strategy Is Important:

The leaders of singularly successful, top-performing health care agencies and organizations create organizational cultures that support the clinical mission at all levels. If the leader focuses on quality; then the entire agency will be focused on quality. In many ways, the quality scores of an agency are a reflection of its leaders' awareness and willingness to "publicly" make quality a priority.

The leaders of high-performing health care organizations hold in common a number of characteristics that are associated with high quality, high efficiency and excellent performance. Maintaining a constancy of purpose, establishing clear goals and expectations and building and fostering a positive culture are fundamental components of successful agencies. The leaders of successful health care agencies are effective advocates for best-practices initiatives at all levels of the organization, from the bedside to the board of directors. One of the most valuable outcomes of effective leadership is the establishment of a culture of shared values, attitudes and beliefs regarding an agency's clinical mission and its organizational vision.⁷

Recommendations:

The leader of organizations must publicly make quality a priority. They must do it by what they say and what they do. The leader must create a culture within the agency that embraces and supports continuous improvement in all of the key areas of the organization. This culture is created by real support for improving care being demonstrated by all members of the management team. When possible, utilize horizontally and vertically integrated work groups to develop and maintain best practices. This practice will help promote a positive and empowered environment capable of handling change.



Additional Considerations:

Management culture that supports reducing unplanned hospitalizations ranks within the top five strategies used by participants of the National Hospitalization Reduction Study with 61% of participants using this strategy. An additional 8% of agencies report implementing this strategy within the past year. Of the agencies using management culture and support as a specific strategy for a year or more, 83% experience senior leaders visiting the CQI/OBQI team meetings on a regular basis and, 78% of these agencies have the senior leaders visiting the clinical area on a regular basis. Senior leaders expect to be briefed on the progress of the agency's PI/QA activities. This briefing occurs on a regular schedule. Frequency of briefing to senior managers breaks down in the graph shown at left.

If there is a barrier to the quality success of the agency's PI/OBQI projects, the person responsible for removing the barriers is the:

- Lead person within the OBQI team, 34%
- Senior leader, 26%
- Clinical manager, 29%
- Other, 11%

Performance improvement activities are promoted by senior leaders within these agencies in the following manner:

1. Talk about the projects as often as possible, 20%
2. Provide time for staff to attend work groups, 18%
3. Display results in the organization, 17%
4. Request and/or provide projects updates at all agency meetings, 16%
5. Write about the projects internally, 13%
6. Provide updates at all external PI/QA related meetings, 11%
7. Write about the projects externally, 4%
8. Other, 1%

The importance of low hospitalization rates and high quality scores is a factor used by successful agencies as part of their marketing strategy. 82% of agencies expect that their marketing and liaison staff are able to discuss the agency's current patient outcome results as part of their role.

Resources:

Total Quality Management and Outcomes Based Quality Improvement: Revisiting the Basics, Home Health Care Management & Practice, February 2005. *Subscription required.*

24-Hour Availability/ Response System

Definition:

Specific strategies built into your 24-hour response service that helps reduce the potential for unplanned hospitalizations.

Percentage Using Strategy:

59% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

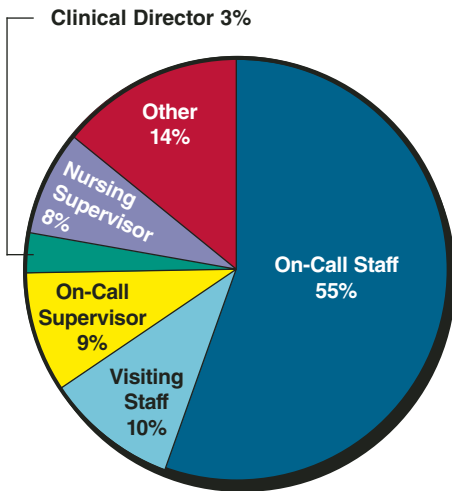
Providing around-the-clock access to health care staff improves continuity of care.

Under a grant from the Promoting Excellence in End-of-Life Care, a national program of the Robert Wood Johnson Foundation, researchers and clinicians at UC Davis Medical Center studied the consequences of 24-hour-a-day telephone access to a nurse for acute care patients undergoing cancer treatment. The availability of an on-call nurse was one component of a multifaceted care management program for patients in the end stages of life. Researchers reported that the on-call coverage improved care, led to more effective pain and system management and improved patient and family satisfaction.⁸

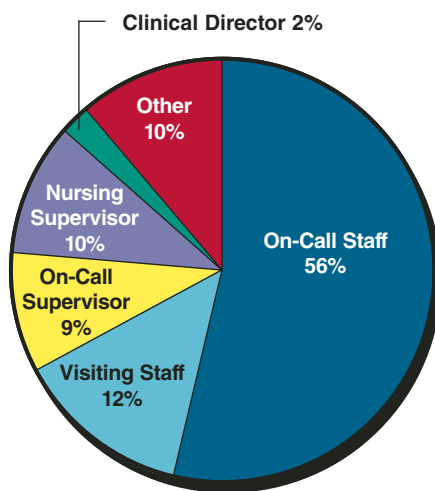
Recommendations:

Most agencies have policies dealing with 24-hour availability. Agencies must strengthen their 24-Hour Availability/Response System to insure that the communication among the patient, on-call staff and physician is timely and responsive to the patient/caregiver need. Agency staff responsible for triaging and managing patient care during non-routine hours should have available; clear guidelines for triaging, easy access to pertinent patient information and physician resources when needed. As soon as a patient is admitted to home care, the patient and caregiver should be provided with the knowledge that the agency is available at all times and on all days. Agency contact names and numbers that cover the 24-hour/7 day a week period should be provided to each patient and family member. Patients and family members should be repeatedly encouraged to contact the home care agency whenever there are any questions or concerns.

Evening On-Call



Weekend On-Call



Additional Considerations:

Among the National Hospitalization Reduction Study’s participating agencies, 24- Hour Availability/Response System is one of the top five strategies used with 59% of participants using this strategy to help reduce preventable hospitalizations. An additional 3% of agencies report implementing this strategy within the past year. Of those agencies that have used 24-Hour Availability to reduce hospitalizations for a year or more, 87% ensure that the on-call staff has access to the patient’s medical record at all times including non-business hours. During non-business hours, the most common expected call back time to the patient/caregiver ranged from 10 to 30 minutes with the majority of agencies (41%) expecting a call back to the patient within 15 minutes.

An important point to note is that when an agency establishes a firm time requirement for responding to a patient crisis, it achieves two crucial goals. First, it provides the patients with a sense of security knowing that if and when they have a crisis, there is support immediately available. This helps to decrease the likelihood that they will go to the emergency room before contacting the agency. Second, firm timelines also sends a message to agency staff. It says that in this agency, we are concerned about quality and reducing hospitalization and prioritize responding to patients when they feel they are in crisis.

While 90% of agencies using this strategy state the overall response time from physicians during non-business hours meets the needs of their patients and staff, 74% implement a standardized protocol when the physician is not available. This protocol includes:

- Sending the patient to the ER, 34%
- Making a nursing assessment visit, 32%
- Contacting the Medical Director, 20%
- Other, 14%

61% of agencies using this strategy rely on an outside answering service to answer calls made to the agency during non-business hours such as evenings, nights, and weekends. The agency staffs most often responsible for triaging calls that come to the agency during on-call hours are displayed above, left:

Medication Management

Definition:

A strategy utilizing specific interventions to assess and monitor the patient/caregiver ability and willingness to accurately and safely maintain the physician-ordered medication regimen as a means of reducing hospitalizations.

Percentage Using Strategy:

59% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

Medication-related complications play a significant role in the hospitalization of older adults and are a contributing factor in accidents and illnesses that lead to hospitalization.

Up to 30 percent of all hospitalizations and perhaps 45 percent of re-admissions among the elderly can be attributed to medication mismanagement. The cost can reach \$3,224 per episode, according to one major study.⁹ Fortunately, current research is beginning to track a reversal in the incidence of medication errors in the elderly, a finding attributed to the effectiveness of medical management education and training at all levels of the health care continuum.¹⁰ Treatment algorithms developed by doctors and pharmacists in tandem with caretaker and patient education campaigns are most effective in preventing prescription errors.¹¹ Continued vigilance in the area of medical management will ensure that patients receive adequate education both on the perils of over-medicating and the proper monitoring of vital medications. Preventing medication errors is not only possible but programs and approaches have already been successfully tested and shown to reduce the medication mismanagement.

Recommendations:

Agencies should consider developing standardized protocol for assessing the patient's medication regimen, ensuring patient adherence to the plan and ensuring patient/caregiver have adequate information on affects and counterindications of various medications. Establish and maintain a thorough and consistent medication assessment and monitoring process for all patients served by your agency. All medications should be reviewed for appropriateness and to ensure that there is no

“VNSNY Home Care has, as part of its electronic patient record, a medication management module that includes a comprehensive medication list and an automated drug utilization review system that alerts the nurse to potential, moderate, or severe drug interactions or potential duplicative therapy. The system also produces patient teaching tools. It has proven to be a valuable resource to support safe and effective management of complex medication regimens. An example of how the system has impacted our ability to provide better quality care was

demonstrated quite clearly during the recall of VIOXX from the marketplace in 2005. Within 1 hour of receiving notification of the recall by our Medical Director, we were able to query our database, identify all patients on our caseload taking VIOXX, and alert our staff to contact their patients and physicians. Without this kind of automated clinical support tool, the process of identifying and alerting patients and physicians would have been much more cumbersome, lengthy and reliable.”

Joan Marren

Visiting Nurse Service of New York

adverse medication reactions including side effects, reactions between two or more medications or herbal supplements, reactions between a food and a medication or overmedication, and addiction. If your agency uses an IS system, explore whether the system includes a modular on assessing potential adverse reactions between medications. The medication management process should go beyond an initial review and include all disciplines involved in the care plan. Effective medication management programs are focused on ensuring patient safety through ongoing medication therapy teaching and care plan oversight.

Additional Considerations:

Among the National Hospitalization Reduction Study’s participating agencies, medication management is one of the top five strategies used with 59% of participants using this strategy to reduce preventable hospitalizations. An additional 5% of agencies reported implanting this strategy within the past year. Of those agencies that used medication management for a year or more, 94% have a standard protocol for the staff to follow when reviewing medications. Patient education is supported with the use of standardized medication teaching tools in 79% of agencies that use the medication management strategy. Patient adherence to their medication regime is monitored on a regular basis by the following approaches:

- Patient/caregiver verbalization of adherence, 32%
- Creating a written check-list, 24%
- Counting medications, 17%
- Review patient diary/documentation, 16%
- Other, 11%

In addition, 88% of these agencies adhere to a specific procedure to ensure laboratory test results are collected and reviewed by agency staff on a timely basis. Because of the impact some medications have on a patient’s ongoing medication regime, 69% of these agencies also use utilize devices in the home to collect specific lab results e.g. PT/INR machines.

Resources:

“Potentially inappropriate medication use by elderly persons in U.S. health maintenance organizations, 2000-2001,” by Steven R. Simon, M.D., M.P.H., K. Arnold Chan, M.D., Sc.D., Stephen B. Soumerai, Sc.D., and others, in the February 2005 *Journal of the American Geriatrics Society* 53, pp. 227-232.

Case Management

Definition:

A specific strategy whereby specific activities and interventions that help decrease the potential for hospitalizations are built into your case management program.

Percentage Using Strategy:

52% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

Outpatient geriatric evaluation and case management programs slow functional decline of the elderly, enabling elders to live independently longer.

Strategies that slow the functional decline of the elderly will bring promising public health benefits in the post-baby boom era. Healthy aging, or maintaining the health and quality of life of older people, is dependent upon the successful organization and delivery of health care and cooperation between traditional health care settings and community care agencies. This becomes especially vital when there is a risk of adverse outcomes from unnecessary hospitalization.¹² Outpatient geriatric evaluation and management programs that assess an elder's broad range of needs - medical, functional, psychosocial, nutritional, and environmental - have proven useful in preventing hospitalization and institutionalization. This approach, in conjunction with a comprehensive plan of care implemented by health care workers, brings the rewards of greater functional ability and improved mental health.¹³ The benefits appear to be greatest when the client plays a leading role in formulating the care plan and shares in its implementation and management.¹⁴

Recommendations:

Effective case management is an essential tool in managing a patient's progress toward achieving positive outcomes and goals. Agencies should implement solid case management processes that promote regular, interdisciplinary communication among the team and a constant attention to returning the patient to homeostasis. Included within these communications is the need for all disciplines involved with patients to be alert to and communicate, particularly to the patient's case manager, when there is an indication of potential hospitalization. Given home care's current

and future mechanism for payment and quality outcome reporting every agency should have a case management program that is focused on the connection between the agency resources used during a care episode and the outcomes and goals achieved by the patient.

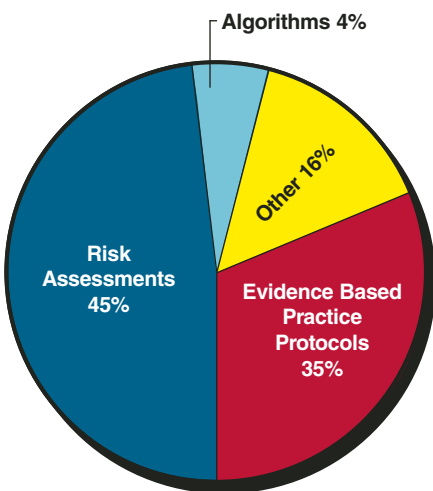
Additional Considerations:

Case management as a specific strategy was used by 52% of the participants of the National Hospitalization Reduction Study. An additional 5% of agencies report implementing this strategy within the past year. Of those agencies that used this strategy for a year or more, 78% have a case management model whereby the clinician develops and oversees the plan of care with 64% including physical therapists as case managers. The plan of care is approved by the clinical supervisor in 46% of agencies, the nurse case manager in 32% of agencies, and the PI/QA reviewer or other staff in the remainder of agencies. An admission nurse model is used by 20% of agencies using the case management strategy.

Case management meetings are conducted on all/most patients in 86% of agencies. On the average, a patient’s case is reviewed:

- Every week, 27%
- Every other week, 23%
- Every month, 22%
- Other, 28%

If tools are used to make care planning decisions, the tools include:



83% of agencies conduct the case management meetings in teams with 72% using the clinical supervisor to facilitate the case management meeting. Areas evaluated with the case management process include:

- Patient goals and outcomes, 92%
- Number of visits, 72%

Resources:

“Home Visits to Prevent Nursing Home Admission and Functional Decline in Elderly People: Systematic Review and Meta-regression Analysis” by Andreas E. Stuck, MD; Matthias Egger, MD; Andreas Hammer; Christoph E. Minder, PhD; John C. Beck, MD in the Journal of the American Medical Association, Feb. 27, 2002, Vol. 287, no. 6, pp. 1022-1028.

<http://jama.ama-assn.org/cgi/reprint/287/8/1022.pdf>. *Subscription required.*

Patient/Caregiver Education

Definition:

A strategy whereby patient/caregiver education includes a component specifically designed to help reduce unplanned hospitalization.

Percentage Using Strategy:

48% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

Supplementing traditional patient education with programs that help patients—and their caregivers—manage their health can bring marked improvements in quality of life for patients. With or without appropriate guidance, patients with chronic conditions regularly make day-to-day decisions about their program of care. Traditional patient education provides patients with important information and teaches them technical skills. Self-management education takes patient education to the next level, instructing patients with a variety of chronic conditions in the problem-solving skills to monitor their health. While elders benefit from both traditional patient education and more advanced self-management education, several studies have shown that teaching self-management skills can improve clinical outcomes and, in some cases, reduce the cost of care. Self-management education for chronic illness may soon become an integral part of high-quality primary care.¹⁵

Recommendations:

All patients admitted to home care should receive information about preventing the deterioration of their condition. Standardized teaching tools should be used whenever possible. This education is most effective if the patient/caregiver's learning readiness and ability is assessed before teaching strategies are developed. Teaching is effective when it is individualized and consistent. Before providing services, each member of the care team should be aware of the skills or knowledge needed by the patient/caregiver and the best way to deliver the education.

Additional Considerations:

Patient/caregiver education focused on helping to reduce hospitalization was used by 48% of the participants of the National Hospitalization Reduction Study. An additional 8% of agencies report implementing this strategy within the past year. Of those

Self-management education takes patient education to the next level, instructing patients with a variety of chronic conditions in the problem-solving skills to monitor their health.

agencies that used this strategy for a year or more, 84% assess the learner's ability at the start of care. The tools used to evaluate the patient/caregiver's learning ability are:

- Physical assessment, 24%
- Falls history, 19%
- Language barrier, 18%
- Depression level, 13%
- Mental status exam, 13%
- Educational preparation/highest degree held, 9%
- Other, 6%

81% provide patients/caregivers information about their disease or condition upon admission to home care. The type of educational tool most often provided to patients/caregivers is:

- Written, 30%
- Verbal, 29%
- Agency developed tool, 21%
- Purchased, third-party tool, 12%
- Video, 4%
- Other, 3%
- Audio, 1%

Additionally, 80% of agencies using this strategy have a communication tool that assures all disciplines/services involved in the plan of care are aware of the learning needs of the patient.

Resources:

“Patient Self-management of Chronic Disease in Primary Care,” by Thomas Bodenheimer, MD; Kate Lorig, RN, Dr PhD; Halsted Holman, MD; Kevin Grumbach, MD, in the Nov. 20, 2002 Journal of the American Medical Association 288, pp. 2469 - 2475. www.jama.com *Subscription required.*

“Helping Patients Manage Their Chronic Conditions,” Thomas Bodenheimer, MD, Kate MacGregor, MPH, and Clair Safiri, California HealthCare Foundation, June 2005. <http://www.chcf.org/topics/chronicdisease/index.cfm?itemID=111768>

Special Support Services

Definition:

A strategy whereby additional resources (e.g. agency, community, and/or outpatient) are used in an effort to reduce unplanned hospitalizations.

Percentage Using Strategy:

47% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

An integrated and holistic plan of care that contains appropriate agency and community resources can identify a decline in health status, improve care, and provide opportunities for greater independence and quality of life in older adults. “Improving the Care of Older Adults with Common Geriatric Conditions,” by the American Association of Health Plans, outlined specific measures health care organizations should undertake to improve the quality of life, health and functional status of older adults. Drawing upon evidence-based literature, best practices and professional judgment the report concluded that plans of care that network with community agencies to provide complementary services for older members led to improved quality of life and health outcomes in this group.¹⁶ More integrated care among providers, primary care physicians and other medical and community resources improves the care of older adults with chronic conditions.¹⁷

Recommendations:

Provide or arrange for additional services for all patients at risk for negative outcomes. Additional support and services contributes to a lower hospitalization rate by creating a safer home environment. Identifying the right additional support service is most frequently achieved with a comprehensive and holistic plan of care that incorporates all appropriate agency and community resources. In addition, the best plan of care involves the entire care team which includes the physician, agency staff, and community resources.

Additional Considerations:

Special support services as a specific strategy was used by 47% of the participants of the National Hospitalization Reduction Study. An additional 4% of agencies

“Our social work intervention program identifies what particular community resources are needed for each patient so that they can be successful living at home. These services are continuing to evolve in response to the changing needs of older Americans.”

*Maureen Hayes
Mercy Home Care
Grayling, Michigan*

report implementing this strategy within the past year. Of those agencies that have used special support services for a year or more, the determination of who receives additional support is made by:

- Case conference among the interdisciplinary care team, 25%
- Case conference between the clinician and clinical manager, 24%
- Primary clinician's decision, 23%
- Physician request, 20%
- Standardized clinical pathway/protocol, 6%
- Other, 1%

The special support services most often arranged by the agency for high risk patients are:

- Social services, 20%
- State elder care services programs e.g. MOW's, chore, and personal care, 20%
- Home safety evaluation by agency physical therapist once admitted, 20%
- Personal care assistant/homemaker service, 17%
- Dietician/nutritionist, 8%
- Home safety evaluation before agency admission, 6%
- Visiting physician or nurse practitioner, 4%
- Palliative care/bridge program, 3%
- Other, 3%

Disease Management

Definition:

A strategy whereby disease management programs (a system of evidenced-based, coordinated healthcare interventions and communications) for populations with specific diseases are used to improve patient care and decrease unplanned hospitalizations.

Percentage Using Strategy:

38% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

A disease management program based upon periodic evaluation of the whole patient can delay or prevent declines in health and functional status in elders. Disease management programs vary widely in the specific techniques and tools they use, but most share the common goals of educating patients to understand and monitor their disease and coordinating care among a team of health care providers. The best disease management programs provide feedback and support to physicians about the patients' status between office visits as well as current information on best practices for particular patients.¹⁸ The goal of disease management is to pinpoint chronic conditions more quickly, treat them more effectively, and thereby slow the progression of disease through a strategy encompassing screening, monitoring, and education, the coordination of care among providers and settings, and the use of best medical practices. Identifying risks early on is certain to improve the quality of life in elderly people, researchers say, with the added—but less certain—benefit of reducing the long-term cost of care.¹⁹

Recommendations:

Consider developing formal disease management programs for your top diseases. Develop and use specific tools, practices, or programs to meet the needs of the majority of the agency's population. Focusing on the specific needs of your patients will lead to individualized care and better patient outcomes. While disease management can include various approaches, offering specialized, competent clinical resources to the staff and/or patients is essential.

“We’ve worked very hard to develop standard practices related to specific diagnoses. For instance, with cardiac patients we have a Hearts at Home Program that ensures a standard of evaluation and care that has worked to keep many of our heart patients out of the hospital. In addition, we’re able to provide the kind of detailed information to physicians that allow better intervention without always having the patient admitted to the hospital for evaluation.”

Jan Bersted

Mercy Home Care Cadillac, Michigan

Additional Considerations:

Disease management was used by 38% of the participants of the National Hospitalization Reduction Study. An additional 5% of participants report initiating a disease management program within the past year. Of those 38% of agencies that use disease management for more than a year, 72% use certified clinical specialists to consult with the visiting staff and 63% use certified clinical specialists to make visits to patients needing their specialty.

The top five certified clinical specialists available at agencies that use this strategy are:

- Wound/Enterostomal, 31%
- Dietician, 19%
- Infusion Therapy, 15%
- Diabetes Care, 9%
- Psychiatric Nursing, 6%

53% of agencies using this strategy also have specific disease management programs. The top ranked conditions or diagnoses included in disease management programs are:

- CHF, 18%
- Cardiac Care, 15%
- Diabetes Care, 15%
- Wound Care, 14%
- Joint Replacement, 11%
- COPD, 10%

In addition, 44% of these agencies use clinical pathways and 4.4% use telehealth as part of the disease management program.

Resources:

Investigation of Increasing Rates of Hospitalization for Ambulatory Care Sensitive Conditions Among Medicare Fee-for-Service Beneficiaries Final Report.

http://new.cms.hhs.gov/Reports/Downloads/McCall_2004_3.pdf

Disease Management Association of America. <http://www.dmaa.org/>

Physician Relationships

Definition:

Any strategy used with your patients' physicians to help reduce unplanned hospitalizations.

Percentage Using Strategy:

37% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

The medical care of older adults is enhanced by a close working relationship between the physician and the home health agency. Because home health care provides many of the same services an elder would otherwise seek through a community hospital, patients are best served when the physician and home health agency forge a close working relationship.²⁰ The success of home health care arrangements are dependent upon a web of providers, an arrangement that also depends, in many cases, upon an informal network of family members who help manage care and take on certain care giving functions that are not covered by the elder's insurance. The physician's role as advisor in the plan of care and as an advisor to both home health staff and family members plays a vital role in the overall quality of care.²¹

Recommendations:

Develop partnerships with key physicians known to the agency to create an effective and reciprocal relationship between the agency staff and the local physician. Using this strategy enhances the care planning process for each patient which ultimately leads to better patient outcomes. Strong physician relationships are also a major catalyst for referrals.

Additional Considerations:

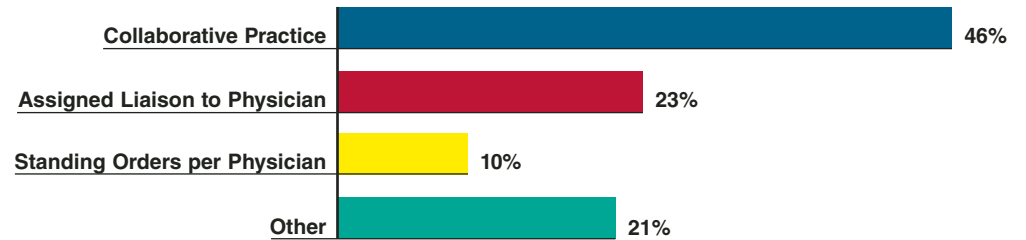
Enhancing the physician relationship was used by 37% of the participants of the National Hospitalization Reduction Study. An additional 2% of agencies report implementing this strategy within the past year. Of those agencies that have developed strategies with physicians for more than a year, 38% have a specific protocol to follow when there is threat of a patient being hospitalized. 72% employ

“My relationship with home health staff is one of mutual respect. I know our patients are best served when I can count upon home health staff to identify potential medical problems early, which enables me to provide a timely assessment and plan of care.”

Lise Glading-DiLorenzo
Community Physician
Valley Medical Associates

a Medical Director. The Medical Director is made aware of all agency PI/QA activities in 91% of agencies using this strategy.

The approaches used to enhance physician relations to reduce unplanned hospitalizations include:



According to those that use this strategy, 76% reported that most physicians in their area are not provided with incentives to reduce hospitalizations among their patients.

Data Driven Strategies

Definition:

A strategy in which an agency monitors and uses specific types of data in an effort to reduce unplanned hospitalizations.

Percentage Using Strategy:

36% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

Data-driven strategies, such as outcome-based quality indicators can substantially reduce the rate of hospitalization. The new era of outcome-based data-driven healthcare is propelled by the dual goals of cost-containment and improved quality of care. In an effort to slow the steadily escalating cost of health care major purchasers of health care are insisting—to varying degrees—that providers employ data-driven methods, such as Outcome-Based Quality Improvements (OBQI) to design treatment plans. The era of sure payment for services by individual physicians and health care organizations is being supplanted by a model of payment that links revenues to demonstrable performance.²²

Integrating OBQI in the day-to-day treatment of older adults in home health care can substantially decrease hospitalization rates and a bring about corresponding, though less dramatic, increases in function and mental health, according to a major national study conducted between 1995 and 2000 by University of Colorado’s Center for Health Services Research. The study has implications for OBQI-guided care nationwide. The integration of OBQI data and outcome enhancement components in the day-to-day operations of home health clinicians resulted in a 22 percent decrease in hospitalization rates over the four-year period and a 5 percent increase in common indicators of health and well-being. The OBQI impacts on patient outcomes were observed despite a significant drop in patient care revenues.²³

Recommendations:

Every agency intending to improve outcomes and maintain best practices should use data to understand the agency’s current position, track progress over time, and compare against national best practice agencies. Agencies that do not have a fully integrated IS system should develop their own strong internal clinical data tracking system. For those who have integrated IS systems, agencies should fully utilize the

“Improving our outcomes has become much more efficient as we have more data to focus our efforts.”

*Mary L. Lenzini, BSN, MA, CHCE
Visiting Nurse Association of
Southeastern CT*

data collection capacities of their system. Agency leaders and staff should understand how to use data to measure performance given the increasing pressure on all agencies to demonstrate improvements.

Additional Considerations:

Data driven strategies were used by 36% of the participants of the National Hospitalization Reduction Study. An additional 7% of agencies reported implementing this strategy within this year. Of those agencies that have used this strategy for one or more years, 96% collect and analyze patient outcome data on a regular schedule. The time points when data review is required by most of the agencies are:

- Quarterly, 57%
- Monthly, 36%

84% of agencies using data driven strategies to reduce hospitalization have a staff or management position focused on data and patient outcomes. The types of data collected and analyzed are:

- Record reviews, 16%
- OBQI reports, 16%
- Incident reports, 15%
- CQI/PI initiatives, 12%
- Staff competency evaluations, 12%
- Third party benchmarking reports, 9%
- Home health profit margin, 4%
- Medicare profit margin, 3%

Resources:

National Quality Forum, National Voluntary Consensus Standards for Home Health Care. <http://www.qualityforum.org/>

Home Health Compare: What's It Mean and What's Happening, Home Health Care Management & Practice, December 2005.

<http://hhc.sagepub.com/cgi/reprint/18/1/70>. Subscription required.

Overview of Risk Adjustment and Outcome Measures for Home Health Agency OBQI Reports: Highlights of Current Approaches and Outline of Planned Enhancements, Peter W. Shaughnessy, PhD and David F. Hittle, PhD.

<http://www.tmf.org/homehealth/RiskAdj1.pdf>

Safety and Risk Assessment

Definition:

A strategy used to assess the risk of hospitalization for patients, and for those patients rated as high risk, specific interventions are implemented to reduce the potential of unplanned hospitalization.

Percentage Using Strategy:

33% of participants have used this strategy for one year or more.

Why This Strategy Is Important:

Older adults are disproportionately affected by accidental injury, representing 26 percent of all injury deaths and 30 percent of all hospitalizations due to injury according to the Centers for Disease Control. Although most injury-prevention programs focus on falls, the major cause of accidental injury in older adults, the population is at risk of injury from a number of accidental means, including fires, car crashes and other life-threatening events.²⁴ According to the Centers for Disease Control, more than 7,500 seniors die in car crashes each year. And while older people are less likely than drivers age 16 to 34 to be involved in crashes that kill other people they are more vulnerable to injury and death.²⁵ A comprehensive safety and risk assessment program that considers both medical and environmental health risks can provide significant health benefits in older adults.

Recommendations:

Agencies should conduct comprehensive safety and risk evaluations on each patient as often as the patient's health status and environment requires. Further, we recommend that the falls risk assessment be integrated into the agency's overall safety and risk assessment management program. The results of safety and risk assessments should be used in the care planning process to ensure each patient remains safely in their home. In addition, incorporating this assessment data in the agency's PI activities will strengthen the quality of care provided to all patients.

Additional Considerations:

Safety and risk assessment strategies were used by 33% of the participants of the National Hospitalization Reduction Study. An additional 5% of agencies reported

implementing this strategy within this year. Of those agencies that have used this strategy for one or more years, 54% have a formal process for assessing patients at risk for hospitalization. The criteria used by these agencies to identify high-risk patients are:

- OASIS assessment, 17%
- Specific diagnosis or conditions, 16%
- Fall Risk assessment, 14%
- Clinical wound/skin assessment, 13%
- Functional status assessment, 13%
- Nutritional status assessment, 11%
- Mental status assessment, 8%
- Agency specific protocol for risk assessment, 5%
- Other, 4%

The agencies using a formal assessment process require a safety/risk assessment at the following time points:

- Admission, 21%
- Resumption of care, 21%
- Recertification of episode, 20%
- Significant change in the plan of care, 19%
- Discharge from service, 10%
- Discharge from one discipline, 7%
- Other, 2%

45% of agencies using this strategy have a specific model of care in place to treat patients identified as high risk for declining safety or health status. Additionally, 77% of these agencies analyze specific types of data (i.e. incident reports, adverse event outcome reports, etc.) to help identify specific populations or characteristics of patients likely to be hospitalized.

Hospital Relationships: Discharge Planning Staff

Definition:

A specific strategy used with a referring hospital discharge department(s) that is designed to help reduce the potential of unplanned hospitalization.

Percentage Using Strategy:

20% of participants have used this strategy for one or more years.

Why This Strategy Is Important:

Potential consequences for elders with serious health problems include increased risk for preventable hospital readmissions and nursing home placement.

A 2004 study that focused closely on comprehensive discharge planning for older patients with CHF found that discharge planning plus post discharge support for older patients with CHF cut readmission rates by 25%, and was responsible for a 13% relative reduction in mortality. The results were achieved without increasing the cost of medical care.²⁶ The evidence, which was gathered from a meta-analysis of 18 studies representing data from 8 countries, and more than 3,000 patients, refuted a major 2000 study by the Department of Veterans Affairs Cooperative Study Group on Home-Based Primary Care that showed no definitive benefit to comprehensive discharge planning.²⁷ The findings from the meta-analysis support routine application of comprehensive discharge planning plus post-discharge support for older inpatients with acute diseases to optimize the transition from acute hospital care to home.

Recommendations:

Develop and maintain a collaborative and effective communication system with local hospital discharge planners which benefits the patient, the agency, and the referring hospital. Building strong relationships with all members from across the continuum of care helps keep the patient goals and outcomes at the center of the processes. It also helps to ensure that the patient has a clear and accurate understanding of what to expect when they begin home care services.

“The VNA and Hospice of Cooley Dickinson works collaboratively with the Care Management (Discharge Planning) Department of the hospital in order to ensure that patients appropriate for home care are identified and an effective plan of care is put into place prior to the patient leaving the hospital in order to achieve a successful outcome in the home.”

Willa J. Fasten

VNA & Hospice of Cooley Dickinson

Additional Considerations:

Relationships with hospital discharge planning staff were used by 20% of the participants of the National Hospitalization Reduction Study. An additional 3% of agencies reported implementing this strategy within this year. Of those agencies that have used this strategy for one or more years, 71% use liaisons on site at referring hospitals while 37% use liaisons at referring long term care facilities.

Relying on a clear and effective communication process is used by 98% of agencies using this strategy to reduce hospitalizations.

74% of the agencies report that the liaison is a clinician. Most agencies, 95%, report using standardized referral criteria. 95% also report that they do not accept every referral made to their agency. The criteria used to screen out a potential patient is:

- Inability to meet patient's needs, 37%
- Unsafe patient situation, 31%
- Other, 24%

Resources:

A Simple Plan: Discharge planning improves the odds. Jane Erwin.

<http://www.nurseweek.com/features/99-6/discharg.html>

Hospital Relationships: Emergency Room Staff

Definition:

A specific strategy used with a local hospital emergency department(s) that is designed to help reduce the potential of unplanned hospitalization.

Percentage Using Strategy:

8% of participants have used this strategy for one or more years.

Why This Strategy Is Important:

Based on the information related to hospital admissions originating from the emergency department (ED), developing close working relationships with ED staff may help home health agencies reduce hospitalizations of new and existing patients.

Approximately half of hospitalizations continue to be routine—patients enter the hospital directly. The second most common source of admission is through the emergency department, comprising 43% of all admissions. The remaining 7 percent of hospital admissions are from another hospital, another health care facility, or of unknown origin.

Admissions through the ED tend to be more expensive and serious. Since 1997 admissions through the ED rose by 18 percent. The highest rate of admission through the ED is seen among the uninsured—61 percent of uninsured hospitalizations begin in the ED. The mean charge for stays that originated in the ED is \$19,000, which is 12 percent greater than the average charge for hospital stays overall.

The percentage of people admitted to the hospital through the ED increased for all age groups, and the increases are largest for elderly patients. For patients over age 45, the proportion admitted through the ED increased the most. For example, for patients 80+, 55 percent were admitted through the ED in 1997, as compared with 64 percent in 2002; this finding represents a 19-percent increase over the 5-year period.

The most common reason for hospitalizations among stays billed to Medicare is congestive heart failure, followed by pneumonia and coronary atherosclerosis.²⁸

Recommendations:

Develop and maintain a collaborative and effective communication system with local hospital emergency departments. Building strong relationships with all members from

across the continuum of care helps keep the patient goals at the center of the processes. By creating an awareness of your desire to reduce unplanned hospitalizations, increased collaboration with this setting should help improve the chances that hospital staff will work with you to reduce the possibilities of a patient being hospitalized whenever this appropriate.

Additional Considerations:

This strategy was used by a only a small number of participating agencies, 8% of the participants of the National Hospitalization Reduction Study. An additional 1% of agencies reported implementing this strategy within this year. Of those agencies that have used this strategy for one or more years, 6% have a process in place whereby they receive a call from the emergency room before the patient is admitted to the hospital. 67% of agencies using this strategy have a liaison in the emergency room setting. Of those that use a liaison, 71% report using a clinician in the liaison role.

“The National Hospitalization Reduction Study has clearly moved patient admission to the hospital to the forefront. We are currently choosing to focus our efforts on case management. We believe that this will impact many of the areas identified in the study. We anticipate that standardization of our case management approach will lead to improved outcomes in the areas such as medication management and visit frequency. Additionally we are in the process of formalizing our falls prevention program. The NHRS is certainly acting as a catalyst to move the industry forward. Each of us is focusing more and more on the evaluation of our processes and the impact not only on the patient but on the outcome measures as a whole. This is moving the industry forward.”

Cathy Barr

HealthEast Home Care and Senior Care Pharmacy

HealthEast Care System

Resources:

Investigation of Increasing Rates of Hospitalization for Ambulatory Care Sensitive Conditions Among Medicare Fee-for-Service Beneficiaries Final Report.

http://new.cms.hhs.gov/Reports/Downloads/McCall_2004_3.pdf

Telehealth

Definition:

A strategy whereby telehealth (devices that transmit video images and/or patient data to the agency from the patient's home) is used as part of the care plan in an effort to improve patient outcomes and potentially reduce unplanned hospitalizations.

Percentage Using Strategy:

8% of participants have used this strategy for one year or more years.

Why This Strategy Is Important:

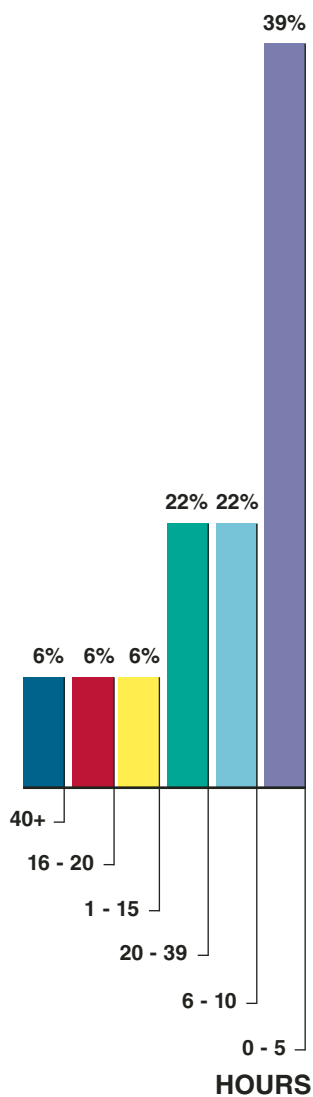
Telemedicine has the potential to provide timely, essential monitoring of patients' medical condition in the home and, under the proper circumstances, can be a cost effective means of gathering essential medical data and providing effective disease management.²⁹ While few research-based studies exist on the infusion of telehealth into the home health setting, a March 2005 report by Medicare Payment Advisory Commission (MedPAC) estimated that telehealth is used by 5 to 10 percent of home health agencies, primarily for diabetes and chronic care patients.³⁰ The slowly emerging technology has proven beneficial even for patients with acute and chronic conditions. An industry study of patients with congestive heart failure, coronary heart disease, diabetes, or chronic obstructive pulmonary disease showed that home monitoring prevented hospitalization and emergency room visits,³¹ while a 2000 study by Kaiser Permanente, the largest non-profit health care organization in the United States, reported that video technology in the home health care setting maintained high-quality care with health benefits to patients and cost savings to the agency.³² As a substitute for some hands-on care, remote technology has the cost-saving potential and may improve the flow of information between the client, caregivers and the home health care staff.

Recommendations:

Telehealth offers new potentials for home care agencies to improve quality and reduce unplanned hospitalizations. Agencies should consider how technology could be used to enhance the care provided by agency staff. Providing services that focus on efficiency, regular patient monitoring, and preventative care will result in better patient outcomes. As the telehealth field continues to evolve, we would expect an increase in the numbers and use of telehealth.

Additional Considerations:

Telehealth was used by a only a small number of participating agencies, 8% of the participants of the National Hospitalization Reduction Study. An additional 3% of



agencies reported implementing this strategy within this year. The lower percent of telehealth may be a reflection of the fact that only 5% to 10% of all agencies presently use telehealth. Of those agencies that have used this strategy for one or more years, 50% have a written tele-care plan to supplement the usual plan of care. Also, 72% of agencies using telehealth target certain patient populations for telehealth contact. The populations most often targeted are:

- CHF, 32 %
- COPD, 30%
- Diabetes, 10%
- Wound care, 10%
- Fall risk, 5%
- Other, 12%

The patient data transmitted by the telehealth devices is monitored by:

- Clinicians assigned to monitor central telehealth stations, 32%
- Clinical supervisors, 29%
- Nurse case managers, 19%
- Specialty nurses, 10%
- Other, 10%

The amount of time each week that the telehealth monitor spends on telehealth is illustrated in the chart shown at left:

Regardless of who monitors the telehealth station, the patient information must be shared with the care team. The information from telehealth devices is shared by:

- Entered in the medical record, 24%
- Faxed to the physician, 24%
- Case conference, 22%
- Voice mail message, 19%
- Email message, 7%
- Other, 3%

Resources:

Telemedicine Information Exchange. <http://tie.telemed.org/homehealth/articles.asp>

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