Be Prepared:

Reducing Nursing Home Transfers Near End of Life

California HealthCare Foundation

ISSUE BRIEF

March 2011

Executive Summary

Few nursing homes have developed a process for helping residents understand and document their end-of-life wishes nor established adequate procedures to care for residents when they are dying. As a result, nursing home residents too often are hospitalized during the last weeks and months of life, resulting in unnecessary suffering and the potential for increased health care costs.

A recent regional project addressed inappropriate nursing home-to-hospital transfers toward the end of life through improved advance care planning, including the use of Physician Orders for Life-Sustaining Treatment (POLST). The PREPARED project, a collaboration between acute care and skilled nursing facilities, sought to reduce avoidable hospitalizations and demonstrate a business case for this model. The intervention included hospital-supported clinician educators assigned to nursing homes to provide education, role modeling, and coaching of key staff. Nursing homes were divided into three groups or cohorts of six facilities, with each facility receiving six months of direct intervention from their assigned team member. An outside evaluator audited the success of the project.

The PREPARED project showed a statistically significant increase in the nursing home as the site of death for terminal patients and reduced hospitalizations from 9.6 per month per facility to 8.9. There was an increase of 6 percentage points in family members' overall rating of their dying loved one's quality of care and a 13 percentage point decrease in the number of family members who thought that their dying loved one was not always treated with respect. There were no statistically significant changes in process measures, such as written advance directives and use of Do Not Hospitalize and Do Not Resuscitate orders, although there was a mild trend toward increased use of hospice services after the intervention.

The project identified a number of factors that inhibited further advances in participating nursing homes, including: the disruptive effect of the state survey process; financial incentives to transfer residents to acute care facilities and disincentives to care for them in place; lack of knowledge, skills, and time of nursing home staff in the provision of advance care planning and pain and symptom management; and insufficient nursing home administrative and physician support.

Several conditions were noted as contributing to significant improvements in certain facilities, including: sustained administrative support and leadership; facility advance care planning champions; involved physicians; focus on quality improvement; and opportunities for resident and family education.

Regarding the fiscal impact for hospitals and health systems interested in sponsoring a PREPARED-like model, the project report describes three ways that they can benefit from preventing nursing home transfers: (1) by avoiding the increased cost of caring for patients in the acute care hospital; (2) by avoiding the losses commonly incurred for inpatient deaths; and (3) by avoiding readmissions that may expose sites

to penalties once provisions of the Patient Protection and Accountable Care Act are implemented. The report also identifies the environmental variables most helpful for a particular hospital achieving revenue-neutral or improved performance.

The PREPARED project was shown to be a credible model for collaborative efforts between hospitals and nursing homes. Improving nursing home advance care planning processes, with particular emphasis on the use of POLST, can improve the quality of care delivered to frail, elderly residents. Furthermore, a program such as PREPARED can convey operational and fiscal benefits to sponsoring hospitals, with return on investment expected to increase as a result of reforms at the state and national levels.

Introduction

American culture avoids discussions about death and dying, and nursing homes are no different. Most seriously ill or frail individuals who reside in nursing homes receive little guidance in making plans for their end-of-life care. Few facilities have developed a thorough process to talk with residents and their families about end-of-life wishes or have put in place adequate procedures to care for residents when they are dying.

As a result, even when contrary to their wishes, nursing home residents too often are hospitalized during the last weeks and months of life.[1] When residents are transferred to an emergency department without guidance about their goals of care, they may receive treatment that is more burdensome than beneficial, resulting in patient suffering and family distress. Furthermore, these transfers may contribute to increased health care costs with no improvement in patient outcomes.

Improving nursing home practices and procedures pertaining to end-of-life care is not a small challenge. A 2008 study by the California HealthCare Foundation identified barriers to good end-of-life care in California nursing homes. Among those noted were low execution of advance directives, lack of clarity regarding resident end-of-life preferences, inadequate staffing levels, poor staff education and training in end-of-life issues, fear of litigation and regulatory citation, and avoiding attention and stigma from a death in the facility.[2]

This issue brief describes a regional project to address inappropriate nursing home-to-hospital transfers toward the end of life through improved advance care planning. The project, called PREPARED (Preparing Residents for End-of-Life Plans and Respecting End-of-Life Decisions), provides important lessons for communities interested in ensuring that nursing home residents receive the care they want in the most appropriate setting. The business case for hospitals investing in a PREPARED-like program is also examined.

Background

In 2003, in response to a Sacramento area hospital's concerns about the number of nursing home transfers to its facility, a pilot project was conducted to try and reduce inappropriate transfers.[3] The project was constructed as a collaboration between acute care facilities and nursing homes.

For eight hours per week, a hospital-funded nurse consultant mentored staff in one nursing home in advance care planning, goals of care discussions, and education and consultation on pain and symptom management. The hospital also contracted four hours per week with a palliative care physician to support the project. Within six months of implementation, hospital transfers from that nursing home decreased 56 percent and patient/family satisfaction measures improved. The pilot was expanded in 2004 to a second nursing home, with similar results.

Based on these promising results, in 2007 the California HealthCare Foundation funded the Coalition for Compassionate Care of California (CCCC) to test the

replicability of the model.[4] Through a collaboration of three hospital systems and 18 nursing homes in the Sacramento area, the PREPARED project's goal was to ensure that nursing home residents receive the most appropriate end-of-life care by reducing avoidable hospitalizations and enhancing palliative care in nursing homes.[5,6] Key project objectives were to increase advance directive use, improve staff skills in facilitating advance care planning, and establish a community end-of-life care standard for area nursing homes. Additionally, the project aimed to demonstrate the business case for this model to facilitate its sustainability and spread.

Process and Intervention

The three Sacramento area hospital systems provided four to eight hours per week of clinician educators (RN or MSW) with expertise in end-of-life care for work in designated nursing homes. With input from hospital management, nursing home partners were recruited, focusing on facilities that had a high volume of discharges, had existing relationships with project team members, were in close proximity to the hospitals, and/or were particularly interested in participating. An initial kick-off meeting for the project was held to garner a broad base of support; 50 representatives from hospital systems, nursing homes, and state survey and ombudsman departments attended.

Since nursing home involvement was voluntary, several actions supported their participation: requiring a signed memorandum of understanding with nursing home leaders; sending an informational letter to the nursing home medical director and all other physicians who had patients at the facility; introducing assigned team members to facility leaders and staff; and identifying champions within nursing homes who could serve as project "cheerleaders." Project leaders and team members met bi weekly to review implementation efforts, discuss challenges, and adapt the intervention as necessary. Informal communication occurred between team members and their hospital system leaders throughout the project.

Nursing homes were divided into three sequential groups or cohorts of six facilities, with each facility receiving six months of direct intervention from their assigned team member. Education was provided to the administrator, nursing director, and clinical staff during the six-month period and follow-up support was offered through the remainder of the project. Team members developed action plans tailored to their assigned nursing home and visited the facility weekly to provide education and support.

CHCF contracted with Brown University to independently evaluate the project.[7] PREPARED team members conducted chart extractions to gather data for the outside evaluators, who also made site visits with participating nursing home and hospital systems.

Elements of the PREPARED Intervention

- Establish a memo of understanding with nursing home admin/director of nursing.
- Provide advance care planning (ACP) education to nursing home staff; introduce POLST.
- Help develop improved ACP process for residents.
- Provide role modeling and coaching of nursing home staff to improve their ACP facilitation skills.
- Offer family education forums.
- Encourage physician support and participation.
- Identify nursing home champions to ensure sustainability.

POLST Plays an Important Role

POLST (Physician Orders for Life-Sustaining Treatment) is a physician order that gives patients more control over their end-of-life care. Produced on a distinctive bright pink form and signed by both the physician and patient, POLST specifies the types of medical treatment that a patient wishes to receive towards the end of

life. It encourages communication between providers and patients, enables patients to make more informed decisions, and clearly communicates these decisions to providers. As a result, POLST can prevent unwanted or medically ineffective treatment, reduce patient and family suffering, and help ensure that patients' wishes are honored.

The pilot project used the POLST form as its primary communication tool; the PREPARED team introduced it in 2007 as an option for participating nursing homes. In 2009, California law required all health care professionals and providers, including hospitals, nursing homes and first responders, to honor POLST orders.

Findings

The PREPARED product data were assessed in the aggregate, with each cohort of six facilities analyzed together. Evaluators compared data collected prior to the intervention from 15 to 20 patient charts per facility with data collected after the intervention. In addition, they conducted interviews prior to the intervention with 103 family members of persons who died in the nursing home and 86 interviews with family members following the intervention.

To assess the impact of the project, evaluators analyzed outcome measures, including:

- Reduction in hospitalization rates;
- Increase in nursing home as site of death;
- Improved perceptions of quality of care by decedent family members; and
- Medical care consistent with advance directives and residents' wishes.

Process measures were also analyzed, including:

- Rate of written advance directives;
- Orders to limit hospitalization; and
- Increased utilization of hospice services.

The PREPARED project showed a statistically significant increase in the nursing home as the site of death for terminal patients (from an average of 5.2 deaths per facility per month to 6.0), indicating that more patients at the end of life were cared for in the nursing home setting than previously. In addition, the overall hospitalizations decreased from 9.6 per month per facility to 8.9.[8] While not statistically significant taken as a whole, by the third cohort of nursing homes the decrease in hospitalizations did reach statistical significance.[9]

Taken together, these findings suggest that deaths shifted from hospitals to nursing homes. This is important because the nursing home may be the better location to receive care from staff who know and respect the person's psychological, emotional, and spiritual needs.

Regarding family perceptions of care for their dying loved one, there was an increase of 6 percentage points in family members' overall rating of quality of care as excellent. Also, the number of family members who thought that their dying loved one was not always treated with respect decreased by 13 percentage points. Nevertheless, these improvements were not statistically significant.

Finally, there were no statistically significant changes in process measures such as written advance directives and use of Do Not Hospitalize (DNH) and Do Not Resuscitate (DNR) orders. However, there was a mild trend toward increased use of hospice services after the intervention.

Discussion

While there was evidence of improvement in several key metrics, the results did not show the overall degree of impact demonstrated in the pilot project. An environmental scan conducted by the project evaluators indicated that the Sacramento area may be ahead of other parts of the state in terms of end-of-life planning, which

may have lessened the project's impact. Data show that DNR and DNH rates in the Sacramento area are well above state and national averages, and the intensity of care is less; both are trends that occurred over the years prior to the intervention.[10,11] Therefore it is plausible to suggest that other areas in California might have a greater effect in terms of reduced hospitalizations from this intervention than did the Sacramento region.

The decrease in hospitalizations by the third nursing home cohort suggests a maturation of the project. This correlates with continued improvement and modification of the intervention based on team members' experience and needs of the nursing homes. Also, the advent of POLST legislation on January 1, 2009, requiring all health care professionals and providers to recognize and follow POLST orders, led to an increase in POLST adoption from the first cohort to the third. An "All Facilities Letter" from the California Department of Public Health also brought needed attention to this issue by introducing POLST to California nursing homes and notifying them of the law's provisions.

Factors that Inhibited Change

The project team pointed to several circumstances that inhibited change, including the following.

Work disruption. Facility surveys conducted by California's Department of Health Services result in considerable work disruption. All elective activities, including quality improvement efforts, are generally put on hold for the duration of the survey, which can extend for many weeks. Several of the study facilities were involved in surveys during the intervention and their active participation was curtailed as a result.

Misaligned incentives. There can be financial incentives for nursing homes to transfer residents to acute care facilities, and disincentives for caring for residents in place. When a nursing home resident is transferred to a hospital, Medi-Cal continues paying the nursing home "bed-hold" rate for three days to ensure there is space available when the resident is discharged. When the person returns to the nursing home, the facility receives a higher per diem rate due to the acute care stay. These financial implications reduce the motivation to care for the resident in the nursing home.

Lack of ACP knowledge. Many nursing home staff have very limited knowledge of end-of-life issues, minimal time for attending trainings or developing new skills, and cultural backgrounds that can inhibit accepted processes for end-of-life care. Some nursing homes provide little advance care planning (ACP) beyond brief conversations upon admission by a non-health care professional. And there often is a lack of understanding about ACP, such as the distinction between an advance health care directive and an intensity of care form.

Lack of administrative and physician support. A lack of administrative and physician support significantly reduced the level of participation from some nursing homes. One facility dropped out of the intervention when upper-level management withheld its backing. Some nursing homes were reluctant to invest additional staff time to ACP and POLST education without enthusiastic support of the POLST form and process from their physicians.

Lack of symptom management knowledge. The project was constrained by its inability to provide adequate education and consultation on pain and symptom management. Although this more intense level of activity contributed to the success of the pilot due to support from a contracted physician, it was not possible to replicate fully that part of the intervention with the time and resources allocated.

Limited time. Finally, team members had a limited number of hours to spend in each facility and lacked enough flexibility in their work schedules to leverage all mentoring and educational opportunities. Coupled

with a relatively short intervention period of six months per facility and a fast turn-around time period for the evaluation, these time constraints may have prevented more positive change.

Factors that Supported Change

While the evaluation did not measure change or analyze outcomes in individual nursing homes, there were facilities that made significant changes in their ACP processes as a result of the project. Corporate leadership in several nursing homes instituted new policies and procedures and replaced their intensity of care forms with POLST. Some of those facilities now have nearly all their residents with completed POLST forms and systems in place to make sure POLST is stored and retrieved appropriately. Other facilities are instituting communication tools introduced by team members during the intervention.

Those nursing homes that were most likely to integrate improved ACP strategies demonstrated the following.

Sustained administrative support and leadership. The top-down culture of most nursing homes requires that management be on board for any intervention to be successful. Strong administrative involvement helped ensure broad awareness of and participation in PREPARED. One nursing home's director of staff development required staff to attend educational programs; another facility's administrator and director of nursing set an example for licensed staff by attending all educational programs provided by their team member. Additionally, low turnover among key staff helped sustain initial efforts.

Facility champions. These supporters varied among nursing homes (administrators, physicians, staff development officers, nurses, social services designees), but those facilities with leaders who were passionate about improving ACP and committed to the project were more likely to make positive change. In one nursing home, the unit secretary, as the person responsible for many process issues, became a cheerleader for proper storage and retrieval of advance directives and POLST forms.

Involved physicians. Discussing patient goals of care and documenting end-of-life wishes is best served with engaged physicians. Those nursing homes with active physician champions saw an increased focus on effective ACP and use of POLST, which set the tone and expectations for other staff.

Quality improvement focus. Nearly all the nursing homes eventually adopted POLST in their facilities. Most facilities that embraced this tool early did so because of its potential to advance end-of-life care that was resident-directed and person-centered.

Opportunities for resident and family education. While not all nursing homes conducted educational forums for residents and family members, those that did discovered that they generated a level of excitement that carried over into richer ACP conversations with staff.

In addition to efforts to improve nursing home ACP expertise and capacity, the project sought to determine the business case for hospital systems to invest in similar interventions in order to reduce preventable transfers from nursing homes.

Hospitals Benefit from Avoiding Preventable Transfers

Hospitals and health systems can benefit from preventing nursing home transfers: (1) by avoiding the increased cost of caring for patients in the acute care setting; (2) by avoiding the losses commonly incurred for inpatient deaths; and (3) by avoiding readmissions that may expose sites to penalties once provisions of the Patient Protection and Affordable Care Act (PPACA) are implemented.

Lower Per-Patient Costs

The clearest benefit from avoided nursing home transfers occurs in integrated health systems, such as Kaiser Permanente, where the system is at risk for all health care costs for enrolled patients, regardless of care setting. Rather than securing compensation for each admission, hospitals in integrated systems receive no additional revenue when patients are transferred from nursing homes. To the contrary, their costs increase due to the higher expense of acute care versus nursing home days or more costly out-of-network hospital per diem charges when beds are full at the acute care site.

Looking forward, the PPACA includes incentives for physicians to join forces in accountable care organizations (ACOs) which, like today's integrated health systems, will have a patient-centered revenue structure. Since these organizations are intended to accept risk for the total cost of care received by a population of patients, ACOs will be positioned to better coordinate patient care and reduce unnecessary hospital admissions. If ACOs provide high quality care and reduce costs to the health care system, they retain a portion of the savings.

Fewer Inpatient Deaths

Hospitals typically lose money on most inpatient deaths, which tend to have lengths of stay and costs that are three times greater than those of the overall hospital population. Additionally, as the primary payer for the vast majority of patients who die in acute care facilities, Medicare uses a fixed reimbursement system that is typically insufficient to cover hospitalization costs. Therefore, with every avoided inpatient death, the hospital can expect to avoid a net loss.

While there will be tremendous variation in costs and revenues for terminal admissions across cases and sites, a hospital should be able to recoup its investment in a program like PREPARED. Hospitals can measure the degree to which they would benefit from avoiding inpatient deaths by evaluating their net margin (net revenues less total costs) for cases transferred from nursing homes that ended in death. If the hospital loses money on such cases and if a sizable number of the transfers come from four to six specific nursing homes, a program like PREPARED that targets staff at those sites has a high probability of paying for itself.

For integrated systems, where margin and revenues are less pertinent factors in assessing the business case for possible interventions, the benefits of avoided inpatient deaths can be appreciated as fewer inpatient days. By avoiding preventable transfers the health system is able to keep more acute care beds available and reduce the likelihood of needing to use out-of-network beds.

Fewer Readmissions

Preventing nursing home transfers also can help reduce 30-day readmissions to acute care hospitals. The PPACA includes provisions that will change the way the Centers for Medicare and Medicaid Services (CMS) compensates hospitals for these readmissions. Beginning in FY 2013, CMS will penalize hospitals that have excessive readmission rates for patients with three common conditions: heart failure, acute myocardial infarction (AMI), and pneumonia. In FY 2015, the list of monitored conditions will expand to include patients with several other conditions often found in nursing home patients.

The fiscal impact of these changes to reimbursement could be significant and serve as powerful motivators to prevent avoidable readmissions. Starting in FY 2013, CMS is empowered to withhold up to 1 percent of total Medicare payments when individual hospitals exceed the expected number of readmissions for any of the monitored conditions. The penalty cap increases to 2 percent of payments in FY 2014, and up to 3 percent in FY 2015 and thereafter.

Weighing "The Stick"

The formula for determining Medicare penalties is based on the number of patients with the applicable condition, the base payment CMS made for those patients, and the percentage of readmissions that were above the expected rate. For example, if a hospital sees 100 patients with pneumonia, and on average is compensated $5,000 for each case, and the number of readmissions was 25 percent higher than expected, then the penalty for these cases would be: 100 × $5,000 × 0.25 = $125,000.

For the purpose of this example, assume the hospital had the exact same incidence of excessive readmissions for heart failure and AMI patients, meaning they face an excessive reimbursement penalty of $375,000. The portion of that $375,000 the hospital is at risk for would depend on the total amount of compensation the site received from CMS. If the hospital received $35 million in total payments from CMS in FY 2013, their penalty would be capped at $350,000, or 1 percent of the total revenues they received from CMS. However in FY 2014, when the cap moves to 2 percent of total CMS payments, that site would be subject to the entire $375,000 penalty, if there were no change in the incidence of readmissions.

The specter of reduced compensation for Medicare cases has made efforts to avoid preventable readmissions an organizational priority for many health systems and hospitals. These changes in readmission compensation are putting community hospitals in a position similar to that of integrated systems, where risk for health care costs does not end at the time of hospital discharge. Ensuring that patient preferences are appreciated and adhered to in post-discharge settings takes on new importance when readmissions put the hospital at risk for losses, or greater losses, on Medicare cases. Revenues are still linked to services, but those services would be offered at a loss, or a greater loss, if the overall number of readmissions exceeds the expected level. Given that private payers commonly model reimbursement after CMS practices, it is highly likely that these changes will be mirrored in other plans as well.

An intervention like PREPARED could be one tool for hospitals to use to prevent avoidable readmissions. Since nursing home residents have multiple chronic conditions like the cardiovascular and lung diseases that are targeted for monitoring and are at risk for multiple acute care stays in the last months of life, the PREPARED approach could help protect hospitals from excessive readmission rates and the accompanying financial penalties.

Factors that Support Hospital Success with PREPARED

The likelihood of an intervention like PREPARED to achieve revenue-neutral or improved performance at a particular hospital is enhanced when the following environmental variables exist:

- The health system/hospital is at risk for all patient health care costs, regardless of treatment setting.
- A relatively small number of nursing homes (four to six) are responsible for a sizable proportion of transfers to the acute care facility, in particular transfers that occur in the last year of life and end in death.
- The hospital has a history of experiencing negative margins (losses) on inpatient deaths.
- The hospital has an active inpatient palliative care program. In addition to ensuring the availability of skilled providers who could serve as educators, developing relationships with nursing home staff would improve the efficacy of ACP begun in the inpatient setting. The hospital-based clinician educators would share knowledge of palliative care and ACP principles with nursing home staff, while learning what nursing home staff need from acute care sites to ensure continuation of ACP.

Conclusion

The PREPARED project serves as a credible model for future collaborative efforts between hospital systems and nursing homes. Improving nursing home staff competence and confidence in managing advance care planning issues, with particular emphasis on use of POLST as a tool for ensuring compliance with patient wishes, can improve the quality of care delivered to frail, elderly residents. The project brought about modest changes in area nursing homes and laid the groundwork for further advancements. The lessons learned and progress to date should be instructive and encouraging to communities considering similar efforts.

Furthermore, a program such as PREPARED can convey operational and fiscal benefits to sponsoring hospitals, with return on investment expected to increase as adjustments to CMS reimbursements take effect in coming years. In particular, as hospitals assume increased risk for readmissions, interventions such as PREPARED that ensure quality end-of-life care in the post-discharge period should be a cost-effective and attractive option for hospitals.

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About the Foundation

The California HealthCare Foundation works as a catalyst to fulfill the promise of better health care for all Californians. We support ideas and innovations that improve quality, increase efficiency, and lower the costs of care. For more information, visit us online at www.chcf.org.

Endnotes

1. A National Institute of Aging study found that 37 percent of nursing home resident hospitalizations are potentially avoidable. "Avoiding Unnecessary Hospitalizations For Nursing Home Residents," ISSN: 1524 – 7929 Volume: 15, February 01 2007.

2. California HealthCare Foundation Issue Brief, "Improving End-of-Life Care in California's Nursing Homes," The HSM Group, Ltd., September 2008. www.chcf.org

3. Project conducted by Catherine McGregor, M.S.N., R.N.; contact cate_mcgregor@att.net for details.

4. The Coalition for Compassionate Care of California is a partnership of regional and statewide organizations dedicated to the advancement of palliative medicine and end-of-life care. www.coalitionccc.org

5. Participating hospital systems included Catholic Healthcare West, Kaiser Permanente, and Sutter Health, with University of California, Davis Health System providing some staff support during the last cohort.

6. Participating nursing homes: Asbury Park Nursing and Rehabilitation Center; Casa Coloma Health Care Center; College Oaks Nursing and Rehabilitation Center; Eskaton Care Center Fair Oaks; Eskaton Care Center Greenhaven; Eskaton Care Center Manzanita; Eskaton Village, Carmichael; Folsom Convalescent Hospital; Foothill Oaks Care Center; Gramercy Court, Horizon West – Carmichael (formerly Walnut Whitney Care Center); Horizon West – Lincoln (formerly Lincoln Manor); Horizon West Sacramento Center for Subacute Care (formerly Heritage Care Center); Horizon West - Sierra Hills (formerly Sierra Hills Care Center); ManorCare Health Services; Mission Carmichael Health Care Center; Oak Ridge Healthcare Center; Sutter Oaks Nursing Center – Midtown.

7. Evaluation for internal use conducted by David Dosa, M.D., M.P.H.; Pedro Gozalo, Ph.D.; Joan M. Teno, M.D., M.S.; Center for Gerontology and Health Care Research, Warren Alpert School of Medicine of Brown University. July, 2010.

8. A reduction of .73 per facility per month when adjusted for months with influenza activity. Brown University evaluation.
9. Change in hospitalizations per facility per month: Cohort 1, +2.63; cohort 2, -0.67; cohort 3, -4.51). Brown University evaluation.
10. DNH orders for cognitively impaired nursing home residents in Sacramento's Hospital Referral Region (HRR#7) steadily increased from 2000 to 2004; by 2004 one in four persons with advanced dementia had a DNH order, a trend not seen in other California HHRs. Brown University evaluation.
11. Dartmouth Health Care Atlas data regarding care delivery during the last 2.5 years prior to death shows that between 2000 to 2003, the Sacramento health care region provided far fewer hospital days (9.85 days) to decedents during the last six months of life than the national (11.68 days) and state (11.75 days) averages. The Sacramento region provided more intensive care days per decedent (3.32 days) over the last six months of life then the national average (3.24) but significantly less then the California average (4.64). Brown University evaluation.