Improving Rates of Advance Directive Discussions Among Managed Care Nursing Home Enrollees

Vincent W. DeLaGarza, MD, Ross E. Andersen, PhD, John Mach, MD, and Richard G. Bennett, MD

Background: Discussions about advance directives should be offered to all nursing home residents. Managed Medicare programs for nursing home residents allow for the development of performance improvement initiatives to ensure that these discussions occur and are documented.

Purpose: To assess the effectiveness of an intervention to increase discussion and documentation of advance directives for enrollees in a managed Medicare program for nursing home residents, and to evaluate whether this intervention affected preferences for cardiopulmonary resuscitation (CPR) and hospitalization among enrollees.

Subjects: Participants were 4,248 enrollees in a managed Medicare program in 1996, and 6,598 enrollees in 1997, in Georgia, Maryland, Massachusetts, Minnesota, Arizona, and Florida.

Design: Descriptive study of a quality improvement initiative.

Methods: A chart review was conducted in the fall of 1996 to determine the prevalence of documented advance directive discussions among all enrollees, and the preferences regarding CPR and hospitalization. Because the discussion rates varied across sites, and were lower than expected, each site developed strategies to improve advance directive discussion and documentation. One year later, a similar survey was conducted to determine the efficacy of the interventions, as well as to assess the impact, if any, on rates of desire for CPR and hospitalization.

Results: Documented discussions of advance directives increased across the six sites from 73% to 85% ($P < 0.001$). The overall percentage of patients desiring CPR did not change following the intervention (18%). However, there were geographical differences in the desire for CPR among enrollees, with those in Minnesota (8%), Arizona (11%), and Florida (12%) desiring it the least, and those in Massachusetts (20%), Georgia (29%), and Maryland (29%) desiring it the most. The overall percentage of desire for hospitalization decreased from 65% to 62% ($P < 0.001$). Enrollees in Georgia were most likely to want hospitalization (87%), and enrollees in Minnesota were the least likely to want hospitalization (57%).

Conclusions: In a managed care program, documentation of advance directive discussions can be increased with focused efforts. Overall, most enrollees did not desire CPR, but a majority desired hospitalization. Despite the similarity of interventions and program philosophy across sites, significant geographic variations in desire for CPR and hospitalization remained. (J Am Med Dir Assoc 2001; 2: 105–109)

Keywords: Advance directives; nursing home; managed care
provided to long-stay nursing facility residents. The concept was initially developed in 1987 by a group of NPs in Minnesota in order to improve the quality of health care delivered to this population, and the Health Care Financing Administration approved a demonstration project of the model in up to nine different cities in the 1990s. The implementation of this project has recently been reported.2

Managed care for nursing home patients is a relatively new phenomenon, and little is known about how it compares to traditional care in nursing facilities. There is some evidence that it may decrease the hospitalization rate for nursing facility patients without increasing mortality.3 Indicators of quality have not been compared between the managed care and fee-for-service systems, but as part of its quality assurance program, EverCare collects data for several clinical indicators including whether or not discussions of advance directives have been documented.

Addressing patient and family desires for treatment is important for maintaining the dignity and comfort of any patient. Historically, efforts to identify patient desires for treatment have been less than ideal, and the Patient Self Determination Act (PASDA) was passed by Congress in 1991 to rectify this situation. This act mandates that future treatment be addressed for patients in nursing homes and hospitals. However, despite the passage of PASDA, many residents of nursing homes still do not have their wishes for future treatment documented.4,5 The purpose of this investigation was to describe a quality improvement intervention designed to promote advance directive discussion and documentation among enrollees in a managed Medicare program for long-stay nursing home patients, and to determine if the intervention affected the desire for CPR and hospitalization among these enrollees.

METHODS

Study Population

Residents from approximately 100 nursing facilities in Georgia, Maryland, Massachusetts, Minnesota, Arizona, and Florida who enrolled in a managed Medicare program. In the fall of 1996, 4,248 enrollees were surveyed. One year later, following continued planned growth in the program, 6,598 enrollees were surveyed.

Description of the Managed Medicare Program

Long-stay nursing home residents and/or their responsible family members or guardians were solicited by specially trained managed care employees to enroll in the managed Medicare program. Each nursing facility with enrollees was certified by Medicare and Medicaid. In this managed care model, nurse practitioners or physician assistants employed by the managed care company worked with facility physicians to provide care for enrollees. Both NPs and PAs were licensed by the state in which they practiced, and credentialed by the managed care program. Most facility physicians were trained in internal medicine or family medicine, and all were credentialed by the managed care program. NPs or PAs were employed by the managed care program, and underwent standardized instruction at hiring to ensure their understanding of the model of care. In addition, regular in-service training occurred for NPs and PAs on a variety of topics including the importance of obtaining advance directives. Each NP or PA typically cared for 80–120 enrollees. NPs or PAs provided daily visits, Monday through Friday, for chronic care and management of acute illnesses. Physicians, PAs, and NPs were encouraged and expected to evaluate complicated patients together on regular occasions and to function as a team.

Study Design

The EverCare model stresses the importance of planning for care at the end of life and when acute illness occurs, and therefore, discussion and documentation of advance directives are a foundation of the program. All NPs and PAs received instruction in this regard, and were familiar with the methods of establishing advance directives for enrollees by direct discussion with those residents who had the capacity to make their own decisions, or through the involvement of family members or guardians for those who lacked capacity. No formal programs were in place in any site to determine whether or not an enrollee had capacity to make advance directives, but since more than 70% of national enrollees were diagnosed with dementia, and all were functionally dependent, family members or guardians were involved in the vast majority of discussions. Language barriers, if any, were addressed through the use of appropriately fluent practitioners or translators.

This was a descriptive study using data collected before and after a formal effort was made to increase documentation of advance directive discussions. An initial survey in 1996 revealed that documentation of advance directive discussions was only recorded for 57–83% enrollees (overall average 73%) across the six sites. Each site developed an intervention program to increase the percentage of enrollees with whom a discussion of advance directives had occurred, and to ensure proper documentation. The efforts varied by site, but included advance directive seminars for NPs and PAs; letters sent to providers including practice guidelines and recommendations to discuss and document advance directives; and letters to providers, NPs, and PAs with results of record reviews for individuals and peers regarding compliance with documentation standards. No data were available in this study with respect to the identity of advance directive discussants.

In both years, data were collected by NPs and PAs who were employees of the health plan, and who were given formatted instruments to tabulate documentation of advance directive discussions with either the enrollee, a family member, or surrogate. Information on the desire for CPR and hospitalization was also collected. Senior health plan personnel with medical training reviewed the data at each site and nationally.

CPR meant instituting basic life support and the calling of 911 units in the involved locales and/or the use of automatic external defibrillators or stand-alone standard defibrillators already present within some nursing homes. The potential benefit, risks, and likely outcome of hospitalization were also discussed with patients. For those who did not wish to be
hospitalized, the managed care program could arrange for treatment including intravenous hydration or medication in the nursing home. Sophisticated monitoring devices (apart from pulse oximetry in some facilities) were not present within most nursing facilities, and patients or their surrogates were informed that treatment and monitoring would not be at the same intensity as within a hospital. (Comfort care was also an option for some of those who did not want to be hospitalized, and included symptomatic treatment of pain and dyspnea without an intent to cure. No data were reviewed pertaining to the percentage who opted for comfort care.)

**Statistical Analysis**

Statistical analysis was carried out using SPSS Version 9 software. Differences in variables between 1996 and 1997 were compared using chi-square analysis.

**RESULTS**

The number of enrollees in each of the six sites is shown in Table 1. The mean age for all enrollees was 85 years and did not vary across sites. The overall percentages (ranges across sites) of enrollees by racial category were 87% (74–92%) white, 11% (1.5–25%) African-American, 1.4% (0.3–6.1%) Hispanic, and 0.3% (0.1–0.4%) other racial group. The percentage of African-American enrollees was highest in Georgia (25%) and Maryland (23%), and Arizona had a significantly higher ($P < 0.01$) proportion of Hispanic enrollees (6.1%) compared to the other sites.

**Changes in Rates of Documentation of Advance Directive Discussions**

Figure 1 illustrates the regional and overall changes in the prevalence of a member having a documented discussion of advance directives. Advance directive documentation occurred in 73% of enrollees in 1996. This proportion increased significantly to 85% ($P < 0.001$) in 1997 after each site established programs to improve the rates of discussion and documentation of advance directives.

Regional differences in the likelihood that site-specific interventions increased documentation in the proportion of enrollees for whom advance directives were addressed. The proportion increased in Georgia, Maryland, Massachusetts, and Arizona ($P < 0.001$), but was unchanged in Minnesota and Florida ($P = 0.367$). No data were available to comment upon or compare the efficacy of the intervention programs carried out in the six sites.

**Changes in CPR Preferences**

Figure 2 illustrates the regional and overall changes in the prevalence of enrollees desire for CPR. The overall rate remained unchanged at 18% in both years, but regional differences remained in the proportions of enrollees desiring CPR following the intervention. Significant decreases in desire for CPR occurred in Georgia and Massachusetts (both $P < 0.001$), where baseline desire for CPR were among the highest initially. In Maryland, Minnesota, Arizona, and Florida, the proportion of enrollees who desired CPR did not change (all $P = 0.570$).

**Changes in the Desire for Hospitalization**

Figure 3 illustrates the regional and overall changes in the prevalence of enrollees who reported desiring hospitalization. The overall desire for hospitalization decreased after the intervention (65% versus 62%, $P < 0.001$). Regional differences in the proportions of enrollees desiring hospitalization...
were observed, with decreases occurring in Maryland, Massachusetts, and Arizona (all P < 0.001)—all sites where the baseline desire for hospitalization was greatest; no change in Minnesota (57% versus 59%, P = 0.247); and an increase in Florida (45% versus 58%, P < 0.001).

**DISCUSSION**

The principal finding of this study was that discussion and documentation of advance directives can be increased with education of health care providers. Even though the initial overall rate of discussion and documentation among the managed care program enrollees (73%) was higher than previously reported averages for nursing home residents, further improvement occurred after the targeted interventions. Although geographical differences in the documentation of advance directive discussions were present among enrollees at baseline, after the intervention these differences had virtually been eliminated. The high initial rate in Minnesota is reflective of the maturity of the site where the program began, and the high initial rate in Florida is explained by the initiation of the program in that state by a small group of physicians committed to the model.

Despite the fact that similar interventions occurred at each site, interesting geographical differences remained following the intervention among the sites with respect to the percentage of enrollees who desired CPR and hospitalization. The higher rates of desire for CPR among enrollees in Georgia (29%) and Maryland (29%) may be reflective of the relatively higher percentage of African-Americans in these two sites as compared to sites with the lowest rates, Minnesota (8%) and Arizona (11%). Racial and geographical differences in desire for life-prolonging treatment have been reported previously, and although this effect was not rigorously explored in this project, our data are consistent with these earlier reports. Similarly, geographical differences remained with respect to desire for hospitalization ranging from 43% to 77%. There is no obvious explanation for these geographical differences, but the fact that more than a third of enrollees overall do not want to be hospitalized is a finding that shows the importance of offering this option to nursing home residents and their surrogate decision-makers as part of advance directive discussions.

The findings of this study may not be generalizable to all nursing home residents. Enrollees in this program were long-stay residents, i.e., nursing home residents admitted for a short post-acute hospital stay were not eligible for enrollment in the managed Medicare program. Since many long-term care facilities now provide services for a significant number of short-stay patients who may have quite different desires with regards to advance directives, comparison of our findings with other future reports must be done with caution. In addition, those who enroll in a managed care program may have other characteristics that make them different from typical nursing home residents, or from those who decline to enroll. No data were available to allow for such comparisons to be made in this project.

Finally, no data pertinent to the quality of the advance directive discussions that were documented were available for analysis. Similarly, questions could not be addressed regarding whether or not any differences existed between enrollee and family member/guardian preferences for cardiopulmonary resuscitation and hospitalization, as has been reported in other studies of advance directives. Therefore, the results of this study should be interpreted in the light of its limitation as a straightforward quality assurance project that shows that documentation of discussions of advance directives can be increased, and not interpreted as making any commentary as to the quality of discussions documented.

In summary, enrollees in a managed Medicare program for nursing home residents were more likely to have advance directives documented than typically reported for nursing home residents, and an intervention to increase documentation of advance directive discussions was effective in further increasing this rate. Geographical differences in patient desires for CPR and hospitalization existed before the intervention, and persisted after it. Future studies should examine the barriers that health care providers face in discussing advance directives with patients, and attempt to explain the reason for the regional differences in the desire for CPR and hospitalization.

**REFERENCES**


Navajo mother and daughter. Chinle, Arizona, Jeffrey M. Levine, MD, photographer.