

THERAPEUTICS

An advance directive program in nursing homes reduced health services utilization without affecting patient satisfaction

Molloy DW, Guyatt GH, Russo R, et al. Systematic implementation of an advance directive program in nursing homes. A randomized controlled trial. JAMA. 2000 Mar 15;283:1437-44.

QUESTION

What is the effectiveness of systematic implementation of an advance directive program in nursing homes?

DESIGN

Randomized {allocation concealed*}†, {blinded (patients)}†,* controlled trial with 18-month follow-up.

SETTING

6 nursing homes in Ontario, Canada, with > 100 residents each.

PATIENTS

1292 patients who were nursing-home residents.

INTERVENTION

6 nursing homes were matched in pairs on key characteristics, and within each pair, each home was randomized to either an advance directive program (3 intervention homes, 636 patients) or to usual policies of advance directives (3 control homes, 656 patients). The intervention homes used an advance directive program called Let Me Decide (LMD), which consisted of health

care choices related to life-threatening illness, cardiac arrest, and nutrition. The LMD advance directive program involved educating hospital and nursing home staff, patients, and families about advance directives. Head nurses on each ward classified patients as being mentally competent, incompetent, or "otherwise"; competent patients and next of kin of incompetent patients had the choice of completing the LMD advance directive. Residents who were rated as "otherwise" took the Mini-Mental State Examination; those who scored ≥ 16 were given the LMD, and the LMD was provided to next of kin of those who scored ≤ 15 .

MAIN OUTCOME MEASURES

Patient and family self-reported satisfaction with health care and health care utilization. All costs were reported in Canadian dollars.

MAIN RESULTS

527 intervention-home (83%) and 606 control-home (92%) patients or their family members agreed to participate; 444 intervention-home (70%) and 374 control-

home (57%) patients completed advance directives. Intervention homes had lower mean per-patient number of hospitalizations (0.27 vs 0.48, $P = 0.001$) than did control homes, fewer hospital days (2.61 vs 5.86, $P = 0.01$), lower hospital costs (\$1772 vs \$3869, $P = 0.003$), and lower total health care and implementation costs (\$3490 vs \$5239, $P = 0.013$). Intervention-home and control-home patients did not differ for satisfaction with health care or rate of death (24% vs 28%, $P = 0.20$).

CONCLUSION

Systematic implementation of an advance directive program in nursing homes reduced utilization and costs of health care services without affecting patient satisfaction.

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*See Glossary.

†Information provided by author.

COMMENTARY

Molloy and colleagues have made a commendable effort to determine the effects of systematically pursuing the implementation of advance directives by nursing home residents. Health care providers in the nursing homes and hospitals were alerted to the advance directives. The study showed that using advance directives led to less utilization of hospitals (with the associated cost savings) without adverse outcomes on patient satisfaction or mortality.

Teno (1), an investigator in the Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatments (SUPPORT), praises Molloy and colleagues for their well-conducted study and promising results. She points out, however, that the data presented are insufficient to conclude that the directives that were implemented provided adequate palliation if the decision was not to hospitalize. Other outcomes could have been considered, such as quality of life rather than patient satisfaction.

Furthermore, although 90 of the directives were completed by patients (49% of those interested and deemed capable), families of patients who were "mentally incompetent" (78% of those interested)

completed 305 directives. Choices by patients were similar to those made by their families. Previous studies, however, have shown that patient values for poor health are greater than anticipated by their families, and the value of advance directives completed by family members has been questioned (2).

Perhaps the most interesting finding is that with a systematic educational effort, patients, their families, and health care providers can be made more aware of the many management options available, even when technology-intensive interventions other than cardiopulmonary resuscitation are no longer desired. This awareness can be achieved without excessive cost.

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References

1. Teno JM. Advance directives for nursing home residents: achieving compassionate, competent, cost-effective care. JAMA. 2000;283:1481-2.
2. Tsevat J, Cook EF, Green ML, et al. Health values of the seriously ill. SUPPORT Investigators. Ann Intern Med. 1995;122:514-20.