

Evaluating a Training Program for Rural Doctors and Nursing Home Staff on Safe Medicine Use for Patients with Dementia and Nursing Home Residents

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What was the research about?

Nursing home residents and people with dementia can have symptoms such as restlessness or aggression. Some types of medicines, like antipsychotics, may help treat these symptoms. But these medicines have serious side effects, especially in the elderly, and raise the risk of falls, confusion, and even death.

In this study, the research team wanted to learn if training staff at nursing homes and doctors' offices would change how often people use these medicines. The team offered training materials to nursing homes or doctors' offices in 29 counties in rural Iowa. The training included information about the risks of these types of medicines and the opportunity to talk with specialists. The team compared symptoms and medicine use among people with dementia and nursing home residents in the 29 counties with those in 10 counties that weren't offered the training.

What were the results?

Offering the training didn't change how often people with dementia and nursing home residents used these types of medicines. It may have reduced symptoms for some nursing home residents.

Nursing home residents in counties that had the training were

- More likely to receive doses of antipsychotics that were too high
- Less likely to have symptoms such as restlessness and aggression

Who was in the study?

The study used Medicare data from 6,275 nursing home residents and 4,845 people with dementia who lived in the community. All lived in rural counties in Iowa.

What did the research team do?

The research team offered the training differently in the 29 counties. In 10 counties, county extension staff delivered the materials in person. In 19 counties, the team mailed it to nursing homes and doctors' offices. In all 29 counties, nursing home staff and doctors could have calls or video meetings with a pharmacist or nurse who were experts in dementia. These specialists could answer questions about medicine and how to plan treatment for patients' needs.

The research team looked at medicine use before and for up to 15 months after the training. They compared results in counties that had the training with those that didn't.

Doctors, nursing home directors, quality improvement groups, Alzheimer's groups, and a patient family member helped plan the study.

What were the limits of the study?

The research team first presented the training at conferences in 2011 and 2012. Clinicians and nursing home staff may have been familiar with the information. The study took place at the same time as a national project to improve dementia care in nursing homes. That project might have affected the study results. The team had data about symptoms for nursing home residents only. The study looked only at medicine paid for by insurance.

Future research could look at other ways to improve safe medicine use for the elderly.

How can people use the results?

Clinicians and nursing home directors can use the results when considering ways to improve safe use of medicines for nursing home residents and patients with dementia.

To learn more about this project, visit www.pcori.org/Carnahan013.