An Educational Approach to Improving Guideline Adherence

Gifford DR, Holloway RG, Frankel MR, Albright CL, Meyerson R, Griggs RC, Vickrey BG. Improving adherence to dementia guidelines through education and opinion leaders. A randomized, controlled trial. Ann Intern Med 1999;131:237–46.

Study Overview

Objective. To evaluate an educational strategy to increase neurologists' adherence to 6 specialty society–endorsed practice recommendations for evaluation and management of dementia.

Design. Randomized controlled trial.

Setting and participants. 417 neurologists practicing in 1 of 6 urban regions in New York State and randomized to 1 of 3 groups. The baseline group was assessed 3 months prior to implementing the educational strategy. The intervention and control groups were assessed 6 months after the intervention.

Intervention. The educational strategy included a mailed American Academy of Neurology (AAN) continuing medical education course [1], an interactive evidence-based AAN-sponsored seminar led by local thought leaders, follow-up mailings, and other practice-based tools.

Main outcome measures. Neurologists' adherence to guidelines. Across all regions, adherence was measured by a mailed survey assessing physician response to detailed clinical scenarios. In 1 region, patients' medical records were reviewed to determine agreement between physicians' scenario responses and the actual care provided.

Main results. Compared with neurologists in the baseline and control groups, neurologists in the intervention group were more adherent to 3 of the 6 recommendations: neuroimaging for patients with dementia only when certain criteria are present (odds ratio [OR], 4.1; 95% confidence interval [CI], 1.9 to 8.9), referral of all patients with dementia and their families to the Alzheimer's Association (OR, 2.8; 95% CI, 1.7 to 4.8), and encouragement of all patients to enroll in the Alzheimer's Association Safe Return Program (OR, 10.8; 95% CI, 3.5 to 33.2). These 3 recommendations had the lowest rate of adherence at baseline (from 1% to 20%). Adherence did not differ between the intervention and nonintervention groups for the other 3 recommendations (which had adherence rates of 64% to 95% at baseline). These recommendations included ordering electroencephalography only if clinical criteria are present, screening for and treating depression, and refraining from ordering apolipoprotein E genotype testing to predict or diagnose Alzheimer's disease. Agreement between scenario responses and actual care ranged from 27% to 99% for the 6 recommendations and was at least 95% for 3 of the recommendations.

Conclusion

A multifaceted educational program facilitated by thought leaders can improve physicians' adherence to practice recommendations in cases where baseline adherence is low.

Commentary

Neurologists' baseline adherence to some recommendations made by their peers (ie, the AAN and local thought leaders) was nearly nonexistent. However, this finding may reflect the method used to disseminate the recommendations rather than the physicians' attitude toward the recommendations themselves. Many physician societies develop practice recommendations or guidelines but rely on ineffective methods to disseminate them (ie, passive methods such as publication or mailing) [2]. As this study shows, educational efforts to promote guideline adherence are more likely to succeed if they are multifaceted, locally based, and involve thought leaders [3].

Applications for Clinical Practice

The authors have demonstrated an inexpensive but effective educational strategy that can be applied in other medical practice areas, including the broader generalist physician community, where recognition of and adherence to guidelines is often low.

References

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3. Soumerai SB, McLaughlin TJ, Gurwitz JH, Guadagnoli E, Hauptman PJ, Borbas C, et al. Effect of local medical opinion leaders on quality of care for acute myocardial infarction: a randomized controlled trial. JAMA 1998;279:1358–63.