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CREATING AN ONLINE CME MODULE: EARLY DETECTION AND DIAGNOSIS OF DEMENTIA AND ALZHEIMER'S DISEASE

Alex Coffman, Grant Goodrich, Matthew Jordan, Erica Marden, Xiaofan Pan, Cornelia Willis, Emily Xue, Martha Richardson, and William Pendlebury, MD

INTRODUCTION

- Alzheimer's disease (AD) is the 6th leading cause of death in the United States. More than 5 million Americans have AD today.
- 1 in 3 seniors die with AD or other dementia. 40% of patients with AD are undiagnosed¹.
- There is no current recommendation regarding routine screening for dementia. Only 78% of surveyed Vermont PCPs regularly conduct a screen for dementia during wellness examinations. Furthermore, the majority of these physicians use less sensitive screening measures like the Mini Mental Status Exam (MMSE)². Early detection of dementia can lead to a timely clinical diagnosis of AD.
- We believe that patients and their families benefit from routine screening for dementia and AD. Our objective was to find the best screening tool for detecting dementia, and to convey this information to PCPs by developing an online CME module.

METHODS

- A literature search was conducted to obtain information on AD, screening tests in use, and prevalence of screening in the United States, with a focus on screening in Vermont.
- The search results were used to create an outline for the CME module. The module was assembled using SoftChalk Software, which allowed the module to be a traditional online tool for viewing on a computer, and also to be run as a "mobile" version for smartphones, iPads, tablets, etc.
- The module was presented at Fletcher Allen Health Care Family Medicine Grand Rounds on December 2, 2013. The audience consisted of Family Medicine Department faculty and members of the Division of Primary Care Internal Medicine, Department of Medicine.
- Grand Rounds attendees completed an 8-question pre- and post-assessment survey prior to and after viewing the module, to allow for comparison. The survey asked general knowledge questions about AD and screening techniques.
- Attendees were also asked to complete a single page survey to gather data on screening techniques currently in practice, sample opinions on screening for dementia and AD, and critique the module.
- Data, including scores and responses to survey questions, were entered into Microsoft Excel 2010. Figures were created in Microsoft Excel. Data analysis was completed with the assistance of Dr. Tom Delaney using a t-test for independent groups.

RESULTS

The results reflect data collected during the UVM/Fletcher Allen Health Care Family Medicine Grand Rounds on December 2, 2014.

Assessment	Mean Score
Pre-Assessment	72.80%
Post-Assessment	97.30%

Table 1: Assessment scores before and after viewing CME module

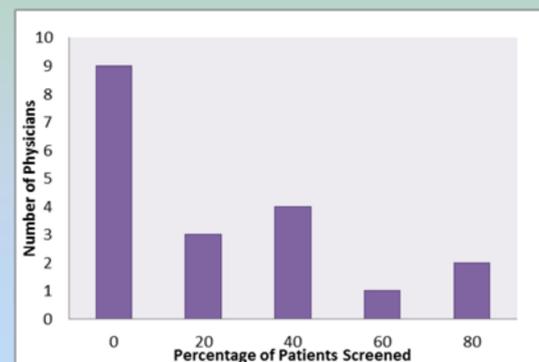
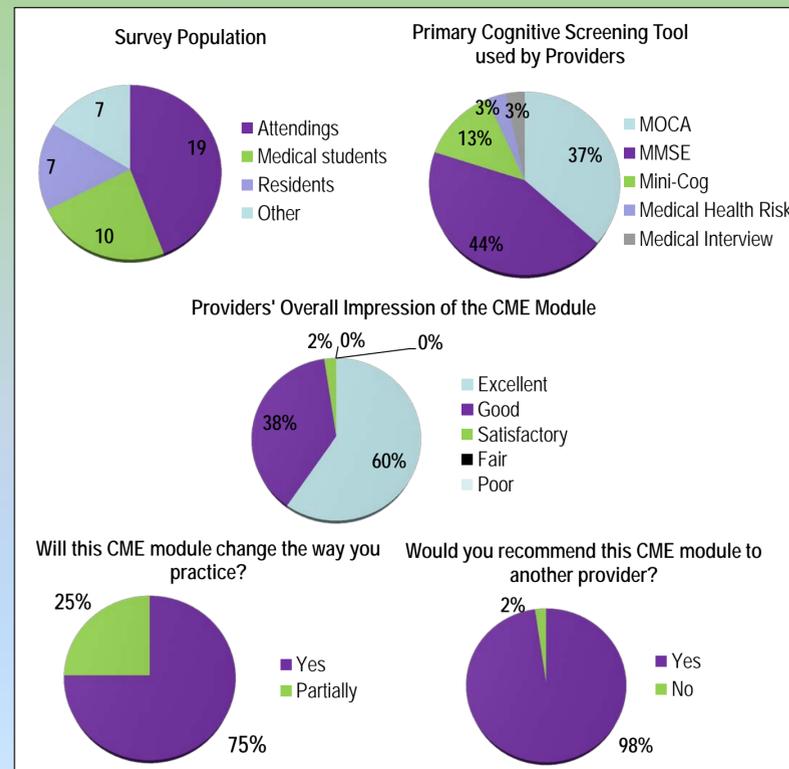


Table 2: Percentage of Older Patients Screened for Cognitive Change by Physicians, n=19



DISCUSSION

- Screening of patients for cognitive impairment and dementia is important for improving dementia care, costs, and quality of life for patients and their families³. All of the Grand Rounds attendees surveyed "strongly agreed" or "agreed" with this principle, confirming what was found in previous surveys of Vermont PCPs².
- In addition, 79% of those surveyed indicated that this CME module changed their view about dementia screening. However, nearly 50% of providers in attendance did not screen any of their older patients for cognitive change; and among those who did screen, most screened less than half of their older patients. This indicates a discrepancy between awareness of the importance of screening and its implementation in practice, a gap that this CME module aims to address.
- Of providers surveyed during Grand Rounds, only 13% currently use the Mini-Cog Assessment, while a combined 81% use either the MMSE or Montreal Cognitive Assessment. However, all providers surveyed after presentation of the module indicated that this CME module will change or partially change their screening methodology.
- In addition to indicating that this module would impact the way they practice, 98% of those surveyed indicated they would recommend this module to another provider, and nearly all surveyed rated the module as "excellent" or "good" in quality. This CME module has the potential to provide Vermont PCPs with important information on the benefits of (and tools and resources available) early detection of dementia and AD.

CME MODULE

- This CME module aims to familiarize users with a screening tool for detecting dementia and to explain the utility of the "Vermont Mini-Cog Assessment", which surpasses other frequently-used screening tools in brevity, sensitivity, and acceptability⁴.
- The module includes information about how to diagnose AD, community resources available for patients and their families, and resources for appropriate follow up care and management.
- The module is pending approval to be hosted on the UVM CME website, and includes guidelines to explain that screening can be performed by any properly trained individual, can take as little as 80-120 seconds, and should be done annually beginning at age 65 or when cognitive changes are recognized.



CONCLUSIONS

- The module was well received by physicians, other health care providers, medical students, and community members with 100% of individuals reporting that the module would change or partially change their practice and most individuals stating they would add a Mini-Cog Assessment to their patients' annual exam.
- The module is embellished by information about how to diagnosis AD, community resources for patients and families, and resources for appropriate follow up care and management.
- We are in the process of getting the module designated as a 1 hour AMA PRA Category 1 CME credit via the UVM Continuing Medical Education office in addition to finding permanent web hosting for the module.

REFERENCES

- McCarten, J. R., P. Anderson, M. A. Kuskowski, S. E. McPherson, and S. Borson. "Screening for Cognitive Impairment in an Elderly Veteran Population: Acceptability and Results Using Different Versions of the Mini-Cog." *J Am Geriatr Soc* 59, no. 2 (Feb 2011): 309-13.
- Borson, S., L. Frank, P. J. Bayley, M. Boustani, M. Dean, P. J. Lin, J. R. McCarten, et al. "Improving Dementia Care: The Role of Screening and Detection of Cognitive Impairment." *Alzheimers Dement* 9, no. 2 (Mar 2013): 151-9.
- de Vugt, M. E., and F. R. Verhey. "The Impact of Early Dementia Diagnosis and Intervention on Informal Caregivers." *Prog Neurobiol* (May 17 2013).
- Cordell, C. B., S. Borson, M. Boustani, J. Chodosh, D. Reuben, J. Verghese, W. Thies, L. B. Fried, and Workgroup Medicare Detection of Cognitive Impairment. "Alzheimer's Association Recommendations for Operationalizing the Detection of Cognitive Impairment During the Medicare Annual Wellness Visit in a Primary Care Setting." *Alzheimers Dement* 9, no. 2 (Mar 2013): 141-50.