Metrics and Outcomes Report

Final Outcomes Data and Analysis: 7th Annual Chair Summit Track on Alzheimer's Disease

Launch: September 11, 2014
Supported by Lilly

Designed, Analyzed, and Prepared By: CME Outfitters, LLC

CME Outfitters

Table of Contents

Educational Outcomes Analysis

This analysis presents educational outcomes data for the Alzheimer's disease track at the 7th Annual Chair Summit and the follow-up CME Snack entitled, *The Challenges of Early Intervention in Alzheimer's Disease,* launched three months following the Chair Summit. The Chair Summit featured three different sessions for participants.

- Plenary session: *Biologically Targeted Early Intervention in Alzheimer's Disease*

- Breakout session: *Alzheimer's Disease: A Maintenance of Certification (MOC) Session*

- Chart Review session: *Options in Early Alzheimer's Disease*

The target audiences for each of the activities were neurologists, psychiatrists, primary care physicians, nurses, nurse practitioners, physician assistants, pharmacists, and other health care professionals who manage geriatric patients. Participants were able to participate in the Chair Summit onsite, via live web stream, or web replay. CME Snack participants were solely online learners.

Learning Objectives

- Implement routine cognitive screening to facilitate early identification and early intervention of Alzheimer's disease (AD) in patients who are over the age of 60 years.

- Discuss modifiable risk factors and quality of life with patients and family/caregivers to support and encourage their participation in their treatment process.

- Incorporate into routine practice the new diagnostic language and when appropriate, biomarkers, PET imaging technologies, and the latest treatment approaches to optimize clinical management of patients with AD.

Methods

Survey mechanisms were programmed and delivered to participants at least 30 days after the activity (either after the live Chair Summit or participation in the CME Snack). The same survey was distributed to a group of clinicians who did not participate in the educational content. Case vignettes were designed to assess whether the diagnostic and therapeutic decisions of participants were consistent with clinical data presented in the educational activities. Clinician beliefs surrounding self-reported practice patterns were also collected. Respondents reported that they see an average of 10 patients with AD per month and 25.8 patients per month over the age of 60.

Chi-square tests were conducted to identify significant difference between responses of the participant and nonparticipant groups. In addition, overall mean scores and pooled standard deviations were calculated for both groups. These were used to calculate the educational effect size using Cohen's d formula.

Top Outcomes Data and Activity Impact

Knowledge

Immediately following education, participants were queried to determine their proficiency in relation to the evidence. Overall, participants demonstrated a strong understanding of the educational content presented to them and correctly answered knowledge-based questions 79% of the time.

Specifically, participants' responses indicated that:

- Ninety-six percent (96%) were able to correctly identify that a positron emission tomography (PET) scan is not usually a part of the initial AD diagnostic workup.

- Eighty-six percent (86%) identified that PET scans would measure amyloid deposition in the brain of someone suspected of having AD.

- Ninety percent (90%) were able to correctly identify that results from recent clinical trials suggest that the focus of diagnosis and clinical management of AD should be the diagnosis of pre-dementia or mild cognitive impairment.

Three-months post-activity, participants retained the educational content:

- Eighty-three percent (83%) of participants at follow-up were able to correctly identify that a PET scan is not usually a part of the initial AD diagnostic workup (p=0.02).

- Sixty-two percent (62%) of participants at follow-up identified that PET scans would measure amyloid deposition in the brain of someone suspected of having AD (p=0.002).

- Seventy-nine percent (79%) of participants at follow-up were able to correctly identify that results from recent clinical trials suggest that the focus of diagnosis and clinical management of AD should be the diagnosis of pre-dementia or mild cognitive impairment (p=0.12).

When asked about the most important information they learned from the education, participants responded:

- The importance of preclinical stages of AD and identifying symptoms of early cognitive challenges in patients—ask the right questions.

- Proper diagnosis and care of AD.

- Reminders for a thorough evaluation of suspected AD that includes a thorough history, MMSE, labs, and comprehensive neurological testing.

- New individualized treatment options available.

- New information about biomarkers, use of PET scans, and amyloid levels in the brain.

Application in Practice

Participants during the Chair Summit and in the follow-up survey were presented with a complex patient with signs of early AD. Responses to the clinical vignette elicited a broad range of answers underscoring the difficulty of a clear diagnosis in early stages of AD and the need for additional education. 29.17% (SE 2.54%) of clinicians believed the 62-year-old male with no memory problems, but deficits in visuospatial and executive functioning can be considered to have possible AD, 58.33% (SE 1.84%) would classify this as mild cognitive impairment. 69.72% (SE 1.32%) of participants and control group understand that age is considered a primary risk

factor for AD. Lastly, 98.10% (SE 0.09%) also understand that current science suggests AD can begin a decade or more before clinical symptoms appear.

Yet, despite the strong understanding demonstrated, screening remains suboptimal. Participants slightly outperformed the control group when 66% (SE 4.81%) of participants reported screening at least 50% of their patient over the age of 60 for AD compared to 60.00% (SE 4.51%) from the control group. Further education on the importance of consistent screening practices is suggested.

To meet the ABPN requirements for the Clinical Modules of Part IV Performance in Practice (PIP), participants are required to collect data on at least five patient cases and apply PQRS quality measures to the cases that will guide treatment decisions. Two of the quality measures that MOC participants chose to work on were both related to diagnosis and yearly assessment of patients' functional status.

2014 PQRS Measures
- % of patients, regardless of age, with a diagnosis of dementia for whom an assessment of cognition is performed and the results reviewed at least once a year.
- % of patients for whom an assessment of patient's functional status is performed and the results reviewed at least once within a 12-month period.

In the six-month follow-up survey, MOC participants (n = 12) were asked to report on the effectiveness of the education and if it had changed their practice. Educational effectiveness was demonstrated by the high percentage of physicians rating their focus on their own selected quality measures as mattering "greatly" to their overall practice.

Alzheimer's Disease MOC (2013): Round 2 Six-Month Outcomes Survey
Educational effectiveness of MOC is shown by high percentages of physicians rating their focus on their own selected QMs as mattering "greatly" to overall practice

Answer Choices on Five-Point Scale for Each Question: 1 = Not at all 5 = Greatly	Physicians Answering Question With 4 – 5 ("Greatly") (%; n = 12)		
	QM Selected for Main Focus	QM Selected for Secondary Focus	Average of Two Selected QMs
By participating in the MOC session, did you gain specific knowledge about the quality measure you chose that you applied to your five cases?	91.7%[a]	66.7%[a]	79.2%[a]
Has your focus on this quality measure changed your practice?	91.7%	75.0%	83.3%
Has your focus on this quality measure helped your patients?	83.3%	75.0%	79.2%
Has your focus on this quality measure changed your practice regarding the other quality measures listed on the previous page?	75.0%	66.7%	70.8%

[a]Highest percentage of physicians choosing "5 = Greatly" over "4" for the selected QM.

Asked to note their accomplishments in the follow-up survey participant responses included:

- I have been doing testing earlier.

- It is important to discuss all aspects of treatment with family contribution and I have been doing that.

- I now track improvement in symptoms with each new medication given.

- Early initiation of treatment is important and I have changed my practice.

- Having the objective data from neuropsychological testing is very important before making recommendations.
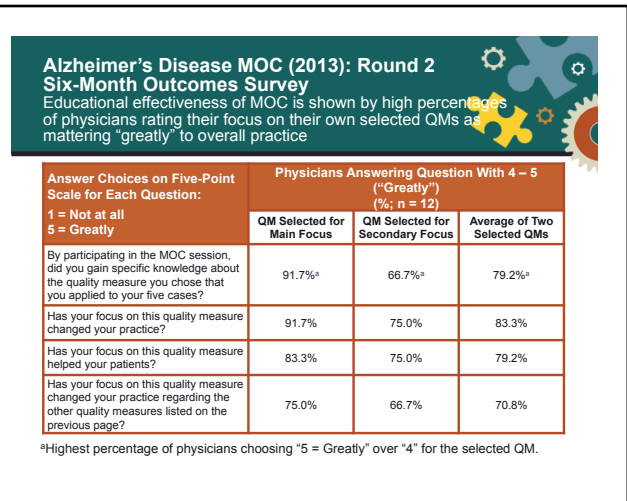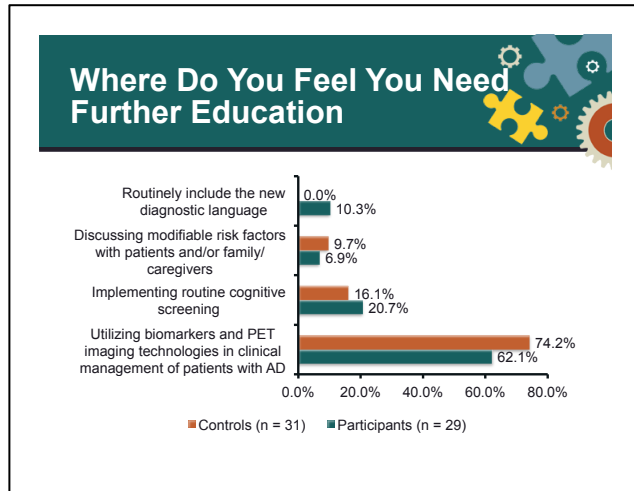
Future Educational Needs

For the purpose of future education planning a needs assessment was conducted. The data from the follow-up group was combined with a sample of non-participants to investigate barriers and identify gaps in practice patterns and medical knowledge.

Of the clinicians who stated education or confidence was the primary barrier to screening their patients over age 60 for AD, 67% practice this behavior in less than 50% of their patients. Furthermore, of those who stated their primary barrier was system-, patient-, or practice-related, 63% still practice this behavior with at least 50% of their patients.

Of those who stated education or confidence to be their primary barrier to discussing modifiable risk factors and quality of life with their patients and/or their family/caregivers, 71% practice this behavior in less than 50% of their patients. Furthermore, for those who stated the system, patient, or practice to be the primary barrier, 47% are still able to implement this practice in at least 50% of their patients.

When asked where they felt they needed additional education, 62.1% of participants and 74.2% of non-participants selected utilizing biomarkers and PET imaging technologies in clinical management of patients with AD.

Additionally, of those who stated education or confidence to be their primary barrier to incorporating biomarkers, PET imaging technologies, and other new treatment approaches for their patients with AD, 63% practice this behavior in less than 50% of their patients compared to 72.2% of non-participants.

Where Do You Feel You Need Further Education

	Controls (n = 31)	Participants (n = 29)
Routinely include the new diagnostic language	0.0%	10.3%
Discussing modifiable risk factors with patients and/or family/caregivers	9.7%	6.9%
Implementing routine cognitive screening	16.1%	20.7%
Utilizing biomarkers and PET imaging technologies in clinical management of patients with AD	74.2%	62.1%

Conclusions

The field of AD is rapidly evolving and education about biomarkers and emerging agents is essential for physicians to keep pace. While the field evolves, barriers remain among physicians attending Chair Summit in the routine assessment and screening of patients over 60 years old in order to facilitate early intervention. Increasing confidence to meet the needs of practicing physicians requires regular education to translate knowledge into application in practice.