Cleveland Clinic

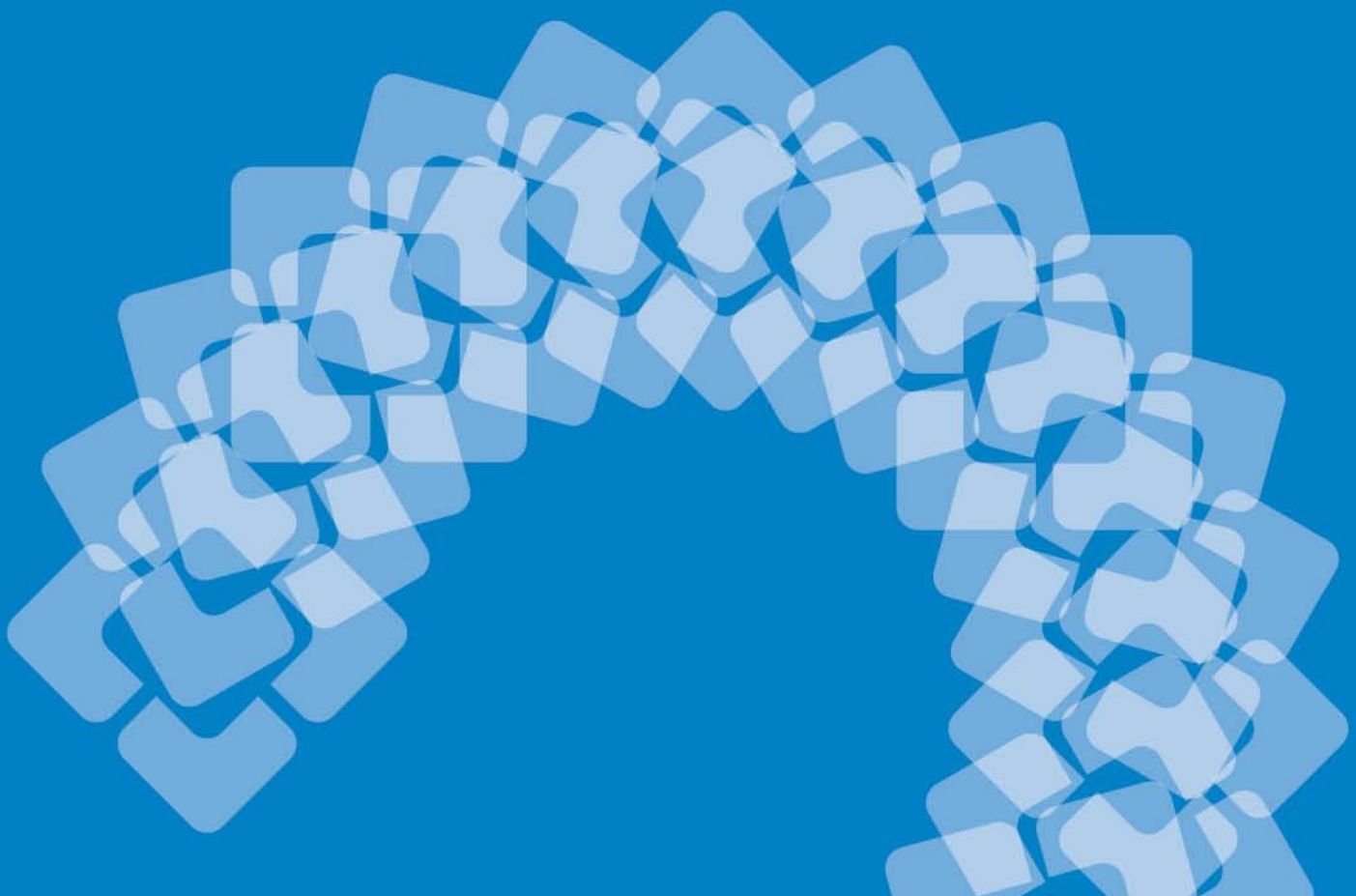
Center for Continuing Education

Outcomes Study

Dementia 2018: Dementia Capable Communities

June 2, 2018

Prepared: June 2018



EXECUTIVE SUMMARY

Overview. The Cleveland Clinic Center for Continuing Education and the Cleveland Clinic Lou Ruvo Center for Brain Health conducted an outcomes study to assess knowledge and competency gains and changes in clinical practice behaviors — levels 3, 4, and 5 on Moore's 7 levels of CME outcomes measurements — resulting from participation at the CME-certified live conference entitled, ***Dementia 2018: Dementia Capable Communities***, on June 2, 2018. This conference will address how health care, social service and legal societies can work together in an organized and meaningful way to manage the growing epidemic of dementia. As scientists strive to find pharmacological therapies to eradicate the symptoms of Alzheimer's and other neurocognitive diseases, communities must find ways to effectively manage these disorders. The numbers of individuals affected by dementia continues to rise, more sectors of society are affected, and more caregivers are called upon to render assistance. Dementia has the potential to negatively impact many communities as healthcare, government, and personal entities require more resources to deal with a growing number of persons whose cognitive and corporeal condition degenerates in the most unpredictable of ways. Early diagnosis, early planning and effective treatments and social supports are among the key topics we will focus on at this one-day conference.

Methods. Outcomes were measured using five survey tools: (1) Pre and post-conference quiz of 12 questions posed by presenters using an Audience Response System [Pages 7-9]. In 12 out of 12 questions, the audience showed gains in knowledge. (2) Faculty were evaluated post-conference, rating them on content, delivery & visual aids, and free of commercial bias factors [Pages 5-6]. (3) A 12-question evaluation survey post conference that asked clinical practice questions (knowledge gains, competency, overall opinion of activity, etc.) The evaluations were given out at the end of the meeting, and out of the 134 participants, 101 evaluations were submitted to assess the faculty and the conference. Unanswered questions on evaluations were not included in the analysis of this report to account for the percentage of audience responses.

Results. The symposium successfully achieved a measurable impact on levels 1 through 5, as evidenced by the following:

Level 1 – Participation: A total of 134 registrants and 9 faculty presenters in health care participated in this event. MD(43), MSW (10), PhD (10), BS (7), DO (6), PA-C (6), MSN (5), APRN (4), LSW (4), MS (4), N/A (4), DPT (3), JD (3), MA (3), NP (3), ORT-L (3), BA (2), BSN (2), DNP (2), LCSW (2), RN (2); AA, ANP, APN, ARNP, BSc, DPM, ESQ, LISW, MBChB, MPA, NP-C, OT, PharmD, PT, ST – (1) each.

Level 2 – Satisfaction: Participants overwhelmingly rated presentations as being excellent, met expectations, was free of bias, and content was between 25% and 75% new for most participants.

Level 3 – Declarative knowledge: The symposium was successful in meeting the learning objectives, and thus, addressed the knowledge and practice gaps identified in the needs assessment. Furthermore, the symposium successfully closed those knowledge gaps as evidenced by knowledge gains in participants from pre-activity to post-activity.

Level 4 – Procedural knowledge: The symposium substantially increased participants' competencies to care for patients with internal and external assaults to the brain, which can cause dementia, based on their increased correct answers to the clinical practice questions. In addition, nearly all participants

indicated that they were likely to change at least some of their clinical practices based on the symposium information.

Level 5– *(To be completed)* Performance**:** A post-conference survey will be emailed three months after the conference to rate the change in clinical behaviors via an anonymous online survey. Questions to be asked are included at the end of this report, but at this time, there are no statistics.

Conclusion. The symposium effectively improved participants' knowledge, competencies, and self-reported practices to be more aligned with current data and recommended practices, thus achieving outcomes levels 1 through 5. This achievement, in turn, has the potential to improve outcomes for patients with dementia.

INTRODUCTION

The Cleveland Clinic Center for Continuing Education conducted an outcomes study to assess knowledge and competency gains and changes in clinical practice behaviors — levels 3 and 4 on Moore's 7 levels of CME outcomes measurements[1] — resulting from participation at a CME-certified conference on internal and external assaults to the brain, which can cause dementia. The conference, entitled Dementia 2018: Dementia Capable Communities, was held on Saturday, June 2, 2018 in the Cleveland Clinic Lou Ruvo Center for Brain Health, Keep Memory Alive Center. The Course Director was Dylan Wint, MD, staff neurologist at the Lou Ruvo Center for Brain Health, Cleveland Clinic.

Goals and Objectives

Upon completion of the program, the clinician/practitioner should be able to:

1. Implement strategies for early detection and diagnosis of dementia.
2. Optimize current and future pharmacologic and non-pharmacologic therapies for dementia.
3. Advise how individuals with dementia and their caregivers can adopt measures to improve the quality of their lives.

Materials and Methods

Outcomes were measured using four survey tools (all are presented in the appendix):

1. Pre and post-conference quiz of 18 questions posed by presenters using an Audience Response (polling) System. In 18 out of 18 questions, the audience showed gains in knowledge.

2. Faculty were evaluated immediately after the conference, rating them on content, delivery & visual aids, and free of commercial bias factors.

3. A 12-question (plus faculty) evaluation survey post conference asked clinical practice questions (knowledge gains, competency, overall opinion of activity, etc.).

1. Moore DE Jr, Green JS, Gallis HA. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. *J Contin Educ Health Prof* 2009;29(1):1-15.

LEVEL 1: PARTICIPATION

The number of physicians and others who participated in the CME activity.

Of the total 134 health care professionals and 9 faculty presenters participated in the conference.

The course was successful in attracting the target audience — primary care providers, neurologists, geriatricians, psychiatrists, internal medicine providers, physician assistants, nurse practitioners, psychologists, social workers and other health care professionals who treat patients with dementia.

In terms of geographic reach, 94% of participants were from the targeted region of Nevada (106), California (10), Arizona (7), Utah (5), Oregon (3), and Washington (3). Other parts of the country were also represented: Ohio (5); Idaho, New Zealand, Texas, Kansas– (1) each.

LEVEL 2: SATISFACTION

Degree to which the CME activity met participants' expectations regarding the setting and delivery of the information.

A total of 101 participants (75% response rate) completed the activity evaluation form, which contributed to the data for this section. Unanswered questions on evaluations were not included in the analysis of this report to account for the percentage of audience responses.

Table 1. Participant activity evaluations.

Criteria	Response
Program overall free from commercial bias	100%
How much of content was new?	
Almost all	4%
About 75%	8%
About 50%	44%
About 25%	39%
None	4%
Would you recommend this conference to a colleague?	99%
Compared with other CME activities, this activity was:	
Better than average	94%
Average	6%
Below Average	0%

A total of 101 participants (75% response rate) completed the faculty evaluation form, which contributed to the data for this section. Unanswered questions on evaluations were not included in the analysis of this report to account for the percentage of audience responses.

Faculty Evaluations

Dylan Wint, MD	Practical Value	Content	Delivery	Visual Aids	Bias Free
Excellent	94	90	95	93	94
Good	4	9	4	6	4
Satisfactory	0	0	0	0	0
Poor	0	0	0	0	0
Unanswered	3	2	2	2	3
Marwan Sabbagh, MD	**Practical Value**	**Content**	**Delivery**	**Visual Aids**	**Bias Free**
Excellent	86	88	82	79	89
Good	10	8	11	15	8
Satisfactory	3	4	5	4	1
Poor	1	0	2	1	1
Unanswered	1	1	1	2	2
Sarah Banks, PhD	**Practical Value**	**Content**	**Delivery**	**Visual Aids**	**Bias Free**
Excellent	67	71	71	71	84
Good	31	27	23	26	14

Satisfactory	2	2	6	1	1
Poor	0	0	0	0	0
Unanswered	1	1	1	3	2
Jeffrey Cummings, MD, ScD	**Practical Value**	**Content**	**Delivery**	**Visual Aids**	**Bias Free**
Excellent	88	85	86	81	83
Good	11	15	13	17	14
Satisfactory	1	0	1	1	3
Poor	0	0	0	0	0
Unanswered	1	1	1	2	1
Steven L. Phillips, MD	**Practical Value**	**Content**	**Delivery**	**Visual Aids**	**Bias Free**
Excellent	75	71	65	66	79
Good	19	23	25	28	16
Satisfactory	4	4	8	3	3
Poor	0	0	0	0	0
Unanswered	3	3	3	4	3
Charles Bernick, MD	**Practical Value**	**Content**	**Delivery**	**Visual Aids**	**Bias Free**
Excellent	85	80	75	79	89
Good	11	15	20	16	7
Satisfactory	1	2	2	2	1
Poor	0	0	0	0	0
Unanswered	4	4	4	4	4
Ruth Almen, LCSW	**Practical Value**	**Content**	**Delivery**	**Visual Aids**	**Bias Free**
Excellent	74	69	81	77	84
Good	18	26	15	18	11
Satisfactory	5	2	1	2	1
Poor	0	0	0	0	0
Unanswered	4	4	4	4	5
Homa Woodrum, Esq	**Practical Value**	**Content**	**Delivery**	**Visual Aids**	**Bias Free**
Excellent	82	83	83	79	87
Good	13	12	12	16	7
Satisfactory	1	1	1	1	1
Poor	0	0	0	0	0
Unanswered	5	5	5	5	6
Jennifer Reed Keene, PhD	**Practical Value**	**Content**	**Delivery**	**Visual Aids**	**Bias Free**
Excellent	70	70	76	75	76
Good	17	17	12	13	10
Satisfactory	2	2	2	2	2
Poor	1	1	0	0	1
Unanswered	11	11	11	11	12

Summary – Level 2

- Most participants indicated that the faculty talks were well presented and their content material was excellent.
- All Participants noted that the presentations, overall, were free of commercial bias.
- Approximately 56% of participants indicated that at least half of the material was new to them.
- 99% of participants would recommend this educational activity to a colleague.
- 94% of participants stated that compared to other CMEs, this activity was better than average.

LEVEL 3A-3B: KNOWLEDGE

Degree to which participants state what the CME activity intended them to know.
Degree to which participants know how to do what the CME activity intended.

Table 2. Percentage of correct answers to the Audience Response System questions.
Knowledge gains were measured by comparing scores on pre-activity and post-activity.

Question Posed	% of Correct Answers Pre-Test	% of Correct Answers Post-Test
1. On average, about what percentage of elderly patients with dementia are diagnosed by their PCP? a. 90% b. 70% **c. 50%** d. 30% e. Not enough study to know	27%	93%
2. Overall, how do the results of a dementia workup affect patients' emotional states? a. Those with dementia become more depressed, but less anxious b. Those without dementia become more anxious, but less depressed c. No effect, whether the patient is diagnosed with dementia or not **d. Improvement in anxiety and depression, regardless of diagnosis** e. Both a and b	27%	89%
3. What is the conversion rate of Mild Cognitive Impairment (MCI) to Alzheimer's disease *per year*? a. 5%-8% **b. 10%-15%** c. 20%-25% d. >50%	34%	85%
4. CSF testing measures the changes that are occurring in the CNS that could be indicative of Alzheimer's disease. Which of the following statements is consistent with an AD diagnosis? a. AD subjects have increased Aβ42, reduced tau and reduced p-tau **b. AD subjects have reduced Aβ42, increased tau and increased p-tau**	43%	90%

c. Neither statement is accurate		
5. True or False: With Parkinson's disease, cognitive impairment is common, even early on. **a. True** b. False	45%	89%
6. Syndromes associated with Alzheimer's disease include: a. Memory complaints b. Problems with language c. Visuospatial challenges d. Behavioral problems **e. All of the above**	99%	100%
7. True or False: It is acceptable to use two cholinesterase inhibitors together (e.g. a pill & a patch) to increase effectiveness. a. True **b. False**	64%	95%
8. True or False: Studies show that diet, exercise, and cognitive training can slow the decline in cognition and processing speeds in individuals with dementia risk factors. **a. True** b. False	99%	100%
9. The following organizations or government programs endorse screening for Dementia. a. The Affordable Care Act of 2010. b. The United States Preventive Services Task Force. c. The International Association of Gerontology and Geriatrics. **d. A and C only.** e. All of the Above	30%	96%
10. The following statements are correct regarding the impact of Dementia. a. More than 5 million Americans have Dementia b. Less that 50 percent of Patients and Caregivers are aware of the diagnosis. c. All forms of Dementia can worsen chronic disease outcomes. d. Affects general health care utilization, especially acute care e. A and C only f. B and D only **g. All of the above**	85%	99%
11. The most common causes of hospitalization for patients with dementia include all of the following EXCEPT: a. UTI b. Falls c. Cerebrovascular events **d. Depression**	66%	93%
12. Aside from general complications that can occur in the hospital, dementia patients are at higher risk of: a. Incontinence b. Delirium c. Poor nutrition **d. All of the above**	94%	99%
13. True or False: It's my responsibility to create a dementia friendly community. **a. True** b. False	96%	100%

14. True or False: Faith communities shouldn't be involved in care planning for someone with dementia. a. True **b. False**	93%	93%
15. True or False: A person in a group home can only complete a power of attorney with a physician certifying capacity. **a. True** b. False	55%	85%
16. True or False: A person under guardianship is not allowed to vote or own a firearm. a. True **b. False**	57%	92%
17. What percentage of the adult population in the U.S. provides unpaid care for an adult? a. 5% b. 9% **c. 14%** d. 25%	24%	73%
18. True or False: The degree to which a partner is prepared to provide care to an individual with dementia dramatically improves both patient and caregiver outcomes. **a. True** b. False	97%	100%

Learning objectives. Knowledge gains were also measured by participants' evaluation of learning objectives met (Table 3). These objectives directly correlate with the faculty presentations. The learning objectives were selected to address the knowledge, competency, and practice gaps identified in the educational needs assessment conducted at the proposal stage.

Table 3. Participants' rating of learning objectives met on course evaluations.

Learning Objectives	Met	Unmet
1) Implement strategies for early detection and diagnosis of dementia.	98%	2%
2) Optimize current and future pharmacologic and non-pharmacologic therapies for dementia.	100%	0%
3) Advise individuals with dementia and their caregivers about measures to improve the quality of their lives.	99%	1%

Summary – Level 3

- Pre-Test/Post-Test: Improvements in knowledge was demonstrated in 18 out of 18 faculty questions posed.
- Learning Objectives: 97% of respondents reported that all objectives were met, and 98% of respondents reported that implementing strategies for early detection and diagnosis of dementia was met, 100% reported that optimizing therapies for dementia was met, and 99% reported that advising individuals with dementia and their caregivers about measures to improve the quality of their lives was met.

LEVEL 4: COMPETENCE

Degree to which participants show in an educational setting how to do what the CME activity intended them to be able to do.

Results from the CME evaluations provide further evidence of this activity's potential impact on patient care. A total of 91% indicated that they were likely to make a change in their practice behavior based on the information learned at the course; 78% were likely or very likely to change (Table 4).

Table 4. Intent-to-change practices.

As a result of what you have learned in this activity, will you change your practice behaviors?	
	Response rates *51 Physicians, et al*
Very likely	46 (47%)
Likely	30 (31%)
Somewhat likely	12 (12%)
Not at all	0 (0%)
N/A	9 (9%)

Number of patients to be affected by these changes each month:	**>50**	**41-50**	**31-40**	**21-30**	**11-20**	**1-10**	**0**	**N/A**
Number	7	6	8	4	19	32	0	14
Percentage	8%	7%	9%	4%	21%	36%	0%	16%

Changes in Patient Care:	**Significant Effect**	**Some Effect**	**Minimal Effect**	**None**	**N/A**
Number	36	39	1	0	14
Percentage	40%	43%	1%	0%	16%

Participant's clinical practice behaviors proposed to change:

1. Additional info to share
2. Early detection of dementia
3. Improved dementia diagnosis strategy
4. Utilize FAST scale on a caregiver level
5. Implementing billing codes new
6. Updated information presented
7. Run dementia test more often
8. To apply updated information given
9. Referral process for dementia
10. Better classification & treatment
11. Screening for dementia
12. Increased options for creative support of PT
13. I will start treatment of dementia early
14. Update PT education in new advances about dementia
15. Look for community resources for my patients -I'm not sure what's available
16. More aggressive pursuit of diagnosis
17. MoCA, FAST
18. New ideas for assessment
19. Increased confidence in giving the diagnosis

20. Donepezil a.m. dosing
21. Vulnerabilities of Dementia patient
22. Recommend resources for caregivers who are parenting children
23. Earlier discussions regarding dementia
24. Use MoCA & advice on legal aspects
25. How to give diagnosis and explain legal concepts, referral for social services
26. Assessment, case management
27. Diagnostic work up especially for YOD
28. Have learned of more support resources to advise my patients & families

Suggestions for future topics / Other comments:

1. Excellent event management! Please consider adding discussion of Integrative Medicine. Too much focus on drugs/pharm.
2. Always excellent topics, excellent speakers (awesome), excellent venues (conducive for learning), excellent staff/organizers, excellent food all the time. Thank you.
3. Appreciate the engaging speaker and practical information. Thank you. More chairs please.
4. I think that Dr. Bernick's (he's great though) topic should have been given by an RN, NP, or case manager for a more multidisciplinary approach. Maybe, next time invite someone with a nursing background to present. There were 4 MDs, 2 PhDs, 1 social worker & 1 lawyer.
5. Needed- Adequate seating for all attendees.
6. Parkinson's Disease, Movement Disorders.
7. Acupuncture
8. Differences in types of dementia.
9. It was great!
10. Topics on Stroke, Parkinson's Disease.
11. Chairs very uncomfortable.
12. Discussion of TDP-43 & its role in dementias. Discussion of: CARTS (cerebral age-related TDP-43 with sclerosis) & PARTS (primary age-related tauopathy with sclerosis).
13. The effects of marijuana in patients with Parkinson's and multiple sclerosis.
14. It would be nice to have an expert on non-pharmacologic intervention in dementia care/prevention present something as well.
15. A very workable facility, some excellent speakers, and incredible food. What more could anyone hope for with a CEU?! More importantly, I learned a great deal, & the book with all the speakers' information will become a reference to use in coming days. Thanks for a great experience!
16. The quality of variety of presenters is very appreciated! They support the network/environment philosophy. Clinicians and the community in general benefits greatly from your efforts – Thank you!
17. Excellent program! It's my second time, please keep up, superb job!!!
18. Topics on stroke, MS.
19. More time for questions and discussion. On how have people formed collaborative groups-successes and failures.
20. Great info. Case presentations would be nice to compliment the information shared
21. A tour of the center would have been nice, or at least basic info about it (more generally than the specific topic of the conference). Information on how/where to find future event info.
22. This program is a tremendous value!
23. I am/was impressed.
24. Excellent seminar - all speakers were great.
25. Great meals, snacks & topics.
26. Would have enjoyed a tour of the facility. Excellent facility and presentations. Consider repeating in North Nevada.
27. Seizures/Parkinson's

28. Great info!
29. The talks about dementia communities should have action plans for those who will be creating a community
30. Habit forming in brain: sports skills, addition process, music memories, etc, etc.
31. More time for Dr. Sabbagh topic
32. Connect to psycho/social, support, and care partnering with community & family
33. I was disappointed that Dr. Sabbagh did not get to the last half of his talk- or to how practically the PCP diagnoses dementia in the office. I also wish Dr. Cummings talked about treatment for behaviors other than meds- as the non-pharm approach is important to consider first (with all this off label prescription). Dr. Keene & Ruth Almen gave very practical useful talks.
34. There were so many presenters that I don't remember enough to rate them. Overall, a very impressive group of speakers with high quality content. However, most went too fast and had too much material. Perhaps could cut the number of speakers and give more time or extend the conference. Would have liked more concrete information from social work, though it was a good message. Facility, food/snacks, logistics- great. Would have liked a history of the clinic/How funded, etc. Perhaps have each sections speaker available for discussion/questions during the break. Thank you so much for the day!
35. Dementia treatment updates. Caregiving stress-assistance programs. Primary Care Training models for screening & knowledge to manage the patients. Update on dementia friendly Nevada.
36. "Nothing about us, without us." Address from a person living with dementia. The importance of consumer, or service user, advocacy. Younger Onset Dementia- Need for specialist services. Psychosocial interventions, e.g. CST, book groups, music, etc.
37. Excellent Conference, gained great information!
38. Just keep up the great work. Possibly a training type CME primary care providers.

Summary – Level 4

- Symposium increased participants' confidence in earlier diagnoses and support for both patients and caregivers
- Nearly all participants indicated intent to change their clinical practice behaviors based on the information learned.

LEVEL 5: PRACTICE *(TBD)*

Degree to which participants demonstrate a change in practice behaviors. **Dementia 2018: Dementia Capable Communities – 3-Month Post-conference Evaluation** (Early Sept. 2018)

Q1: As a result of attending the conference, have you changed your practice behaviors?

Answered: | Skipped:

Answer Choices	Responses
Yes, Consistently	
Somewhat	
Neutral	
Not at All	
Total	

Q2: As a result of attending the conference, has your confidence in Patient Care increased?

Answered: | Skipped:

Answer Choices	Responses
Yes, Consistently	
Somewhat	
Neutral	
Not at All	
Total	

Q3: As a result of attending the conference, how much of an effect has there been in changing Patient Care?

Answered: | Skipped:

Answer Choices –	Responses –
Significant Effect	
Some Effect	
Minimal Effect	
None	
Total	

Q4: As a result of attending the conference, what Clinical Practice Behaviors have changed?

Answered: | Skipped:

Q5: As a result of attending the conference, approximately how many patients have been affected by these changes?

Answered: | Skipped:

Answer Choices	Responses
0 - 25%	
25 - 50%	
50 - 75%	
>75%	
Total	

Q6: What were the MOST effective aspects of attending the Advances in Neurological Therapeutics 2016 Conference?

Answered: | Skipped:

Q7: What were the LEAST effective aspects of attending the Advances in Neurological Therapeutics 2016 Conference?

Answered: | Skipped:

Table 5. Intent-to-change practices.

Summary – Level 5

- Participants felt the conference helped change clinical behaviors three months post-conference … TBD