UVM Project ECHO: Enhanced Diagnosis and Management of Dementia by the Primary Care Team

Dementia and Driving

December 16, 2021

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• RECORDING OF SESSION TO BEGIN
Agenda

• Introductions
• Objectives
• Didactic Presentation (~20-30 min)
• Case presentation
  • Clarifying questions
  • Participants – then faculty panel
• Discussion
• Recommendations
• Summary
• Closing Announcements
  • Submission of new cases
  • Completion of evaluations
Series Objectives

Learning objectives for this ECHO series include being able to:

- Describe current standard of care for diagnosis, treatment, and care of patients with cognitive impairment, Alzheimer’s disease (AD), and dementias – evidence-based review and approaches.
- Name non-pharmacological resources for family caregivers including caregiver supports and assistance in management of caregiver stress.
- List pharmacologic approaches to sleep and behavioral issues.
- Discuss side effects of pharmacologic approaches to sleep and behavioral issues.
- Identify Vermont-specific rules regarding driving and guardianship.
CME Disclosures

University of Vermont (UVM) Office of Continuing Medical and Interprofessional Education (CMIE) is approved as a provider of Continuing Medical Education (CME) by the ACCME. UVM designates this internet live activity for a maximum of 1.5 AMA PRA Category 1 Credits. Participants should claim only the credit commensurate with the extent of their participation in the activity.

Interest Disclosures:

• As an organization accredited by the ACCME to sponsor continuing medical education activities, UVMCMIE is required to disclose any real or apparent conflicts of interest (COI) that any speakers may have related to the content of their presentations.
Dementia and Driving

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[I have no conflicts to disclose.]
Dementia and Driving

Session Objectives:

1. Have a general understanding of older driver statistics
2. Understand how dementia can affect skills needed for driving
3. Explore ways to discuss driving with clients, plan early
4. Understand screening tools that can be used in the clinic
5. Understand resources for driving evaluations and next steps for driving cessation
6. Understand VT specific rules and processes
Why is driving important to our clients and why should we address it?

• Driving is the major mode of transportation in the U.S.

• Health care practitioners caring for older adults in leading position to help patients with maintaining independence (including community access)

• Adopt preventative practices –
  • assessment and counseling
  • identify older drivers at risk, screen and refer for evals
  • help enhance driving safety
  • ease transition to driving retirement when necessary
The Difficult Topic
Why Physicians and Providers are essential

• Medical conditions impact driving skills

• Aging patients with more complex presentation
  • You are on the front line and know patients well
  • Adult children approach MDs about a parent
  • Spouses approach MDs with concerns
  • Nursing and Allied health professionals

• DMV sees physicians as the expert

• Ethical responsibility to identify if patients at risk to self or others
Statistics

- US Older adult population age 65+ reached 43 million in 2012 and expected to double by 2050 \(^1,2\)

- Approximately 86% of Americans 65+ continue to drive

- Expected that 1 of 4 licensed drivers will be an older adult by 2050 in addition to driving more miles than older drivers do today \(^3\)

- In 2019, 7,214 people 65+ killed (20% of all traffic fatalities) \(\text{(NHTSA May 2021)}\)

- In 2019 most traffic fatalities in crashes involving older drivers occurred during the daytime (72%), on weekdays (69%), and involved other vehicles (66%).
  - This is an increase compared to ALL fatalities which was 49% during the day, 60% weekdays, and 45% involving another vehicle. \(\text{(NHTSA May 2021)}\)
More important statistics...

- In 2019, occupants killed in crashes, those 65+ were restrained 71% of the time compared to 48% for those under 65.

- Motor Vehicle Accidents (MVAs) = the leading cause of injury-related death between the ages of 65 and 74.

- MVAs are second leading cause of death after falls between ages of 75 and 84. (5)

- Increased co-morbidities and frailty associated with aging make it far more difficult to survive a crash. (5)

- In VT in 2021 so far, 62 total fatalities on the road.

- (older stat: Just in November, 2017: VT- 6 elderly drivers going wrong way on interstate) (VT DMV, Driver Improvement)
Key Facts about Older Adult Drivers

- Many older drivers self regulate their driving
- Night, local, time of day, weather
- However, driving locally does not mean less risk
- Some do not have insight that they are at risk
- Self report not an adequate measure of fitness to drive
Top 5 Crash Types for Older Drivers

1. Turning left at an intersection with a stop sign.

2. Turning left at an intersection on a green light without a dedicated green turn arrow.

3. Turning right at a yield sign to merge with traffic at speeds 40-45 mph.

4. Merging onto a highway from a ramp that has a yield sign.

5. Changing lanes on a road that has four or more lanes. (5)
Identifying Risk/Red Flags in the Clinic

• Keep driving on your radar
• Ask a few questions about driving
• Age alone is not a red flag

• **Patient history:** Acute changes? Medication changes? *Diagnosis of dementia is a red flag*

• **Observation for more gradual changes:**
  • sensory loss
  • poor self care
  • impaired ambulation/mobility and FALLS
  • difficulty with navigation
  • impaired attention, memory
  • language expression/comprehension
  • decreased insight/difficulty managing medical encounters
Alzheimer’s Association – Signs of unsafe driving

- Forgetting how to locate familiar places
- Failing to observe traffic signs
- Making slow or poor decisions in traffic
- Driving at an inappropriate speed
- Becoming angry or confused while driving
- Hitting curbs
- Using poor lane control
- Making errors at intersections
- Confusing the brake and gas pedals
- Returning from a routine drive later than usual
- Forgetting the destination you are driving to during the trip
How dementia can affect driving

- **Short term memory, working memory, long term memory changes** (route planning, running out of gas, right of way errors, confusing gas/brake)

- **Slowed processing speed, reaction time** (memory affects processing speed, intersection management, id/react to hazards, anticipating hazards)

- **Difficulty with divided attention** (drifts in lane, not checking mirrors, intersections, managing hazards)

- **Impaired visual perception** (mental maps, construction zones, etc.)

- **Impaired executive function skills** (problem solving, impulse control, decision making)
Drivers with Dementia and Outcomes of Becoming lost while driving (Hunt et al, AOTA, 2010)

- Exploratory study of 207 reports of lost drivers with dementia over 10 year period reported by newspapers and media (ages 58-94, most male)
- 32 drivers found dead, 116 found alive (35 injured)
- People found alive: range of miles was 1-1,730 with an ave. of 2 days missing
- People found dead, range of miles was 4-930 with an ave. of 26.76 days until body found
- Cause of death included: drowning after driving into body of water, driving into a mine and could not find way out, struck a tree, MVA, exposure to elements.
- People who became lost while driving and died were driving to familiar places such as grocery store, PO, doctor’s office, or family’s home.
• People with early AD may continue to do ok driving

• Earliest symptoms of AD + driving: loss of recent memory and inability to recognize familiar objects, lost in familiar areas. May ask for directions and not remember directions and continue to drive

• Drivers under pressure to navigate their way have more safety errors – cognitive load

• Popular recommendation is to drive locally – unfortunately may not remember this recommendation AND many tragic events happen when drivers with AD are driving to local familiar areas

• Co-piloting not recommended – couples often get lost and die together (couple got lost, man went to get help then could not remember where his car/wife were, wife perished)
Identifying Risk Factors

Cognitive Impairments

• Memory
• Processing speed
• Divided attention
• Executive function skills
• Impulsivity
• Behavior issues
• Mental health concerns
• Visual perceptual difficulty
• Insight
Cognitive Screens

- No single assessment can predict fitness to drive – should use array of tests

- **Short Blessed Test** – scores higher than 6 indicate high risk for being in a crash due to memory deficits


- **Montreal Cognitive Assessment (MoCA)** (norm: 26-30). Significant relationship between MoCA score and on road outcome. For every 1 point decrease in score, x1.36x as likely to fail road test. (8)

- **Clock Draw** (more than 1-2 errors indicate risk)

- **AD8 caregiver/family interview**

- Subjective reports of getting lost when driving, running red light, recent accident, relying on co-pilot
What to do with the data?

• **GREEN**: Lower risk/Acute issues
  
  • Hip replacement, knee replacement, hand in splint
  • Address driving
  • May not need full driving evaluation
  • Advise re: current abilities, anticipated healing time
  • Consider medications, precautions, readiness
  • Advise re: temporary transportation, temporary handicap placard
  • Helpful resources: CarFit, self-awareness tools
What to do with the data?

- **YELLOW**: Needs further evaluation

- Mix of strengths and impairments that clearly affect IADLs
- Screen in clinic
- Provide education re: comprehensive driving evaluation
- Help decide on readiness
- **Referral** to a Driver Rehabilitation Program: “OT Driving Evaluation”, diagnosis
  - If not sure – contact a Driver Rehabilitation Specialist (www.ADED.org)
Why an eval with Driver Rehab Specialist vs DMV?

- **Driver Rehab Program**: 2 part evaluations
  - Clinical testing (2 hours evaluation) – comprehensive assessment of vision, motor, cognitive skills, simulator &
  - On-road testing (2 hour session evaluation/education)
  - Occupational Therapist, Certified Driver Rehab Specialist, Driving School Instructor
  - Medical/rehabilitation focus, breaking down areas of strength, challenges
  - Make recommendations to clients and family, referring providers
  - Provide rehabilitation/training as needed and if appropriate
  - Adaptive equipment
Why an evaluation with Driver Rehab Specialist vs DMV?

- **DMV:**
  - 15 minute road test
  - May require vision test
  - Tester in client’s car – no instructor brake
  - Not sensitive to medical changes or issues
  - Does not test cognition/executive function
  - “Turn left at stop sign”
  - Pass/fail – can keep retesting
  - May request MD evaluation and further testing through a driver rehab program
What to do with the data?

• **RED= STOP DRIVING**

• **Vision impairment:** does not meet legal requirements –
  • advise no driving. DMV notification. Refer to Driver Rehab if potential to use bioptics.

• **Moderate to severe Alzheimer’s** – should no longer drive. This is a general consensus through medical associations, AOTA.

• Impairments that **clearly demonstrate a safety risk**

• **If not a rehab candidate** – do not need Driver Rehab
  • report right to DMV
• Discuss recommendation to stop driving with patient and family, care team/doctor.

• Letter to DMV or Universal Medical Evaluation Form
  
  **recommending** medical suspension, “not medically fit to drive”

  - **Universal Medical Evaluation/Progress Report**
    
    Department of Motor Vehicles - Agency of Transportation
    120 State street, Montpelier, Vermont  05603-0001
    802.828.2000 or 888.99-VERMONT  dmv.vermont.gov

• DMV in NY or other states have slightly different process

• DMV makes final decision, not MD

• Advise to get non-driver ID card

• Plan for giving up car/keys

• Referral/PLAN for alternative transportation
  
  • Agency on Aging/Age Well
  • Social Worker
DMV Process

- Report to DMV using Universal Medical Evaluation Form
- What happens when DMV notified?
  - If stating NO driving, medical suspension, patient can appeal
  - If refer for further evaluation:
    - DMV testing - Driver Improvement “Special” Exams
    - May be written and road test – same as 16 year olds
- Recommendation for Driver Rehab/driving with instructor only restriction

**SECTION D – Medical Examiner’s Opinion**

1. I have examined the patient and in my opinion: (Check-mark one of the statements below.)
   - [ ] The patient **IS NOT** medically fit to drive any motor vehicle on the highway.
   - [ ] There are no reasonable **medical** grounds to limit the driving privileges for a passenger car.
   - [ ] The patient is medically fit to drive, however, they should:
     - [ ] Submit progress reports to the Department of Motor Vehicles every: _____ Months _____ Years
     - [ ] Be further evaluated for driving ability.

Comments: ________________________________

2. Patient’s condition is totally stable: [ ] Yes [ ] No
Ethical Questions re: Driving and reporting

• From Jan Ferguson, JD – UVM Health Network Risk Management (Driving and the Elderly Presentation 2018)

Based on AMA ethical opinion E-2.24 Impaired drivers and their physicians:

• Physicians should assess patients’ physical or mental impairments that might adversely affect driving abilities. In making evaluations, physicians should consider:
  • The MD must be able to identify and document physical or mental impairments that clearly related to the ability to drive
  • The driver must pose a clear risk to public safety

• Before reporting, steps should be taken:
  • Discussion with client and family
  • Recommendation for further treatment or evaluation
The Take-Away....

• Consider and discuss driving with your elderly patient
• Determine need for further screening/evaluation
• Can do some screening in clinic/identify needs
• With dementia, beginning stages AD may still be at risk if getting lost. Moderate to severe AD = no driving
• Significant functional impairment may mean cessation of driving without further eval needed (vision and cognition)
• Older adults with visual or physical impairments have greater potential for “rehab” of safe driving than those with cognitive impairment
• Refer for driving evaluation with a driver rehab specialist for comprehensive assessment/recommendations
Community Resources

• **Driver Rehab Programs in Vermont:**
  - UVM Medical Center
    - Partnered with CVMC, NWMC, Porter for clinical evals FOR COGNITIVE DX
  - Rutland Regional
  - Adaptive Driving Associates (WRJ, VT)

• **www.ADED.org** – national and international organization of driver rehab specialists

• **Clinician’s guide to assessing and counseling older drivers, 3rd edition** – available free on line

• **The Hartford Brochures:** [www.thehartford.com/resources/mature-market-excellence/publications-on-aging](http://www.thehartford.com/resources/mature-market-excellence/publications-on-aging)

• **AOTA.ORG** – has great resources on driving and the elderly

• **Fitness to Drive Screening (FTDS):** Web based tool for caregivers/family members and OTs to detect drivers at risk: [http://fitnessstodrive.phhp.ufl.edu/us/](http://fitnessstodrive.phhp.ufl.edu/us/)
More Resources

• **AAA Roadwise Review**: A Tool to help seniors Drive Safely Longer  [http://aaaroadwisereview.com/](http://aaaroadwisereview.com/)

• **Car Fit** – [www.car-fit.org](http://www.car-fit.org)

• **AARP** – Driver Safety course for older drivers  [www.Seniordriving.aaa.com](http://www.Seniordriving.aaa.com)
More Resources

- **DMV** – Driver Improvement, Universal Medical Evaluation Form
- **Agency on Aging**
- **Short Blessed Test**
- **MOCA**
- **SLUMS**
- **Clock Draw Test**
- **Snellgrove Maze Test**
- Videos of medical conditions and how they can affect driving
  - [https://www.nhtsa.gov/road-safety/older-drivers#2346](https://www.nhtsa.gov/road-safety/older-drivers#2346)
We are here to help! – Contact us anytime.

UVM Medical Center – Driver Rehab Program

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The University of Vermont
LARNER COLLEGE OF MEDICINE
OFFICE OF PRIMARY CARE & AHEC PROGRAM
References


4. NHTSA 2015 study (DOT HS 812 372)


DO NOT INCLUDE:
- Names
- Address
- DOB
- Phone/Fax #
- Email address
- Social Security #
- Medical Record #

The discussion and materials included in this conference are confidential and privileged pursuant to 26VSA Section 1441-1443. This material is intended for use in improving patient care. It is privileged and strictly confidential and is to be used only for the evaluation and improvement of patient care.
Case Presentation Format

Case presentation from a participant (a real-world case, from the field)
Then
Clarifying questions about the case from group to case presenter
Then
Ideas, suggestions, recommendations from participants
Then
Ideas, suggestions, recommendations from ECHO faculty team
Then
Additional discussion, if any (All)
Then
Summary of case discussion
(course co-directors: Mary Val Palumbo, DNP, APRN, GNP-BC and John Steele Taylor MD)
• RECORDING TO BE STOPPED FOR CASE PRESENTATION
Questions and Discussion from the group....
**Prep for Next Session**

Prior to each session, if you have specific questions for our faculty expert(s), please let us know and we will pass along ahead of time.

**SESSIONS ARE ON THURSDAYS FROM 7:30AM TO 9:00AM** *(3rd Thursday of each month)*

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Dementia Clinical Consults
45 min slots available
2nd and 4th Wednesdays
2-4 PM
Sign up at: https://www.signupgenius.com/go/5080B4AACAE2FA6FC1-corner

Diagnosis & Management of Dementia
For Primary Care and other healthcare providers.

Or Email:
Mary.Palumbo@med.uvm.edu

Online Learning via Vermont Health Learn
(CMEs at your own pace)
Conclusion

• Slides are posted at www.vtaheec.org

• Volunteers to present cases (this is key to the Project ECHO model)
  • Please submit cases to Mary.Palumbo@med.uvm.edu

• Please complete evaluation survey after each session

• Once your completed evaluation is submitted, CE information will be emailed to you.

• Please contact us with any questions, concerns, or suggestions
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