#### DUKE DEMENTIA FAMILY SUPPORT PROGRAM

# Caregiver Connections An Educational Webinar Series With The Experts

The presentation will begin shortly.
Thank you for your patience!

dukefamilysupport.org 919-660-7510



# The Road Ahead: A Discussion about Comprehensive Driving Evaluation

Presented by:

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### **Discussion Will Include:**

- How mild cognitive impairment (MCI) and dementia impact driving
- Warning signs to stop driving or get an evaluation
- How to discuss driving concerns with a loved one
- Before, during and after of a driving evaluation
- Who is notified of the *results* of the driving evaluation
- What happens if someone continues to drive when it has been recommended that they stop driving



# **Unique Challenges**

- Driving is a privilege
- Public safety
- Self-rating of driving ability is not accurate
  - Family/caregiver's rating is often an accurate predictor of medical fitness to drive.
- May not recognize changes
- Thoughtful *planning*



# **Warning Signs**

- Family reports concerns to medical provider
- History of accident/crashes/fender benders
- Need reminders on how to get to familiar places
- Failing to observe traffic signs
- Making slow or poor decisions in traffic
- Driving too slow or fast for road conditions
- Agitation/periods of confusion
- Confusing the brake and gas pedals
- Poor lane control





# Cognition

- Driving *Implications*:
  - Ability to *recognize* traffic conditions and destinations
  - Ability to *process* information and make
     appropriate decisions in a *timely* manner
  - Ability to understand and operate own vehicle
  - Ability to recall directions and routes





# **Physical Function**

- Strength
- Sensation
- Range of motion
- Gross/fine motor skills
- Balance
- Endurance
- Neck flexibility
- Mobility
- Managing mobility device
- Hearing loss





# **Physical Function: Reaction Time**

#### Motor control

- Activating pedals and steering
- Applying even pressure and maintaining speed

#### Vision

Scanning

### Cognition

- Divided attention
- Memory
- Cognitive processing





### **Vision**

90% of all sensing clues while driving come through the eyes

- Driving implications:
  - Ability to see
    - other vehicles
    - Traffic signals/signs
    - Lane markings
    - Road conditions
    - Pedestrians
    - Equipment and controls





### **Other Considerations**

- Obstructive sleep apnea (CPAP compliance)
- Seizures
- Diabetes (peripheral neuropathy, retinopathy)
- Cerebrovascular disease
- Cardiovascular disease (syncope)
- Psychiatric disease
- Eye diseases
  - Glaucoma, cataracts, macular degeneration



### **Medications**

# Polypharmacy increases potential for side effects that can impact driving

- Medications that alter consciousness require special attention
- New medications and dose adjustments should be reviewed carefully for efficacy and adverse effects



### "We Need to Talk"



- Start the conversation in the early stages of the disease
  - Understand that this may be the *first of many* conversations about driving
  - Consider an objective third party evaluation
  - Discuss specific symptoms that may impair driving;
     slow response time, gait instability, memory loss
  - Reinforce medical diagnoses and legal liability.
  - Driving skills progressively decline over time, recommend frequent re-assessment (every 6 months)



# When the Conversation Does *NOT* Go Well

- Be patient
- Demonstrate understanding & empathy
- Acknowledge the pain of the change
- Consider an objective third party evaluation
- As a last resort, remove keys, disable car or remove vehicle completely
  - Be sure to provide safe, reliable, alternative transportation



# **Objective Third Party Evaluation**

- Occupational Therapy Comprehensive Community Mobility Evaluation
- 2-3 hour evaluation performed by an occupational therapist/certified driving rehab specialist
- Provides an objective measurement as related to crash risk
- Cost: \$200 for clinical
- Medical provider referral



### **OT Clinical Assessment**

- Assesses Four Areas of Driving
  - Physical
  - Cognition
  - Vision
  - Reaction time





### **Possible Outcomes**

- Return to driving with NO restrictions
- Return to driving WITH restrictions
- Referral to an on-road driving evaluation
- **Discontinue** driving





### Results

- Reports shared with:
  - Referring physician
  - Patient/Family members



- OT is NOT permitted to share results with NC DMV (unless they were referred by the DMV)
- NC does not have a mandatory DMV notification of diagnosis of dementia



# Planning for Driving Retirement

- Never too early
- Involve family and close friends
- Develop agreement
- Alternative transportation options
- Sign a driving contract





# **Alternative Transportation**

- Transition driving responsibilities
  - Family members
  - Friends
- Arrange transportation services
- Reduce need to drive
  - Mail prescriptions, grocery delivery, meal delivery





# **Alternative Transportation**

- Ridesinsight.org
- Center for Volunteer Caregiving (Free Wake County)
- Transportation Solutions for Caregivers
- National Association of Agencies on Aging
- Local Area Agency on Aging
- AARP Mobility Resources
- Local Alzheimer's disease chapters



# **Driving Against Medical Advice**

- Legal implications
- Patient will be held at fault for an accident



### Clinical Resources in North Carolina

- Department of Veteran Affairs Medical Center (Veterans only)
  - Salisbury, NC
- Duke University Health Center at Lenox Baker
  - Durham, NC
- Frye Regional Rehabilitation Hospital
  - Hickory, NC
- Driver Rehabilitation Services, P.A.
  - McLeansville, NC
- Forsyth Medial Hospital
  - Winston-Salem, NC
- Care Partners Health Systems
  - Asheville, NC



### References

- Alzheimer's Association (2019) Dementia and Driving: Available at: <a href="http://www.alz.org/care/alzheimers-dementia-and-driving.asp">http://www.alz.org/care/alzheimers-dementia-and-driving.asp</a>
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- Korner-Bitensky NA, Mazer BL, Sofer S, et al. Visual testing for readiness to drive after stroke: a multicenter study. *Am J Phys Med Rehabilitation*. 2000; 79(3): 253–259.
- Meador, Kimford. To drive or not to drive, roles of the physician, patient, and state. Neurology. 2007;68:1170-1171.
- North Carolina General Assembly (2019) Physicians, psychologists, and other medical providers providing medical information on drivers with physical or mental disabilities or disease: Available at: <a href="https://www.ncleg.gov/EnactedLegislation/Statute">www.ncleg.gov/EnactedLegislation/Statute</a>



# **Questions?**





### **Duke's Comprehensive Community Mobility Evaluation**

- Melissa Werz, OTD, OTR/L
- Department of Physical and Occupational Therapy
  - Duke Health Center at Lenox Baker
    - 3000 Erwin Road
    - Durham, NC 27705
    - Appointments: 919 684-2445
      - Information: 919 684-4543
        - Fax: 919 681-5555
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Thank you for joining us today!

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