THE ROAD AHEAD: DRIVING DURING YOUR JOURNEY WITH ALS

Melissa Werz, OTD, OTR/L, DRS
Objectives

- Audience will:
  - Identify areas of impairment related to ALS diagnosis that negatively impact driving safety
  - State understanding of appropriate referrals for clinical driving assessment
  - State resources available for community mobility in their area
What do we do:

- Assessment of patient’s roles
  - Activities of Daily Living (ADLs)
- Upper extremity function
- Instrumental ADLs
  - Driving safety
  - Community access to engage in activities outside of the home
Why the need to continue to drive?

- Sense of independence
- Social interaction
- Maintain health services
- Quality of life
- Identity

Unique Challenges

- Driving is a privilege
- Public safety is a concern
- A person’s self-rating of driving ability is not accurate in accessing unsafe driving issues
- Persons dealing with cognitive issues or executive thought processing may not recognize changes in their driving skills
- Thoughtful planning is the key to a smooth transition for mobility and transportation needs

Warning Signs

- Poor judgement during decision making
- Making slow or poor decisions in traffic
- Driving at an inappropriate speed
- Hitting curbs
- Using poor lane control
- Unable to manage the brake/gas pedals/steering wheel/secondary controls
- Difficulty with trunk/neck control when checking for traffic
- Fatigue
- Unable to independently get into/out of the vehicle

Areas of Impairment that Impact Driving Safety

- Impaired motor skills/muscle strength
- Impaired eye-hand/foot reaction time
- Impaired cognition
- Decreased neck/trunk range of motion
- Impaired pulmonary status
Having the Conversation

- Starting the conversation
  - Understand that this may be the first of many conversations about driving
  - Initiate a conversation to express concerns outside of the car or actual driving situation
  - Consider an evaluation by an objective third party
  - Discuss specific symptoms that may impair driving, slow response time, decreased endurance, near misses or weakness
  - Reinforce medical diagnoses. Ask the physician to write a letter or write a prescription stating that the person must not drive. You can use this for reinforcement during the conversation.

When the conversation does not go well

- Be patient and firm. Demonstrate understanding and empathy
- Acknowledge the pain of this change
- As a last resort, take away the car keys, disable the car or remove the vehicle completely. When you do any of these things, be sure to provide safe, reliable alternative transportation

Planning Ahead

- It is never too early to plan ahead and to start the conversation
- Involve family and close friends
- Develop an agreement for all to share that includes practical safety steps
  - Periodic driving evaluation
  - GPS monitoring system for the car
    - Apps
      - Glympse
      - Find My Friends
      - Google+
      - Carrier-branded apps ($5.99-$9.99/month)
- Alternative transportation options
- Sign a driving contract

Transportation Options

- Transition driving responsibilities to others
  - Family members
  - Friends
- Arrange taxi service
- Use special transportation services for older adults
- Reduce the need to drive by having prescription medicines, groceries or meals delivered
2-3 hour evaluation performed by an occupational therapist/certified driving rehab specialist

Cost: $200 for clinical

No longer need a physician’s referral
Assessment – Physical

- Strength
  - Manual Muscle Testing
- Range of Motion
- Coordination
  - Reaction time testing
  - DMV Guidelines
  - Emergency Reaction Time
    - (0.75 seconds)
- Sensation
- Balance
- Mobility
- Endurance
- Neck Flexibility
Assessment – Visual

- Visual acuity
- Peripheral vision/Field of Vision
  - Visual neglect, homonymous hemianopsia
- Depth perception
- Contrast sensitivity
  - Daytime/nighttime vision/glare
- Visual perception
  - Visual memory, closure, figure ground
Assessment – Cognition

- Memory
  - Long term, short term, directions
- Safety/judgement and problem solving
- Road sign recognition and regulations
- Divided attention and multi-tasking
Assessment - Reaction Time

- Vericom Reaction Time Test
  - Motor Control
    - activate pedals and steering
  - Vision
    - Scanning
  - Cognition
    - Divided attention
    - Memory
    - Cognitive processing
Full Clinical Evaluation
- On-road assessment
  - Performed by a NC DMV certified driving instructor
  - Recommended for clients with ‘red flags’ on clinical evaluation
  - Out of pocket expense ($150-$400)
  - Performed in the client’s neighborhood when possible

Driving with restrictions
- Daylight driving only
- Drive on local, familiar roads
- Drive within a ___ mile radius of home
- Limit/No highway driving
- Limit/No driving on roads with speeds over 45 mph
- Avoid driving in inclement weather; rain, snow, sleet
- Carry a cellphone for safety
- Limit conversations with other passengers
Possible Outcomes

- Driving with adaptive equipment
  - Steering knob
  - Left foot accelerator
  - Hand controls
  - Blind spot mirrors/Expanded view mirror

- Discontinue driving
  - Community accessibility
  - Family/Friends/Caregivers
Clinical and on-road reports are shared with the referring physician, client and family members only.

The OT/CDRS is not permitted to share the results with NC DMV.

Some states have mandatory DMV notification (diagnosis specific) **NC does not**
Community Mobility Resources

- Ridesinsight.org
- Center for Volunteer Caregiving (Free - Wake County)
- Transportation Solutions for Caregivers
- National Association of Agencies on Aging
- American Occupational Therapy Association
- ALS Association Nationwide Chapter Locator
- AARP Mobility Resources
Clinical Resources in NC

- 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 Medical Hospital
  - Winston-Salem, NC
- Care Partners Health Systems
  - Asheville, NC
Duke Driving Program

- 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: 919 668-3988
- Fax: 919 681-5555
- www.ptot.duhs@duke.edu
Questions


