“Can I Still Drive?”
Assessing the Older Driver

Can I drive?
• You are currently working with a patient who is 75 years old. She was referred for therapy following a right hip replacement. During a treatment session she informs you that she needs to be able to return to driving since she lives alone.

Can I drive?
• After further review of her medical history you learn that she has Type II Diabetes which is often uncontrolled. Prior to her hip replacement she had been experiencing frequent falls resulting in use of a rolling walking while out in the community. Since her surgery she complains of forgetfulness and “feeling slower than normal”.

Course Objectives
• Identify healthcare providers’ roles in maintaining an older driver’s safety.
• Differentiate between an Occupational Therapy generalist and a Driver Rehab Specialist
• Discuss common aging changes, medical conditions and medications that can affect driving skills.
• Assess older patients to make appropriate recommendations and customize interventions to maintain safe driving skills.
• Describe the components of a driving evaluation

Course Objectives
• Discuss driving cessation and transportation options with patients that are unsafe to drive
• Describe the ethical and legal responsibilities in reporting unsafe drivers

I’ve Been Driving Since....
Driving Then vs Now

- Changes to vehicles
  - Increase in technology
- Changes to roadways
  - Increase in complexity and number of lanes
- Changes to driving laws
- Changes in driving behaviors
  - Increase in aggressiveness

Driving & Demographics

- The number of older licensed drivers in the U.S. is expected to increase
  - from ~20 million today to ~40 million in 2020.
  - Graph is for drivers 70 years and older

So What Does This Mean to Me?

OT Practice Framework

- Which is used to define and guide occupational therapy practice states
  - "occupational therapy is the application of core values, knowledge, and skills to assist clients to engage in everyday activities or occupations that they want and need to do in a manner that supports health and participation."

Areas of Occupation

- Activities of daily living
- Instrumental activities of daily living
- Rest and sleep
- Education
- Work
- Play
- Leisure
- Social participation

Case Study Activity
Driver Fitness
• An individual’s ability to utilize and maintain physical, cognitive

Who Is Involved In The Older Driver’s Fitness/Community Mobility
• Patient and their family
• Physician
• Therapists
• Case Managers
• Driving Rehabilitation Specialist
• Mobility Equipment Dealers
• Office of Motor Vehicles

The Role of...
• Patient and their family
  – Identify goals for driving/community mobility
  – Identify concerns and provide insight into the older driver’s habits
  – Collaborate with healthcare professions in developing a transportation plan
  – Reinforce recommendations made by Occupational Therapist or Driving Rehab Specialist

The Role Of...
• Physicians
  – Identify potential medical conditions that could impact driving
  – Assess physical and mental abilities
  – Provide medical interventions
  – Refer to therapy to remediate skills
  – Refer to Driving Rehab Specialist for a comprehensive driving evaluation
  – Complete OMV Medical Examination Form

The Role Of...
• Therapists
  – Identify and address potential effects of diagnosis/deficits on driving/community mobility
  – Identify transportation needs
  – Educate on “driver fitness” and driving process
  – Assist with initiation of applications for funding sources for vehicle modifications
  – Refer to appropriate providers (i.e. physicians, DRS, mobility equipment dealer)
The Role Of...

• Case Manager/Social Worker
  – Provide resources on alternate transportation options
  – Provide counseling regarding driving retirement
  – Provide counseling and planning for families and caregivers

The Role Of...

• Driver Rehabilitation Specialist
  – Provide comprehensive evaluations
    • Clinical and Behind the Wheel Assessment
  – Provide assessment results and recommendations
  – Provide resources and assist with transportation planning
  – Inspect vehicles and modifications
  – In-vehicle training

The Role Of...

• Office of Motor Vehicles
  – Licensing of individuals
  – Suspension and revoking of licenses
  – Identifying individuals with potential medical issues that could impact driving ability
  – Medical Advisory Board

OT Generalist vs Driving Rehab Specialist

• All healthcare professionals have a responsibility to be knowledgeable and address driving/community mobility needs.

OT Generalist vs Driving Specialist

• The OT Generalist should:
  – Be able to identify potentially at risk drivers
  – Be able to screen functions for safe driving
  – Be able to provide awareness of risk factors and strengthen skills related to driving
  – Have understanding of reporting laws and driving requirements
    http://lpp.seniordrivers.org/lpp/index.cfm
OT Generalist vs Driving Rehab Specialist

• The OT Generalist should:
  – Be able to recommend commonly available equipment to improve “fit of vehicle”
  – Be able to provide resources for alternate transportation options and transportation planning
  – Be able to determine when to refer to Driving Specialist

OT Practice Framework

• Client Factors
  – Values, beliefs, and spirituality
  – Body Functions
  – Body Structures
• Activity demands
  – Objects and their properties
  – Social demands
  – Space demands, etc.

Vision

• Visual Acuity
• Contrast Sensitivity
• Visual Field
• Visual Processing
• Depth Perception
• Glare Recovery

Age Changes in Field of View

Common Age Related Vision Changes

• Macular Degeneration
• Cataract
• Glaucoma
• Diabetic Retinopathy
• Neurological Diseases (MS, Parkinson’s)
Common Age Related Cognitive Changes

- Dementia
- Medication Related
- Fatigue
- Depression

Cognition

- Memory
- Attention
  - Attention Switching
  - Divided Attention
  - Complete Missing Information
- Decision Making

Common Age Related Physical Function Changes

- Arthritis
- Diabetic Neuropathy
- Osteoporosis
- Loss of Limb

Physical Function

- Strength
- Flexibility
- Sensation
- Coordination
- Balance
- Break Reaction Time

Other Medical Conditions

- Stroke
- Seizures
- Fractures
- Hip and knee replacements
- Sleep disorders
- Cardiovascular disease
- Respiratory disease

Medications

- Many medication classes have been associated with impaired driving skills and increase accident risk.
- Drug mechanisms that can impair driving
  - Sleepiness, fatigue, sedation, lightheadedness, syncope, blackouts, vision and impaired judgment and decreased coordination
Medication Side Effects

- Important to know the side effects of the medications that your patients take that can impair driving
  - Drowsiness
  - Dizziness
  - Blurred Vision
  - Unsteadiness
  - Fainting
  - Reaction time
  - Extrapyramidal Side Effects

Anticholenergics

- Includes antihistamines, some anti-depressants, antipsychotics and anti-parkinsonian
  - Blurred vision
  - Sedation
  - Confusion
  - Ataxia
  - Tremors and jerking
  - Common names: Spiriva, Ditropan, Advil/Tylenol PM, Benadryl, Wellbuterin

Anticonvulsants

- Ataxia
- Confusion
- Somnolence
- Tremors
- Common names: Diazepam, Gabapentin, Phenobarbital

Antidepressants

- Side effects may vary among classes of antidepressants.
  - Bupropions (Wellbutrin and Zyban) cause anxiety, restlessness and insomnia
  - SSRIs (Lexapro, Paxil, Zoloft) cause insomnia or sedation, anxiety and restlessness
  - Tricyclics (Elavil, Sinequan) cause sedation, blurred vision, orthostatic hypotension and tremors

Antihypertensives

- Lightheadedness
- Dizziness
- Fatigue
- Antihypertensives such as beta-blockers have CNS effects such as sedation, confusion, insomnia and nervousness.

Antiparkinsonians

- Excessive daytime sleepiness
- Lightheadedness
- Dizziness
- Blurred vision
- Dyskinesia
- Confusion
Antipsychotics
• Patients should be advised not to drive if experiencing severe side effects
• Heavily sedating
• Extrapyramidal side effects
• Physicians should consider formal psychomotor testing and on road assessments
• Common names: Haldol, Serentil, Compazine

Muscle Relaxers
• Sedation
• Blurred Vision
• Lightheadedness/dizziness
• Weakness
• Confusion
• Common names: Baclofen, Zanaflex, Flexeril

Medication Education
• Patients should be advised not to drive when experiencing severe side effects
• Patients should be advised not to drive during initiation, change in dosage or withdrawal
  — Important with Anticonvulsants, muscle relaxers and antipsychotics
• http://seniordriving.aaa.com/medical-conditions-medications/RoadWise-RX

“Red Flags”
• Acute events
• Patient or family member’s concern
• Chronic medical conditions
• Medical conditions with unpredictable/episodic events
• Medications

Occupational Therapy Process
• Occupational Profile
  — The initial step in the evaluation process that provides an understanding of the client’s occupational history and experiences, patterns of daily living, interests, values, and needs.

Occupational Therapy Process
• Analysis of Occupational Performance
  — The step in the evaluation process during which the client’s assets, problems, or potential problems are more specifically identified. Targeted outcomes are identified.
Assessing the Older Driver

- Self Assessments for the Older Driver
  - Driving Decisions Workbook
  - AAA Drivers 65 Plus: Check Your Performance

- Family/Caregiver Assessments
  - We Need to Talk Warning Signs for Older Drivers
  - ELDERLY DRIVERS Is your loved one driving safely?
  - Fitness to Drive Screening measure
    http://fitnesstodrive.phhp.ufl.edu/

Assessing the Older Driver

- Medical history
- Current medications
- Driving habits, routines and roles
- Restrictions
- Typical driving environments
- Use of alternate transportation

Assessing the Older Driver

- Visual Assessment:
  - Visual acuity, Peripheral vision, Depth perception, Color perception, Road sign recognition, Binocular glare testing, Contrast sensitivity, Stereopsis, Contrast sensitivity, Peripheral vision, Tracking, Convergence, Saccades, Pursuits

Assessing the Older Driver

- Vision:
  - Motor – Free Visual Perception Test
  - Baylor Visual Perceptual Assessment
  - Snellen Cart

Assessing the Older Driver

- Cognitive Assessment:
  - Memory, Divided attention, Attention Shifting, Executive functioning, Decision making, Processing,
Assessing the Older Driver

**Cognition**
- Trail Making Test A & B
- Blessed Orientation – Memory – Concentration Test

**Physical Assessment:**
- Range of motion, Strength, Fine motor coordination, Muscle tone, Proprioception, Endurance, Balance, Tactile sensation, Light and deep pressure stereognosis

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Assessing the Older Driver

**Physical Assessment:**
- Driver Skills Assessment of Motor Abilities
  [http://web.missouri.edu/~proste/tool/visiondriving/index.htm](http://web.missouri.edu/~proste/tool/visiondriving/index.htm)
- Timed Get Up and Go Test
  [http://www.healthcare.uiowa.edu/igec/tools/mobility/getUpAndGo.pdf](http://www.healthcare.uiowa.edu/igec/tools/mobility/getUpAndGo.pdf)
- Colorful Reaction Time Tester
  [http://faculty.washington.edu/chudler/java/backtime.html](http://faculty.washington.edu/chudler/java/backtime.html)

**Standardized therapy assessments commonly used to assess driving related skills:**
- Assessment of Driving Related Skills (ADReS)

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Treatment Ideas to Improve Driver Fitness

**Vision**
- Scanning to locate road signs
- Scanning parking lots to locate vehicles
- Training to increase head movements to improve visual field


**Cognitive**
- Matching of road signs and definitions
- Decision making for driving emergencies
- Planning alternate transportation options
- Increase processing speed by incorporating metronome into activities
- Identification of dangerous situations
Treatment Ideas to Improve Driver Fitness

- Physical
  - Improving flexibility
  - Practice “viewing blindspots”
  - Coordinate lower extremity movements to visual cues
  - Use a “steering wheel” to increase upper extremity endurance and flexibility
  - Practice car transfer techniques and load adaptive equipment

Adaptive Equipment to Improve Driving Abilities

- Seat belt adapters
- Handybar
- Panoramic rear and side mirrors
- Seat and back support cushions
- Keyless ignition or key adapters

Case Study: Treatment Planning

Educational program created by American Society on Aging in partnership with AARP, AAA and AOTA

- The program is designed to help older drivers find out how well they currently fit their personal vehicle, to highlight actions they can take to improve their fit, and to promote conversations about driver safety and community mobility. A proper fit in one’s personal vehicle can greatly increase not only the driver’s safety but also the safety of others.
- Become a CarFit Technician to participate in CarFit events

Referring to Driving Rehabilitation Specialist

- You should refer patients to a DRS for a driving evaluation if....
  - Patient experiences physical limitations that may require vehicle modifications to control a vehicle safely and legally
  - Patient is unable to tolerate driving for long periods due to pain or fatigue
  - Patient’s physical, cognitive, or visual skills have changed
  - Patient’s family is concerned about patient’s ability to drive
  - Physician requests evaluation due to recent illness or condition

Referring to Driving Rehabilitation Specialist

- Prior to making the referral:
  - Let patient know why they are being referred
  - Explain what the assessment will involve and accomplish
  - Let patient know what they can expect to pay for these services
Referring to Driving Rehabilitation Specialist

• Document specific reason for recommending driving assessment
• When applicable, family and caregivers should be informed of recommendations
• If patient is safe to drive (with or without restrictions, adaptive devices, and/or rehabilitation), reinforce any recommendations made by DRS
• If patient is not safe to drive, counseling may be required for driving cessation

Referring to Driving Rehabilitation Specialist

• What do you do if your patient refuses assessment?
  – Encourage patient to complete self-screening tool
  – Counsel patient on tips for safe driving to raise his/her level of awareness, and encourage safe driving habits
  – Suggest enrolling in a driving course
  – Document your concern regarding patient’s driving ability, supported with relevant information, and document patient’s refusal with any counseling provided
  – Provide family with information, caregiver assessments
  – If you are urgently concerned about patient’s driving safety, notify OMV

DRS Driving Evaluations

• Clinical Assessment
  – Vision skills
  – Break reaction time
  – Cognition
  – Range of motion
  – Strength
  – Sensation
  – Coordination
  – Balance

DRS Driving Evaluations

• On Road Assessment
  – Ability to transfer into/out of car
  – Loading adaptive devices
  – Maneuvering of vehicle
  – Management of vehicle controls
  – Management of speed
  – Appropriate stopping and following distance
  – Management of lane changes and turns
  – Observation skills
  – Judgment and decision making

DRS Driving Evaluations

• Results and Recommendations
  – Continue Driving
  – Continue Driving with equipment or modifications
  – Continue driving with restrictions
  – Rehabilitation or training
  – Driving retirement

Who do I contact??

• Baton Rouge Rehabilitation Hospital, Baton Rouge
  • (225) 231-3107
• Touro Rehabilitation Center, New Orleans
  • (504) 897-8557
• Lady of Lourdes, Lafayette
  • (337) 470-2859
• CREST, Ruston
  • (318) 257-4562
Modified Vehicles

- Driver vs Passenger
- Low tech vs high tech equipment

Louisiana Mobility Equipment Dealers

- Crescent Vans, Inc
  - Metairie
- Fastserv Medical
  - Monroe & Bossier
- Superior Van and Mobility
  - Baton Rouge & Harvey

http://www.nmeda.com/locate-a-dealer-results/

Driving Retirement

- Providing follow up services
- Would not tell a patient there are unsafe to take a shower without providing follow up recommendations to maintain independence

Counseling the Older Driver

- Explain why it is important to stop driving
  - Explain what the results tell you about patient’s level of function, and then explain why this function is important for driving
  - State the potential risks of driving
  - Discuss patient’s thoughts or feelings

Counseling the Older Driver

- Discuss transportation options
  - Encourage patient to create a transportation plan
  - Give patient resources to explore
  - Explore any barriers your patients foresee to these methods (financial constraints, limited service, destinations, etc.)
  - Encourage patient to involve family in creating transportation plan
  - Involve case manager who may be aware of alternate modes of transportation

- Reinforce driving cessation
  - Ensure that patient understands reasons (legal, health, and safety) why driving cessation is recommended
  - Have patient reiterate to you, why he/she must not drive
  - Reassure patient that you are available for further assistance and to answer any questions
  - Encourage family/caregiver support
Counseling the Older Driver

- Situations that require additional counseling:
  - The resistant patient
  - Patient presents with symptoms of depression
  - Patient lacks decision-making capacity
  - Patient shows signs of self-neglect or neglect

Responsibility & Liability

- Obligation to promote patient’s health, autonomy, and quality of life.
- Equally responsible to protect patients from harm and duty to protect the public health

Ethical Responsibilities

- If you recognize your patient has an impairment that puts them at risk as a driver, you have to do something about it
- When someone make a decision that has the potential to do harm not only to themselves, but to others as well, we have an ethical obligation to protect them from doing so

AT RISK

Assess Function
- Vision
- Cognition
- Motor

- Remediate Skills
- Educate on Driving Evaluations
- Refer to DRS

Is the patient safe to drive?

Yes

No

NOT AT RISK

Promote Driver Fitness
- Aging Tips
- Tips for Safe Driving
- Defensive Driving Courses
- Re-assessment

Counsel Patient and Family
- Alternate Transportation
- Inform Physician

Louisiana Reporting Procedures

- Physician/Medical Reporting
  - There is no statutory provision requiring physicians to report patients. However, if a medical report is filed, it must address the medical concern for which it was required; contain the physician’s signature, address, and phone number; and be dated within 60 days from the date received by the Department. The physician’s opinion of the applicant’s ability to safely operate a motor vehicle is desired but not required.

- Other Reporting
  - Will accept information from OMV employees or agents in the performance of duties, law enforcement officers, health care providers, or family members
Louisiana Reporting Procedures

- Legal Protection
  - A physician who provides such information has statutory immunity from civil or criminal liability for damages arising out of an accident.
  - Louisiana has statutory protection for good faith reporting of unsafe drivers.

Navigating the Resources

- AOTA Driver Safety
  - [http://www.aota.org/older-driver](http://www.aota.org/older-driver)
- LA Office of Motor Vehicles
  - [http://www.expresslane.org/](http://www.expresslane.org/)

Maintaining Safety and Independence