

COMPLEXITIES OF DRIVING

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Complexities of Driving

- ▣ Have I identified any “Key Indicators” that could affect driver performance?
- ▣ What do I do now?
- ▣ Where do I start?

Complexities of Driving

- ▣ What observation skills or resources do I have to consider driving may be an issue.
- ▣ Physician, family, OT, PT, SLP, cognitive evaluation.
- ▣ *Physical
 - Can I safely enter the vehicle with adequate gait, transfers, and demonstrate the ability to safely stow an assistive gait device if needed.

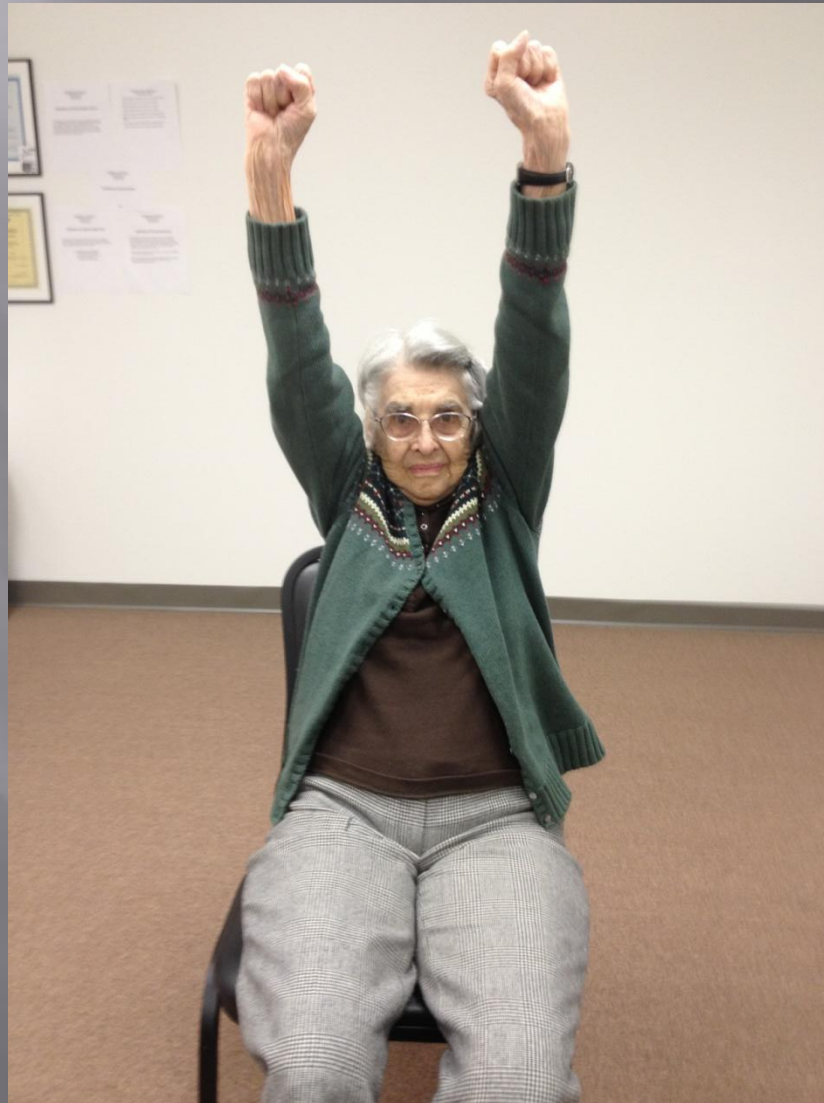
Key Indicators

- Do I have the musculoskeletal requirements to complete pre-drive adjustments of the vehicle. Consider AROM, trunk rotation, strength, pinch, fine motor prehension.
- What do I do when I get into my car? What biomechanics are required to complete pre-drive adjustments?
- Is it ok if I choose not to use them?

Key Indicators

- ▣ Does my resident or consumer have the musculoskeletal requirements to “physically” drive using OEM controls.
- ▣ Starting, parking brake release, gear shift, steering, gas/brake, turn signals, horn, wiper, wiper wash, cruise, dimmer, etc.
- ▣ HVAC, radio, navigation, cell phone.

What range of motion is required to drive?



Is it a simple process....



If ROM was the only consideration then he would not drive.



Or her at 2'9"



Or him as a C5 Quadriplegic



Key Indicators

- Hip flexion, adduction, abduction, knee ext./flexion, ankle dorsa flexion and plantar flexion.
- Sensory discrimination
- AROM patterns in the upper extremities.
- Consider more than just shoulder range of motion. Forearm rotation, wrist function, grasp/release.

Key Indicators

- Look at a biomechanical plane that simulates driving.
- Seated without the affects of gravity and gait.
- Observation of gait is not the plane of driving.

Key Indicators

- What vision is required to drive in our state?
- Where would I find this?
- *Glaucoma, macular degeneration, cataract formation, sensitivity to light.
- *Refer to your vision specialist with a specific question regarding the consumers ability to drive or need for assessment.
- *Has there been any changes that could affect there ability to see when driving.

Key Indicators

-Are we aware of any vision or visual perceptual deficits that could influence driving.

*Distance acuity

*Depth perception

*Horizontal fields

*Color perception

*Contrast sensitivity

*Visual Perceptual

Key Indicators

- If I changed from binocular to monocular driving. Would I anticipate any problem?
- Can you identify any vision problems from your observation of the resident or consumer?

Key Indicators-"I always carry 4 sets of driving glasses!"



Key Indicators

What's wrong with this picture?



Key Indicators

- Cognitive changes and the impact on driving.
- What is needed to “effectively” drive in today’s environment?

Risk Assessment

- Processing of risk is the fundamental cognitive skill a driver uses to avoid accidents and arrive alive. What is risk assessment?
- Processing speeds
- Attention concentration skills
- Memory/recall
- Direction following
- Sequencing

Key Indicators



What do I do now?

- Start by having the difficult conversation with the consumer, family member, and physician.
- Seek resources and refer to a specialist when needed.

Don't try and tackle it alone...

- ▣ ADED-The Association for Driver Rehabilitation Specialists www.ADED.net
- ▣ AOTA-The American Occupational Therapy Association, Inc. www.aota.org
- ▣ Maryland MVA-Driver Wellness and Safety www.mva.maryland.gov