Driving and Community Mobility Advancements

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OT Services at Sugarhouse

• Traditional rehabilitative therapies for persons with CVA, TBI, SCI, and other neuromuscular disorders
• Hand therapy
• Work hardening
• Home safety assessments
• Functional Capacity Evaluations
• Driver Rehabilitation Program
Sugarhouse Community Access
Objectives

1. Participants will be able to identify the driving rehabilitation process and a physicians role in this process.

2. Participants will be able to identify new technology used for clinical and on the road assessment in addition to vehicle modifications.

3. Participants will be able to identify 3 resources regarding driving program development.
Providers of Driver Rehabilitation

- Occupational therapist
- Physical therapist/physiotherapist
- Driving instructors/educators
- Kinesiologist and/or kinesiotherapist

Provider Levels

• Occupational Therapy Generalist

• Driving Rehabilitation Specialist
  – Advanced training. Performs all components (clinical, on the road, training and referrals). Plans, develops, coordinates, and implements driving services for individuals with disabilities (AMA, 2003, p. 53)

• Certified Driving Rehabilitation Specialist (CDRS)
  – Certification from Association of Driving Educators for the Disabled (www.ADED.net)
  – Voluntary credentialing process
  – Community Mobility Certification available through AOTA
ADED

• The Association for Driver Rehabilitation Specialists
  Established in 1977
  Non-profit
  List of local providers
  Wealth of information

www.drivers-ed.org
Sugarhouse Referral Process

- Physician order for “driving evaluation”
- Cost $175
- Additional training $60.00 per hour
- Not reimbursable by insurance
- Reimbursed by WCFU, Workforce Services, automobile insurance, MDA, HB 400
Driving Evaluation

• Intake form (medical history, medication, driving history, insurance and license verification) and safe driving video presentation

• Pre-driving assessments in clinic

• “On the road” training or testing

• Review and make recommendations, complete paperwork as needed for M.D.
Driving Evaluation cont’d

• Review and recommendations

• Functional Ability Evaluation (FAE) Medical Report Form

• Equipment and driving recommendations

• E-mail and fax form to referring MD, PA, or FNP
Common Recommendations

• Completion of the Medical Report form by physician
• Recommended restrictions
  – Speed
  – Area
  – Daylight Only Driving
• On the road training hours
  – Practice specific skills
• Driving Simulator
Adaptive Equipment

- Blind spot mirrors
- Spinner knobs
- Turn signal Extension
- Left foot accelerator
- Pedal guards
- Hand controls
Role of the Physician

• Service provider
  – Leaving the acute or rehab service
    • Precautions – activity participation, medication, work, driving
  – Outpatient clinic
    • Verbal vs. written documentation
  – Family practice
    • Screening for impairments (cognitive, visual, motor, sensory)
  – Caregiver initiated
    • Valuable, biased(?), emotionally driven feedback

• Client may have a Medical Report form for your completion

• Part of your assessment and evaluation
  – Cognitive, motor, visual, sensory impairment
  – Medication side-effects
### Functional Ability In Driving: Guidelines and Standards for Health Care Professionals

This table shows, in general, the principle requirements for each level and may be used as a rough guide only. A full narrative description and table for each category are found in the Functional Ability In Driving: Guidelines and Standards for Health Care Professionals, which is available at a Utah Driver License Division office or on-line at [www.driverlicense.utah.gov](http://www.driverlicense.utah.gov).

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<tbody>
<tr>
<td>1</td>
<td>No history or fully recovered</td>
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<td>No current or past balance problem</td>
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<td>2</td>
<td>Adult, stable with non-insulin stimulation, diet and/or oral meds</td>
<td>All Class I rhythm, no limits, no symptoms on ordinary activity</td>
<td>Minimal symptoms, No steroids</td>
<td>Minimal impairment, able to control equipment</td>
<td>Seizure free 1 year, off medication</td>
<td>Minimal difficulty with good adjustment</td>
<td>Stable 1 year with or without medication</td>
<td>No consequences within past year</td>
<td>No history or problem for 2 years. ESS &lt;6</td>
<td>Minimal loss of function</td>
<td>Problems with good self-management ESS 7-9</td>
<td>Milder balance (Meniere’s disease)</td>
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<td>3</td>
<td>Stable on oral insulin-stimulating agent and/or diet</td>
<td>Class I rhythm stable, with pacemaker for 6 months</td>
<td>Symptoms with strenuous activity</td>
<td>Slight impairment, able to control equipment</td>
<td>Seizure free 1 year, on medication</td>
<td>Slight impairment with good judgment</td>
<td>Stable 3 months with or without medication</td>
<td>No consequences within past 6 months</td>
<td>Mild loss of function with or without compensatory device</td>
<td>Moderate problems, good professional management ESS 10-12</td>
<td>Problems but not incapacitating</td>
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<td>4</td>
<td>Stable on insulin for 1 year</td>
<td>Class II rhythm, stable for 3 months Diabetic under 120</td>
<td>Stable with O2 or steroids, dyspnea on exertion</td>
<td>Moderate impairment of dexterity</td>
<td>Seizure free 6 months on medication</td>
<td>Moderate impairment with good judgment</td>
<td>Stable 1 month with medication</td>
<td>No consequences within past 3 months</td>
<td>Moderate loss of function with or without comp device</td>
<td>Moderate problems related to time of day ESS 13-15</td>
<td>Recurring problem, not in past 3 months</td>
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<td>5</td>
<td>Stable for 6 months</td>
<td>Class III anticipated aggravation by unlimited driving</td>
<td>PO2 over 50, symptoms w/ordinary activity, no cough syncope 3 months</td>
<td>Moderate impairment and decreased stamina</td>
<td>Seizure free 3 months on medication</td>
<td>NOT USED</td>
<td>Minimal dyskinesia, medications which interfere with coordination</td>
<td>No consequences within past 1 month</td>
<td>Limited joint motion</td>
<td>Moderate problems related to time and circumstances ESS 13-15</td>
<td>Recurring problems not In past 1 month</td>
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<td>6</td>
<td>Stable for 3 months</td>
<td>Class III unstable rhythm, uncontrolled hypertension</td>
<td>Severe dyspnea no syncope within 3 months</td>
<td>Moderate impairment expected to be temporary</td>
<td>Single recurrence over 2 years Special circumstances</td>
<td>Moderate impairment, variable adjustment or altered competence from meds, alcohol, drugs</td>
<td>As recommended. Driving under direct supervision may be therapeutic</td>
<td>Intermittent impairment of function, not in driving or working hours, drive under supervision</td>
<td>Impairment or debility requiring assistance of responsible driver</td>
<td>NOT USED</td>
<td>NOT USED</td>
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<td>7</td>
<td>Special Circumstances or under evaluation</td>
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<td>8</td>
<td>Severe unstable insulin-dependent</td>
<td>Class IV arrhythmia with loss of conscious uncontrolled HT</td>
<td>Severe dyspnea, syncope within 3 months</td>
<td>Impairment incompatible w/driving</td>
<td>Seizures not controlled or interfering medications,</td>
<td>Severe impairment and poor adjustment</td>
<td>Active condition with risk</td>
<td>Chronic use of alcohol or drugs</td>
<td>Level 10 2000 or worse with VF less than 60 degrees</td>
<td>Chronic unsafe conditions</td>
<td>Severe problem, no medication or unsuccessful therapy</td>
<td>Chronic balance problems</td>
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Revised 11/06
Liability Considerations

• Driving is a privilege, not a right.
• Driver’s License Division (DLD) has their own Medical Advisory Board (MAB) to review cases as needed
• DLD has the final say about who can drive
• Collaborative process between client, physician, caregivers, and therapists
Alternative Community Mobility

- Driving Retirement
  - Develop a plan
    - Senior transportation program
    - Family, church, friends, neighbors
    - Private resources (taxi, UBER, van rentals, etc)
    - Hartford resources
Alternative Community Mobility

• Public Transportation
  – Trax
  – Bus
  – Flex Trans
Advances in Equipment

• Driving Simulators
• Dynavision/BITS
• Car/Truck Adaptations
• Van Adaptations
Dynavision Visuomotor Training Device
BITS
BITS Parameters Screen
Rapid Eye Movement Screen
Advanced Technology
2014 MV-1 DX
Advanced Technology
IDS Systems
Advanced Technology
AEVIT 2.0 Primary Controls

Step 1 - Activate the scan by pushing the switch.
Step 2 - When the desired function is heard, activate the switch again and the function begins!!

Activate the switch and a voice (yours if you like) announces the functions. When the desired function is heard, activate the...
Advanced Technology
AEVIT 2.0 Secondary Controls
Advanced Technology
AEVIT 2.0 Smart-Shift
Advanced Technology
Advanced Technology
Advanced Technology
Advanced technology
Drive Master
Advanced Technology
Case Study #1

- 14 year-old, fell 30 feet
- Diffuse Axonal Injury
- Compound Left Femur Fracture
- Diplopia
- Visual Neglect and Inattention
Case Study #2

• Left CVA; Right Hemiparesis
• Aphasic
Case Study #3

• 38 year old male

• Diving Accident in 2011

• C6 Level Tetraplegia
Equipment Vendors

• ParaQuad Mobility 801-487-0111
  www.paraquad.com

• Mobility Solutions Inc. 801-566-3199
  www.msiutah.com

• Performance Mobility 801-849-0369
  www.performancemobility.com
Online Resources

• Driver’s License Division
  – www.driverlicense.utah.gov

• Association for Driver Rehabilitation Specialists (ADED)
  – www.driver-ed.org
  – www.aded.net

• AARP
  – www.aarp.org

• American Automobile Association (AAA)
  – www.aaa.com or www.aaafoundation.org
  – www.seniordrivers.org

• American Occupational Therapy Association Driving Microsite
  – www.aota.org/olderdriver/
Online Resources cont’d

- Older Driver Project with American Medical Association, [www.americangeriatrics.org](http://www.americangeriatrics.org)
- National Mobility Equipment Dealers Association [NMEDA.com](http://NMEDA.com)
- The Hartford [www.thehartford.com/lifetime](http://www.thehartford.com/lifetime)
Questions?