Disclosure

- Medical Advisor, Manitoba Public Insurance, Driver Fitness
- Paid a speaker fee by MPI
- No commercial interests
Objectives

- To review the impact of dementia on driver performance
- To discuss clues for family and friends that the driving privileges of a person with dementia should be reviewed
- To discuss the role of physicians and other health professionals in assessing drivers with dementia and reporting to the licensing authority
- To present the Manitoba Public Insurance process for assessing drivers with dementia, including the tools that are utilized
Driving Cessation

- Males – 6.2 years
- Females – 9.4 years
- Voluntary vs. Involuntary
- Role of insight
- “But my driver licence is my only photo ID”
Medical Conditions and Driving

- Persistent (functional) Impairment
- Episodic (Risk of sudden incapacitation) Impairment
Episodic Impairment

- Seizures
- Blackouts
- Heart Disease (eg. arrhythmia)
- Sleep disorders
- Low blood sugar (hypoglycemia)
Persistent Impairment

- Vision
- Dementia
- Neurological Disorders (eg. stroke, Parkinson Disease)
- Musculoskeletal Disorders (eg. arthritis)
- General debility caused by multiple medical conditions, including the effects of medication.
What is the Risk?

Health Conditions and Crash Risk

Risk of an At-Fault Crash

- Slightly High Crash Risk = 1.1-2.0
- Moderately High Crash Risk = 2.1-5.0
- Considerably High Crash Risk = 5.0+

(See Vernon, 2002; Vaa 2003; Sagberg, 2003; Charlton 2004; Dobbs, 2002 [Red Flags])
Supreme Court of Canada

- 1999 – Grismer Decision
- B.C. Superintendant of Motor Vehicles v. B.C. Council of Human Rights
- A diagnosis alone is insufficient reason to disqualify
  - An applicant has the right to an individual assessment to demonstrate the ability to compensate
Persistent (functional) impairments

- Driving is a complex task, requiring
  - adequate vision
  - motor control
  - coordination
  - ability to maintain attention
  - intact higher cognitive functioning:
    - perception and attention to/interpretation of stimuli
    - formulation of a plan to handle a situation based on previous experiences
    - execution of an action such as steering, braking
    - monitoring the outcome of a behaviour as feedback for subsequent action

  NB. Insight – individuals with pathology that affects attention, perception, and executive function are less likely to be aware of their deficits.
Definition of Dementia

- A general term for a decline in mental ability severe enough to interfere with daily life
- Can dementia be reversible?
- Most common forms are persistent and progressive
  - In all cases driving cessation will eventually become necessary
Degree or Severity of Dementia

- Some memory impairment but no definite diagnosis
  - forgets names, location of objects
  - trouble finding words
  - difficulty travelling to new locations
  - difficulty handling problems at work

- Mild Dementia
  - difficulty with complex tasks (instrumental ADL)
    - finances, shopping, meal planning, cooking, taking medications, telephoning

- Moderate Dementia
  - difficulty with basic ADL – eating, dressing, hygiene
    - needs help choosing clothing & dressing
    - requires prompting and assistance with bathing

- Severe Dementia
  - decreased ability to use toilet/incontinence
  - vocabulary limited
  - loses ability to walk/sit
  - unable to smile
Driving Errors in Dementia

- Drives too slow
- Lane positioning
- Unsafe lane changes
- Inappropriate stops
- Trouble with turns, especially left turns
What can you do?

- Discuss with driver
- Discuss with family MD/nurse practitioner
- Report to MPI – Medical Compliance and Assessments
  - 510 – 234 Donald Street
    Winnipeg R3C 4A4
  - Electronically – MPI website
    - [http://apps.mpi.mb.ca/english/contact/s_contact/inquiries.asp](http://apps.mpi.mb.ca/english/contact/s_contact/inquiries.asp)
  - Written information must include:
    - your name and relationship to driver
    - suspected medical condition
    - the specific driving behaviour you observed that prompted your concern
    - telephone number where you can be reached
  - Identity will not be disclosed
  - A request for a medical report will be sent to the driver
Physician Role and Responsibilities

- Physicians do **not** take away driver licences
- Mandatory reporting of potentially medically unfit drivers
- Rule out reversible causes of cognitive decline
- In office assessment of cognitively impaired drivers
  - Validity of cognitive screening tools:
    - MMSE, MOCA
    - Simard MD
    - Trails B
- Reassess frequently – every 6-12 months
Trail Making Test
Medical Compliance and Assessments/Driver Fitness, MPI

- Is separate dept from Bodily Injury (Claims)
- Evaluate medical information and co-ordinate functional assessments. Apply CCMTA Medical Standards for Drivers and internal policy
- Review medical reports from physicians/other HCP’s
- Review information from Police/RCMP, public at large, self declarations.
- Assess and determine customer’s ability to safely operate a motor vehicle.
- Coordinate access to various driver assessment tools, including DAMP, DriveABLE, in vehicle evaluations
- Drivers & Vehicle Act and The Highway Traffic Act provides authority
MPI Process for Drivers With Dementia

- Once information received, a medical report is requested
- Driver may be suspended pending the outcome
- Prior to proceeding to DriveABLE, all other CCMTA medical standards must be met
- Drivers are not candidates for DriveABLE if they have physical or vision impairments that may affect driving and/or ability to perform DriveABLE tasks
  
  e.g. Parkinson Disease patient with cognitive issues
  
  (refer to DAMP)
DriveABLE

- Evidence based assessment tool that evaluates driving errors related to cognitive impairment
- In use in North America, Australia, New Zealand, South Korea
- Developed by observing the types of high risk driving errors made by individuals with known dementia and not made by control groups
- Then a road test was designed that would expose candidates to suitable situations. The test is scored based on the number and severity of errors made
- A computer based written test was then developed and performance correlated with performance on the road test (ie. designed to predict road test outcome)
In Office Cognitive Assessment

- Winnipeg or Brandon
- Cost is $50
- Driver is asked to complete a series of tasks using a computerized touch screen/touching a button
- Administered by specially trained MPI staff
- Translation protocol
- Family members/caregivers are able to observe
Potential outcomes:

- Pass - no further testing necessary
  - will be kept on annual medical recall
- Inconclusive – must complete on road evaluation
- Fail – licence is cancelled. Can retake once, or proceed to on-road evaluation, or appeal to Medical Review Committee
On Road Evaluation

- Winnipeg or Brandon
- Cost is $75.00
- Completed by specially trained MPI driver examiners
- Conducted on a special road course designed to reveal driving errors associated with cognitive decline

Potential outcomes:
- Pass - no further testing required
  - annual medical recall
- Fail - licence cancelled. Cannot retake. Can appeal to Medical Review Committee
Medical Review Committee

- Separate appeal body not governed by MPI
- Established by legislation
- Provides appeal process in cases where a person’s licence has been cancelled or declassed for failing to meet the medical standards
- Conducts hearings to determine if standards applied in fair and equitable manner and whether exception to rule may be made.
- Members include FPs, neurologists, cardiologists, optometrists and nurses
- MPI provides copy of driver’s medical file prior to appeal
Driver Assessment and Management Program

- Health Sciences Centre – OT department
- A 2 part functional assessment
  - in clinic – by OT
  - on road – by a specialized driving instructor
- Assess drivers with:
  - physical impairments (e.g. stroke, MS, Parkinson Disease, spinal cord injury, traumatic brain injury, amputation)
  - visual problems
  - combined physical/cognitive impairments
  - general debility related to multiple medical conditions, including the effect of medications
- Access coordinated by MPI – Medical Compliance and Assessment/Driver Fitness
- Cost - $100.00
- Current wait time – 2 months
Strategies for Compensation

- Role of conditional licences (eg. local area only)?
- Use of co-pilots/navigators?
- Driver education programs?

Remember!

- A person with dementia qualifying for a licence is a temporary situation. In time, all will need to cease driving
Conclusions

- Dementia is a medical condition with a high risk of poor driving outcomes
- All individuals with dementia will eventually have to cease driving
- Individual assessment is required
- Families should watch for high risk driving errors and a lack of insight
- It is difficult for physicians to determine driving ability based on an office assessment
- Manitoba Public Insurance utilizes various tools to determine whether individuals with dementia can continue to drive
QUESTIONS?