Driving and Dementia
Practical Tips for the Family Physician

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Medico-legal problems related to fitness to drive

CMPA experience, 2005-2009:

- 67 medico-legal cases
- Half were legal actions, half were College complaints
- Decisions in favor of the physician predominated

- 3 principal themes
  - Legal actions involving physician failure to report patient as unfit to drive because of a medical condition
  - Complaints that a report had been made to a provincial licensing authority
  - Complaints related to refusal to support an application for restoration of driving privileges

7.3 Specific assessment

Factors that should be considered in the assessment of older drivers spell out the mnemonic SAFEDRIVE.*

Safety record	Is there a history of driving problems?
Attentional skills	Does patient experience lapses of consciousness or episodes of disorientation?
Family report	What are family's observations of driving ability?
Ethanol	Screen for alcohol abuse
Drugs	Review medication, especially for psychoactive drugs
Reaction time	Are neurologic and musculoskeletal disorders slowing reactions?
Intellectual impairment	Complete Mini-mental State Examination
Vision	Test for visual acuity
Executive function	Does the patient have trouble planning and sequencing tasks and self-monitoring behaviour?

Canadian Medical Association. Determining fitness to operate motor vehicles: CMA Driver's Guide, 7th ed. Ottawa, 2006

Canadian Medical Association position…

Moderate to severe dementia is a contraindication to driving. Moderate dementia is defined as the inability to independently perform two or more instrumental activities of daily living (including medication management, banking, shopping, telephone use, cooking) or any basic activity of daily living (eating, dressing, bathing, toileting, transferring).

No test, including the Mini-mental State Examination (MMSE) has sufficient sensitivity or specificity to be used as a single determinant of driving ability. However, abnormalities on tests including the MMSE, clock drawing and Trails B should trigger further in-depth testing of driving ability.

- New impairment due to cognition
- Grade B, Level 3 evidence (based on expert opinion)

Canadian Medical Association. Determining fitness to operate motor vehicles: CMA Driver's Guide, 7th ed. Ottawa, 2006

Activities of Daily Living

INSTRUMENTAL ADL's

- Manage medications
- Handle money, bills, shop
- Use telephone
- Prepare food

BASIC ADL's

- Bathe/shower
- Walk
- Toilet
- Transfer (bed/chair)
- Feed self

Canadian Medical Association position…

“Physicians should err on the side of reporting any potentially medically unfit driver.”

- Discretionary reporting in
  - Alberta
  - Nova Scotia
  - Quebec

- MD protection for reporting in all provinces; in most, not admissible as evidence in legal proceedings

Canadian Medical Association. Determining fitness to operate motor vehicles: CMA Driver’s Guide, 7th ed. Ottawa 2006

CMA Driver's Guide revisions, 8th Ed…

- Cognitive screening alone cannot determine driving fitness
- It is recommended that physicians administer more than one cognitive screening tool
- In patients with dementia, driving fitness should be reassessed every 6 to 12 months, or more frequently if the cognitive impairment progresses
- The legal duty is to report concerning findings, rather than to assess driving fitness. It's up to the transportation authorities to decide which patients with dementia or MCI are safe or unsafe to drive.

Canadian Medical Association. Determining fitness to operate motor vehicles: CMA Driver's Guide, 8th ed. Ottawa, 2013

CMA Driver's Guide revisions, 8th Ed…

- If cognitive tests such as MMSE, MOCA, Clock, Trails, or other in-office tests are markedly abnormal (where the results are specific and believable)…
  - Is the test result consistent with other evidence?
  - Use common sense – consider the severity of findings

Canadian Medical Association. Determining fitness to operate motor vehicles: CMA Driver's Guide, 8th ed. Ottawa, 2013

CMA Driver's Guide revisions, 8th Ed…

To help you "get off the fence," ask yourself four questions:

1. Given the results of your clinical assessment, would you get in the car with the patient driving?
2. Given the results of your clinical assessment, would you let a loved one get in a car with the patient driving?
3. Given the results of your clinical assessment, would you want to be crossing a street in front of a car with the patient driving?
4. Given the results of your clinical assessment, would you want to have a loved one cross a street in front of a car with the patient driving?

Canadian Medical Association. Determining fitness to operate motor vehicles: CMA Driver's Guide, 8th ed. Ottawa, 2013

Questions to Ask the Family

1. Do you or would you feel uncomfortable being a passenger when the person is driving?

2. In the last year has the person had any accidents or near misses or tickets for traffic violations (driving too slowly, failure to stop)?

3. Have you noticed the person self-restricting their driving habits (driving less or only familiar routes, or avoiding driving at night, in bad weather, or busy streets)?

4. Have there been occasions where the person has gotten lost or shown navigational confusion?

5. Have you or others seen unsafe or abnormal driving behavior or are cues/directions needed from a “copilot”?

Considerations in Fitness to Drive

- History of driving accidents or near-accidents*
- Family member concerns*
- Trails A & B – for ‘task switching’, visuospatial and executive function
- Clock draw – for visuospatial and executive function
- Pentagon draw / cube draw – for visuospatial function
- Cognitive test scores – maybe
- CMA guidelines – inability to independently perform 2 instrumental ADLs or 1 basic ADL

* Ask patient and family member separately

Use efficient, validated cognitive screening tools that staff can administer

Montreal Cognitive Assesment (MoCA) vs. MMSE

MMSE > 26 is normal

MMSE < 26 detects
18% of MCI
78% of mild AD

Specificity 100%

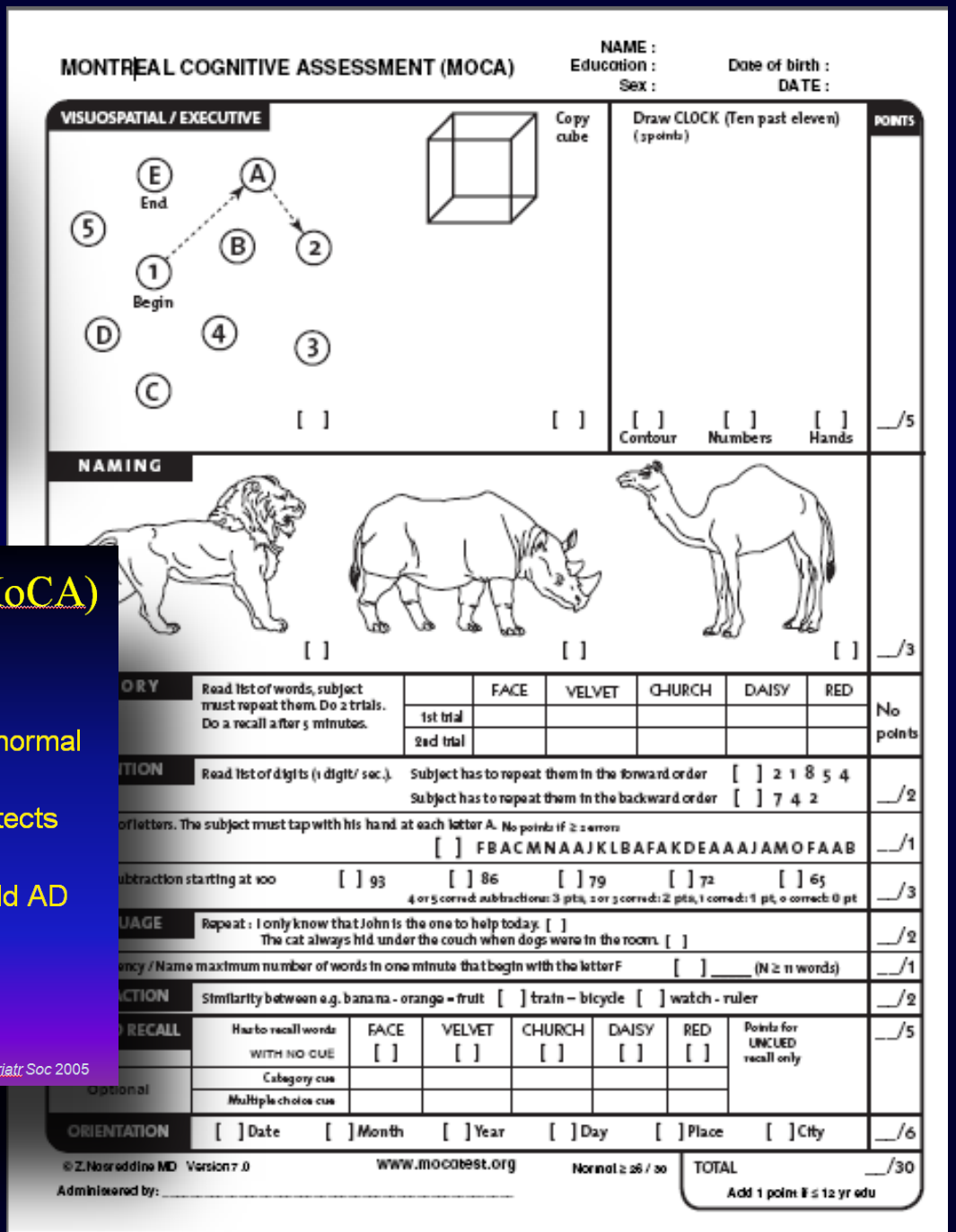
MoCA > 26 is normal

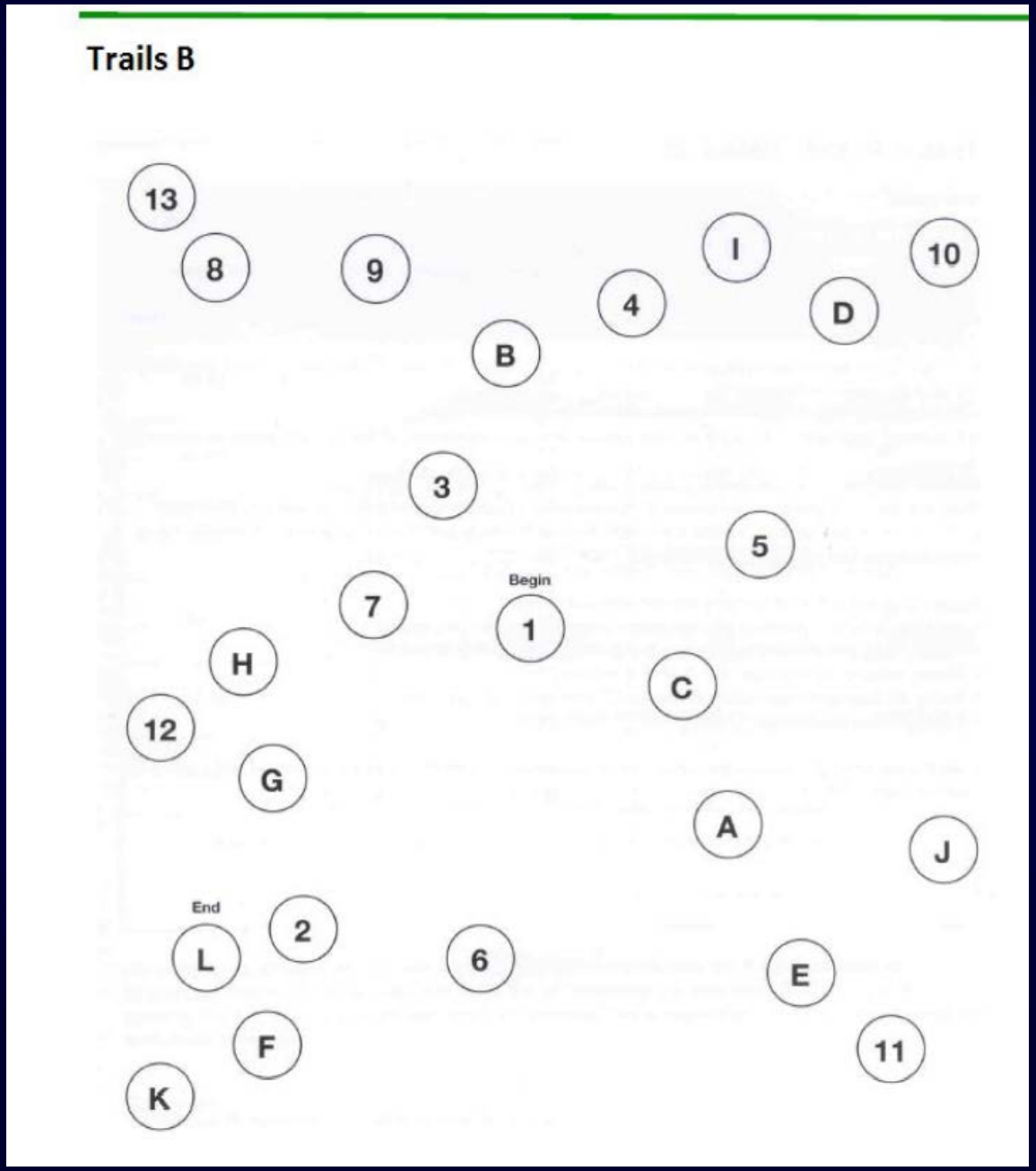
MoCA < 26 detects
90% of MCI
100% of mild AD

Specificity 87%

Nasreddine Z et al, *J Am Geriatr Soc* 2005

www.mocatest.org





Trails B

"On the paper are the numbers 1 through 13 and the letters A through L, scattered across the page. Starting with 1, draw a line to A, then to 2, then to B, and so on, alternating back and forth between numbers and letters until you finish with the number 13. I'll time how fast you can do this. Are you ready? Go."

If education or language is a concern, ask the patient to write down numbers 1-13 and letters A-L

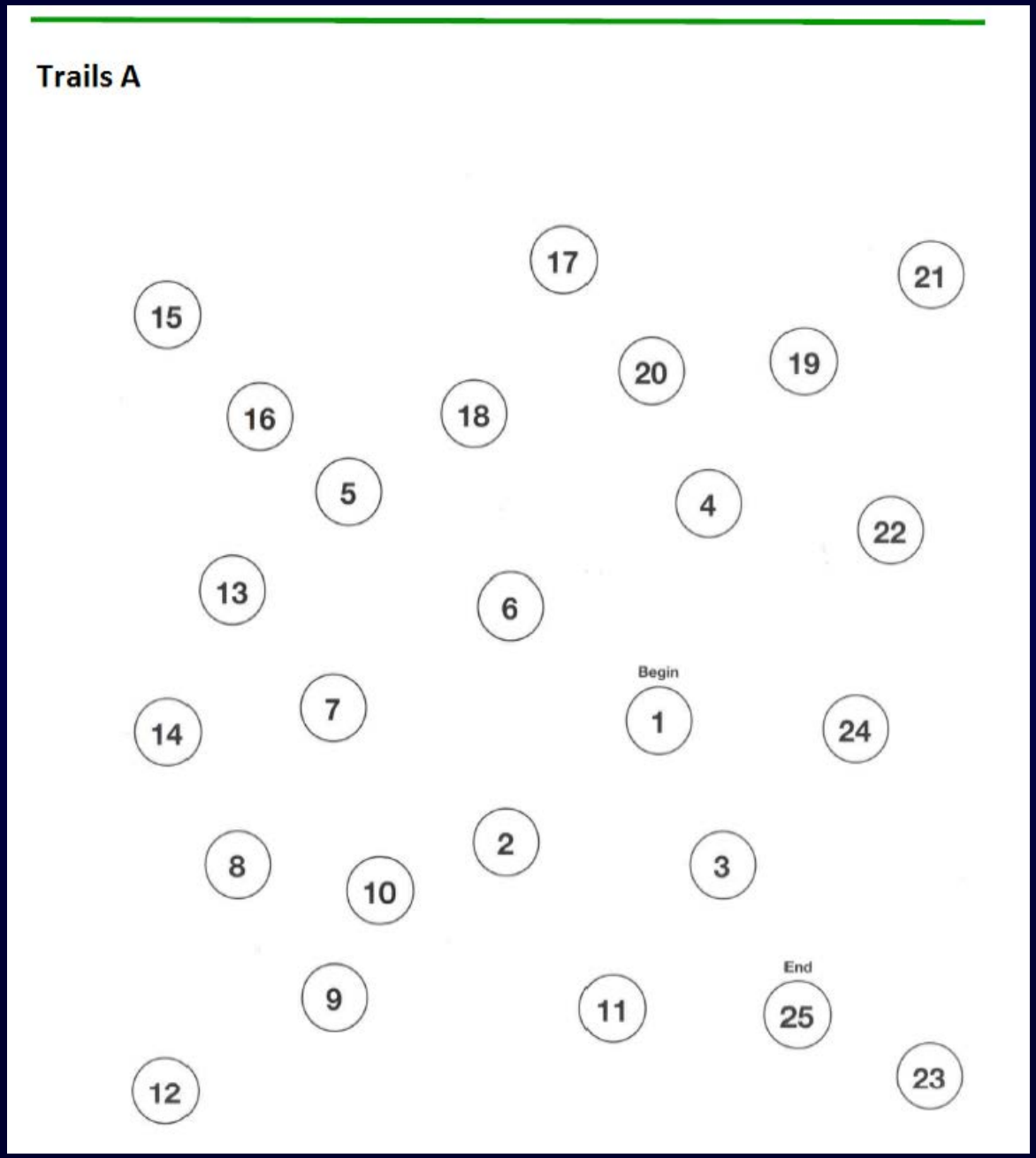
Trails B

Tests “task switching”

- Completion time > 3 minutes or 3 or more errors suggests an unsafe driver
- Completion time of 2 – 3 minutes or 2 errors is unclear
- Completion time of < 2 minutes and 0 or 1 error is acceptable

Roy M, et al. Systematic review of the evidence for Trails B cut-off scores in assessing fitness-to-drive. Canadian Geriatrics Journal 2013;16(3)

Molnar, F.J. et al. Practical experience-based approaches to assessing fitness to drive in dementia. Geriatrics & Aging 2009;12(2)

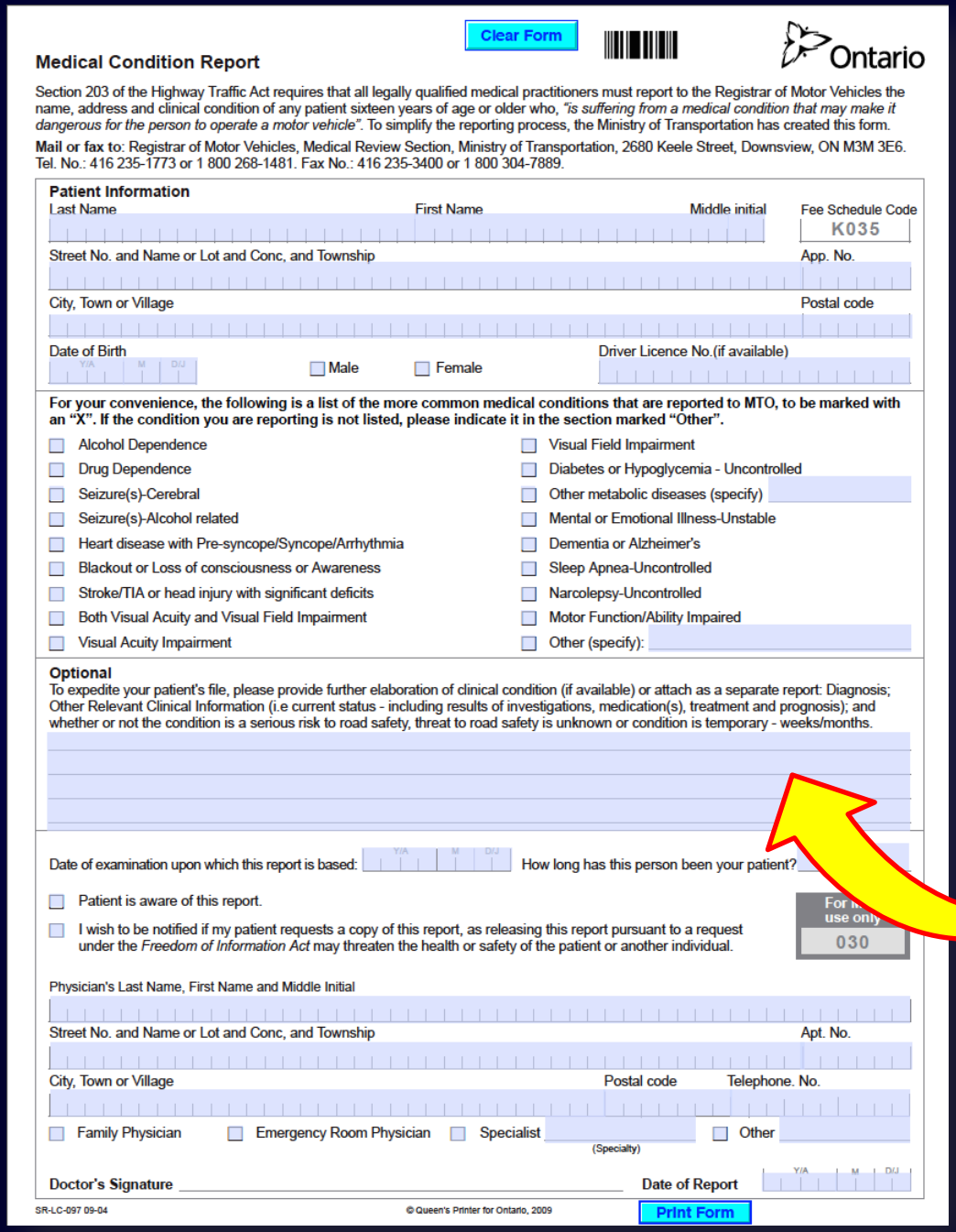

Trails A
17
21
15
20
19
16
18
5
4
22
13
6
Begin
7
14
1
24
2
8
3
10
End
9
11
25
12
23

Trails A

Patients with Frontotemporal Dementia or Lewy Body Dementia or Parkinson's Disease Dementia are generally UNSAFE to drive!

Fitness to Drive

The gold standard for assessing driving safety is a comprehensive on-road assessment.



Clear Form

Medical Condition Report

Ontario

Section 203 of the Highway Traffic Act requires that all legally qualified medical practitioners must report to the Registrar of Motor Vehicles the name, address and clinical condition of any patient sixteen years of age or older who, *"is suffering from a medical condition that may make it dangerous for the person to operate a motor vehicle"*. To simplify the reporting process, the Ministry of Transportation has created this form.

Mail or fax to: Registrar of Motor Vehicles, Medical Review Section, Ministry of Transportation, 2680 Keele Street, Downsview, ON M3M 3E6. Tel. No.: 416 235-1773 or 1 800 268-1481. Fax No.: 416 235-3400 or 1 800 304-7889.

Patient Information

Last Name | First Name | Middle initial | Fee Schedule Code: K035

Street No. and Name or Lot and Conc, and Township | App. No.

City, Town or Village | Postal code

Date of Birth (Y/A M D/J) ☐ Male ☐ Female | Driver Licence No.(if available)

For your convenience, the following is a list of the more common medical conditions that are reported to MTO, to be marked with an "X". If the condition you are reporting is not listed, please indicate it in the section marked "Other".

- ☐ Alcohol Dependence
- ☐ Drug Dependence
- ☐ Seizure(s)-Cerebral
- ☐ Seizure(s)-Alcohol related
- ☐ Heart disease with Pre-syncope/Syncope/Arrhythmia
- ☐ Blackout or Loss of consciousness or Awareness
- ☐ Stroke/TIA or head injury with significant deficits
- ☐ Both Visual Acuity and Visual Field Impairment
- ☐ Visual Acuity Impairment
- ☐ Visual Field Impairment
- ☐ Diabetes or Hypoglycemia - Uncontrolled
- ☐ Other metabolic diseases (specify)
- ☐ Mental or Emotional Illness-Unstable
- ☐ Dementia or Alzheimer's
- ☐ Sleep Apnea-Uncontrolled
- ☐ Narcolepsy-Uncontrolled
- ☐ Motor Function/Ability Impaired
- ☐ Other (specify):

Optional

To expedite your patient's file, please provide further elaboration of clinical condition (if available) or attach as a separate report: Diagnosis; Other Relevant Clinical Information (i.e current status - including results of investigations, medication(s), treatment and prognosis); and whether or not the condition is a serious risk to road safety, threat to road safety is unknown or condition is temporary - weeks/months.

Date of examination upon which this report is based: (Y/A M D/J) | How long has this person been your patient?

☐ Patient is aware of this report.

☐ I wish to be notified if my patient requests a copy of this report, as releasing this report pursuant to a request under the *Freedom of Information Act* may threaten the health or safety of the patient or another individual.

For MTO use only: 030

Physician's Last Name, First Name and Middle Initial

Street No. and Name or Lot and Conc, and Township | Apt. No.

City, Town or Village | Postal code | Telephone. No.

☐ Family Physician ☐ Emergency Room Physician ☐ Specialist (Specialty) ☐ Other

Doctor's Signature _____ **Date of Report** (Y/A M D/J)

SR-LC-097 09-04 © Queen's Printer for Ontario, 2009 Print Form

Examples of ways to report to Ministry of Transportation

List the concerning history and/or impaired activities of daily living and cognitive test scores
(minimum legal requirement)

OR

"This is to notify the Ministry of Transportation that the patient is currently under investigation for cognitive concerns and has been advised not to drive until an on-road driving assessment has been performed to determine fitness to drive"
(exceeds legal requirement)

How to tell the patient he or she may be unsafe to drive

1. Be firm and non-negotiable in your instructions.

2. Discuss implications with patient and family.

3. Communicate your legal obligation and intention to notify the MOT, but that any decision to revoke the license rests with the MOT

4. Explore transportation options.

5. Focus on positives.

6. Provide a written statement.

7. Document and report to MOT.

Sample of written statement for the patient

Date
Name
Address

Dear Mr (Mrs):

It is my legal responsibility to notify the Ministry of Transportation if there is any concern regarding driving safety.

You have undergone assessment at

_____

I am recommending that you do not drive for the following reasons:

_____

_____

_____, MD

Follow-up

- For patients with mild dementia who are able to drive, reassessment of driving safety is required every 6 – 9 months

- Discuss eventual need to stop driving

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

Physicians' Warnings for Unfit Drivers and the Risk of Trauma from Road Crashes

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From the Department of Medicine, University of Toronto (D.A.R., C.J.Y.), the Clinical Epidemiology Program, Sunnybrook Research Institute (D.A.R., C.J.Y., D.T.), the Institute for Cli... Science... the Div... cine, Su... (D.A.R.), jury Prev... Research... the Depa... Policy an... sity, Stanf... requests t... Health Sci... view Ave., T...

N Engl J Med...
DOI: 10.1056...

ABSTRACT

...a medical ...sessed the ...rashes.

...Ontario, ...ian who ...younger ...l health- ...depart- ...g and a

...physi- ...there were 1430 road crashes in which the ...a driver and presented to the emergency department, as compared with 273 road crashes during the 1-year subsequent interval, representing a reduction of approximately 45% in the annual rate of crashes per 1000 patients after the warning (4.76 vs. 2.73, P<0.001). The lower rate was observed across patients with diverse characteristics. No significant change was observed in subsequent crashes in which patients were pedestrians or passengers. Medical warnings were associated with an increase in subsequent emergency department visits for depression and a decrease in return visits to the responsible physician.

N=100,075, 13% diagnosed with dementia

- For dementia, event rate of crash requiring ER visit reduced from 2.92/1000 to 0.86/1000 annually

- **"…the data suggest that practicing physicians may be able to help prevent serious trauma from road crashes."**

Risk Management Considerations

- Inform the patient of your intention and/or obligation to report
- Remind the patient that any decision to revoke the license rests with the MOT
- Caution the patient not to drive until the MOT has made a determination
- Document your assessment, discussion, warning and advice to the patient regarding driving, and your intention to report
- Limit the information in the report to what is required by legislation

o If the patient says you are not permitted to send this information to the MOT or they will sue you….

o Address driving issues early!

Further reading

- Molnar FJ, et al. Practical experience-based approaches to assessing fitness to drive in dementia. Geriatrics & Aging. 2009;12(2):83-92

- Roy M, et al. Systematic review of the evidence for Trails B cut-off scores in assessing fitness-to-drive. Canadian Geriatrics Journal 2013;16(3)

- Canadian Medical Protective Association: Reporting patients with medical conditions affecting their fitness to drive. Originally published December 2010, revised February 2011