

The slide features a decorative arrangement of six light purple circles. Three circles are positioned in a horizontal row at the top, and three are in a horizontal row at the bottom. The text is centered between these two rows. The top-left circle is an outline, while the other five are solid. The text 'Driving and Dementia' is centered between the top row of circles. The text 'Partners in Care Conference' and 'March 9, 2009' is centered between the bottom row of circles.

Driving and Dementia

Partners in Care Conference

March 9, 2009



Driving and Dementia

- Review office based tests to assist in assessing driving
- Discuss assessment options
- Review new Medical Fitness to Drive recommendations re:driving



Should all patients be advised to stop driving at the time of diagnosis

- Why?

- Enhance patient and public safety
- Easier for physicians
- Impairment of driving ability an inevitable consequence of the disease

- Why not?

- Loss of independence, self-esteem
- Increased social isolation, depression
- Increased caregiver stress
- Accident rate similar to 16-24 y.o. males



Reporting: Obligations

- Mandatory in most provinces
- Medical Fitness guide
 - Reporting if moderate impairment defined as
 - 2 or more IADL impairments
 - 1 ADL impairment

Predictive Factors

- Fall in past 1-2 yrs
- Visual defects
- Cognitive deficits
- PHx of at fault MVA
- Medication use (BZ's, TCA's, narcotics)
- Also look for
 - Neck ROM
 - Strength



Questions to ask

- To patient
 - Noticed change, lost confidence
 - Gotten lost, forgotten route
 - Accidents, fender-benders, traffic citations
 - Other honking, irritated
- To family
 - Are you uncomfortable, noticed unsafe behavior
 - Any crashes, near misses, traffic violations
 - Needs cues, directions, co-piloting
 - Gotten lost



Who to believe?

- *JAGS 2005 94-98 Prediction of Driving in Early AD*

Very Mild AD

	Safe	Marginal	Impaired
Self	94	6	0
Informant	76	24	0
MD	69	28	3
Instructor	46	39	15



Mild AD

	Safe	Marginal	Impaired
Self	94	6	0
Informant	50	50	0
MD	56	38	6
Instructor	41	35	24



Assessment options: office

- MMSE
- Clock drawing test
- Trails B
- Challenge re familiar routes/ street naming
- No single test is perfect



MMSE

- Self-Reported Driving, Cognitive Status, and Physician Awareness of Cognitive Impairment *Valcour et al JAGS* 2002;50:1265-7
- 300 of 900 Internal Medicine patients
- Assessed cognition by Cognitive Abilities Screening Instrument (CASI, =MMSE+)
- Chart review for evidence of cognition problems

MD Awareness

- Mean MMSE 24 ± 4.5
- 60% of all patients drive

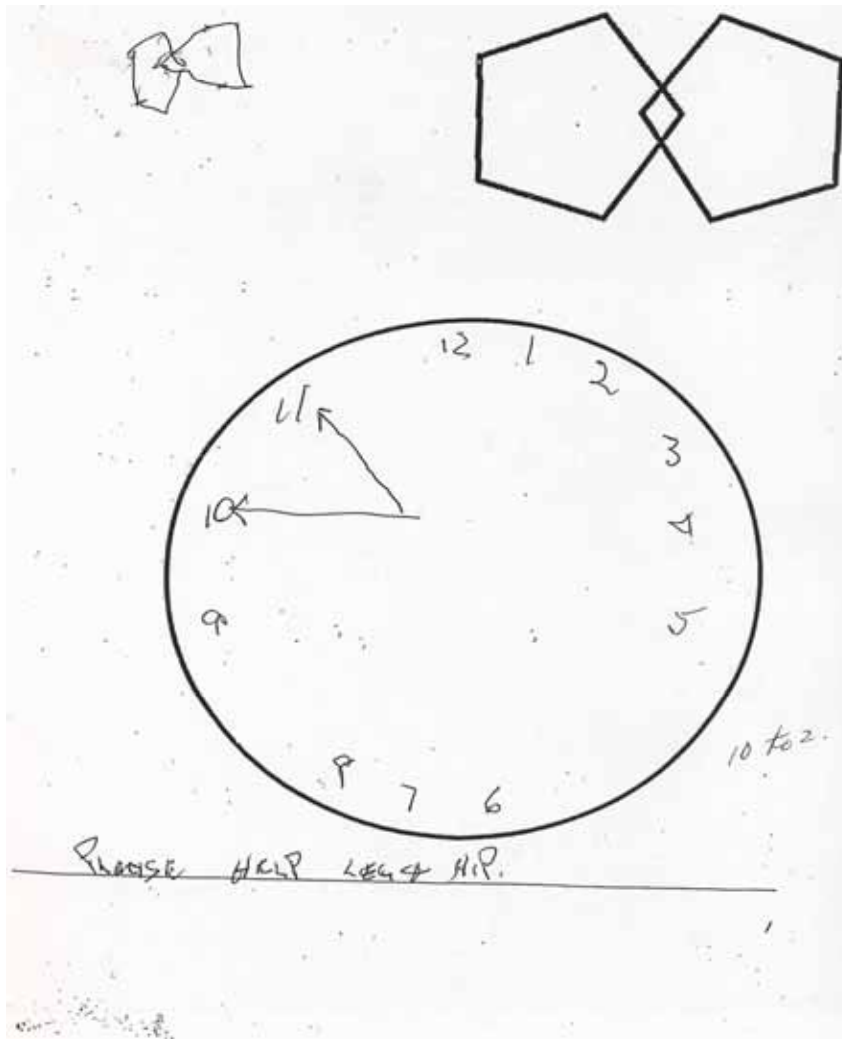
CASI Score	% who drive
Good (82-100)	73
Intermediate (74-82)	38
Poor (<74)	23

MD Awareness

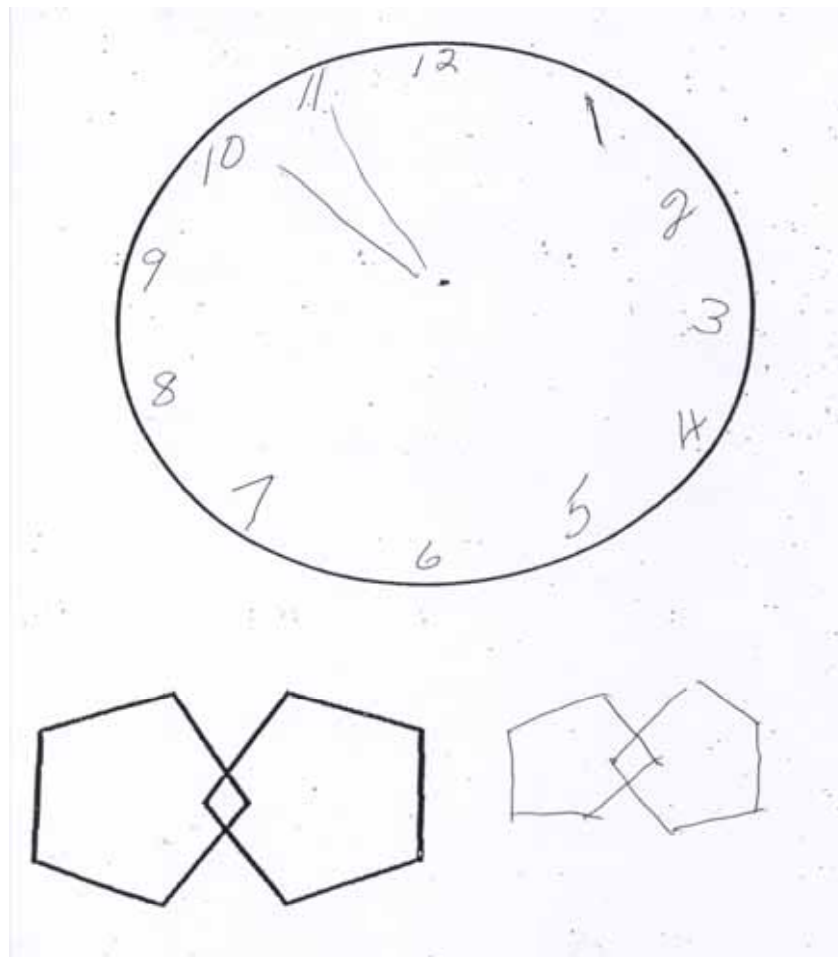


- 5% of intermediate, 11% of poor scoring drivers recognised by MD as cognitively impaired
- Limitations - urban Honolulu, low participation rate, no data on crashes etc

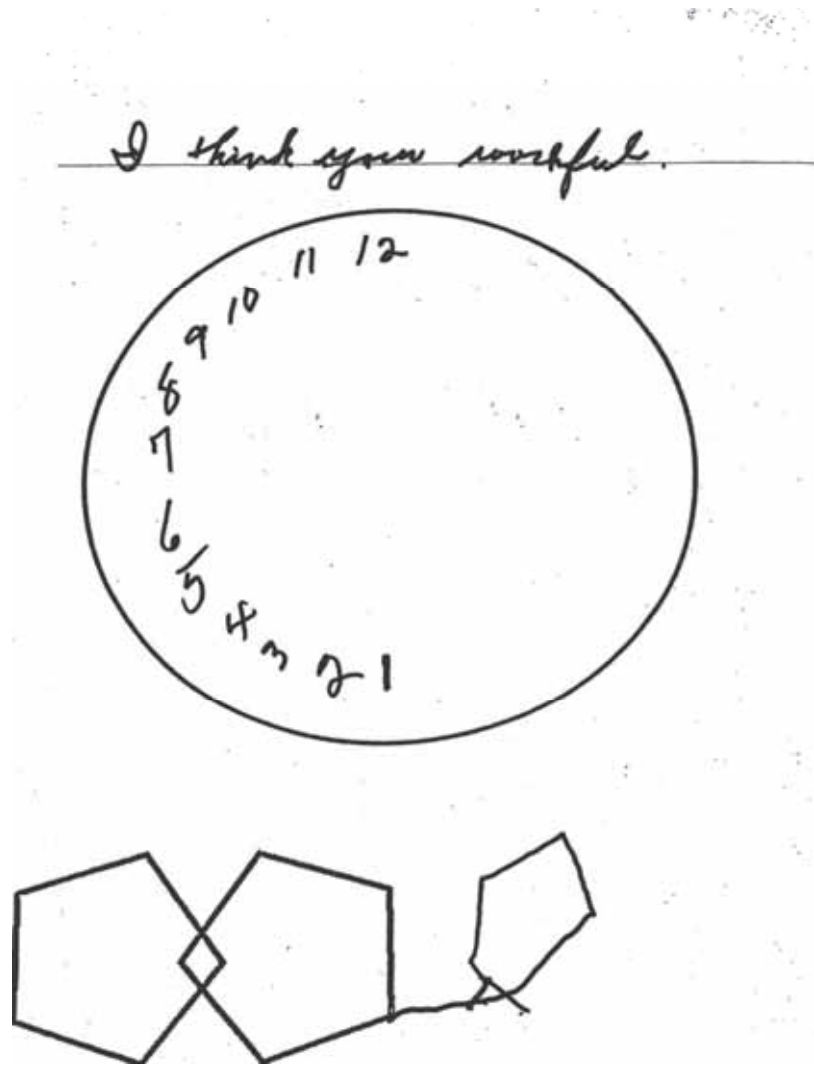
CDT: abnormal

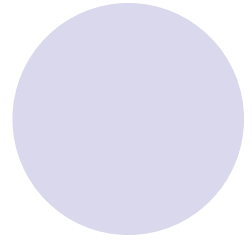
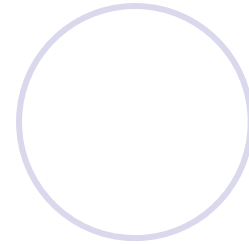
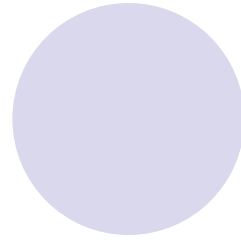
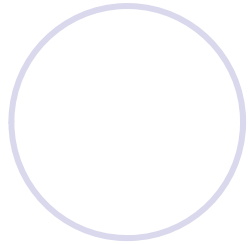
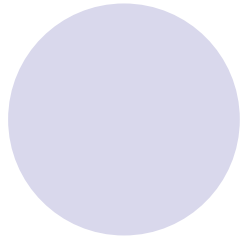


CDT: abnormal

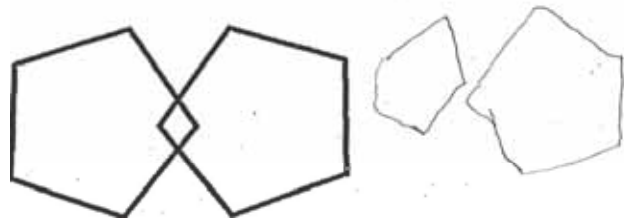
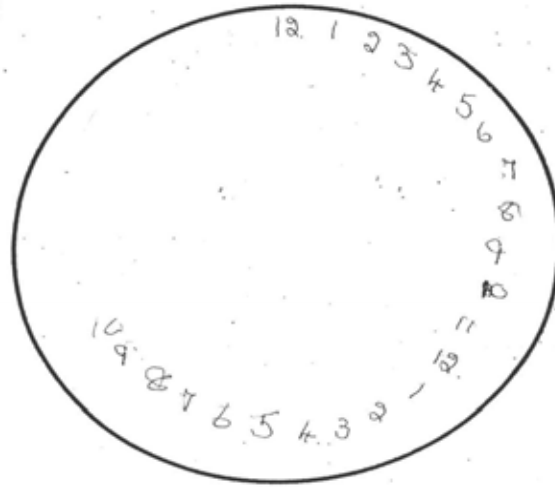


CDT: abnormal

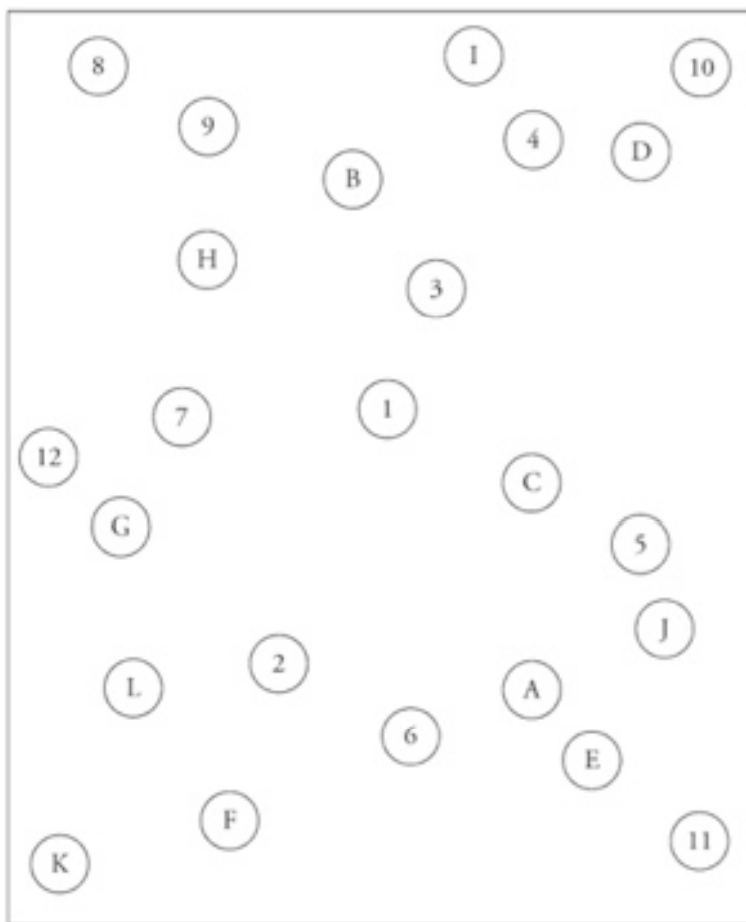
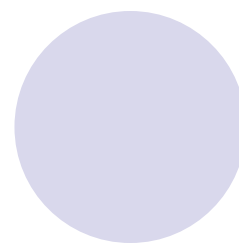
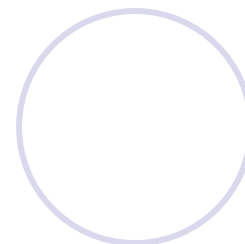
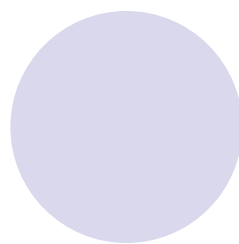
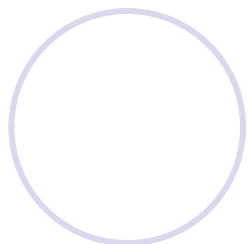




* I enjoy your company



Trails B





Assessment options: referral

- Geriatric services/ Neurology
- Specialized driving assessment centres
 - Ideal
 - Expensive, limited availability
 - Reserved for “I’m really not sure and it will break their heart” cases
- Road test through provincial departments

Road Testing



- drivers with mild AD or vascular dementia vs. elderly and young controls
- “Sepulveda Road Test” 6 stage 2.7 mile course through their VA Center campus, developed for this study
- Road test scores correlated well with MMSE for AD, less well for VaD
- Apparently Clock test did not correlate



Discussion

- Controls made minor errors e.g rolling stop
- Subjects with dementia made more serious errors e.g. entering “do not enter”
- MMSE, Road Test - strong predictors
- Limitations:
 - Referral population, convenience sample
 - Non-reproducible road test



Medical Fitness Guide

- If patient is driving and you suspect cognitive deficits
 - Confirm concerns
 - Involve specialized services if you are not sure
- If there is a diagnosis of dementia
 - If it is mild and you are uncertain about safety: additional assessment
 - Moderate to severe: unsafe, notify patient and family