



DriveWise[®] Driving Evaluation

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MassDOT

INNOVATION
+ MOBILITY
Exchange



Beth Israel Deaconess
Medical Center

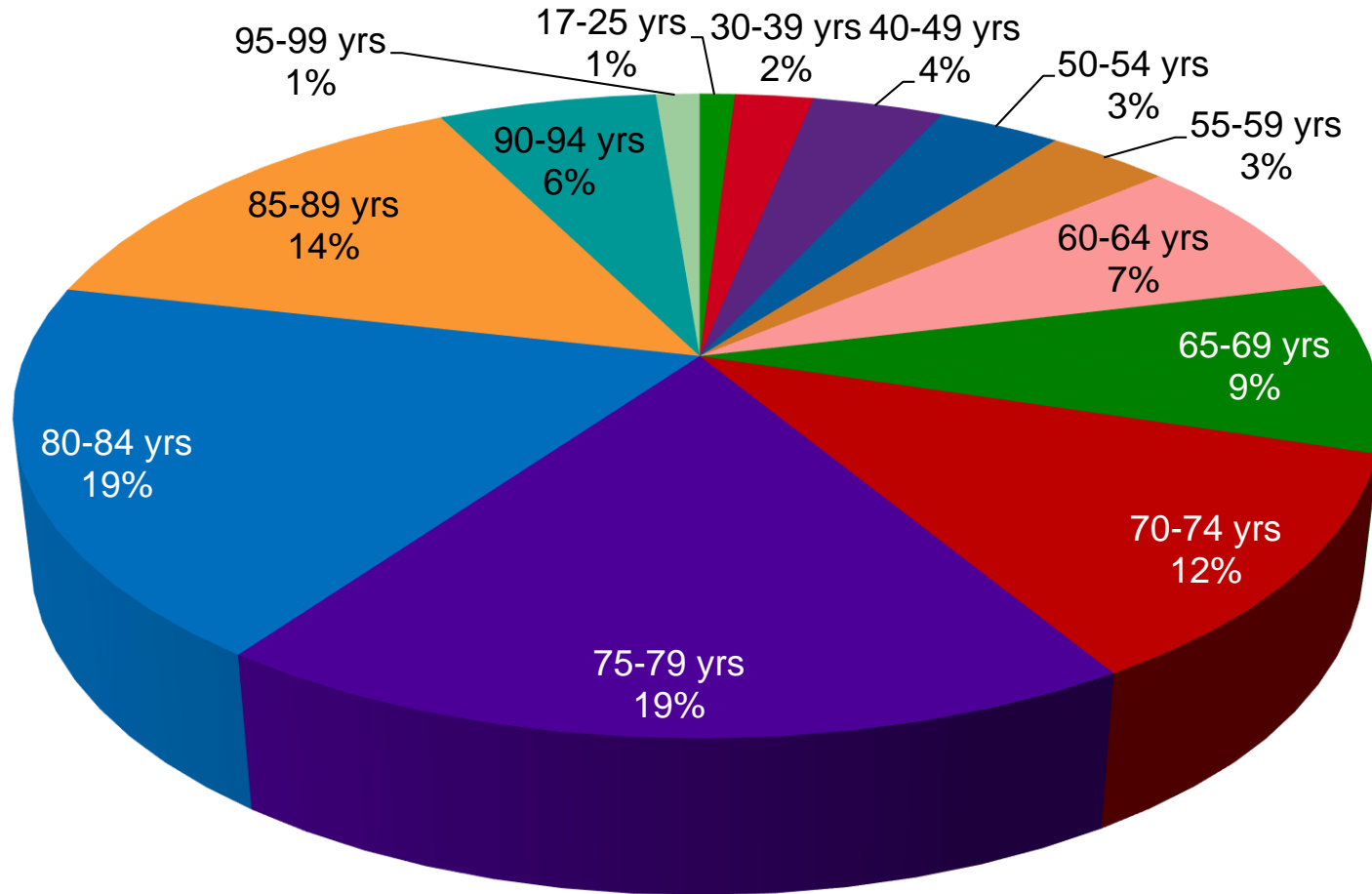
DriveWise®

- Objective assessment of driving safety with support for patient/family
- Hospital based, Multidisciplinary team approach
- Clinical Evaluation, Research & Education

DriveWise® Clients

- Over 700 individuals
- People with medical, cognitive or psychiatric problems that may impair driving safety
- Diagnoses: Dementia, MS, Parkinson's, brain tumors, ALS, Stroke, post ECT, bipolar, orthopedic
- Ages: 17-97

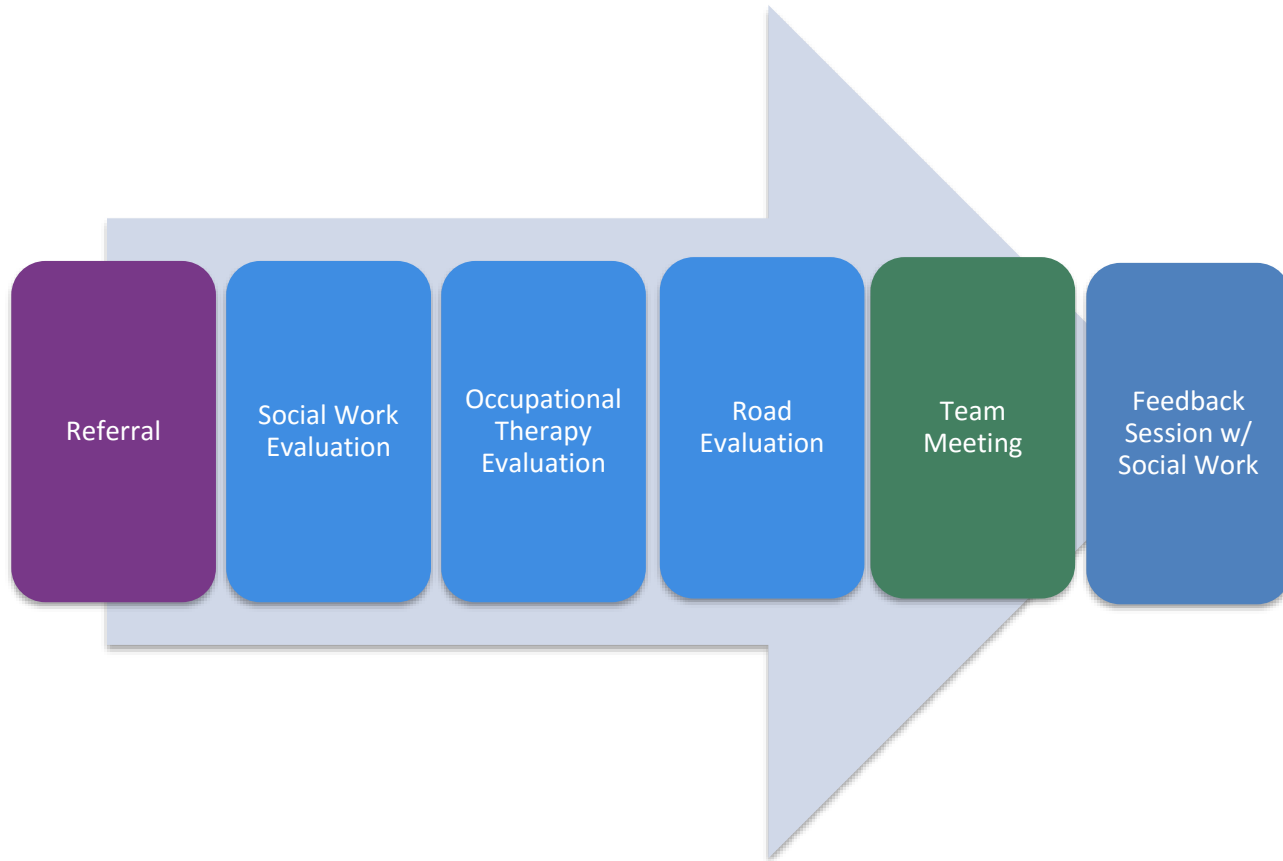
DriveWise® Demographics by Age



Driving & Older Adults

- Primary mode of transportation.
- Enables people to maintain connections & contribute to the community.
- Relationship between health, sense of autonomy & ability to drive. (Eisenhandler 1990; Dickerson et al., 2007)
- Cessation associated with depression, health problems, social isolation, and caregiver stress. (Edwards et al., 2009; Fonda et al., 2001; Marottoli et al., 2000; Taylor & Tripodes 2001).

DriveWise[®] Process



Social Work Evaluation

- Participation Agreement
- Medical, social and driving history
- Begin to anticipate consequences of driving retirement
- Set up feedback session at which time good/bad news delivered in detailed letter

Occupational Therapy Evaluation

- Vision
- Cognition/Perception
- Physical Function
- Standardized On-road Evaluation

Vision Assessment

- Visual acuity- 20/40 or better,
 - Daytime only restrictions available
- Visual Field- 120 degrees of lateral field at eye level
- Tracking & depth perception
- Contrast Sensitivity

Cognitive/Perceptual Assessment

- Attention to task & ability to divide attention: TMT (Duncanson et al., 2018)
- Memory & orientation: MMSE /MoCA (Hollis et al., 2015)
- Useful Field of View (Ball et al., 1988)
- Information processing speed
- Decision making, judgment

Physical Assessment

- Strength and range of motion
- Coordination
- Sensation
- Functional control
- Mobility
- Brake reaction time

(Dickerson et al., 2008)



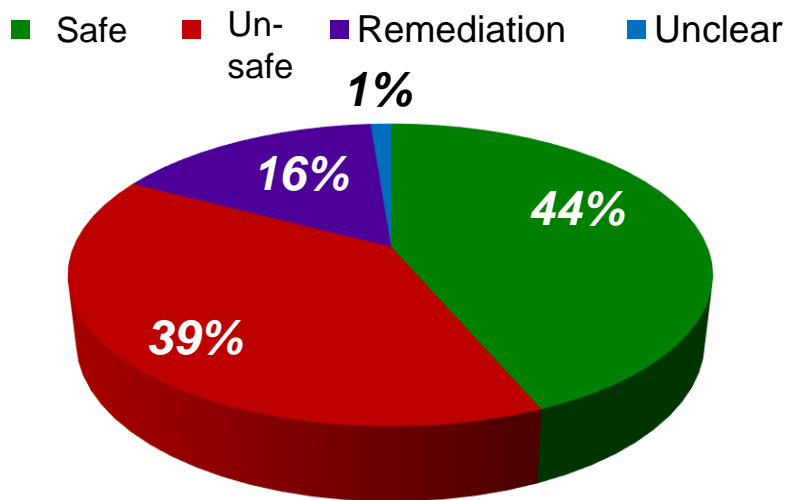
On Road Evaluation

- The 'gold standard' for assessing driver safety
(Amick & Ott, 2008)
- Standardized: Based on the Washington University Road Test (Hunt et al., 1997)
- OT and CDI both score and comment on driving performance
is only a 'snapshot' of driving

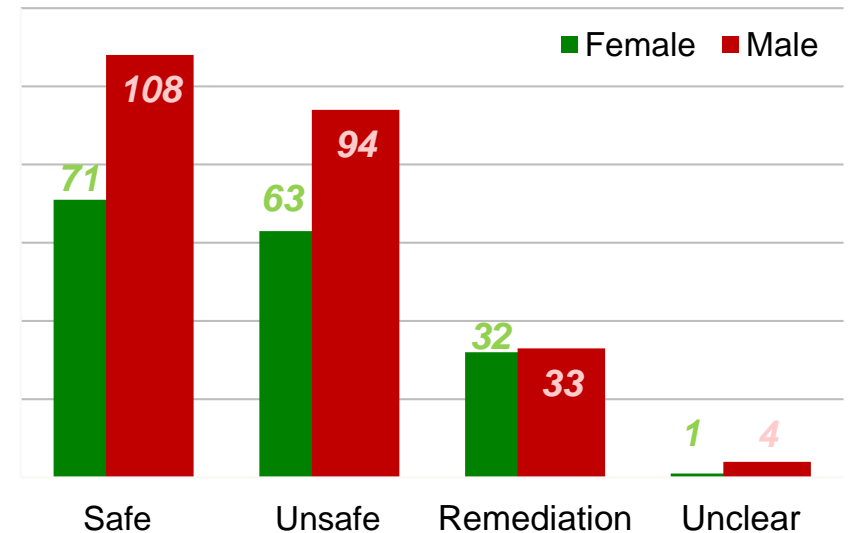
Outcomes of the Evaluations

- Individuals can either be safe, unsafe or be referred for driving remediation.

Overall Results



By Gender



The Oldest Old Driver

(Hollis et al., 2013)

- 88 individuals; 27 oldest old (90-97),
61 old (80-87)
- Drivers age 90+ at no greater driving risk than those 10 years younger
- Age, in and of itself, does not predict driving safety
- Procedural memory ages well



Concerned? You should...

- Start the discussion about driving
- Get feedback from friends and family
- Review driving record, history of crashes, near misses, car damage
- Consult with doctors
- Schedule a formal driving evaluation such as DriveWise®

Thank you