



Driving and Dementia

David W. Eby, Ph.D.

Research Associate Professor

Head, UMTRI Social and Behavioral Analysis

Director, M-CASTL



UNIVERSITY OF MICHIGAN



Dementia: Incidence and Prevalence

- **Dementia affects about 5.1 million Americans today:**
 - 4.9 million age 65+
 - ~200,000 <65 with early onset
- **Every 72 seconds, someone in America develops Alzheimer's disease. Given current treatment, by 2050, it will be every 33 second;**
- **By 2050, estimates range from 11.3 to 16 million dementia patients;**
- **About 70% live in community;**
- **About 20% live alone.**



Driving & Dementia

- **Although research provides insights into why driving is difficult for those with dementia, it has yet to determine the level of cognitive impairment associated with an unacceptable driving risk.**
- **Dementia has consequences for safe driving**
 - **Review by Man-Son-Hing, et al. (2007)**
- **Despite, and perhaps because of, the cognitive declines caused by dementia, up to 45% of patients with dementia still drive, and the majority of these people drive alone.**
- **Evidence shows that people with dementia do not change their behaviors after a crash.**

Driving and Dementia

- **Caregivers often turn to professionals including physicians, eye care specialists, and retirement community personnel for guidance about driving.**
 - **professionals, family members and the drivers themselves may be unaware of the extent of declines in driving skills.**
- **It is unclear how real-world driving performance changes with the progression of dementia in older adults.**
- **How dementia and its progression affects driving needs to be better understood.**

Driving and Dementia

- *Most important challenges in maintaining safe mobility for people with dementia:*
 - Determining when the driver is no longer safe to drive;
 - Educating medical professionals, licensing agencies, and family members (caregivers) about how dementia can effect driving;
 - Developing dementia-friendly alternative transportation.

Driving and Dementia

- *Most promising approaches to maintaining safe mobility for people with dementia:*
 - Instrumented vehicle studies to determine objective driving measures;
 - Multidisciplinary team approach (physician, occupational therapist, family member, licensing agency, etc) to assessing and counseling drivers with dementia;
 - Supplemental transportation that provides door-through-door services.



Thank You



UNIVERSITY OF MICHIGAN

