

## **U.S. Department of Transportation: Driver Self Screening**

*This project developed and tested a self-screening instrument for older drivers focused on health concerns that affect driving. It found the instrument useful as a first-tier screening tool for drivers 75 and older.*

### **Lead Agency:**

U.S. Department of Transportation  
National Highway Traffic Safety Administration (NHTSA)

### **Agency Mission:**

Save lives, prevent injuries and reduce economic costs due to road traffic crashes through education, research, safety standards and enforcement activity.

### **Principal Investigator:**

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### **Partner Agency:**

University of Michigan

### **General Description:**

The purpose of this project was to improve upon existing self-screening instruments for older drivers by focusing entirely on “health concerns” that affect driving – that is, the symptoms that people experience due to medical conditions, the medications used to treat them, and the general aging process. The objective was to create an easy-to-use self-screening instrument. The instrument identifies health symptoms experienced by the driver that relate to declines in driving abilities, and provides individualized feedback to the driver about those health conditions and what can be done to continue driving safely. The study included a literature review, deliberations by an expert panel, instrument development, and an evaluation/validation study.

The literature review generated a list of health concerns that might influence driving and a list of critical driving skills. The expert panel finalized the lists of health concerns and critical driving skills to include in the instrument; discussed how severity levels of the health concerns influence critical driving skills; and considered the content of the self-

screening instrument's feedback. Based on earlier project activities, 27 health concerns and 15 critical driving skills were included in the instrument.

Results of the validation study showed that drivers who had a greater number of health concerns as identified by the self-screening instrument also tended to have poorer observed driving performance. In addition, drivers who had a greater number of health concerns as identified by the instrument also tended to have greater deficits in driving-related abilities as identified by an occupational therapist. These relationships were true only for subjects 75 and older, not for those 65-74.

***Excellence:***                   What makes this project exceptional?

It is well-established that aging can lead to declines in perceptual, cognitive, and psychomotor functions. Accurately assessing declines in driving abilities and relating them to increased crash risk has been a goal of traffic safety professionals for many years. This project provides promising self-screening driving ability tools.

***Significance:***               How is this research relevant to older persons, populations and/or an aging society?

There are several benefits of self screening: reluctant drivers may be more willing to assess their own driving abilities than to be professionally assessed; people may discover declines at an earlier stage; and self screening instruments can reach a wide variety of people because such instruments are easily distributed.

***Effectiveness:***            What is the impact and/or application of this research to older persons?

This project provides five types of individualized feedback for drivers: general awareness of how certain health concerns can affect driving; self awareness about individual health concerns and driving skills that may be declining; individualized recommendations for behavioral changes to maintain safe driving; individualized recommendations for further evaluation; and individualized recommendations for vehicle modifications to maintain safe driving.

***Innovativeness:*** Why is this research exciting or newsworthy?

The results of this project suggest that the instrument may be a useful and valid self-screening instrument for older adult drivers 75 and older.