

**Project Title:**

Anticipatory Guidance for Older Drivers

**University:**

North Dakota State University

**Principal Investigators:**

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**Research Needs:**

Older drivers are overrepresented in driver fatalities, total traffic fatalities, and occupant fatalities (NHTSA 2011, U.S. Census Bureau 2011). This problem is projected to deteriorate as the U.S. population continues to age and as the population aged 65 and older continues to make up a larger proportion of the population. The population aged 65 and older is projected to increase by as much as 178% by 2030, with fatal crash involvements by this population ballooning by approximately 155% in the same time period (Lyman et al. 2002).

Health care providers (HCPs) are in a position to provide anticipatory guidance to their older patients which may prevent further motor vehicle fatalities. Although mostly used with children and their parents, anticipatory guidance has been found to be a critical but underused strategy, especially for adults (Ballesteros and Gielen 2010). Research has shown that injury prevention counseling or anticipatory guidance by HCPs is associated with safer behaviors (Chen et al. 2007, Posner et al. 2004).

Considerable research has been conducted on identifying and screening for problem older drivers (Korner-Bitensky et al. 2010, Jang et al. 2007, Marshall and Gilbert 1999, Bogner et al. 2004, Kakaiya et al. 2000), but little research has been conducted on solely providing anticipatory guidance on safe driving habits. It is unknown how frequently HCPs counsel their patients on safe driving habits, how early they begin this anticipatory guidance, their perceptions and barriers regarding providing this guidance, or what affect providing this counseling early (i.e. prior to age 65) has on driving habits and on making a smoother transition to driving cessation.

**Research Objectives:**

The goal of this project is to identify HCP attitudes, perceptions, and barriers to providing anticipatory guidance regarding driving-related issues, including but not limited to driving cessation, to older drivers. In addition, researchers would like to determine the frequency of HCP counseling regarding safe driving habits being provided to patients starting at age 55 to determine if drivers who receive anticipatory guidance at a younger age are less likely to be involved in motor vehicle crashes and are more confident drivers.

**Research Methods:**

HCPs located in North Dakota, South Dakota, Colorado, Utah, Wyoming, Iowa and Nebraska involved in active practices which include patients 55 years of age or older will be surveyed about their attitudes and perceptions regarding providing counseling concerning traffic safety issues such as driving cessation to patients in their practices. HCPs will also be asked about any perceived barriers to providing this counseling. In addition, drivers aged 55 or older in the same states will be surveyed about their most recent visit to their HCP, obtaining information about whether their HCP 1) spoke with them about driving cessation or other safe driving issues, and/or 2) provided information about resources available to them regarding driving cessation or other traffic safety-related issues, in addition to obtaining self-report information on their driving history and driving confidence.

**Expected Outcomes:**

The results from this study will provide information regarding current levels of anticipatory guidance being disseminated by HCPs. The results will also aid health systems, hospitals, and other groups who have an interest in older drivers and traffic safety in designing educational materials specific to HCPs in providing counseling on driving issues.

**Relevance to Strategic Goals:**

This project is directly related to the strategic goal of traffic safety in that it deals specifically with current levels of counseling provided by HCPs on driving issues to their patients aged 55 or older.

**Educational Benefits:**

Not applicable.

**Work Plan:**

		<b>Expected Completion Month</b>
	<b>Task</b>	
Task 1	Conduct literature review	Month 1
Task 2	Draft physician and driver survey	Month 3
Task 3	Obtain provider lists from each state, obtain driver survey sample	Month 4
Task 4	Administer surveys	Month 6
Task 5	Input survey results	Month 8
Task 6	Conduct data analysis	Month 10
Task 7	Present survey findings in draft report	Month 11
Task 8	Final report submitted to MPC	Month 12

**Project Cost:**

Total Project Costs: \$54,202

MPC Funds Requested: \$27,101

Matching Funds: \$27,101

Possible Sources of Matching Funds: NDSU overhead, AARP, State Farm, in-kind match.

**TRB Keywords:**

Older drivers, traffic safety, anticipatory guidance

**References:**

Ballesteros, M.F., and A.C. Gielen. 2010. Patient counseling for unintentional injury prevention. *American Journal of Lifestyle Medicine* 4(1): 38-41.

Bogner, H.R., J.B. Straton, J.J. Gallo, G.W. Rebok, and P.M. Keyl. 2004. The role of physicians in assessing older drivers: Barriers, opportunities, and strategies. *The Journal of the American Board of Family Practice* 17(1): 38-43.

Chen, J., M. Kresnow, T.R. Simon, and A. Dellinger. 2007. Injury-prevention counseling and behavior among U.S. children: Results from the second injury control and risk survey. *Pediatrics* 119(4) e958-e965.

Federal Highway Administration (FHWA). Highway Statistics 2007.  
[http://www.fhwa.dot.gov/policyinformation/statistics/2007/2007\\_hwy\\_statistics.pdf](http://www.fhwa.dot.gov/policyinformation/statistics/2007/2007_hwy_statistics.pdf)

Jang, R.W., M. Man-Son-Hing, F.J. Molnar, D.B. Hogan, S.C. Marshall, J. Auger, I.D. Graham, N. Korner-Bitensky, G. Tomlinson, M.E. Kowgier, and G. Naglie. 2007. Family physicians' attitudes and practices regarding assessments of medical fitness to drive in older persons. *Journal of General Internal Medicine* 22(4): 531-543.

Kakaiya R., R. Tisovec, and P. Fulkerson. 2000. Evaluation of fitness to drive: The physician's role in assessing elderly or demented patients. *Postgraduate Medicine* 107(3): 229-236.

Korner-Bitensky, N., A. Menon, C. von Zweck, and K. Van Bentham. 2010. Occupational therapists' capacity-building needs related to older driver screening, assessment, and intervention: A Canadawide survey. *American Journal of Occupational Therapy* 64(2); 316-324.

Lyman, S, SA Ferguson, ER Braver, and AF Williams. 2002. Older driver involvements in police reported crashes and fatal crashes: trends and projections. *Injury Prevention* 8:116-120.

Marshall, S.C. and N. Gilbert. 1999. Saskatchewan physicians' attitudes and knowledge regarding assessment of medical fitness to drive. *Canadian Medical Association Journal* 160(12): 1701-1704.

National Highway Traffic Safety Administration (NHTSA). 2011. Traffic Safety Facts 2009 Data – Older Population. <http://www-nrd.nhtsa.dot.gov/Pubs/811391.pdf>.

Posner, J.C., L.A. Hawkins, F. Garcia-Espana, and D.R. Durbin. 2004. A randomized, clinical trial of a home safety intervention based in an emergency department setting. *Pediatrics* 113(6): 1603-1608.

U.S. Census Bureau. 2011 Statistical Abstract – The National Data Book.  
[http://www.census.gov/compendia/statab/cats/population/estimates\\_and\\_projections\\_by\\_age\\_sex\\_raceethnicity.html](http://www.census.gov/compendia/statab/cats/population/estimates_and_projections_by_age_sex_raceethnicity.html)

MPC-370FT. Type: TFT, all in one pc ad display. PC configuration parameter. Model:MPC-370FT. CPU: Intel ATOM D525/ Dominant frequency : Dual-core 1.8G/bus frequency:800MHz/ Second Level Cache :1M. Mainboard model: original Intel D525KT.