BEST'S REVIEW
www.bestreview.com May 2010
Auto
Property/Casualty

Brain POWER

New science helps older drivers reduce accidents and boost safety.

by Steven Aldrich

- **The Situation:** As baby boomers become "seniors," their rate of at-fault auto accidents will increase.
- **The Problem:** This sector also expects to live longer and be more active than any previous generation.
- **The Road Ahead:** Allstate has had promising results using brain performance training to improve older customers' driving skills.

A dramatic shift is occurring in the U.S. population—more than 85 million people are now over the age of 50 and the first of the baby boomers turns 65 this year. The implications for the nation's auto insurers are profound. Nearly 100 million older drivers will be on the road at the end of 2010, a 40% increase from the year 2000, according to the U.S. Department of Transportation and the Census Bureau.

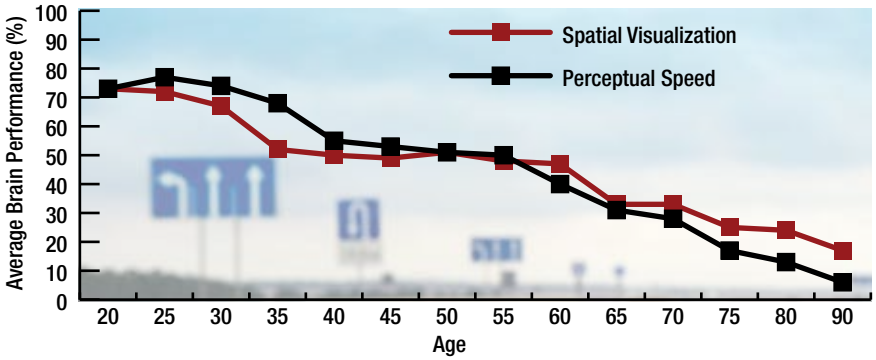
That demographic tilt represents both a threat and an opportunity for the industry. The aging population increases crash risk among this cohort of drivers, but at the same time it creates an opening for the industry to fully align with policyholders' desires to drive safer and longer. The average life expectancy in the U.S. has reached a new high of almost 78 years, and older drivers represent a large percentage of the auto insurance business. This shift toward an older population leads to two big impacts on personal lines business: a change in purchasing behavior and an increase in crash incidence.

Underwriters, product teams and executives can transition from relying primarily on screening for risk up-front to taking proactive steps toward reducing losses and strengthening the customer experience.

Contributor Steven Aldrich is chief executive officer at Posit Science Corp., based in San Francisco. He may be reached at Steven.Aldrich@positscience.com.

Downward Slope

Average performance of the brain over time.



Source: Posit Science Corp.

For example, Allstate has launched a pilot program using brain fitness technology from Posit Science to improve mature drivers' driving ability.

Changing Boomer Behavior

Baby boomers behave differently from the mature drivers of the past because they have significantly more access to information and are comfortable with technology. A recent survey from the Pew Internet & American Life Project found that 70% of 50-to-64-year-olds use the Internet on a regular basis. They e-mail, do research and buy online at a rate nearly equaling younger generations. This means that the annual auto insurance shopping rate of 36%, as reported by J.D. Power & Associates, will apply to this demographic, too, as boomers age. No longer can insurers rely on historically high retention rates of 90% or greater for older policyholders.

A golden opportunity exists to better serve this demographic. Older customers will respond to either staying with or switching to those carriers that provide differentiated offerings that improve longevity and safe driving—a key concern for this group and their families.

The aging of the population makes it very likely that the total number of crashes will increase unless proactive measures are taken. There have been significant improvements in vehicles over the past two decades. Seat belts (and their use), airbags, anti-lock brakes, stronger frames and crumple zones are standard features, dropping crash-related injury and fatality rates to historic lows.

However, driver performance has been left behind. Drivers' skills and abilities over those same two decades have not shown the same rate of improvement. Crashes reported by the Department of Transportation have held steady at roughly six million per year. The number of accidents will increase as the number of older drivers increases without a change in approach.

Significant research has been directed at trying to understand the factors leading to crash risk, and how older drivers' physical, visual and cognitive capabilities affect it. In a 2009 NHTSA-sponsored research report on assessment methods, cognitive ability was the most highly correlated with driving ability. The research team wrote: "The useful field of view (factor) was strongly associated with driving performance outcomes and has also been shown to be predictive of crashes."

A key factor in this increased risk is the speed and accuracy of the brain. Brain performance peaks in a person's 20s, decreases to half by age 50 and shows continued decline thereafter. The good news is that this decline is not an inevitable consequence of aging.

Options for Insurers

What can carriers do to improve driving safety, keep drivers on the road and retain more customers? A place to begin is by examining recent discoveries in brain performance training. One recent study showed that at-fault crash risk can be reduced by 50% among drivers older than 50.

Research about how the brain works and its impact in situations such as driving make it clear that cognitive capability is one of the biggest factors in driving safely, especially among the aging population. This is not about changing the customer's behavior on the road through teaching safer maneuvers and driving techniques. The brain needs to process and respond to the thousands of pieces of information taken in every second while driving in order to track multiple objects on the road and in the car, use peripheral vision and maintain a clear focus of what is straight ahead. Driving is a very demanding mental task and improvements in brain performance lead to deep-seated, unconscious improvements in the speed and accuracy of the brain's visual system.

A key concept in safe driving and cognitive performance is the previously mentioned useful field of view. The UFOV is the visual area over which information can be extracted at a single glance. Good UFOV performance is essential to allowing a driver enough time to notice and react to potential hazards, especially in peripheral vision. It is measured by a computer and tests visual processing speed, divided attention and selective attention.

Multiple research studies have shown that drivers with poor UFOV are twice as likely to get into a crash. This ability generally declines with age due to the brain's slower processing speed and reduced ability to divide its attention. However, a large body of research has demonstrated that UFOV performance can be improved with brain training and that these improvements directly enhance driving safety. Very specific computer-based brain training of only 10 total hours has led to impressive reductions in driving risk and crashes.

For example, Dr. Daniel Roenker of Western Kentucky University showed that participants who underwent UFOV training reduced dangerous maneuvers on a 14-mile open road circuit by 36%. These participants also improved reaction times, providing them with 22 feet of additional stopping distance when driving at 55 mph.

This improved driving safety translates into reductions in crash rates. Research by Dr. Karlene Ball of the University of Alabama, released last year, showed that at-fault crashes were reduced by 51% in the five-year period following training.

And drivers who have done the training can also expect to drive longer. Dr. Jerri Edwards, a researcher at the University of South Florida, found that older participants with UFOV training were 40% less likely to stop driving in the three-year follow-up period. Dr. Edwards says, "We now have two clinical studies that show that people who use the UFOV technology are less likely to cease driving and more likely to maintain driving across time—both in distance and frequency—and they have less crash risk."

Allstate Takes the Wheel

Allstate is a strong example of how brain performance training can be put into practice.

The insurer's continuous research on driving safety led it to explore Posit Science's InSight brain fitness software program because it includes UFOV technology. In 2009, Allstate conducted a pilot InSight program to determine if using the software would help improve driving skills and reduce accident rates among customers 50 years and older. The pilot was conducted in Pennsylvania, where Allstate offered the software to 100,000 of its customers aged 50 to 75, and participants were encouraged to complete at least 10 hours of training.

Within six months, nearly 5,000 users had undergone some training with the software, and almost 1,000 users had trained for at least 10 hours. Early results show that customers who trained for 10 or more hours experienced a significant decrease in damage claim frequency relative to a control group that did not go through the training.

"Allstate sees cognitive training as a key part of the next evolution of driver safety, especially in older drivers," said Tom Warden, assistant vice president, Allstate Research and Planning Center. "We are confident the pilot provided real findings and [we] are committed to continuing our work with Posit Science in this area."

Moving the Needle

Recent studies and real-world results indicate that enhancing brain performance among customers helps them become better drivers and improves loss performance by meaningful amounts. Insurers and customers can work together to improve driving performance and reduce accidents. Underwriters, product teams and executives can take proactive steps to tackle the challenges and opportunities of a growing demographic group.

As the population continues to age, this insight gives the industry a new approach for profitably acquiring and retaining the tens of millions of older drivers in the United States. BR