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BACKGROUND

- Based on estimated annual travel, the fatality rate for drivers aged 85 years and older is nine times higher than that for those aged 25-69 years.⁶
- There is currently no standardized screening process to identify drivers who need to limit or stop driving.⁸
- In the state of Oregon, physicians are legally required to report unsafe drivers to the DMV, but surveyed providers did not have accessible information or resources on how to do this appropriately.

OBJECTIVES

- Determine baseline comfort and knowledge surrounding evaluation and reporting of potentially unsafe elderly drivers.
- Provide an intervention that improves provider familiarity with a process and available resources for screening elderly drivers.

METHODS

- The goal was to create an easy to use, informative workflow to serve as a guide alongside currently available but underutilized resources (including DMV paperwork and PT evaluation) in assessing and reporting unsafe elderly drivers.
- Residents and faculty were surveyed anonymously before and after a brief informational didactic session on:
 - Overall comfort in evaluating elderly drivers
 - Knowledge of how to report unsafe drivers
 - Knowledge of available community resources
 - Implementation of a new driving evaluation tool within the EMR (Smart Phrase, see Figure 1)

Figure 1

Do you, as the provider, have reason to believe the patient has a chronic or progressive impairment that is severe, uncontrollable and not correctable that would impair their ability to safely drive a vehicle? (Yes/No:24223)

A. If NO, ask if a family member has a concern.
If family member has concern, provide family member with:
"Driver Evaluation Request" DMV form (available in office) AND Information on/referral to OT for evaluation

B. If YES, proceed with workflow below.

1. Does the patient have any of the following: {ACTIONS; HAS/DOES NOT HAVE:19233} Functional impairments, including: visual acuity or field of vision, strength, peripheral sensation, flexibility, motor planning and coordination
If patient "HAS" any of the above, Proceed with "Mandatory Impairment Referral" DMV form (available in office).
If patient "DOES NOT HAVE" any of the above or it remains UNCLEAR, proceed with Question 2

2. Does the patient have any of the following: {ACTIONS; HAS/DOES NOT HAVE:19233} Cognitive impairments, including: Attention, Judgment and Problem Solving, Reaction Time, Planning and Sequencing, Impulsivity, Visual-Spatial, Memory
If patient "HAS" any of the above, Proceed with "Mandatory Impairment Referral" DMV form (available in office).
If patient "DOES NOT HAVE" any of the above or it remains UNCLEAR, proceed with Question 3

3. Loss of consciousness or control {ACTIONS; HAS/DOES NOT HAVE:19233}
If patient "HAS" any of the above, Proceed with "Mandatory Impairment Referral" DMV form (available in office)
If patient "DOES NOT HAVE" any of the above or it remains UNCLEAR, proceed with referral to OT for Eval

RESULTS

- Twenty-two providers responded to the initial survey, and 16 to the follow-up.
- Results of the surveys showed:
 - Improvements in provider knowledge and comfort
 - Improvement from 86% to 100% of providers being aware of mandatory reporting and there was a 25% increase in the number of providers knowing *how* to alert the DMV.
 - There was a large increase (from 36% to 88%) in providers aware of available resources (Figure 2).
 - Comfort with the process also improved, with 13% feeling "very comfortable" with assessing elderly drivers in their capacity to drive safely, compared to 0 respondents on the initial survey (Figure 3).

Figure 2

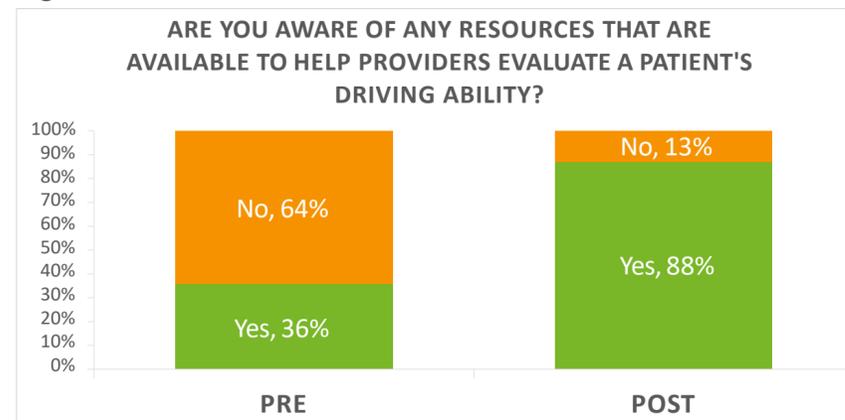
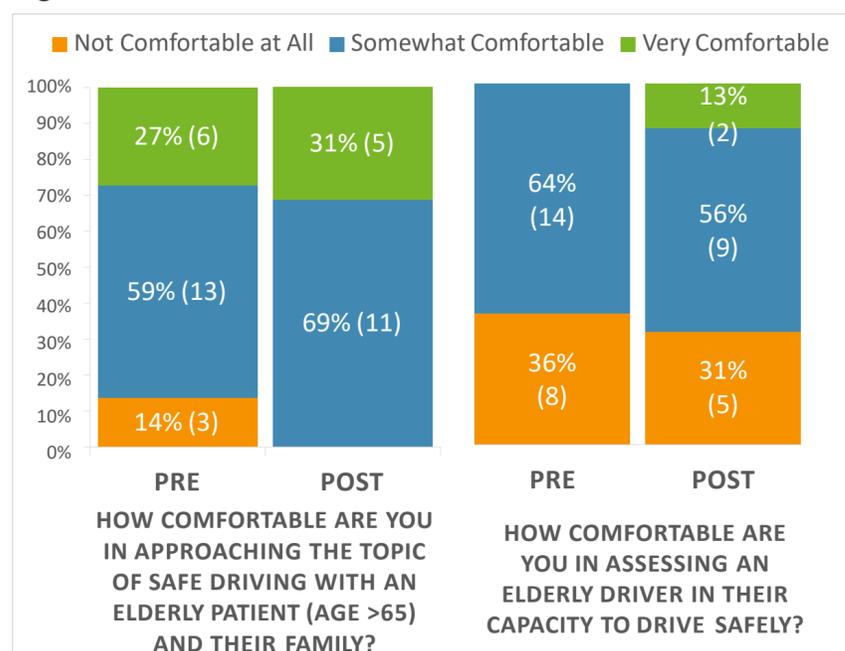


Figure 3



CONCLUSIONS

- Family medicine residents and faculty are not generally comfortable or familiar with the evaluation of elderly drivers in the outpatient setting, but this can be easily improved upon with basic interventions like a brief informational session on the evaluation process and the development of supportive resources as seen in our study.
- Knowledge of available resources increased the most dramatically after one informational meeting and this can help multiple drivers and patients.
- Previous studies have indicated that among primary care providers using neuropsychology testing to evaluate elderly drivers, many are interested in clinical assessment tools to help them make these evaluations.³

Limitations

- Providers were not adequately using the new screening tool
 - 43% of respondents stated this was because they were unaware of the tool, and 43% stated it was because they had not yet needed it.
 - More information should be provided via alternate modalities, including email, as a reminder of the tool and for providers who were not at the didactic session
 - Opportunities for evaluation may have been missed due to visit time constraints and other acute problems.

FUTURE IMPLICATIONS

- Once providers are more aware of resources available, they may be more equipped to evaluate drivers more regularly.
- Future studies could look at re-educating providers about the smart phrase and then track how often it is used, and determine how it could be improved

REFERENCES

- Albert G, Lotan T, Weiss P, Shifan Y. The challenge of safe driving among elderly drivers. *Healthcare Technology Letters*. 2018;5(1):45-48. doi:10.1049/htl.2017.0002.
- Berger JT, Rosner F, Kark P, Bennett AJ. Reporting by physicians of impaired drivers and potentially impaired drivers. *Journal of General Internal Medicine*. 2000;15(9):667-672. doi:10.1046/j.1525-1497.2000.04309.x.
- Bogner HR, Straton JB, Gallo JJ, Rebok GW, Keyl PM. The Role of Physicians in Assessing Older Drivers: Barriers, Opportunities, and Strategies. *Journal American Board of Family Practitioners*. 2004;17(1):38-43.
- Boustani M. The Primary Care Physician and the Unsafe Older Drivers. *Journal of General Internal Medicine*. 2007;22(4):556-557. doi:10.1007/s11606-007-0132-5.
- Carr DB, Duckek JM, Meuser TM, Morris JC. Older Adult Drivers with Cognitive Impairment. *American Family Physician*. 2006;73(6):1029-1034.
- Finestone AJ. The older driver: who is responsible? The state, the doctor, or the older driver? *Clinical Interventions in Aging*. 2006;1(1):6-9. doi:10.2147/cia.2006.1.1.6.1.
- Ikpeze TC, Elfar JC. The Geriatric Driver. *Geriatric Orthopaedic Surgery & Rehabilitation*. 2016;7(2):106-109. doi:10.1177/2151458516644818.
- Wiese LK, Wolff L. Improving Safety in Older Drivers. *Public Health Nursing*. 2016;116(10):14-14.