CHAPTER 5 DRIVER REHABILITATION

KEY POINTS

- Because driving is the most complex instrumental activity of daily living (IADL), individuals who have difficulty performing activities of daily living (ADLs) and IADLs are likely to be at-risk drivers.
- A driver rehabilitation specialist (DRS) with a professional medical degree is best qualified to make a fitness-to-drive decision when an at-risk older adult has functional impairments in physical, visual, or cognitive abilities.
- A comprehensive driving evaluation is completed by a DRS and occupational therapist and includes a medical and driving history, a clinical assessment of underlying component abilities, and an on-road evaluation that results in a range of client-centered recommendations.
- Older adult driving programs vary widely in terms of services offered, provider credentials, knowledge and education, costs, availability, and outcomes.
- Because the role of an occupational therapist is to evaluate and plan interventions for patients with impairment of ADL and IADLs, a referral to occupational therapy will provide an evaluation of functional risk through analysis of complex activities of daily living, generating evidenced-based recommendations that may include referral for specialized services, a comprehensive driving evaluation, or recommendation to cease driving.
- Before referring to a DRS, advise the older adult about the reason for the referral, the goals of the assessment and associated rehabilitation, the evaluation tests that will likely be done in clinic and on the road, and the expected out-of-pocket cost for these services.

This chapter provides information about driving rehabilitation, the range of services that may be available in a community, and what data is required to respond to the question, "When can I drive?" For the clinical team, this question may come from the older adult driver or as a request from his or her caregiver.

Driving is a complex IADL1 that is impacted by many medical conditions and advanced aging, just like all other ADLs and IADLs.[2-4] Thus, as discussed in Chapter 3, if the patient presents with suspected impairments in ADLs/IADLs, it may be more practical and ethical to refer to a general practice occupational therapist first before the highly specialized services of the DRS. The occupational therapist can evaluate the underlying visual, sensory, physical, and cognitive abilities and/or functional IADL performance (independence in self-care, cooking) as the initial step to determining the intervention plan and determine whether further evaluation specific to driving is needed. The driver may be too impaired to be able to independently manage medications or finances, cook independently, or be left alone for two hours; in that case, all risk factors clearly support the included recommendation of driving cessation. At other times, the skilled expertise of the DRS is essential to better understand capacity for compensation, intervention, and equipment or vehicular modifications. This chapter will describe the scope of driving rehabilitation, the diverse types of driving programs and services, criteria for determining when the DRS is essential, and strategies to address driving as an IADL.

After scoring **Mr. Phillips'** *(introduced in previous chapters) performance on the CADReS toolbox assessments, you discuss the results with him. You assure him that he scored well on the cognitive tests, but that his performance on the visual and motor tasks indicates a need for further evaluation and treatment. You recommend that Mr. Phillips make an appointment with his ophthalmologist, whom he has not seen for over a year. You also recommend that he begin exercising regularly by walking for 10-minute intervals, three times a day, and stretching gently afterward. His son, who is present at the clinic visit, offers to exercise with him several times a week.*

When Mr. Phillips arrives for his follow-up appointment, he is wearing new glasses. His vision with the new glasses is 20/40 in both eyes. You retest his motor skills, and he is now able to complete the Rapid Pace Walk in 8.0 seconds. His range of motion on finger curl and neck rotation, however, remains restricted and his Trails B test has not improved. With Mr. Phillips' agreement, you refer him to occupational therapy to evaluate other complex IADLs, keeping in mind that he might need further help from a DRS for an evaluation and adaptive equipment.

"Mr. Phillips, I'm pleased that you can see better with your new glasses and that your physical fitness has improved with your walking. Keep up the good work! However, I'm still concerned about your brain's slower ability to process information and your reduced ability to move your neck. I'm worried that you can't see around you well enough to drive safely. I'd like to send you to someone who can assist us with understanding your complex daily activities and give us some insight about your driving abilities. Depending how it goes, you might benefit from also seeing a driving rehabilitation specialist."

Mrs. Alvarez *informs you she often looks at her feet to make sure she is using the right pedal. "Mrs. Alvarez, looking at your feet during driving is dangerous, because your eyes are not on the road. I'd like to send you to someone who can professionally evaluate your driving abilities. They will do a full evaluation and assist you in finding ways to safely use the pedals.*

A person called a driver rehabilitation specialist will ask you some questions about your medical history and test your vision, strength, range of motion, and thinking skills—similar to what we did the last time you were here. He or she will also take you out on the road and watch your driving. He or she might recommend some modifications for your car, such as hand controls and teach you how to use them.

"The cost of a professional driving evaluation ranges anywhere from $300 to $600, and there may be additional costs for accessories or rehabilitation training. However, it is possible that insurance may pay for part of the assessment and training. I know this may sound like a lot of money, but I think this is important for your safety and offers you the best chance to keep your license as you face sensory changes in your feet. If you were in a serious car crash, you or someone else could be injured, and the medical costs could end up costing you considerably more money. We should try to prevent that from happening."

OLDER ADULT DRIVERS WHO CAN BENEFIT FROM DRIVING REHABILITATION

Driving evaluation and rehabilitation are appropriate for older adult drivers with a broad spectrum of sensory (i.e., visual, perceptual), physical, and/or cognitive impairments. Driving rehabilitation specialists work with drivers diagnosed with dementia, stroke, arthritis, low vision, learning disabilities, limb amputations, neuromuscular disorders, spinal cord injuries, mental health problems, cardiovascular diseases, and other causes of functional deficits, including changes of normal aging.

Previously, it was assumed that all individuals with driving concerns should be seen by a DRS, or at minimum be evaluated "on the road." However, current research evidence supports making a driving decision for some older adults after a careful assessment of vision, cognition, and physical ability as applied to functional ADL/IADL activity. This evidence supports acknowledging that when an individual shows deficits in other complex tasks of daily living, driving cessation should be considered, because driving is the most complex IADL.[4-7] In these cases, referral to the DRS is probably not warranted, unless the family needs the confirmation.

In general, in cases when the older adult has relatively intact cognition, but visual or physical impairment that will impact driving (e.g., amputation, neck fusion), a direct referral to the DRS is warranted.[8] Advancement in vehicle technology allows compensation for a wide range of physical and some visual impairment. Vehicle modifications include extended gear-shift levers where reach is limited, padded steering wheel covers for pain or weakened grip, foot pedal extenders to compensate short leg length, or extra/larger mirrors for patients with restricted range of motion or flexibility, such as in arthritis. The specialist will oversee the process, including ensuring proper installation and training in the use of adaptive equipment.

Recovery and rehabilitation are sometimes lengthy and complicated when the patient has a condition that can affect all underlying skills needed for driving (e.g., stroke, diabetes, head injury) or has a progressive disease (e.g., dementia, Parkinson disease). In these cases, the decision to refer is much more complex. The clinical team must question if return to driving will be an option, evaluate the evidence available from the screening tests, and determine when in the recovery or disease process referral to a DRS would be warranted. In an effort to address these questions, a translational model was developed called OT-DRIVE, a framework for risk identification, treatment planning, and referral.[9]

DECISION INDICATORS FOR DRIVING

The profession of occupational therapy considers driving under the broader IADL of driving and community mobility,[1] acknowledging that ADLs and IADLs are the mainstay of occupational therapy practice. The "typical" occupational therapy evaluation begins with an interview of the patient's desires and goals (i.e., the occupational profile) as well as an assessment of the patient's visual, sensory, motor, and cognitive function using many of the same assessment tools used by the DRS. The outcome of this evaluation is the first step in the OT-DRIVE model (the "OT"); the therapist determines whether driving is important to this client and whether driving will be a risk.[9]

While developed to illustrate a framework for occupational therapy practitioners to use to determine driving risk and interventions,[9] Figure 1 can be used by general clinicians to describe the current status of patients in terms of driving risk and the most appropriate interventions. The "red" proposes that there is strong evidence from the

Figure 1 - Framework for OT-DRIVE

medical perspective and is supported by evaluation that driving risk is high in all or most areas (vision, perceptual, cognition) and that impairments exceed the threshold for safe driving. Patients in the "red" include individuals with moderate/severe dementia or whose insight and judgment have been impaired by major trauma. A referral to the specialized services of a DRS is not warranted, because the generalist occupational therapist and/or other service providers such as social workers can develop an intervention plan for mobility that includes driving cessation, turning the focus to mobility preservation through exploration of supportive transportation.

The "green" describes patients who may have temporary health issues that preclude driving for a period of time but have no evidence of impaired capacity or fitness to drive. Examples may be patients recovering from hip or knee replacement or hand or arm injuries. While these patients currently haves physical impairments that limit driving now, their cognitive capacity to self-restrict during this interval is intact. For these individuals, an appropriate typical recovery recommendation may be to "return to driving slowly when you feel able to do so." However, through addressing short-term mobility options during the period of non-driving, the clinical team should also encourage physical exercise, promote driver safety programs, and discuss warning signs for the future.

When diminished visual, cognitive, or physical abilities indicate concern for independence in managing complex IADLs, driving should be addressed. Recognizing these concerns is the first responsibility of the clinician/healthcare provider. Seeking data to better understand the level of impairment and its impact on driving is a prudent next step. When there is not clear evidence (i.e., not "red" or "green"), determining the degree to which the impairments affect fitness to drive is categorized as "yellow," supporting a specialized evaluation best done by the DRS. Using evidence from evaluations and clinical judgment, the general practice occupational therapist can determine if it is best to 1) optimize subskills for driving in rehabilitation, 2) consider other services to improve fitness to drive, or 3) determine the readiness for a comprehensive driving evaluation by a DRS, scheduled at the "right time."[9]

> **Mr. Phillips** *returns for a follow-up visit after undergoing the occupational therapist's IADL evaluation. The results indicated that Mr. Phillips scored below normal limits on several cognitive assessments. When observed performing complex IADL tasks, Mr. Phillips had difficulty with completing tasks as directed and organizing the elements of tasks; there were also issues with safety. The occupational therapist recommended that someone assist Mr. Phillips with medication management and his finances, and that he should actively plan alternative transportation options.*

DRIVER REHABILITATION

The goal of driver rehabilitation is to assist individuals with disabilities or age-related impairments in maintaining independent driving through use of specialized mobility equipment and/or training.[10]

Driving rehabilitation specialists have advanced education in clinical and on-road evaluation, driving education, adaptive strategies and means for compensation, an extensive understanding of the vehicle, and the array of aftermarket options including vehicle modification. It is important to understand this service is highly specialized, and some states require licensing as a driving instructor to take patients on the road. While driver rehabilitation is a multidisciplinary field,

the majority of DRSs are occupational therapists who have completed additional training in driver rehabilitation while others have degrees in medical fields such as physical therapy or psychology. Those with nonmedical backgrounds tend to come from education, transportation or community mobility backgrounds, such as driving school instructors or driver education programs. The diversity of programs and service providers will be discussed later in this chapter along with the implications for cost and appropriate referral.

THE ROLE AND FUNCTIONS OF DRIVER REHABILITATION SPECIALISTS (DRS)

A DRS provides "clinical driving evaluations and driving mobility equipment evaluations and intervention to develop or restore driving skills and abilities."[11]

The DRS with a medical background performs a comprehensive driving evaluation that includes an in-depth clinical assessment of functional abilities plus an on-road performance evaluation. A comprehensive driving evaluation can last one to four hours, depending on the older adult's disabilities, driving needs, and the driver rehabilitation program model. Typically, after the clinical assessment, the on-road evaluation is performed if the older adult driver meets the minimum state standards for health and vision and holds a valid driver's license or permit.

Based on the data gathered through these two components, a DRS develops a summary of the evaluation results and an individualized plan for preserving safe mobility, be it as a driver or non-driver. Although driver rehabilitation programs vary, most typically consist of a comprehensive driving evaluation that includes these important elements:

Comprehensive Driving Evaluation[11]

■ Clinical assessment, including review of driving history, driving needs, and license status; review of medical history and medications; functional assessments of vision/perception (e.g., acuity, contrast sensitivity, visual fields, ocular range of motion, saccades, phorias, convergence/divergence, depth perception, visual closure); physical abilities (e.g., balance, range of motion, motor strength, coordination, sensation, reaction time); and cognition (e.g., memory, divided and selected attention, judgment, executive function, processing speed, multi-tasking, insight).

■ On-road evaluation to determine the degree of driving risk, including vehicle control, adherence to traffic rules and regulations, environmental awareness and interpretation, defensive driving, wayfinding, and consistent use of compensatory strategies for visual, cognitive, physical, and behavioral impairments. Vehicle ingress/egress, mobility aid management (e.g., ability to transport a wheelchair or scooter), and vehicle preparation and maintenance are also evaluated. The on-road evaluation is typically performed in the evaluation vehicle equipped with dual brakes, a rearview mirror and eye-check mirror for the DRS, and any necessary adaptive equipment. (Note: Some programs separate the clinical and on-road portions of the evaluation on different days for several reasons: in consideration of fatigue, require on-road driving on two separate occasions to evaluate for consistency, or for team scheduling with the on-road evaluation provider).

■ Communication of assessment results and recommendations is typically provided directly to the older adult, the caregivers, and/or referring health care provider/agency; the process for communication of the DRS evaluation of outcomes and recommendations may vary by program model and local referral agreement. Variations include sending driving evaluation results to the clinical team to relay to the older adult driver and

caregivers.

■ Recommendations following a comprehensive driving evaluation may include:

- No restrictions. The older adult demonstrates adequate skills to drive with no currently diagnosed medical condition known to increase risk over time.

- Return to driving after the vehicle is equipped with adaptive driving equipment to match the older adult's individual needs and instruction/training after installation.

- Continue to drive with restrictions that are consistent with state laws. Some states do not offer restrictions, whereas others may offer a restricted license that would define, for example, a limitation to geographic areas (e.g., 5-mile radius from residence or local routes) or conditions (e.g., no night or highway driving) in which the older adult drives. (Note: Recommendations may be offered that are informal, but "Restrictions" describe a licensing action associated with the license similarly to how a required vision correction is part of licensure.)

- Reevaluation on a regular basis is indicated when an older adult demonstrates adequate skills to drive at present but has been diagnosed with a progressive disorder that may cause future decline (e.g., dementia, Parkinson disease).

- Temporary driving cessation, noting potential for improvement and driving in future. Recommended intervention to improve deficits in vision, perception, motor and/or cognition is advised when the older adult has medical condition(s) that can improve over time (e.g., stroke, heart attack, traumatic brain injury) and can return for reevaluation.

- Permanent driving cessation. This is advised when an older adult does not demonstrate the necessary skills to compensate for visual, perceptual, or cognitive deficits essential to safely resume driving, and the potential for improvement, even with intervention, is poor. In these cases, the message conveys that all options were explored and considered, but the decline the older adult has experienced has made operation of a motor vehicle unsafe for self and community. Alternative transportation options and a support network should be addressed with the older adult by referring to appropriate providers, including the generalist occupational therapist.

The Vehicle

■ For some, the mobility solution may center on the vehicle. Aftermarket adaptations or vehicle modification may address personal vehicle mobility for the patient as driver or support access, securement, and caregiver support for mobility as passenger. The patient and family/care partners are considered when addressing driving and community mobility.

■ Services may include:

- Assessment of vehicle, vehicle modifications, and equipment for the older adult's safe transport as a passenger or driver. Modifications may include accommodations for transportation of power wheelchair or other mobility device or if the individual is to be a wheelchair passenger or driver.

- Address the needs of caregivers as the driver responsible for transporting the individual as a passenger (e.g., inability to assist with transfer because of arthritis, limitations in stowing mobility devices, transporting scooter). In these cases, mobility equipment solutions such as scooter or wheelchair lifts or tie-down systems may be recommended to preserve mobility by proactively addressing the caregiver's physical capabilities, limitations, and mobility goals.

Older adults who perform poorly on the clinical

assessment may or may not be offered an on-road evaluation. If the older adult driver is deemed too impaired, the risk to the driver and evaluator may preclude an on-road evaluation for safety reasons. However, even after poor performance on the clinical driving evaluation, the DRS may still conduct an on-road evaluation in some cases:

■ Older adults who perform poorly on some individual components of the clinical driving evaluation may still demonstrate safe driving because there is no clinical assessment tool that accurately predicts on-road performance as clearly as the on-road assessment and driving is an overlearned skill.[6,12-13]

■ Older adults and their family and caregivers may need concrete evidence of unsafe driving. However, in the case of the older adult with cognitive impairment who lacks insight, the on-road evaluation may in fact serve to change only the perception of the family but not that of the driver.

Treatment and Intervention

■ Adaptive driving instruction or driver retraining, with or without vehicle modifications.

■ Coordination of vehicle modifications:

- Vehicle consultation: The DRS often serves as a consultant to older adults who are purchasing a new vehicle to ensure that the vehicle will accommodate the necessary mobility limitations (door opening or seat height to optimize ease in transfer, ease in applying adaptive equipment now or in the future).

- Vehicle modification recommendations: The DRS provides written recommendations for all vehicle/equipment needs to the older adult driver, third-party payer, and vehicle/equipment dealer.

- Adaptive equipment/vehicle modification inspection: The DRS is involved with the older adult and mobility equipment dealer in a final fitting to ensure training in the use of equipment and optimal functioning of the recommended vehicle/equipment. (For more information on mobility equipment dealers [MEDs], see www.nmeda.com, the website of the National Mobility Equipment Dealers Association).

■ Driving simulators have a growing role in older adult driving evaluation, training, and intervention.[14] Although simulator sickness is an issue for some older adults,[15] simulators are emerging as an effective tool for driving assessment[16] and more importantly, as an intervention tool for older adults with medical conditions.[17-20] The numbers of occupational therapy departments in hospital settings purchasing driving simulators are increasing; thus, research in this area is needed.

Mrs. Alvarez *is referred and evaluated by the DRS.*

The DRS completes a comprehensive driving evaluation for Mrs. Alvarez. Vision and cognition are within normal limits for someone her age. However, she demonstrates slower reaction times, especially for motor tasks. She informs the DRS she often looks at her feet to make sure she is using the right pedal. Physical results indicate that she has poor proprioception in her feet and cannot safely use the pedals without visually watching her feet. Because of her strong cognitive skills and motivation to maintain driving, the DRS believes she is a good candidate for hand controls, so a second appointment is scheduled with the DRS to try a few different types of controls to see which works best for her (and her vehicle). Once the hand controls are fitted into her vehicle, Mrs. Alvarez will take a series of lessons with the DRS to ensure the equipment is fitted properly to her vehicle and she has the appropriate training.

Making the Referral to the DRS

Before making the referral, advise the older adult about your reasons for recommending a specialist evaluation, the goals of the assessment and rehabilitation, the evaluation and tests that will likely be offered, and the expected out-of-pocket cost for these services.

Some programs require a written healthcare provider prescription while others may not. Understanding your local requirements or clinic policies is important to appropriately and efficiently refer the older adult. A driving evaluation prescription should list specific reasons and needs that justify the evaluation and/or rehabilitation. For example, "OT driver evaluation for hand weakness with poor finger flexion or for limited neck rotation secondary to arthritis," "driving evaluation for hemianopsia secondary to stroke," or "driving evaluation for cognitive impairments secondary to Alzheimer disease" provide guidance for the DRS and are more likely to be reimbursed by insurance. In contrast, vague orders for "an older adult," "debilitated," or "frail" older adult do not provide adequate guidance to the DRS and can complicate insurance reimbursement. In addition, the DRS will also need information on current diagnoses and medications.

If appropriate and feasible in the clinical team setting, a follow-up appointment should be scheduled after the driving evaluation. If the recommendation from the DRS is continued driving with or without restrictions, adaptive devices, and/or rehabilitation, the recommendations should be reinforced by the clinical team. When applicable, caregivers should be informed of these recommendations. Also remember that older adult drivers should be counseled on health maintenance and safe driving behaviors and encouraged to develop a transportation plan that includes alternative forms of transportation or choices in case they experience temporary or long-term changes that may limit driving in the future. If the older adult is not considered fit to drive, then this information must be conveyed clearly to the older adult and caregivers, and followed up with services that support driving cessation and address continued mobility as a non-driver (see Chapter 6).

Special mention is made of other rehabilitation specialists who may help address impairments that are common in older adults. For instance, physical therapists may be able to improve muscle weakness, range of motion, or physical frailty. Visual rehabilitation may be available in some specialized centers. Neuro-ophthalmologists or optometrists may provide vision training, especially for older adults with neurologic insults that affect convergence, alignment, nystagmus, eye apraxia, and/or visual neglect from stroke, head injury, brain tumors, and trauma.

CONDITIONS COMMONLY SEEN IN DRIVING PROGRAMS

Normal aging happens to everyone at different rates, and research has shown that age alone does not justify a driving evaluation.[13] In fact, most older adults appropriately self-restrict and do not engage in risky driving behaviors (e.g., speeding, tailgating, drinking and driving).[13,21] However, many medical conditions require the clinical team to consider how the condition and/or its medications affect driving, as outlined specifically in Chapter 9. The most common conditions of older adults referred to a DRS include the neurological progressive conditions (e.g., dementia, Parkinson disease), stroke and/or acquired brain, and advanced aging.

Dementia or Other Progressive Conditions

For the progressive conditions, it is "not if, but when" to cease driving.[22] Early in the disease

stages, intervention by an occupational therapy practitioner may include assisting the older adult and family in developing a transportation plan likely to include criteria indicative of eventual cessation. This plan may focus on determining the individual's current driving needs, incorporating strategies for compensation such as finding altered driving routes (e.g., avoiding left hand turns or busy intersections), guiding family to gather performance data by observing practice drives, and recommending close and extended follow-up by the medical provider or seeking the services of a DRS as the condition progresses. The transportation plan offers the older adult and family the opportunity to anticipate and plan for transition, framing driving cessation as a process and not an arbitrary or "too late" decision. The conversation of cessation must be followed by access to local providers to explore resources, alternative forms of transportation, and the supports the older adult requires (e.g., escort, curb-to-curb, or door-to-door). An example may be found in Appendix C. For those unwilling or unable to understand the cessation recommendation, caregivers should be provided with strategies to prevent access to the car and to manage ongoing resistance and arguments demanding access to the car. Other clinical team members may also be helpful when supporting older adults and caregivers who lack insight. In some instances when compliance with cessation is questioned, a process for reporting the unsafe driver to the state licensing authority may be required (see Chapter 7). Clinicians in particular may be asked to respond if the older driver receives a letter from a medical review board, vehicle licensing agency, or law enforcement. An example may be found in Appendix C. Health care providers may be asked to complete a state medical reporting form (for an example, see http://dor.mo.gov/forms/1528.pdf).

Acquired Brain Injury or Stroke

In contrast to dementia, individuals who have had an acquired brain injury such as a stroke have great potential for recovery and rehabilitation. Research has shown that recovery can be up to months or years following the initial stroke, especially if rehabilitation services are ongoing. Because returning to driving is one of the most valued IADLs of individuals with stroke,[23] individuals with brain injury who have insight and meet visual state standards need to be evaluated by the DRS at the right time in recovery. Evidence supports individuals with stroke successfully returning to driving[16, 24-25] if evaluation and intervention occur at the right time with the appropriate equipment.

Mr. Phillips *returns for a follow-up visit after undergoing driver assessment. The DRS recommended that wide-angle rearview mirrors be fitted on Mr. Phillips' car and install a back-up camera (if possible). Additionally, the DRS recommended strategies to reduce distractions and cognitive fatigue that included no longer listening to the radio, only driving in familiar places and/or using a GPS for unfamiliar places, and not using interstates. The DRS also recommended and reviewed the high-risk intersections that should be avoided. Mr. Phillips states that he is driving more comfortably with his adaptive device and use of strategies, and his son says that he appears to be focusing better on his driving tasks. You counsel him on the Tips for Safe Driving and Ten Tips for Aging Well resources, advise him to continue walking, and encourage him to start planning alternative transportation options. His daughter is recruited to assist Mr. Phillips and his son with these discussions and interventions.*

PROGRAMS THAT ADDRESS DRIVING: FROM EDUCATION TO REHABILITATION

Driving rehabilitation encompasses a range of programs and providers. The interprofessional nature of driving rehabilitation involves services equipped to address a range of needs. Most health care professionals understand that driving rehabilitation should only involve medical providers; however, sometimes other driving services are assumed to be included. The Spectrum of Driver Services[26] document was developed to define and describe the range of driver services, including providers' education and credentials, required providers' knowledge, typical services provided, and outcomes of each program type. Figure 2 differentiates the programs and can assist the clinical members in referring to appropriate levels of service.[26] The significant features include:

■ The differentiation between community-based education; medically based assessment, education, and referral; and specialized evaluation and training with driver rehabilitation programs.

■ There are five major types of program (i.e., driver safety programs, driving schools, driver screening, clinical IADL evaluations, and driving rehabilitation programs), with typical providers described with their credentials. This will assist in determining which programs use providers with a medical background.

■ Under each program type, the required providers' knowledge and typical services will assist the reader in being able to differentiate preventive services (i.e., updating driving skills or acquiring a driver's license) from medically based assessment. These sections also articulate the differences between screening at a physician's office, a clinical (or IADL) assessment that might be done by a generalist occupational therapist, and the specialized services provided by the DRS.

■ The outcome of each program type is clearly stated. Because driver safety programs provide education and awareness and driving schools enhance skills for healthy drivers, these two categories **should not** be the intervention resource for those with medical conditions. The medically based assessment, education, and referral programs that indicate risk or the need for referral to the specialized programs are the appropriate programs for these individuals.

Thus, the clinical team member's task is to determine if the need is related to:

1. knowledge and learning (e.g., knowing how, road knowledge to navigate the complex driving environment),
2. lack of confidence (due to limited driving), or
3. capacity (e.g., visual processing, speed and flexibility to use vehicle controls, cognitive capacity to judge and manage the unexpected, stamina to remain alert and attentive throughout).

If the issue is capacity, because the older adult demonstrates impairments through use of the clinical screening (CADReS) and/or by performance in other IADLs, the clinician should consider referral to a general practice occupational therapist who can offer a traditional professional evaluation of IADLs, including high-level/complex IADLs, to determine driving risk and safety. If an older adult is unable to be left alone for 2 hours, for example, this level of IADL impairment may offer adequate data to make driving recommendations based on impaired capacity for living independently as well as driving. If the IADL status offers a mix of strengths and impairments, the older adult could then be referred on to a comprehensive driving evaluation. The question of driving competence may be the first clue the clinical team has that may lead to a general review of IADL status and eventual diagnosis of

Figure 2 - Spectrum of Driver Services

Spectrum of Driver Services: Right Services for the Right People at the Right Time

A description consumers and health care providers can use to distinguish the type of services needed for an older adult.

	COMMUNITY-BASED EDUCATION		MEDICALLY-BASED ASSESSMENT, EDUCATION AND REFERRAL		SPECIALIZED EVALUATION AND TRAINING
Program Type	**Driver Safety Programs**	**Driving School**	**Driver Screen**	**Clinical IADL Evaluation**	**Driver Rehabilitation Programs (Includes Driver Evaluation)**
Typical Providers and Credentials	Program specific credentials (e.g. AARP and AAA Driver Improvement Program).	Licensed Driving Instructor (LDI) certified by state licensing agency or Dept. of Education.	Health care professional (e.g., physician, social worker, neuropsychologist).	Occupational Therapy Practitioner (Generalist or Driver Rehabilitation Specialist#). Other health professional degree with expertise in Instrumental Activities of Daily Living (IADL).	Driver Rehabilitation Specialist#, Certified Driver Rehabilitation Specialist*, Occupational Therapist with Specialty Certification in Driving and Community Mobility+.
Required Provider's Knowledge	Program specific knowledge. Trained in course content and delivery.	Instructs novice or relocated drivers, excluding medical or aging conditions that might interfere with driving, for purposes of teaching / training / refreshing / updating driving skills.	Knowledge of relevant medical conditions, assessment, referral, and / or intervention processes. Understand the limits and value of assessment tools, including simulation, as a measurement of fitness to drive.	Knowledge of medical conditions and the implication for community mobility including driving. Assess the cognitive, visual, perceptual, behavioral and physical limitations that may impact driving performance. Knowledge of available services. Understands the limits and value of assessment tools, including simulation, as a measurement of fitness to drive.	Applies knowledge of medical conditions with implications to driving. Assesses the cognitive, visual, perceptual, behavioral and physical limitations that may impact driving performance. Integrates the clinical findings with assessment of on-road performance. Synthesizes client and caregiver needs, assist in decisions about equipment and vehicle modification options available. Coordinates multidisciplinary providers and resources, including driver education, health care team, vehicle choice and modifications, community services, funding / payers, driver licensing agencies, training and education, and caregiver support.
Typical Services Provided	1) Classroom or computer based refresher for licensed drivers: review of rules of the road, driving techniques, driving strategies, state laws, etc. 2) Enhanced self-awareness, choices, and capability to self-limit.	1) Enhance driving performance. 2) Acquire driver permit or license. 3) Counsel with family members for student driver skill development. 4) Recommend continued training and / or undergoing licensing test. 5) Remedial Programs (e.g., license reinstatement course for teens / adults, license point reduction courses).	1) Counsel on risks associated with specific conditions (e.g., medications, fractures, post-surgery). 2) Investigate driving risk associated with changes in vision, cognition, and sensory-motor function. 3) Determine actions for the at-risk driver: • Refer to IADL evaluation, driver rehabilitation program, and / or other services. • Discuss driving cessation; provide access to counseling and education for alternative transportation options. 4) Follow reporting / referral structure for licensing recommendations.	1) Evaluate and interpret risks associated with changes in vision, cognition, and sensory-motor functions due to acute or chronic conditions. 2) Facilitate remediation of deficits to advance client readiness for driver rehabilitation services. 3) Develop an individualized transportation plan considering client diagnosis and risks, family, caregiver, environmental and community options and limitations: • Discuss resources for vehicle adaptations (e.g., scooter lift). • Facilitate client training on community transportation options (e.g., mobility managers, dementia-friendly transportation). • Discuss driving cessation. For clients with poor self-awareness, collaborate with caregivers on cessation strategies. • Refer to driver rehabilitation program. 4) Document driver safety risk and recommended intervention plan to guide further action. 5) Follow professional ethics on referrals to the driver licensing authority.	Programs are distinguished by complexity of evaluations, types of equipment, vehicles, and expertise of provider. 1) Navigate driver license compliance and basic eligibility through intake of driving and medical history. 2) Evaluate and interpret risks associated with changes in vision, cognition, and sensory-motor functions in the driving context by the medically trained provider. 3) Perform a comprehensive driving evaluation (clinical and on-road). 4) Advise client and caregivers about evaluation results, and provides resources, counseling, education, and / or intervention plan. 5) Intervention may include training with compensatory strategies, skills, and vehicle adaptations or modifications for drivers and passengers. 6) Advocate for clients in access to funding resources and / or reimbursement. 7) Provide documentation about fitness to drive to the physician and / or driver-licensing agency in compliance with regulations. 8) Prescribe equipment in compliance with state regulations and collaborate with Mobility Equipment Dealer^ for fitting and training. 9) Present resources and options for continued community mobility if recommending driving cessation or transition from driving. Recommendations may include (but not restricted to): 1) drive unrestricted; 2) drive with restrictions; 3) cessation of driving pending rehabilitation or training; 4) planned re-evaluation for progressive disorders; 5) driving cessation; 6) referral to another program.
Outcome	Provides education and awareness.	Enhances skills for healthy drivers.	Indicates risk or need for follow-up for medically at-risk drivers.		Determines fitness to drive and provides rehabilitative services.

#DRS – Health professional degree with specialty training in driver evaluation and rehabilitation. *CDRS – Certified Driver Rehabilitation Specialist-Credentialed by ADED (Association for Driver Rehabilitation Specialists). +SCDCM – Specialty Certified in Driving and Community Mobility by AOTA (American Occupational Therapy Association).
^Quality Approved Provider by NMEDA (National Mobility Equipment Dealers Association).

Driver Rehabilitation Programs: Defining Program Models, Services, and Expertise.
Occupational Therapy In Health Care, 28(2):177–187, 2014

degenerative processes such as Alzheimer disease.

By distinguishing knowledge (i.e., rules of the road) from capacity (i.e., physical and cognitive abilities), the clinician will be better equipped to select from the array of support or evaluation services available. The CADReS screening tool will offer data to consider when selecting programs that address knowledge and skills, or capacity for patients considered medically at risk.

Many relatively healthy aging drivers may have their needs best addressed through education. However, it is important to remember the needs or safety concerns of the experienced (older) driver are distinctly different from those of the new learner or "novice driver" (the primary focus of most driving schools). While some driving schools offer driving lessons to adults who have never driven, are new to the region or country, or are hesitant because they have not driven for many years, the more common education types are the low-cost, group education "refresher" courses offered in communities by AAA, AARP, or other providers.

In fact, a new program called the "Driving Check-Up" has been developed by the American Automobile Association Foundation for Traffic Safety (AAAFTS) that focuses on a driving evaluation of driving skills and knowledge, but not medical fitness to drive.[27] Such a service could provide support for some older adults without specific medical conditions who may need help with driving skills. For example, if an older adult has a stroke and can no longer drive, the spouse, now assuming the role of primary driver, may be licensed, but lack experience or confidence having been in the passenger seat for many previous years. For spouses who have not driven in many years, a referral to a driving school for a driver refresher course may improve confidence and safety.

Clinician: I'm pleased to see you **Mrs. Alvarez,** *and I understand you drove yourself to this appointment with your new, adapted vehicle. How is it working out?*

Mrs. Alvarez: It is working, but it takes a lot of practice. It was hard to learn, but I really want to be independent, so I worked with the DRS for all the hours she recommended, and I feel more comfortable than I did in the beginning.

Mrs. Alvarez: It is surprising how cars can be adapted, even my old car! I do think I am safer now than when I was always looking for where my feet were on the pedals. I am slowly getting out more than before. However, the DRS did recommend that I start making a transportation plan for the future.

Clinician: That is a really good idea, and we can give you materials to help you with that plan.

VARIETY OF DRIVING REHABILITATION PROGRAMS[23]

Figure 3 illustrates the three main levels of driver rehabilitation programs, which are defined as basic, low tech, and high tech.[26] The basic program is appropriate for older adult drivers with no or minor physical impairments who require only very basic adaptive equipment in the vehicle. The low-tech program can address the needs of older adult drivers who may need mechanical or low-tech vehicle modifications or equipment (e.g., hand controls, left foot accelerator, spinning knob for one-handed steering) and/or training in safe use on the road. The high-tech program is necessary for older adults who need to drive from a wheelchair or need high-tech equipment, such as low-effort steering. The programs that have high tech programs typically provide the full spectrum, including the basic program services.

Figure 3 - Spectrum of Driver Rehabilitation Program Services

Spectrum of Driver Rehabilitation Program Services

A description consumers and health care providers can use to distinguish the services provided by driver rehabilitation programs which best fits a client's need.

Program Type	DRIVER REHABILITATION PROGRAMS Determine fitness to drive and / or provide rehabilitative services.		
Levels of Program and Typical Provider Credentials	**BASIC** Provider is a Driver Rehabilitation Specialist (DRS)# with professional background in occupational therapy, other allied health field, driver education or a professional team of CDRS or SCDCM with LDI**.	**LOW TECH** Driver Rehabilitation Specialist#, Certified Driver Rehabilitation Specialist*, Occupational Therapist with Specialty Certification in Driving and Community Mobility+, or in combination with LDI. Certification in Driver Rehabilitation is recommended as the provider for comprehensive driving evaluation and training.	**HIGH TECH** Driver Rehabilitation Specialist#, Certified Driver Rehabilitation Specialist*, Occupational Therapist with Specialty Certification in Driving and Community Mobility+. Certification in Driver Rehabilitation is recommended as the provider for comprehensive driving evaluation and training with advanced skills and expertise to complete complex client and vehicle evaluation and training.
Program Service	Offers driver evaluation, training and education. May include use of adaptive driving aids that do not affect operation of primary or secondary controls (e.g., seat cushions or additional mirrors). May include transportation planning (transition and options), cessation planning, and recommendations for clients as passengers.	Offers comprehensive driving evaluation, training and education, with or without adaptive driving aids that affect the operation of primary or secondary controls, vehicle ingress / egress, and mobility device storage / securement. May include use of adaptive driving aids such as seat cushions or additional mirrors. At the Low Tech level, adaptive equipment for primary control is typically mechanical. Secondary controls may include wireless or remote access. May include transportation planning (transition and options), cessation planning, and recommendations for clients who plan to ride as passengers only.	Offers a wide variety of adaptive equipment and vehicle options for comprehensive driving evaluation, training and education, including all services available in Low Tech and Basic programs. At this level, providers have the ability to alter positioning of primary and secondary controls based on client's need or ability level. High Tech adaptive equipment for primary and secondary controls includes devices that meet the following conditions: 1) capable of controlling vehicle functions or driving controls, and 2) consists of a programmable computerized system that interfaces / integrates with an electronic system in the vehicle.
Access to Driver's Position	Requires independent transfer into OEM^ driver's seat in vehicle.	Addresses transfers, seating and position into OEM^ driver's seat. May make recommendations for assistive devices to access driver's seat, improved positioning, wheelchair securement systems, and / or mechanical wheelchair loading devices.	Access to the vehicle typically requires ramp or lift and may require adaptation to OEM driver's seat. Access to driver position may be dependent on use of a transfer seat base, or clients may drive from their wheelchair. Provider evaluates and recommends vehicle structural modifications to accommodate products such as ramps, lifts, wheelchair and scooter hoists, transfer seat bases, wheelchairs suitable to utilize as a driver seat, and / or wheelchair securement systems.
Typical Vehicle Modification: Primary Controls: Gas, Brake, Steering	Uses OEM^ controls.	Primary driving control examples: A) mechanical gas / brake hand control; B) left foot accelerator pedal; C) pedal extensions; D) park brake lever or electronic park brake; E) steering device (spinner knob, tri-pin, C-cuff).	Primary driving control examples (in addition to Low Tech options): A) powered gas / brake systems; B) power park brake integrated with a powered gas / brake system; C) variable effort steering systems; D) reduced diameter steering wheel, horizontal steering, steering wheel extension, joystick controls; E) reduced effort brake systems.
Typical Vehicle Modification: Secondary Controls	Uses OEM^ controls.	Secondary driving control examples: A) remote horn button; B) turn signal modification (remote, crossover lever); C) remote wiper controls; D) gear selector modification; E) key / ignition adaptions.	Electronic systems to access secondary and accessory controls. Secondary driving control examples (in addition to Low Tech options): A) remote panels, touch pads or switch arrays that interface with OEM^ electronics; B) wiring extension for OEM^ electronics; C) powered transmission shifter.

#DRS - Health professional degree with specialty training in driver evaluation and rehabilitation, *CDRS – Certified Driver Rehabilitation Specialist – Credentialed by ADED (Association for Driver Rehabilitation Specialists). +SCDCM – Specialty Certified in Driving and Community Mobility by AOTA (American Occupational Therapy Association) ^OEM – Original Equipment installed by Manufacturer.
**LDI-licensed driving instructor.

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It is important to note that the services of an occupational therapist providing medically necessary services are covered by third-party payers, Medicare, and Medicaid.

FUNDING SOURCES FOR DRIVER ASSESSMENT AND REHABILITATION

The costs associated with specialized driving services may be a barrier to access and adherence to the recommendation for evaluation. Many specialized services require associated "out-of-pocket" fees, and the comprehensive driving evaluation is no exception. If driving safety is in question, the evaluation data to support continued driving or cessation is essential. Ethically, recommendations must follow a medically indicated need and not be based on cost.

It is also important to recognize this highly skilled evaluation is not the same as a driving test offered through the state licensing authority, which is typically a basic entry-level test of knowledge (rules of the road) and skills of handling a motor vehicle (overlearned and practiced by older adults). Typically, the individual must complete a knowledge test, pass a vision screen, and demonstrate a specific list of prompted maneuvers on the road. It is not a measure of capacity, judgment, or executive ability, and it is not geared to the experienced driver. It results only in a pass/fail with no recommendation or information to caregivers of what comes next. Similarly, typical driving schools are geared toward education and learning how to drive safety. The typical driving instructor expertise is teaching and learning, and he or she may offer an older driver multiple lessons to resolve the safety issue of missing a stop sign, when in fact, the cognitively impaired older adult will likely not benefit from lessons as a novice driver might. Accordingly, while costs for driving evaluations vary, informed consumers should consider the full package, for example, if lessons are included.

As a referral source, understanding and communicating a basic understanding of costs and options may improve the effectiveness of referral. There are many models of programs, some private practice, some associated with hospitals or universities. All likely have some combination of costs that may be insurance eligible and some that are not. It would be misleading to offer global cost estimates in this document. Periodic inquiry with local providers is the most straightforward way to ensure communication of accurate information. The following questions may guide this inquiry:

1. What are your costs for driver assessment and training? Costs vary between programs and according to the extent of services provided (e.g., evaluation, training, rehabilitation intervention).
2. What are typical costs for basic adaptive equipment?
3. Does your program assist patient exploration of insurance and funding options? Typically, the DRS is well informed of funding opportunities and will assist clients in this exploration.

Two programs that typically support expenses associated with comprehensive driving evaluations, driver rehabilitation, and vehicle modifications are state workers' compensation and vocational rehabilitation programs. These programs offer financial support for mobility for persons with a disability in support of return-to-work, meaning many older adult drivers will not qualify for either program. Coverage from Medicare, Medicaid, and private insurance companies is variable and depends on local interpretation of policies (i.e., government fiscal intermediaries).[28] (Please see the reference for examples of how to appeal denials and pursue funding for coverage of driving evaluations.) The Veterans Administration (VA) programs may also cover driving evaluations and training for spinal cord and mobility-related injuries, as well as offer senior driving safety assessments, although not all states have a VA driver rehabilitation program. In those instances,

the VA program may contract with a local driver rehabilitation program to provide services to veterans. Many driver rehabilitation programs choose to offer their services as private pay only, because current reimbursement models are inadequate to cover the expenses of this individualized and highly trained specialized service. Since rates and extent of insurance reimbursement vary, older adult drivers should be encouraged to independently inquire about program rates, insurance coverage, and payment procedures that may include the requirement to pay up-front and receive the approved reimbursement at a later time.

Also, older adults and caregivers should be advised to carefully review insurance policies. Of interest, at least one automobile insurance provider offers a plan that reimburses up to $500 for a comprehensive driving evaluation performed by a DRS who is also an occupational therapist. This specific policy allows the older adult up to three years recovery to access this benefit.

Transportation is a significant factor in decisions for housing and placement in facilities. The personal vehicle driven by self or spouse is the most preferred mode of transportation. When balanced against the personal and global costs to the older adult driver and the community of a crash, or services needed to support an older adult lacking independent mobility, the comprehensive driving evaluation may prove to be a cost-saving strategy.

FINDING A DRIVER REHABILITATION SERVICE

Two national associations offer education and credentials in driver rehabilitation. The American Occupational Therapy Association (AOTA) offers a multitude of education options to develop specialty expertise in driving and community mobility. In addition, a portfolio-based professional Specialty Certification in Driving and Community Mobility (SCDCM) (www.aota.org/Education-Careers/Advance-Career/Board-Specialty-Certifications/Driving-Community-Mobility.aspx) is available for application from the credentialing body at AOTA. The SCDCM includes a development plan and must be renewed, via application, every 5 years. Only occupational therapy practitioners may apply for certification for this advanced level of achievement.

The Association for Driver Rehabilitation Specialists (ADED) (formerly Association of Driver Educators for the Disabled, still known as ADED) also offers education and certification to become a DRS. Because persons of varied backgrounds may apply for certification through ADED, the education and experience qualifications to take the certification examination vary. Once attained, ADED requires that the certified driver rehabilitation specialists (CDRSs [www.aded.net/?page=215]) renew their certification every 3 years by fulfilling a minimum of 30 continuing education hours in the field of driver rehabilitation. Although many DRSs either hold certification or are in the process of obtaining the necessary education and experience to sit for the examination, in most states certification is not required to practice driver rehabilitation.

Driver rehabilitation programs are expanding nationally to include occupational therapy practitioners with advanced knowledge in driving rehabilitation who have formed relationships (for referral) with the smaller number of highly trained specialists. DRSs are located across the country, although availability is typically in urban areas or large medical centers. DRSs can be in private practice or affiliated with hospitals, rehabilitation centers, driving schools, VA hospitals, and state motor vehicle departments. Driving rehabilitation services may also be accessed through area agencies on aging, universities, and

area departments of education. Before referring older adults to driving rehabilitation services, it is important to ensure the appropriate level of service needed is available. The credentials and knowledge level of the provider, typical services provided, and expected outcome should match the needs of the older adult driver and caregivers. A background in driver education alone is likely insufficient for appropriate assessment of medically impaired drivers and correct interpretation of the assessment.

To find a provider in the local area, calling the occupational therapy departments in local hospitals or rehabilitation centers is a good place to start. The AOTA website is a source to locate a DRS by state (https://www.aota.org/olderdriver). The ADED's online directory is another good source of information (https://www.aded.net/search/custom.asp?id=1984) to locate DRSs and CDRSs. The local chapters of subspecialty organizations such as the Alzheimer's Association may keep up-to-date driving evaluation program information on their websites. Many local chapters of the Alzheimer's Association (https://www.alz.org/help-support/caregiving/safety/dementia-driving) also provide lists of area driving evaluation programs.

When selecting a DRS or driving rehabilitation program, the older adult driver and/or caregivers may wish to inquire:

- How many years of experience does the DRS (or program) have and what types of clients do they serve? In many cases, experience may be a more important indicator of quality than certification alone. Many well-qualified DRSs are not certified (and certification is typically not required).
- For older adults with medical conditions, it is important to ascertain if the DRS has a medical background. The complexity of conditions such as dementia, stroke, or Parkinson disease requires a DRS that has been educated in the conditions, medications, and potential progression of the condition.
- Does the driver rehabilitation program provide a comprehensive driving evaluation that includes both clinical and on-road assessments? A DRS who provides both components of the evaluation (or a program whose team of specialists perform both components) is ideal. Referral to two separate specialists or centers is inconvenient for the older adult and the clinical team member and often presents a greater challenge in insurance reimbursement. In addition, some programs use a driving simulator program, which should not be used to replace the on-road component. Simulators have the advantages of reliability and safety, but they are not standardized and validity is limited when compared with the performance-based road test. In addition, in older adults they may induce motion sickness, which can limit the findings.
- Does the program provide rehabilitation and training? A driver rehabilitation program should ideally provide both evaluation and rehabilitation. If the older adult driver will likely need any adaptive devices or vehicle modifications, he or she and their caregivers should go to a "low tech" or "high tech" program (see Appendix C) that has the appropriate equipment to evaluate and train the driver in their use.
- How much can the older adult driver expect to pay out-of-pocket for assessment, rehabilitation, and adaptive equipment?
- Who will receive a report of the assessment outcome? Typically, reports are sent to the older adult driver and to the referring clinical team member and/or referring agency (e.g., workers' compensation or office of retirement services). Some DRSs also send reports to caregivers, at the request of the caregiver and with the older adult's

consent. Whether or not the DRS reports to the state licensing agency is variable and should be clearly stated before the evaluation is initiated. In states with mandatory reporting laws, the DRS and/or physician may send a report to the state licensing agency; even if reporting is not legally required, some will still send a report in the interest of public safety and ethical responsibility. In cases when the recommendation is to cease driving, reporting to the state licensing agency will typically result in the state review board or medical board suspending the license or requesting more information, although each varies in the process and time frame.

- If the older adult receives recommendations to cease driving, does the DRS provide any counseling or aid in transportation planning? Note that DRS counseling does not preclude the need for follow-up by the clinical team. Many times, the older adult and caregivers may be too distressed at the time of evaluation and recommendations to deal with additional information. Mobility counseling and transportation planning are crucial for reinforcing the message to cease driving by providing resources to support continued mobility in the community, as well as demonstrating the health care provider's compassion and support.

WHEN DRIVER ASSESSMENT IS NOT AN OPTION

Unfortunately, driver evaluation and rehabilitation services may not always be readily available in the local area. Even if a DRS is available, the older adult may refuse further assessment or be unable to afford it. However, some patients and caregivers in DRS shortage areas may be willing to travel to have this type of evaluation, particularly if the chances are good that the evaluation may result in prolonging driving life expectancy and safety.

It is important to distinguish whether the recommendation for driver assessment is elective or essential to ongoing driving. If the latter, steps for stopping driving until assessment is done must be clearly communicated to the older adult driver and caregivers and, if necessary, also to the state licensing authority. Older adults who refuse on the basis of cost should be reminded that operating a motor vehicle is expensive and that the assessment is critical for safety and important when considered against the cost of a motor vehicle crash. It is the clinician's ethical duty to report to the licensing authorities if there are clear indications that the older adult is demonstrating unsafe driving practices, resulting in risk to themselves and the public.

If comprehensive driving evaluation through a DRS is not available, there are several options:

- Advocacy efforts can be undertaken to inform local rehabilitation providers that the clinical team is seeking local driving rehabilitation services for older adults. Rehabilitation providers must know of local interest to recognize the need for program growth.

- As discussed, occupational therapists are "generalists" who can provide an occupational therapy evaluation of IADLs. (These services are typically provided and reimbursed by Medicare and Medicaid as occupational therapy services). Because driving is an IADL, these assessments can be used to determine driving risk and potential for risk. Occupational therapists in general practice may also be able to perform specific assessments that provide results correlated to driving risk as well as provide mobility counseling. Referral to these types of health professionals may actually be a more widely available option in many communities.

- Private driving schools and driving education programs may be available in the local area.

However, they may not have expertise in evaluating older adults with medical impairments.

- Further evaluation by another health professional such as a geriatrician, neurologist, psychiatrist, or neuropsychologist can be considered for an older adult who has a chronic condition such as Alzheimer disease or an episodic acute illness (e.g., seizure disorder).
- If changes in driving behavior are likely to improve the older adult's driving safety (e.g., avoiding driving at night, rush hour, adverse weather conditions, etc.), the clinical team member can make recommendations. However, officially, state policies vary in the area of restrictions. Strict adherence to these policies can be made a condition for licensing through the state licensing agency or medical review board. State policies should be checked before making these recommendations. It also has to be acknowledged that the research literature on the benefits of license restriction is not clear. In general, when possible, it is generally better to lean toward driving autonomy with license restriction, but if there are concerns that the older adult would not honor the restrictions then driving cessation may be the best option.

If the older adult's driving safety is an urgent concern, the clinician may wish to report to the state licensing agency, which will have steps to follow that may include a state driving assessment. Depending on the particular state's reporting laws, physicians may be legally responsible for reporting "unsafe" drivers to the state licensing agency. (For a discussion of the legal and ethical issues, see Chapter 7; for a list of state licensing agencies and other resources on state laws, see Chapter 8.) The older adult should be made aware of the referral/report to the state licensing agency, which should be documented and also offered to the older adult in writing. This may place the clinical team member in a difficult position. Many states require physicians to fill out forms that require medical information and vision testing results and to provide an opinion on whether the driver should undergo visual and/or on-road testing.

Regardless if the older adult has no medical contraindications to continued driving, he or she should be offered education and handouts such as the Ten Tips for Aging Well and Safe Driving Tips (available in this guide). All older adults should be encouraged to develop a transportation plan, and to become familiar with and able to successfully access alternative forms of transportation. Planning ahead is invaluable to support aging in place while bridging short- or long-term disruptions in the most common and familiar form of transportation—the personal vehicle.

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