



## DriveABLE™: Providing Science-Based Driving Assessments for Medically At-Risk Drivers

### **DriveABLE™: The company and its mission.**

DriveABLE™ is a university spin-off company that provides a scientifically-based driving evaluation to identify those drivers who have become unsafe-to-drive due to medical impairments. The internationally recognized technology is delivered through DriveABLE Assessment Centres Inc. on a licensed basis with the support of the service delivery and research staff. DriveABLE™'s mission is to promote traffic safety by providing a high quality, scientifically and socially justifiable evaluation to identify drivers who are medically impaired and to enhance the well-being and quality of life for those who can no longer drive safely.

### **Science Based: The DriveABLE™ protocol is backed by award-winning research.**

The research compared the driving performance of medically impaired drivers with that of healthy normal drivers. The comparison enabled the discovery of specific categories of driving errors that are made by medically impaired drivers and signal the driver's competence has declined to an unsafe level. The driving errors of competent drivers also were catalogued to disassociate those from the competence-defining errors. This scientific discovery is unique to DriveABLE™, and fundamental to justifying the evaluation protocol as effective and fair. The science then identified the driving maneuvers, road, and environmental conditions that reveal the competence-defining driving errors. This information forms the basis for defining the rules for laying out the driving test course. Finally, DriveABLE™'s performance criterion may be the only one that is scientifically and socially justifiable. Driving errors of competent drivers must not be counted as though they indicated a change in *competence*. DriveABLE™'s large database allows assigning the **unsafe driver criterion** only when the driver displays driving errors of a type or severity that exceed those of competent drivers. An In-Office component emphasizing the assessment of mental abilities important for safe driving was developed to enhance

safety by accurate identification of the most dangerous drivers without the necessity of testing them on public roadways.

### **Unprecedented Standardization:**

#### ***DriveABLE™ procedures set the standard.***

The standardization of driving assessments across all test centers in a jurisdiction is a major challenge for Licensing Authorities. It also is one of the major threats to fairness for those tested, and to protecting other road users from unsafe drivers who were not identified. One challenge to standardization has been the lack of knowledge about the driving elements critical to measuring driver competence. DriveABLE™ has solved that problem through research that specifically identified those elements. The remaining challenge has been measuring and equating the difficulty of the test course across all examination centers. DriveABLE™ has solved that problem by using an external criterion to measure the test course difficulty. That criterion has a scientifically demonstrated relationship to driving performance. When the driving course is more or less difficult than DriveABLE™'s standard, the performance criterion is adjusted accordingly to equate driver outcomes at that test Center with those of all other Centers.

### **Urban and Rural Drivers: Scientifically demonstrated equal fairness.**

The DriveABLE™ protocol has been demonstrated through research to provide equal outcomes for urban and rural drivers who are matched in medical diagnosis, level of cognitive impairment, age, and sex.

### **Field Tested: The DriveABLE™ protocol retains integrity across diverse test environments.**

The DriveABLE™ protocol has been tested in large and small urban centers, with assessment centers in driving examiner offices, hospitals and other medical facilities, and stand-alone offices.

**The DriveABLE™ Model: *A model designed for assured quality and wide distribution.***

DriveABLE™ licenses the delivery of DriveABLE™'s scientifically-based driver evaluation protocol to selected groups. The Licensee provides the assessment protocol to clients referred by the medical community, licensing authorities, insurers, and concerned persons or their family members. The client performance information is encrypted and sent via the Internet to the DriveABLE™ home office where the findings are scored and compared to DriveABLE™'s normative database. The outcome measures are encrypted and sent to the Licensee for printing and reporting to the referral source and others if appropriate. The performance measures for each client from each DriveABLE™ assessment Center are maintained on the DriveABLE™ home office server in accordance with privacy issues. These databases are used to enhance and extend the DriveABLE™ services and for continued quality control.

**Extensive Quality Assurance: *High quality, consistent assessments are assured.***

DriveABLE™ personnel train and certify all In-Office Assessment and In-Car driving evaluators. The training includes sensitivity training for interacting with medically impaired and older clients, as well as sensitizing the DriveABLE™ personnel to the importance of driving and related issues for the clients and their families. In addition to the initial standardization of the Center's road course, there is periodic re-confirmation of the standardization calibration. Because the home office receives all client performance measures from the In-Office and In-Car testing, consistency of assessment administration can be monitored from the home office.

**Going beyond: *DriveABLE™ provides assistance for clients, families, and the medical community.***

DriveABLE™ demonstrates its concern and respect for clients, families, the medical community and licensing authority personnel by providing services that go well beyond the assessment protocol. DriveABLE™ personnel include internationally recognized experts in the areas of driving assessment, medical conditions and driving, older drivers, and the consequences of driving cessation. Identifying medically at-risk drivers for whom a driving assessment is necessary to resolve the competency issue is challenging for the medical and licensing communities. Information to assist in the assessment is available from DriveABLE™, and re-

search directed toward the development of effective screening procedures remains a priority. A brochure to assist families in identifying when a family member's driving may have declined to an unsafe level and how to approach that person about the need for an assessment is available to families. When there is need for a driver to stop driving, help for families is available on how to initiate and carry out an effective discussion. Research by DriveABLE™ associates has compared different types of support groups for persons who must stop driving and for their primary caregiver. The research identified how the issues differ for the ex-driver and the caregiver and how each needs to be addressed with a different approach and goals. Support groups based on the research have been implemented locally and a training manual to broaden the availability is under development. DriveABLE™ provides courses for continuing medical education credit on identifying medically at-risk drivers, the assessment process, and family needs. DriveABLE™ personnel have provided support to licensing authorities, law enforcement, and older drivers through expert testimony, and internationally on a wide variety of expert panels.