

Using “Age” as a Fitness-to-Drive Criterion for Older Adults

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BIOGRAPHIES

HOLLY TUOKKO is a clinical neuropsychologist by training and received her Ph.D. in Human Neuropsychology from the University of Victoria in 1983. She has worked extensively with older adults experiencing mental health problems, first at the Clinic for Alzheimer Disease and Related Disorders at University Hospital in Vancouver and later with a mental health outreach team for seniors in Victoria. She joined the faculty of the Department of Psychology and the Centre on Aging at the University of Victoria in 1997. Over the past 15 years, Dr. Tuokko's research has focused on mental health and aging and has spanned issues of concern to diagnosis of mental health disorders in older adults to intervention studies of caregivers of persons with dementia. The current focus of her research is the evolution of cognitive disorders in older adults and the impact of these disorders on functional competency. Specific competencies of interest to Dr. Tuokko are the types of understanding necessary to consent to participation in research, consent to health care and consent to receive support services and issues related to *driving* competency. She has co-authored a number of papers and presentations examining driving related issues in older adults and persons with dementia. She has been involved with the National Highway Traffic Safety Administration in the United States on working groups and is listed in the Transportation Research Board of the National Research Council's ***Older Driver Resource Directory (3rd Ed.)***, Transportation Research Circular Number 497, February 2000. She is presently a consultant to the Mature Driver Project, a collaborative initiative between the Capital Health Region, the RCMP and the Insurance Corporation of BC.

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EXECUTIVE SUMMARY

The aging of the Canadian population is transforming the demographics of the driving population. With the aging of the baby boom generation, it is anticipated that the number of seniors living in Canada will increase exponentially, reaching 23% of the population by 2041. An increasing proportion of the older population has been driving throughout their adult lives and are expecting to continue to do so. Drivers over the age of 80 years are the fastest growing segment of the driving population.

Although studies of crash rates indicate that persons age 65 and older are relatively safe drivers, other research indicates that it is the oldest drivers (over 80 years) who pose a greater risk to themselves and the public. However, it is unclear from the existing literature whether the abilities of older drivers are compromised because of age itself, or because of the age-associated risk of having one or more medical conditions that can affect driving. This, coupled with the changing demographics of Canadian society, highlights the need for a review of the current laws regulating fitness to drive in the context of age.

We focused our review on the driver of the passenger vehicle as most drivers fall into this class and it is here where jurisdictions differ most in the use of age, and older ages in particular, to trigger some form of driver re-evaluation. In all provinces, testing of fitness to drive includes at least two components: tests relating to ability to drive; and medical tests (such as vision, psychological, physical abilities). It is primarily the latter type of testing in which age is either specifically used as a trigger for testing or is, by implication, a factor in determining fitness to drive. In addition to reviewing the laws and the extent to which they may be discriminatory on the basis of age (Parts 2 and 4), we reviewed the medical and social science literature to

examine the extent to which age-related medical conditions affect driving (Part 3). In addition, through focus groups and individual interviews (Parts 5 and 6), we obtained the views of seniors, health care providers, driving researchers, and representatives from licensing authorities concerning the adequacy of the present age-based procedures for identifying problem drivers and the types of changes to the present procedure that may prove beneficial.

The review of the provincial and territorial statutory provisions disclosed considerable variation in how age is used in the licensing process with some provinces imposing testing for personal vehicle licensing up to ten years before others. It appears that one of the major reasons for using age to trigger re-evaluations is that older drivers may be at increased risk for medical conditions that may compromise their ability to operate a motor vehicle safely. In fact, reviews of the medical and social science literature show little data to support the assumption that the effects of age alone (i.e., in the absence of medical conditions) adversely impacts on driving performance. It is easy to erroneously conclude that there is widespread, gradual age-related deterioration in driving skills when only a few debilitated older adults pose a risk to other motorists. To the extent that the age-related testing laws are based on arbitrary distinctions of age alone, they may be legally discriminatory, and are at the least perceived as unfair. Seniors and health care professionals interviewed as part of this research questioned the use of age, per se, as a triggering mechanism. The fact that medical evaluations seemed only to be triggered by age rather than medical conditions (at all ages) was worrisome to both seniors and health care professionals.

In considering the unfairness of the laws requiring evaluations at an arbitrary age, it was recommended that alternate methods of triggering be considered: periodic medical evaluations (at younger ages as well); greater specificity in medical requirements (clearer delineation of the role of the health care professional); changes to existing reporting requirements; re-examination

following multiple or specific types of accidents. It was concluded that it is unlikely that any one of these approaches will be sufficient to address the complexity of the issue and that a multifaceted approach targeting persons at increased risk for driving difficulties may yield the best result.

A number of issues relevant to this discussion and the use of age criteria in driver licensing were identified for consideration. Central to this discussion was the need for broad education and focused research to support future policy. It will also be necessary to vigilantly examine for unintended, as well as intended consequences of changes made to licensing policy. The role of alternative mode of transportation to meet the needs of de-licensed drivers was identified as important for consideration as was the cost of implementing criteria other than, or in addition to, age.

PART ONE: THE OLDER DRIVER: INTRODUCTION AND GENERAL COMMENTS

The aging of the Canadian population is transforming the demographics of the driving population. In 1996, about one-half of seniors living in private households (1.7 million) were driving a vehicle (i.e., car, mini-van or light truck). It is anticipated that the number of seniors living in Canada will increase exponentially, reaching 23% by 2041.¹ Taking this demographic growth into account, the number of older drivers is expected to more than double over the next few decades.² Drivers over the age of 80 years are the fastest growing segment of the driving population in Canada.³ These observations underlie the need to examine the subject of fitness to drive in older adults.

Previous research has indicated that as a person ages, normal physiologic changes and age-associated medical conditions may compromise the ability to operate a motor vehicle safely.⁴ The distinction between changes associated with “normal aging” and those associated with “age-related medical conditions” underlies the concepts of primary and secondary aging.⁵ Primary aging refers to the intrinsic processes of biological aging that are genetically determined and take place with the passage of time in spite of good health and in the absence of disease. Secondary aging refers to age-related deterioration that is pathological and results from extrinsic factors, including disease, environmental influences, and behavior. These effects are

¹ Statistics Canada, *Population estimates for 1996 and projections for the years 2001, 2006, 2011 and 2016*, online: Statistics Canada <<http://www.statcan.ca/english/Pgdb/People/Population/demo23a.html> (date accessed: 10 December 2000).

² I. Bess, *Seniors Behind the Wheel* (Report No. 11-008) (Ottawa: Statistics Canada, 1999).

³ Insurance Corporation of British Columbia [hereinafter ICBC], *Traffic Collision Statistics: Police-attended injury and fatal collisions* (British Columbia: Motor Vehicle Branch, 1998).

⁴ D. Reuben, R. Silliman & M. Traines, “The Aging Driver: Medicine, Policy, and Ethics” (1988) 36 *J. Am. Geriatr. Soc.* 1135 [hereinafter Reuben]; W. Millar, “Older Drivers – A Complex Public Health Issue” (1999) 11 *Health Rep.* 59 [hereinafter Millar].

⁵ E. Busse, *Theories of Aging*. In E. Busse & E. Pfeiffer, eds., *Behavior and adaptation in later life*, (Boston: Little, Brown, 1969).

referred to as secondary because, although they are age-associated, people can theoretically age without experiencing them. Although a theoretical distinction is drawn between these forms of aging, in practice the distinction is often unclear or is not made. Unfortunately, then, often what has been attributed to age is really that which was due to disease, or disability, not age per se. For example, senile dementia (severe cognitive impairment among the old) was once considered a normal part of the aging process.⁶ We now know that, far from being normal or inevitable, these conditions are the result of some specific organic brain injury or disease (e.g., Alzheimer's disease). The failure to clearly distinguish between factors associated with normal aging and those related to age-associated conditions or diseases must be kept in mind when reviewing the literature concerning driving performance and age.

It has been noted that among all drivers age 65 and older it is the oldest drivers who pose more risks to themselves and the public. For example, statistics from the U.S. National Highway Traffic Safety Administration (1996) indicate that the rate of crashes per miles driven begins to rise at age 70, and increases rapidly at age 80.⁷ Furthermore, older drivers are four times more likely than younger adults to be hospitalized following a motor vehicle accident, and their recovery is slower.⁸ As well, older drivers commit several moving vehicle violations at higher rates than drivers in other age groups.⁹

On the other hand, persons age 65 and older are relatively safe drivers. In British Columbia, for example, older drivers comprise 13.6% of the total driver population but are responsible for only

⁶ B. Lemme, *Development in Adulthood (3rd ed.)* (Boston: Allyn and Bacon, 2001).

⁷ A. Straight & A. McLarty Jackson, *Older Drivers* (Washington: AARP Public Policy Institute, 1999).

⁸ A. Dobbs, "Health issues", *Canadian Council of Motor Transport Administrators' Maturing Drivers Workshop Proceeding and Aging Driver* (Ottawa: Canadian Council of Motor Transport Administrators, 2000).

⁹ Reuben, *supra* note 4.

9.2% of the accidents and fatal collisions.¹⁰ Seniors also drive fewer miles than any other age group. Other research suggests that when crash rates are adjusted for miles driven, the motor vehicle crash morbidity and mortality rates for older adults are similar to those of younger adults.¹¹

Despite concerns raised by the research on accident rates in older adults, surprisingly little research has addressed evaluating driver competence or methods for identifying potentially unsafe older drivers¹². Similarly, little is known about the consequences of driving cessation for the individuals and their families. The research available suggests that decisions about continued driving can be very emotionally charged and may lead to family conflict including physical violence.¹³ Not only, then, does loss of driving privileges mean loss of personal independence and, potentially, social isolation, but it may also have an impact on family relationships as it is the family that ultimately must ensure compliance with driving restrictions.¹⁴

The question remains, then, as to whether the abilities of older drivers are compromised because of age itself, or because of age-associated risk of having one or more medical conditions that can affect driving. For example, recent studies show that many medical conditions (e.g., diabetes, cardiovascular disease, and/or other neurological conditions)

¹⁰ ICBC, *supra* note 3.

¹¹ C. Brayne et al., "Very Old Drivers: Findings From a Population Cohort of People Aged 84 and Over" (2000) 29 *Int. J. Epidemiol.* 704; J. Graca, "Driving and Aging" (1986) 2 *Clin. Geriatr. Med.* 583; Reuben, *supra* note 4.

¹² B. Dobbs & A. Dobbs, "*The psychological, social, and economic consequences of de-licensing the older driver*" (Paper presented at the mid-year meeting of the Driver Program Subcommittee of the National Research Council's Transportation Research Board Committee on the Safety and Mobility of Older Drivers, Washington, D.C., 30 Sept-1 Oct 1996) [unpublished].

¹³ *Ibid.*

¹⁴ *Ibid.*

increase the risk of at-fault crashes among drivers of all ages, though many of these conditions are age-related.

These studies, coupled with the changing demographics of Canadian society, highlight the need for a review of the current laws regulating fitness to drive in the context of age. In all provinces, testing of fitness to drive includes at least two components: tests relating to ability to drive (for example, literacy, knowledge of driving rules, and actual driving); and medical tests (such as vision, psychological, and physical). It is primarily the latter type of testing in which age is either specifically used as a trigger for testing or is, by implication, a factor in determining fitness to drive. To the extent that those laws adopt age as a determinant in evaluating fitness to drive, the legitimacy of such laws are open to attack. As the Supreme Court of Canada stated in 1999, driving "is a privilege most adult Canadians take for granted" and one which "must not be removed on the basis of discriminatory assumptions founded on stereotypes of disability, rather than actual capacity to drive safely"¹⁵. The laws, and the extent to which they may be subject to challenge, are discussed in Parts 2 and 4 of this study.

In considering the use of age as a trigger in evaluating medical fitness to drive, the broader question arises whether it is a reliable gauge. The enforced medical evaluation of cognitively intact older adults may well fail to address the larger public policy of ensuring road safety by granting licenses only to those who are fit to drive. On the other hand, screening procedures to identify high-risk individuals are clearly needed. The extent to which age-related medical conditions affect driving is examined in Part 3 of the paper.

¹⁵ *British Columbia (Superintendent of Motor Vehicles) v. British Columbia Council of Human Rights*, [1999] 3 S.C.R. 868, p.872

Part 5 presents the views of seniors and health care providers concerning the adequacy of the present age-based procedures used in British Columbia for identifying problem drivers and the types of changes to the present procedures that may prove beneficial. Finally, Part 6 summarizes all of the material from parts 2 through 5 and presents the views of researchers and representatives of licensing authorities in BC and Alberta concerning our summary.

The advantages and disadvantages of age as a marker for fitness-to drive re-evaluation are addressed and recommendations arising from our research are presented.

PART TWO: CURRENT AGE-RELATED “FITNESS-TO-DRIVE” STANDARDS

I. OVERVIEW

A license to drive on a public road is required in all parts of Canada. The issuing of driving licenses falls within provincial jurisdiction as “property and civil rights” under s.91(13) of the *Constitution Act, 1867*, and the provincial residuary power in s.92(16) over “all matters of a merely local or private nature in the province”.¹⁶ For the Yukon, the Northwest Territories, and Nunavut, the jurisdiction to regulate locally devolves from federal authority to legislate for the territories in the *Constitution Act, 1871*.¹⁷ The material that follows is limited to the regulation of fitness and the operation of automotive motor vehicles inside provincial or territorial boundaries.

As each province regulates the terms under which it will grant, refuse or suspend driving licences, it is not surprising to find that there is a lack of uniformity in Canadian law in the field of licensing. Despite this lack of uniformity, a review of provincial statutes and related regulations reveals some common themes. For example, all provincial legislation stipulate different classes

¹⁶ *Constitution Act, 1867* (U.K.), 30 & 31 Vict., c. 3, reprinted in R.S.C. 1985, App. II, No. 5.

¹⁷ *Constitution Act, 1871* (U.K.), 34-35 Vict., c.28 (*The British North America Act, 1871*).

of drivers' licenses, based on the type of vehicle driven. In addition, there is recognition in all of the provincial statutes that an applicant must be "fit" to drive, relative to the class of license sought. The evaluation of fitness in all provinces is conferred by statute upon a government official.¹⁸ That individual will rely upon both statutory and regulatory terms of reference in the evaluation process, but it is fair to say that the discretion granted is, generally speaking, very broad.

In all provinces, testing of fitness to drive includes at least two components: tests relating to ability to drive and medical tests. It is primarily the latter type of testing in which age is either specifically used as a trigger for testing or is, by implication, a factor in determining fitness to drive. The laws, regulations and policies where age is a factor are reviewed in detail in the discussion which follows. The discussion focuses on the licensing requirements for passenger vehicles as most drivers fall into this class and where jurisdictions differ most in use of age to trigger some form of driver re-evaluation.

II. STATUTORY AGE-RELATED LAWS

All provinces have either statutory or regulatory testing of applicants for licenses, and all stipulate a minimum age for the granting of driver's licenses. However, only one - Nova Scotia - has a specific statutory prohibition on driving after a certain age is reached, and that prohibition is limited. Subsection 69(2) of the *Nova Scotia Motor Vehicle Act*¹⁹ states that:

No person, who has attained the age of sixty-five years, shall drive a bus after the last day of the month in which the person attains that age.

¹⁸ For example: the Superintendent (B.C.); the Minister (Alberta); the Administrator (Saskatchewan); the Registrar (Manitoba, Nova Scotia, New Brunswick, Newfoundland, the Northwest Territories, Nunavut and the Yukon); and the Régie (Quebec) .

¹⁹ R.S.N.S. 1989, c. 293.

This statutory prohibition can be waived. Subsection 69(3) gives the Registrar the discretion to issue a chauffeur's license permitting anyone over age sixty-five to operate a bus, subject to any special conditions imposed.

Although actual prohibitions based on age are absent in all the other provincial statutes, two provinces (Alberta and the Yukon) have specific statutory provisions that require testing of applicants of certain age categories. Quebec also has a statutory provision for testing based on age, but it is in the discretion of the Régie.²⁰ The statutory provisions of these provinces are discussed below.

A. Alberta and the Yukon

The mandatory testing provisions in the Alberta and Yukon statutes²¹ are almost identical. In both provinces, an applicant for a driver's license or a renewal must file a medical certificate completed and signed by a physician and submit to a vision screening test. In Alberta, the filing and screening requirements apply to any applicant 75 years or over (although prior to 1987, the age was 69). In the Yukon, the triggering age is 70.

A failure to file the medical certificate or submit to the vision screening test results in a denial of driving privileges. Even when the applicant fulfils the requirements, the government official can refuse a license if not satisfied with the results of the testing. In the Yukon, the Registrar must be satisfied that "the physical or other competency of the applicant to drive" will not endanger

²⁰ *Highway Safety Code*, R.S.Q., 1986, c. C-24.2.

²¹ *Motor Vehicle Administration Act*, R.S.A. 1980, c. M22, s. 14(4); *Motor Vehicle Act*, R.S.Y. 1986, c. 118, s. 17(5).

the safety of the public.²² In Alberta, the wording is identical, although it is the Minister who exercises the discretion.²³ It is interesting to note that, beyond this wording, there is no guidance provided in either statute as to the criteria to be considered in ensuring the safety of the public. The regulations of the Yukon statute does, however, set out detailed medical conditions which can result in a denial of a license.

In both Alberta and the Yukon, licenses subject to conditions (including time restricted) may be granted to those applicants who do satisfy the Minister or Registrar (respectively). There is, however, no statutory provision for retesting once a license, whether conditional or not, has been granted. Nor do the statutes of Alberta or the Yukon contain any provisions for the automatic expiration of licenses upon a licensee attaining the age of 70 or 75 respectively. A review of the regulations to each statute reveals a divergence in how the two provinces deal with these two issues.

The regulations of the Yukon statute fail to give any guidelines for automatic retesting after age 70, or for the expiration of licenses. The only other requirement in the regulations relating to age is that, for commercial licenses, medical reports must be filed on the initial application, on any renewal by any licensee after age 45 and annually thereafter.²⁴

Alberta has far more detailed regulations on expiration of licenses. For example, a class 1, 2 or 4 license (including buses, vehicles with air brakes, vehicles with 3 or more axles, ambulances, and taxis) first expires when a person reaches the age of 45, subject to a number of exceptions,

²² *Motor Vehicle Act*, R.S.Y. 1986, c. 118, s. 17(5) and s. 10.

²³ *Motor Vehicle Administration Act*, R.S.A. 1980 c. M22, s. 14(4) and 10(1).

²⁴ *Motor Vehicle Regulations*, C.O. 1978/120, Appendix B to Part I.

and subject to renewal every two years.²⁵ It expires again at the age of 65 (unless the license was issued with the preceding 6 months, in which case the license expires the age of 66) and annually thereafter.²⁶

The regulatory provisions for expiration of other classes of licenses coincide with the age-related testing set out in the Alberta statute. In particular, a class 3, 5, 6 or 7 licence (including 2 axle vehicles, recreational vehicles with no more than 3 axles, motor cycles, and mopeds) expires when a person reaches the age of 75, unless the licence was issued or last renewed within the preceding 6 months, in which case the licence expires when the person reaches the age of 80. The duration of a new class 3, 5, 6 or 7 licence issued to a person age 75 years is 4 years from the applicant's next birthday, and for a renewal, 5 years from the date of expiry of the preceding licence. The regulations provide, however, that any class 3, 5, 6 or 7 licence expires when a person reaches the age of 80, again unless the licence was issued within the preceding 6 months, in which case the licence expires when the person reaches the age of 82.²⁷

The effect of the Alberta regulations is that, for most older drivers, testing will be mandatory at age 75 and 80. It should be noted that Alberta recently enacted new legislation relating to the licensing of drivers. The *Traffic Safety Act*²⁸ was partially proclaimed in 1999, and appears designed to eventually replace the existing *Motor Vehicle Administration Act*. The new Act does not contain any specific age restrictions, although an unproclaimed section will enable the Minister to make regulations “governing any matter with respect to age, qualifications, examinations and testing of persons to drive or otherwise operate vehicles”.²⁹ To date, the

²⁵ *Motor Vehicle Administration Order*, Alta Reg 25/76, s. 3.1(3).

²⁶ *Motor Vehicle Administration Order*, Alta Reg 25/76, s. 3.1(4) & (5).

²⁷ *Motor Vehicle Administration Order*, Alta Reg 25/76, s. 3.1(6) to (10).

²⁸ S.A. 1999 c. T-6.4.

²⁹ S.A. 1999 c. T-6.4, s. 64(b).

transitional regulations clarify only that a disqualification or suspension of a driver's license under the old Act continues under the new Act.³⁰

B. Quebec

In Quebec, the *Highway Safety Code* stipulates that the Régie **may** require proficiency assessments or medical and health examinations of any licensee who has reached the age of 70.³¹ Other circumstances which may trigger such examinations include: holding a license for commercial or emergency vehicles, taxis, buses and minibuses; the license holder has not had an examination in the previous ten years or has not been authorized to drive for three years or longer; and any "reasonable grounds" that an evaluation may be required. It is interesting to note that such examinations can, in the Régie's discretion, be required for any licenses and renewals, regardless of age.³² The regulations to the Code provide detailed lists of medical conditions which can prevent the issuing or reissuing of a license.

The Régie may suspend or refuse a license if an applicant refuses to undergo a medical or health examination, or refuses or fails a proficiency examination.³³ However, there is discretion not to suspend if the applicant has "developed compensatory abilities enabling him to drive" or can comply with conditions without "constituting a hazard to public safety".³⁴

³⁰ A.R. 250/99.

³¹ *Highway Safety Code*, R.S.Q. c C-24.2, s. 109.

³² *Ibid.*, s. 73.

³³ *Ibid.*, ss. 81, 190, 191.

³⁴ *Ibid.*, s.191.1.

III. REGULATORY AGE-RELATED LAWS

Five provinces have mandatory testing provisions similar to those found in Alberta and the Yukon, but the requirements are contained only in the regulations of each provincial statute. These provinces are Nova Scotia, New Brunswick, Newfoundland, Northwest Territories and Nunavut. One other province, Ontario, has regulations giving the Minister the discretion to require testing of license holders at specified ages.

It is of interest that, until 1996,³⁵ Manitoba also had regulations requiring testing for a first license, and for re-testing at specified ages. A medical report had to be filed when an application for a license was first made, and thereafter every five years up to the age of 44, every two years between the ages of 45 and 64, and every year after the age of 65. Since these regulations were repealed in 1996, age-related testing requirements have been included only in policy, apparently to facilitate revisions in a more reasonable and timely manner.³⁶

Although each of Nova Scotia, New Brunswick, Newfoundland, Northwest Territories, Nunavut and Ontario has regulations that provide for testing of license holders at specified ages, there is considerable diversity in both the testing requirements and conditions. The regulations of the six provinces are reviewed in detailed below.

³⁵ *Class Licenses Regulation*, Man. Reg. H60-412/87R, repealed by Man. Reg. 39/96.

³⁶ Discussions with Ms. Victoria McDonald of the Manitoba Transportation Safety and Regulation Department on August 1, 2001; also see discussion on policy issues, below.

A. Nova Scotia

In Nova Scotia, the *Classification of Drivers' Licenses Regulation*,³⁷ requires medical certificates for certain classes of licenses. In particular, applicants for classes 1 through 4 licenses (which include semi-trailer and tractors, buses, taxis, ambulances and other emergency vehicles, and single vehicles exceeding 13,500 kg) must file a medical certificate on the initial application, upon a renewal, and every five years after that renewal until the age of 64. Thereafter, the medical certificate must be filed annually. It is not clear from the regulations what consequences result from a failure to file a medical report, but it is unlikely that a driver's license will issue without such a report.

While there are no other age related testing requirements, the Nova Scotia regulations provide stringent and detailed medical conditions which will deprive an applicant of the more demanding classes of licenses (including semi trailers, tractors, buses, taxis and ambulances).

B. New Brunswick

The *General Regulation - Motor Vehicle Act* of New Brunswick³⁸ contains several age related testing requirements for the issuing of driver's licenses. The regulations require that all applicants produce a medical certificate when first applying for a license. Thereafter, holders of Class 1 and 2 licenses (principally tractor trailers or buses) must undergo medical re-examination every four years until age 45 and every two years thereafter.³⁹ Class 3 license holders (three axled vehicles and vehicles capable of towing other vehicles) must undergo

³⁷ N.S. Reg. 174/82.

³⁸ N.B. Reg. 83/42.

³⁹ *Ibid.*, s. 27(1)(b).

medical re-examinations every two years after age 65.⁴⁰ (Re-examinations for Class 3 licenses may be triggered sooner if “the need is otherwise indicated by the occurrence of some physical or mental impairment”.) There are no age specific testing requirements for any other classes of licenses (including regular passenger vehicles and motorcycles) in the regulations. The regulations contain detailed physical conditions that disqualify an applicant from obtaining a license, but there is ministerial discretion to waive the mandatory medical requirements.

C. Newfoundland

In Newfoundland, certificates from a medical practitioner attesting to an individual’s fitness to drive are required for all applications for licenses or renewals.⁴¹ For class 5, 6 and 8 licenses (passenger vehicles excluding taxis, ambulances, motorcycles and traction engines), the certificate must be filed at the age of 75 and 80 and every 2 years thereafter. For class 1, 2, 3, or 4 licenses (semi trailer trucks, buses, trucks with three or more axles, taxis, and ambulances), the certificate must be filed every five years until the age of 45, every three years to the age of 65 and annually each year after the age of 65. Failure to file a medical certificate results in a refusal to issue a driver’s license.

D. Northwest Territories and Nunavut

The Northwest Territories and Nunavut have identical regulations and they are succinct. Each incorporates by reference Standard 6 of the *National Safety Code for Motor Carriers*.⁴² That NSC Standard requires a medical report for any commercial vehicle license on application, every 5 years to age 45, every 3 years to age 65 and annually thereafter. For passenger

⁴⁰ *Ibid.*, s. 27(1)(c).

⁴¹ *Highway Traffic Driver Regulations*, 1999, N.R. 110/98, s. 12.

⁴² Canadian Council of Motor Transport Administrators, annual publication, hereinafter the “NSC”.

vehicle licenses, medical reports are required at age 75 and 80 and every 2 years thereafter. A form of medical report is prescribed in each regulation. It is not clear from the regulations what consequences result from a failure to file a medical report, but it is unlikely that a driver's license will issue without such a report.

E. Ontario

The *Highway Traffic Act Drivers Licenses Regulation*⁴³ of Ontario sets out the types of examinations which may be required for various types of licenses, including: knowledge of the Act and regulations; driver testing; and medical and physical examinations “to determine the person's fitness to drive”.⁴⁴ Detailed lists of medical qualifications (consisting largely of conditions which would disqualify an applicant) are also listed.⁴⁵

The regulations give the Minister the power to require examinations and re-examination at various ages, depending upon the type of license sought.⁴⁶ For example, for usual passenger vehicles suitable for personal use (Class G), motorcycles (Class M) and vehicles exceeding 11,000 kilograms (excluding buses) (Class D), the Minister may require that any license holder who reaches the age of 80 “complete successfully, once every two years, the applicable examination” and “meet the qualifications” prescribed in the regulations. For vehicles of more than 4,600 kilograms, ambulances and buses (Classes A, B, C, E and F) and air brake vehicles, the Minister may require that any license holder who reaches the age of 65 complete examinations and meet the qualifications every year. (It should be noted that such license holders under age 65 are subject to re-examinations every five years and re-qualifications every

⁴³ R.R.O. 1990, Reg. 340/94 amended to 337/00

⁴⁴ *Ibid.*, s. 15.

⁴⁵ *Ibid.*, ss. 14 and 17.

⁴⁶ *Ibid.*, s. 16.

three years.) Finally, any driver who reaches the age of 70 and is involved in an accident is subject to re-examination and re-qualification.

Despite failure to meet qualifications, any applicant may still qualify for a license in the class applied for “if he or she demonstrates the ability to drive...as safely as any person” meeting the qualifications.⁴⁷ Moreover, the Minister may waive the qualifications in a number of circumstances.⁴⁸ There is no indication in the regulations about the consequences of refusing to submit to an examination or re-examination, but presumably such a refusal would result in a denial of the license or re-licensing of the applicant.

IV. AGE-RELATED POLICIES

While the statutes or regulations of almost half of the provinces contain no specific age restrictions or testing requirements, the exercise of the governing official’s discretion in those provinces may impact more harshly on older applicants. It will be recalled that all provincial statutes give the governing official the authority to require medical testing of applicants (including physical, psychological and vision). Some provinces rely upon that authority in creating policies that require testing or retesting of applicants at certain ages.

For example, in Manitoba, the holders of commercial licenses (Classes 1 through 4) must file medical reports every ten years from age 18 to 39, every five years between ages 40 and 60, and every two years thereafter. Holders of passenger vehicle licenses (Class 5) do not file medical reports unless they have a medical condition that may affect their ability to drive. Such

⁴⁷ *Ibid.*, ss. 17(2) and (3).

⁴⁸ *Ibid.*, ss. 20, 21 and 21.1.

conditions must be disclosed upon application for any license⁴⁹. However, it is not clear how authorities are to be alerted to medical conditions arising after a license has been granted, as there is no specific obligation of a licensee to report them. It may be that the health care professional's duty to report (discussed below) alerts the authorities to such conditions.

British Columbia has a more stringent policy for passenger vehicle licenses. The Superintendent requires a medical examination where class 5 and 6 drivers (passenger vehicles and motor cycles) reach 80 and every two years thereafter via the authority vested in section 29 of the *Act*.⁵⁰ Commercial-class drivers must also undergo periodic examinations beginning at age 40 for drivers with class 1, 2, and 4 licenses and age 45 for drivers with class 3 licenses. Medical assessments may also be required if a driver has been involved in an accident or if anyone expresses concern to the Superintendent about a licensee's fitness to drive.

The procedure related to age-related testing in British Columbia is of interest. The testing of seniors begins with a "Driver's Medical Examination Report" sent by mail before a driver's 80th birthday. The report must be completed by the driver's doctor, who mails it to the Superintendent of Motor Vehicles. The completed form is reviewed by the Superintendent and the driver is notified if any further information or testing is required.⁵¹ The cost of the medical examination is not covered by the provincial Medical Services Plan and the physician may charge for this service. As a result of the medical examination, the driver may be required to take a driver's re-examination, consisting of one or more of the following: a vision screening, an oral examination on road signs and signals, or a road test.

⁴⁹ *Highway Traffic Act*, C.C.S.M., c. H60, s. 27(6).

⁵⁰ British Columbia. Ministry of Transportation and Highways, Office of the Superintendent of Motor Vehicles, *A Guide to Operations*. (Victoria, B.C. 1999) at 26-27.

⁵¹ British Columbia, Ministry of Transportation and Highways, Office of the Superintendent of Motor Vehicles, *Guide to Operations*, 1999 at 27.

The operational guidelines for the Office of the Superintendent of Motor Vehicles identify a “Medical Intake Agent” who reviews all medical reports and identifies the reports which show a medical condition. These reports are then forwarded to a “reviewing officer” who makes the decision on fitness to drive on behalf of the Superintendent of Motor Vehicles.⁵² The decision of the reviewing officer must be based on “clearly stated and properly documented” medical reasons “consistent with guidelines of the BC Medical Association and Canadian Medical Association”.⁵³

While there is an appeal process for a decision made by the reviewing officer, the preliminary decision may be made in the absence of any submissions by the applicant. Moreover, once the Superintendent determines an appeal, there is no statutory right of appeal.

V. OTHER AGE-RELATED CONSIDERATIONS: REPORTS OF HEALTH CARE PROFESSIONALS

The statutes of each province except Quebec contain provisions that impose either a positive duty on, or give discretion to, certain health care professionals to report patients who drive when it may be dangerous to do so. The reliance upon a subjective judgment of such individuals may have a significant impact on the use of age as a determinant in the licensing process, and should not be overlooked.

The reporting requirements are imposed on various branches of the health care profession. In Newfoundland, P.E.I., Northwest Territories, and Nunavut, the duty is restricted to medical practitioners. In Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick and the Yukon, the

⁵² *Ibid.*, at 27.

⁵³ These are discussed below.

duty is imposed upon medical practitioners and optometrists. In B.C., the duty is imposed upon psychologists, optometrists and medical practitioners. In Nova Scotia, medical practitioners and registered psychologists are the only professionals mentioned in the statute. The meaning of “medical practitioner” under the various provincial statutes is not defined, but the term is generally defined in the *Interpretation Act* of most provinces as referring to a person qualified as a member of a College of Physicians and Surgeons.⁵⁴ For the purposes of the following discussion, the term “health care professional” is used globally to describe all of the various professionals identified in the different provincial statutes.

The duty imposed on health care professionals is a positive (that is, mandatory) one, except in Alberta and Nova Scotia, where the duty is voluntary. It is interesting to note that in the Northwest Territories, the duty is to report any person over the age of 15, whether a driver or not.⁵⁵ In all statutes, the health care professional is protected from legal action in making the stipulated reports.

The grounds upon which reporting is required varies, depending upon the province and the health care professional involved. For example, in Alberta, the Yukon, Ontario and New Brunswick, an optometrist is only required to report vision conditions which would affect driving. However, in Manitoba, an optometrist must report any “disease or disability”. In Nova Scotia, a psychologist must report any “mental or emotional difficulties”, whereas in British Columbia, a psychologist must report any medical condition which would affect driving.

⁵⁴ See, for example, the *Interpretation Act of Ontario*, R.S.O. 1990, c. I – 11, and the *Interpretation Act of B.C.*, R.S.B.C. 1996, c. 238.

⁵⁵ *Motor Vehicle Act*, R.S.N.W.T. 1988, c. M-16, s. 103(1).

Generally speaking, it is fair to say that the majority of health care professionals have a duty to report when the patient is suffering from any condition which may make it “dangerous” or “unsafe” to drive or may “interfere” with the safe operation of a motor vehicle. For example, in B.C., the health care professional must report any patient over the age of 16 who “in the opinion of” the professional “has a medical condition that makes it dangerous to the patient or to the public for the patient to drive a motor vehicle, and continues to drive a motor vehicle after being warned of the danger” by the professional.⁵⁶ In Manitoba, the duty is to report a driver who, in the professional’s opinion “has a disease or disability that may be expected to interfere with the safe operation of a motor vehicle that may be operated with the class of license or permit held by the person”.⁵⁷

The use of the words “dangerous” or “safe” in conjunction with the word “opinion” creates a daunting challenge to the health care professional, and there is an absence of statutory or regulatory guidance on how to interpret the words. There are two publications to which medical professionals may refer: the “NSC”⁵⁸ and the Canadian Medical Association’s *Determining Medical Fitness to Drive: A Guide for Physicians* (the “CMA Guide”).⁵⁹ It should be noted that only members of the Canadian Medical Association receive the latter publication automatically, and whether optometrists or psychologists are even aware of either publication is unknown.

The NSC is produced by the Canadian Council of Motor Transport Administrators, a non-profit organization created by provincial, territorial and federal transport ministries with the mandate to act as a neutral and independent coordinating body in all matters dealing with the

⁵⁶ *Motor Vehicle Act*, RSBC 1996, c.318, s. 230.

⁵⁷ *The Highway Traffic Act*, C.C.S.M.. C H60, s. 157.

⁵⁸ See *supra* note 42.

⁵⁹ Canadian Medical Association, Sixth Edition [hereinafter *Determining Medical Fitness*]

administration, regulation and control of motor vehicle transportation and highway safety in Canada.

The NSC sets out a number of minimum performance standards for the safe operation of commercial vehicles, although it refers as well to passenger vehicles. Standard 6 covers medical standards, and part 14 of Standard 6 covers the aging driver. It declares that “the physiologic changes that accompany the ageing process will eventually affect everyone’s driving ability” and recommends that medical reports be filed for Class 1 through 4 (commercial vehicles) on application, at least every 5 years to age 45, thereafter every 3 years to age 65 and annually thereafter. For Class 5 and 6 (passenger vehicles), the ages are 76 and 80, and every 2 years thereafter.

The NSC notes that the following factors be considered in the licensing of ageing drivers: slowed reaction time, lack of attentiveness, poorer judgement, failing vision, slowed thought process, episodes of confusion, declining memory, loss of physical strength, arthritis, severe respiratory problems, sudden changes in heart rhythm, and possible side effects of drugs.

The CMA Guide is designed specifically to assist physicians in determining whether patients are “medically fit to drive a motor vehicle safely”. Many of the standards are similar to those found in the NSC. Section 12 of the CMA Guide, dealing with aging drivers, acknowledges the difficult position in which a physician can be placed in determining an older patient’s fitness to drive, and suggests that factors to consider include: failing vision, hearing loss, slowing of perception, episodes of confusion, declining memory, loss of strength, arthritic joints, chronic obstructive pulmonary disease and potential changes in heart rhythm. Drug side effects are also suggested as a factor.

Unfortunately, neither the NSC nor the CMA Guide give any indication of how the physician can assess which factors, or combination of factors, will affect the driving abilities of the patient to a degree necessary to trigger a report to the licensing authorities. It is impossible to ascertain the extent to which members of the medical professional either rely upon the NSC or the CMA Guide, or even comply with the statutory reporting requirements. Failure to comply can be hazardous for the medical professional, as will be discussed in Part 4.

VI. SUMMARY

The various laws relating to age-related testing are summarized at Appendix 1. It is fair to say that there is no national standard for such testing, although some provinces clearly incorporate the NSC Standard 6 testing requirements. It is also fair to say that age-related testing requirements are in no way triggered by an individual's actual driving ability or disability. While there is evidence that abilities generally decline with age, as reviewed in Part 3, the requirement that a person reaching an arbitrarily fixed age undergo a medical examination is suspect. Such testing is based solely on the assumption that aging adversely affects driving abilities, and ignores the important distinction between primary and secondary aging characteristics. This distinction is discussed more fully in Part 3.

PART THREE: REVIEW OF FACTORS THAT IMPACT ABILITY TO DRIVE

I. INTRODUCTION

There is no question that a number of medical conditions may have an impact upon the ability of an individual to drive. This is recognized in all provinces, as evidenced by the general requirement for some kind of medical examination of all applicants for driver licenses. As noted in Part 2, some provinces use age as a determinant to trigger medical examinations and re-examinations in the licensing process. Often, the cost of such examinations is borne by the applicant, and in all cases, licenses will be denied or revoked if no examinations occur.

There are a number of reasons for singling out older drivers as high-risk groups. First, in normal aging, there is frequently some psychomotor slowing that may affect driving ability.⁶⁰ Second, age-related decreases in reaction time, divided attention (performing two or more simultaneous tasks), and selective attention (filtering out irrelevant information) have been documented.⁶¹ Third, older adults may be at increased risk for medical conditions that may compromise their ability to operate motor vehicles safely.⁶²

Even though there is some deterioration of mental, motor, and sensory functions with increasing age (i.e., primary aging), it is not known to what extent this affects driving performance, and elderly persons usually drive safely. Reviews of the research, in fact, show that little data

⁶⁰ J. Rubinsztein & C. Lawton, "Depression and Driving in the Elderly" (1995) 10 Int. J. Geriatr. Psychiat. 15 [hereinafter Rubinsztein].

⁶¹ R. Marottoli & M. Drickamer, "Psychomotor Mobility and the Elderly Driver" (1993) 9 Clin. Geriatr. Med. 403. in Rubinsztein and Lawton, *ibid.*

⁶² Reuben, *supra* note 4.

support the assumption that older drivers are, per se, unsafe drivers.⁶³ According to current statistical trends, the crash rate per miles driven among older adults is not as high as it is among drivers less than 25 years of age.⁶⁴ Furthermore, there is some limited research to suggest that healthy older drivers pose less of a threat to others⁶⁵ and commit fewer errors on standardized road tests⁶⁶ compared to younger drivers. Many older drivers also avoid serious driving problems because they recognize their limitations and limit or adjust their driving by avoiding driving at night, in heavy traffic, and in bad weather.⁶⁷ On the other hand, even if self-regulation is a common practice among older drivers, it is not a foolproof method of protecting public safety, especially if one considers that aging drivers with disorders affecting mental functioning (e.g., dementia), for example, may lack insight into their driving difficulties.

Another factor to consider is that older drivers show the greatest variability of any age group, with some older drivers possessing adequate driving skills until a very late age, and others singled out relatively early as being high-risk drivers.⁶⁸ However, it is easy to erroneously conclude that there is widespread, gradual age-related deterioration in driving skills when only a few debilitated older adults pose a significant risk to other motorists. Performance is impaired only after considerable loss of function, perhaps because of the onset of a significant medical condition combined with age-associated inefficiencies that interact to significantly impair driving

⁶³ E. Tulloch, "What Shall We Do About Miss Daisy's Driving: Background for the Elder Law Attorney" (1998) 27 Colo. Lawyer 81 [hereinafter Tulloch]; Reuben, *supra* note 4.

⁶⁴ *Ibid.*, D. Bignotti, "Should Your Patient Be Driving?" [1990] Senior Patient 20 [hereinafter Bignotti]; A. Williams & O. Carsten, "Driver Age and Crash Involvement" (1989) Am. J. Public Health 326; Reuben, *supra* note 4.

⁶⁵ L. Evans, "Risks Older Drivers Face Themselves and Threats They Pose to Other Road Users" (2000) 29 Int. J. Epidemiol. 315.

⁶⁶ D. Carr et al., "The Effect of Age on Driving Skills" (1992) 40 J. Am. Geriatr. Soc. 567 in Tulloch, *supra* note 63 at footnote 7.

⁶⁷ J. Waller, "Research and Other Issues Concerning Effects of Medical Conditions on Elderly Drivers" (1992) 34 Hum. Factors 3 [hereinafter Waller]; K. Ball & C. Owlsey, "Identifying Correlates of Accident Involvement for the Older Driver" (1991) 33 Hum. Factors 583 [hereinafter Ball]; Reuben, *supra* note 4.

⁶⁸ P. Waller, "The Older Driver" (1991) 33 Hum. Factors 499; Ball, *ibid.*

performance. If fitness to drive policies affecting the lives of older adults are to be developed in an equitable and fair fashion, consideration of the complex interplay among all of the variables affecting the driving performance of older adults must be made. The legal requirements for driver licenses may need updating to ensure that only those adults, of any age, who are at high risk for unsafe driving are required to undergo re-evaluation. High risk factors might include the presence of vision, psychological, physical or other medical problems.

Certainly, there is some evidence to suggest that older drivers are at higher risk for crash involvement if they are suffering from certain medical conditions or taking certain prescription medications that affect driving performance. While specific conditions related to each of the factors reviewed might affect driving skills regardless of age, many are more common and prevalent with increasing age. We have not provided an exhaustive listing or complete review of all medical conditions that affect driving. Such documents exist elsewhere.⁶⁹ Instead, in the next sections, we have identified areas of particular concern with respect to the older driver and provided general commentary based on available literature: sensory and motor functioning, mental functioning, and frailty. It must be noted that some conditions are easily identified, whereas others are not. Similarly, the criteria for determining the conditions under which a person can no longer drive are clear and easily applied for some disorders, and not for others. Finally, assistive devices (e.g., specialized lenses, mirrors) may be available for facilitating driving under some conditions but not others. As advances are made in medical science and technology, the existing criteria and guidelines are likely to require periodic revisions and clarification.

⁶⁹ *Determining Medical Fitness*, *supra* note 59. In addition, the regulations of the relevant highway safety statutes contain detailed lists of medical criteria. See, for example, Quebec, Ontario and Nova Scotia.

II. SENSORY AND MOTOR CONDITIONS

Several age-related changes in vision can affect driving. For example, peripheral vision declines with age⁷⁰, as does depth perception and visual acuity⁷¹. Furthermore, age-associated visual conditions such as cataracts, glaucoma, and macular degeneration often impact driving performance.

Despite the increased prevalence of visual disturbances with advancing age, the functional relations between driving and a given visual impairment is quite variable.⁷² To date, the relations between these visual conditions and risk of accidents in seniors is undetermined, with existing studies showing both positive and negative associations.⁷³

Similarly, whether or not hearing loss is associated with an increased risk of car accidents remains questionable. Hearing loss of some sort reportedly affects approximately one-third of all adults between 65 and 74 years of age and about half of those between 75 and 79.⁷⁴ Some research indicates that self-reported hearing impairments are associated with adverse driving events;⁷⁵ other researchers indicate that hearing loss does not interfere with the ability to drive safely.⁷⁶

⁷⁰ Fletcher, et. al., *The Merck Manual of Geriatrics*, 2nd ed. (New Jersey: Merck Research Laboratories, 1995) [hereinafter *The Merck Manual*].

⁷¹ Bignotti, *supra* note 64.

⁷² Ball, *supra* note 67.

⁷³ J. Gresset & F. Meyer, "Risk of Automobile Accidents Among Elderly Drivers with Impairments or Chronic Diseases" (1994) 85 Can. J. Public Health 282 [hereinafter Gresset]

⁷⁴ *The Merck Manual*, *supra* note 70.

⁷⁵ J. Gallo, G. Rebok & S. Lesikar, "The Driving Habits of Adults Aged 60 Years and Older" (1999) 47 J. Am. Geriatr. Soc. 335 [hereinafter Gallo].

⁷⁶ Bignotti, *supra* note 64.

Conditions that affect movement such as pain may also affect driving performance. Arthritis, osteoporosis, and debilitating rheumatologic conditions that commonly affect the elderly may restrict an older driver's range of motion, making it difficult to shoulder check and steer, as well as restricting field of view.⁷⁷ Drivers who report a diagnosis of many of these conditions often are at increased risk of crash involvement.⁷⁸ On the other hand, the severity of the impairment must be taken into account. Obviously, conditions that severely restrict the driver's mobility would be more likely to negatively influence driving performance.⁷⁹ However, it is usually possible to adapt the vehicle to accommodate older adults suffering from these conditions.⁸⁰

Other diseases affecting motor functioning, such as neurological conditions such as Multiple Sclerosis, Parkinson's disease, or Amyotrophic Lateral Sclerosis may also impair driving, but the degree of disability varies widely.

III. MENTAL FUNCTIONING

Some conditions, more than others, place older adults at increased risk of traffic violations and motor vehicle accidents. Those diseases or disorders that affect mental functioning (e.g., judgment, reasoning) require special consideration: disorders that result in an abrupt change in mental functioning, disorders associated with fluctuations in mental functioning and progressive neurodegenerative disorders.

⁷⁷ *The Merck Manual*, *supra* note 70; G. McGwin et al., "Relations among Chronic Medical Conditions, Medications, and Automobile Crashes in the Elderly: A Population-based Case-control Study" (2000) 152 *Am. J. of Epidemiol.* 424 [hereinafter McGwin].

⁷⁸ McGwin, *ibid.*

⁷⁹ Gallo, *supra* note 75.

⁸⁰ Waller, *supra* note 67.

A. Abrupt change in mental functioning

Seizure disorders, sleep disorders (e.g., narcolepsy, sleep apnea), and coronary heart disease, depending on the frequency and severity of anginal episodes, syncope, arrhythmia, and shortness of breath, are examples of disorders that may result in the sudden loss of consciousness while driving. Most guidelines for determining fitness to drive, such as those proposed by the Canadian Medical Association⁸¹, clearly describe procedures for determining the fitness-to-drive of persons with seizures disorders. Research describing the driving records of those who suffer from sleep disorders (e.g., narcolepsy, sleep apnea) has shown that sleepiness affects driving performance because it results in decreased vigilance and increased crash risk.⁸² Complaints about sleep are common among the elderly, with many older adults suffering from both transient and chronic insomnia as well as specific sleep disorders such as drug-induced sleep disturbances, sleep apnea, sleep complications due to restless leg syndrome, and narcolepsy.⁸³ Generally, older adults reporting excessive somnolence and a history consistent with an intrinsic sleep disorder may require regular fitness-to-drive evaluations to determine whether or not they pose significant risks to other motorists.

Cardiovascular disorders (e.g., myocardial infarction) can also result in a sudden loss of consciousness while driving. However, research on crash rates for persons with cardiovascular disorders yields mixed results. Some studies focusing on older drivers have reported negligible associations between heart disease and crash involvement.⁸⁴ According to McGwin and colleagues, sudden driving incapacitation due to myocardial infarction causes less than 1% of

⁸¹ *Determining Medical Fitness*, *supra* note 59.

⁸² *Ibid.*

⁸³ *The Merck Manual*, *supra* note 70.

⁸⁴ Gresset, *supra* note 73; R. Guibert et al., "Are Drivers with CVD More at Risk for Motor Vehicle Crashes?" (1998) 44 *Can. Fam. Physician*, 770.

all motor vehicle accidents.⁸⁵ Foley and colleagues, for example, found that neither heart disease nor hypertension was associated with risk for crashing.⁸⁶ It is possible that older drivers with various types of cardiovascular conditions are at greater risk of motor vehicle crashes, but because they modify their driving habits after receiving their diagnosis, they avoid driving accidents.⁸⁷ Nevertheless, other studies have identified heart disease as being associated with automobile crashes⁸⁸ and so the quandary for the clinician is estimating the risk in an individual patient.

Considering these mixed findings, the practical advice might be to err on the side of caution and regularly re-evaluate fitness to drive in adults with cardiovascular disease. The Canadian Medical Association has advised refraining from driving for at least four weeks following acute myocardial infarction and coronary bypass surgery.⁸⁹

Cerebral vascular disorders (i.e., vascular disorders affecting the brain) may also affect driving. The incidence rates for transient ischemic attacks are highest among the elderly, and may negatively affect the driving performance of older adults by impairing the cognitive functioning of the driver or via sudden incapacitation.⁹⁰ Studies of the driving safety of those who have suffered a cerebral vascular accident (e.g., brain hemorrhage or stroke) have generally reported increased risks.⁹¹ Older stroke patients may be especially prone to unsafe driving because of the combined effects of age-related deficits and focal neurological deficits induced by the stroke.

⁸⁵ McGwin, *supra* note 77.

⁸⁶ D. Foley, R. Wallace & J. Eberhard, "Risk Factors for Motor Vehicle Crashes Among Older Drivers in a Rural Community" (1995) 43 J. Am. Geriatr. Soc. 776 [hereinafter Foley].

⁸⁷ Gresset, *supra* note 73.

⁸⁸ *Ibid.*; Bignotti, *supra* note 64; Gallo, *supra* note 75; Gresset, *supra* note 73.

⁸⁹ *Determining Medical Fitness*, *supra* note 59.

⁹⁰ *The Merck Manual*, *supra* note 70.

⁹¹ Waller, *supra* note 67; R. Sims et al., "Exploratory Study of Incident Vehicle Crashes Among Older Drivers" (2000) 55A J. Gerontol. M22 [hereinafter Sims]; McGwin, *supra* note 77.

Generally, studies of older stroke patients indicate that the reaction time and steering errors made by stroke patients are worse than that of adults who are aging normally.⁹² However, others have observed that those older adults who suffer stroke-related paralysis or weakness are more prone to spontaneously make the decision to stop driving.⁹³

B. Fluctuations in mental functioning

There are a variety of circumstances under which mental functioning may fluctuate. These may occur as a function of a specific medical condition that by its nature alters the level of mental functioning of the adult (e.g., psychiatric conditions, diabetes). Treatment for the underlying disorder may reduce or eliminate these fluctuations. Alternatively, a variety of over-the-counter and prescription medications used inappropriately may result in mental fluctuations.

Studies of diabetic drivers have indicated that, aside from the effects of visual impairments due to diabetic retinopathy, diabetic individuals may be at risk while driving if the metabolic aspects of the disease are not controlled. For example, people with insulin-dependent (i.e., Type I) diabetes experience cognitive changes at relatively moderate levels of hyperglycemia. Such cognitive changes include visuoperceptual disturbances, disorientation, and decreased attention/concentration; these deficits obviously can impair skills necessary for safe operation of a vehicle. Of the few studies that have been conducted on older diabetic drivers, the risk of accidents among insulin-dependent diabetic seniors was moderate to high.⁹⁴ On the other hand, patients with stabilized diabetes with no episodes of altered consciousness are reportedly

⁹² McGwin, *ibid.*

⁹³ M. Campbell, T. Bush & W. Hale, "Medical Conditions Associated with Driving Cessation in Community-dwelling, Ambulatory Elders" (1993) 48 J. Gerontol. S230.

⁹⁴ W. Clarke et al., "Hypoglycemia and the Decision to Drive a Motor Vehicle by Persons with Diabetes" (1999) 282 J. Am. Med. Assoc. 751; Gresset, *supra* note 73; P. Hansotia & S. Broste, "The Effect of Epilepsy or Diabetes Mellitus on the Risk of Automobile Accidents" (1991) 324 New Eng. J. Med. 22.; G. McGwin et al., "Diabetes and Automobile Crashes in the Elderly" (1999) 22 Diabetes Care 220; Waller, *supra* note 67.

safe drivers.⁹⁵ The majority of these studies, however, are not age-specific, despite the fact that diabetes is fairly common among the elderly with a prevalence of 8.8% among those aged 65-74.⁹⁶

The influence of psychiatric disease and its treatment on seniors' driving performance is an understudied area but is an area that has been identified as worthy of inclusion in some existing guidelines for determining fitness-to-drive.⁹⁷ In this section, two questions will be addressed: Are older drivers who are suffering from psychiatric conditions more or less likely to be involved in road traffic accidents? Do medications used to treat these conditions interfere with driving performance?

Psychiatric disorders are common. Research has shown that the lifetime prevalence of psychiatric disorders may be as high as 38%.⁹⁸ Persons of all ages are not immune to emotional difficulties. Furthermore, the elderly patient who is suffering from a psychiatric illness is probably at greater risk of involvement in a motor vehicle accident because of changes associated with the psychiatric condition (e.g., reduced attention/concentration, psychomotor slowing) and compounded by the effect of age-related changes.⁹⁹

Some common psychiatric conditions that have been reviewed in the driving literature that are particularly applicable to older adults include: anxiety, depression, manic-depression, psychosis, and personality disorders. With respect to anxiety conditions, the presumption is that anxious drivers are more at risk for unsafe driving because anxiety can cause decreased psychomotor

⁹⁵ *Determining Medical Fitness*, *supra* note 59.

⁹⁶ Bignotti, *supra* note 64.

⁹⁷ *Determining Medical Fitness*, *supra* note 59.

⁹⁸ P. Hoaken & S. Sishta, "Insurability of the Psychiatrically Ill or Those with a Past History of Psychiatric Disorder" (1989) 34 *Can. J. Psychiat.* 731.

⁹⁹ Rubinsztein, *supra* note 60.

function that in turn can negatively affect driving performance. Indeed, limited research suggests that anxious drivers are at increased risk for motor vehicle accidents.

Little has been written about the effect of mood change, particularly depression, on the driving skills of the elderly. Rubinsztein and Lawton conducted two case studies of older men (ages 77 and 81) admitted to an acute geriatric psychiatry ward with major depressive disorder, and found that both had had motor vehicle accidents prior to admission¹⁰⁰. Other research demonstrates that patients suffering from mood-induced psychotic episodes and depression demonstrate questionable fitness for driving.¹⁰¹ With respect to manic-depression, some research demonstrates that adults suffering from this condition have twice the expected accident rate even after correcting for fewer miles driven.¹⁰² Overall, then, a review of the limited research available suggests that the presence of mood disorders places one at a higher risk for unsafe driving.

In addition to the effects of mood disturbances on driving performance, certain personality disorders have been found to be associated with increased accident risk. For example, those suffering from Antisocial Personality Disorder often act in an aggressive and irresponsible manner, character traits that are commonly associated with a propensity to reckless driving and increased risk of being involved in fatal motor vehicle accidents.¹⁰³ The personality characteristics that impact driving performance have not specifically been studied in older age cohorts.

¹⁰⁰ Rubinsztein, *ibid.*

¹⁰¹ U. Gerhard & V. Hobi, "Cognitive-psychomotor Functions with Regard to Fitness for Driving of Psychiatric Patients Treated with Neuroleptics and Antidepressants" (1984) 12 *Neuropsychobiology* 39 [hereinafter Gerhard].

¹⁰² T. Silverstone, "The Influence of Psychiatric Disease and its Treatment on Driving Performance" (1988) 3 *Int. Clin. Psychopharm.* 59 [hereinafter Silverstone].

¹⁰³ Noyes in Silverstone, *ibid.*

Despite the fact that psychiatric patients overall have a higher than expected rate of involvement in motor vehicle accidents, it would be unfairly discriminatory to cancel, deny, or restrict the licenses of all elderly drivers suffering from psychiatric illnesses. On the other hand, a review of the literature suggests that regular fitness to drive re-evaluations of those older adults suffering from psychiatric conditions is most likely warranted.

Medications may also affect the mental functioning of the older adult. The use of medications, like and in response to the number of chronic medical conditions and disabilities, increases with advancing age.¹⁰⁴ Many of these drugs – especially drugs that cause sedation – impair driving. Sedative drugs include antihistamines and alcohol, which used alone or in combination have deleterious effects on driving.

Drugs commonly prescribed to older adults that have been shown to be positively associated with crash involvement include anticoagulants and anti-inflammatory medications.¹⁰⁵ Skeg also identified a significant association between the use of minor tranquilizers among drivers and serious road crashes.¹⁰⁶ Moreover, psychotropic medication may affect driving performance. Psychotropic medications affect driving performance because they decrease psychomotor reaction time.¹⁰⁷ Benzodiazepine use, in particular, is commonly prescribed to older adults, and is known to compromise driving safety.¹⁰⁸ Overall, some researchers report that older adults taking prescription medications for treatment of psychiatric conditions are at increased risk of

¹⁰⁴ Millar, *supra* note 4.

¹⁰⁵ McGwin, *supra* note 77.

¹⁰⁶ Reuben, *supra* note 4.

¹⁰⁷ H. Grabe et al., "The Influence of Polypharmacological Antidepressive Treatment on Central Nervous Information Processing of Depressed Patients: Implications for Fitness to Drive" (1979) 37 *Neuropsychobiology* 200 [hereinafter Grabe]; Gerhard, *supra* note 101.

¹⁰⁸ Ray et al. in Rubinsztein, *supra* note 60.; B. Hemmelgarn et al., "Benzodiazepine Use and the Risk of Motor Vehicle Crash in the Elderly" (1997) 278 *J. Am. Med. Assoc.* 27; R. Thomas, "Benzodiazepine Use and Motor Vehicle Accidents: Systematic Review of Reported Association" (1998) 44 *Can. Fam. Physician* 799.

crashing¹⁰⁹, whereas others report no correlation between medication usage and driving performance.¹¹⁰

The impact of antidepressants on road safety is currently unknown. According to some, users of antidepressant drugs are not at increased risk for traffic accidents,¹¹¹ perhaps because antidepressants can sharpen a depressed patient's attention and concentration and tracking skills, thereby improving driving performance. On the other hand, in the acute phase of treatment, antidepressant medication usage has been shown to adversely affect driving performance.¹¹² Certain classes of antidepressant medications have been found to affect psychomotor abilities to a greater extent than others.¹¹³

Another important consideration is that polypharmacological treatment has a more severe effect on driving fitness than monotherapeutic interventions.¹¹⁴

¹⁰⁹ Ray, *ibid.*, Silverstone, *supra* note 102; W. Ray, "Safety and Mobility of the Older Driver: A Research Challenge" (1997) 278 J. Am. Med. Assoc. 66.

¹¹⁰ Foley, *supra* note 86.

¹¹¹ T. Seppala, M. Linnoila & M. Mattila, "Psychomotor Skills in Depressed Outpatients Treated with L-tryptophan, Doxepin or Chlorimipramine" (1978) 10 Ann. Clin. Res. 214; M. Linnoila & T. Seppala, "Antidepressants and Driving" (1985) 17 Accident Anal. Prev. 297 [hereinafter Linnoila]; Gerhard, *supra* note 101.

¹¹² Linnoila, *ibid.*; L. Judd, "Effect of Lithium on Mood, Cognition, and Personality Function in Normal Subjects" (1979) 36 Arch. Gen. Psychiat. 860; Sims, *supra* note 91.

¹¹³ Grabe, *supra* note 107]; Gerhard, *supra* note 101.

¹¹⁴ Grabe, *ibid.*

C. Progressive neurodegenerative disorders

Degenerative disorders affecting the central nervous system occur with increased prevalence at older ages¹¹⁵. These disorders may affect specific aspects of the mental functioning of older adults such as perception, memory, judgment, reasoning, planning, early in the disease process with all areas of mental functioning eventually affected. Dementia, a general term indicating impairment of more than one area of mental functioning that interferes with the person's ability to meet the diverse demands of everyday life, is associated with increased driving problems.¹¹⁶ Reviews of the literature indicate that dementia patients have 4.7 more accidents than cognitively intact older adults.¹¹⁷ However available literature suggests that neither the duration since the onset of dementia nor the severity of dementia can predict accurately which patients can drive safely. There are as yet no consistently agreed upon indicators of the point at which persons with neurodegenerative diseases primarily affecting mental functioning (as opposed to physical functioning) may require re-evaluations of the ability to drive. It may be that a diagnosis of a specific neurodegenerative condition may suffice to prompt some specific actions by licensing authorities even though it is not clear that all of these people are unsafe to drive.

IV. FRAILITY

Frailty, in the context of the older adult, is a concept that has emerged to capture the notion that minor impairments or deficits in multiple areas of mental and/or physical functioning increases a person's vulnerability. Within the context of driving, an older adult may not exhibit any particular specific impairments of sensory, motor, or mental functioning but overall functioning is limited

¹¹⁵ Canadian Study of Health and Aging Working Group, "Canadian Study of Health and Aging: Study methods and prevalence of dementia" (1994) 150 CMAJ. 899.

¹¹⁶ Ball, *supra* note 67.

¹¹⁷ Bignotti, *supra* note 64; Millar, *supra* note 4.

due to a loss of stamina, or a loss of physiologic reserve that increases the risk of disability.¹¹⁸ There is as yet no agreed upon method for defining frailty although a few studies suggest that physical frailty, either alone or in combination with other conditions, is a factor that impacts driving safety.¹¹⁹

V. SUMMARY

In reviewing the literature related to older drivers' fitness-to drive, we found that the presence of sensory or motor deficits or disorders that affect mental functioning may place older adults at increased risk for unsafe driving, traffic violations, and collisions. However, the mere presence of any of these factors does not ubiquitously indicate that driving performance will be affected. On the other hand, we have tried to note that conditions that in isolation are not sufficient to affect driving may, in combination, increase the risk of driving problems. Some of the conditions examined occur more frequently in older adults and older adults are more likely than younger adults to have multiple medical conditions and be taking medications to treat these conditions. Certain disorders are easier to identify and treat than others. For example, some vision or neurological disorders are quite clear in their presentation and their effects on driving are equally as clear (e.g., uncontrolled seizure disorder). Disorders that result in fluctuating mental functions are less easy to predict but many times can be controlled with appropriate therapeutic regimes. Degenerative conditions change over time and, with respect to neurodegenerative conditions, it may not be clear at what point in a disease process the person is no longer safe to drive. The implication for re-evaluations of the ability to drive is that

¹¹⁸ D. M. Buchner & E. H. Wagner, "Preventing Frail Health" (1992) 8 Clin Geriatr Med 1.

¹¹⁹ Bignotti, *supra* note 64; Millar, *supra* note 4.

targeting the presence and severity of certain medical conditions, regardless of age, may identify potential at risk drivers more effectively than age per se.

Despite the fact that detection of high-risk drivers is not foolproof, outlining the variables that increase the risk of crash-involvement is sanctioned when public safety is imperiled. Furthermore, once identified as high risk, a driving re-evaluation may reveal no further functional impediments so that the driver, regardless of age, is deemed fit to drive on a case-by-case basis.

PART FOUR: LEGAL CHALLENGES TO AGE RELATED TESTING LAWS

I. INTRODUCTION

The preceding review of medical conditions suggest that the goal of a safe driving environment may be better served with a more inclusive re-evaluation process than is currently in place. The existing emphasis on testing at arbitrary ages, while justified to some degree by the medical literature, unfairly assumes that primary aging alone increases risks for driving safely. This unfairness may result in legal challenges to one or another age relating testing laws at some point. Whether such challenges will give rise to a legal remedy cannot be accurately predicted. The discussion which follows will explore some of the possible legal avenues which such challenges might take. It does not purport to be an exhaustive exploration, a task beyond the scope of this study.

In considering whether the use of age as a marker for licensing requirements is justifiable from a legal perspective, certain general principles must not be overlooked. First, fitness to drive is a

prerequisite for vehicle licensing and re-licensing. Second, the testing and retesting of fitness must be an integral part of the licensing process. Third, the level of fitness required will depend upon the type of license sought. In other words, the higher the level of skill associated with a particular type and size of vehicle, the higher the level of fitness that will be needed.

Accepting that testing and retesting for licensing purposes is proper clarifies the discussion of whether using age as marker for that testing or retesting is appropriate. The question which will arise in the context of a challenge to the laws is not whether testing or retesting is necessary. Rather, it will be whether the use of age alone is the proper trigger for testing or retesting. Are there legitimate reasons for choosing, for example, the age of 75 as a signpost for testing driving abilities? Is the consequence of refusing such testing - the loss of driving privileges - reasonable? Is it fair?

II. HUMAN RIGHTS LEGISLATION

The most obvious route to challenge provincial laws on age related testing is that province's human rights legislation.¹²⁰ Such legislation generally prohibits discrimination against individuals or groups with respect to, among other areas, any service customarily available to the public. This prohibition has been successful in challenging statutory vision restrictions upon driving in British Columbia.¹²¹ However, a review of human rights legislation in the provinces which have age related testing requirements for driving reveals that age does not enjoy the same protection from discrimination as other enumerated grounds.

¹²⁰ The *Canadian Human Rights Code*, R.S., 1985, c. H-6, does not apply as it extends only to those laws "within the purview of matters coming within the legislative authority of Parliament", s. 2.

¹²¹ The vision requirements in the *Motor Vehicle Act Regulations* were struck down as discriminatory in *British Columbia (Superintendent of Motor Vehicles) v. British Columbia (Council of Human Rights)*, [1999] 3 S.C.R. 868 (the "Grismer" case).

At the far end of the scale is the Yukon, which does not contain age as a grounds for protection against discrimination in its legislation at all.¹²² In other provinces, the protection provided is limited in the range of age or the types of discrimination protected against. For example, in British Columbia, age is defined as between 19 to 64.¹²³ Even within those parameters, however, protection is not provided in British Columbia against discrimination in the area of accommodation, services, facilities or property purchases.¹²⁴

In Alberta, although age is not restrictively defined as it is in British Columbia, protection against age discrimination is not afforded with respect to goods, services, accommodation or facilities.¹²⁵ In Newfoundland, age is not defined at all, but it is also not included as a ground for protection against discrimination with respect to accommodation, services, facilities or goods.¹²⁶

In both the Northwest Territories and Nunavut (which have the same statute dealing with human rights),¹²⁷ protection against discrimination is not restricted on the basis of age. However, the particular wording of the protection provided is very restricted. There is a prohibition on denying “accommodation, services or facilities available *in any place* to which the public is customarily admitted”¹²⁸ (*emphasis added*). Other human rights statutes refer more generally to accommodation, services or facilities available to the public. Arguably, age related testing requirements is not a service available “*in any place*” at all. It is difficult to imagine age related testing qualifying under this wording of discrimination.

¹²² *Fair Practices Act*, R.S.Y. 1986, c. 62.

¹²³ *Human Rights Code of British Columbia*, R.S.B.C. 1996 c. 210, s. 1.

¹²⁴ *Ibid.*, ss. 8 and 9.

¹²⁵ *Human Rights, Citizenship and Multiculturalism Act*, R.S.A. 2000, c. H-11.7, s. 3.

¹²⁶ *Human Rights Act*, R.S.N. 1992 c. H-14, s. 6(1).

¹²⁷ *Fair Practices Act*, R.S.N.W.T. 1988 c. F-2.

¹²⁸ *Ibid.*, s. 4.

In Ontario, the *Human Rights Code*¹²⁹ does provide protection against discrimination to those over 64, but only with respect to employment. However, Ontario is unique among Canadian provinces in denying human rights protection with respect to the requirements of examinations and qualifications contained in the *Highway Traffic Act Drivers Licenses Regulation*. In particular, Section 19 of those Regulations provides that the “examinations and qualifications required of an applicant...apply despite the *Human Rights Code*”.¹³⁰

The remaining provinces which have age related testing requirements (Manitoba, New Brunswick and Nova Scotia) do provide protection against discrimination based on age with respect to services.¹³¹ However, even in these provinces, the protection is qualified. In Manitoba, discrimination is permitted if a “bona fide and reasonable cause exists for the discrimination”.¹³² In Nova Scotia, the Human Rights Commission may exempt a discriminatory program or activity if, in its opinion, “there is a bona fide reason to do so”.¹³³ Similarly, in New Brunswick, the Human Rights Commission may permit discrimination if it is “based upon a *bona fide* qualification as determined by the Commission”.¹³⁴

An analysis of the manner in which these provisions permitting discrimination might be applied to age related testing requirements is beyond the scope of this paper. Presumably, evidence to support a bona fide reason for discrimination would include scientific and medical evidence that aging can result in declining abilities generally,¹³⁵ and statistics showing that aging drivers

¹²⁹ R.S.O. 1990, c. H.19.

¹³⁰ *Supra* note 43 at s. 19

¹³¹ See: *Human Rights Act*, R.S.M. 1985, c. H-11, s. 13(1); *Human Rights Act*, R.S.N.B 1992., c. H-11, s. 5(1); and *Human Rights Act*, R.S.N.S. 1989, c. 214, s. 5(1).

¹³² *Ibid.*, s. 13(1).

¹³³ *Ibid.*, s. 9.

¹³⁴ *Ibid.*, s. 4(4).

¹³⁵ See discussion of this evidence in Part 3.

have more driving accidents than some (but not all) other age groups.¹³⁶ The weight which an adjudicator might afford such evidence is unknown. Nevertheless, at least in Manitoba, Nova Scotia and New Brunswick, there is a real risk that age related testing laws may be subject to a challenge under human rights legislation.

III. CHALLENGES UNDER THE CANADIAN CHARTER OF RIGHTS AND FREEDOMS

Other than human rights legislation, the most likely challenge to age related testing will be under the *Canadian Charter of Rights and Freedoms*¹³⁷ (the "Charter"). Section 15 of the Charter protects against discrimination based on age. Specifically, it states:

Every individual is equal before and under the law and has the right to equal protection and equal benefit of the law without discrimination and in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age, or mental or physical disability.

There are at present no Charter decisions reported anywhere in Canada striking down laws requiring age-related testing or retesting for driving licenses. A complete analysis of the nature of a challenge which might be mounted against those laws would require an independent study. There are, however, some general principles that can be examined in Charter cases generally which can be considered in assessing the exposure of the age related testing laws.

The application of Section 15 of the Charter has been carefully reviewed by the Supreme Court of Canada in a number of cases. The court identified its purpose in 1989, in the decision of

¹³⁶ As noted in the Introduction and in Part 3.

¹³⁷ *Part I of the Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11.

Andrews v. Law Society of British Columbia.¹³⁸ Justice McIntyre began the discussion as follows:

Section 15(1) of the Charter provides for every individual a guarantee of equality before and under the law, as well as the equal protection and equal benefit of the law without discrimination. This is not a general guarantee of equality; it does not provide for equality between individuals or groups within society in a general or abstract sense, nor does it impose on individuals or groups an obligation to accord equal treatment to others. It is concerned with the application of the law. No problem regarding the scope of the word "law", as employed in s. 15(1), can arise in this case because it is an Act of the Legislature which is under attack. Whether other governmental or quasi-governmental regulations, rules, or requirements may be termed laws under s. 15(1) should be left for cases in which the issue arises.¹³⁹

The last sentence cited may give rise for some concern in using Section 15 to challenge age-related testing requirements, insofar as the requirements of several provinces are contained in regulations or policies. Do these regulations and policies qualify as "laws" for the purposes of section 15?

One would have thought that a regulation passed and proclaimed pursuant to the provisions of a statute is no less a "law" than the authorizing statute itself. A policy might be harder to qualify as a "law". However, it is difficult to contemplate that the Charter would not apply to strike a discriminatory practice found in a regulation or policy whilst applying to strike the same discriminatory practice in a statute. Certainly, Justice LaForest in the *Andrews* decision was not prepared to limit Section 15 in the manner described by Justice McIntyre.¹⁴⁰ He had the opportunity to revisit this issue in the decision of *McKinney v. University of Guelph*,¹⁴¹ and made the following observation:

¹³⁸ [1989] 1 S.C.R. 143.

¹³⁹ *Ibid.*, at 161.

¹⁴⁰ *Ibid.* at 194.

¹⁴¹ [1990] 3 S.C.R. 229

The most obvious form of law for this purpose is, of course, a statute or regulation. It is clear, however, that it would be easy for government to circumvent the Charter if the term law were to be restricted to these formal types of law-making.... On the assumption that the universities form part of the fabric of government, I would have thought their policies on mandatory retirement would amount to a law for the purposes of s. 15 of the Charter.¹⁴²

Although *obiter*, this conclusion supports the conclusion that, whether age-related testing requirements are contained in a statute, regulation or policy, they are likely “laws”, and Section 15 ensures that such laws give equal protection to individuals or groups without discrimination. The question remaining is, of course, whether age-related testing laws are discriminatory. Justice McIntyre, in the *Andrews* case, describes discrimination in the following terms:

I would say then that discrimination may be described as a distinction, whether intentional or not but based on grounds relating to personal characteristics of the individual or group, which has the effect of imposing burdens, obligations, or disadvantages on such individual or group not imposed upon others, or which withholds or limits access to opportunities, benefits, and advantages available to other members of society. Distinctions based on personal characteristics attributed to an individual solely on the basis of association with a group will rarely escape the charge of discrimination, while those based on an individual's merits and capacities will rarely be so classed.¹⁴³

It is clear that the requirement of testing or retesting drivers of a specified age imposes an obligation on those individuals or groups not imposed upon others. That distinction is based solely upon the personal characteristic of age. However, as noted by Justice McIntyre in *Andrews*, not all distinctions are discriminatory:

It is not every distinction or differentiation in treatment at law which will transgress the equality guarantees of s. 15 of the Charter. It is, of course, obvious that legislatures may -- and to govern effectively -- must treat different individuals and groups in different ways. Indeed, such distinctions are one of the main preoccupations of legislatures. The classifying of individuals and groups, the making of different provisions respecting such groups, the application of different rules, regulations, requirements and qualifications to different persons is necessary for the governance of modern society.¹⁴⁴

¹⁴² *Ibid.* at para. 49.

¹⁴³ *Supra* note 138 at 174.

¹⁴⁴ *Ibid.* at 169.

This comment suggests that the court may be prepared to treat distinctions in driver testing as a necessary part of the law. It has been noted that the court “has demonstrated a marked tendency to defer to legislative judgment” where broad issues of social policy are concerned.¹⁴⁵ If vehicle licensing is viewed as social policy, age-related testing requirements may be accepted as a permissible distinction.

Even if such laws are found to be discriminatory, they may still be found to be justifiable under Section 1 of the Charter. The test under Section 1, broadly speaking, is whether the objective of the impugned law is of a “pressing and substantial concern”. Certainly, the objective of all licensing laws is of pressing and substantial concern: that is, the safety of highways for all citizens.¹⁴⁶ The testing of driving abilities on an ongoing basis is a component of that safety, as noted by the NSC.¹⁴⁷ However, whether such a broadly stated objective is sufficient to justify possible discriminatory laws is questionable. Certainly, the Nova Scotia Supreme Court was not prepared to so find in a case considering a law prohibiting a commercial driver’s license because of a medical condition.¹⁴⁸ In that case, the applicant, Mr. Hines, was deprived of his commercial vehicle license when he was diagnosed with insulin-dependent diabetes. The regulations of the Nova Scotia *Motor Vehicle Act* contained a blanket prohibition on granting licenses to such individuals. In considering the objective of the regulations, the court concluded:

The evidence advanced by the respondents, for the most part, addressed highway safety in general but the real issue is whether the operation of large commercial vehicles on our highways by insulin-dependent diabetics constitutes a pressing and substantial concern. To determine the answer to this question, it

¹⁴⁵ Robert J. Sharpe and Katherine E. Swinton, *The Charter of Rights and Freedoms* (Toronto: Irwin Law, 1998) at 49.

¹⁴⁶ See, for example: *Hines v. Nova Scotia (Registrar of Motor Vehicles)* (1990), 73 D.L.R. (4th) 491 (N.S.S.C. (T.D.)) and *British Columbia (Superintendent of Motor Vehicles) v. British Columbia (Council of Human Rights)*, [1999] 3 S.C.R. 868.

¹⁴⁷ See discussion of the NSC standards in Part 2.

¹⁴⁸ *Hines*, *supra* note 146.

was imperative for the court to have before it medical evidence on the effects of diabetes on the operators of large trucks as those effects relate to the safe operation of vehicles.¹⁴⁹

The court was not satisfied it had such evidence, and declared that the regulation in question was null and void. Mr. Hines' commercial license was restored.

It is possible that the court's reasoning in the *Hines* decision may be applicable to age-related testing laws. In particular, it is arguable that the real issue is whether the operation of vehicles by the elderly constitutes a "pressing and substantial concern". There is a considerable body of scientific and medical evidence that aging can result in declining abilities generally.¹⁵⁰ There are also statistics showing that aging drivers have more driving accidents than some (but not all) other age groups.¹⁵¹ Such evidence might well be compelling to a court hearing a Charter challenge. However, the following comments of Justice LaForest in the *McKinney* decision (dealing with the issue of mandatory retirement) may be a caution to assuming such evidence will be adequate:

There is a general relationship between advancing age and declining ability; see "The Age Discrimination in Employment Act of 1967" (1976), 90 Harv. L. Rev. 380, at p. 384; Tarnopolsky and Pentney, *Discrimination and the Law* (1985), at p. 7-5. This hardly means that general impediments based on age should not be approached with suspicion, for we age at differential rates, and what may be old for one person is not necessarily so for another.... The truth is that, while we must guard against laws having an unnecessary deleterious impact on the aged based on inaccurate assumptions about the effects of age on ability, there are often solid grounds for importing benefits on one age group over another in the development of broad social schemes and in allocating benefits.¹⁵²

Can there also be "solid grounds" for denying older citizens their driving privileges unless testing is completed? An affirmative answer to this question was suggested by the Supreme Court of

¹⁴⁹ *Ibid.* at 498.

¹⁵⁰ See discussion of this evidence in Part 3.

¹⁵¹ As noted in the Introduction and in Part 3.

¹⁵² *Supra* note 141 at 249.

Canada in the Grismer case referred to earlier.¹⁵³ In dealing with the legitimacy of vision requirements contained in British Columbia's driving laws, Justice McLachlin noted:

The evidence suggests that the Superintendent set a goal of reasonable safety. It would have been unfeasible for the Superintendent to have set a goal of absolute road safety, as nobody is a perfect driver. Even among drivers with excellent vision, hearing and reflexes, there is a range of driving ability. Moreover, many people are licensed even though their physical characteristics might make them less safe than the average driver. The medical consultants at the Motor Vehicle Branch who assess the risk involved in licensing drivers with various disabilities seemed to be aware of the potential hardship involved in losing one's licence. The consultants balanced the need for people to be licensed with the need for reasonable highway safety. For example, it appears the Superintendent licensed people with severe hearing difficulties, provided that they could pass an individualized test showing that they compensate reasonably well for their lack of hearing. Similarly, the Superintendent licensed people over 80, even though their age made them more susceptible to maladies like heart attacks and strokes and reduced their reaction time, provided again that they could pass an individualized test showing that they compensated reasonably well for any such disabilities that they had. To pass these tests, the hearing impaired or elderly were not required to demonstrate that they were perfectly safe drivers. They were merely required to demonstrate that they could drive reasonably safely. Finally, people with less than a 120 degree field of vision, but who did not have H.H., were licensed if the doctor was convinced that their vision was adequate for safe driving despite being below the 120 degree standard.

The Superintendent thus recognized that removing someone's licence may impose significant hardship. Striking a balance between the need for people to be licensed to drive and the need for safety of the public on the roads, he adopted a standard that tolerated a moderate degree of risk. The Superintendent did not aim for perfection, nor for absolute safety. The Superintendent rather accepted that a degree of disability and the associated increased risk to highway safety is a necessary trade-off for the policy objectives of permitting a wide range of people to drive and not discriminating against the disabled. The goal was not absolute safety, but reasonable safety.¹⁵⁴

While tangential to the issue in the Grismer case (which dealt with the application of the B.C. *Human Rights Code* to the denial of a driver's license on the grounds of reduced vision), these comments do indicate the ease with which the Supreme Court of Canada may accept that the objective of age-related testing laws is of a pressing and substantial concern.

¹⁵³ *Supra* note 121.

¹⁵⁴ *Ibid.* at 26 & 27.

For the purposes of a Charter argument, however, that conclusion would not end the matter. Even if the objective of age-related testing is of sufficient importance to override the right of equality before the law, the court must still be satisfied that the means chosen is justified. This involves an application of the “proportionality test” which requires proof that there is a rational, non-arbitrary, non-capricious connection between the legislative objective and the testing requirements, that the testing requirements impairs equality under the law as little as possible, and that there is proportionality between effects of the law and its objectives. The latter will rarely be the case if the first two conditions are not met.

In the *McKinney* decision and a number of other decisions rendered concurrently,¹⁵⁵ the Supreme Court of Canada found that a law requiring mandatory retirement at age 65 satisfied the proportionality test. There was, however, considerable evidence of the social and economic importance of such retirement requirements.

It is an open question whether there would be sufficient evidence in a Charter case challenging age related testing laws. While there is evidence of increased risks in drivers who are elderly, there is likewise evidence of increased risks of much younger age groups.¹⁵⁶ In light of such conflicting evidence, it is difficult to know how a court would apply the proportionality test. It may find that singling out one group of citizens because of age is not impairing equality under the law “as little as possible”. On the other hand, it might consider the evidence of risks in older drivers compelling. At this point, the most that can be said is that age-related testing laws regulations and policies face risk of a challenge brought under the Charter.

¹⁵⁵ *Supra* note 141.

¹⁵⁶ See Part 3.

IV. APPEAL PROCESSES WITHIN PROVINCIAL LEGISLATION

While reliance on Charter arguments has superseded other remedies in many areas of the law, non-Charter challenges should not be overlooked. There have been a number of successful challenges to provincial licensing restrictions under appeal provisions of provincial highway safety statutes. None of these dealt specifically with age-related testing requirements, but the cases may prove instructive in considering possible challenges to such laws, and are reviewed below.

One of the earliest reported decisions is *Re Gaucher*, a 1979 decision from the Supreme Court of P.E.I.¹⁵⁷ Mr. Gaucher was an 80 year old gentleman who had been licensed to drive for fifty years. Having been involved in a traffic incident, he was required to undergo retesting in accordance with the provisions of the P.E.I. *Highway Traffic Act*. The testing occurred with two separate English-speaking examiners, although Mr. Gaucher's understanding of English was found to be limited.

The court found that Mr. Gaucher's license had been recalled as a result of written reports of the two examiners, without having given Mr. Gaucher the opportunity to be heard. Although the statute did not require such a hearing, the court found that the "demands of justice" did require it. What is particularly interesting about the judgment is the following passage:

The operation of a motor vehicle on the highway is a *right* and not a privilege and I hesitate to recall or cancel that *right* while I entertain a reasonable doubt that the person being subject to the driving test might not have completely understood what he was being asked to do.¹⁵⁸ (*emphasis made by judge*)

¹⁵⁷ (1979), 22 Nfld. & P.E.I.R. 342

¹⁵⁸ *Ibid.* at para 23.

Classifying driving as a right instead of a privilege suggests that it cannot be denied without due process. In *Re Gaucher*, the court found that Mr. Gaucher's common law right to a fair hearing was denied, and ordered that his driver's license be restored. The court also ordered that it be provided with a report of another examination of Mr. Gaucher by a bilingual examiner or with an interpreter, upon which the court (not the Registrar) would determine if the license should be recalled.

Relying upon *Re Gaucher* in a challenge to age-related testing requirements, it is arguable that a right to a fair hearing requires that some positive evidence of a driver's inabilities be established before tests are required. It is also arguable that requiring testing in the absence of such evidence is arbitrary, and the consequences of a refusal to test unfair.

Another challenge that could be considered is with respect to the manner in which a decision is made to deny licenses to seniors. Often, the standards of the NSC and the CMA Guide are relied upon in reaching a decision. In two cases, one originating in P.E.I. and the other in Ontario, the courts considered these standards.

In *Smith v. Prince Edward Island (Registrar of Motor Vehicles)*,¹⁵⁹ Mr. Smith, a school bus driver for some 20 years, had his license recalled because he no longer met vision standards imposed by the Registrar. (He had vision in only one eye). These standards adopted the then-current CMA Guide. The court concluded that, despite the "broad discretionary powers" granted to the Registrar, the standards set out in the *Guide* did not provide the Registrar with a standard clear enough to disqualify Mr. Smith from driving a school bus.

¹⁵⁹ (1980), 30 Nfld. & P.E.I.R. 215.

A later edition of the CMA Guide was relied upon in the Ontario decision of *Johnston v. Ontario*.¹⁶⁰ In that case, Mr. Johnston's professional license was suspended because of two separate episodes of epileptic seizures. The court found that Mr. Johnston had met the medically accepted standard set out in the CMA Guide and ordered his license reinstated. The court said:

...it is not the intention of the Ministry to render the highways risk-free; rather, the intention is reasonably to minimize the risk and at the same time to maintain that delicate balance between one citizen's right to make a legitimate livelihood and that of the public, generally, to have the highways free of unreasonable risks.¹⁶¹

In these cases, the emphasis of the courts was on the right of applicants to be tested on their own abilities as opposed to some general standard. While it is true that the actual testing of seniors will be individualized, the requirement that they all be tested because of their age may be viewed with disfavour by the courts in an appeal brought under the statute authorizing the blanket testing.

V. CONCLUSIONS

It is likely only a matter of time before the age-relating testing laws are challenged in court. Whether such challenges will give rise to a legal remedy cannot be accurately predicted. It should be remembered, however, that a court of law is not the only arena in which challenges to laws requiring testing at certain ages may occur. Even if a legal challenge is unsuccessful, the public perception that such laws are unfair may be compelling enough to justify a review of the testing requirements. While the need for testing and retesting of driving abilities is clear, the

¹⁶⁰ (1987), 48 M.V.R. 57

¹⁶¹ *Ibid.* at 70

manner in which such testing is triggered may need to be revisited. Some alternate methods are explored in Part 6.

Before leaving the discussion of legal considerations of the age-related testing laws, a note should be made about the statutory provisions requiring that health care professionals report medical conditions which may be dangerous or unsafe for driving. As mentioned, the extent of compliance with such provisions is unknown. The popularity of such reporting is also unknown, but if such provisions became the only method to trigger testing, the health care professions may well have cause for concern. This is because, while there is protection from any liability for making such reports, the failure to make such reports can result in serious legal consequences. In particular, the Ontario Court of Appeal has on two separate occasions found doctors who failed to report medical conditions that resulted in motor vehicle collisions contributorily negligence for the resulting injuries.¹⁶² While health care professionals may be reluctant to judge the extent to which medical conditions may adversely affect driving safety, there is clearly a risk in failing to do so.

PART FIVE: CONSULTATIONS

To better understand the tangible and intangible ways in which the use of age criteria for fitness to drive evaluations affect the lives of older adults, we conducted two focus groups with seniors (5 in each focus group). These seniors all resided in Sidney, British Columbia and volunteered to take part in these focus groups by responding to an advertisement placed in the local seniors

¹⁶² *Toms v. Foster* (1994), 7 M.V.R. (3rd) 34 (Ont. C.A.); *Spillane (Litigation Guardian of) v. Wasserman*, (1998) 41 C.C.L.T. (2nd) 292 (Ont. C.A.)

centre. In addition, we conducted interviews with 4 health care providers, 3 physicians and an optometrist who:

- routinely conduct clinical assessments of older adults, and
- are regularly required to provide opinions concerning the fitness of older adults to drive.

Through these interviews, different perspectives on fitness-to-drive evaluations were brought together concerning the present procedures in British Columbia and their impact on the lives of seniors and experts required to perform evaluations. The questions posed to the respondents focussed on current policy and included such topics as:

1. How do you view mandatory driving re-evaluations based on age?
2. How adequate do you think evaluations based on age are for identifying problems drivers? How comfortable do you think assessors are in making an assessment as to whether a person is sufficiently impaired so as to present a hazard on the road?
3. Are there other factors that influence driving other than age? Under what conditions would you recommend fitness-to-drive evaluation?
4. What are the benefits and drawbacks of fitness-to-drive evaluations?
5. How important an issue is driving to older adults? Why/why not?
6. How could the procedure be improved? What would you recommend to improve driving conditions for older adults?

Our main goal was to capture views of the present procedure in British Columbia. In this way we hope to have a better understanding of the benefits and drawbacks of these procedures.

These respondents surveyed generally covered the issues of interest. It must be acknowledged that our sampling of respondents was small and these individuals may not have raised all potential comments and concerns surrounding the present procedure. Moreover, these

comments are specific to the procedures in British Columbia alone. We did not attempt a broader survey of the present procedures employed in other provinces.

I. HOW DO YOU VIEW MANDATORY DRIVING RE-EVALUATIONS BASED ON AGE?

In general, the need for some form of mandatory driving re-evaluation procedure was supported by both seniors and experts. However, a variety of opinions were expressed as to whether or not age was the criteria of choice. Although there seemed to be agreement that basing the lower limit for driving on age seems reasonable because of biological maturity, health care professionals differed as to whether or not age should be the basis of re-evaluation later in life:

“The lower limit is there because of biological factors which suggest that maturity, ability to maintain concentration, and to have the skills and maintain the skills while driving a motor vehicle would not be there in the majority of people below a certain age. ...The change in human abilities with age is documented. Both with regards to achieving maturity through adolescence and in the decline in the senior years, as one gets older...And I think that it is a discrimination, but discrimination is a reasonable thing -- I think discrimination's got a bad name because of inappropriate discrimination in terms of, for instance, race. And this concept of ageism and discrimination on the basis of age is not the same thing. There are recognized and quite well-accepted changes that occur biologically with age. Which can affect the ability to, for instance, operate dangerous equipment, including a motor vehicle. And I think it's very appropriate to make rules which protect society -- both the people operating the equipment and the people who may be influenced by the operating of a car. So I think it is discrimination, but it's appropriate discrimination.”

“I would think there's probably a more rational way to target people who could be evaluated, or should be evaluated...Biased against older adults -- there's certainly prejudice built into it that's somewhat ageist. And I think it's a fairly rough line to draw. It's not nearly as valid as the line we draw when people are young. If they're less than 16, we say no, because we know developmentally people up to the age of 15 or 16 are developing these skills. But we don't know that when people reach 80 they start losing these skills at any appreciable rate. So I can't see the fairness in that.”

Seniors, while strongly in favour of mandatory re-evaluation, consistently agreed that using age as a criteria for re-evaluation, if the intent is to identify problem drivers, seemed unfair and unwarranted.

“I don't think it [age] has anything to do with that, actually. I mean you've got drivers 20 years old, 30 years old, 40, 50, what have you. And they can have a lot easier chance of getting into accidents and causing trouble just by their actions on the road. You'll find that most people when they get over 65 are very careful drivers.”

Even those seniors and health care professionals in favour of age criteria varied as to the appropriate age at which evaluations should take place:

“I think the age of 80 is a very generous allowance, really. But I don't think -- and actually, they could start testing everybody over the age of 70. Because they don't do the car testing the way they used to many years ago, used to be every two years, you get a bit older, you'd be tested. But they can't -- simply can't do it...-- they could just send a notice out to people at the age of, say, perhaps 65, 70.”

“You could make them more frequent, so therefore the person -- you're doing it on a more frequent basis... Well, if you take tests more regularly, they aren't as much tests any more, are they? Just -- instead of starting at age 80 and making it every -- maybe it starts at age 65 or something like that.”

It was acknowledged, most notably by health care professionals, that age serves as a convenient proxy by which to screen for complex medical conditions, use of medications, cognitive impairment, or “multiple organ failure as a biological feature of life.” It also is universal in that everyone, regardless of whether or not they attend a physician regularly, must see a physician to have the fitness-to-drive evaluation form completed:

“Because I think that people who are 80 or something should have a physical. I mean quite often it's the only thing that drags them into the doctor to have a physical at all. So it's for their own well-being anyway”

II. HOW ADEQUATE DO YOU THINK EVALUATIONS BASED ON AGE ARE FOR IDENTIFYING PROBLEM DRIVERS? HOW COMFORTABLE DO YOU THINK ASSESSORS ARE IN MAKING AN ASSESSMENT AS TO WHETHER A PERSON IS SUFFICIENTLY IMPAIRED SO AS TO PRESENT A HAZARD ON THE ROAD?

The primary concern about the fitness-to-drive evaluations for both seniors and health care professionals is centred on the need for a standardized approach to completing the evaluation form. Although most seniors acknowledged that a person's own family doctor, who has known them for a period of time (e.g., two years), should have the requisite knowledge to complete the form accurately, concern was expressed about variability between doctors in their approach to completing the evaluation form. It was noted by the health care professionals that many physicians are not aware that guidelines (federal and provincial) exist. Even when physicians are aware of the guidelines, it was noted that clinical judgment is required and so the rules may not be applied in a standardized or uniform way:

"You take a look at that individual and it is not necessarily a completely objective thing. You're also -- if you know who that individual is, and you know what they do ... -- I mean there are other factors that come into filling those forms out."

Health care professionals indicated that certain aspects of the evaluations address fairly obvious problems (e.g., vision, mechanics, loss of consciousness) and that these things are quite readily and reliably noted by evaluators. There are established clear guidelines for the identification of these disorders (e.g., CMA) and health care professionals interviewed felt confident that, as long as the evaluators are familiar with the existing guidelines, these conditions will be easily and consistently identified. However, it was also noted by the health care professionals that there are other cognitive or behavioural factors such as insight and

judgment that may not be so easy for evaluators to assess. To accurately identify problems with judgment and insight, a conversation with a collateral informant may be necessary. It was suggested by one health care professional that, in situations where cognitive impairment is suspected, a multi-disciplinary team approach including neuropsychological assessment may be required. All health care professionals indicated feeling very uncomfortable making judgments where guidelines are unclear or non-existent, and in particular, where cognitive impairment or hidden substance abuse are concerned:

“If they're physically fine but mentally there are some problems, or there's some hidden substance abuse problem, then I don't feel very comfortable at all with making that [decision about fitness-to-drive].”

One health care provider questioned the need for the present system of having physicians complete fitness-to-drive evaluations:

“I think that for the number of people being brought in for examinations, the amount of work is probably of very little benefit... and an awful lot of seniors running around. I bet there's a much more efficient way to do it.”

III. ARE THERE OTHER FACTORS THAT INFLUENCE DRIVING OTHER THAN AGE? UNDER WHAT CONDITIONS WOULD YOU RECOMMEND FITNESS-TO-DRIVE EVALUATION?

As noted earlier, most health care professionals acknowledged that age is being used as a means of screening for medical conditions such as multiple medical problems, medication use, cognitive impairment, vision problems the risks for all of which increase with age. Other factors that were identified included reaction times, ability to turn the head, concentration, impulsivity, and the likelihood of unpredictable events occurring (e.g., seizures, sleep attacks, heart attack). Particularly of note, these unpredictable events may affect anyone at any age. Both the seniors and the health care professionals noted that having licenses with specific restrictions (e.g., no night-time driving, driving only within a certain geographic area) can be very beneficial by allowing people to maintain access to their motor vehicle under these conditions. This flexible approach to licensing was viewed as appropriate:

“I mean I believe if you look in the back of the driver's licenses now, it talks about, "You're not allowed to drive more than x kilometers from your home," or something like that. I think there is a restriction for that ... going back and forth to (the grocery store, doctor's office) --sometimes that's all that people use the cars for ... for individuals that are very active and well -- very mentally alert-- they should be allowed to go back forth -- you know, to the bank and back.”

IV. WHAT ARE THE BENEFITS AND DRAWBACKS OF FITNESS-TO-DRIVE EVALUATIONS?

Seniors and health care professionals agreed that fitness-to-drive evaluations were important and necessary for protection of the individual and society. Some of the drawbacks that have already been identified above included the concerns over fairness in how the forms are completed by evaluators, the need for better guidelines for assessors around the accurate

identification of insight and judgment problems, and the fact that many physicians are not aware that the guidelines (i.e., federal and/or provincial) exist. Specifically, health care professionals noted that the following areas are not adequately articulated in the existing sets of guidelines: cognitive impairment, the role of medications affecting cognition, multiple diagnoses, and combinations of several problems or a minor nature:

“... you can judge it by a single event, and the single event you look at is seizure frequency -- it's not that difficult to draw up regulations. I think with mild cognitive impairment it becomes more difficult. And with some other areas of physical function, for instance vision, there are quite clear rules about complete visual field defects or complete loss of vision. But if you take a typical older person, there might be milder degrees of visual deterioration, combined with subtle impairments in concentration, combined with slower reaction times. All in someone who is not cognitively impaired but is nevertheless processing at a somewhat slower speed just because of their age. So they don't meet criteria for cognitive impairment, but in fact processing speed is slower, and they have other multiple physical factors which may slow their reaction times. The complete picture could in fact constitute a hazard for driving ... And the guidelines may be much more difficult to draw up given that it's not an episodic disorder where you can specify seizure-free incidents, time, or control of heart symptoms and so on. You're dealing with more subtle variables. So if there was a greater degree of uniformity -- and I think if there was something which was legislated and administered in an arm's length way, where we could say, "We're not doing this out of any -- it's not me as a doctor who's saying you're not allowed to drive. Basically it's constitution -- it's mandatory, it's mandated by law. That this type of testing is appropriate, and it appears that you may not reach the criteria, or that you do require further testing." And I think it needs to be determined, first of all, what the appropriate guidelines are.”

Of concern to all health care professionals was the effect the fitness-to-drive evaluations can have on the practitioner-patient relationship. If the a problem is reported on the fitness-to-drive evaluation form, the source of the information is stated on the follow-up letter to the older adult. Even though the practitioner was acting on the best interest of the older adult, the older adult may become very upset and no longer see their physician. Although most practitioners accept this and try to communicate their position effectively to the older adult, it was suggested that either this information be kept confidential or that these evaluations be conducted by a third party.

“And the downside of it might be that people are angry with you for pointing out the obvious ... And possibly that assessment could be by someone other than the family doctor. Whereas you don't really want to have people's doctor-patient relationship suffer over an area of conflict.”

Of concern to the seniors was the cost of having the fitness-to-drive evaluation form completed. Many seniors were unclear as to why the completion of this form should be viewed differently from other aspects of their health care for which no charge is levied. Since they were seeing their own family physician, who is fully aware of their medical status, some seniors viewed this as an unnecessary doubling of costs. However, of particular concern was the variation in the price of completing the form among physicians. Apparently the cost varies from \$50.00 to \$100.00 in the local area. There was some concern that some seniors may not be able to afford these costs.

“But it seems to vary with doctors. I hear the remarks. Some people say that it cost them 40, some 55, some 70. Some doctors throw it in every year with their checkup.”

V. HOW IMPORTANT AN ISSUE IS DRIVING TO OLDER ADULTS?

The seniors and the health care professionals indicated that being able to drive is very important to most older adults as this allows them to maintain their independence and mobility. Not being able to drive has significant consequences for the older adult as they may not be able to get to public transportation. Moreover, the loss of the license tends to be equated with a loss of ability to live independently and care for oneself. The loss of a license may require a move (i.e., to a new location) or may result in withdrawal from services (e.g., no longer attend physician). Both seniors and health care professionals indicated that people may also withdraw socially if they do not have the means to get around. However, it was also noted by seniors that many older

adults choose to give up their cars and are pleased with the result. A number of the respondents, both seniors and health care professionals, indicated that there are alternatives to driving if the ultimate goal is mobility and that perhaps it is the attitude toward driving that needs to change. As two health care professionals note:

"I mean it really cramps them, their style, for this -- especially if you've got two elderly -- one isn't driving anymore, and that person is the driver for both of them. And suddenly they can't do these things ... You know, people say, "Well, there's the bus." Well, that's all fine and dandy, but if the bus means you've got to walk two blocks up a hill, you might not be able to do that. And then you've got to have friends come and drive you, or take a taxi. Well, maybe you can't afford a taxi."

"It means a lot to seniors right now. But I would think that perhaps the younger generation could be led to be less invested in their driving. Especially if it's somehow seen to be environmentally cool not to be a driver all your life. If taking cabs became OK. I mean many seniors believe that cabs are never a possibility because it's too expensive, when they insure cars and fill them full of gas and keep them sitting in paid parking garages and only use them once a month. But our society's economically and culturally addicted to cars, and I think it's to the detriment of our cities and our planet. And hopefully we can come up with some ways around that to some extent other than just electric cars."

It was also noted by a health care professional that some older adults who do not drive wish to maintain their driver's license for identification purposes. Requiring a fitness-to-drive evaluation for these persons would not appear warranted.

VI. HOW COULD THE PROCEDURE BE IMPROVED? WHAT WOULD YOU RECOMMEND TO IMPROVE DRIVING CONDITIONS FOR OLDER ADULTS?

The respondents indicated that there are a variety of other methods for addressing fitness-to-drive that could be used in conjunction with or as alternatives to the present procedure. These responses generally fell into 4 categories: education, road engineering, reporting mechanisms, and access to alternative modes of transportation.

The need for education concerning fitness-to-drive issues arose both in the context of seniors and physicians. Both the seniors and health care professionals noted that a system that allows the person being re-examined an opportunity to demonstrate their fitness-to-drive would be an improvement over the current system. It was acknowledged that on-road driving assessment for all persons at or over a certain age appear impractical but that a system that allows seniors to obtain reasonably priced driver education would be useful. A number of the older adult respondents indicated that they have taken such courses and benefited from them. It was suggested that course content be both theoretical and practical with the opportunity for on-road experience. Some suggested that offering these courses through Seniors Centres would improve accessibility. Others noted that driving schools and some other organizations (i.e., 55 Alive) presently offer such courses, although the prices and quality varies. It was felt that this education could be made mandatory or could be non-mandatory and result in savings or a rebate on automobile insurance rates. As two seniors noted:

“I think perhaps if they made it mandatory, a defensive driving test, for people at a certain age. Because I took it when I was in my thirties, and I was amazed at how little I knew. And it really made me very alert to a lot of things. Because you get -- as you get older, you get busier, and you don't really -- probably not as careful about measuring distance and things like this as you should be. But I think the defensive driving test -- my husband got me doing that, because certain members of the forces -- he was in the Navy -- and he had to do it, and he said, "You'll find it very, very helpful." And I did. It made me very much aware that I was lacking in a lot of things which I should have been aware of.”

“But I think the mandatory defensive driving -- they could just send a notice out to people at the age of, say, perhaps 65, 70. After this that perhaps you should -- to hold a license you should be required to take a defensive driving course, or else read the book -- they have a very good book, the Motor Vehicle have -- I got that the other day. Telling you all the things -- a lot of things that us older drivers who learned to drive, probably from a member of the family, many, many years ago -- don't learn. Whereas if you go to a driving school now, as we like our grandchildren to do, it's a different course altogether.”

A health care professional made similar observations:

“So I think that a sort of non-mandatory thing where a patient can submit themselves -- ... I think patients and people generally have a fear of arbitrary

authority taking their license away just like that. And a process which doesn't in fact involve them face-to-face with the licensing authority, but has them going through a process of assessment which is not -- which they see as perhaps not resulting in instantaneous loss of license, but giving them perhaps the ability to improve their driving skills, or being -- I think they want fairness. I think what people want essentially is to feel that they are going to be dealt with in a fair, equitable way in which there will be some redress, or their voice will be heard. If they say, "Well, but I can do this better," or, "I want to try it again," or, "Maybe get off these pills and see if I can pass -- if I can concentrate better." I think they would be much more comfortable with that. And I think the fear of people is that once you've lost your license, that's it."

Respondents noted that a non-mandatory self-assessment process may alert people of factors that may affect driving (e.g., medical conditions, vision problems) and provide suggested actions people could take. Many older adults are already preparing for the driving evaluations and providing everyone with the same information and opportunity may be another way to facilitate individual involvement in the re-evaluation process. Two health care professionals noted:

"Well, why not send people a survey, and say, "Is there any reason you can't shoulder check, or use your mirrors? Is there any reason you" -- and it would be fairly easy for people to do some sort of visual screens...the only way that I know in the office if a person has had a blackout or a seizure or loss of consciousness, is that people tell me. We could survey them about that, and just let them know that the law says if you knowingly have something like this, then you should not be driving until your condition has been stable for six months and the doctor says you're fine. So I think those kinds of reminders would help all the reasonable people. And that kind of survey would help with everyone reasonable no matter what age."

"...these people know that they're getting close to the time where they're going to be called in to get their driver's license checked by the family physician. And it's kind of like studying up for a test. They want to come in to make sure their vision meets the requirement first...So I think the feeling of some flexibility in the system."

Health care professionals noted that physicians, and other health care providers, could do more to provide information to their patients about driving issues:

"So people have reasonable choices to make which will allow them to become independent of the car. It's only when it happens suddenly. I think people who are planning ahead can easily learn how to manage without a vehicle, and it's not such a big blow. So in a sense, maybe public education around the issue of the need to consider the fact that you may not be able to drive when you get older

would be an important point. And a lot of people do consider that anyway...Well, the thing about public education is that doctors have a role in public health in the sense of dealing one-and-one with their patients. We need to advise on things like nutrition, good health issues. And with increasingly older patients, issues of maintaining independence often do come up in discussion. So absolutely, doctors should be saying, "Look, you know, you must realize that in the next ten years or so you may find it increasingly difficult to live in your single-family dwelling which is out in the country and which requires you to have a driver's license." So for physicians, you're very well placed to raise the issue of review of the need to consider the possibility they won't be able to drive. And I think yeah, doctors are in a good position to discuss that with people."

"Mak[e] driving safety a discussion point in any kind of health problem where the health problem might affect driving."

Health care professionals and seniors noted that ensuring that road conditions facilitate safe driving is something that will be of benefit to all drivers, not just seniors:

"I think I'd like to say that we probably should be working to make all the roads as safe as possible"

"Make their signs a little bit more clearly! ... I think they have very poor signs and directions. I may wear glasses and I can see the signs, but I still think they're too small, or -- and some of the big signs are too confusing, as far as I'm concerned...They don't know where they're going. They're afraid and they'll slow down and they're looking, trying to find the sign, and everything like this. This does -- the main thing, the most important thing, is to keep the traffic moving. Then you'll have less accidents."

Respondents also noted that mechanisms allowing for the report of unsafe drivers by health care professionals or others may adequately capture persons who are a hazard on the road, regardless of the age of the driver. It was noted by health care professionals that a variety of procedures could be used to identify persons for further evaluation:

"But if there are concerns because of reports of others, or accidents, or medical visits -- using some data from hospital, if there's a discharge diagnosis from the hospital of anything that needs to be concerned about ... perhaps those are the people we should be targeting... But I'd also like to have some sort of -- if there are concerns, some sort of report from either a spouse or a relative or someone else saying that they -- if there's any question or concern, asking for them to support that person. And if they don't support that person, then maybe we should be evaluating further... families do have an influence. And people think twice about things if their family members don't want to drive with them anymore. And

if that's not the case, then we should be looking at it. Most people don't know that they can call the Motor Vehicle Branch and say, "I have concerns about this person's driving." I think people should know that... it should be for anybody. I think anybody should be able to express concerns. And I think that they should be willing to swear and sign something saying that they're doing this with absence of malice, and no biases, and only out of care for that person, and have some sort of way of demonstrating that, I suppose. Or concern for public safety. And as long as people do make that report with an absence of malice, then I think it should be OK. And if people are found later to have -- done it in a malicious way, then I think there should be some kind of punishment. I think that would discourage people from misusing the system."

Respondents also noted that there is a need to improve the types and access to alternative modes of transportation. If easily accessible, affordable, convenient transportation was available, more seniors may voluntarily reduce their need for a motor vehicle. Available alternatives included taxis, buses, scooters, and volunteers drivers. It is important to understand the factors that influence the use of alternative modes of transportation beyond cost, accessibility, and convenience when developing new modes of transport. For example, it is often noted that taxis are too expensive an alternative to maintaining a private automobile. Yet, often the cost is, in fact, less, but other attitudinal factors appear to influence choices. There were special issues identified concerning the use of alternative transportation after dark by seniors:

"Oh, it's [night-time travel] a big problem, yes. That's where if you have a car, you really don't have that much of a worry. But you have to take it careful anyway. But if you have to move around on foot or something of that nature, then you have to be really careful, and you have to take it as it comes."

"Years ago there was a smaller bus that went around XXX, and some of the different outlying areas -- because there's a lot of people, older people, that live out in these areas... But I think if they had some type of small bus that would go at certain times, people would know -- I mean if it goes at one o'clock, you make your appointment for two o'clock or something....I think the service that we were talking about, which was in existence here for a while, was along the lines -- instead of a bus running around empty all the time, if it was needed, they'd phone and say it was needed. But that's -- it's probably less expensive than running an empty bus around."

Health care professionals, too, raised the issue of alternative modes of transportation:

“The main thing I wanted to say is that alternative methods of transportation have to be encouraged. Especially in seniors' communities and other communities where the population is very dense and cars are more -- cause more traffic and more pollution and more problems than they're worth. Many people who don't drive very much still want to keep their car and their license and their insurance, even though it financially doesn't make sense, and other transportations could give people just as much independence and for less cost. And freedom... I would think that you should be able to design our cities for people to get around quickly and efficiently, without so many cars on the road. Buses, streetcars, cabs. Alternative methods of transportation such as that should be somehow made more popular and more accessible. This odd preoccupation we have with needing to drive to be free and independent, that idea needs to go.”

VII. SUMMARY

It was clear from our interactions with the seniors and health care professionals that there was general agreement that driving is an important issue for older adults and there was general appreciation of the need for driver re-evaluation. However, less clear was whether age was the criteria of choice. Seniors clearly noted that they felt age had very little to do with identifying problem drivers. Others felt that the age at which re-evaluation should be pursued should be lowered. Most respondents, seniors and health care professionals, acknowledged that age is used as a means for identifying persons at high risk for medical conditions. Some health care professionals felt this was warranted; others did not. Specifically, both seniors and health care professionals noted that the medical evaluations of fitness-to-drive lack reliability, especially since some physicians seem unaware of presently available guidelines. Specific areas where the existing guidelines lack clarity were identified by the health care professionals: cognitive impairment, role of medications affecting cognition, multiple diagnoses. Seniors expressed concern over the variability in the cost of these assessments. Health care professionals expressed concern about the effect that fitness-to-drive evaluations can have on patient-practitioner relationships.

Various suggestions were offered as to how the present procedures may be improved. For example, a more elder-friendly approach to on-road driving assessment perhaps could be provided through third parties such as driving schools. In addition, it was suggested that non-mandatory self-appraisals could be used as adjuncts to the present procedures, and that physicians be encouraged to make driving safety a discussion point for any kind of health problem that might affect driving regardless of age. Finally, the need for accessible, affordable, convenient alternative forms of transportation was raised to meet the needs of older persons who no longer drive. However, it was noted that a more general shift in attitudes toward driving and the use of alternative modes of transportation may need to occur before such transportation becomes generally available and utilized.

PART SIX: SUMMARY AND RECOMMENDATIONS

I. OVERVIEW

The current standards of testing fitness-to-drive specified in provincial legislation, literature reviews on factors affecting driving, and consultations concerning the adequacy of the present age-based criteria (i.e., focus groups and individual interviews) were summarized as a consultation paper (see Appendix 2). Canadian researchers in the field of driving assessment and persons involved in fitness-to-drive assessments or licensing in two provinces (British Columbia and Alberta) were provided with this consultation paper and interviewed concerning its content. In addition to being asked to identify gaps in the consultation paper, each of the expert consultants was questions concerning 1) the importance of fitness-to drive re-evaluations 2) the adequacy of the present procedure in their jurisdiction (i.e., age-based) for identifying

problem drivers; 3) other factors influencing driving performance; 4) identified alternative approaches to the identification of high-risk drivers; 5) barriers that would be expected to affect the implementation of other possible options to replace or modify the law's use of age as a marker for re-evaluation of fitness to drive; and, 6) the perceived impact of making changes to the current fitness-to-drive laws and government policies. The questions presented to these expert consultants are shown in Appendix 3. Four researchers in Alberta and British Columbia and three Motor Vehicle Branch representatives in British Columbia and Alberta took part in this consultation process. In this section, we have incorporated the comments and concerns of the expert consultants into our summary and recommendations.

II. SUMMARY

The aging of the Canadian population is transforming the demographics of the driving population. In 1996, about one-half of seniors living in private households (1.7 million) were driving a vehicle (i.e., car, mini-van or light truck). It is anticipated that the number of seniors living in Canada will increase exponentially, reaching 23% by 2041.¹⁶³ Taking this demographic growth into account, the number of older drivers is expected to more than double over the next few decades.¹⁶⁴ Drivers over the age of 80 years are the fastest growing segment of the driving population in Canada.¹⁶⁵ These observations underlie the need to examine the subject of fitness to drive in older adults.

Studies of crash rates indicate that persons age 65 and older are relatively safe drivers. For example, in British Columbia, older drivers comprise 13% of the total driver population but are

¹⁶³ *Supra* note 1.

¹⁶⁴ *Supra* note 2.

¹⁶⁵ ICBC, *supra* note 3.

responsible for only 9.2% of the accidents and fatal collisions. However, other research indicates that it is the oldest drivers (over 80 years) who pose a greater risk to themselves and the public and it has been noted that, when crash rates are adjusted for miles driven, the motor vehicle crash morbidity and mortality rates for older drivers are similar to the high rates of young adults.

It is unclear from the existing literature whether the abilities of older drivers are compromised because of age itself, or because the age-associated risk of having one or more medical conditions can affect driving. It is clear that the presence of many medical conditions that are associated with increased crash involvement occur more frequently with advancing age (e.g., diabetes, cardiovascular disease).

This information, coupled with changing demographics of Canadian society, highlights the need for a review of the current laws regulating fitness to drive in the context of age. Although licensing of commercial vehicles in many provinces contains age-specific triggers for re-evaluation, only a restricted class of drivers is affected and there tends to be more consistency across jurisdictions. We have therefore focused our review on the driver of the passenger vehicle as most drivers fall into this class and it is here where jurisdictions differ most in the use of age, and older ages in particular, to trigger some form of driver re-evaluation.

III. RESEARCH FINDINGS

The review of laws inside provincial and territorial boundaries discloses considerable variation in how age is used in the passenger vehicle licensing process. Some provinces have made efforts to incorporate the National Safety Code standards recommended by the Canadian Council of Motor Vehicle Transport Administrators, which state that medical reports be filed for passenger vehicles at age 76 and 80, and every two years thereafter. However, the efforts have not been uniform, and the result is that some provinces impose testing for personal vehicle licensing up to ten years before others. For example, Quebec requires medical certificates at age 70, Alberta at age 75 and 80, Newfoundland, the Northwest Territories and Nunavut at age 75, 80 and every two years thereafter, the Yukon at age 75, B.C. at age 80, and Ontario at age 80 and every two years thereafter. Saskatchewan, Manitoba, New Brunswick, P.E.I., on the other hand, have no apparent age related testing requirements for passenger vehicles.

The underlying philosophy of the laws imposing testing at age 70 and beyond can be fairly described as one focussed on primary aging considerations only. In particular, such testing is triggered by age alone. It is not triggered by specific medical conditions of the licensee, or by the licensee's actual ability (or inability) to drive. There is no question that a number of medical conditions may have an impact upon the ability of an individual to drive. It appears that one of the major reasons for using age to trigger re-evaluations is that older drivers may be at increased risk for medical conditions that may compromise their ability to operate motor vehicles safely. While our review of the literature supports this position, it is easy to erroneously conclude that there is widespread, gradual age-related deterioration in driving skills when only a few debilitated older adults pose a significant risk to other motorists. Reviews of the literature, in fact, show that little data support the assumption that older drivers are, per se, unsafe drivers.

That is, it is unclear that the effects of age alone (i.e., primary aging) adversely impact on driving performance.

To the extent that the age-related testing laws are based on arbitrary distinctions of age alone, they appear discriminatory. Such discrimination may contravene the human rights legislation of some provinces, as well as the right to equality under section 15 of the *Canadian Charter of Rights and Freedoms*. More importantly, as more drivers reach the determinative ages of 70, 75 or 80, it can be expected that the laws will come under increasing criticism. Already seniors and health care professionals are questioning the use of age, per se, as a triggering mechanism. The need for re-evaluation is generally accepted and, seniors in particular, do not question the need for ways to identify problem drivers. However, the fact that medical evaluations seem only to be triggered by age, except in obvious situations (e.g., epilepsy), rather than medical conditions at all ages was worrisome to both seniors and health care professionals. It is anticipated that pressure will develop for governments to change the laws.

The need for testing and retesting of driving abilities is obvious. In considering the unfairness of the laws requiring evaluations at an arbitrary age, it is recommended that alternate methods of triggering the testing be considered. The following discussion explores some of the methods that might be considered. It is not intended to be comprehensive, and further study will be needed to determine what will work best for all stakeholders, including the licensing authorities, the health care profession, the licensees and others who may become involved in the testing process. To the extent that provinces have different testing requirements now, the need to focus on individual provinces will be a necessary component of such further studies.

IV. ALTERNATIVE METHODS

A. Periodic Medical Evaluations

As has been noted, Standard 6 of the NSC recommends that medical reports be filed on a periodic basis for both commercial and passenger vehicle licenses. The standard is justified by the NSC on the grounds that it ensures that any physiologic changes accompanying the aging process are identified. This justification is sound, but for reasons already identified, the age chosen for passenger vehicle testing (age 76 and 80) appears arbitrary.

It is possible to avoid the perception of unfairness, and the apparent legal flaw, in choosing specific ages for passenger vehicle testing by adopting age-related requirements similar to those specified for commercial vehicles. These, it will be recalled, directed that medical reports be filed upon application, every five years to age 45, thereafter every three years to age 65, and annually thereafter. While it may not be necessary to test as frequently for passenger vehicle licenses, the concept has the advantage of treating all licensees equally at all stages of the driving life. For example, medical reports might be required upon application, every five years to age 70 and every three years thereafter.

The concept of periodic and universal medical testing is not without difficulties. First, a decision must be made about who will perform the testing and who will bear the cost of it. There is some merit in appointing medical professionals as agents of the licensing authority, for it is arguable that standards of testing could then be better controlled. This could, however, be a substantial additional cost to the budget of the licensing authority. If it is to be the licensee's own physician, as is now the case in British Columbia, clearer guidance would be necessary with

respect to the procedures to be followed and tests to be administered. (This is discussed in more depth in the next category.)

Another difficulty is the increased administration costs in reviewing the medical reports filed, assuming that they need to be reviewed on an individual basis. It may be possible to standardize the reports to some degree, allowing for a review to be triggered only if certain conditions are disclosed.

An alternate method of periodic reporting might also be considered to deal with these difficulties. For example, a licensee might be required to personally complete a standardized certificate of medical fitness upon each renewal of a license. The certificate would comprehensively list medical conditions that might affect driving abilities, and where identified, such conditions would trigger the additional requirement for a medical report.

Insofar as medical conditions alone do not necessarily establish that a licensee is no longer qualified to operate a vehicle, another method of periodic testing might be to require a licensee to provide a certificate of driving competency from an accredited private organization whenever a license is renewed. This option shifts the burden of testing from the licensing authority to the private sector, but would no doubt come with an increase to the cost already borne by licensees. Such certification could be required in conjunction with the certificate of medical fitness mentioned above.

B. Greater Specificity in Medical Requirements

Some provinces and territories provide detailed lists of medical conditions that may affect driving and, on the basis of levels of impairment, indicate the likely relation to licensing. For

example, the regulations of the Quebec Highway Safety Code specify the disorders, level of severity of the disorder, and how consistent the presence of this disorder would be with maintaining a driver's license:

Hypertension where diastolic pressure exceeds 130 mm of mercury is essentially inconsistent with driving a road vehicle.¹⁶⁶

Regulations of this type provide more specific direction for persons in the role of evaluating medical fitness to drive than is available in most provinces and territories. The adoption of this approach has the advantage of placing the decision as to the possible impact of the identified disorders on driving within the regulations (i.e., the law) rather than relying on health care professionals, who may or may not be very familiar with the disorder in question, in making these judgments. Currently, the available guidelines for professionals (the NSC mentioned above, and the Canadian Medical Association Guide, both discussed in Part 2) provide similar types of information but the onus is left to the practitioner to make the judgment concerning fitness-to-drive and it is unknown to what extent these guidelines are consulted and applied.

However, it is clear from our research that practitioners feel uncomfortable making judgments concerning fitness-to-drive for a variety of reasons¹⁶⁷. First, medical practitioners are trained to identify medical conditions but not necessarily to consider the broader impact that those conditions may have on the performance of everyday activities such as driving performance. Moreover, given that driving is a complex task that involves a combination factors including sensory and motor skills, understanding of particular rules and conventions, and strategic planning, some individuals may be better able to compensate for loss in some areas of functioning than others. Except in the most obvious cases (e.g., blindness), it may be extremely

¹⁶⁶ *Highway Safety Code*, R.S.Q., 1986, c. C-24.2, s 619

¹⁶⁷ S.C. Marshall & N. Gilbert, "Saskatchewan physicians' attitudes and knowledge regarding assessment of medical fitness to drive", (1999) 160 *Canadian Medical Association Journal* 1701-1704.

unrealistic to expect a practitioner in her/his office to be able to accurately judge whether or not a person is fit-to-drive. In addition, some medical practitioners worry about the impact that making a negative fitness-to-drive appraisal may have on their ongoing practitioner-patient relationship. They may not know how to broach the topic or they may be unsure about the implications of their assessment (e.g., financial, emotional, need for additional assessment) for the older adult. If the role of the medical practitioner was limited to the identification of clearly delineated medical conditions, without the need for subjective interpretation as to the influence of this condition on driving, this may alleviate some of their discomfort. The impact of the condition on driving could be evaluated elsewhere.

Clear criteria for identifying medical conditions likely to affect driving, applied in a standardized and uniform fashion for people of all ages, is an approach that appears to hold merit. The identification of prescribed medical conditions likely to affect driving could then trigger further evaluation (e.g., visual, motor, psychological) or a report to the licensing authority depending on the nature (e.g., severity) of the condition. Such a targeted approach would limit the number of assessments to only those identified, as opposed to all persons of a particular age, and focus on those at greatest risk. The availability of detailed criteria for identifying conditions likely to affect driving may also facilitate making a discussion of the effects of identified medical conditions on driving part of standard medical practice regardless of age.

C. Reporting Requirements

The importance of reporting medical conditions has been recognized in the statutes of most provinces, in provisions requiring health care professionals to report conditions that might make it dangerous or unsafe to drive. The difficulties with these provisions were discussed in Part 2, and include the subjective nature of the reporting requirement, along with a lack of adequate

guidance about how the health care professional can assess which conditions may affect driving.

Despite these difficulties, the need for information about medical conditions of licensees is obvious, and health care professionals can expect to continue to be involved in the process. That being said, it is important to provide such professionals with more direction on what conditions must be reported and when. Helpful as the CMA Guide and the NSC may be, it is questionable whether they are sufficiently disseminated or understood. A broad education initiative coupled with clearly defined parameters for reporting (such as detailed medical conditions as noted above) is recommended that may include not only physicians but other health care professionals. Indeed, it was noted that community health workers who often go into the homes and have close contact with clients over a long period of time may be in a better position than physicians to assess the situation around driving. This would have the added benefit of clearly informing all health care professionals of the legal duty to identify and report conditions of licensees. This legal duty takes precedent over any ethical or professional duty of patient confidentiality, and professionals may also need assistance in developing policies and procedures to explain their concerns to patients who may be hostile to admitting any adverse medical conditions.

As was noted in Part 4, failure to report adverse conditions can result in contributory liability attaching to the health care professionals for damages resulting from injuries sustained in collisions caused by the condition. Whether such liability would attach where the health care professional failed to identify the condition is unknown, but it is certainly a possibility.

Other sources of information should not be overlooked. Family and friends of licensees may be more likely than a health care professional to recognize, and at an earlier stage, any

deterioration in driving abilities. Law enforcement community can also contribute to the identification of high-risk older drivers¹⁶⁸ at the location of an accident or when investigating a traffic violation. In some communities, a neighborhood watch approach is used to identify dangerous drivers. If alternative reporting mechanisms are to be effective, educational programs providing information about what to look for, how to report, and alternatives to driving would be required and specifically designed for each group. Having these alternative reporting mechanisms in place may address concerns about individuals who do not have regular access to health care professionals or for whom driving difficulties are related to factors other than those identified by health care professionals. A procedure to allow for reporting of problems by such persons should be considered, or if one is already in place, better publicity of that procedure should be undertaken. In either case, however, clear guidelines would be needed to ensure that reports are not maliciously made, that the licensee have the opportunity to refute any allegations made (e.g., driver control board), and that persons reporting are provided with contact information should they require support and assistance during the de-licensing process.

D. Other Triggers

It will be recalled that Ontario and P.E.I. have regulations requiring re-examination or re-qualification of licensees who reach a certain age and have been involved in an accident. While the age-related requirement may not be justified, the concept of testing driving abilities after a licensee has been involved in one or more accidents bears some consideration. A determination of fault would likely be needed before such accidents were considered an appropriate trigger for re-testing. However, where a licensee is found to have caused or contributed to a number of accidents, or has committed specific types of violations, it is fair to

¹⁶⁸ National Highway and Traffic Safety Administration. (n.d.) Cues for law enforcement. Retrieved 18 July 2001, from <http://www.nhtsa.dot.gov/people/injury/olddrive/lawcues.html>.

assume that he or she may not have the ability to drive safely. Guidelines could be developed to ensure that the testing was justified.

V. CONCLUSION

It is apparent that the evaluation of fitness to drive is complicated. It is not sufficient to establish that an applicant for a license has the ability to drive (knowledge of driving rules and driving skills). It is also necessary to ensure that the health of an applicant will not adversely affect those abilities, to an extent that would make it unsafe for the applicant and others on the road if the applicant were to be granted a license. To the extent that the health of an applicant is affected by his or her age, the use of a mechanism to re-evaluate a driver at specific ages may be justified. This study suggests, however, that to use age alone as an evaluation marker is not justified on existing medical or legal evidence. A more thoughtful approach is to recognize that age may (but not necessarily will) bring with it medical conditions that affect driving ability, and to explore how best to test those medical conditions in a non-discriminatory and effective, or fair and accurate, manner. Above, we provided some suggestions for such testing methods. It is unlikely than any one of these approaches will be sufficient to address this complex issue. Instead, a multifaceted approach targeted toward identifying persons at increased risk for driving difficulties may yield the best results.

A number of inter-related issues need to be considered in finding ways to pursue this goal. The first is the need for education about driver re-evaluation for all persons involved. Public education is needed to focus attention on the medical conditions that may have a serious impact on driving performance at all ages. Knowing what these conditions are, how driving performance may be affected, and how steps can to taken to ensure safe driving may allow

individuals and their families and friends to begin addressing concerns. Individuals may seek assistance in managing the condition (e.g., consult a physician or optometrist), may self-restrict their driving (e.g., drive only during day light hours), may seek opportunities for improvement (e.g., enroll in driver education classes), or may seek out alternative modes of transportation. Families and friends may be better able to support aging drivers in maintaining or relinquishing driver's licenses. Education for health care professionals in how to identify medical conditions that may affect driving, how to discuss driving issues with patients, and the necessary steps to be taken when there is a concern (i.e., policy and procedures) may support them in providing appropriate patient care.

The second issue identified in the pursuit of a fair and accurate assessment procedure is the need for additional research to support policy decisions. This research may focus on the development of efficient, effective screening tools for use in the identification of high risk drivers, methods for providing in depth driving assessment of those thought to be at high risk, and convenient, accessible, affordable alternative modes of transportation for persons no longer able to drive. Although a variety of alternative modes of transportation are available in some areas (e.g., buses, light rapid transit, taxi, volunteers drivers), they do not necessarily meet the needs of older adults. Research into how best to meet the needs of older adults in various situations (e.g., rural vs. urban, commuting between locations) is needed to ensure that appropriate services or environmental supports are provided.

A third issue relevant to the discussion is the need to look for factors external to the individual that could influence driving performance. For example, it is known that collisions often occur in the context of a left-hand turn. Improving traffic control around left-hand turns, improving signage and lighting, improving road conditions, and improving automobile design (e.g., fewer distractions on the dashboard), may be of particular benefit to the older driver.

Finally is the issue of cost for the implementation of criteria other than age to trigger re-evaluation. On the one hand, it was noted that, at present, only a very small percentage of high risk older drivers are being identified and that using other criteria would likely increase the number of people being identified. This was viewed as increasing the costs to a system already struggling. The additional manpower and human resources required, educational programming, and needed research all contribute to the increased cost. Given this increase in cost in a time of budget restraint, cost sharing (i.e., public funds, insurance companies, individual) and the need for private sector involvement may be worthy of consideration. The cost for the medical evaluations presently done (\$50-\$100) is of concern to some older adults and health care professionals and it is likely that this cost would increase if more sensitive and specific assessment tools were developed. However, it may be that taking at-risk drivers (of any age) off the road may result in cost savings of sufficient magnitude to warrant implementation of these alternative procedures.

Examining the use of age as a criterion for fitness-to-drive re-evaluations has raised a number of issues for consideration. In moving toward changes in current policies and/or procedures, it is clear that broad education and focused research will be central elements. It will be necessary to vigilantly examine for unintended, as well as the intended, consequences of changes made. The issues identified in this document are not intended to be exhaustive, but to generate further discussion and study.

APPENDIX 1 PROVINCIAL AGE-BASED CRITERIA

Province	Type of license	Age triggering testing
British Columbia	personal	80 and every two years thereafter
Alberta	professional	45 and every two years until 65 and annually thereafter
	personal	75 and 80
Ontario	professional	Every five years until age 65 and annually thereafter
	personal	80 and every two years thereafter
Quebec	personal	70
New Brunswick	professional	Every four years until 45, and every two years thereafter for tractor trailers and buses; every two years after 65 for 3 axled or towing vehicles
Nova Scotia	professional	Every five years until 64 and annually thereafter BUT no one over 65 to drive a bus
Newfoundland	professional	Every five years until 45, every three years until 65 and annually thereafter
	personal	75, 80 and every two years thereafter
Yukon	professional	45 and annually thereafter
	personal	75
Northwest Territories	professional	Every five years until 45, every three years until 65 and annually thereafter
	personal	75, 80 and every two years thereafter`
Nunavut	professional	Every five years until 45, every three years until 65 and annually thereafter
	personal	75, 80 and every two years thereafter`

APPENDIX 2

CONSULTATION PAPER

I. Introduction

The aging of the Canadian population is transforming the demographics of the driving population. In 1996, about one-half of seniors living in private households (1.7 million) were driving a vehicle (i.e., car, mini-van or light truck). It is anticipated that the number of seniors living in Canada will increase exponentially, reaching 23% by 2041.¹⁶⁹ Taking this demographic growth into account, the number of older drivers is expected to more than double over the next few decades.¹⁷⁰ Drivers over the age of 80 years are the fastest growing segment of the driving population in Canada.¹⁷¹ These observations underlie the need to examine the subject of fitness to drive in older adults.

Studies of crash rates indicate that persons age 65 and older are relatively safe drivers. For example, in British Columbia, older drivers comprise 13% of the total driver population but are responsible for only 9.2% of the accidents and fatal collisions. However, other research indicates that it is the oldest drivers (over 80 years) who pose a greater risk to themselves and the public and it has been noted that, when crash rates are adjusted for miles driven, the motor vehicle crash morbidity and mortality rates for older drivers are similar to the high rates of young adults.

¹⁶⁹ Statistics Canada, *supra* note 1. <<http://www.statcan.ca/english/Pgdb/People/Population/demo23a.html> (date accessed: 10 December 2000).

¹⁷⁰ Bess, *supra* note 2.

¹⁷¹ ICBC, *supra* note 3.

It is unclear from the existing literature whether the abilities of older drivers are compromised because of age itself, or because the age-associated risk of having one or more medical conditions can affect driving. It is clear that the presence of many medical conditions that are associated with increased crash involvement occur more frequently with advancing age (e.g., diabetes, cardiovascular disease).

This information, coupled with changing demographics of Canadian society, highlights the need for a review of the current laws regulating fitness to drive in the context of age. Although licensing of commercial vehicles in many provinces contains age-specific triggers for re-evaluation, only a restricted class of drivers are affected and there tends to be more consistency across jurisdictions. We have therefore focused our review on the driver of the passenger vehicle as most drivers fall into this class and it is here where jurisdictions differ most in the use of age, and older ages in particular, to trigger some form of driver re-evaluation.

II. Research Findings

The review of laws inside provincial and territorial boundaries discloses considerable variation in how age is used in the licensing process. Some provinces have made efforts to incorporate the National Safety Code standards recommended by the Canadian Council of Motor Vehicle Transport Administrators, which state that medical reports be filed for passenger vehicles at age 76 and 80, and every two years thereafter. However, the efforts have not been uniform, and the result is that some provinces impose testing for personal vehicle licensing up to ten years before others. For example, Quebec requires medical certificates at age 70, Alberta at age 75 and 80, Newfoundland, the Northwest Territories and Nunavut at age 75, 80 and every two years thereafter, the Yukon at age 75, and Ontario at age 80 and every two years thereafter.

Saskatchewan, Manitoba, New Brunswick, P.E.I., on the other hand, have no apparent age related testing requirements.

The underlying philosophy of the laws imposing testing at age 70 and beyond can be fairly described as one focussed on primary aging considerations only. In particular, such testing is triggered by age alone. It is not triggered by specific medical conditions of the licensee, nor by the licensee's actual ability (or inability) to drive. There is no question that a number of medical conditions may have an impact upon the ability of an individual to drive. It appears that one of the major reasons for using age to trigger re-evaluations is that older drivers may be at increased risk for medical conditions that may compromise their ability to operate motor vehicles safely. While our review of the literature supports this position, it is easy to erroneously conclude that there is widespread, gradual age-related deterioration in driving skills when only a few debilitated older adults pose a significant risk to other motorists. Reviews of the literature, in fact, show that little data support the assumption that older drivers are, per se, unsafe drivers. That is, it is unclear that the effects of age alone (i.e., primary aging) adversely impact on driving performance.

To the extent that the age-related testing laws are based on arbitrary distinctions of age alone, they appear discriminatory. Such discrimination surely contravenes the right to equality under section 15 of the *Canadian Charter of Rights and Freedoms*. Whether a court would "save" the laws under the "reasonable limits" provisions of Section 1 of the *Charter* was discussed in Part 3, and it was concluded that at least some of the laws as currently drafted may well be fatally flawed and not saved by this provision. The successful invocation of Section 1 does not, however, justify the laws themselves. As more drivers reach the determinative ages of 70, 75 or 80, it can be expected that the laws will come under increasing criticism. Already seniors and health care professionals are questioning the use of age, per se, as a triggering mechanism.

The need for re-evaluation is generally accepted and, seniors in particular, do not question the need for ways to identify problem drivers. However, the fact that medical evaluations seem only to be triggered by age, except in obvious situations (e.g., epilepsy), rather than medical conditions at all ages was worrisome to both seniors and health care professionals. It is anticipated that pressure will develop for governments to change the laws.

The need for testing and retesting of driving abilities is obvious. In light of the conclusion that testing at ages arbitrarily designated (either in statutes, regulations or policies) is of questionable validity, it is recommended that alternate methods of triggering the testing be considered. The following discussion explores some of the methods which might be considered. It is not intended to be comprehensive, and further study will be needed to determine what will work best for all stakeholders, including the licensing authorities, the health care profession, the licensees and others who may become involved in the testing process. To the extent that provinces have different testing requirements now, the need to focus on individual provinces will be a necessary component of such further studies.

III. POSSIBLE SOLUTIONS

A. Periodic Testing

As has been noted, Standard 6 of the NSC recommends that medical reports be filed on a periodic basis for both commercial and passenger vehicle licenses. The standard is justified by the NSC on the grounds that it ensures that any physiologic changes accompanying the aging process are identified. This justification is sound, but for reasons already identified, the age chosen for passenger vehicle testing (age 76 and 80) appears arbitrary.

It is possible to avoid the perception of unfairness, and the apparent legal flaw, in choosing specific ages for passenger vehicle testing by adopting age-related requirements similar to those specified for commercial vehicles. These, it will be recalled, directed that medical reports be filed upon application, every five years to age 45, thereafter every three years to age 65, and annually thereafter. While it may not be necessary to test as frequently for passenger vehicle licenses, the concept has the advantage of treating all licensees equally at all stages of the driving life. For example, medical reports might be required upon application, every five years to age 70 and every three years thereafter.

The concept of periodic and universal medical testing is not without difficulties. First, a decision must be made about who will perform the testing and who will bear the cost of it. There is some merit in appointing medical professionals as agents of the licensing authority, for it is arguable that standards of testing could then be better controlled. This could, however, be a substantial additional cost to the budget of the licensing authority. If it is to be the licensee's own physician, as is now the case in British Columbia, clearer guidance would be necessary with respect to the procedures to be followed and tests to be administered. (This is discussed in more depth in the next category.)

Another difficulty is the increased administration costs in reviewing the medical reports filed, assuming that they need to be reviewed on an individual basis. It may be possible to standardize the reports to some degree, allowing for a review to be triggered only if certain conditions are disclosed.

An alternate method of periodic reporting might also be considered to deal with these difficulties. For example, a licensee might be required to personally complete a standardized certificate of medical fitness upon each renewal of a license. The certificate would comprehensively list

medical conditions that might affect driving abilities, and where identified, such conditions would trigger the additional requirement for a medical report.

Insofar as medical conditions alone do not necessarily establish that a licensee is no longer qualified to operate a vehicle, another method of periodic testing might be to require a licensee to provide a certificate of driving competency from an accredited private organization whenever a license is renewed. This option shifts the burden of testing from the licensing authority to the private sector, but would no doubt come with an increase to the cost already borne by licensees. Such certification could be required in conjunction with the certificate of medical fitness mentioned above.

B. Greater Specificity in Medical Requirements

Some provinces and territories provide detailed lists of medical conditions that may affect driving and, on the basis of levels of impairment, indicate the likely relation to licensing. For example, the regulations of the Quebec Highway Safety Code specify the disorders, level of severity of the disorder, and how consistent the presence of this disorder would be with maintaining a driver's license:

“Hypertension where diastolic pressure exceeds 130 mm of mercury is essentially inconsistent with driving a road vehicle”

Regulations of this type provide more specific direction for persons in the role of evaluating medical fitness to drive than is available in most provinces and territories. The adoption of this approach has the advantage of placing the decision as to the possible impact of the identified disorders on driving within the regulations (i.e., the law) rather than relying on health care professionals, who may or may not be very familiar with the disorder in question, in making

these judgments. Currently, the available guidelines for professionals (the NSC mentioned above, and the Canadian Medical Association Guide, both discussed in Part 2) provide similar types of information but the onus is left to the practitioner to make the judgement concerning fitness-to-drive and it is unknown to what extent these guidelines are consulted and applied.

Clear criteria for identifying medical conditions likely to affect driving, applied in a standardized and uniform fashion for people of all ages, is an approach that appears to hold merit. The identification of medical conditions likely to affect driving could then trigger further evaluation (e.g., visual, motor, psychological) or a report to the licensing authority depending on the nature (e.g., severity) of the condition. The availability of detailed criteria for identifying problems drivers may also facilitate making a discussion of the effects of identified medical conditions on driving part of standard medical practice regardless of age.

C. Reporting Requirements

The importance of reporting medical conditions has been recognized by the statutes of most provinces, in provisions requiring health care professionals to report conditions which might make it dangerous or unsafe to drive. The difficulty with these provisions were discussed in Part 2, and include the subjective nature of the reporting requirement, along with a lack of adequate guidance about how the health care professional can assess which conditions may affect driving.

Despite these difficulties, the need for information about medical conditions of licensees is obvious, and health care professionals can expect to continue to be involved in the process. That being said, it is important to provide such professionals with more direction on what conditions must be reported and when. Helpful as the CMA Guide and the NSC may be, it is

questionable whether they are sufficiently disseminated or understood. An education initiative coupled with clearly defined parameters for reporting (such as detailed medical conditions as noted above) is recommended. This would have the added benefit of clearly informing all health care professionals of the legal duty to identify and report conditions of licensees. This legal duty takes precedent over any ethical or professional duty of patient confidentiality, and professionals may also need assistance in developing policies and procedures to explain it to patients who may be hostile to admitting any adverse medical conditions.

As was noted in Part 4, failure to report adverse conditions can result in contributory liability attaching to the physicians for damages resulting from injuries sustained in collisions caused by the condition. Whether such liability would attach where the health care professional failed to identify the condition is unknown, but it is certainly a possibility.

Other sources of information should not be overlooked. Often, family and friends of licensees are more likely than a health care professional to recognize, and at an earlier stage, any deterioration in driving abilities. A procedure to allow for reporting of problems by such persons should be considered, or if one is already in place, better publicity of that procedure should be undertaken. In either case, however, clear guidelines would be needed to ensure that reports are not maliciously made, that the licensee have the opportunity to refute any allegations made, and that persons reporting are provided with contact information should they require support and assistance during the de-licensing process.

D. Other Triggers

It will be recalled that Ontario and P.E.I. have regulations requiring re-examination or re-qualification of licensees who reach a certain age and have been involved in an accident. While

the age-related requirement may not be justified, the concept of testing driving abilities after a licensee has been involved in one or more accidents bears some consideration. A determination of fault would likely be needed before such accidents were considered an appropriate trigger for re-testing. However, where a licensee is found to have caused or contributed to a number of accidents, it is fair to assume that he or she may not have the ability to drive safely. Guidelines could be developed to ensure that the testing was justified.

IV. CONCLUSION

It is apparent that the evaluation of fitness to drive is complicated. It is not sufficient to establish that an applicant for a license has the ability to drive (knowledge of driving rules and driving skills). It is also necessary to ensure that the health of an applicant will not adversely affect those abilities, to an extent that would make it unsafe for the applicant and others on the road if the applicant were to be granted a license. To the extent that the health of an applicant is affected by his or her age, the use of a mechanism to re-evaluate a driver at specific ages may be justified. This study suggests, however, that to use age alone as an evaluation marker is not justified on existing medical or legal evidence. A more thoughtful approach is to recognize that age may (but not necessarily will) bring with it medical conditions that affect driving ability, and to explore how best to test those medical conditions in a non-discriminatory and effective manner. The suggestions noted above for such testing methods are not intended to be exhaustive, but to generate further discussion and study.

APPENDIX 3

INTERVIEW QUESTIONS

(Key Consultants)

1. CURRENT POLICY

- From your perspective, how important an issue is driving re-evaluation?
 - (What are the benefits and drawbacks of fitness to drive re-evaluations?) Probe Question
- As you know, fitness-to-drive evaluations in some provinces in Canada are mandated on the basis of age. What are your thoughts and feelings around this approach?
 - (How adequate do you think re-evaluations based on age are for identifying problem drivers? How comfortable do you think assessors are in making an assessment as to whether a person is sufficiently impaired to present a hazard on the road? Why?) Probe Questions
- We have identified a number of factors influencing fitness-to-drive in our summary. Are there other factors that influence driving performance?
- We have identified some alternative approaches to the identification of high-risk drivers. What are your thoughts about these suggestions?
 - (Can you recommend alternative procedures for identifying high-risk drivers? Self-assessment of fitness-to-drive independent of official channels is an option available to persons in some areas. How do you feel about this option?) Probe Questions
- What would be the barriers to implementing these alternative procedures?
 - (Are there any barriers that people might face when going through the driving re-evaluation process? How might these be mitigated?) Probe Questions
- What impact might implementing these alternative procedures have on the licensing system? On society? On the individuals being re-evaluated?
- (What forms of alternative transportation are presently available? How adequate are they to meet the needs of those undergoing re-evaluation?) Probe Questions

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