



**Hemisphere Centre for Health & Wellness Inc.**

**Financial Projections**

Automobile Insurance Business Case - Comparative Analysis

	Data	Calculation	Current Underwriting Process			Underwriting with BrainScreen® Assessment		
			No Cognitive Impairment	Cognitive Impairment	Total	No Cognitive Impairment	Cognitive Impairment	Total
Applicants older than 65 (licensed drivers)	33,700,000	a						
Policies issued to drivers with dementia	2,775,000	b						
Proportion 65 or older	86%	c						
Policies issued to drivers >65 with dementia (rounded)	<u>2,390,000</u>	d = b x c						
Policies issued to drivers with CIND	3,928,000	e						
Proportion 65 or older	86%	f						
Policies issued to drivers >65 with CIND (rounded)	<u>3,380,000</u>	g = e x f						
BrainScreen® diagnosis error rate (false negative)	10%	h						
Policies issued			27,930,000	5,770,000	<b>33,700,000</b>	27,930,000	577,000	<b>28,507,000</b>
			i = a - d - g	j = d + g	k	l = a - d - g	m = h x j	n
Likelihood of involvement in a collision given knowledge of an applicant's cognitive health		o	6.2%	23.0%		6.2%	23.0%	
Expected number of drivers 65 or older making a claim for a collision			1,723,000	1,327,000	<b>3,050,000</b>	1,723,000	133,000	<b>1,856,000</b>
			p = i x o	q = j x o	r	s = l x o	t = m x o	u

**Comparative Analysis**

**Savings from reduction in benefit payments**

Annual reduction in number of claims	1,194,000	v = r - u
Average dollar value per claim	<u>20,000</u>	w
	<u>23,880,000,000</u>	x = v x w

**Loss of policy premiums on non-renewal of applicants with cognitive impairment**

Annual number of non-renewals using BrainScreen®	5,193,000	y = k - n
Average premium	<u>1,438</u>	z
	<u>7,467,534,000</u>	aa = y x z

**BrainScreen® assessment and related costs**

BrainScreen® user fee	25.00	bb
Other insurer administration costs	<u>25.00</u>	cc
	50.00	dd = bb + cc
Number of BrainScreen® assessments	33,700,000	ee = a
	<u>1,685,000,000</u>	ff = dd x ee

**Net savings for insurers** 14,727,466,000 **gg = x - aa - ff**