



	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)	3,250,000	a						
Policies issued to drivers with dementia	306,000	b						
Proportion 65 or older	86%	c						
Policies issued to drivers >65 with dementia (rounded)	260,000	d = b x c						
Policies issued to drivers with CIND	612,000	e						
Proportion 65 or older	86%	f						
Policies issued to drivers >65 with CIND (rounded)	530,000	g = e x f						
BrainScreen® diagnosis error rate (false negative)	10%	h						
Policies issued			2,460,000	790,000	3,250,000	2,460,000	79,000	2,539,000
			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	5.5%	23.0%		5.5%	23.0%	
Expected number of drivers 65 or older making a claim for a collision			135,000	182,000	317,000	135,000	18,000	153,000
			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	164,000	v = r - u
Average dollar value per claim	10,000	w
	1,640,000,000	x = v x w

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

Annual number of non-renewals using BrainScreen®	711,000	y = k - n
Average premium	1,200	z
	853,200,000	aa = y x z

**BrainScreen® assessment and related costs**

BrainScreen® user fee	25.00	bb
Other insurer administration costs	25.00	cc
	50.00	dd = bb + cc
Number of BrainScreen® assessments	3,250,000	ee = a
	162,500,000	ff = dd x ee

**Net savings for insurers** 624,300,000 **gg = x - aa - ff**