

## **\$4.9 Billion Decrease in Health Care Expenditure: The Ten-Year Impact of Improving Smoking, Alcohol, Diet and Physical Activity in Ontario**

### **Briefing Note**

**April 6, 2016**

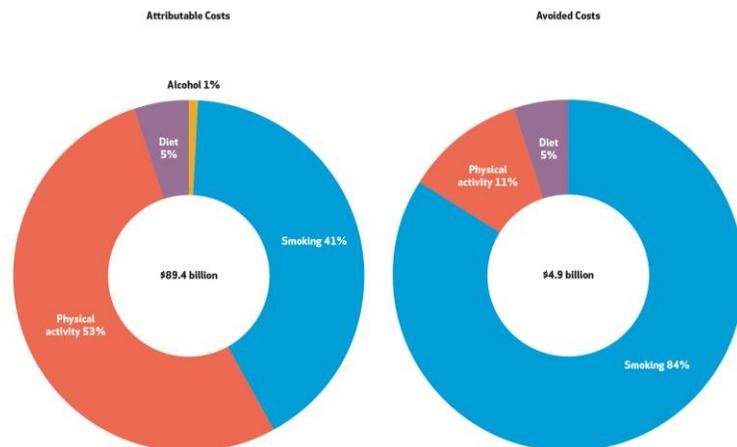
### **What we know**

Smoking, unhealthy alcohol consumption, poor diet and physical inactivity play an important role in overall health. Previous research at the Institute for Clinical Evaluative Sciences examined the impact of these four health behaviours on hospitalization costs and found that 32% of all hospital bed-days between 2001 and 2012 were linked with these behaviours.<sup>1</sup> This study, which had a look-back window of 10 years from 2004 to 2013, is the first to directly measure how changes in health behaviours have resulted in increased or decreased health care use across three sectors in Ontario: hospital care, drugs and community care.

### **What the Report tells us**

**Unhealthy behaviours are costly, but overall, Ontarians have made improvements over the 10-year study period.**

- More than \$89.4 billion or 22% of health care costs could be attributed to the four health behaviour risk factors.
- Physical inactivity (53%) and smoking (41%) contributed to the largest proportion of the burden.
- Overall, Ontarians have improved, resulting in a 1.9% cost decrease (cost savings of \$4.9 billion).
- Most of this reduction came from smoking cessation, which accounted for 1.7% of the savings.
- The impact of lower socioeconomic position accounted for 15.0% (\$60.7 billion) of all costs. Together, unhealthy behaviours and socioeconomic position contributed to a burden of \$134 billion in health care costs over 10 years, or 37% of Ontario's health care costs.



*Health care attributable and avoided costs by health behaviour risk factor for Ontarians aged 25+, 2004 to 2013.*

### **Online calculator**

Researchers created an online calculator that estimates health care costs for individuals based on customizable health profiles. The purpose of the calculator is to provide users with an interactive tool to further explore the factors that contribute to health care costs. Visit [www.projectbiglife.ca](http://www.projectbiglife.ca).



### **Where do we go from here?**

The health premium of prevention and social equity is an overlooked opportunity for a sustainable health care system. Though seemingly modest, a 1.9% reduction in health costs is substantial compared to other savings the province has been able to achieve. Authors suggest that for every \$1 increase in health costs attributed to Ontario's aging demographic, the province can achieve savings in the range of 20 cents by reducing unhealthy behaviours – authors are not aware of another cost saving intervention equal to this reduction. A greater investment in disease prevention and population health could help increase the sustainability of health care by reducing spending on illness, in particular with respect to hospital care. Combining this effort with strategies that address social determinants of health, including income and education level, can reap further benefits.<sup>2</sup>

1. Manuel DG, Perez R, Bennett C, Rosella L, Choi B. *900,000 Days in Hospital: The Annual Impact of Smoking, Alcohol, Diet and Physical Activity on Hospital Use in Ontario*. Toronto, ON: Institute for Clinical Evaluative Sciences; 2014.  
 2. Manuel DG, Perez R, Bennett C, Laporte A, Wilton AS, Gandhi S, Yates EA, Henry DA. *A \$4.9 Billion Decrease in Health Care Expenditure: The Ten-Year Impact of Changing Smoking, Alcohol, Diet and Physical Activity on Health Care Use in Ontario*. Toronto, ON: Institute for Clinical Evaluative Sciences; 2016.