

## Supplementary File 3

We will undertake a cost-effectiveness analysis, where the outcome of interest is consultation appointment attendance, adopting the perspective of the public third-party payer (i.e., the Ontario Ministry of Health). Using a costing algorithm developed in SAS and available at ICES,<sup>1</sup> we will be able to estimate all direct patient-level healthcare costs incurred by the public third-party payer for both the intervention and control groups. In particular, we will include costs of hospitalizations, ED visits, physician services (i.e. primary care, psychiatry and other) and diagnostic tests, outpatient prescription drugs for individuals covered under the provincial public drug insurance plan, home care, long-term care, and other hospital-based care (which includes rehabilitation and complex continuing care). The costing methodology used in the algorithm includes a bottom-up/micro-costing approach to cost services at the individual level. This makes use of individual episodes of care or utilization in the healthcare system and their associated prices (or costs or amounts paid). A top-down approach, which allocates corporate aggregate (i.e. institutional) costs to individual visits or cases/episodes of care, will be applied in cases where individual unit costs are not available (e.g., for institutional care settings). In addition, we will include all costs associated with delivering both arms of the intervention. Costs will be reported in 2023 using the Consumer Price Index for Health and personal care (Statistics Canada). All costs and outcomes will be discounted at a rate of 1.5% per year, in line with the Canadian Agency for Drugs and Technologies in Health guidelines.<sup>2</sup> The incremental cost-effectiveness ratio (ICER) will be calculated as the difference in discounted mean costs between the intervention and control groups divided by the difference in attendance rates. We will use a net benefit regression approach to model probabilities of cost-effectiveness for each additional patient referred who attends their consultation appointment in the intervention compared with control group. In addition, we will undertake relevant sensitivity analyses to test the robustness of findings by varying relevant parameters, such as the discount rate. Finally, we will examine the real-world budget impact of implementing the intervention across Ontario, to estimate the cost to the Ministry of Health of implementing this model of care across the province and the potential cost-savings to the system associated with this.

**REFERENCES**

1. Wodchis WP, Austin PC, Henry DA. A 3-year study of high-cost users of health care. *CMAJ* 2016;188(3):182-88. doi: 10.1503/cmaj.150064 [published Online First: 2016/01/13]
2. Guidelines for the Economic Evaluation of Health Technologies. 4th ed. Ottawa, ON, 2017.