



June 2017

## Research on Advancing Cessation Treatment (REACT)

Despite declining prevalence of smoking in Ontario in the last few decades, rates of smoking cessation have not increased significantly in the last few years. Close to 2 million smokers reside in Ontario, with no statistically significant change in reported current use of tobacco between 2007/2008 and 2013 Canadian Community Health Surveys.

Ontario offers a wide array of provincial cessation support services, including Smokers' Helpline, Smoking Treatment for Ontario Patients (STOP) Program, the Ottawa Model, Leave the Pack Behind, OHIP Billing Code, public health unit services and the Ontario Drug Benefit program. These services reach 7% of Ontario smokers annually. In 2013, a majority of Ontario smokers (56%) intended to quit in the next six months (23% in the next 30 days). However, the proportion of Ontario smokers who successfully quit each year (12-month abstinence) is estimated as 1.6%. While 7.6% of Ontario's smokers reported quitting for 30 days or more in the past year, 2012 Ontario data suggest that 79% of these recent quitters relapse during the year.

**Key Message:** OTRU is studying the urgent need to improve cessation outcomes by providing better understanding of the actual versus potential impact of cessation services in Ontario.

### Research Activities

To advance cessation treatment in Ontario, OTRU will generate new knowledge to inform cessation policies and practices through a:

1. Knowledge synthesis of existing global and Ontario specific knowledge
2. Longitudinal cohort study of cessation among Ontario smokers (Smokers' Panel)
3. Randomized study of long-term engagement
4. Health care utilization and health status study

### Knowledge Synthesis

OTRU will primarily examine existing review-level evidence from international research and from experience in Ontario. In cases where systematic reviews are dated, we will conduct literature searches and quality appraisals to provide up to date knowledge. Where there are no systematic reviews, we will search the literature, appraise quality and, where feasible, conduct systematic realist-informed reviews. A realist-informed knowledge synthesis will identify key mechanisms and contextual factors that affect outcomes and will explain how and why outcomes vary for sub-groups. The knowledge synthesis will include quantitative studies, qualitative evidence, evaluative information, grey literature (e.g., newspapers, websites), and information gathered by contacting experts in the field. The search strategy will be refined by our knowledge-user partners and OTRU. Information will be organized into categories, including research goals and objectives, target population, setting, contextual factors, methods, used, outcomes, data quality, and identification of knowledge gaps. Knowledge synthesis from Ontario's experience will use both published literature and evaluative reports.

### Longitudinal Cohort Study of Cessation among Ontario Smokers (Smokers' Panel)

Smokers' Panel is a longitudinal cohort of over 5,000 current and recent smokers, referred following participation in Ontario's smoking cessation system. Each participant has completed a comprehensive baseline survey of individual characteristics, smoking behaviours and smoking cessation history, including service use. OTRU will examine the relationship between personal characteristics (including sex, age, education, socio-economic status, nicotine dependence, mental health, smoking and quit history) and duration of smoking abstinence. The effect of personal characteristics on risk of relapse will also be examined.

### Long-Term Engagement Randomized Study

OTRU will conduct a two-arm parallel randomized study to assess the effectiveness of engagement in achieving desired outcomes, such as increased intention to quit, quit attempts, referral to cessation services and long-term abstinence. The study will recruit 3,000 smokers and recent quitters from three organizations: Smokers' Helpline, Ottawa Heart Institute and the STOP Program (1,000 smokers from each organization). Equal allocation ratios will be made to the intervention and control arms. Participants in the intervention arm will receive standardized email messages every month for 12 months, while participants in the control arm will not receive the monthly email messages, and will only be contacted for follow-up at 12 months. All participants will complete outcome assessments online after 12 months from initial study recruitment.

### Health Care Utilization and Health Status Study

This study will characterize health status and healthcare utilization patterns of smokers in Ontario using health administrative data linked to the Institute for Clinical Evaluative Sciences (ICES). STOP data (150,000 smokers) and Ontario Tobacco Survey (OTS) data (4,500 smokers and 3,000 nonsmokers) will be linked to ICES data. The linked STOP-OTS-ICES data will be used to identify effectiveness of services by assessing healthcare utilization and health status associated with the use of diverse smoking cessation programs and policy delivery models. The differences in service coverage and utilization between a population sample of smokers and a clinical sample will be compared. For each of STOP and OTS linked ICES data sets, detailed descriptive reports will be generated examining how smokers differ in the patterns of access to, and use of, selected forms of primary care and mental health care utilization. Patterns of healthcare/service utilization will be examined prior, concurrent to and subsequent to, enrollment of smokers into diverse smoking cessation program delivery models compared to smokers not engaged with such services.

### Knowledge Translation and Exchange

Knowledge translation and exchange is intrinsic to the research design through the participatory action research approach and the active involvement of community representatives, public health and tobacco control stakeholders and decision makers in research activities.

A Knowledge Exchange Advisory Committee (KEAC) informs research design, data collection, interpretation and dissemination. The KEAC is made up of community representatives, decision makers, and public health and tobacco control stakeholders.

### Opportunities to Address Additional Research Questions (Applied Health Research Questions)

This project provides the opportunity to address questions from health system policy makers or providers (Knowledge Users) through an Applied Health Research Question (AHRQ) process. An AHRQ can be posed to obtain research evidence to inform planning, policy and program development. As a Research Provider, we look forward to working with you to identify and address knowledge needs for the development of effective cessation services in Ontario.

### What AHRQ Responses Can Provide to Knowledge Users

Three Types of Research Provider Responses:

1. Rapid response: Preliminary information in one week or less providing a "first blush" response, e.g., expert opinion or relevant systematic reviews, articles or reports on a given policy topic.
2. Research report or technical brief: Approximately 4-8 weeks of work to quickly synthesize the existing research evidence on a given topic. The final product could be a presentation or a report. Upon conclusion of the AHRQ, the researcher will complete the AHRQ Summary of Findings Form which will be disseminated broadly once completed.
3. Research project: Where it has been confirmed that new knowledge must be generated, i.e., existing knowledge is not sufficient for planning or policy development requirements, new research projects will be initiated. The duration may be months, or years, depending on the project. For longer-term projects it is expected that some information be provided within the funded funding year. Institutions should contact the Research Unit prior to undertaking any longer-term projects. Organizations should not initiate new multi-year projects if they have one year funding agreements unless they can produce some interim or preliminary findings during the funded period. At the end of the project, the researcher will complete an AHRQ Summary of Findings Form which will be disseminated broadly. Interim or preliminary findings will not be disseminated.

It is understood that not every question will result in a research response.

For more information about initiating an AHRQ request, contact Dr. Robert Schwartz:  
[robert.schwartz@utoronto.ca](mailto:robert.schwartz@utoronto.ca) or 416-978-3901.

Research on Advancing Cessation Treatment (REACT) is a 3-year study funded by the Ministry of Health and Long Term Care's [Health System Research Fund \(HSRF\)](#).