THE ONTARIO TOBACCO RESEARCH UNIT
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Generating knowledge for public health

EVALUATION NEWS

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STOP Program Implementation in Three Health Care Treatment Settings

A Comparative Evaluation of Addiction Agencies, Community Health Centres and Family Health Teams

Background

The Smoking Treatment for Ontario Patients (STOP) Program is a province-wide initiative coordinated by the Centre for Addiction and Mental Health (CAMH) that delivers smoking cessation treatment and counselling support to eligible Ontario smokers who wish to quit smoking. The program uses the existing health care infrastructure as well as new and innovative means to reach smokers from all parts of the province. Since October 2012, the STOP program has partnered with Addiction Agencies (AAs), Community Health Centres (CHCs) and Family Health Teams (FHTs) across the province to provide access to free nicotine replacement therapy (NRT) and cessation counselling for patients interested in quitting smoking.

AAs, CHCs and FHTs participating in the STOP program are able to choose from three program delivery models that suit their specific capacity or interest. Organizations can offer support to patients by providing:

- One-on-one counselling and up to 26 weeks of NRT (individual model)
- One day group counselling and a 5-week kit of NRT (group model)
- A combination of both individual and group counselling (combination model)

The STOP program requires practitioners to be trained in smoking cessation in order to participate in the program. Training and knowledge exchange opportunities include:

- TEACH 3-day Core Course and/or 2-day Specialty Courses
- One six-hour workshop on Fundamentals of Tobacco Interventions
- Monthly webinars on various topics related to smoking cessation

Evaluation Approach

The Ontario Tobacco Research Unit (OTRU) conducted formative evaluations of the STOP program in AAs, CHCs and FHTs from the period October 2012 to November 2014,[1,2] and a comparative evaluation across

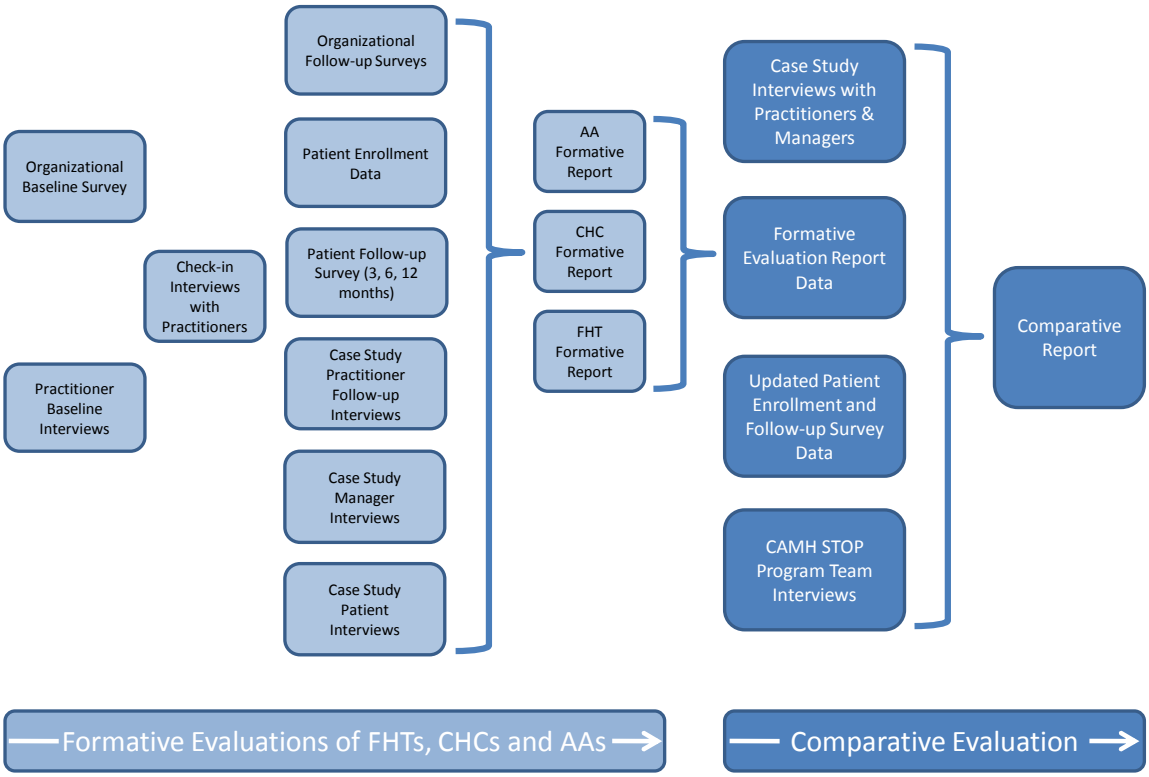
[1] Kaufman P, Di Sante E, Zhang B, Ivanova A, Schwartz R, Selby P, Zawertailo L. *Formative Evaluation of the STOP with Addiction Agencies from June 2013 to January 2015*. Toronto: Ontario Tobacco Research Unit. March 2015.
[2] Babayan A, Di Sante E, Schwartz R, Selby S, Zawertailo L. *Formative Evaluation of the STOP with Community Health Centres from April 2012 to January 2014*. Toronto: Ontario Tobacco Research Unit. March 2014.

the three treatment settings from April 2014 to January 2015. The overall purpose of the comparative evaluation was to provide knowledge about the overall successes and challenges in the provision of cessation services across the three types of organizations. This knowledge will inform how programs can be improved and tailored to specific health care settings.

Evaluation Methods

The comparative evaluation employed a mixed methods approach, including surveys with program participants, interviews with the CAMH STOP team, baseline and follow-up surveys and program administrative data with all participating AAs, CHCs and FHTs. In addition, five case studies were selected from each organization type for in-depth assessment of the program implementation, outputs, and outcomes (Figure 1).

Figure 1: Comparative Evaluation Methods



Key Findings

Selected key findings describe STOP program implementation at the treatment settings and its impact on the smoking behaviour of patients as of November 2014. Due to the ongoing nature of the STOP program, the evaluation findings are relevant only for the period during which the evaluations were conducted in each treatment setting.

Enrolment

Patient enrolment varied across the case study treatment sites (Table 1), but in general patients were enrolled through:

- Referrals from other practitioners and health agencies
- Word-of-mouth
- Advertisements in health care settings

Table 1: Enrollment by Treatment Setting, October 2012 to November 2014

	% of Eligible Sites Enrolled (#)	Total # of Participants Enrolled Since Launch	Average Monthly Enrollment	Minimum Monthly Enrollment	Maximum Monthly Enrollment
AAs	15% (30)	3,016	116	33	223
CHCs	70% (53)	5,705	219	157	276
FHTs	76% (139)	25,690	988	557	1266

Provision of Nicotine Replacement Therapy

Case study interviews found that practitioners typically dispensed less than four-weeks of NRT at a time to patients. This provided an opportunity to assess patient motivation and the tolerability, side effects and effectiveness of the NRT. It was thought to also encourage the patient to return to the site more often for follow-up.

All of the program implementers at the AAs, CHCs and FHTs said that they chose which NRT products to provide based on patient intake information and preference. Interestingly, program implementers at two case study sites (AA and CHC) requested that nicotine spray be made available to STOP participants.

Provision of Counselling Sessions

Initially, treatment settings were implementing the STOP models as follows:

- Individual model (60%-84%)
- Combination model (12%-33%)
- Group model (3%-7%)
- Other models (1%-2.5%)

At 12-month follow-up, these patterns were maintained at CHCs and FHTs. However, at AAs, there was a decrease in the number of sites using the Individual Model (60% to 47%) and an increase in the number of sites using the Combination Model (33% to 53%).

Individual Counselling

Individual counselling was offered at all case study sites across the treatment settings. The initial counselling session was typically scheduled for 30-60 minutes and began with completing the requisite program paperwork, including the informed consent documentation and a baseline questionnaire.

At most AAs, follow-up sessions varied depending on whether the participants were in the residential or community program. For participants in the community program, follow-up sessions usually occurred weekly; for residential program participants follow-up counselling sessions were weekly or more frequently on an ad-hoc basis.

At CHCs and FHTs, sessions typically occurred every 1 to 4 weeks during patient visits to pick up additional NRT. Generally, the program implementer met with the patient for between 10 and 30 minutes at a time. Program implementers at some AAs, CHCs and FHTs also conducted telephone follow-up sessions for patients with no time to visit or who lacked transportation.

Group Counselling

Among case study sites, three of the five AAs, one of the five CHCs and one of the five FHTs ran the group counselling model. Although some positive aspects of the group counselling model were noted (e.g., peer support), several challenges were identified (e.g., lack of personal attention for patients in group model). Program implementers and managers thought that increased training, a manual on how to run groups and more staffing resources may help to overcome these challenges.

Patient Demographic and Smoking Characteristics

Patients at AAs were more likely to be younger, male, unemployed, with low household income (<$40,000), and less likely to be daily smokers and less educated (less than high school), compared to patients at CHCs and FHTs. Patients at CHCs were more likely to be younger, male, less educated, unemployed, with less household income, and to smoke other tobacco products, compared to patients at FHTs. The most common comorbidities across the three treatment settings were depression, anxiety and chronic obstructive pulmonary disease (COPD). The proportion of patients reporting depression and anxiety was particularly high at AAs. In contrast, FHTs had a relatively lower representation of patients with depression and anxiety.

Overall, patients at the three treatment settings smoked about a pack of cigarettes per day at baseline. However, patients at FHTs smoked on average slightly fewer (20) cigarettes per day than those at AAs (21 cigarettes per day) and CHCs (22 cigarettes per day). The majority of patients (>50%) at the three treatment settings had made at least one quit attempt in the past 12 months before enrollment in the STOP program. The rate of not making a quit attempt in the past 12 months was significantly higher ($p<0.01$) at AAs (42%) compared to at CHCs (48%) and FHTs (49%), but there was no difference between CHCs and FHTs.

Program Effects on Cessation Practices at AAs, CHCs and FHTs

The STOP program appears to have affected the priority of smoking cessation at the organizational level over time. The following specific effects were noted:

- Increased awareness of smoking cessation among other practitioners
- Increased referrals for smoking cessation services
- Increased staff and resource allocation for smoking cessation
- Increased support and buy-in from physicians and management
- Increased provision of free NRT to smoking patients

The majority of program implementers also provided self-help materials, intensive counselling and referrals to local smoking cessation to their patients at all three treatment settings. The majority of implementers at CHCs and FHTs also provided minimal contact intervention, and prescriptions for Zyban© and Champix©.

Program Effects on Smoking Behaviour

Overall, patients at FHTs had higher quit outcomes for almost all measures at 3-month, 6-month and 12-month follow-ups, compared to patients at AAs and CHCs. Patients at AAs and CHCs were less likely to make a quit attempt, and less likely to quit for at least 7 days, 30 days or continuously for 3 or 6 months, compared to patients at FHTs.

When we controlled for confounding factors (e.g., age, sex, income, employment status, smoking behaviours, use of other quit aids, health and alcohol use), FHT patients also had higher quit outcomes for almost all measures at 3- and 6-month[3] follow-up compared to AA and CHC patients. However, there was no difference in quit outcomes among AA and CHC patients.

STOP in AAs

As of November 2014, The STOP program was operational in 30 AA sites (15% of all eligible AA sites), and had enrolled just over 3,000 patients. These numbers are lower than for FHTs and CHCs, which is most likely reflective of the relatively recent implementation of the STOP program in AAs. Participants at AAs were primarily recruited through proactive enrollment (promotional materials in the community) and reactive enrollment (self-referral upon admittance). Interestingly, one AA also required automatic enrollment in the STOP program as a condition of seeking treatment at the AA.

[3] There was insufficient data to form an adjusted model for 12 month outcomes.

Most AAs offered a combinational model of program delivery (53%), followed closely by the individual model (47%). The case study data suggests that these models were used more frequently within this treatment setting because they are more conducive to the residential programs offered by most AAs. In residential programs, participants staying at the facility can take part in groups, and have access to individual counselling during which they can discuss their progress in the STOP program. One AA had tried the combination model, but changed to the individual model after finding that participants were not getting the individual attention needed in a group setting for success with STOP.

Most of the staff assigned to the STOP program in AAs were Addiction Counsellors (66%) and the mean number of practitioners assigned per AA was 12. This is significantly higher than at CHC and FHTs and likely reflects the multi-site nature of AAs; where one implementer at each site is trained in STOP.

A number of facilitators helped the implementation of the STOP program at AAs. Most of the AAs (76% of AAs surveyed and 2 of 5 case study AAs) identified practitioners' interest and/or belief in smoking cessation preventative care and/or chronic disease management as a program facilitator. Having staff time available for program delivery was also found to be a facilitator (65% of AAs surveyed and all 5 case studies), as was support and buy-in from management (65% of AAs surveyed and all 5 case studies). The following facilitators were also mentioned during the case study interviews with implementers:

- Ability to adapt the program to include a personal touch (4 of 5 case studies)
- Availability of free NRT (all 5 case studies)
- Ongoing educational opportunities provided by STOP (4 of 5 case studies)
- CAMH Portal (all 5 case studies)
- Strong relationship with STOP program coordinators (all 5 case studies)

The most frequent challenges to program implementation identified by AAs were:

- Patients with complex issues (71% of AAs surveyed; all 5 case studies)
- Lack of patient motivation/readiness to quit (47% of AAs surveyed; 2 of 5 case studies)
- Timing and focus of STOP teleconferences (all 5 case studies)

STOP in CHCs

As of November 2014, the STOP program was operational in 53 CHCs (70% of all eligible CHC sites) in Ontario, and enrolled 5,705 patients. The patient recruitment process for CHCs was primarily reactive due to resource constraints. Most CHCs (65%) offered the individual model of STOP, where individual counselling sessions were offered every 1-4 weeks depending on client and practitioner availability. CHCs were more likely to be single-site organizations (76%). The mean number of staff assigned to deliver the STOP program at each CHC was four; and most (26%) of these staff were Nurse Practitioners.

The following facilitators supported the implementation of the STOP program at CHCs:

- Practitioner interest and/or belief in smoking cessation, preventative care and/or chronic disease management (95% of CHCs surveyed; 4 of 5 case studies)
- Support and buy-in from physicians (87.5% of CHCs surveyed; all 5 case studies)
- Support and buy-in from other practitioners (87.5 of CHCs surveyed; all 5 case studies)
- Support from management (all 5 case studies)
- Availability of free NRT (all 5 case studies)
- CAMH Portal (all 5 case studies)

Challenges to program implementation at CHCs included:

- Patients with complex issues (75% of CHCs surveyed; 4 of 5 case studies)
- Lack of staff time for program delivery (55% of CHCs surveyed; 2 of 5 case studies)
- Onerous documentation process (3 of 5 case studies)

To improve the documentation process, program implementers identified the need for a tool to track the date of patient enrollment, and suggested that the literacy levels of program documentation be adjusted to better suit the patient population.

STOP in FHTs

As of November 2014, the STOP program was operational in 139 (76% of all eligible FHT sites) in Ontario, and had enrolled 25,690 patients. According to case study interviews, recruitment is more proactive in FHTs than in CHCs and AAs because some FHTs had existing staff (e.g., health promoters) to help with recruitment and implementation of other smoking cessation programs (e.g., Ottawa Heart Institute). Most (82%) of FHTs offered the individual model of program delivery and counselling sessions were offered every 1-4 weeks. FHTs that offered the STOP program were more likely to be multi-site (52%), as opposed to single sites for CHCs. Most staff assigned to the STOP program at the FHTs were Registered Nurses (40%), and the mean number of staff assigned per FHT was four.

The following facilitators supported implementation of the STOP program at FHTs:

- Practitioner interest and/or belief in smoking cessation, preventative care and/or chronic disease management (90% of FHTs surveyed; 2 of 5 case studies)
- Staff time available for program delivery (87% of FHTs surveyed; 2 of 5 case studies)
- Support and buy-in from management (77% of FHTs surveyed; 4 of 5 case studies)
- Availability of free NRT (4 of 5 case studies)
- Ongoing educational opportunities provided by STOP (4 of 5 case studies)

Challenges to program implementation at FHTs included:

- Lack of patient motivation/readiness to quit (61.5% of FHTs surveyed; 1 of 5 case studies)
- Patients with complex issues (50% of FHTs surveyed; 2 of 5 case studies)
- Lack of resources (4 of 5 case studies)
- Need for a more streamlined documentation process (4 of 5 case studies)

Conclusions

The comparative evaluation highlights the unique challenges and barriers to delivering a cessation program in different treatment settings due to organization, program, practitioner and patient level factors. The most common challenge/barrier across all three treatment settings was treatment of patients with complex issues (e.g., mental health issues, other addictions and co-morbidities). The second most common challenge/barrier was the lack of patient motivation/readiness to quit smoking. Other challenges/barriers were more common in specific treatments settings, such as the lack of funding for program delivery at AAs; lack of staff time for program delivery at CHCs; and challenges related to keeping track of patients enrolled in the program and difficulties with patient access to the site due to lack of transportation or living in rural locations at FHTs.

The evaluation outcomes help to inform how the implementation of cessation programs can be improved and tailored to particular practice settings. Overall, program implementers and managers were interested in receiving more information and resources from STOP, including promotional materials to help with recruitment, information for patients to take home and review and lists of other smoking cessation services that are offered in the area. They also identified the need for further knowledge and training on how to conduct group sessions, handle stages of change, and deal with patients who have complex issues. Specific to the provision of NRT, requests were made for additional information about how NRT reacts with different medications, access to a wider variety of NRT, including different brands of patches and nicotine spray, and samples of different products to show patients and educate them about use. A central location for all resources would help to improve accessibility to materials and streamline knowledge provision for implementers. The need for resources on how to implement a smoke-free grounds policy was also highlighted.

Program implementers at all three treatment settings mentioned the need to improve follow-up with patients, and increase program flexibility to allow select patients to participate longer than 26 weeks. Finally, the ability to directly refer patients to specific treatment settings that are offering the STOP program in their areas was flagged as a future enhancement.

Overall, the evaluation of STOP program implementation in AAs, FHTs and CHCs was positive. Implementers, managers, participants, and CAMH program staff were very pleased with the resources provided by the STOP program to enhance cessation support for Ontario patients. This was demonstrated by managers across treatment settings who advocated for continued funding of the program during evaluation data collection.

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