



THE ONTARIO TOBACCO RESEARCH UNIT  
UNITÉ DE RECHERCHE SUR LE TABAC DE L'ONTARIO

*Generating knowledge for public health*

# Smoking Cessation Activities in Ontario Hospitals: Survey Results

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### EXECUTIVE SUMMARY

In April 2011, the Ontario government announced a renewed commitment to building a Smoke-Free Ontario by taking action to implement the recommendations made by the Tobacco Strategy Advisory Group (TSAG) report, *Building on Our Gains, Taking Action Now: Ontario's Tobacco Control Strategy for 2011–2016*.<sup>i</sup> One of the recommendations from TSAG is to expand smoking cessation services in health care settings.

The Ministry of Health Promotion and Sport (MHPS) and the Ministry of Health and Long-Term Care (MOHLTC) recently launched an initiative aimed to enhance cessation support to hospital patients with chronic diseases. As a first step, the Ontario Tobacco Research Unit (OTRU), in partnership with the MHPS and MOHLTC, conducted a survey of Ontario hospitals to provide a snapshot of the current state of hospital-based smoking cessation services, practices and policies.

A web survey was administered by OTRU in July 2011. A total of 165 of the 224 hospital sites in Ontario identified by MOHLTC completed the survey resulting in a 74% response rate.

The survey was not intended to provide a comprehensive and detailed assessment of cessation services, practices and policies at the hospital level. Rather, it provides a high-level description of the current state of hospital-based cessation activities based on the analysis of perceptions and perspectives of the senior hospital managers who responded to the survey.

Key findings from the survey include:

- 84% of hospital sites reported that they offer smoking cessation services for their patients.
- Inpatient smoking status was most commonly assessed at admission (86%).
- The three most common smoking cessation services provided to inpatients were: nicotine replacement therapy (73%), self-help materials (65%), and patient referrals to external resources (50%).

<sup>i</sup> Ministry of Health Promotion and Sport (MHPS). *Building on Our Gains, Taking Action Now: Ontario's Tobacco Control Strategy for 2011–2016*. Toronto, Ont.: Ontario Ministry of Health Promotion and Sport, 2010.

- Hospital sites that offer nicotine replacement therapy or prescription medication to patients reported mostly doing so at no cost to patients (94% and 90%, respectively).
- 31% of all hospital sites that provided smoking cessation services allocated resources (funding) specifically for smoking cessation activities.
- Nurses (89%) and physicians (79%) were the most commonly cited health professionals within the hospital who provide smoking cessation services to patients.
- Most hospital sites indicated that members of their hospital staff have attended smoking cessation training programs (82%).
- 51% of hospital sites indicated having a champion who drives the provision of smoking cessation services.
- The most commonly adopted policies and practices for smoking cessation were: documenting patient smoking status upon admission (79%), making smoking cessation pharmacotherapies available in the hospital formulary (73%), having standard methodology for the identification of smoking status (69%), and having smoking cessation support for hospital staff (62%).
- The policies and practices that were largely reported as being neither adopted nor under active consideration, include assigning dedicated staff to provide smoking cessation treatment (56%) and having processes in place to follow-up smokers for at least one month after discharge (73%).
- 85% of hospital sites indicated partnering with various organizations, including public health units and Smokers' Helpline, to deliver smoking cessation services to patients in hospital.
- The most often cited barriers and challenges were lack of staff time to provide cessation support (78%), lack of funding (75%), and lack of capacity to monitor or track the implementation of policies and programs (46%).
- A wide variety of ideas to help the adoption and implementation of smoking cessation policies at the hospital level were suggested, including, most commonly, the need for additional funding, guidance on policy development, staff training, support of champions and management.
- Many similar themes arose with regard to improving smoking cessation services within hospitals including increased resources, a wide range of practice changes (e.g. following up with patients post discharge, transitioning smoking cessation treatment across departments), champions and staff training.

### INTRODUCTION

In April 2011, the Ontario government announced a renewed commitment to building a Smoke-Free Ontario by taking action to implement many of the recommendations made by the Tobacco Strategy Advisory Group (TSAG) report, *Building on Our Gains, Taking Action Now: Ontario's Tobacco Control Strategy for 2011–2016*. One of the recommendations from TSAG is to expand smoking cessation services in health care settings.

The Ministry of Health Promotion and Sport and the Ministry of Health and Long-Term Care are working together to determine the best ways to increase the availability of cessation services in health care settings such as hospitals, family health teams, and community settings. One of the government's initiatives aims to enhance cessation support to hospital patients with chronic diseases.

As a first step, the Ontario Tobacco Research Unit, in partnership with the MHPS and MOHLTC, conducted a baseline survey of Ontario hospitals to provide a snapshot of the current state of hospital-based smoking cessation services, practices and policies.

## METHOD

### Data Collection

A web survey was administered by OTRU from July 4 to 31, 2011. All 224 hospital sites in Ontario were invited to participate in the survey.<sup>ii</sup> An email containing a unique link to the survey was sent out to each hospital Chief Executive Officer (CEO). A list of the hospital sites, the names of hospital CEOs and their email addresses were compiled and supplied by the MHPS and MOHLTC.

The survey was administered with the use of the online survey technology, Key Survey. Measures were put in place to prevent repeat responses and unauthorized survey completion. A unique survey link was assigned to each hospital site that allowed the survey to be completed only once. In total, 165 hospital sites completed the survey resulting in a 74% response rate (see Table 1). The results presented in this report only reflect the hospital sites that responded to the survey.

**Table 1: Survey Response Rate**

Indicator	Data
Total number of Ontario hospital sites invited to the survey	224
Number of hospital sites completed the survey	165
<b>Response rate</b>	<b>73.6%</b>

The survey was designed collaboratively by OTRU and representatives from the MOHLTC and MHPS. The survey asked a range of questions on various issues, including:

- Cessation services and policies that are currently in place in hospitals
- Types of health professionals engaged in delivering cessation support
- Types of cessation training programs attended by staff
- Approaches to resource allocation for smoking cessation activities
- Challenges in implementing smoking cessation services and policies
- Suggestions for improvement and other questions

The complete survey questionnaire is available in Appendix 1.

<sup>ii</sup> In this report, the terms hospital site and hospital are used interchangeably to refer to both single-site and multi-site hospital organizations in Ontario.

While hospital CEOs were the first point of contact, the expectation was that the survey would be forwarded to the person or group of people within the hospital who were in the best position to provide the required information. The survey was designed to take no more than 10 minutes to complete.

### Analysis

Descriptive statistical analyses were conducted using SAS 9.2. Frequencies were computed for each survey question. In order to illustrate the availability and provision of smoking cessation policies, programs, services, and resources in Ontario hospitals, survey data were further analyzed by the following characteristics (cross-tabulations):

- **Type of hospital:** community, small, teaching, chronic/rehab, other<sup>iii</sup>
- **Local Health Integration Network (LHIN)** (See Appendix 3 for a description of the term)
- Hospitals implementing the **Ottawa Model for Smoking Cessation (OMSC)** (See Appendix 3 for description of the program)

The number of cross-tabulations presented in this report is limited. Results are not presented if the interpretation could be misleading either due to the question structure (e.g., check all that apply) or the sample size (i.e., small cell sizes).

Most survey questions allowed respondents to provide their own responses by selecting the option “other” (Questions 2-10, 19-20). These responses were further categorized and key trends were reported in the results section.

Additionally, the survey contained two open-ended questions (Questions 21-22) which were coded and analyzed using NVIVO 9 software. Key themes that emerged are presented at the end of the results section.

<sup>iii</sup> The typology of hospitals was provided by MOHLTC. Types of hospitals with a low number of respondents were grouped together for analytical purposes under the category ‘other’ (n=7). These hospitals include Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice and Health Authority.

### Limitations

There are some limitations to this survey that should be noted. In general, the survey is not intended to provide a comprehensive and detailed assessment of cessation services, practices and policies at the hospital level. Further, due to the short timeline for implementing the survey, no administrative data on cessation services and practices were collected and analyzed to provide greater insight into the provision of smoking cessation care to hospitalized smokers. The survey provides a high-level description of the current state of hospital-based cessation activities based on the analysis of perceptions and perspectives of the senior hospital managers who completed the survey.

More specific limitations of the survey are:

- The survey does not allow for a detailed understanding of the reported smoking cessation services. It is unclear if the responses refer to services offered across the entire hospital organization, one hospital site, one department or unit, or by one individual. It is also unclear if respondents referred to smoking cessation services, and not withdrawal management activities. Without more detail about the smoking cessation services, we cannot ascertain how comprehensive the cessation support is.
- The survey does not capture the extent to which smoking cessation services are offered to patients. It is unclear how many patients are receiving these services, or the type (e.g. 1-hour sessions, NRT doses) or duration of cessation support.
- The survey does not allow for a detailed understanding of the capacity within hospitals to provide smoking cessation services. It is unclear what percentage of staff has received smoking cessation training or education. It is also unclear what percentage of staff members provide smoking cessation services to patients, either as a portion of the whole staff group or by subtype of health professional.

## RESULTS

### Sample Characteristics

Of hospital sites that responded to the survey (n=165), nearly half were community hospitals (45%) and more than a quarter were small hospitals (27%). The remaining hospital sites were teaching, chronic/rehab and other hospitals. Within each type of hospital, the survey response was similar to the distribution of hospitals in Ontario (see Table 2).

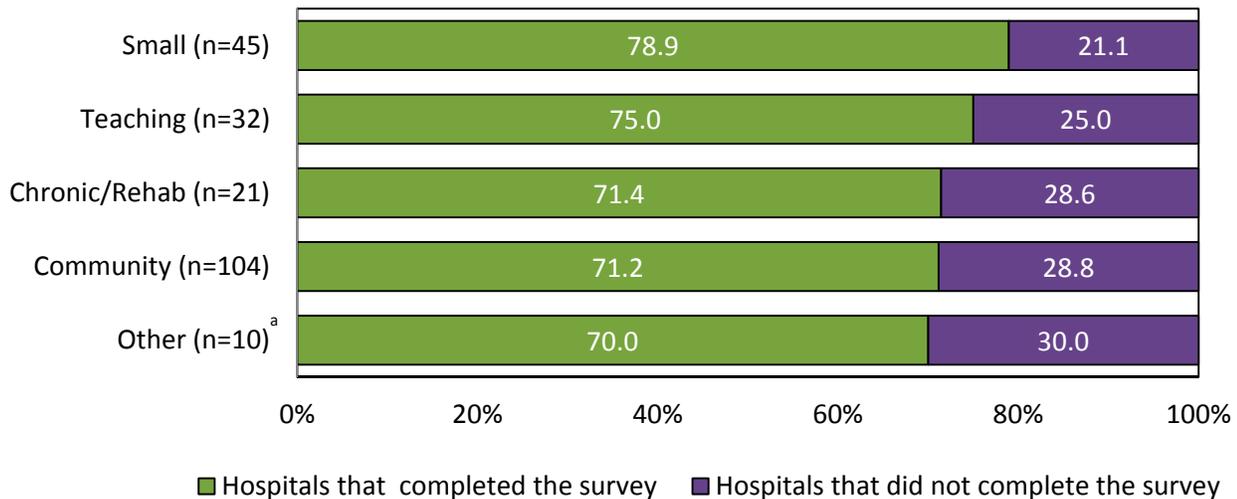
**Table 2: Type of Hospitals in Survey Sample vs. Ontario**

	Survey Sample		Ontario	
	n	%	n	%
Community	74	44.8	104	46.4
Small	45	27.3	57	25.5
Teaching	24	14.5	32	14.3
Chronic/Rehab	15	9.1	21	9.4
Other <sup>a</sup>	7	4.2	10	4.5
<b>TOTAL</b>	<b>165</b>	<b>100%</b>	<b>224</b>	<b>100%</b>

<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

The survey response rate within each type of hospital was 70% or more (see Figure 1).

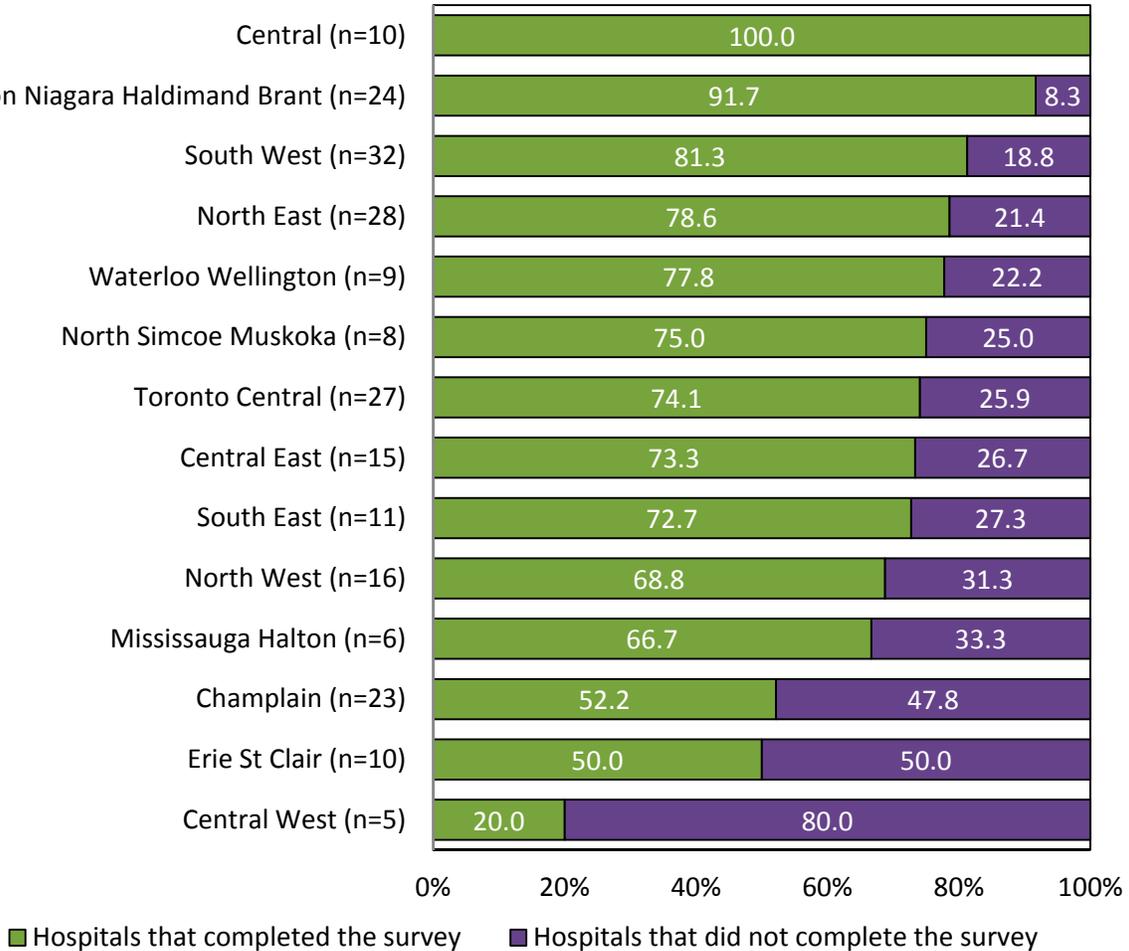
**Figure 1: Survey Response Rate by Type of Hospital, n=224**



<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

Survey response varied by each of the 14 Local Health Integration Networks (see Figure 2). All of the hospitals in the Central LHIN responded to the questionnaire. The majority of hospitals in other LHINs completed the questionnaire, with the exception of the Central West LHIN (20%).

Figure 2: Survey Response Rate by LHIN, n=224



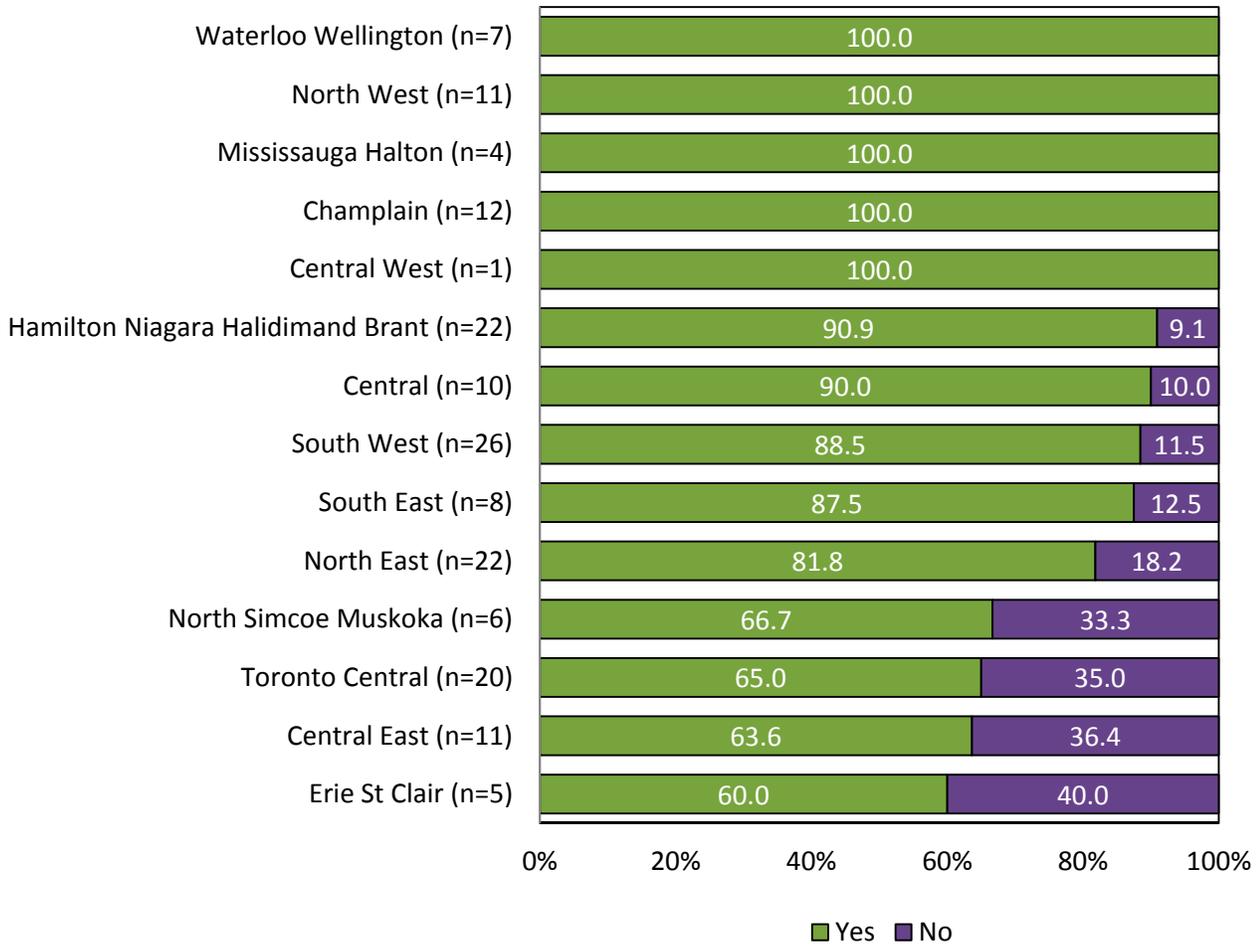
Twenty-six percent of the hospital sites (n=42) that responded to the survey had implemented the Ottawa Model for Smoking Cessation (OMSC). A further breakdown of the OMSC by type of hospital and LHIN is available in Tables A1 and A2 in Appendix 2.

## Provision of Smoking Cessation Services

The majority of responding hospital sites (84%, n=139) indicated that they offered smoking cessation services for their patients. Data was not collected regarding the level in which the smoking cessation services were offered (i.e., entire hospital corporation, single hospital site, single department, or single individual), nor the extent to which the services were offered to patients.

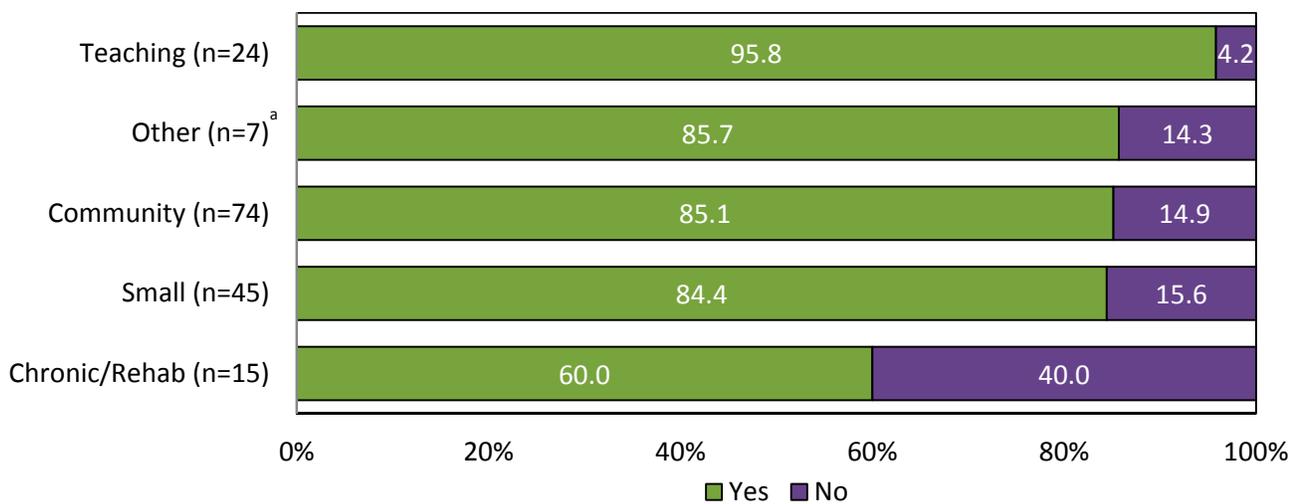
Figure 3 shows that the majority of responding hospital sites within each LHIN indicated that they provided smoking cessation services. However, in 4 LHINs (North Simcoe Muskoka, Toronto Central, Central East, Erie St. Clair), one-third or more of responding hospitals did not offer smoking cessation services at all.

Figure 3: Hospitals Offering Any Type of Smoking Cessation Service for Patients, by LHIN, n=165



Nearly all teaching hospitals (96%), hospitals categorized as “other” (86%), community hospitals (85%), and small hospitals (84%) indicated that they provided smoking cessation services to patients (see Figure 4). In contrast, only 60% of chronic/rehab hospitals indicated that they provided smoking cessation services to patients. As expected, all hospital sites with the OMSC in place reported that they provided smoking cessation services to patients. However, the majority of hospital sites without the OMSC in place also indicated that they provided smoking cessation services to patients (79%).

Figure 4: Hospitals Offering Any Type of Smoking Cessation Service For Patients, By Type of Hospital, n=165



<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

## Identification of Patients within the Hospital Setting Who Are Smokers

Among hospital sites that provide smoking cessation services, the majority reported identifying inpatient smokers at admission (86%), in pre-admission clinics (54%), and during the course of treatment in hospital (51%; see Table 3). Fewer hospital sites reported identifying these patients at discharge from hospital (11%). Hospital sites that selected “other” (11%), explained that there was no formal process for identification and/or identification was inconsistent depending on the practices of individual health care practitioners.

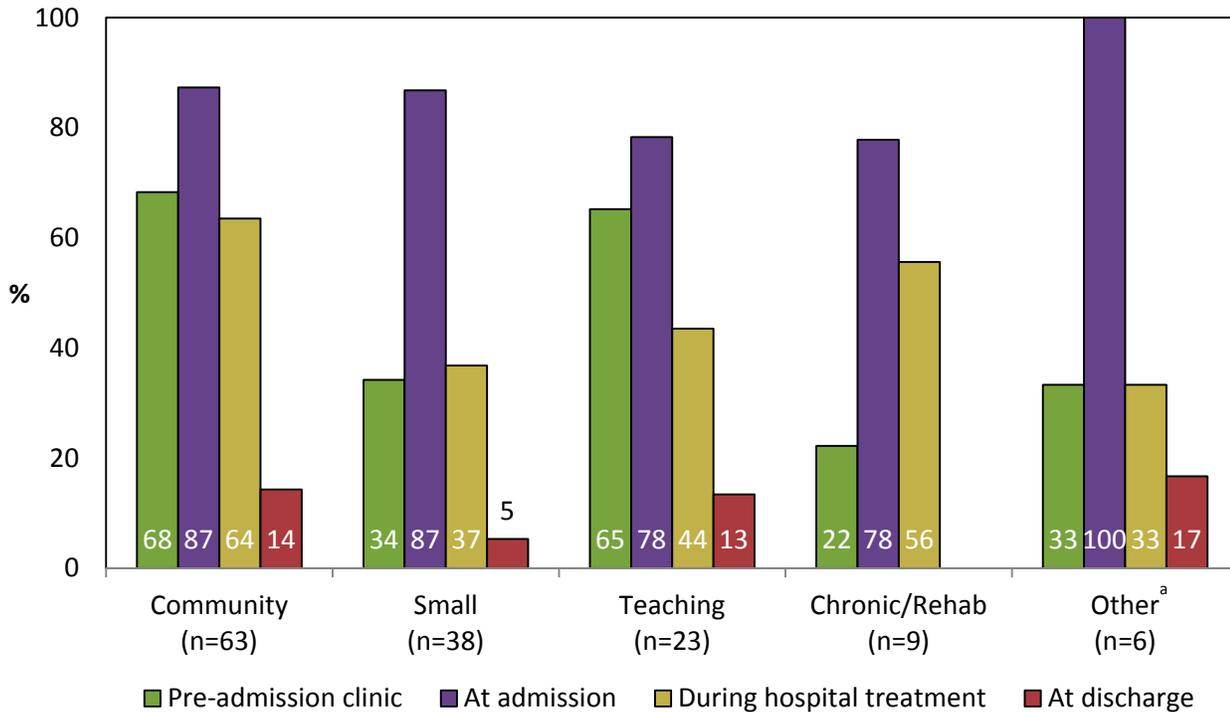
**Table 3: Points during Hospital Stay Where an Inpatient Smoker Is Identified, n=139**

	n	% <sup>a</sup>
At admission	119	85.6
Pre-admission clinic	75	54.0
During hospital treatment	71	51.1
At discharge	15	10.8
Other	15	10.8

<sup>a</sup> Percentages do not add up to 100% as the survey participants could check more than one answer.

Within each type of hospital, admission was the most commonly reported location where inpatient smokers were identified (78% or more; see Figure 5). Identifying inpatient smokers at other points during a hospital stay varied by type of hospital.

**Figure 5: Points during Hospital Stay Where an Inpatient Smoker Is Identified, By Type of Hospital, n=139**



<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

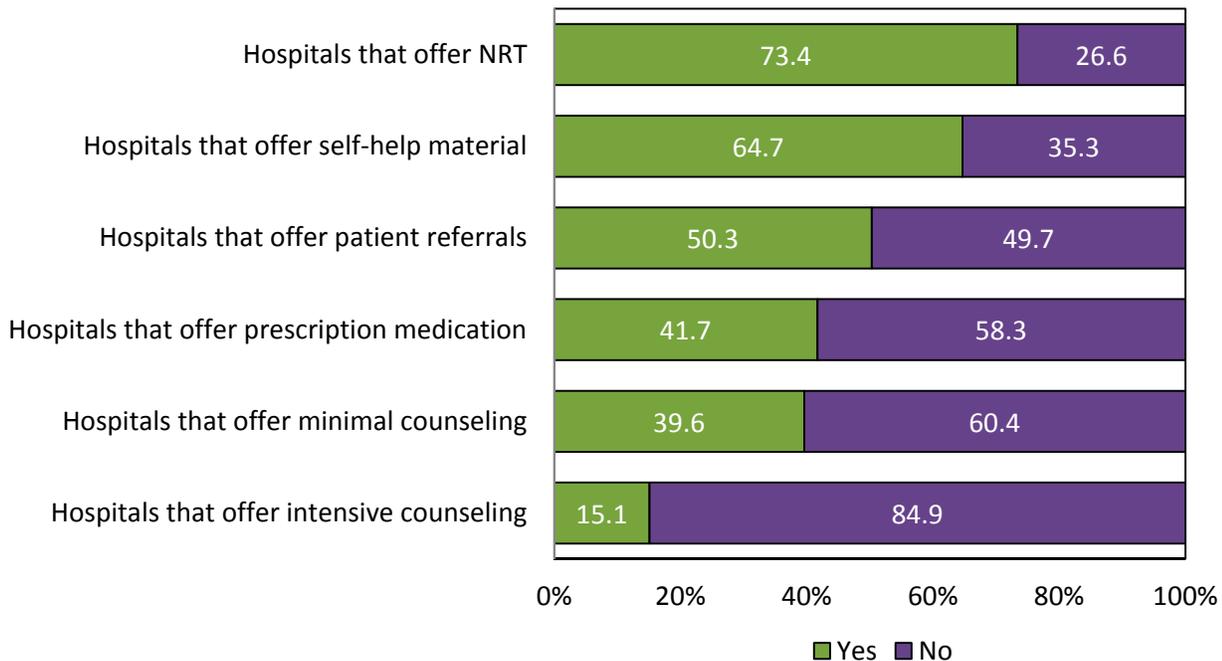
When hospital sites with the OMSC in place were compared to hospital sites without the OMSC in place, a similar pattern for identifying inpatient smokers during a hospital stay was observed (see Table A3 in Appendix 2).

Over 60% of hospitals sites indicated that they identify patients who smoke at two or more points during a hospital stay. In particular, hospital sites, including those with the OMSC, determine smoking status at two points (22%), three points (31%), and four points (7%) during a typical visit.

## Provision of Specific Smoking Cessation Services and Patient Referral

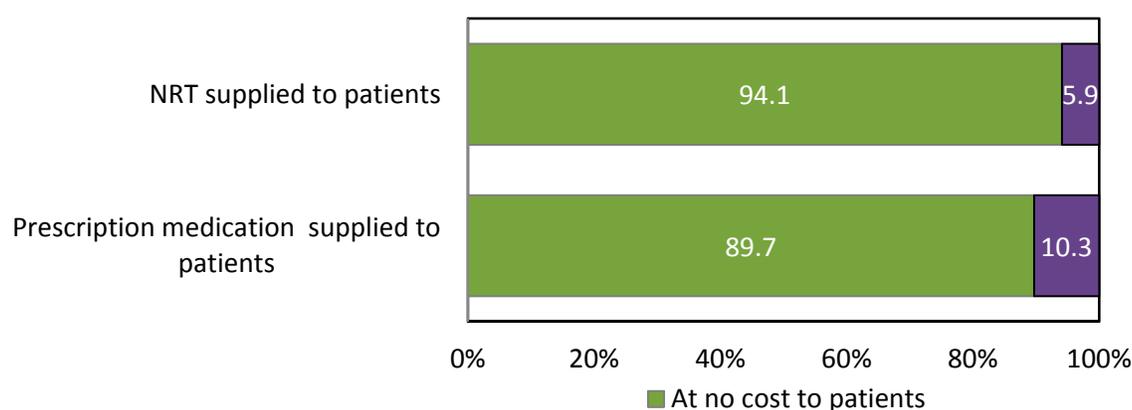
Among hospital sites that provided smoking cessation services, the majority indicated that they provided nicotine replacement therapy (NRT; 73%), self-help materials (65%), patient referrals (50%; see Figure 6) to all inpatients. Fewer hospital sites reported offering inpatient smokers prescription medication (42%), minimal counseling (e.g., using the 5 As protocol; 40%) and intensive counseling (e.g. sessions that are 10 minutes or longer; 15%).

Figure 6: Smoking Cessation Services Provided To Inpatients by Hospitals, n=139



Among hospital sites that offered NRT to inpatients (n=102), 94% reported that they supplied it at no cost (see Figure 7). Similarly, 90% of hospital sites that offered prescription medication for smoking cessation to inpatients reported supplying it at no cost. A small proportion of hospitals reported providing NRT (10% of hospitals) and prescription medication (6%) at full cost to patients.

**Figure 7: Supply of NRT (N=102) and Prescription Medication (N=58) to Patients**



Among hospital sites that reported patient referrals to external resources, most directed patients to Smokers’ Helpline<sup>iv</sup> (79%), to a public health unit (67%), or to a primary care physician (57%; Table 4). Hospital sites that selected “other” external resources (19%) reported referring patients to the Ottawa Heart Institute (n=4), Heart Niagara (n=3), pharmacists (n=2), addictions programs (n=2), Hearth and Stoke Foundation (n=1), and out-patient follow-up programs (n=1). A summary of external resources by type of hospital can be found in Table A4 in Appendix 2.

**Table 4: External Resources Where Patients are Referred, n=70**

	n	% <sup>a</sup>
Smokers' Helpline	55	78.6
Public health unit	47	67.1
Primary care physicians (including Family Health Teams)	40	57.1
Other	13	18.6
Specialty clinic(s) (e.g. nicotine dependence clinic, asthma clinic)	12	17.1
Community Health Centre (CHC) or Aboriginal Health Access Centre (AHAC)	9	12.9

<sup>a</sup> Percentages do not add up to 100% as the survey participants could check more than one answer.

<sup>iv</sup> A brief description of Smokers’ Helpline is provided in Appendix 3.

## Resource Allocation for Smoking Cessation Activities

The survey inquired whether hospitals were allocating resources (funding) specifically for smoking cessation activities. Data analysis show that only 31% of all hospital sites that provided smoking cessation services reported allocating resources for smoking cessation activities (n=43). Among these hospitals, 42% reported allocating resources for designated staff, 35% for program funding, and another 35% for NRTs or prescription medication (see Table 5). “Other” funded items cited by respondents included: cost of follow-up calls as per the OMSC, cost for staff smoking cessation aid reimbursement, staff education and counseling, research activities, and self-help materials.

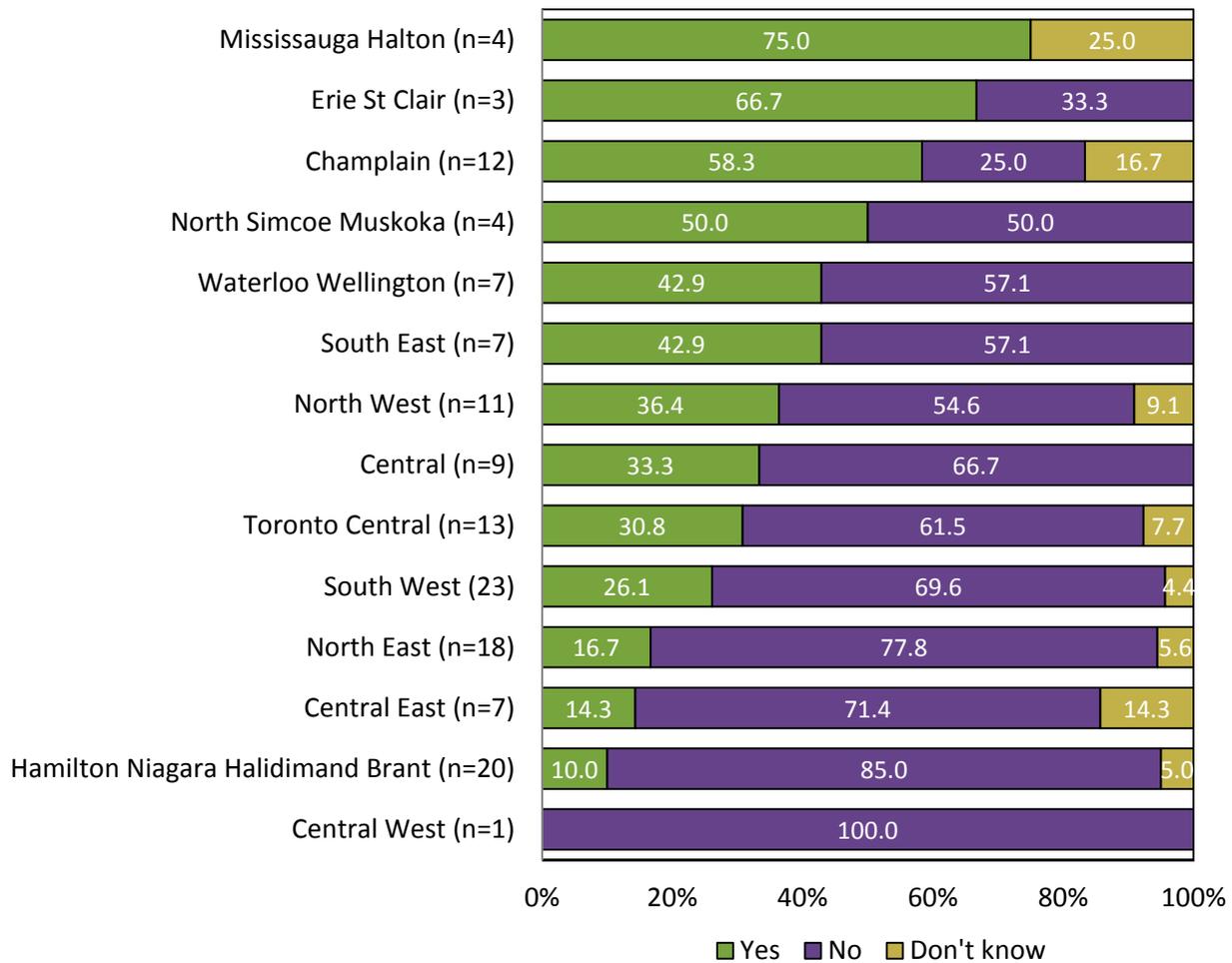
**Table 5: Specific Allocation of Smoking Cessation Resources, n=43**

	n	% <sup>a</sup>
Designated staff/FTE funded	18	41.9
Program funding	15	34.9
Funding for NRTs or prescription medication	15	34.9
Other	12	27.9

<sup>a</sup> Percentages do not add up to 100% as the survey participants could check more than one answer.

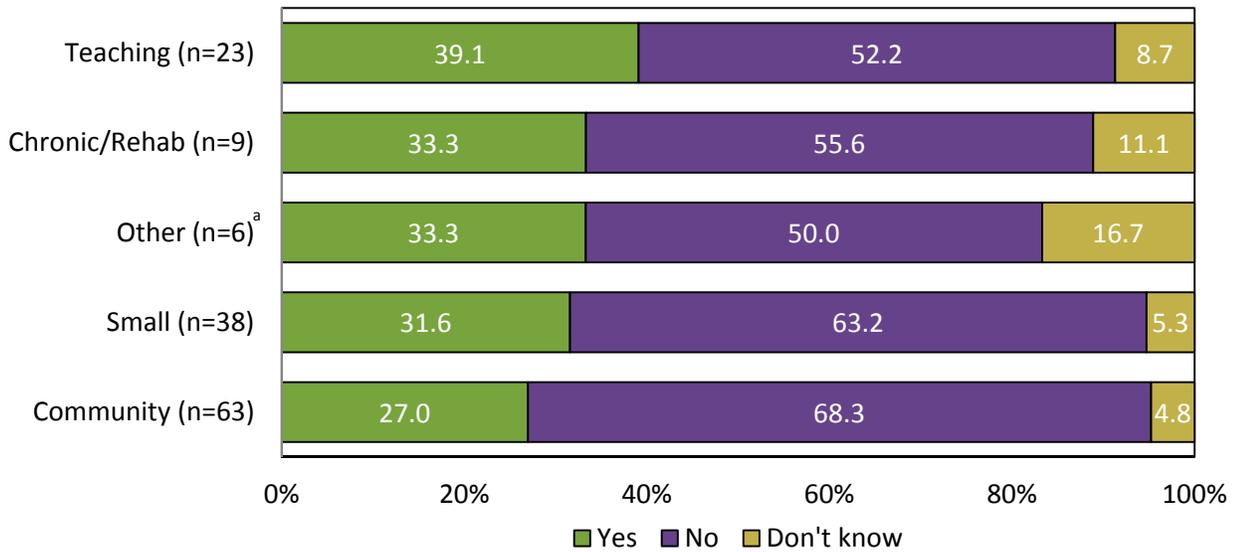
The proportion of hospital sites that allocated resources specifically for smoking cessation activities within each LHIN was also assessed. As Figure 8 indicates most hospitals in the Mississauga Halton LHIN (75%), Erie St. Clair LHIN (67%), and Champlain LHIN (58%) reported providing funding for smoking cessation activities. Few or no hospital sites did so in the North East LHIN (17%), Central East LHIN (14%), Hamilton Niagara Haldimand Brant LHIN (10%), and Central West LHIN (0%).

**Figure 8: Hospital Sites Allocating Resources Specifically For Smoking Cessation Activities, By LHIN, n=139**



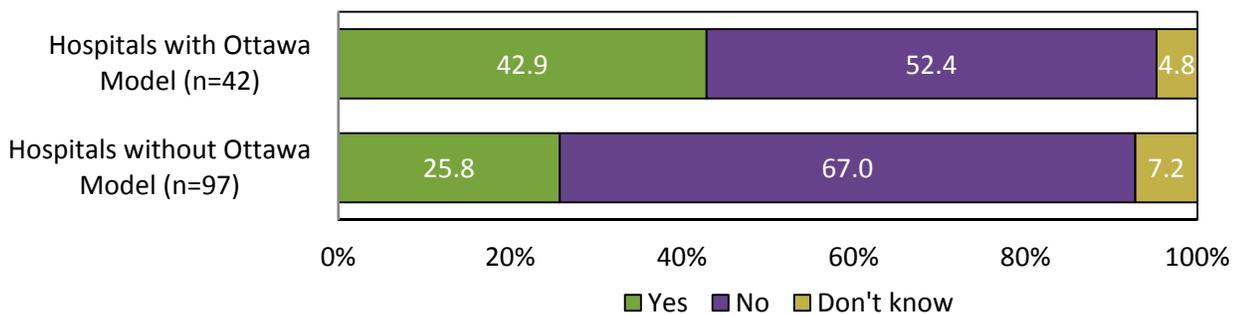
Analysis by type of hospital revealed that approximately 30% to 40% of hospital sites allocated resources specifically for smoking cessation activities (see Figure 9). Further, hospital sites with the OMSC in place allocated resources specifically for smoking cessation activities more so than did those without the OMSC (43% vs. 26%; Figure 10).

**Figure 9: Hospital Sites Allocating Resources Specifically For Smoking Cessation Activities, By Type of Hospital, n=139**



<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

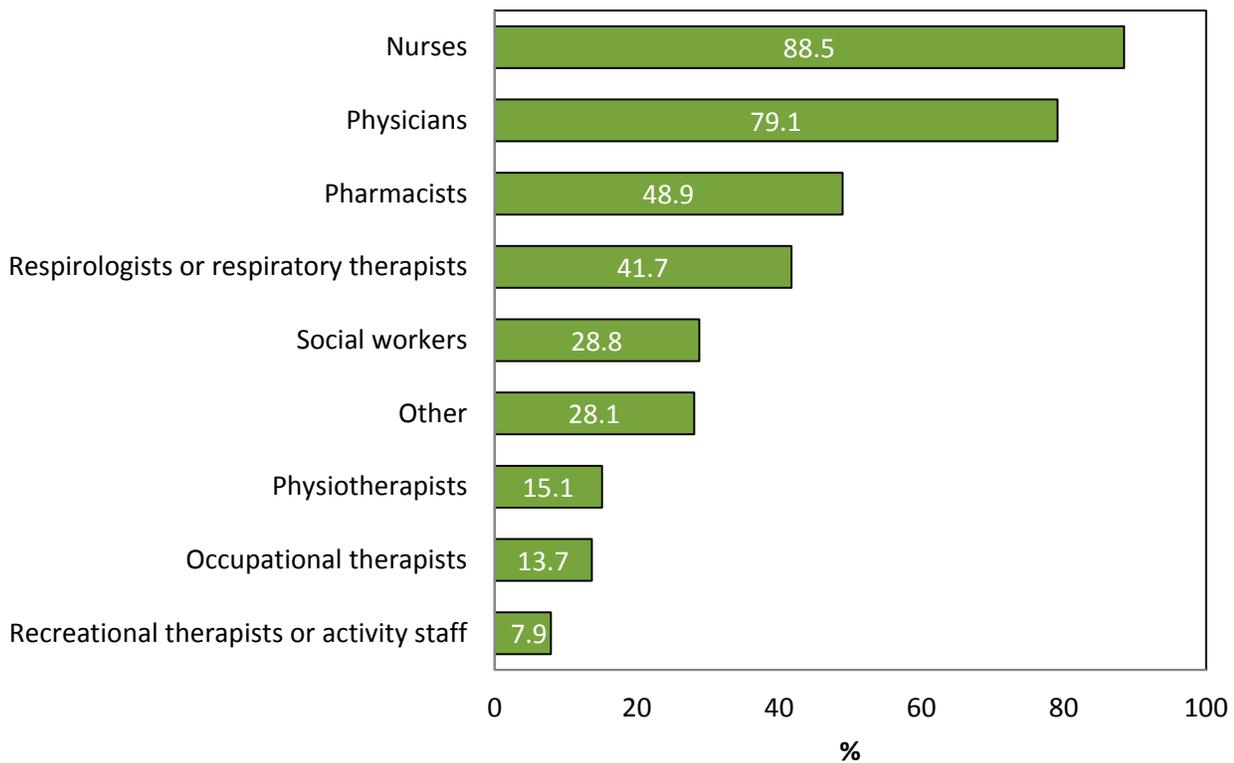
**Figure 10: Hospital Sites Allocating Resources Specifically For Smoking Cessation Activities, By OMSC, n=139**



## Provision of Smoking Cessation Services by Health Professionals

Most hospital sites reported that nurses (89%, including nurse practitioners, and specialty nurses) as well as physicians (79%) provided smoking cessation services to patients (see Figure 11). The most frequently cited “other” types of health professionals included addictions counselors (n=8), psychologists (n=3), and dietitians (n=2). Similarly, nurses and physicians were the most commonly reported health professional to provide smoking cessation services when responses were analyzed by type of hospital and OMSC (See Tables A5 and A6 in Appendix 2).

Figure 11: Health Professionals Who Provide Smoking Cessation Services to Patients, n=139

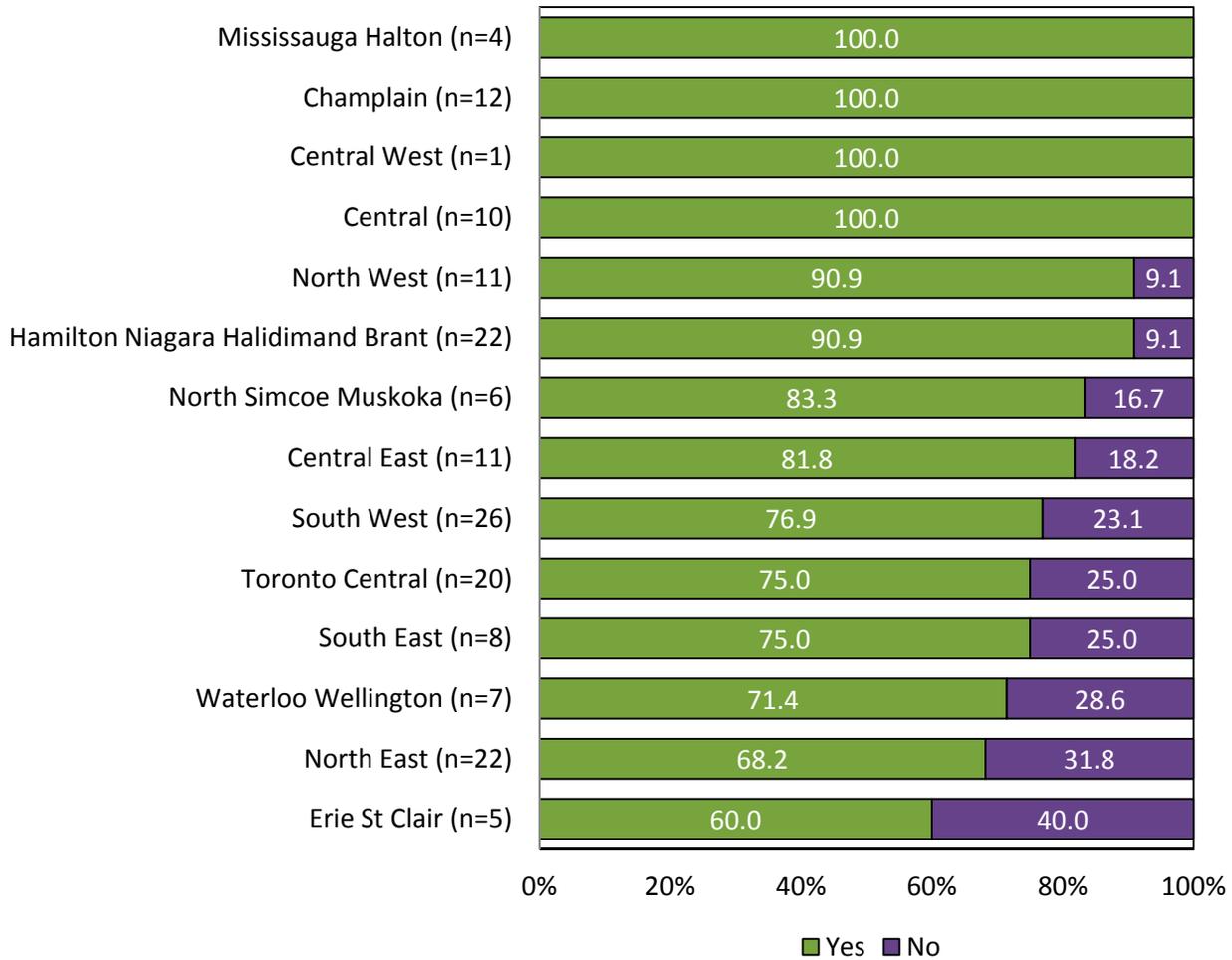


## Smoking Cessation Training Programs

The majority of hospital sites (82%, or n=135) indicated that members of their staff have attended smoking cessation training programs. Data was not collected about the number or proportion of staff that have been trained, neither as a whole or by type of health care professional.

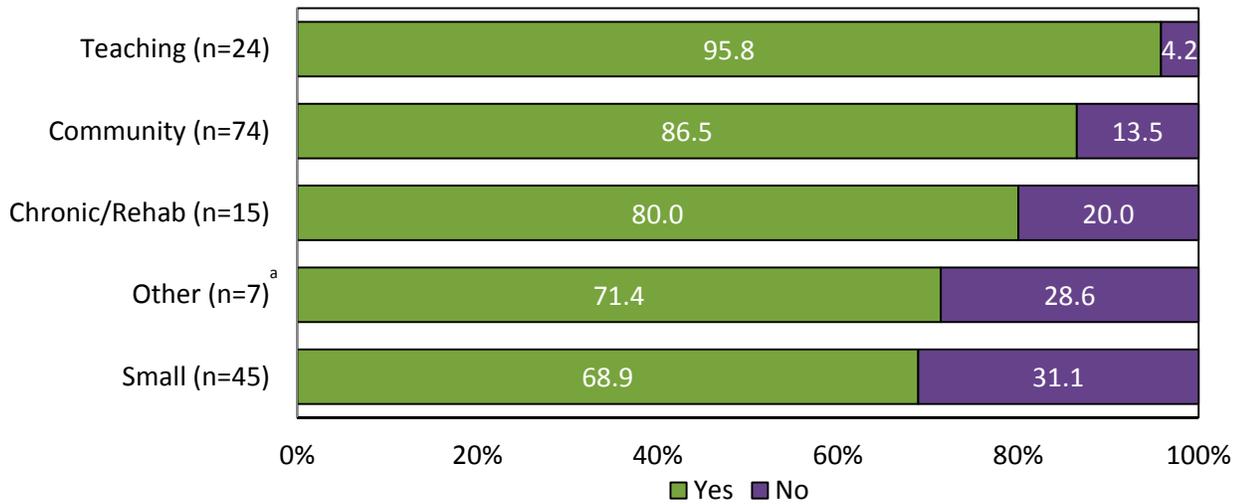
Analysis by LHIN area demonstrated that all hospital sites in the Mississauga Halton LHIN, Champlain LHIN, Central West LHIN, and the Central LHIN reported that members of their staff participated in smoking cessation training programs (see Figure 12).

**Figure 12: Hospital Staff Members That Attend Smoking Cessation Training Programs, by LHIN, n=165**



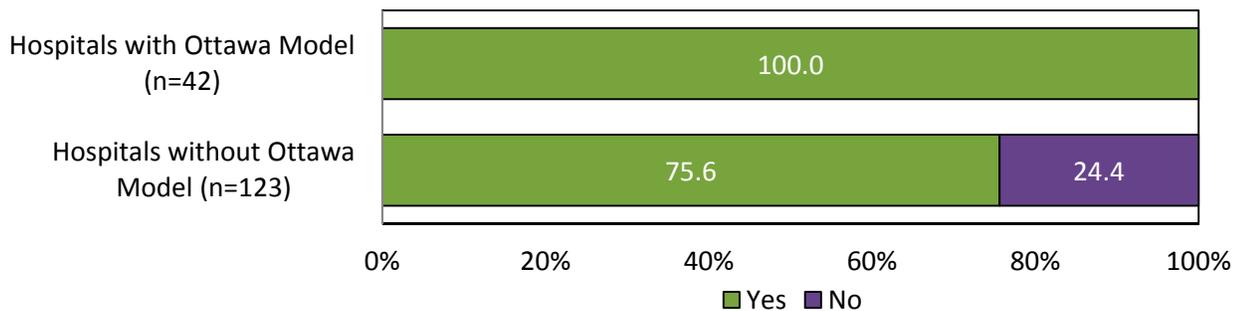
The majority of hospital sites within each hospital category reported that members of their staff had attended smoking cessation training programs (see Figure 13). All hospital sites with the OMSC in place reported staff attending smoking cessation training programs while three quarters of other hospital sites without OMSC reported cessation training program attendance (100% vs. 75.6%, respectively; see Figure 14).

Figure 13: Hospital Staff Members That Attend Smoking Cessation Training Programs, By Type of Hospital, n=165



<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

Figure 14: Hospital Staff Members That Attend Smoking Cessation Training Programs, by OMSC, n=165



Hospital staff have attended various training programs. Table 6 shows that a substantial proportion of hospital sites mentioned that members of their staff attended the Ottawa Model for Smoking Cessation at the University of Ottawa Health Institute (42%), Registered Nurses’ Association of Ontario (RNAO) smoking cessation eLearning course (41%), and Training

Enhancement in Applied Cessation and Health (TEACH) training (41%).<sup>v</sup> 13% of hospital sites reported using a wide range of other sources for staff training, such as: Quit Care program (n=6); in-services, internally offered training (n=5); Mayo Clinic tobacco cessation program (n=2); RNAO Champions workshops (n=2), OMSC Annual Conference (n=2), Trillium's own World No Tobacco Day Smoking Cessation Symposium (n=2); Public Health Community of Practice (n=1); webinar (n=1); training program provided by the Northern Cancer Fund (n=1).

**Table 6: Smoking Cessation Training Programs Attended By Hospital Staff, n=165**

Training Program	n	% <sup>a</sup>
Ottawa Model for Smoking Cessation (OMSC)	69	41.8
RNAO eLearning Course: <i>Helping People Quit Smoking</i>	68	41.2
Training Enhancement in Applied Cessation and Health (TEACH) training	68	41.2
RNAO Smoking Cessation Best Practice Champions program	45	27.3
Training programs delivered by local PHUs	39	23.6
OTRU online course: <i>Tobacco and Public Health: From Theory to Practice</i>	36	21.8
Program Training and Consultation Centre (PTCC) brief intervention training	26	15.8
Clinical Tobacco Intervention (CTI) program	13	7.9
Other	22	13.3

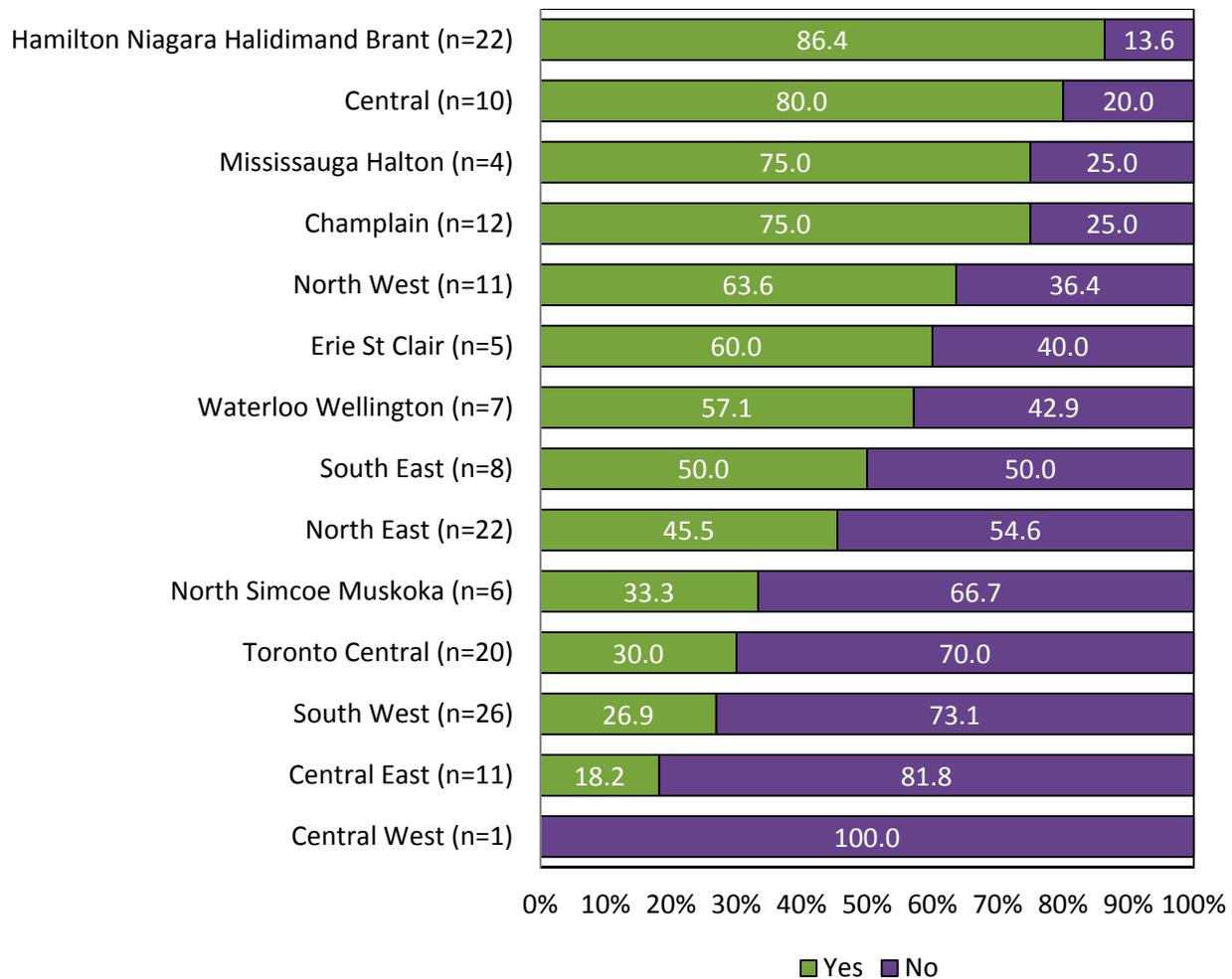
<sup>a</sup> Percentages do not add up to 100% as the survey participants could check more than one answer.

<sup>v</sup> A brief description of the RNAO and TEACH projects is provided in Appendix 3.

## Championing the Provision of Smoking Cessation Services

Approximately half of responding hospital sites (51%, n=84) indicated having a champion<sup>vi</sup> who drives the provision of smoking cessation services. Most hospitals in the Hamilton Niagara Haldimand Brant LHIN (86%), Central LHIN (80%), Mississauga Halton LHIN (75%), Champlain LHIN (75%), North West LHIN (64%), Erie St. Clair LHIN (60%), and the Waterloo Wellington LHIN (57%) reported having a champion. None of the hospital sites in the Central West LHIN reported having a staff champion for smoking cessation services (see Figure 15).

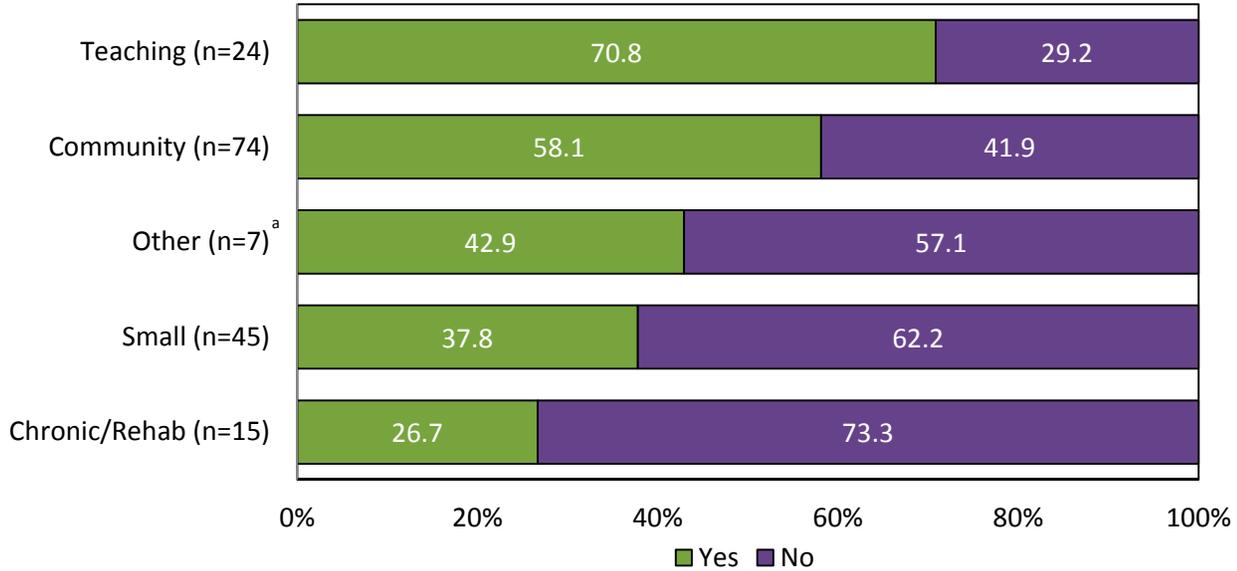
Figure 15: Hospital Sites With a Smoking Cessation Champion, by LHIN, n=165



<sup>vi</sup> The term “champion” is used in a general sense and is not specific to staff who have attended the RNAO Smoking Cessation Champion workshops.

The majority of teaching (71%) and community hospital sites (58%) indicated having a champion on staff (see Figure 16).

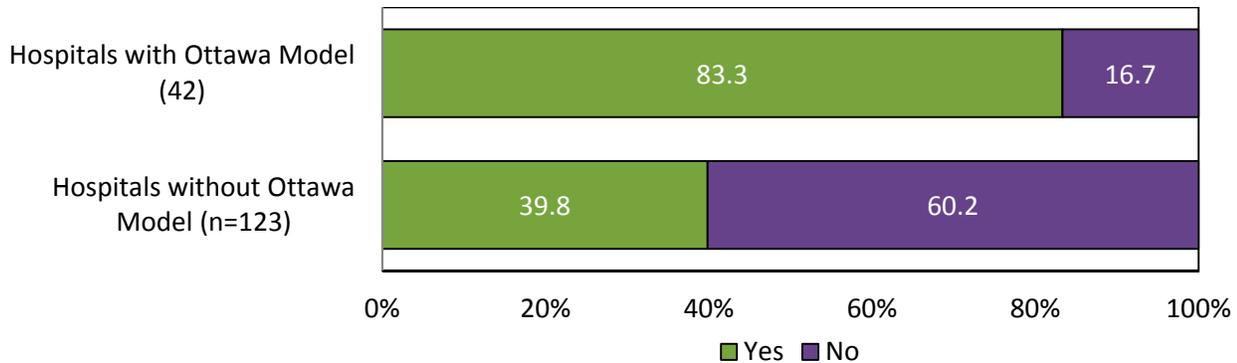
Figure 16: Hospital Sites With a Smoking Cessation Champion, by Type of Hospital, n=165



<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

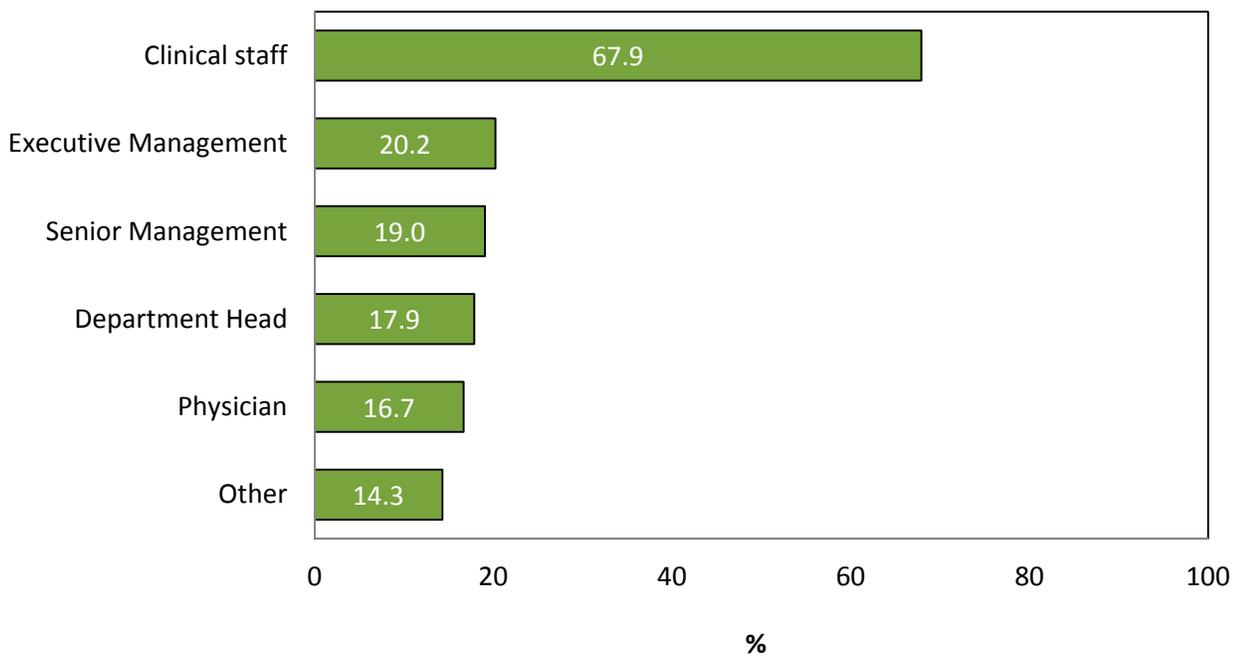
Nearly all hospital sites with the OMSC indicated having a champion for smoking cessation services on staff (83%), while only 40% of hospital sites without the OMSC reported having such a champion (see Figure 17).

Figure 17: Hospital Sites with a Smoking Cessation Champion, by OMSC, n=165



Among hospital sites that indicated having a smoking cessation services champion on staff (n=84), the majority reported that this person was a clinical staff member (e.g. nurse, respiratory therapists, etc; 68%). A few hospital sites reported the champion being a member of executive management (20%), senior management (19%), a department head (18%), or a physician (17%; see Figure 18). A few champions hold other positions within the hospitals. Champions included addiction counselors (n=5), a manager of human resources (n=1), a manager of clinical area (n=1), an organizational health manager (n=1), a psychometrist (n=1), a regional education lead (n=1), a smoking cessation project lead (n=1), and a tobacco withdrawal management coordinator (n=1).

**Figure 18: Position of the Champion Who Drives the Provision of Smoking Cessation Services, n=84**

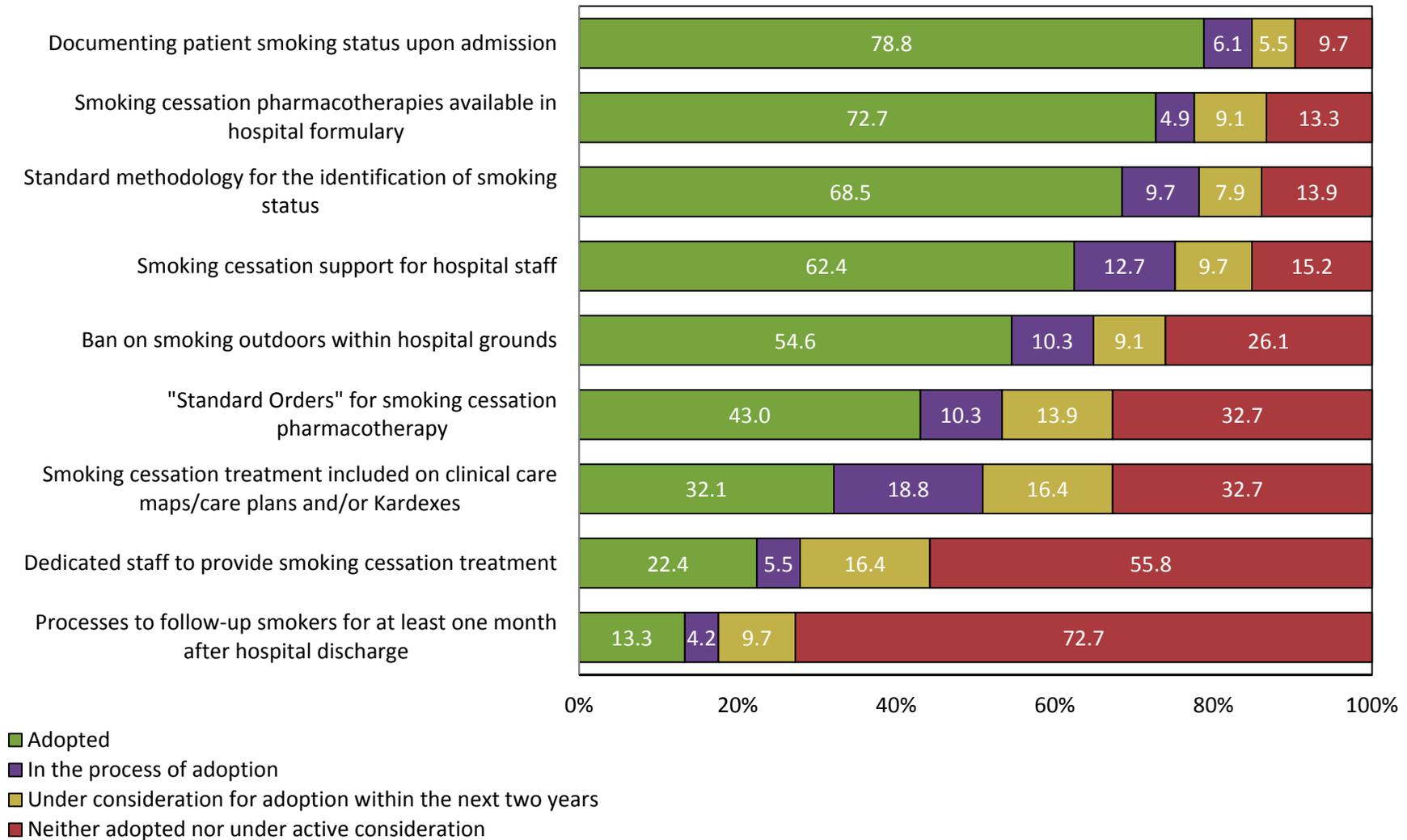


### Adoption of Specific Policies and Practices for Smoking Cessation

Documentation of patient smoking status upon admission was the most widely adopted policy among all hospital sites that participated in the survey (79%, or n=130). Other cessation specific policies/practices commonly adopted by hospital sites include making smoking cessation pharmacotherapies available in the hospital formulary (73%, or n=120), having a standard methodology for the identification of smoking status (69%, or n=113), and having smoking cessation support for hospital staff (62%, or n=103; see Figure 19).

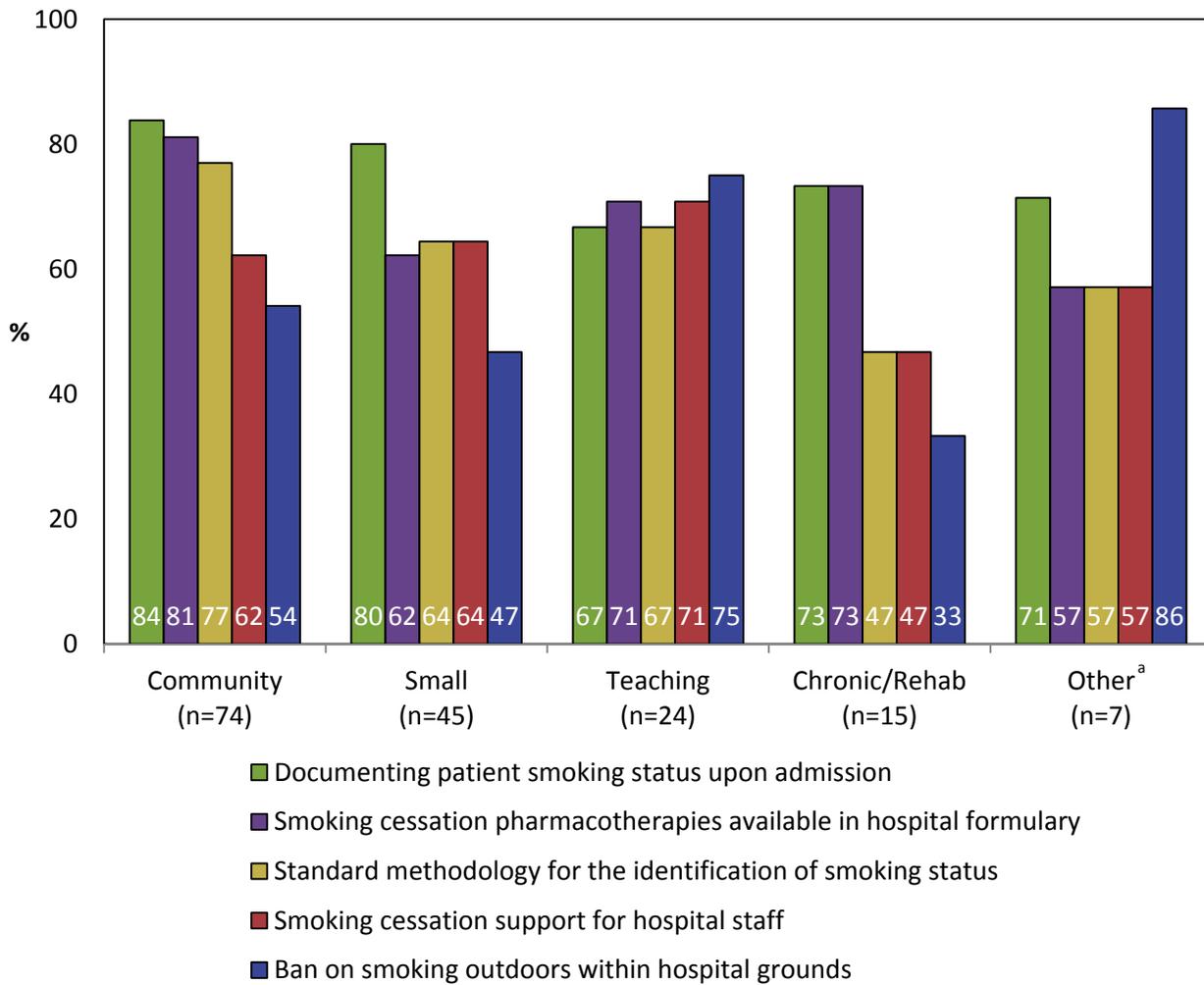
In contrast, having dedicated staff provide smoking cessation treatment and implementation of smokers' follow-up for at least one month after hospital discharge were the two policies/practices that neither have been adopted nor considered for adoption by 56% and 73% of hospital sites, respectively. Compared to all hospital sites that responded to the survey, hospital sites that provided smoking cessation services (n=139) displayed a similar pattern for the adoption of policies/practices for smoking cessation.

Figure 19: Adoption of Policies and Practices for Smoking Cessation, n=165



The five most commonly adopted cessation policies/practices were analyzed by types of hospital (see Figure 20). Data analysis revealed that, with some variation, community and small hospital sites most frequently reported adopting all policies/practices, except for the provision of smoking cessation support to hospital staff (highest among teaching hospitals; 71%) and a ban on smoking outdoors within hospital grounds (highest among "other" hospitals; 86%).

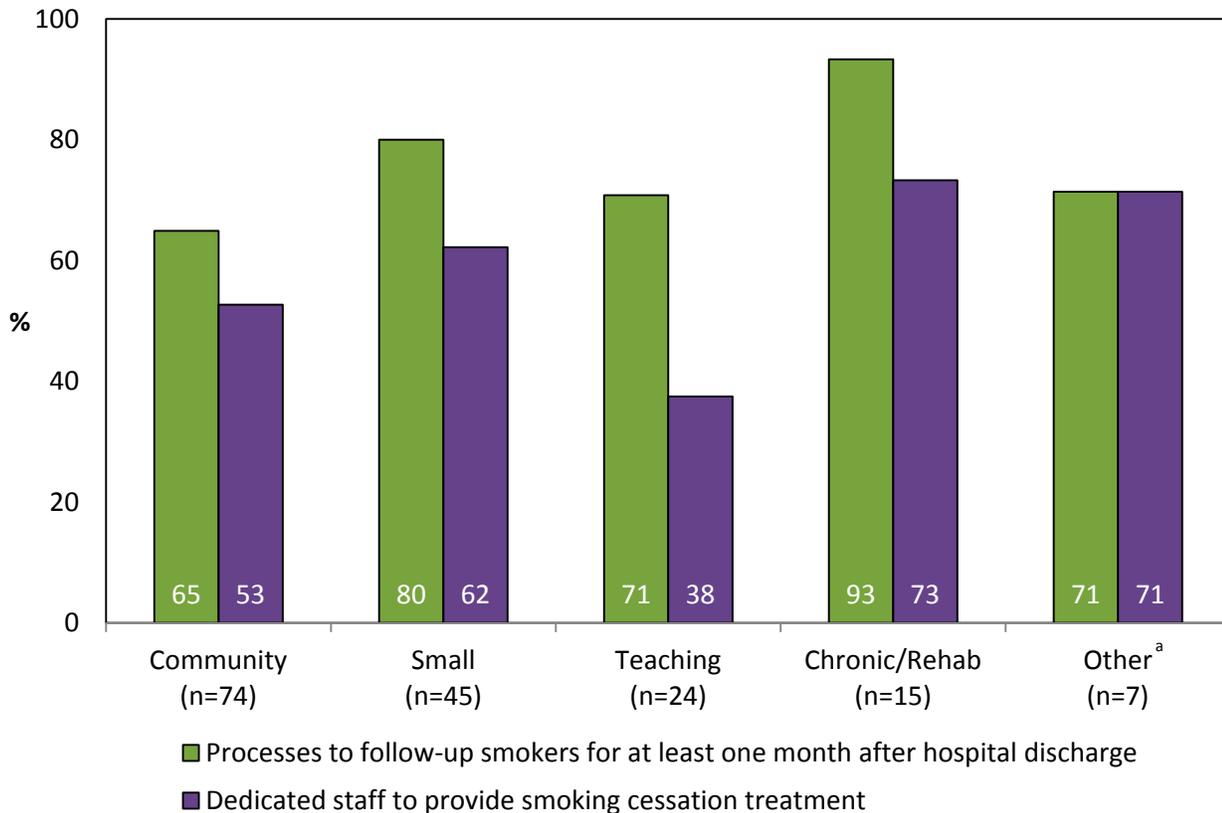
Figure 20: Most Commonly Adopted Policies and Practices for Smoking Cessation, By Type of Hospital, n=165



<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

Policies/practices with lowest adoption rate were also analyzed by types of hospital. As shown in Figure 21, chronic/rehab, small and “other” hospitals most frequently reported neither adopting nor considering for adoption the practices of assigning dedicated staff to smoking cessation treatment and following-up with smokers after hospital discharge.

**Figure 21: Smoking Cessation Policies And Practices Most Commonly Reported As Being Neither Adopted, Nor Under Active Consideration, By Type Of Hospital, n=165**



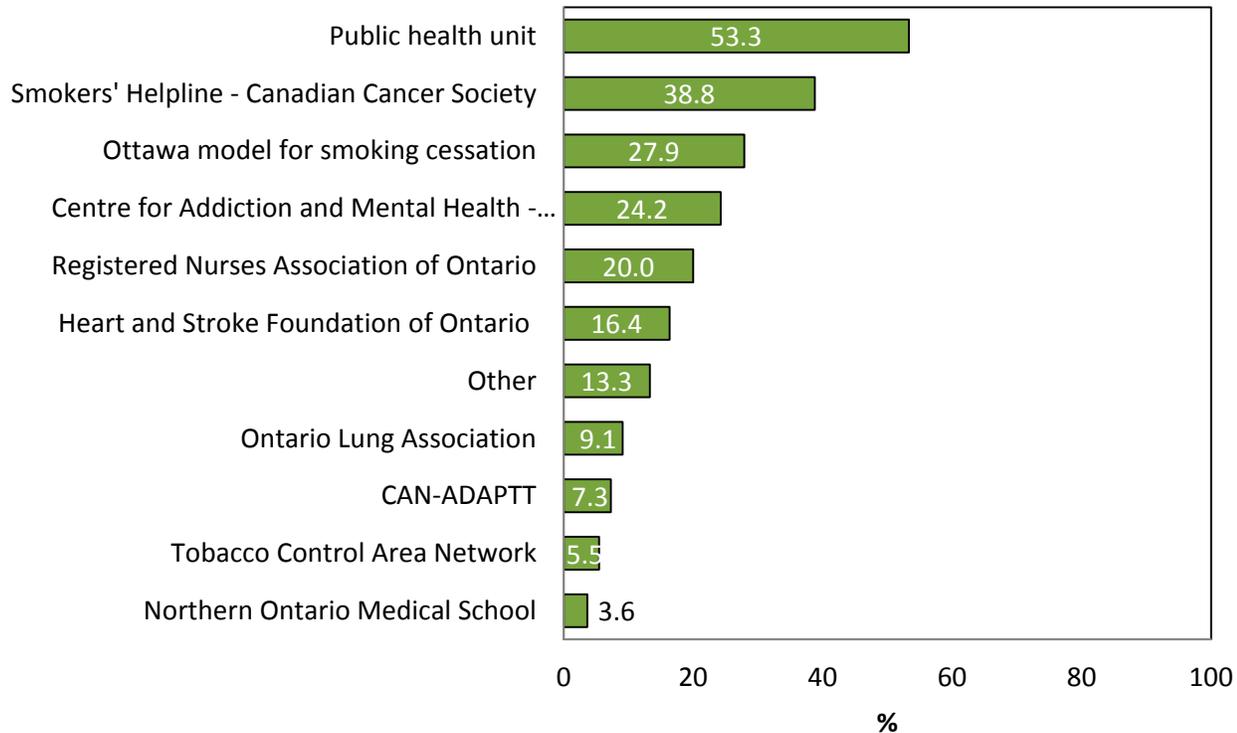
<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children’s Hospital, Hospice, and Health Authority.

Hospital sites with the OMSC indicated that they have largely adopted (79% or more) most of the policies/practices for smoking cessation, except for the following three policies/practices. Having dedicated staff to provide smoking cessation treatment was largely adopted (45%) or neither adopted nor considered for adoption (33%). Including smoking cessation treatment on clinical care maps, care plans, or Kardexes was largely adopted (41%) or in the process of being adopted (41%). Last, establishing procedures to follow-up smokers for at least one month after discharge was largely adopted (38%), under consideration for adoption within the next two years (21%), or neither adopted nor considered for adoption (31%). A summary of policies/practices for smoking cessation by OMSC can be found in Table A7 in Appendix 2.

## Partnerships between Hospitals and External Organization to Provide Smoking Cessation Services

The majority of hospital sites (85%) indicated partnering with various organizations to deliver smoking cessation services to patients in hospital. Survey data showed that hospital sites most commonly collaborated with public health units (53% of hospitals), Smokers’ Helpline (39%), Ottawa Model for Smoking Cessation (28%), Center for Addiction and Mental Health (24%), RNAO (20%) and other organizations (see Figure 22). Few hospital sites reported working with CAN-ADAPTT (7%), Tobacco Control Area Networks (6%), and the Northern Ontario Medical School (4%). Thirteen percent of hospitals reported partnering with “other” organizations, such as Family Health Teams (n=4), the Canadian Cancer Society (n=3), the Program and Training Consultation Centre (PTCC) (n=2), a separate vendor (n=2), addiction counselors (n=1), diabetes education centre (n=1), Heart Niagara (n=1), Community Health Centre (n=1), Mayo Clinic (n=1), Stroke Prevention Clinic (n=1) and others. Detailed descriptions of these collaborations were not collected in the survey.

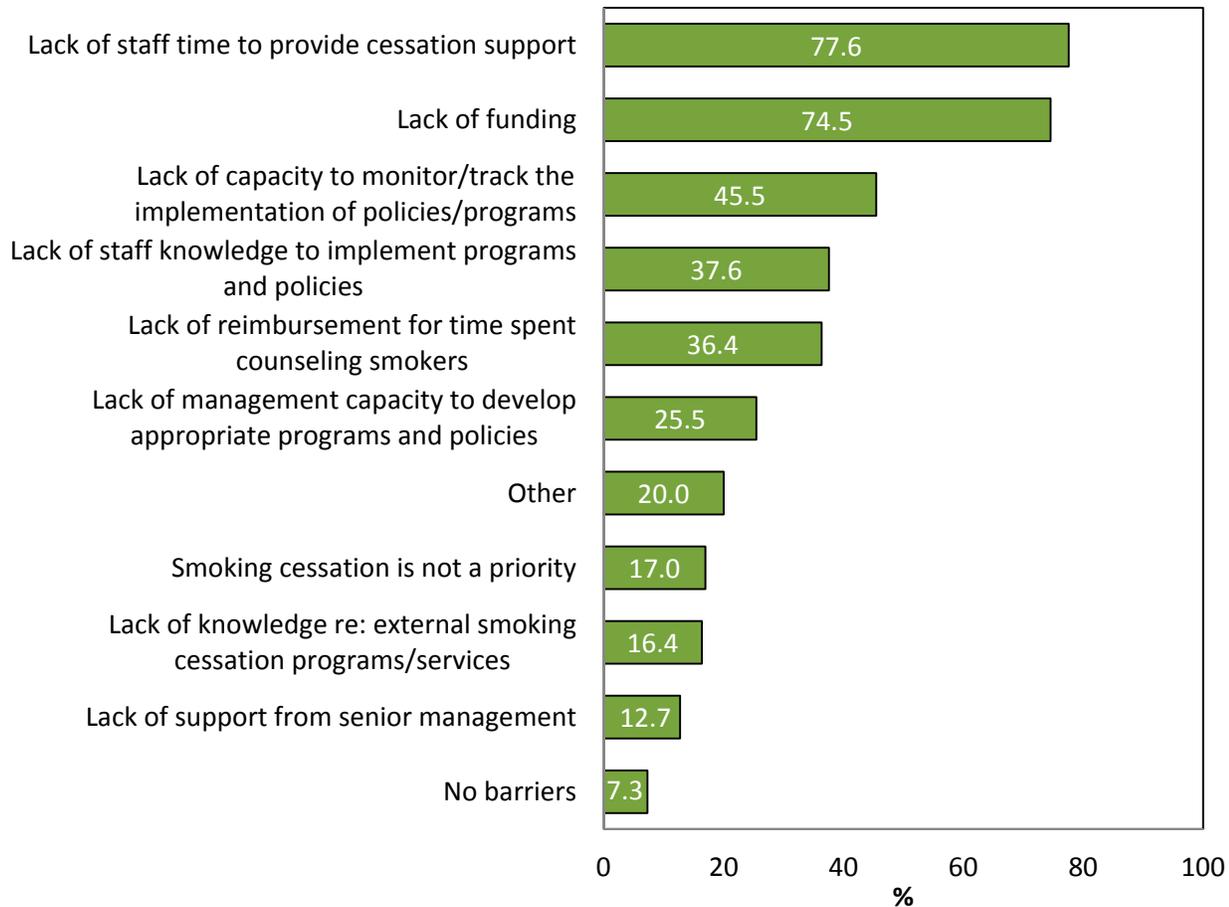
Figure 22: Organizations Hospital Sites are Working with to Deliver Smoking Cessation Services, n=165



## Barriers and Challenges to Implementing Smoking Cessation Services and/or Policies in Hospitals

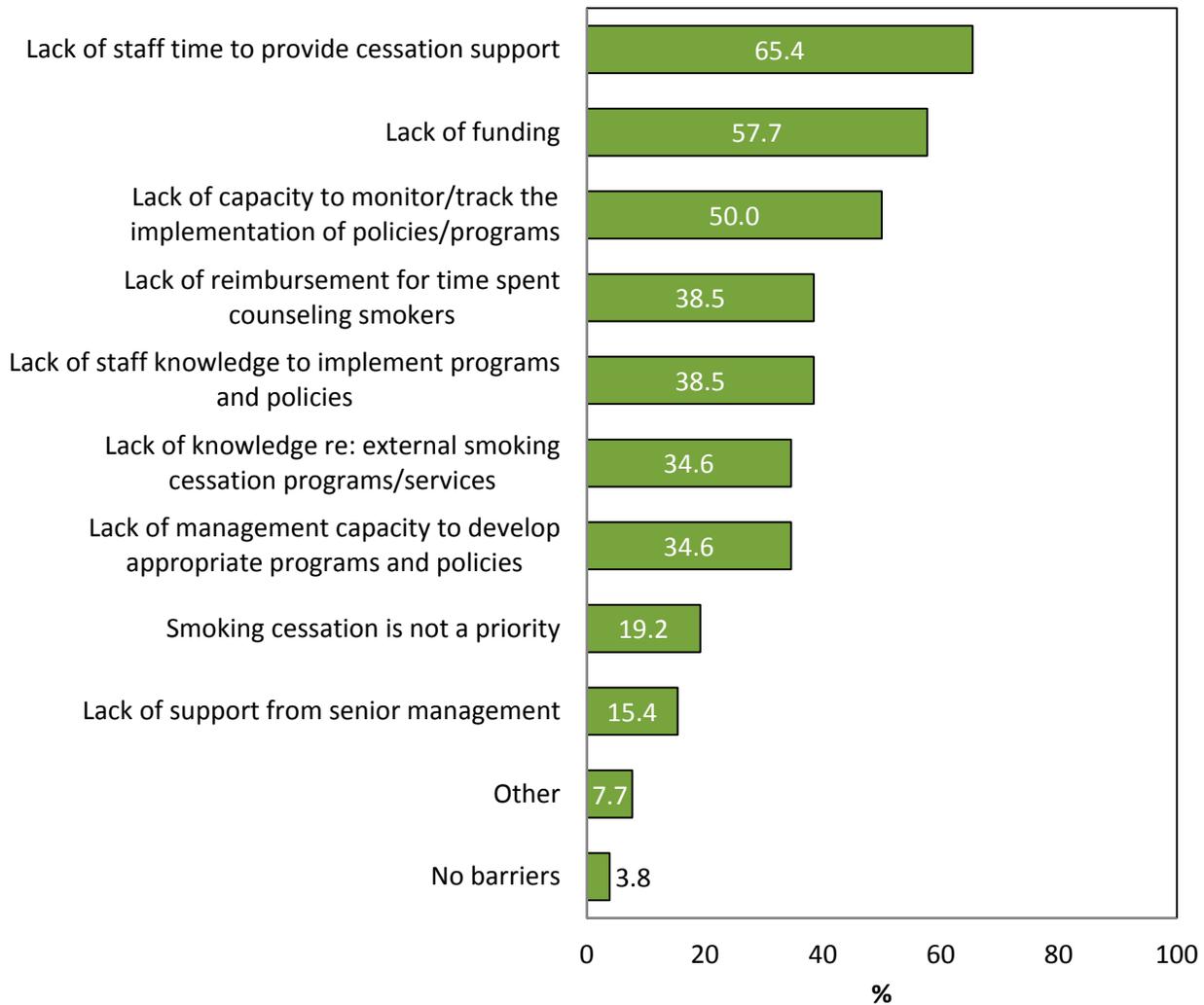
The most often cited barriers and challenges to implementation of smoking cessation services and policies included lack of staff time to provide cessation support (reported by 78% of hospital sites), lack of funding (75%), and lack of capacity to monitor or track the implementation of policies and programs (46%; see Figure 23). Smoking cessation not being a priority (17%), lack of knowledge about external smoking cessation programs and services for patient referral (16%), and lack of support from senior management (13%) were the barriers cited by fewer than 20% of hospital sites. Additionally, 7% of hospital sites reported not having any barriers to the implementation of smoking cessation services and policies.

Figure 23: Perceived Barriers/Challenges to Implementing Smoking Cessation Services and/or Policies, n=165



Hospital sites that reported not offering smoking cessation services (16%, n=26) identified similar key barriers to implementing cessation services. In particular, lack of staff time to provide cessation support (mentioned by 65% of the hospitals), lack of funding (58%), and lack of capacity to monitor and track the implementation of policies and programs (50%) were most commonly cited barriers by these hospitals (see Figure 24).

**Figure 24: Barriers and Challenges to Implementing Smoking Cessation Services and/or Policies, Among Hospitals Reported Not Offering Smoking Cessation Services, n=26**



Community hospitals most commonly cited lack of funding as a barrier (45%); this was also a barrier for small hospitals (27%) and teaching hospitals (19%). Similarly, community hospitals most commonly cited lack of staff time to provide cessation support (48%), followed by small (24%) and teaching hospitals (16%).

In comparison to hospitals sites that do not follow the OMSC, those with the OMSC in place tended to less frequently report barriers/challenges to implementing smoking cessation services or policies (e.g., 73% vs. 27% for lack of staff time to provide cessation support). The only barrier that was identified by relatively similar proportions of OMSC hospitals and non-OMSC hospitals was the lack of support from senior management (43% OMSC hospitals vs. 57% non-OMSC hospitals).

## Suggestions for Improvement

### Perceived Ways to Encourage the Adoption and Implementation of Smoking Cessation Policies at the Hospital Level

When asked about adoption and implementation of smoking cessation policies at the hospital-level, respondents provided a wide variety of ideas and suggestions; however, the most common responses included the need for additional funding/resources, guidance on policy development, staff training, champions and management support.

- Funding/Resources (61 responses)
- Policy Guidance (44)
- Staff Training (22)
- Champions (14)
- Management Support (14)
- Research (10)
- Collaboration with Smoking Cessation System (9)
- Evaluation (8)
- Patient Education/Awareness (7)
- Hospital Consultation (3)
- Enforcement (2)

Overwhelmingly, the most common response was the need for targeted resources (n=61) for smoking cessation policy development and implementation and enforcement. Respondents emphasized the need for funding to support the hiring of dedicated staff, and to increase staff time for smoking cessation activities. A couple of respondents noted that, while commitment is great at the level of management and clinical staff, the major barrier is simply lack of resources.

*“I believe most hospitals are willing to adopt these policies for health reasons. The barrier is the lack of resources (human and financial) to implement them. Hospitals are being forced to be all things to all people.”*

Respondents also commonly advocated for the need for province-wide policy guidance (n=44) to require smoke free grounds, accreditation standards, standards of practice for implementing smoking cessation, and adoption of clinical best practices.

It was noted that *“A standard approach makes it easier for patients, visitors, and staff to understand the expectations regarding smoking cessation and support.”* Other reasons given for the need to take a standardized approach included: maintaining consistency, expediting efforts in individual organizations, ameliorating liability issues, promoting an inter-professional team approach, and systematizing the identification and treatment of patients who smoke.

In order to encourage the effective implementation of policies, it was suggested that identification and treatment of smokers should be a part of all hospital accountability agreements with LHINs, the MOHLTC, and the hospital accreditation process.

A significant number of respondents felt that **staff training** (n=22) is an essential factor in the effective implementation of smoking cessation policies. In addition to general training, it was suggested that staff need specific training in counseling special populations, motivational interviewing, outpatient follow-up, and awareness of community supports. It was widely suggested that there is a need for all staff to receive training in minimal contact interventions, and for dedicated staff to receive more intensive training so that they can serve as an internal resource person.

In addition to training for all hospital staff, it was strongly suggested by a number of respondents that there is a need for a designated staff person or **champion** (n=14) who could oversee policy development, implementation and could serve as an internal resource person to hospital staff. A couple of respondents mentioned that a designated staff person could provide follow-up to all patients who smoke. In many cases respondents noted that targeted funding would be essential to the creation of such a position.

**Support from all levels of management** (n=14) was deemed vital to the success of policy development and implementation. Strategies to improve buy-in included: targeted funding,

awareness and education for organizational policy makers and implementers, and alignment of smoking cessation programs with the mission, vision and values of each hospital. Finally, one respondent suggested that management should be evaluated based on smoking cessation indicators.

Respondents (n=10) recognized the need for **research** in a number of areas to inform the policy development process. In particular, respondents mentioned the need for research to inform smoking cessation interventions, the smoking cessation needs within a children's hospital, cost savings and improved patient care associated with different smoking cessation models, as well as improved outcomes, work with specific populations, and finally, optimal models of inter-professional care.

Respondents mentioned that strengthening relationships/**collaboration** (n=9) with other strategic partners could inform the development and implementation of policies. Organizations mentioned included: Public health units, community based partners, LHINs, Ottawa Model for Smoking Cessation, and Smokers' Helpline. In order to avoid duplicating efforts, respondents advocated that these programs should share resources, and strategies when possible.

**Monitoring and evaluation** (n=8) strategies were seen as essential in implementing smoking cessation policies. It was suggested that standardized indicators would ensure effective program implementation, and demonstrate the impact of hospital based smoking cessation policies. One respondent urged that evaluations should be shared publicly for accountability purposes.

In order to implement smoking cessation policies, respondents pointed to the need for **patient education** (n=7) efforts to motivate patients (and staff) to participate in smoking cessation programs. A small number of respondents suggested that hospitals should be involved in a **consultation** (n=3) process to determine the smoking cessation needs specific to geographic areas, and to ensure that internal priorities are not compromised by the introduction of new smoking cessation policies. Finally, a couple of respondents pointed to the need for **external enforcement efforts** (n=2), rather than putting the burden of enforcement on hospital staff.

### Perceived Ways to Improve Effectiveness and Accessibility of Smoking Cessation Services at the Hospital Level

Many of the themes that arose in response to policy development questions were consistent with the ideas to improve smoking cessation services at the hospital level. Major themes included the following.

- Resources (44 responses)
- Practices (20)
- Champions (18)
- Staff Training (17)
- Collaboration with Smoking Cessation System (16)
- Services for Outpatients (14)
- Evaluation (13)
- Provision of NRT (12)
- Management Support (9)
- Patient Education (7)
- Staff Cessation Program (3)
- Enforcement (2)

Overwhelmingly, the most common response was the need for **resources** (n=44) for smoking cessation service delivery. Respondents pointed specifically to the need for targeted funding to hire a dedicated person and to increase staff time for smoking cessation activities. Other suggestions included funding to design and develop programs for patients as well as staff. While the majority of respondents expressed the need for long-term continuous funding, there were a few hospital representatives who advocated for short-term start-up funding for the development of smoking cessation policies and programs.

A wide range of **practice changes** (n=20) were suggested in order to improve smoking cessation service deliveries:

- Routine follow-up post discharge
- Consistency of smoking cessation treatment when patients move across departments/ settings

- Standardized smoking cessation interventions in all areas of patient care
- Minimal contact interventions at every admission
- Provision of NRT to all smokers admitted to hospital as well as outpatients
- Group sessions offered to all inpatients
- Nicotine dependence clinic for all mental health populations
- Staff that could provide smoking cessation interventions on evening shifts
- Smoking status integrated into routine patient information collection
- Routinely providing patients with feedback regarding impact of smoking on health conditions
- Dedicated smoking cessation staff
- Inter-professional approach to provision of smoking cessation services
- Programs for specific patient populations
- Incorporating the 5As in all patient interventions

Many respondents indicated the need for a designated staff person or a **champion** (n=18). Suggested roles for a designated staff person included to: serve as an internal resource person for staff, monitor compliance with best practices, lead the development of policies and programs, be a liaison with strategic partners in smoking cessation, check census daily of the number of smokers admitted to the hospital, motivate patients to quit smoking, provide pharmacology, and to coordinate the inter-professional approach to smoking cessation.

Respondents indicated the need for **staff training** (n=17) at the clinical level. Many felt that smoking cessation training should be mandatory for all staff. Many respondents noted the need for consistency across the health care system, and the need to **collaborate** (n=16) in smoking cessation initiatives with strategic provincial and local partners including public health units, Smokers' Helpline, primary care resources, and community health agencies. There was also a strong emphasis on the need to connect rural hospitals with external smoking cessation resources.

Respondents also identified the need to strengthen smoking cessation services offered in **outpatient clinics** (n=14). Often services such as assessing smoking status, offering minimal contact interventions, or providing NRT are offered to inpatients but are not available to outpatients. One respondent suggested that outpatient clinics would be an appropriate setting to develop a nicotine management program for chronic disease patients.

Respondents urged for a strong **monitoring and evaluation** (n=13) system to track the provision of services and cessation outcomes. One suggestion was that an evaluation strategy should be a requirement for all targeted funding for smoking cessation services. It was suggested that evaluation results be shared both internally and externally.

A number of respondents pushed for the **provision of free NRT** (n=12) to both inpatients and outpatients. A couple of respondents also suggested that NRT should be provided free of cost to hospital staff. As in the case of policy development, respondents felt that **management buy-in** (n=9) is essential for effective smoking cessation service delivery.

**Data tracking** particularly systematic collection of smoking status, and daily check on the number of smokers admitted to the hospital, was highlighted as an important activity to facilitate service delivery. A small number of respondents suggested that hospitals have a role to play in **patient education** (n=7) to shift the culture of thinking about smoking as a lifestyle issue, to a healthcare issue. A small number of respondents also indicated that **staff cessation programs** (n=3) should be available in all hospitals. Finally two respondents felt that greater efforts to **enforce policies** (n=2) would improve service delivery.

### CONCLUSION

Hospitals are key settings for the provision of smoking cessation care. A web survey of Ontario hospitals was conducted to obtain a broad understanding of the current state of hospital-based smoking cessation activities. A majority of Ontario hospitals appeared to be engaged in smoking cessation by offering some type of cessation service to inpatients, adopting cessation policies and practices, enhancing their staff capacity in delivering smoking cessation support. However, lack of staff time and funding were perceived as key impediments to effective implementation of smoking cessation services and/or policies in hospital settings. The survey was not intended to provide a comprehensive and detailed assessment of cessation activities at the hospital level and therefore the results should be treated with caution.

## APPENDICES

Appendix 1: Survey Questionnaire

Appendix 2: Supplementary Tables

Appendix 3: Description of Terms and Programs

## Appendix 1: Survey Questionnaire

### Contact Information

Please provide the name, position, telephone and email address of the main contact for this survey:

Name: \_\_\_\_\_  
Position: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Email: \_\_\_\_\_

### Introduction

This survey is designed to better understand the extent to which hospitals are delivering tobacco cessation services. The results of the survey will inform the development of a series of research pilots to examine how to expand and improve hospital-based cessation services across Ontario. We will be sharing the aggregated results of the survey with all hospital CEOs and with others involved in advising us on the research pilot project. Your hospital will not be individually identified in any survey report.

### Cessation Services for Patients

1. Does your hospital currently offer any type of smoking cessation service for your patients?
  - A. Yes
  - B. No **GO TO Q11**
  
2. At what point is an inpatient smoker identified within the hospital? (Check all that apply)
  - A. Pre-admission Clinic
  - B. At admission
  - C. During hospital treatment
  - D. At discharge
  - E. Other, please specify \_\_\_\_\_

## Smoking Cessation Activities in Ontario Hospitals: Survey Results

3. Which of the following smoking cessation services does your hospital currently provide? (Check all that apply and indicate which type of patients receive the service)

Cessation service	All inpatients	All patients in outpatient clinics	All patients visiting the ED	Inpatients from specific hospital wards, please specify: _____	Outpatients from specific clinics, please specify: _____	ED patients with specific clinical conditions, please specify: _____	Other, please specify: _____
Self-help materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimal counseling intervention (e.g. using the 5As protocol)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensive counseling intervention (i.e. sessions are 10 minutes or longer)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nicotine replacement therapy (NRT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prescription medication (e.g. Champix, Zyban)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient referrals to external resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. If you offer NRT to your inpatients, how is it supplied?

- A. At no cost to patients
- B. At a reduced cost to patients
- C. At full cost to patients

- D. other, please specify \_\_\_\_\_
5. If you offer a prescription cessation medication (e.g. Zyban or Champix) to your inpatients, how is it supplied?
- E. At no cost to patients
  - F. At a reduced cost to patients
  - G. At full cost to patients
  - H. other, please specify \_\_\_\_\_
6. If you offer patient referrals to external resources, which of the following resources do you recommend? (Check all that apply)
- A. Public Health Unit
  - B. Smokers' Helpline
  - C. Community Health Centre (CHC) or Aboriginal Health Access Centre (AHAC)
  - D. Specialty clinic(s) (e.g. nicotine dependence clinic, asthma clinic)
  - E. Primary care physicians (including Family Health Teams)
  - F. Other, please specify \_\_\_\_\_
7. Does your hospital allocate resources specifically for smoking cessation activities?
- A. Yes
  - B. No
  - C. Don't know
- 7.1 If yes, how is this funding allocated?
- A. Program Funding
  - B. Designated Staff/ FTE Funded
  - C. Funding for NRTs or prescription medication
  - D. Other, please specify: \_\_\_\_\_

### Staff Training and Capacity

8. Which of the following health professional(s) within your hospital provide smoking cessation services to your patients? (Check all that apply)
- A. Physicians
  - B. Nurses
  - C. Social workers
  - D. Occupational therapists
  - E. Physiotherapists
  - F. Respiriologists or respiratory therapists
  - G. Recreational therapists or activity staff
  - H. Pharmacists
  - I. Other, please specify \_\_\_\_\_
9. Have hospital staff attended any of the following cessation training programs? (Check all that apply)
- A. Training Enhancement in Applied Cessation and Health (TEACH) training
  - B. Clinical Tobacco Intervention (CTI) program
  - C. RNAO Smoking Cessation e-learning Course – Helping People Quit Smoking
  - D. RNAO Smoking Cessation Champions program
  - E. Ottawa Model for Smoking Cessation (OMSC) – University of Ottawa Heart Institute

- F. Program Training and Consultation Centre (PTCC) Brief Intervention Training
- G. Ontario Tobacco Research Unit (OTRU) Tobacco Cessation Online Course – Tobacco and Public Health: From Theory to Practice
- H. Training programs delivered by local Public Health Unit
- I. Other, please specify \_\_\_\_\_

10. Do you have a champion who drives the provision of smoking cessation services within your hospital?

- A. Yes
- B. No

10.1. If yes, what type of position does the champion hold within your hospital?

- A. Executive Management (e.g. CEO, VP)
- B. Senior Management (e.g. Director-level management)
- C. Department Head
- D. Physician
- E. Clinical staff (eg. nurse, respiratory therapist, etc.)
- F. Other, please specify \_\_\_\_\_

### Policies and Practices to Support Cessation Services

For each policy and practice listed below, please indicate whether the policy/practice has been adopted, is in the process of adoption, is under consideration for adoption within the next two years or is not under active consideration.

10. Policy/practice: **Documenting patient smoking status upon admission**

- A. Adopted
- B. In the process of adoption
- C. Under consideration for adoption within the next two years
- D. Neither adopted nor under active consideration

11. Policy/practice: **Standard methodology for the identification of smoking status**

(eg "...any tobacco use in the past six months? in the past 7 days?")

- A. Adopted
- B. In the process of adoption
- C. Under consideration for adoption within the next two years
- D. Neither adopted nor under active consideration

12. Policy/practice: **"Standard Orders" for Smoking Cessation Pharmacotherapy**

- A. Adopted
- B. In the process of adoption
- C. Under consideration for adoption within the next two years
- D. Neither adopted nor under active consideration

13. Policy/practice: **Dedicated staff to provide smoking cessation treatment**

- A. Adopted
- B. In the process of adoption
- C. Under consideration for adoption within the next two years
- D. Neither adopted nor under active consideration

14. Policy/practice: **Smoking cessation treatment included on clinical care maps/ care plans and/or Kardexes?**
- A. Adopted
  - B. In the process of adoption
  - C. Under consideration for adoption within the next two years
  - D. Neither adopted nor under active consideration
15. Policy/practice: **Smoking cessation pharmacotherapies available in hospital formulary?**
- A. Adopted
  - B. In the process of adoption
  - C. Under consideration for adoption within the next two years
  - D. Neither adopted nor under active consideration
16. Policy/practice: **Processes to follow-up smokers for at least one month after hospital discharge**
- A. Adopted
  - B. In the process of adoption
  - C. Under consideration for adoption within the next two years
  - D. Neither adopted nor under active consideration
17. Policy/practice: **Ban on smoking outdoors within hospital grounds**
- A. Adopted
  - B. In the process of adoption
  - C. Under consideration for adoption within the next two years
  - D. Neither adopted nor under active consideration
18. Policy/practice: **Smoking cessation support for hospital staff**
- A. Adopted
  - B. In the process of adoption
  - C. Under consideration for adoption within the next two years
  - D. Neither adopted nor under active consideration

### Collaboration with Cessation Partners

19. Are you currently working with any of the following organizations to deliver a smoking cessation services for hospital patients?
- A. Public Health Units
  - B. Tobacco Control Area Network (TCAN)
  - C. Smokers' Helpline - Canadian Cancer Society (CCS)
  - D. Centre for Addiction and Mental Health (CAMH) - STOP, TEACH
  - E. Ottawa Model for Smoking Cessation – University of Ottawa Heart Institute
  - F. Northern Ontario Medical School
  - G. Registered Nurses' Association of Ontario (RNAO)
  - H. Ontario Lung Association (OLA)
  - I. Heart and Stroke Foundation of Ontario (HSFO)
  - J. CAN-ADAPTT
  - K. Other, please specify:

### Perceived Barriers / Challenges to Delivering Smoking Cessation Services:

20. What are the perceived barriers/challenges to implementing smoking cessation services and/or policies in your hospital? (Check all that apply)
- A. No barriers
  - B. Smoking cessation is not a priority
  - C. Lack of funding
  - D. Lack of staff knowledge to implement programs and policies
  - E. Lack of staff time to provide cessation support
  - F. Lack of support from senior management
  - G. Lack of management capacity to develop appropriate programs and policies
  - H. Lack of capacity to monitor/ track the implementation of policies/ programs
  - I. Lack of knowledge re: external smoking cessation programs/services for patient referral
  - J. Lack of reimbursement for time spent counseling smokers
  - K. Other, please specify: \_\_\_\_\_

### Suggestions for improvement:

21. What do you think should be done to encourage the adoption and implementation of smoking cessation policies at the hospital level?
- 

22. What do you think should be done to improve effectiveness and accessibility of smoking cessation services at the hospital level?
- 

### Thank you for completing the survey.

The results of the survey will inform the development of a series of research pilots to examine how to expand and improve hospital-based cessation services across Ontario. Participation in the research pilots will offer excellent opportunities to integrate cessation services into the ongoing care and treatment of patients.

Please indicate whether your hospital would be interested in participating in a research pilot:

- A. Yes
- B. No

## Appendix 2: Supplementary Tables

**Table A1: Use of the Ottawa Model for Smoking Cessation, by Type of Hospital, n=165**

	Yes		No	
	n	%	n	%
Community	21	50.0	53	43.1
Teaching	15	35.7	9	7.3
Small	4	9.5	41	33.3
Other <sup>a</sup>	2	4.8	5	4.1
Chronic/Rehab	0	0	15	12.2
TOTAL	42	100	123	100

<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children's Hospital, Hospice, and Health Authority.

**Table A2: Use of the Ottawa Model for Smoking Cessation, by LHIN, n=165**

	Yes		No	
	n	%	n	%
Hamilton Niagara Haldimand Brant	16	38.1	6	4.9
Champlain	11	26.2	1	0.8
Toronto Central	4	9.5	16	13.0
Mississauga Halton	2	4.8	2	1.6
North East	2	4.8	20	16.3
South East	2	4.8	6	4.9
Waterloo Wellington	2	4.8	5	4.1
Central	1	2.4	9	7.3
Erie St. Clair	1	2.4	4	3.3
South West	1	2.4	25	20.3
Central East	0	0	11	8.9
Central West	0	0	1	0.8
North Simcoe Muskoka	0	0	6	4.9
North West	0	0	11	8.9
TOTAL	42	100	123	100

**Table A3: Points during Hospital Stay Where an Inpatient Smoker Is Identified, by OMSC, n=139**

	Hospital Sites with OMSC		Hospital Sites without OMSC	
	n	% <sup>a</sup>	n	% <sup>a</sup>
At admission	38	90.5	81	83.5
Pre-admission Clinic	28	66.7	47	48.5
During hospital treatment	25	59.5	46	47.4
At discharge	6	14.3	9	9.3
Other	3	7.1	12	12.4

<sup>a</sup> Percentages do not add up to 100% as the survey participants could check more than one answer.

**Table A4: External Resources Where Patients Are Referred, By Type of Hospital, n=139**

	Chronic/Rehab		Community		Other <sup>a</sup>		Small		Teaching	
	n	% <sup>b</sup>	n	% <sup>b</sup>	n	% <sup>b</sup>	n	% <sup>b</sup>	n	% <sup>b</sup>
Public health unit	3	75.0	28	87.5	0	0	10	47.6	6	54.6
Smokers' Helpline	4	100	28	87.5	1	50.0	11	52.4	11	100
Community Health Centres (CHC) or Aboriginal Health Access Centre (AHAC)	0	0	5	15.6	0	0	1	438	3	27.3
Specialty clinics	2	50.0	3	9.4	0	0	1	4.8	4	36.4
Primary care physician (inc. FHT)	1	25.0	18	56.3	0	0	14	66.7	5	45.5
Other	1	25.0	8	25.0	1	50	5	23.8	2	18.2

<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children's Hospital, Hospice, and Health Authority.

<sup>b</sup> Percentages do not add up to 100% as the survey participants could check more than one answer.

**Table A5: Health Professionals Who Provide Smoking Cessation Services to Patients, n=139**

	Chronic/Rehab		Community		Other <sup>a</sup>		Small		Teaching	
	n	% <sup>b</sup>	n	% <sup>b</sup>	n	% <sup>b</sup>	n	% <sup>b</sup>	n	% <sup>b</sup>
Physicians	8	88.9	41	65.1	6	100	33	86.8	22	95.7
Nurses	7	77.8	54	85.7	6	100	33	86.8	23	100
Social workers	1	11.1	18	28.6	5	83.3	1	2.6	15	65.2
Occupational therapists	3	33.3	7	11.1	1	16.7	1	2.6	7	30.4
Physiotherapists	1	11.1	11	17.5	1	16.7	4	10.5	4	17.4
Respirologists or respiratory therapists	2	22.2	35	55.6	0	0	8	21.1	13	56.5
Recreational therapists or activity staff	0	0	6	9.5	2	33.3	0	0	3	13.0
Pharmacists	6	66.7	28	44.4	4	66.7	9	23.7	21	91.3
Other	3	33.3	26	41.3	2	33.3	5	13.2	5	21.7

<sup>a</sup> Other category includes Specialty Mental Health Hospital, Specialty Children's Hospital, Hospice, and Health Authority.

<sup>b</sup> Percentages do not add up to 100% as the survey participants could check more than one answer.

**Table A6: Health Professionals Who Provide Smoking Cessation Services to Patients among Hospitals with the OMSC in Place, n=42**

	n	% <sup>a</sup>
Nurses	40	95.2
Pharmacists	34	81.0
Physicians	33	78.6
Social workers	21	50.0
Respirologists or respiratory therapists	17	40.5
Other	17	40.5
Physiotherapists	6	14.3
Occupational therapists	5	11.9
Recreational therapists or activity staff	3	7.1

<sup>a</sup> Percentages do not add up to 100% as the survey participants could check more than one answer.

Table A7: Policies and Practices to Support Cessation Services among Hospitals with the OMSC in Place, n=42

	Adopted		In the Process of Adoption		Under Consideration for Adoption		Neither Adopted, nor Under Active Consideration	
	n	%	n	%	n	%	n	%
Smoking cessation pharmacotherapies available in hospital formulary	37	88.1	1	2.4	1	2.4	3	7.1
Documenting patient smoking status upon admission	35	83.3	2	4.8	2	4.8	3	7.1
Standard methodology for the identification of smoking status	35	83.3	3	7.1	0	0	4	9.5
Ban on smoking outdoors within hospital grounds	34	81.0	4	9.5	1	2.4	3	7.1
Smoking cessation support for hospital staff	34	81.0	4	9.5	2	4.8	2	4.8
"Standard Orders" for smoking cessation Pharmacotherapy	33	78.6	2	4.8	1	2.4	6	14.3
Dedicated staff to provide smoking cessation treatment	19	45.2	1	2.4	8	19.1	14	33.3
Smoking cessation treatment included on clinical care maps/care plans and/or Kardexes	17	40.5	18	42.9	2	4.8	5	11.9
Processes to follow-up smokers for at least one month after hospital discharge	16	38.1	4	9.5	9	21.4	13	31.0

### Appendix 3: Description of Terms and Programs

#### Local Health Integration Network (LHIN)

The province of Ontario is divided into 14 LHINs. The main role of each LHIN is to plan, fund and integrate health care services locally. This is accomplished by bringing together health care partners from various sectors—hospitals, community care, community support services, community mental health and addictions, community health centres and long-term care—to develop innovative, collaborative solutions leading to more timely access to high quality services for the residents of Ontario.

#### Ottawa Model for Smoking Cessation (OMSC)

Led by the University of Ottawa Heart Institute, the Ottawa model is a clinical smoking cessation program designed to help hospitalized smokers quit smoking and stay smoke-free. The overall goal of the program is to reach a greater number of tobacco users with effective, evidence-based tobacco dependence treatments delivered by health professionals. This is accomplished by systematically identifying and documenting the smoking status of all admitted patients, providing evidence-based cessation interventions—including counseling and pharmacotherapy—and conducting follow-up with patients after discharge. The program has been implemented in a number of hospitals across Ontario as well as other provinces of Canada.

#### Smokers' Helpline (SHL)

The Canadian Cancer Society's Smokers' Helpline is a free, confidential and province-wide smoking cessation service that provides support to individuals who want to quit, are thinking about quitting, have quit but want support, continue smoking and do not want to quit, and want to help someone else quit smoking. Smokers' Helpline utilizes various modes of delivering cessation support, including over the phone, online and text messaging services. By phone, tobacco cessation Quit Coaches counsel clients following reactive contact or referral. Once clients are engaged in service, Quit Coaches offer proactive follow-up calls based on evidence that multiple call-back counseling improves long-term cessation for smokers who contact quitline services. Quit coaches use motivational interviewing and apply the trans-theoretical model of behaviour change when working with clients. A team of seven Regional Coordinators work throughout the province establishing and fostering essential partnerships in each of the Tobacco Control Area Networks. Regional Coordinators enhance cessation efforts, resource

utilization and the reach of SHL by increasing the promotion and integration of SHL throughout Ontario. Smokers' Helpline develops referral relationships with health providers in clinical and community settings and has been engaged with the Ottawa Model for Smoking Cessation.

### **Nursing Best Practice Smoking Cessation Initiative (SC Initiative)**

The Nursing Best Practice Smoking Cessation Initiative is a project undertaken by the Registered Nurses' Association of Ontario (RNAO). The goal of the SC Initiative is to increase the capacity of nurses in integrating smoking cessation best practices into daily practice, and adopting the RNAO Smoking Cessation Best Practice Guidelines at the organizational and team levels. Since 2007, a multipronged strategy has been developed and implemented to ensure achievement of the goal. The key programmatic components of the strategy are: establishment of pilot smoking cessation project sites in several public health units across Ontario; development and enhancement of the Smoking Cessation Coordinator role and the Smoking Cessation Champion Program; use of social media and RNAO Tobacco Free resources (i.e. TobaccoFreeRNAO.ca website, eLearning course, and other resources); ongoing engagement with Schools of Nursing and nursing students; partnership within the Smoke-Free Ontario Strategy and collaborations with chronic disease prevention/management programs.

### **Training Enhancement in Applied Cessation Counselling and Health (TEACH)**

TEACH is a University of Toronto accredited program for health practitioners. TEACH aims to enhance treatment capacity for tobacco cessation interventions by offering evidence-based, accredited, accessible, and clinically relevant curricula to a broad range of health practitioners, such as registered nurses, addiction counsellors, social workers, respiratory therapists, pharmacists and others. The core-training course focuses on essential skills and evidence-based strategies in intensive cessation counselling. The project also offers 14 different specialty courses targeting interventions for specific populations. Other key elements of TEACH Project include: collaboration and partnership with other cessation training groups, hospitals, community stakeholders, and government; community of practice activities to provide health practitioners with clinical tools and applications, as well as opportunities for networking and continuing professional education; and evaluation component to examine the project impact and knowledge transfer.