

## A qualitative investigation of smoke-free policies on hospital property

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### ABSTRACT

**Background:** Many hospitals have adopted smoke-free policies on their property. We examined the consequences of such policies at two Canadian tertiary acute-care hospitals.

**Methods:** We conducted a qualitative study using ethnographic techniques over a six-month period. Participants ( $n = 186$ ) shared their perspectives on and experiences with tobacco dependence and managing the use of tobacco, as well as their impressions of the smoke-free policy. We interviewed inpatients individually from eight wards ( $n = 82$ ), key policy-makers ( $n = 9$ ) and support staff ( $n = 14$ ) and held 16 focus groups with health care providers and ward staff ( $n = 81$ ). We also reviewed ward documents relating to tobacco dependence and looked at smoking-related activities on hospital property.

**Results:** Noncompliance with the policy and exposure to secondhand smoke were ongoing concerns. Peoples' impressions of the use of tobacco varied, including divergent opinions as to whether such use was a bad habit or an addiction. Treatment for tobacco dependence and the management of symptoms of withdrawal were offered inconsistently. Participants voiced concerns over patient safety and leaving the ward to smoke.

**Interpretation:** Policies mandating smoke-free hospital property have important consequences beyond noncompliance, including concerns over patient safety and disruptions to care. Without adequately available and accessible support for withdrawal from tobacco, patients will continue to face personal risk when they leave hospital property to smoke.

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Canadian cities and provinces have passed smoking bans with the goal of reducing people's exposure to secondhand smoke in workplaces, public spaces and on the property adjacent to public buildings.<sup>1,2</sup> In response, Canadian health authorities and hospitals began implementing policies mandating smoke-free hospital property, with the goals of reducing the exposure of workers, patients and visitors to tobacco smoke while delivering a public health message about the dangers of smoking.<sup>2-5</sup> An additional anticipated outcome was the reduced use of tobacco among patients and staff. The impetuses for adopting smoke-free policies include public support for such legislation and the potential for litigation for exposure to second-hand smoke.<sup>2,4</sup>

Tobacco use is a modifiable risk factor associated with a variety of cancers, cardiovascular diseases and respiratory conditions.<sup>6-11</sup> Patients in hospital who use tobacco tend to have more surgical complications and exacerbations of acute and chronic health conditions than patients who do not use tobacco.<sup>6-11</sup> Any policy aimed at reducing

exposure to tobacco in hospitals is well supported by evidence, as is the integration of interventions targeting tobacco dependence.<sup>12</sup> Unfortunately, most of the nearly five million Canadians who smoke will receive suboptimal treatment,<sup>13</sup> as the routine provision of interventions for tobacco dependence in hospital settings is not a practice norm.<sup>14-16</sup> In smoke-free hospitals, two studies suggest minimal support is offered for withdrawal,<sup>17,18</sup> and one reports an increased use of nicotine-replacement therapy after the implementation of the smoke-free policy.<sup>19</sup>

Assessments of the effectiveness of smoke-free policies for hospital property tend to focus on non-compliance and related issues of enforcement.<sup>17,20,21</sup> Although evidence of noncompliance and litter on hospital property<sup>2,17,20</sup> implies ongoing exposure to tobacco smoke, half of the participating hospital sites in one study reported less exposure to tobacco smoke within hospital buildings and on the property.<sup>18</sup> In addition, there is evidence to suggest some decline in smoking among staff.<sup>18,19,21,22</sup>

We sought to determine the consequences of policies mandating smoke-free hospital property

in two Canadian acute-care hospitals by eliciting lived experiences of the people faced with enacting the policies: patients and health care providers. In addition, we elicited stories from hospital support staff and administrators regarding the policies.

## Methods

Our qualitative study used ethnographic techniques,<sup>23,24</sup> including interviews, focus groups, observations and document review, to explore the culture of tobacco use and management in two Canadian tertiary acute-care hospitals: the University of Alberta Hospital, Edmonton, Alberta, and the Winnipeg Health Sciences Centre, Winnipeg, Manitoba. These large teaching hospitals are located in provinces with similar weather conditions. At each site, three years before our study began, a policy for smoke-free property had been implemented under the direction of local health authorities and in response to city bylaws mandating smoke-free public places. In Winnipeg, the health authority implemented its policy a few months before the adoption of the city's bylaw; in Edmonton, the policy was implemented a few months after adoption of the local bylaw. The study was approved by the University of Manitoba Nursing and Education Research Ethics Board, the Health Science Centre Department of Research and the University of Alberta Health Ethics Research Board.

Sampling was designed to enhance the diversity of perspectives heard from each study site while achieving comparable diversity between sites.<sup>23</sup> Convenience and stratified quota strategies were aimed at recruiting participants from among both patients and health care providers.<sup>23,24</sup> Purposive and stratified quota strategies were used to recruit participants from among other key informants, policy-makers and hospital support staff.<sup>23,24</sup>

At each site, four wards were selected to ensure diversity among patients in terms of age and diagnosis. These wards provide care to adult inpatients with a variety of acute or chronic health conditions. For each ward, we interviewed at least 10 patients (including people who did and who did not smoke), held two focus groups with health care providers and collected copies of tobacco-related resource materials, blank patient-care forms and the hospital's tobacco control policy and procedures.

Posters and pamphlets describing the study were widely distributed after an initial visit to each ward. Other posters advertising the focus groups extended an invitation to attend one of two meetings, and all health professionals work-

ing on the ward were eligible to participate. Posters and pamphlets for patients were available on the wards. Eligibility criteria for patients were the ability to speak and understand English and to provide informed consent.

Purposive sampling was used to recruit participants from two groups of key informants: policy-makers and hospital support staff (housekeepers, security guards, groundskeepers). All of the key informants who were invited to participate agreed to be interviewed with the exception of two policy-makers (due to unavailability).

Research assistants observed the hospital property (6 h/site) to document compliance with the policy and identify locations displaying tobacco-related signs.

We used a semistructured approach for our interviews and focus groups. Guiding questions were developed using the results of a previous tobacco-related study in hospital settings,<sup>25</sup> the literature and consultations with stakeholders. Research assistants recruited patients and conducted interviews (10–30 min) that focused on the respondents' use of tobacco and treatment for tobacco dependence while in hospital, and solicited their impressions of the policy. The principal investigator and research assistants led the discussions with the focus groups (60–90 min). Participants discussed their perceptions of the policy and the management of tobacco use among patients. Interviews with key informants (30–90 min) were completed by a research assistant at the site. Interviews explored the development and implementation of the policy, and ongoing concerns. Focus group discussions and interviews were audiorecorded with the informed consent of participants. All participants completed a brief demographic questionnaire.

Data were collected over six months that included a cold Canadian winter (December 2008 to May 2009). Ward data were collected in two cycles lasting three months each, during which research assistants focused on two of the four wards. Focus groups were held early in each cycle to secure a presence on the ward and ensure support for the study. Interviews with key informants and observations of the property were completed over six months.

## Statistical analysis

Audiorecordings were transcribed verbatim, and the transcripts were stored and managed electronically, as were the documents collected from the study wards and the notes on field observations. Data were analysed using a nonlinear process to generate themes inductively.<sup>23,24,26</sup> The study team reviewed a sample of transcripts to generate "memos" (reflective thoughts, questions

and perceptions in response to the data). The principal investigator and project manager assessed the memos to inform the initial coding of themes. The project manager coded the remaining transcripts according to the initial themes. Regular meetings with the principal investigator during this coding resulted in minor changes to themes and subthemes. After initial coding was complete, the final themes and subthemes were reviewed by the study team, which resulted in minor revisions to coding. A second research assistant randomly sampled one-third of the transcripts for a blind recoding using the final coding scheme. Agreement was greater than 85% when recoded transcripts were compared with the originals. Throughout the memo and coding phases of analysis, data from each participant were kept separate to support the generation of perspectives from each standpoint (patients, health care providers and other key informants). Data from the demographic questionnaires underwent descriptive statistical analysis to report central tendency measures and frequencies of responses to items.

## Results

Characteristics of the 186 participants in the study are shown in Table 1. We focus on a portrayal of the hospital context and discussion that

draws primarily on the experiences of patients ( $n = 82$ ) and health care providers (16 focus groups;  $n = 81$ ). Relevant insights from other key informants ( $n = 23$ ) supplement the discussion. Although the purpose of this study was not to investigate systemic differences between sites, some notable differences are highlighted.

### Hospital context

Policies stated that smoking was banned inside all buildings, at all entrances and on all hospital property, including parking lots and the spaces adjacent to air uptake vents. At one site, where the property's edge was near building entrances, the policy stipulated no smoking within 5 m of an entrance.

At both sites, the policy outlined support for smoking cessation for patients and staff; if specific support was mentioned, it was nicotine-replacement therapy. Programs to help staff with smoking cessation were available at each site, but research assistants were unable to access these services despite repeated attempts during the study.

Wards providing palliative, hospice or psychiatric care or care for chemical-dependence were exempt from the smoke-free policies. At one hospital, patients of the emergency department were allowed to smoke outside under supervision.

Compliance and enforcement measures were

**Table 1:** Characteristics of the 186 participants in the study

Characteristic	Focus groups			Key informants	
	Patients $n = 82$	Registered nurses $n = 54$	Other health care providers $n = 27$	Policy-makers $n = 9$	Support staff $n = 14$
Sex, no. (%)					
Female	33 (40.2)	44 (81.5)	22 (81.5)	7 (78.8)	5 (35.7)
Male	49 (59.8)	19 (18.5)	5 (18.5)	2 (22.2)	9 (64.3)
Age, mean, yr (range)	54.7 (23–86)	39.2 (23–65)	34.8 (22–54)	50.6 (44–63)	50.0 (36–64)
Smoking status, no. (%)					
Current smoker	23 (27.5)	8 (14.8)	$n = 26$ 5 (18.5)	1 (11.1)	1 (7.1)
Former smoker	43 (52.5)	8 (14.8)	$n = 26$ 6 (22.2)	5 (55.6)	5 (35.7)
Nonsmoker	16 (20.0)	38 (70.4)	$n = 26$ 15 (55.6)	3 (33.3)	8 (57.1)
Current or former smoker who was offered assistance with smoking cessation, no. (%)	$n = 36$ 10 (27.8)	$n = 8$ 3 (37.5)	$n = 5$ 0 (0.0)	$n = 1$ 0 (0.0)	$n = 1$ 1 (100.0)
Current or former smoker who wanted assistance with smoking cessation, no. (%)	$n = 36$ 20 (55.6)	$n = 8$ 2 (25.0)	$n = 5$ 4 (80.0)	$n = 1$ 0 (0.0)	$n = 1$ 0 (0.0)

addressed in the policy document from one site, where it was the responsibility of all staff to approach noncompliant tobacco users, explain the policy and suggest that transgressors move off the property. People who showed repeated noncompliance were to be reported to the hospital administration. At the other site, the policy document provided no details on enforcement.

We collected and reviewed nonconfidential documents regarding patient care from the eight study wards (Table 2). Copies of the smoke-free property policy could be found in ward binders, and access to nicotine-replacement therapy was available on all wards. There was minimal evidence of the availability of tobacco-related education materials or referral options (in-hospital or community) for health care providers, and no pamphlets or posters on the policy were available to patients or visitors. Although the availability of educational materials with tobacco-related content for patients varied across wards, the key ideas addressed by such materials were medications for smoking cessation, where to go for assistance, advice and the health risks associated with smoking.

We found ample observational evidence that people continue to smoke on hospital property (Box 1). Hospital groundskeepers commented on increased litter on the property and a subsequent

increased workload, a consequence of the lack of ashtrays and people discarding their cigarette butts on the ground. Signs, though present, were seen as ineffective — people were seen smoking directly under, or in proximity to, signs stipulating a smoke-free area. People smoking on hospital property were typically seen near entrances or in locations that allowed them to hide while smoking. People smoking at entrances tended to be patients with mobility limitations (e.g., in wheelchairs or connected to equipment) and, possibly, their visitors. Staff who had reportedly been seen smoking on hospital property included security guards, ambulance drivers, nurses and doctors. Enforcement efforts by security guards were reported to be minimal, and narratives commonly reflected the difficulties of strict enforcement.

### Experiences of patients and health care providers

The perspectives of our participants reflect their divergent views on tobacco use and the users of tobacco (Boxes 2 and 3). The reasons cited for smoking included for relief from stress or anxiety and for social benefit (e.g., to reduce loneliness or boredom). The comments from participants supported their divergent responses and showed the tension between thinking of tobacco

<b>Table 2:</b> Resources supporting health care services and their availability on the eight wards studied	
Resource	Wards on which resource was available <i>n</i> = 8
Ward policy on managing tobacco use	Three wards had unwritten policies concerning unsafe tobacco use (cigarettes and lighters were confiscated and kept locked in a central location, and patient was required to request one cigarette at a time)
Education material for nurses	Three wards had a binder available for health care providers to address smoking cessation with patients
Nicotine replacement medications	Eight wards (in hospital formulary and available with a physician's order; nicotine patch and gum products)
Community resources	Two wards displayed information about the local smoker's help line; one ward displayed a poster for a local tobacco-cessation program
Nurses' referral options	Two wards referred patients to social workers for tobacco dependence; no wards provided referrals to smokers' helplines
Materials about the hospital's smoke-free policy	Two wards displayed posters
Educational materials for patients	Seven wards provided educational materials for patients (the most common messages conveyed were advice to quit and health risks associated with smoking; one resource mentioned preventing exposure to second hand smoke)
Admission forms	Eight wards included questions assessing current tobacco use (number of years and cigarettes/d; if patient had stopped smoking, the date on which they stopped was recorded)

use as an addiction or as a bad habit: addictions need to be treated, whereas although a bad habit is hard to break, it is inappropriate to ask someone to change their behaviour. A third position expressed was the argument that people have the right to smoke, which no one can take away. Although some people reported not feeling stigmatized by staff or fellow patients for their smoking, others mentioned feeling judged for continuing to smoke. Compassion and sympathy toward people who smoke was frequently (but

not unanimously) expressed among health care providers and patients who do not smoke.

Health care providers also mentioned that patients who smoke could be angry and demand-

#### Box 1: Key informants' reflections on compliance and enforcement

- WK03-FS: Some days it's easy to pick up ... at least 5 to 10 pounds of butts.
- EK05-NS: They get up to the front entrance and then drop it on the floor because there is no place to put it [cigarette butt] ... they walk into the building and it's stuck to their feet and track it in[side].
- EK02-NS: Our issue is how do we get people away from the doors and entrances and off our property is still a challenge; that's not yet accepted. If you're outside, there's a general feeling that I should be able to smoke. Doesn't matter if I'm on someone's property or not.
- EK02-NS: They'll be sitting on a bench that says no smoking right beside it, and they're smoking.
- WK11-FS: Some security guards will enforce it, some won't; some will walk right by.
- WK07-S: Main entrances — we decided that's what we would worry about. Anything else, you know, unless it's a major attraction ... we're going to let it slide.
- EK05-NS: A lot of them are patients with IVs attached, and you tell them there is no smoking on hospital property. Well, then you sometimes see them pushing this IV pole all the way down the sidewalk in the snow.
- EK05-NS: We get a lot of verbal abuse and a lot of stuff to pick up ... garbage all the time.
- WK05-FS: You [security guard] can't very well tell someone, "You can't," and then be caught in a corner yourself.
- WK02-NS: Everyone has responsibility to challenge anyone who is smoking. And I believe the policy says that too or word to that affect. The practical part of that is that it's intimidating to go up to people — you know a nurse or somebody — to go up to smoke big guy to say "I'm sorry sir; you can't smoke here", and the guy says "What are you going to do about it?" which is often the reply. I have no problem doing that and I usually get compliance; I usually will get people walking away. But I'm 6 feet tall, and I've got a tie on, and that helps.

Notes: Quotes are verbatim from individual interviews, so the smoking status of the participant is known. IV = intravenous, S = current smoker, FS = former smoker, NS = nonsmoker.

#### Box 2: Patient perspectives on tobacco use and people who use tobacco

- EP10-FS: It's an affliction, it's a disease, and they should be able to treat it somehow other than send them outside to have a smoke in 30-below weather.
- EP19-FS: Guess that's all I'm trying to do is trying to break that damn habit.
- EP34-NS: They're addicted smoking; it's hard to quit and people tend to justify.
- WP25-S: I was in constant pain, agonizing pain, but I still managed to go for smokes.
- WP33-S: It is an addictive substance for more people, and those that need it will literally go off in the middle of the night in freezing weather to get it.
- WP17-FS: It is an addictive bad habit, and it is not something that people can go [snap of fingers] off and on.
- EP38-NS: It's legal, so I guess it's their right to have a place to smoke.
- WP23-S: Still believe people should have the right to choose ... I don't think anybody has the right to superimpose their beliefs on other people.
- EP11-FS: People in hospital gowns outside the hospital sitting on a bench smoking — outrageous. If you're trying to avail yourself of publicly financed services the least you can do is not parade the insanity of smoking outside the hospital door.

Note: Quotes are verbatim from individual interviews, so smoking status of the participant is known. Patients self-identified as "former smokers" if they did not currently smoke as of the date of the interview. S = current smoker; FS = former smoker; NS = nonsmoker.

#### Box 3: Perspectives of health care providers on tobacco use and people who use tobacco

- EFG01: Smoking is not part of a healthy lifestyle, so we need to get that across to people.
- EFG04: I recognize that it's a dependence and not something they're just really choosing to do, but as a nurse, you see that's not helping them; it's actually making some of their issues worse ... it's hard to watch and hard to figure out what our place is in that situation.
- WFG01: I have zero understanding on the drive to make a person get out there, have that cigarette, when they're obviously having pain.
- EFG07: We need to address these people, because it is a stressful time to give up your bad habit.
- WFG01: When somebody wants to do something, they'll do it. And all the experts in the world and all the information in the world ... is not going to do anything until you decide that's what I want to do for me.
- WFG07: It's only nicotine; they say most of its psychological.
- EFG07: I don't like to make them feel like they have to quit because it is their choice. I think as long as society, as a whole, says [they] can make that choice, they should be allowed to choose. What I think we need is a designated area with separate ventilation.
- EFG06: You have these people who have the right to go and do what they want, and I don't see management or the hospital saying "No, you can't leave this unit," because you can't imprison them.
- EFG06: It's a very big ethical moral issue for us that we are constantly battling ... you just can't take somebody's rights away.
- WFG05: When they get back after their smoke, they're just in so much pain, yelling. And I'm like, well you made it all the way downstairs.

Note: Quotes are verbatim from focus group discussions; the smoking status of each participant is unknown.

ing, frequently asking for assistance to leave the ward to smoke (Box 4). At times, these requests, particularly from patients with mobility limitations, resulted in nurses looking for someone to assist the patients outside or having to accompany the patients themselves. Alternately, health

care providers were concerned with patients simply leaving the ward. Such a situation could result in staff not knowing where a patient was. This could lead to a search off the ward or cause a disruption in health care because the patient is not available.

#### Box 4: Perspectives on the behaviours of patients who smoke

Health care providers\*

- WFG08: Including the two that ring, ring, ring, and ask to be taken outside constantly
- EFG03: Smoking ... you're holding their life, like that's part of their life — smoke — so, they think you're controlling my life ... they get mad at the nurses.
- EFG04: I don't know if annoying is the right word, but it's hard to follow-up on their care when you can't see what they are doing.
- EFG05: There is that whole piece of keeping peace on the ward, really, because these patients can get really agitated and they get really upset and then get really demanding.
- EFG04: They come back on their own. But it's hours later and who knows what's happened.
- EFG06: I've worked in other units in the hospital where some of the patients, in order to, because they're not as mobile, you're sometimes stuck trying to find someone to take them downstairs.
- EFG06: It finally came to the point where if you had a nurse that had some time, you'd just go down. And you're really torn about that. I should not be enabling this, but again, what do you do?

Patient†

- EP35-S: I just told her I wanted to go, and she said she didn't think it was a good idea, but I went anyway, and got sick, and got told, "I told you so."

Note: S = current smoker.

\*Quotes are verbatim from focus group discussions; the smoking status of each participant is unknown.

†Quotes are verbatim from individual interviews, so the smoking status the participant is known.

#### Box 5: Patient experiences of tobacco-related conversations

- WP38-S: I know there are some people who are trying to quit, but if all the nurses ask is if you smoke, they don't ask you if you are trying to quit or that kind of question. So if they could ask that, then they would know that you want that and you could get help.
- EP40-S: [Nurse suggested] that I should quit, it would be better for me.
- EP29-FS: [The staff] were worried about me going outside because of the smoke.  
Researcher: They were worried that you were going to start again?  
EP29-FS: Yeah.  
Researcher: How did they address that you?  
EP29-FS: They just told me not to go outside where the smoking area was ...
- WP17-FS: They just say you shouldn't smoke, and it is not very good, and that is why you are here.
- EP-S: Well, there is help; if I went to any one of the nurses they could probably get a patch.
- EP35-S: The nurse said, "Let me give you a patch." I didn't take her up on the offer.
- Researcher: You've been taking the nicotine gum since you've been here?  
EP04-FS: : Yes.  
Researcher: Were you offered that from your doctor?  
EP04-FS: : No, I suggested I wanted it.
- Researcher: So they offered you the patch?  
WP40-S: I kind of asked for it.  
Researcher: As far as you remember, nobody at the hospital offered you a patch or any other kind of NRT.  
WP40-S: No. I got my mom to get me nicotine gum, but when they found out ... they told me no. I had to get it approved.
- EP11-FS: Since I can in the hospital, I haven't given smoking any attention at all. It's irrelevant to me.
- WP06-S: I know how inconvenient it is. So, in a way, it's how badly you want the inconvenience, and I don't want it badly enough.

Note: Quotes are verbatim from individual interviews, so smoking status of the participant is known. Patients self-identified as "former smokers" if they did not currently smoke as of the date of the interview. S = current smoker; FS = former smoker; NRT = nicotine-replacement therapy, NS = nonsmoker.

### Treatment for tobacco dependence

Most participants acknowledged that patients were asked during admission if they smoked. Health care providers noted the information was recorded on admission forms but was rarely transferred to other patient-care forms. Efforts beyond this initial step in treating tobacco dependence, such as assessing smoking history and readiness to quit or providing assistance, were minimal. Box 5 gives examples of patients' stories regarding treatment for tobacco dependence, suggesting varied experiences. Patients knew about the ban on smoking and were told to not smoke on the ward. Beyond this, some patients received the suggestion that they stop smoking. Nicotine replacement therapy was not consistently offered, and some patients faced barriers to obtain it. Although some patients abstained from smoking during their stay in hospital, few described receiving assistance to support abstinence or to develop a strategy for cessation as part of planning for their discharge from hospital. One exception was patients who attended a preadmission clinic. Such clinics included developing a treatment plan for the patient's tobacco dependence during the upcoming stay in hospital.

Discussions with the health care providers suggest that they feel a sense of powerlessness in their ability to stop someone from smoking (Box 6). Although advice on smoking cessation was frequently given, assistance to manage withdrawal was inconsistently provided. Some health care providers admitted to having limited knowledge about how nicotine-replacement therapy alleviated cravings. Many health care providers reported no or limited awareness of the referral options that existed within the community or the hospital.

### Safety issues

Patients voiced concerns about going off property to smoke and about feeling unsafe going outside alone to smoke (Box 7). Having to go outside to smoke often required the patients to wait for visitors or leave to smoke with other patients.

Both sites have a number of entrances, many of which are not open 24 hours a day; one patient relayed having been locked outside on a winter's evening. Patients spoke about the mobility difficulties they face in cold weather, snow and ice, each of which could underlie their decision to smoke near entrances.

Finally, a few patients worried about getting suddenly sick while smoking outside.

Health care providers noted that patients who smoke tend to have a strong desire to leave the ward and expressed concern for patients being off the ward and unsupervised (Box 8). They lamented the responsibility and liability issues

that would result from an untoward event befalling a patient while off the ward or not on hospital property. Some wards at both sites implemented a sign-out form that stipulated the patient was leaving the ward against medical advice, but this approach was applied inconsistently. When patients were not mobile independently, staff were frustrated by ongoing demands for assistance and the need to develop plans for supporting the patients leaving to smoke. They admitted that some patients tried to smoke in their beds, which raised additional safety concerns (e.g., fires, smoking near oxygen sources). When patients disobeyed policy and smoked on the ward, their cigarettes might be confiscated and kept at the nurses' station. Patients could then request one cigarette at a time if they wished to leave to smoke in an appropriate location.

#### Box 6: Health care providers' descriptions of their inability to address tobacco dependence

- WFG04: You have to deal with it, and sometimes you want to help them, but you're stumped.
- WFG05: We advise against it, but you know, they are going to do it. What do you do?
- EFG07: Sometimes I feel guilty not addressing it with the patient.
- EFG02: They say no, not interested in any of that stuff. They just go, "I'm going for a walk, going down for coffee."
- WFG07: They don't know how to order it properly either ... do you get them the 25mg, the 14 mg, the 7 mg? Should they be on the nicotine patch?
- Researcher: Do you have an understanding of how these medications work?  
EFG-03: Minimal.

Note: Quotes are verbatim from focus group discussions; the smoking status of each participant is unknown.

#### Box 7: Patients' concerns for their safety

- WP18-S: If there are two or three of us together they are not going to bother us, but if there are other people here, I will go outside with them. If I am going outside for a smoke at night, I will go with them.
- WP31-S: I got locked out there ... I was in a wheelchair, and I went outside, but I didn't see the sign on the door that was up at eye level, but in a wheel chair, I didn't see it.
- EP39S: Why should we freeze and get pneumonia ... or have to stand out here in the rain to have a cigarette? We have much more health risks with that kind of thing then we do from smoking.
- WP18-S: My chair has limitations. I got no grip on my tires, so if I go any further where it is not cleaned ... I get stuck.
- WP40-S: Well, it is a little bit difficult for the people in wheelchairs; and I don't know, but if I was walking, then I would have no problem going off the property.
- WP28-FS: Well, I'm sure the safety issue, going out when it's minus 30 below and probably not dressed well and sick, or you wouldn't be here, and it's not the best part of town to be outside smoking in the middle of winter, dark and that. So, there's a bit. I think there's a real safety issue going off the property to smoke.

Note: Quotes are verbatim from individual interviews, so smoking status of the participant is known. Patients self-identified as "former smokers" if they did not currently smoke as of the date of the interview. S = current smoker; FS = former smoker; NS = nonsmoker.

Certain safety issues were specific to going outside to smoke. In conditions of extreme cold, intravenous lines could freeze and electronic pumps could malfunction, both of which would result in a disruption to treatment. At times, patients were inadequately dressed for extreme

cold, thus putting them at risk for frostbite. Although patients in isolation (such as patients with tuberculosis) wore a mask while outside, their discarded cigarette butts, particularly if collected and used by another smoker, could become a vector for the spread of disease. Again,

#### Box 8: Health care providers' reflections on patient safety

- EFG04: They go out, and they say they are going out for a smoke, and you don't know what they are doing.
- EFG06: And I mean as nurses, we feel responsible. So, where is that line, you know? Where they can have the freedom to go, yes, because they want to, but like ... we are still responsible for their care ... we need to do your vitals, we just came back or whatever it. We have to do our work.
- EFG01: We tell them they are not supposed to leave the ward. They're supposed to be monitored, but then they still go, and they sign the form saying they're refusing physician advice to not smoke.
- WFG06: If you let them [go off the ward], you've allowed it. I think you do have a bit of responsibility for that for sure.
- WFG02: Your patients are going off hospital property, and, like, say something happens and they haven't signed any forms or anything. And then what?
- EFG06: For the safety of everybody, we confiscate cigarettes, matches or the lighters.
- EFG02: The odd time they will smoke in the bathrooms, which is a fire hazard  
Researcher: What happens if they do?  
EFG02: Confiscate the lighters usually.
- EFG07: They have direct IV access with a pump full of morphine ... they are going now off site to smoke. In the cold weather, their IVs get frozen, and so that would be affecting the drug [administration].
- WFG02: Patients are going out and it's 35 below out there ... having like pajama top on and a blanket, and nothing on their feet ... I don't think that's right.
- WFG08: We have TB patients that go outside and take their masks off and smoke.

Note: Quotes are verbatim from focus group discussions; the smoking status of each participant is unknown.

#### Box 9: Impressions of policies mandating smoke-free property

Health care providers\*

- EFG04: I like the policy, I just find myself really sensitive to smoke ... but I don't think it's, in my opinion, like not super effective, because there is no follow-up to it.
- EFG07: The biggest flaw I saw ... there is no smoking anywhere, but there are still people who choose to smoke who cannot get off property.
- WFG02: Well, this gentleman the other day was smoking between the two [entrance] doors! Security walked right by and ignored it.
- WFG06: A lot of people parked underground all night, so there's this big cloud of smoke down there.
- EFG06: It's a good idea, but are we really following through with it and doing what we should to make the policy actually work? No.

Patients†

- EP04-FS: Well, they're trying to send a message ... whether it's been effective or not I don't know.
- WP37-NS: Well, how do they police it? How do they police the ground right outside the door? It is probably an impossible task.

Key informant†

- WK05-FS: I could probably walk around the complex right now and talk to about a half dozen people ... that are not smoking in the right spot.
- EK03-NS: There are still just as many people and patients that smoke, and so I don't think we're supporting them enough, well enough.
- EK01-FS: It's pretty easy to do that, it's after the fact ... like, if you're going to develop the policy, you need some way to enforce it, and that's more the question — not the policy itself.
- WK02-NS: Probably not even quite where we want to be yet, but I think it is growing with time in changing the cultural norm.

Note: S = smoker; FS = former smoker; NS = never smoker.

\*Quotes are verbatim from focus group discussions; the smoking status of each participant is unknown.

†Quotes are verbatim from individual interviews, so smoking status of the participant is known.

staff talked about patients with mobility limitations (e.g., those in a wheelchair or with an intravenous pole) being vulnerable to poor sidewalk conditions (e.g., snow, ice-covered, cracked pavement) or unsafe neighbourhoods.

### Perspectives on the policy and suggestions for improvement

Impressions were mixed as to the effectiveness of the policies (Box 9). Although hospital staff and patients were supportive of the policy, they voiced concerns over safety and the lack of enforcement of the policy. In addition, there was mention of the possibility of exposure to second-hand smoke at site entrances.

Suggestions for improvement included stronger enforcement, the creation of a designated smoking area, better abstinence support and more education for nurses to treat withdrawal (Box 10). Options for treatment were very rarely discussed.

### Interpretation

We report the lived experiences of the people directly affected by these policies. At the two hospitals studied, the introduction of a policy mandating smoke-free property has not achieved the intended goals of reduced exposure to second-hand smoke or communicating a clear message about the harms of smoking. Although some patients abstained from smoking while in hospital, many received minimal or no support in doing so. Patients who continued to smoke faced a variety of safety concerns.

Health care providers reported that addressing tobacco use was a constant part of daily practise. Unfortunately, the delivery of effective treatment for withdrawal was rare. Instead, the focus was on managing the behaviour of the patient.

Investigations of hospital policies that ban smoking tend to report some level of noncompliance as the norm.<sup>16,17,20,21,27</sup> In the United Kingdom, where health institutions were to implement smoke-free policies by 2007,<sup>4</sup> this goal has nearly been achieved; however, patient noncompliance and staff reluctance to enforce the policy continue.<sup>17,20</sup> Participants suggested establishing enclosed designated smoking areas to diminish exposure to tobacco smoke and circumvent concerns for the safety of patients. Such a strategy may be compassionate, but it violates legislation and sends mixed messages concerning the use of tobacco and health.

A further suggestion from participants was stronger enforcement of the policies and consequences for noncompliance. Although punishment may be a logical reaction to a breach of

policy, addressing an addictive behaviour in that way is not particularly humane, effective or medically appropriate. Furthermore, punishment would likely heighten the divisiveness between people who smoke and those who do not, as well as exacerbate ongoing staff–patient confrontations.<sup>25</sup>

A few participants spoke about improving the management of withdrawal symptoms and treatment for tobacco dependence, echoing suggestions from previous reports.<sup>3,17</sup> The severity

#### Box 10: Suggestions on how to improve or change existing policies

##### Enforcement

Health care providers\*

- EFG06: Need to hire a security guard to go out there and police it.
- EFG06: So, there has to be consequences to it, or else it won't work.

Patients†

- EP24-S: The main thing that I can see ... is to actually enforce fines.
- WP36-FS: It should be stopped. And whether they have to get a little tougher, that is fine with me right now.

##### Designated areas

Health care providers

- EFG02: It would be a lot better for patient care, and maybe the patients wouldn't have to sneak out all the time. Because I think a lot of them get shunned for being a smoker ... I know where you are going ... it's safe.
- WFG01: Let them have a space where they can smoke so, you know, that other people who are nonsmokers won't have to go near and more people are happy.

Patients

- EP18-S: You can make all the space in the world for nonsmokers, where's the smokers' place?
- EP01-FS: Even though it's wrong by most standards ... I would like to see someplace restored for them.
- WP23-S: In fact, if they are really worried about secondhand smoke, perhaps building like a solarium room or something for the patients would make more sense to me.

##### Treatment

Health care providers

- EFG06: There might as well be resources ... they need to let us know what is out there.
- WFG05: I think that they should have support for patients in the hospital.

Patients

- WP38-S: They should have more stuff around the hospital like pamphlets and maybe even like a specific booth where there is someone you can talk to about smoking. You know, if someone is having a hard time, they are sick and they really want to smoke, but they want to quit at the same time — there would be a certain somebody down there in the lobby or something that they can talk to that is available.
- WP38-S: When they do training for nurses, they should also make that something important they should learn about too and be educated on smoking because it does have to do with people's health ... A lot of people die over smoking and second hand smoke, and they should have something ... that educates them about smoking, so they can help patients who are admitted to asking those kinds of questions about smoking.

time in changing the cultural norm.

Note: S = smoker; FS = former smoker; NS = never smoker.

\*Quotes are verbatim from focus group discussions; the smoking status of each participant is unknown.

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of withdrawal symptoms has been associated with patients' likelihood to comply with smoking bans among patients in hospital.<sup>28</sup> Effectively treating withdrawal symptoms could influence decisions to abstain from smoking while in hospital, thereby influencing compliance with policy.

Our findings suggest that the use of tobacco continues to be framed as a habit or personal choice rather than as an addiction.<sup>16,20,25</sup> Like other researchers, we have found that when tobacco use is framed as a habit, health care providers are perplexed as to why people continue to smoke when faced with health concerns and restrictions, and consider such people to not be taking responsibility for their health.<sup>25</sup> This may be a root cause for the stigmatization of people who smoke, or at least for the lack of empathy toward them. Moreover, health care providers with this attitude tended to say that there is little they could do to stop someone from smoking, or that they do not have the right to make such a request. Both beliefs suggest self-absolution from the responsibility to treat tobacco dependence. When smoking was framed as an addiction, health care providers were inclined to think that treatment for withdrawal symptoms was required for people staying in hospital.

Similar to the results of a previous study,<sup>29</sup> health care providers reported minimal knowledge about effective treatment options for tobacco dependence, but they believe that something more must be done to assist patients.

Study findings affirm evidence that tobacco dependence treatment is inconsistently offered in hospitals<sup>14–18,25,29</sup> and health providers were uninformed about tobacco dependence treatment,<sup>29</sup> despite availability of nicotine-replacement therapy at study sites. This treatment gap is perplexing, especially as within Canada there exists an evidence-based hospital tobacco dependence treatment program.<sup>30</sup> Unintended patient safety consequences of smoke-free property necessitate effective tobacco dependence treatment during a stay in hospital; simply as a risk-management action. Moreover, a health-promoting policy that causes patients to face diverse safety concerns (treatment disruption, infectious disease contact, exposure to adverse weather and possible violence) projects a contradictory health message.

### Limitations

These results must be reviewed in light of certain limitations. Our findings are based on data collected from two hospitals. Because workplace cultures can differ across locations, studies in other settings are warranted to capture the diverse array of wards, populations and settings beyond those represented in this study.

Because of the cross-sectional nature of this study, we were unable to assess temporal ordering of how these smoke-free policies and their impact on patients have evolved over time.

### Conclusion

As an emerging standard for Canadian hospitals, smoke-free property is intended to reduce exposure to second-hand smoke, communicate denormalization messages about smoking and enhance tobacco cessation.<sup>24,5</sup> However, noncompliance and inadequate treatment for tobacco dependence appear to be the norm.<sup>29</sup> Enhancing appropriate health care for patients who use tobacco to include consistent and effective treatment for the symptoms of withdrawal may improve this problem.

Reframing tobacco use as an addiction may be an important root strategy to shift practise norms. People who smoke will have symptoms of withdrawal during a stay in a hospital with a smoke-free policy. With the advent of these policies, abstinence support with effective management of withdrawal symptoms for patients in hospital is imperative.

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