Integrating Tobacco Cessation into a Substance Use Withdrawal Program Serving a Rural Municipality and 33 Northern Remote Communities

Patricia M. Smith, PhD (psmith@nosm.ca)

Lisa Seamark, BScN RN, Katie Beck, BSc, RKin

Disclosure of Affiliations, Financial and In-Kind Support

Affiliations

- I have no relationships with for-profit or not-for-profit organizations.
- My co-authors were employees at Meno Ya Win Health Centre when the research was carried out.

Financial Support

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In-kind Support

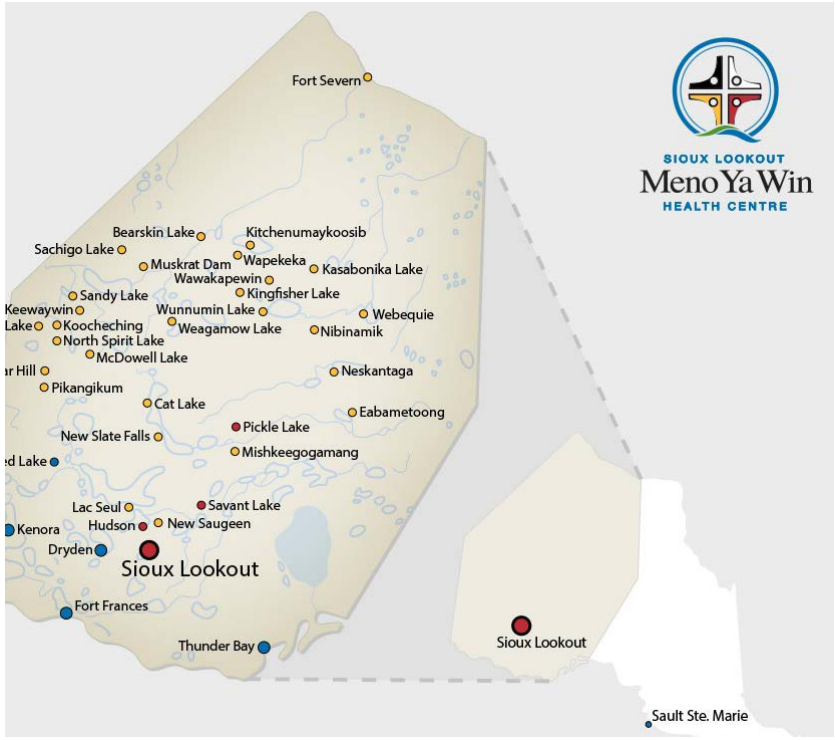
- Lakehead University Office of Research and Office of Finance

Research Ethics Board Approval

- Lakehead University (REB#031 17_18)
- Meno Ya Win Health Centre (REB#6-14) which included representatives from:
    - Hospital (RNs, MDs, pharmacy, legal, ethics office)
    - Municipality of Sioux Lookout
    - Sioux Lookout First Nation Health Authority
    - Elder
    - Independent First Nations Alliance (IFNA)
    - Keewaytinook Okimakanak (Northern Chiefs)
    - Matawa Tribal Council
    - Shibogama Tribal Council
    - Windigo Tribal Council

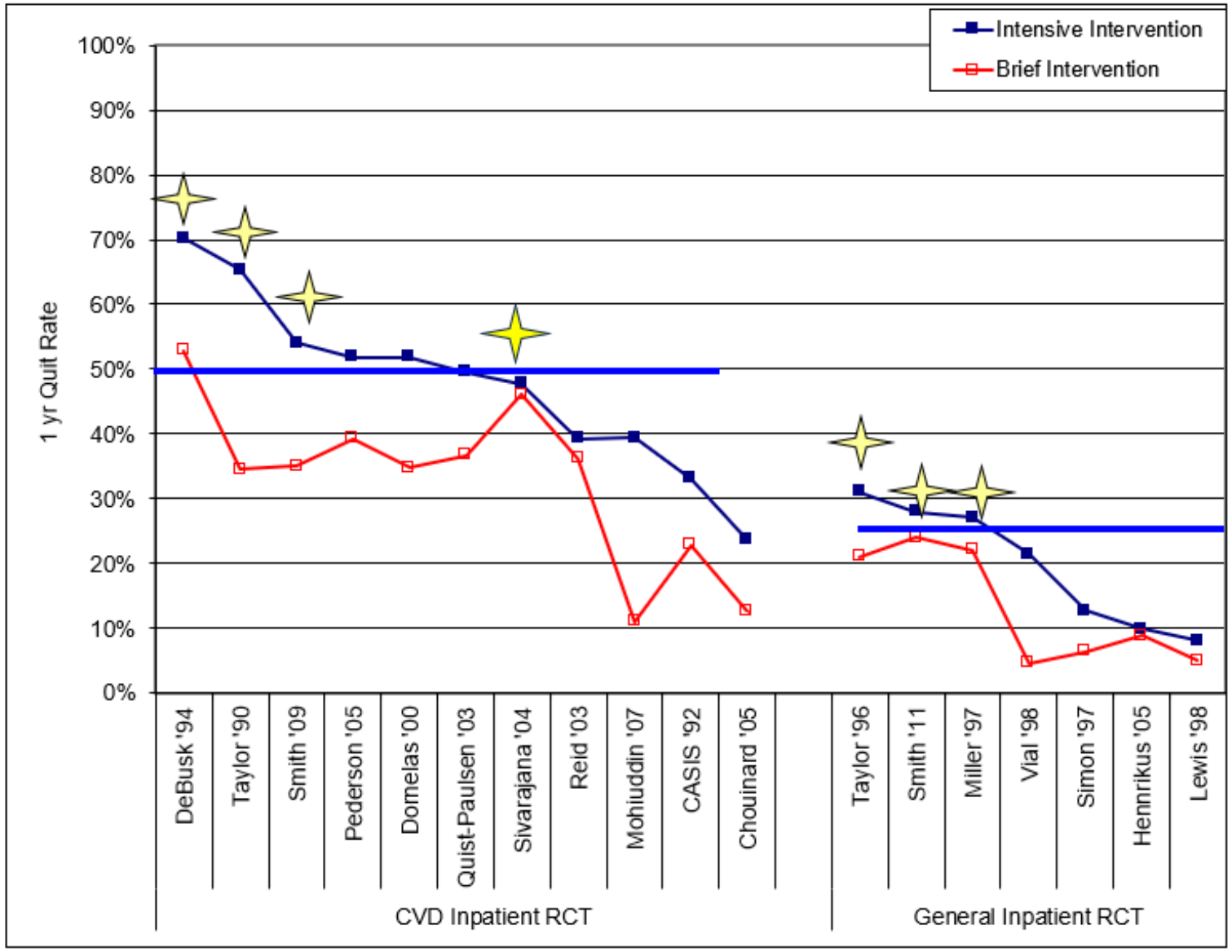
Study Background

- MOHLTC Health System Research Fund Targeted Call
  - Tobacco control of interest for policy makers and knowledge users
  - Cross-cutting components: equity, Indigenous health, patient-centred care, implementation science
- Held ongoing funding to translate evidence-based, patient-centred, smoking reduction/cessation intervention from RCTs into practice
  - One site, Meno Ya Win Health Centre (MYW), systematically offered the cessation program to all inpatients & by referral for outpatients
  - When the inpatient substance use withdrawal program changed to a 2-week outpatient program, challenging to systematically offer smoking cessation to all participants
- Funding call: good timing & fit for development of a tobacco cessation implementation model to decrease inequity to access and health inequalities in an outpatient withdrawal program.



Background
Moving On to Being Free Evidence Base

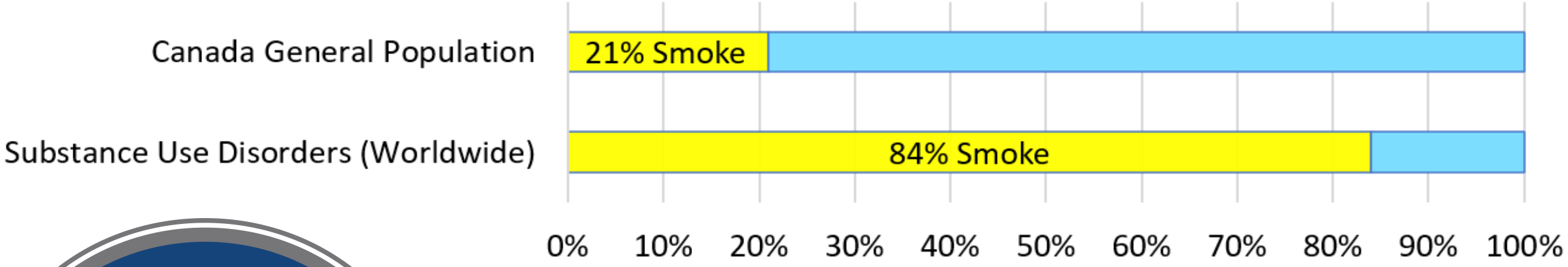
- Patient-centred, nurse case-managed, intensive intervention
- Derivative Staying Free inpatient program, developed at Stanford University (1982)
- Consistently high results (7 RCTs, 3 dissemination studies)
- Only cessation program to receive Congressional Top Tier Evidence designation



*Stars are Staying Free/ outcomes are the highest among intensive interventions.
Graph based on data from the inpatient meta-analysis by Rigotti et al. 2012

Background: Substance Use Disorders and Smoking

Tobacco use is high among individuals in substance use disorder programs (highest among opioid use vs. alcohol).



Health inequalities: higher smoking-related morbidity and mortality due to higher smoking rates.

Tobacco interventions are recommended and result in better treatment outcomes, yet few are integrated into practice.

Study Objectives

Develop	Calculate	Determine	Estimate
a model to integrate an evidence-based smoking reduction/cessation intervention (Moving On) into a 2-week outpatient withdrawal program.	smoking prevalence to determine the need for a smoking reduction/cessation program.	smoking cessation intervention uptake.	staffing resources required to deliver the smoking cessation intervention.

Methods

Setting:

- Meno Ya Win Health Centre outpatient withdrawal program serving Sioux Lookout and 33 remote communities.

Eligibility:

- Age 16+, receiving care in the outpatient SUD program.

Implementation model for smoking reduction/cessation in withdrawal program

- Developed a weekly Healthy Living general behaviour change group based on 2-week rotation (this is not the intensive cessation).
- Groups provided a centralized location to ensure all withdrawal program participants would systematically be offered the option for the intensive smoking cessation program.
- During the weekly groups, participants could sign up for individual appointments for the Moving On smoking cessation program.

Moving On to Being Free cessation intervention

Initial appointment:

- Overview of *Moving On* and research component; if interested signed consent, created initial reduction plan.
- No-cost NRT available for up to 26 weeks.

2-month “active” treatment protocol

- Nurse-initiated follow-up sessions post-withdrawal treatment were completed by phone when clients returned to their home communities.
  - Weekly month 1
  - Biweekly month 2

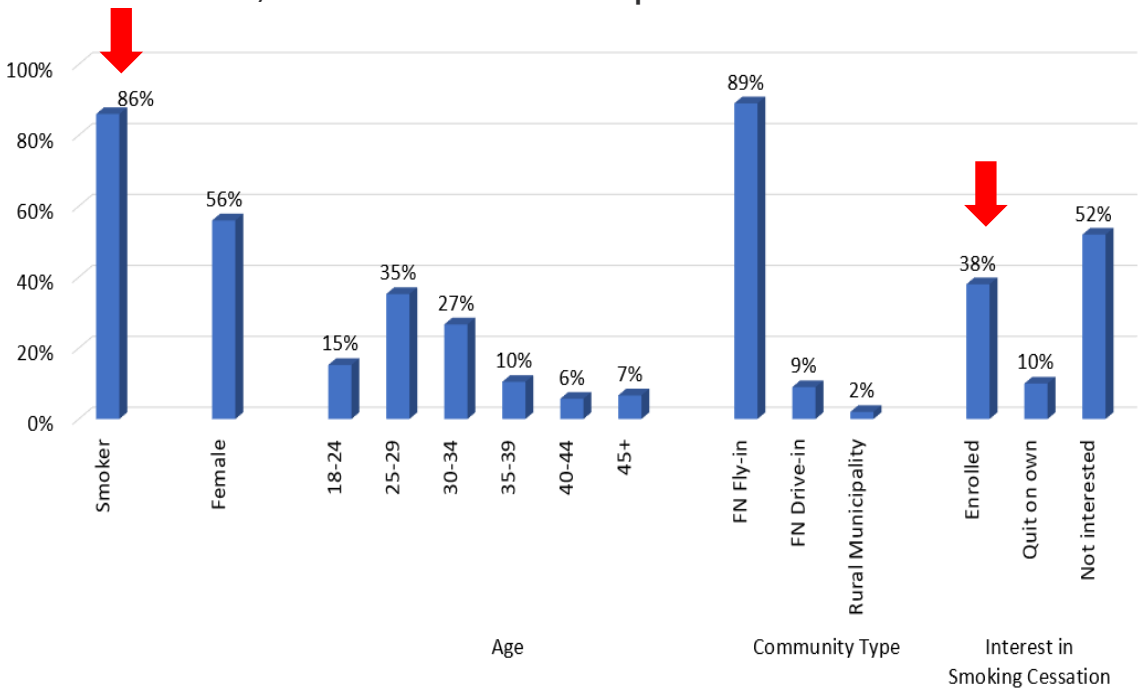
Long-term follow-up

- 3, 6, 12-months post-withdrawal treatment by phone.

Results: Healthy Living Group

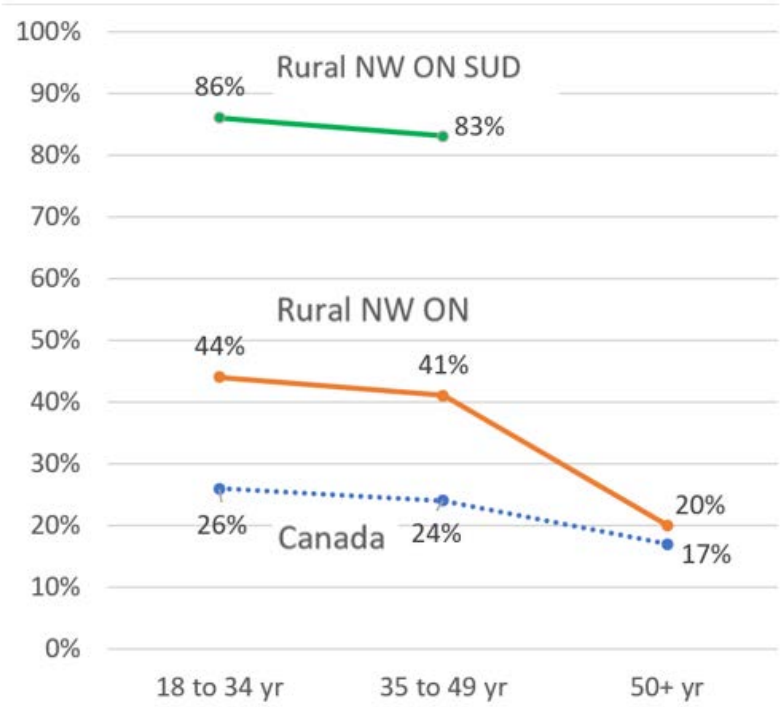
- Received brief smoking cessation education at beginning of each group (10 minutes).
- Learned to develop a general behaviour change action plan (based on self-regulation theory: 10 minutes).
- Discussed a health topic of their choosing from the “toolbox” (20 minutes)
- Developed a behaviour change plan based on topic (or chose own topic: 15 minutes).

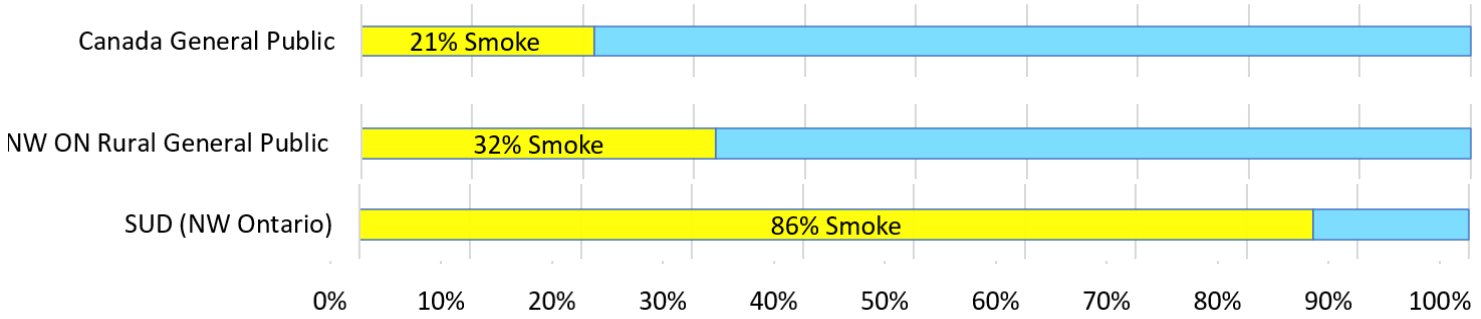
32 Groups over 8.5 Months, 105 individuals from 22 communities; sessions attended/person: 1.3 ± 0.6



Activity	Time
Session 1	
Smoking education Part 1	10 minutes
Action plan teaching	10 minutes
Tool chosen from tool box and discussed (client choice)	20 minutes
Tool options: Physical activity	
Sleep	
Healthy eating	
Weight management	
Smoking cessation	
Decision-making	
Breathing techniques	
Understanding emotions	
Using your mind	
Action plan exercise: develop and share action plan	15 minutes
Session 2	
Smoking education Part 2	10 minutes
Action plan teaching	10 minutes
Review action plan from previous week	5 minutes
Problem solve if necessary	5 minutes
Tool chosen from tool box and discussed (client choice)	20 minutes
Tool options: same as Week 1	
Action plan exercise: develop new action plan	10 minutes

Results: Smoking Prevalence 86%

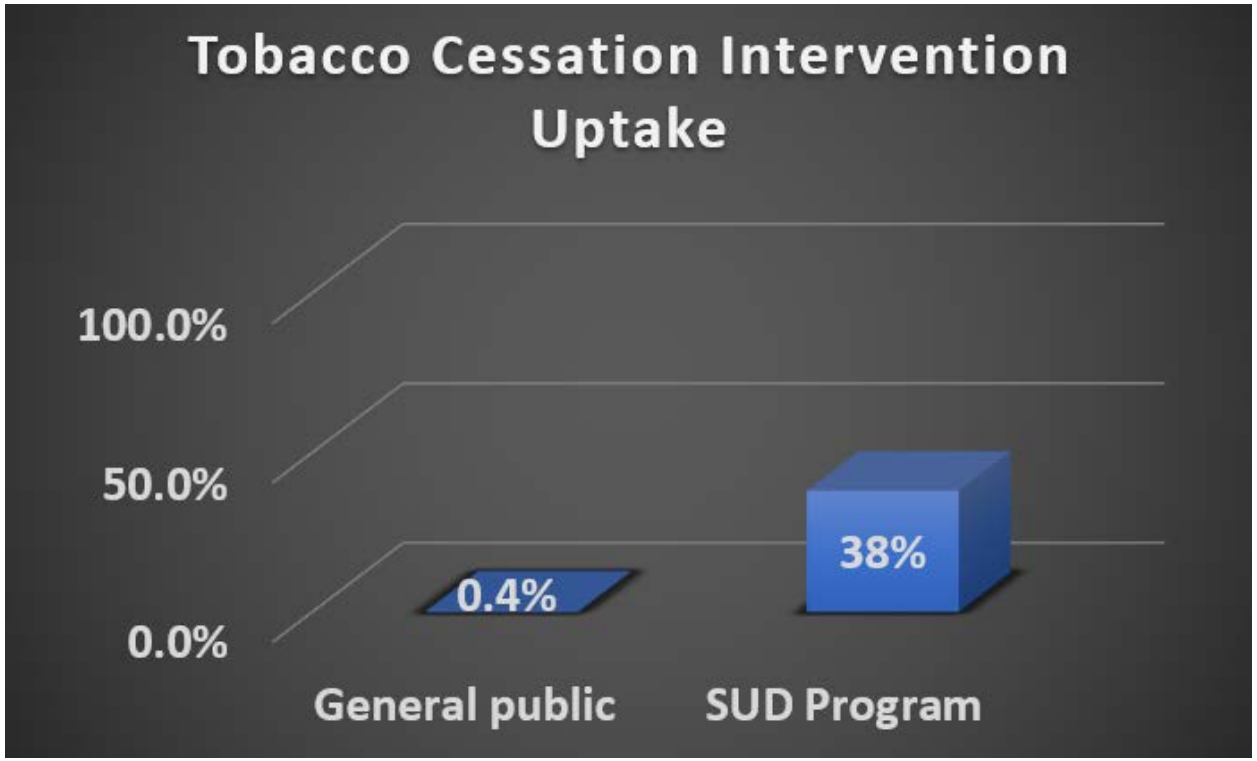




- Age-adjusted smoking rate in the withdrawal program was 2.02 higher than expected in general rural population in NW ON.
- Potential reasons high rate:
  - Majority on opioid treatment, young, high smoking in rural population (young adults)

Results: Intervention Uptake 38%

Compares ***favourably*** to the <1% of general population of smokers who seek help to quit.



Results: Staffing Resources

- **Estimated time:** 2.25 hr./week by end of year 1
  - does not adjust for drop-out which decreases #calls and could decrease time to 1.6-1.8 hr./week
- **Estimated cost:** $87-$100/week
  - based on $45/hr. + 24% benefits

- **Assumptions**:
  - 38% enrolled, equivalent to 1/wk
    - Optimal group size <9 so if uptake is <38%, enrollment will be <1/week
  - Initial 1-hr session
  - 6 x 10-min post-SUD phone calls over two months
  - 3 x 5-min follow-up calls (at 3, 6, 12 months)

			Minutes/Session										
					Weekly Month 1			Biweekly Month 2				Long-term	
Week	Total Hr/wk.	Total Minutes/wk.	1 hr/new enrolled	7 days	14 days	21 days	30 days	45 days	60 days	90 days	180 days	1 year
1	1.00	60	60									
2	1.17	70	60	10								
3	1.33	80	60	10	10							
4	1.50	90	60	10	10	10						
5	1.67	100	60	10	10	10	10					
6	1.67	100	60	10	10	10	10					
7	1.83	110	60	10	10	10	10	10				
8	1.83	110	60	10	10	10	10	10				
9	2.00	120	60	10	10	10	10	10	10			
10	2.00	120	60	10	10	10	10	10	10			
11	2.00	120	60	10	10	10	10	10	10			
12	2.08	125	60	10	10	10	10	10	10	5		
13	2.08	125	60	10	10	10	10	10	10	5		
24	2.08	125	60	10	10	10	10	10	10	5		
25	2.08	125	60	10	10	10	10	10	10	5		
26	2.17	130	60	10	10	10	10	10	10	5	5	
27	2.17	130	60	10	10	10	10	10	10	5	5	
51	2.17	130	60	10	10	10	10	10	10	5	5	
52	2.25	135	60	10	10	10	10	10	10	5	5	5
53	2.25	135	60	10	10	10	10	10	10	5	5	5

1st week: one initial 1-hr intake

2-months of treatment calls accumulate by 1/week for each enrollment

3, 6, 12 mn accumulate more slowly

Note: Assumes initial intake session = 1 hr/enrolled (1 new enrolment/week); 6 post-SUD program counselling calls at 10 minutes/each, and 3 long-term follow-up calls at 5 minutes each.

Conclusions

Successfully developed a proof of concept model for implementing smoking cessation into SUD treatment.

Builds on a 30+-yr. evidence-base:

Clinically important to use evidence-based interventions when available.

Scientifically sound practice to replicate interventions tested in RCTs to determine generalizability to new populations & locations.

Innovation and Equity:

Healthy living group provided a forum for tobacco education and behaviour change skills.

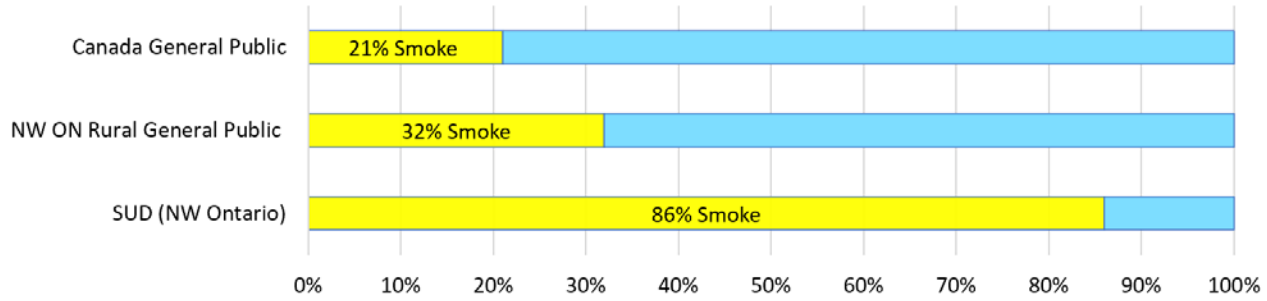
The group increased equity of access to an evidence-based cessation intervention by providing a centralized activity that all SUD treatment participants attended as part of their overall programming.

New Knowledge: 1st Canadian study to report:

1. Smoking prevalence in SUD treatment
   - High (86%), consistent with worldwide review
2. Compare age-adjusted SUD treatment smoking prevalence to general public
   - 2x rural regional rate.
3. Intensive tobacco intervention uptake in SUD treatment
   - Receptivity was high based on high enrolment: 38% vs. <1% in general public
4. Staff resources for an intensive intervention in SUD treatment program
   - Practical & natural fit: SUD programs usually offer group, individual, and post-treatment programming
   - Only a few staff hours a week, $87-$100/wk.

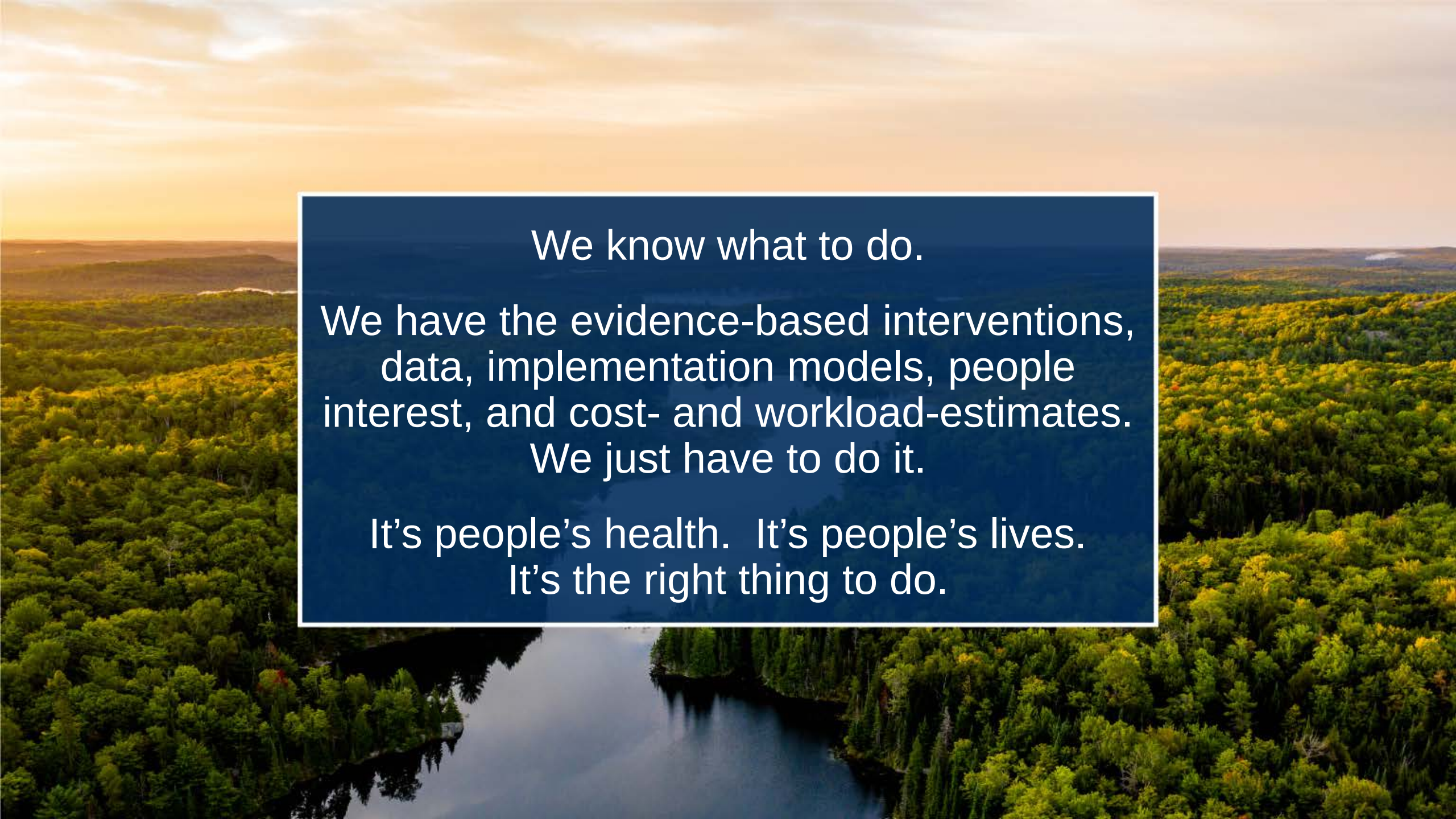
IMPLICATIONS

Policy is ***urgently*** needed to support ***equitable*** access to ***evidence-based, patient-centred, intensive*** smoking ***cessation interventions*** for substance use disorder treatment programs (and general public).



There are few risk factors for which the

- prevalence is so high,
- related health inequalities are so devastating,
- benefits of change are so great, and
- the overall lack of and inequities with access to effective, evidence-based care are so pronounced.


We know what to do.
We have the evidence-based interventions, data, implementation models, people interest, and cost- and workload-estimates. We just have to do it.
It’s people’s health. It’s people’s lives. It’s the right thing to do.

NORTHERN HEALTH RESEARCH CONFERENCE

Northern Ontario School of Medicine
École de médecine du Nord de l'Ontario

Questions?

Please note:

- I currently have MOHLTC one-time “post-COVID” funding (in addition to annual funding) to help healthcare and community settings implement this intensive smoking cessation intervention for any population. The funding supports training, ongoing support, materials, and NRT.
- Please contact me if you are interested or interested in applying for a research position.

Patricia M. Smith, PhD

Northern Ontario School of Medicine

psmith@nosm.ca