



'Smokeless Campus' Smoking Cessation Intervention

Medical Centre Institute of Technology Carlow

Theresa Lowry-Lehnen RGN, BSc (Hons), MSc, PGCE (QTS), H.Dip.Ed, M.Ed, PhD

Introduction

In February 2018, following ongoing consultation with students and staff and extensive work carried out by the Smokeless Campus Committee, Institute of Technology Carlow became a 'Smokeless Campus'. This profile relates to the smoking cessation initiative implemented by the Nurse at IT Carlow, in providing on site consultation and support services at the college's medical centre for students who require help to stop smoking. While the initiative is on-going and available to all students, this profile provides data on a group of 25 smokers who participated in a smoking cessation intervention programme. It explains the methods used to assist the students to stop smoking and the results obtained over a ten month period from March-December 2018. The profile also provides quantitative data on brief interventions for smoking cessation (5A's) carried out with all smokers who attend the student medical centre.

Background

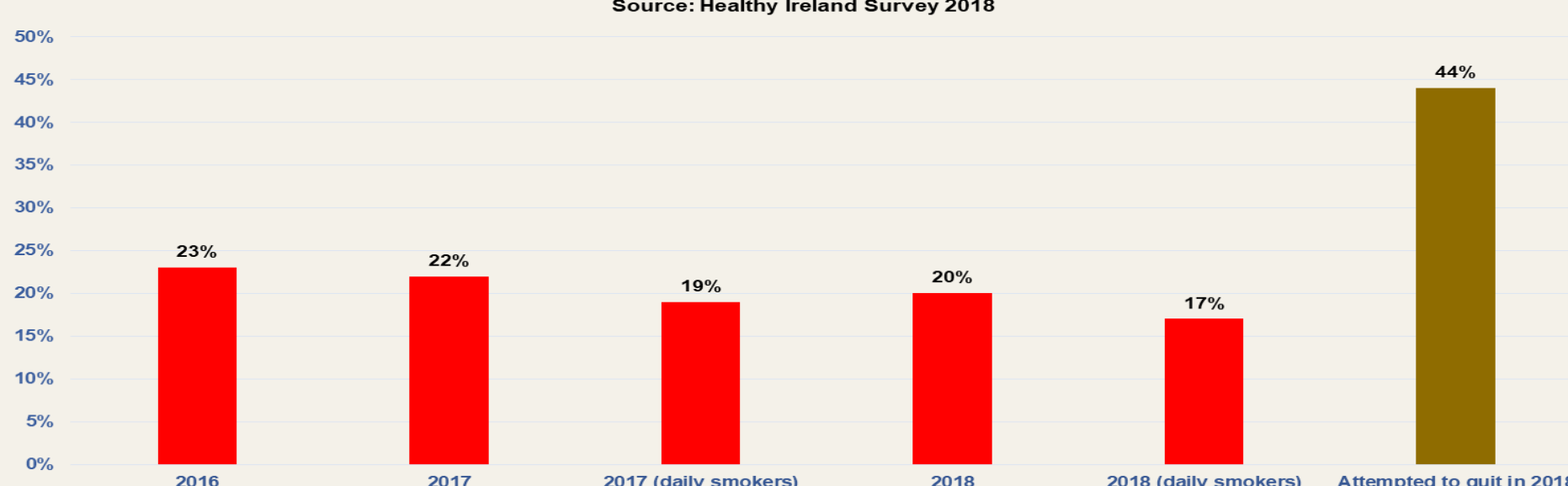
Tobacco use is the leading cause of preventable death in Ireland with almost 6,000 smokers dying each year from tobacco related diseases (HSE, 2018). The estimated annual costs are: healthcare €506 million; lost productivity €1,071 million; fires €6 million; litter €69 million; loss of welfare due to smoking-related (i) morbidity €1,355 million and (ii) mortality €7,657 million (HSE, 2016).

National Smoking Statistics 2018: The number of smokers in Ireland has decreased by an estimated 80,000 people over the past three years. The prevalence of smoking has dropped from 23% in 2015 to 20% in 2018 (Healthy Ireland Survey, 2018).
•20% are current smokers; down from 22% (2017) and 23% in 2016
•17% are daily smokers down from 19% (2017)
•44% of all smokers in the last 12 months have attempted to quit.

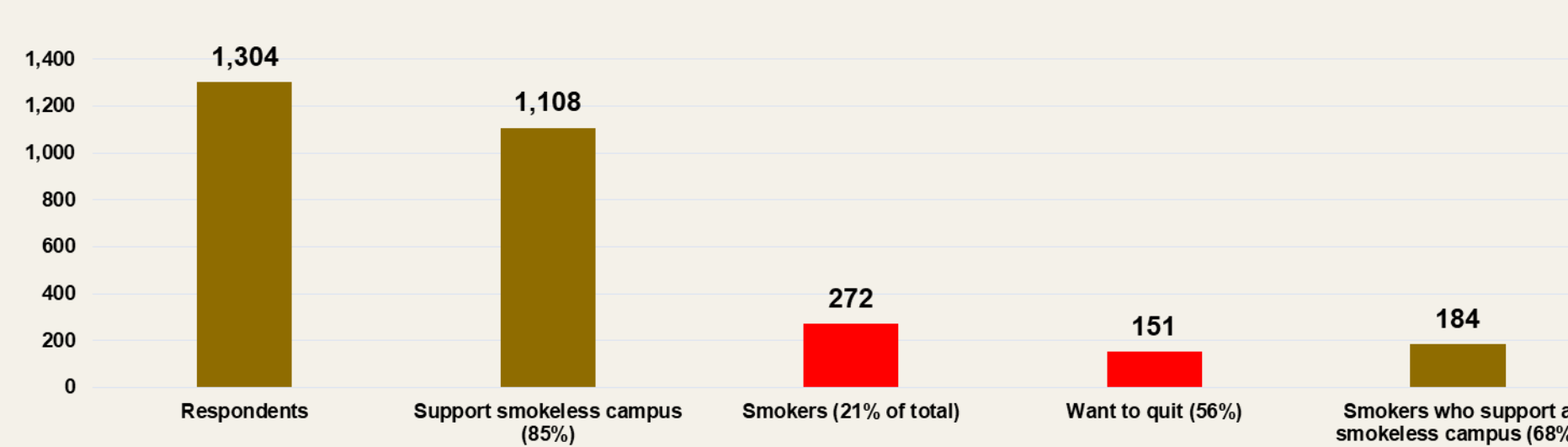
We have made huge progress towards becoming a 'tobacco free Ireland by 2025', however, there is still a lot more work to do.

In 2017, an in-depth survey was sent to all students and staff at the IT Carlow campus proposing the Smokeless Campus initiative. 1,304 responded of whom 234 were staff and 1,070 students. 84.97% of all respondents supported a smokeless environment. 272 respondents were smokers (20.86%). Of the 272 smokers, 151 (56%) said they would like to quit. 184 of the 272 smokers (68%) said they would support a smokeless campus (Flynn, 2018).

Smoking Prevalence in Ireland 2016 - 2018 (percentage of smokers)
Source: Healthy Ireland Survey 2018



Smokeless Campus Survey 2017, IT Carlow



Smoking Cessation Intervention

A smoking cessation service at the IT Carlow Medical Centre provides on site consultation and support for all students who require help to stop smoking. This profile provides data on a group of 25 smokers who participated in a smoking cessation programme following the introduction of the Smokeless Campus. It explains the methods used to assist the students to stop smoking and the results obtained over a ten month period (March to December 2018). Statistical data is also provided on outcomes of brief interventions for smoking cessation (5A's) carried out with all smokers who attend the medical centre.

Participants & Age Ranges

- 25 Participants
- Age range 19 - 42 years.

Daily Smoking History

- 15 ≥ 20 cigarettes daily
- 7 ≥ 10 ≤ 15 cigarettes daily
- 3 ≤ 10 cigarettes daily

Participant Programme Completion

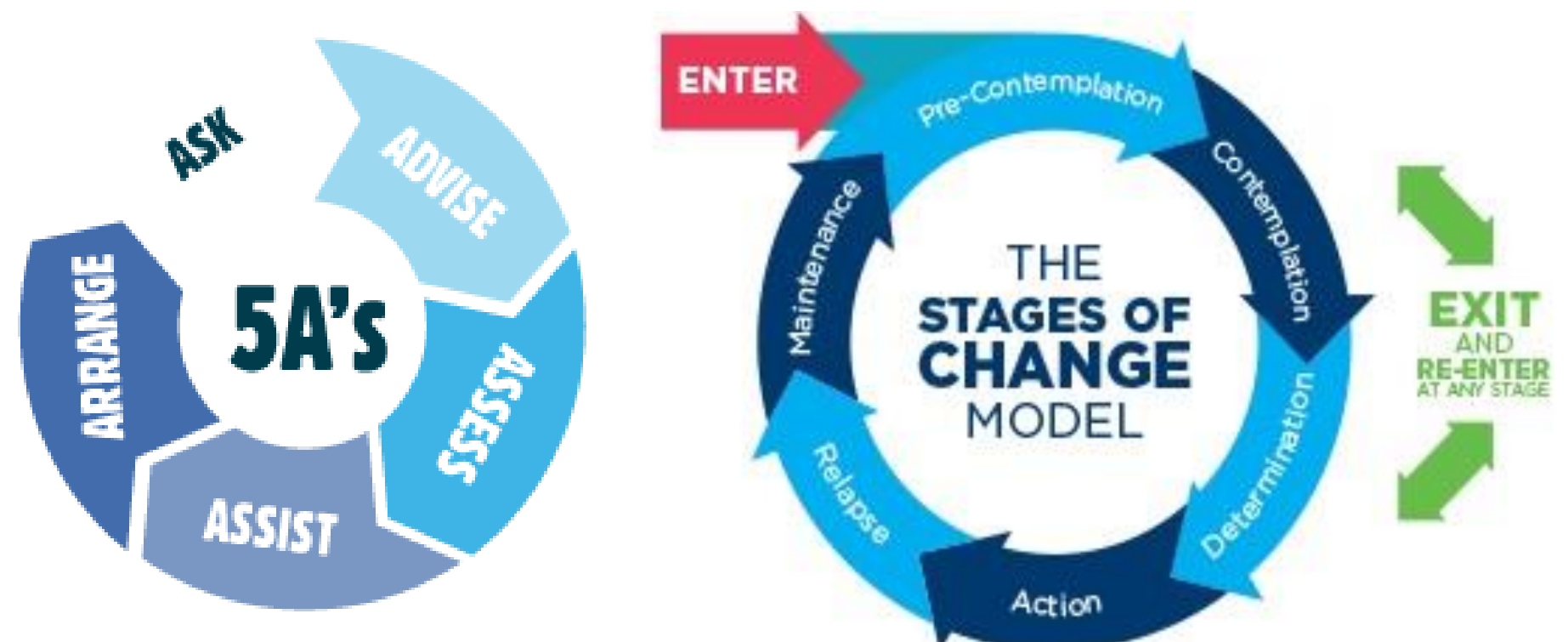
- 25 participated initially
- 18 completed the programme
- 2 discontinued end of week 2
- 3 discontinued end of week 6
- 2 discontinued end of week 9

Methods

- 1) **Brief interventions for smoking cessation** are carried out at the IT Carlow Medical Centre with all students who smoke. **Brief interventions** involve opportunistic **advice, discussion, negotiation and encouragement** that typically take between 5 and 10 minutes. **Five components** of the brief intervention framework are: **Ask, Advise, Assess, Assist, Arrange**.
 - **Ask:** systematically identify all smokers at every visit. Record smoking status, no. of cigarettes smoked per day/week and year started smoking.
 - **Advise:** urge all smokers to quit. Advice should be clear and personalised.
 - **Assess:** determine willingness and confidence to make a quit attempt; note the stage of change.
 - **Assist:** aid the smoker in quitting. Provide behavioural support. Recommend / prescribe pharmacological aids. If not ready to quit, promote motivation for future attempt.
 - **Arrange:** follow-up appointment within one week or refer to specialist cessation service for intensive support.
- 2) **Smoking Cessation Counselling Sessions** with the Nurse on campus. Weekly sessions: duration varies, 15-30 minute appointment, as required, incorporating 'Motivational Behavior Change Model' / 'Stages of Change Model'.
- 3) 'Smokerlyser': breath carbon monoxide (CO) monitor to aid smoking cessation. Motivational and visual aid used at each consultation. Displays ppm and %COHb. Clinically proven to help people stop smoking.
- 4) **Aids:** Literature, Quit Packs, Quit helpline details, Healthy lifestyle, BMI, weight management and dietary advice.
- 5) **Non-Nicotine Pharmacotherapy:** Prescriptions for non-nicotinic products provided at the IT Carlow Medical Centre. Follow-up smoking cessation consultations.

Smoking Cessation Resources

ASK	about tobacco USE
ADVISE	tobacco users to QUIT
ASSESS	readiness to make a QUIT attempt
ASSIST	with the QUIT ATTEMPT
ARRANGE	FOLLOW-UP care



Results and Analysis

Brief Interventions for Smoking Cessation (5A's)

Brief interventions for smoking cessation (5A's) are offered to all smokers who attend the student medical centre. This is having a very positive impact. Following the introduction of the Smokeless Campus, **107 (54%)** of 200 identified smokers at the medical centre have either stopped smoking (**35%**) or made concerted efforts to stop (**29%**) using the 5A's in the past year (Lowry-Lehnen, 2018).

Smoking Cessation Counselling Sessions

<p>Smoking Cessation Counselling Sessions 15-30 minutes 16 week programme</p>	<p>25 participants (100%)</p> <ul style="list-style-type: none"> • 2 discontinued end of week 2 • 3 discontinued end of week 6 • 2 discontinued end of week 9 <p>7 (28%) who discontinued the programme stated they were not ready to quit on this occasion and would try again in the future</p> <p>18 remaining participants (72%)</p> <ul style="list-style-type: none"> • 12 attended weekly sessions x 16 weeks • 6 twice monthly sessions x 16 weeks <p>'Stages of Change Model' is incorporated at each session</p>
<p>Follow-up Smoking Cessation Sessions 5-15 minutes</p>	<ul style="list-style-type: none"> • 10 attended monthly follow-up sessions • 5 attended occasional follow-up sessions • 3 followed up via telephone consultation with the nurse and QUIT helpline support services

Smoking Cessation Resources

<p>'Smokerlyser' Non-invasive measure of blood Carboxyhaemoglobin (%COHb),</p>	<p>Measures blood Carbon Monoxide (CO) levels. All participants used the 'smokerlyser' at each session, and more frequently in the first month.</p> <p>98% of participants found the 'smokerlyser' the most motivational tool.</p>
<p>Behaviour Change Model Stages of Change Trans-theoretical Model</p>	<p>Structured motivational therapy in practice. Stages of Change Model used at each session was very effective in motivating participants. 93% of participants reported it helpful.</p>
<p>Non-Nicotine Pharmacotherapy</p>	<p>6 (33.3%) of the remaining 18 participants used Non-Nicotine Pharmacotherapy</p> <ul style="list-style-type: none"> • 5 stopping smoking completely within 6 months • 1 did not complete the recommended course

Smoking Cessation Programme Results

25 (100%) Participants	18 (72%) Completed	7 (28%) Discontinued
14 of 25 (56%) participants who started the programme stopped smoking	14 of 18 (78%) who completed the programme stopped smoking	4 of 18 (22%) who completed the programme have not stopped smoking
5 of 18 (28%) succeeded using pharmacotherapy	9 of 18 (50%) succeeded without medication	2 of 18 (11%) now use e-cigarettes 2 of 18 (11%) still smoke tobacco

Conclusion

The smoking cessation programme carried out with 25 participants over 10 months had a very good success rate. Results show that **56%** of all initial 25 participants and **78%** of the remaining 18 participants successfully stopped smoking within six months using this programme, and continue to be non-smokers.

Brief interventions for smoking cessation (5A's) involving opportunistic **advice, discussion, negotiation and encouragement** has a very positive impact on smoking cessation. This can be seen by the numbers of students, **107 (54%)** of 200 identified smokers, who have stopped smoking (**35%**) or made concerted efforts to stop (**29%**) in the last year using the 5A's and following the introduction of the 'Smokeless' Campus.

Smoking cessation interventions, including pharmacotherapy and behavioural change interventions increase smoking cessation. The use of visual, behavioural change and motivational aids such as the 'Smokerlyser' and 'Stages of Change' model greatly supported participants and enhanced successful outcomes. Non-nicotine pharmacotherapy, clinically proven to stop smoking, was clearly effective and had a very high success rate (**83.3%**) with 6 participants who used it in this study.

References

1. Department of Health (2018). Healthy Ireland Survey 2018. DOH. Dublin. Available at <https://health.gov.ie/wp-content/uploads/2018/10/Healthy-Ireland-Survey-2018.pdf>
2. Flynn, R. (2018). Smokeless Campus Initiative at Institute of Technology Carlow. Institute of Technology, Carlow.
3. Health Service Executive (2018). Smoking the facts. HSE. Dublin. Available at <https://www.hse.ie/eng/about/who/tobaccocontrol/kf/>
4. Health Service Executive (2016). An assessment of the economic costs of smoking in Ireland. HSE. Dublin. Available at <https://health.gov.ie/healthy-ireland/tobacco/an-assessment-of-the-economic-costs-of-smoking-in-ireland/>
5. Lowry-Lehnen, T. (2018). Brief Intervention for Smoking Cessation Statistics. Medical Centre, Institute of Technology Carlow.