

The Evaluation of Smoking Cessation in Cancer Patients with an Intensive Clinical Tobacco Intervention Program using the 'Opt Out' Approach to quitting.

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Introduction

There are several factors that have been associated with an increased risk of cancer; with previous and current tobacco use demonstrating an increase in both the rate of cancer incidence as well as decreasing the efficacy of treatment^{1,2}.

Higher smoking prevalence and incidence of smoking in Northeastern Ontario is reflected by a comparatively elevated rate of associated cancers³.

¹Karam-Hage M, Oughli HA, Rabius V, *et al*. Tobacco cessation treatment pathways for patients with cancer: 10 years in the making. *J Natl Compr Canc Netw* 2016;14:1469–77.

²Chang EHE, Braith A, Hitsman B, Schnoll RA. Treating nicotine dependence and preventing smoking relapse in cancer patients. *Expert Rev Qual Life Cancer Care* 2017;2:23–39.

³Conlon MS, Lightfoot NE, Bissett RJ, Fehring GM. Cancer incidence and mortality in northeastern Ontario, 1991-1998. *Canadian Journal of Public Health*. 2002;93(5):380-385.





Introduction

Despite the evidence that tobacco use throughout cancer treatment can increase risk of adverse effects and reduce survival, approximately **20%-60%** of cancer patients continue to smoke throughout their treatments^{4,5,6}.

Relapse of tobacco use in cancer patients has been demonstrated to be higher than in the non oncology setting, with **50-83%** relapse rates compared to **18-23.6%**².

⁴Karam-Hage, M., P.M. Cinciripini, and E.R. Gritz. Tobacco use and cessation for cancer survivors: an overview for clinicians. *CA: a cancer journal for clinicians*, 2014. 64(4): p. 272-290.

⁵Coups, E.J. and J.S. Ostroff. A population-based estimate of the prevalence of behavioral risk factors among adult cancer survivors and noncancer controls. *Preventive medicine*, 2005. 40(6): p. 702-711.

⁶Liu, J., et al. Smoking behaviours of current cancer patients in Canada. *Current Oncology*, 2016. 23(3): p. 201.



Introduction



Potential Health Benefits of Smoking Cessation



- All cause and cancer specific mortality
- Risk of wound complications and post-operative infections
- Toxicity with radiation therapy
- Risk of recurrence and second primary cancers



- Response to anti-cancer therapies in a variety of cancer types
- Effectiveness of molecular targeted drugs
- Survival
- Quality of life



Introduction



One of Ontario Health's (formerly Cancer Care Ontario's (CCO)) essential components of quality cancer care is the smoking cessation framework which provides guidance on implementing evidence-based smoking cessation activities.

From April 2020-21, patients screened at the NECC ranked among the highest in the province for Smoking Status (20.6% > 16.6% Provincial Average), Tobacco Screening among new patients (95.6% > 54.9%), Recommended Referrals among smokers (93.6% > 69.4%) and Referrals Accepted for CTI (87.2% > 32.4%).



Purpose



The purpose of this study was to assess if an 'Opt Out' intensive smoking cessation intervention program would encourage reduced time to quit and reduced relapse rate among cancer patients receiving care at the Northeastern Cancer Centre.



Methods



Design and Setting

- Retrospective cohort study.
- Patients >18 years of age receiving care at the NECC that were smoking at time of assessment and enrolling in the intensive smoking cessation intervention program were assessed.
- Information regarding the process of the involvement in the smoking cessation program was retrieved from patient records.



Methods



Design and Setting

- Cancer diagnosis and treatment, date of diagnosis, date of intervention, as well as time to quit from start of treatment was retrieved.
- Records identified were taken from the HSN MOSAIQ and ABLEdent software records, from the EMR of the HSN Cancer Care Clinic.

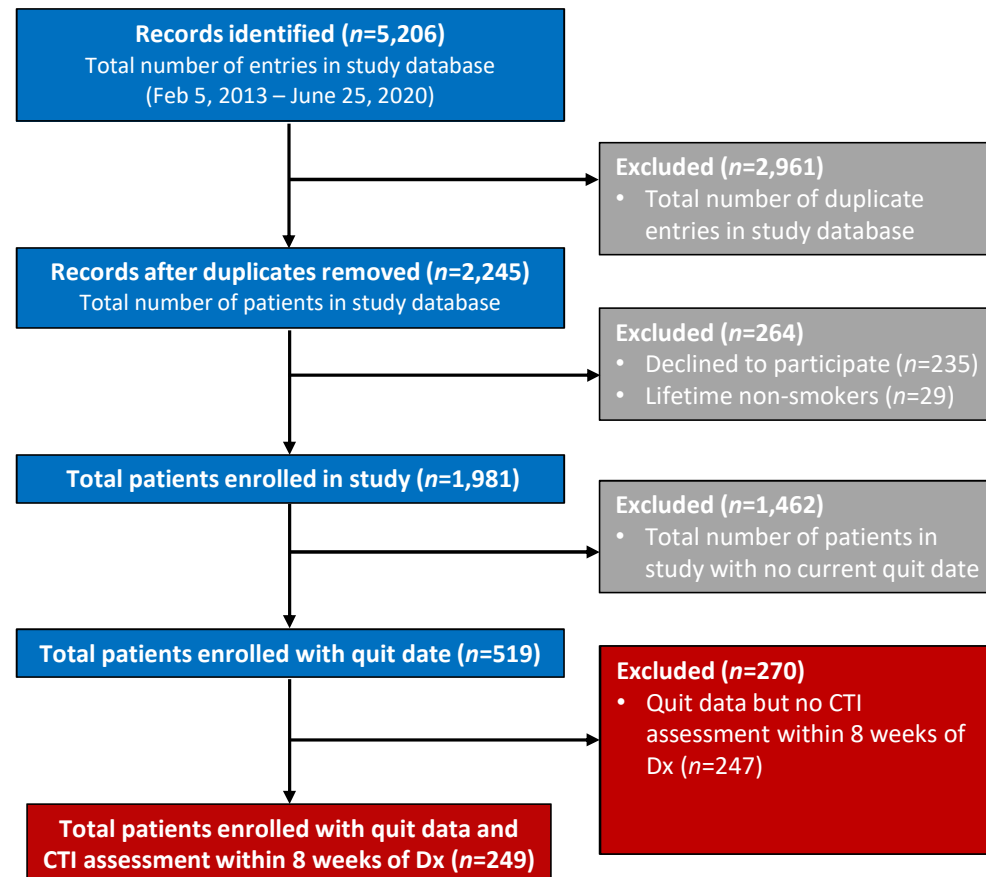


Results



Figure 1.

Flow chart of the study design: eligibility criteria for participants.



Results



- **26%** of cancer patients (519/1,981) quit smoking with a CTI assessment before or after 8 weeks of their cancer diagnosis date.
- **13%** (249/1,981) quit smoking with a CTI assessment within 8 weeks of their cancer diagnosis date.
- **48%** (249/519) of patients that quit smoking received a CTI assessment within 8 weeks of their cancer diagnosis date.



Results

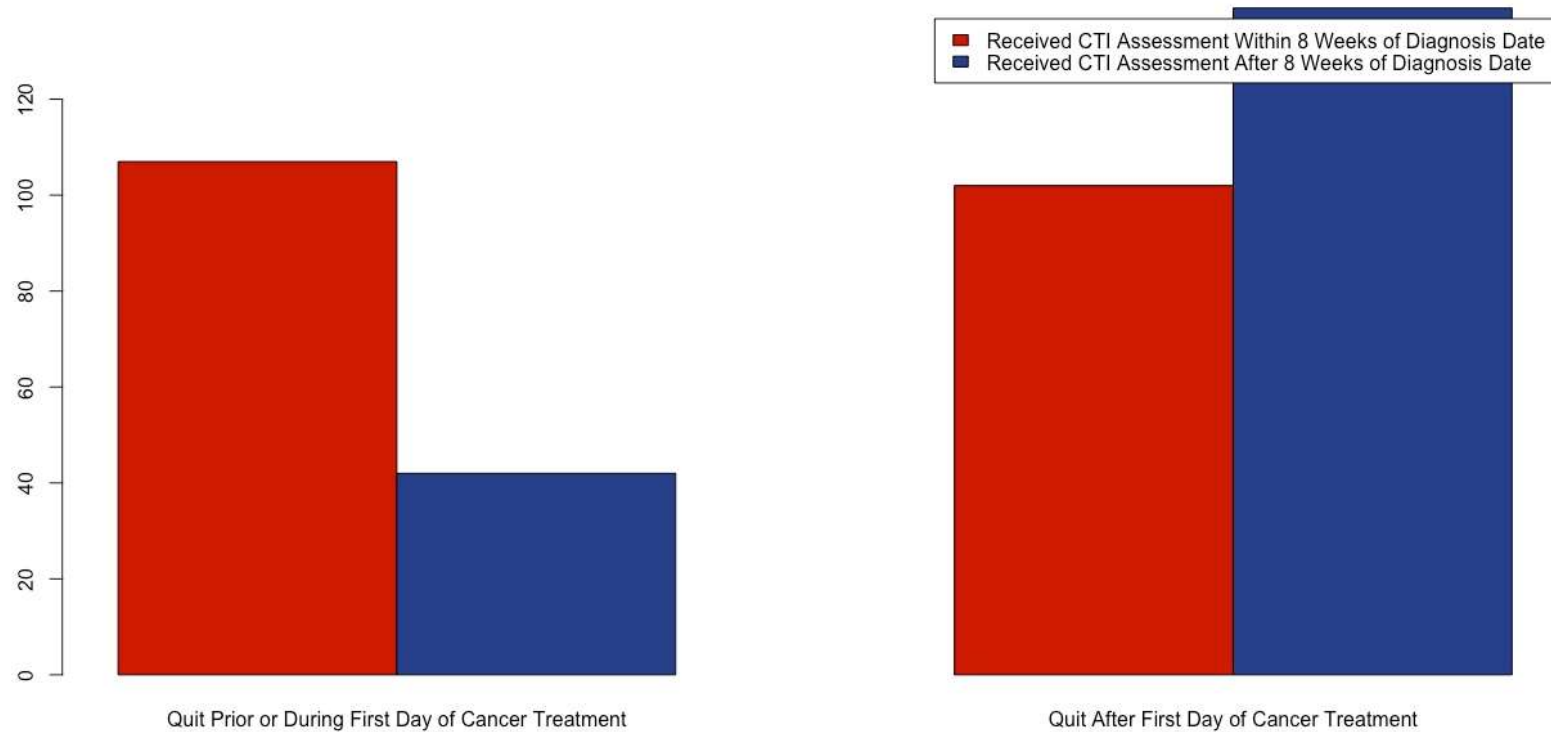


Figure 2. Patient quit date by CTI assessment date. 21.6% (n=107) quit prior/during first day of Tx and received CTI assessment within 8 weeks of Dx date. 8.5% (n=42) quit prior/during first day of Tx and received CTI assessment after 8 weeks of Dx date. 20.6% (n=102) quit after first day of Tx and received CTI assessment within 8 weeks of Dx date. 28.0% (n=139) quit after first day of Tx and received CTI assessment after 8 weeks of Dx date. 21.3% (n=106) had no Tx.





Final Thoughts and Future Directions

1. Evidence states that smoking cessation can decrease cancer treatment related morbidities and increase overall survival.
2. Time is of essence in the Oncology setting and the 'Opt Out' Approach to cessation can help contribute to successful **timely cessation**.
3. Further data collection and analysis is being analyzed to determine whether relapse rates can be reduced among cancer patients receiving Internal Intensive CTI using the "Opt Out" Approach.



Thank you.

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