

# Patient-Reported Distress and Acute Care Utilization for Cervical Cancer Patients Undergoing Concurrent Chemoradiation

Areeb Hassan<sup>1</sup>, Alyssa Macedo<sup>2</sup>, Genevieve Bouchard-Fortier<sup>3</sup>, Stephanie L'heureux<sup>4</sup>, Manjula Mangati<sup>1</sup>, Kathy Han<sup>1</sup>, Candice Yu<sup>1</sup>, Madeline Li<sup>5</sup>, Jennifer Croke<sup>1</sup>

<sup>1</sup>Radiation Medicine Program, Princess Margaret Cancer Centre, Toronto, ON, <sup>2</sup>Cancer Quality & Innovation, Princess Margaret Cancer Centre, Toronto, ON, <sup>3</sup>Department of Gynaecologic Oncology, Princess Margaret Cancer Centre, Toronto, ON, <sup>4</sup>Department of Medical Oncology and Hematology, Princess Margaret Cancer Centre, Toronto, ON, <sup>5</sup>Department of Supportive Care, Princess Margaret Cancer Centre, Toronto, ON, Canada

## INTRODUCTION

- Concurrent chemo-radiotherapy followed by brachytherapy is the standard curative treatment for locally advanced cervical cancer.
- Treatment journey is associated with significant toxicity and complex navigation, resulting in unscheduled acute care visits
- Patient-reported outcomes (PROs) provide the opportunity to understand the patient's symptoms, needs, and overall experience

## AIM

- To characterize the symptom burden and unmet needs of locally advanced cervical cancer patients undergoing concurrent chemoradiation
- To evaluate the utility of PROs in predicting unscheduled acute care visits

## METHODS

- Patients with FIGO Stage IB-IVA cervical cancer treated with curative intent chemo-radiotherapy between January 2014 and December 2020 were retrospectively identified
- Data Collection:**
  - Patient socio-demographics, PRO scores, clinical and treatment characteristics, and unscheduled acute care visits were extracted from medical records
  - PROs: Edmonton Symptom Assessment System-revised (ESAS-r) and Social Difficulties Inventory (SDI) are routinely completed by patients prior to the clinical encounter
    - Moderate-severe ESAS-r score: > 4 for any individual item
    - Social difficulty: Yes to any SDI Subscale
  - Unscheduled acute care visit: any visit to our institution's Radiation Nursing Clinic, Emergency department visit, and/or hospitalization
- Data Analysis:**
  - Descriptive statistic summarized socio-demographic, PRO and clinical/treatment data
  - A logistic regression model evaluated if ESAS-r and/or SDI scores increased the likelihood of having an unscheduled acute care visit within 1 month of PRO completion

## RESULTS

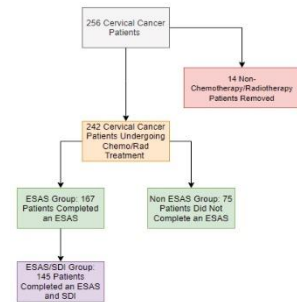
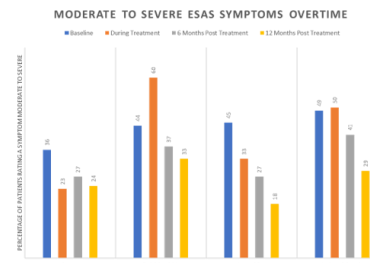


Figure 1: Patient Cohort Sample

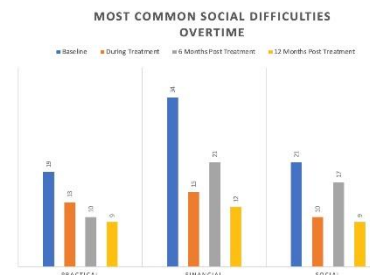
Table 1: Patient Characteristics

Variable	N = 145
Age (Median, Range)	48 (25 – 79)
FIGO Stage (n, %)	
1B	16 (11%)
2A	16 (11%)
2B	45 (31%)
3A/B	6 (4%)
3C	56 (39%)
4A	6 (4%)
Overall Treatment Time, Days (Median, Range)	51 (21-135)
Unscheduled Acute Care Visit Type (n=482) (%)	
Radiation Nursing Clinic	376 (78%)
Urgent Care Clinic	20 (4%)
Emergency Department	43 (9%)
Hospitalization	43 (9%)

### Symptom Burden and Social Difficulties Analysis:

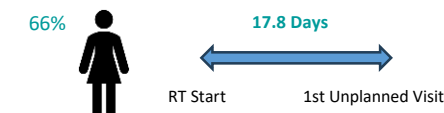


- At baseline, poor Well Being (49%), Anxiety (45%), Tiredness (44%), and Pain (36%) were the most common moderate/severe symptoms
- These persisted in 29%, 18%, 33, 24%, respectively 12 months post-treatment



- At baseline, financial concerns were the most common Social Difficulty
- This persisted in 12% at 12 months post-treatment

### Unscheduled Acute Care Utilization:



- 66% (n=96) had at least one unplanned acute care visit from treatment start to one month post treatment
  - Average # visits/patient = 6
  - Average time from RT start to 1st visit = 17.8 days

### Association between PROs & Acute Care Utilization

- On multivariate logistic regression analysis, there were no associations between ESAS-r nor SDI scores and subsequent unplanned acute care visits

## CONCLUSIONS

- Cervical cancer patients undergoing concurrent chemo-radiotherapy endorse significant symptoms and social difficulties at baseline that persist 12 months post-treatment
- Patients utilize unplanned acute care health services frequently during treatment; however, there were no associations between PRO scores and acute care visits
- Future work is ongoing to assess a Proactive Symptom Monitoring Program and to determine predictors of acute care utilization

## CONTACT INFORMATION

Email: [jennifer.croke@uhn.ca](mailto:jennifer.croke@uhn.ca); Twitter: @jenncroke

Email: [mhass@uwo.ca](mailto:mhass@uwo.ca)