

REASONS FOR OPIOID UNDERUSE FOR CANCER PAIN

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On behalf of:

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OBJECTIVE

To evaluate the use, and associations with lack of use, of opioids for older cancer out-patients reporting pain.

Background:

Ontario Cancer Symptom Management Collaborative

- Since 2007 cancer centres in Ontario have been systematically collecting:
 - Edmonton Symptom Assessment System (ESAS) scores
 - Palliative Performance Scale (PPS) scores
- Goal is to improve symptom screening and assessment, symptom control and coordinated palliative support

Edmonton Symptom Assessment Scale

Please circle the number that best describes:

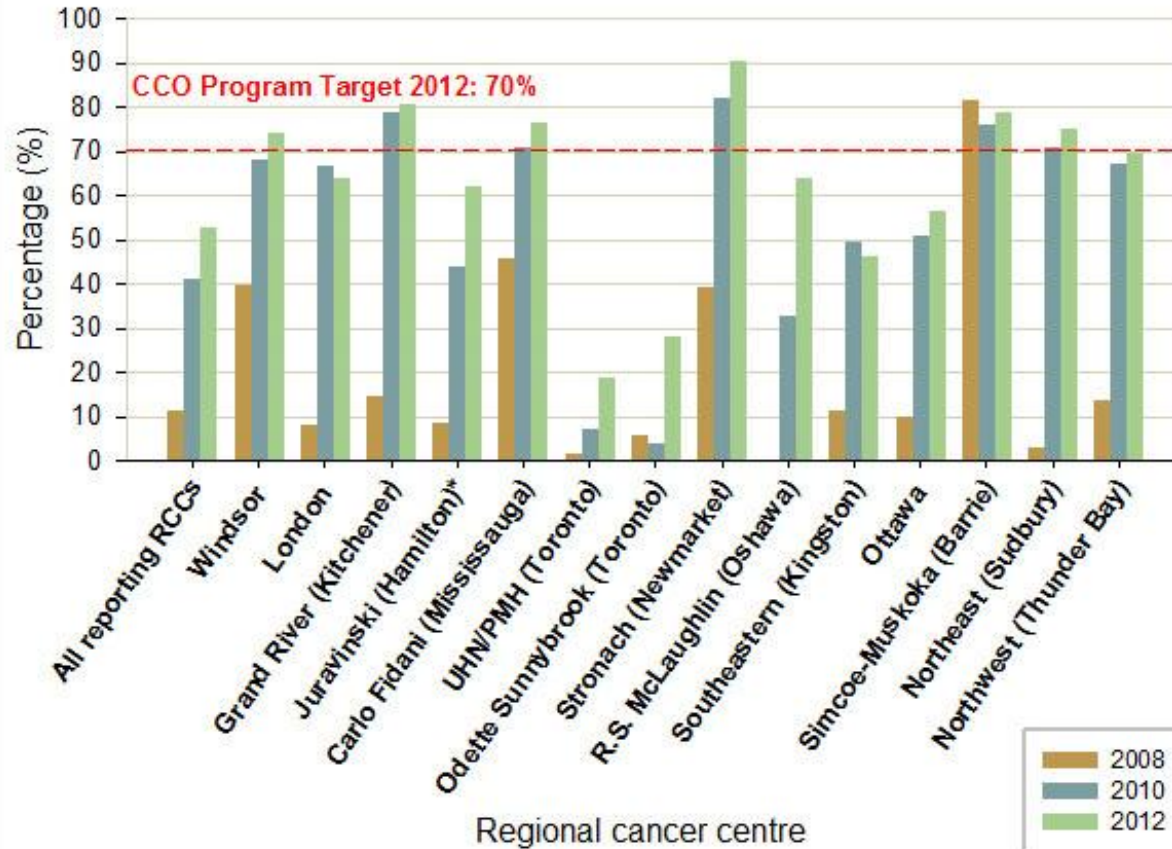
No pain	0	1	2	3	4	5	6	7	8	9	10	Worst possible pain
Not tired	0	1	2	3	4	5	6	7	8	9	10	Worst possible tiredness
Not nauseated	0	1	2	3	4	5	6	7	8	9	10	Worst possible nausea
Not depressed	0	1	2	3	4	5	6	7	8	9	10	Worst possible depression
Not anxious	0	1	2	3	4	5	6	7	8	9	10	Worst possible anxiety
Not drowsy	0	1	2	3	4	5	6	7	8	9	10	Worst possible drowsiness
Best appetite	0	1	2	3	4	5	6	7	8	9	10	Worst possible appetite
Best feeling of wellbeing	0	1	2	3	4	5	6	7	8	9	10	Worst possible feeling of wellbeing
No shortness of breath	0	1	2	3	4	5	6	7	8	9	10	Worst possible shortness of breath
Other problem	0	1	2	3	4	5	6	7	8	9	10	

Symptom screening kiosks



Symptom Assessment and Management

Percentage of cancer patients who were screened at least once per month for symptom severity, 2008, 2010 and 2012, by regional cancer centre (RCC)



Report date: February 2013

Data source: Ontario Cancer Symptom Management Reporting Database, Activity Level Reporting

Prepared by: Cancer Care Ontario, Informatics Centre of Excellence

Note: *Juravinski (Hamilton) has experienced ALR data submission issues since June 2012

CSQI 2013

Approach

Cohort:

1. All cancer patients in Ontario who completed an ESAS pain assessment between January 2007 and March 2009
2. Age >65
3. Pain scores >4/10

Data linkages

DATA SOURCES

ESAS/PPS

link to

OCR

CIHI-DAD

NACRS

RPDB

ODB

OHIP

HCDB

CCRS

VARIABLES

Age

Sex

Cancer type

Comorbidity

Income quintile

Vital status

OUTCOMES

Symptom burden

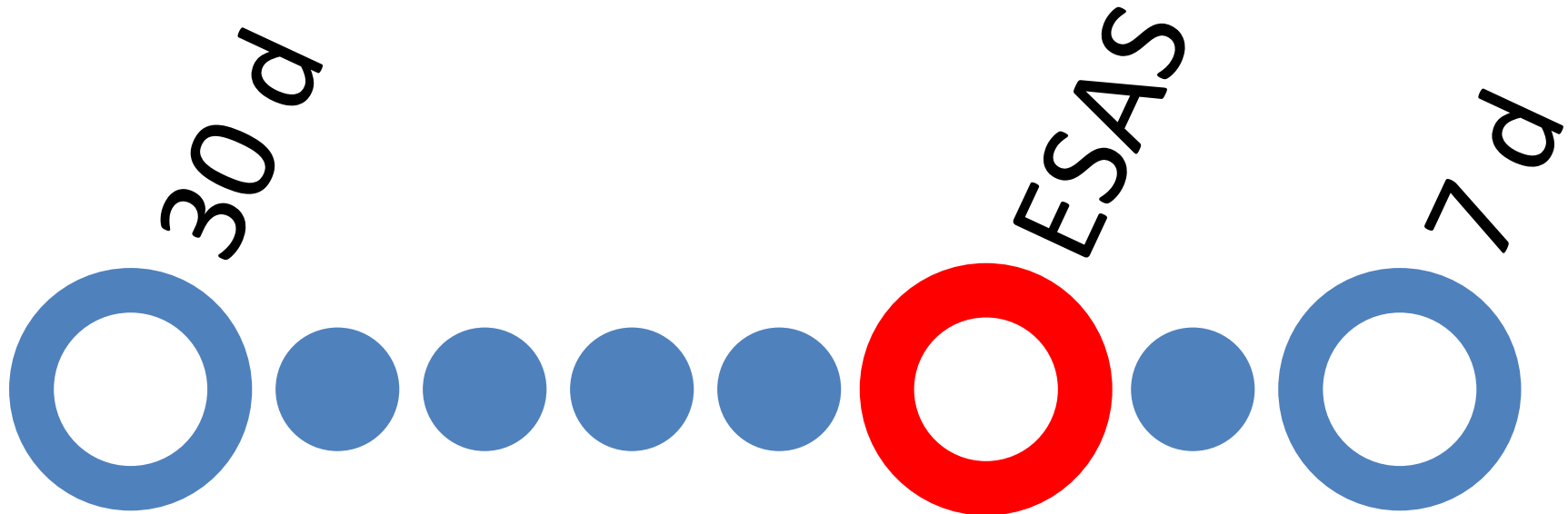
Performance status

Health service use (inpatient,
outpatient, CCAC, drugs)

Survival



Looked for an opioid prescription or change in opioid prescription



Approach (continued)

- To explore associations with lack of opioid use, charts of patients reporting pain scores > 4 in 2011 at 11 cancer centres were audited

RESULTS



45% of the 9826 patients with pain severity scores > 4 did not receive opioid analgesics

Opioid Prescription After Pain Assessment: A Population-Based Cohort of Elderly Patients With Cancer

Lisa Barbera, Hsien Scow, Anna Husain, Doris Howell, Clare Atzema, Rinku Sutradhar, Craig Earle,

Table 1. Proportion of Patients Receiving an OP by Pain Score Severity

OP Use	Pain Score (%)			
	0 (n = 9,044)	1-3 (n = 5,540)	4-6 (n = 4,973)	7-10 (n = 4,853)
OP 0-7 days after assessment	2.8	8.6	23.3	40.9
OP 30-0 days before assessment	7.2	15.6	22.1	26.3
No OP 30 days before or 7 days after assessment	90.0	75.8	54.6	32.9

Abbreviation: OP, opioid prescription.

Multivariable model for odds of receiving opioids

Table 3. Results of Multivariable Model for Odds of Receiving OP Including Basic Demographics and Assessment Location

Demographic	OR (adjusted)	95% CI
Age at assessment, years		
65-74	1.00	
75-84	0.82	0.72 to 0.93
85-94	0.70	0.56 to 0.87
95+	0.51	0.14 to 1.90
Sex		
Male		
Female	0.86	0.74 to 0.998
Charlson score		
0		
1+	1.16	1.01 to 1.34
Cancer type		
Lung	1.00	
Breast	0.70	0.57 to 0.86
CNS	0.30	0.12 to 0.79
GI	1.05	0.87 to 1.26
Genitourinary	0.98	0.80 to 1.19
Gynecologic	0.68	0.52 to 0.88
Hematologic	0.66	0.52 to 0.84
Head and neck	0.80	0.58 to 1.11
Other	1.62	0.82 to 3.21
Primary unknown	1.49	0.77 to 2.89
Sarcoma	2.83	0.84 to 9.60
Skin	2.03	1.09 to 3.76
Income quintile		
1 (low)	0.99	0.82 to 1.21
2	1.08	0.88 to 1.31
3	0.88	0.72 to 1.07
4	0.82	0.68 to 0.99
5	1.00	
Assessment location		
Home	1.00	
Clinic	0.64	0.53 to 0.77

NOTE. Significant results in bold.
Abbreviations: OP, opioid prescription; OR, odds ratio.

younger age

male sex

comorbid illness

cancer type (lung, GI, skin)

pain assessment at home

Chart audit

299 cases:

- 8% clearly documented that the pain was non-cancer related
- 5% chronic pain } ?cancer vs. non-cancer pain
- 2% pain being managed in the community }

⇒ estimate 8-15% of the audited cohort with pain scores 4-10 had non-cancer related pain

- Only 2 patients had documentation that they declined opioids

Extrapolation

9826 patients with pain scores > 4

$$\times 8\% = 786$$

$$\times 15\% = 1474$$

had pain unrelated to cancer

⇒ If removed from the denominator, then the proportion of untreated cancer related pain improves to 35-40%

Limitations

- Data is not truly population based
 - Not every cancer patient is included
 - Enriched for lung cancer and palliative patients
- Assessments happen on an opportunistic basis, not regular intervals
- Suggestion that chart audit protocol was implemented differently in different cancer centres

Conclusions

- Untreated cancer pain is a significant problem:
 - Even after excluding non-cancer pain over 1/3 of patients with significant pain scores do not receive an opioid prescription around the time of their assessment
- Rates are similar to other reports of under-management of pain in cancer patients
 - Cleeland 1994 NEJM, 330:592-596
 - Fisch 2012 JCO, 30: 1980-1988
- Very few documented occurrences of patients declining opioids
 - Chart audit is a poor tool for explaining these findings

Next steps

Admin data approach

- Trends over time of opioid use
- Compare cancer and non-cancer patient trends
- Look for changes among cancer patients after ESAS screening started

Primary data approach

- Prospectively identify patients with pain ≥ 4
 - ⇒ survey them and their providers to identify barriers to addressing pain
 - ⇒ relating the level of barrier to the adequacy of pain management
- Key informant interviews at regional cancer centers:
 - structures and processes to screen for & manage symptoms
 - explore feasibility of potential interventions (E.g., audit and feedback)

⇒ Develop and test an intervention based on the findings