

How much palliative care is delivered at the end-of-life? : A population-level observational study in Ontario

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CAHSPR Conference May 2015

Introduction

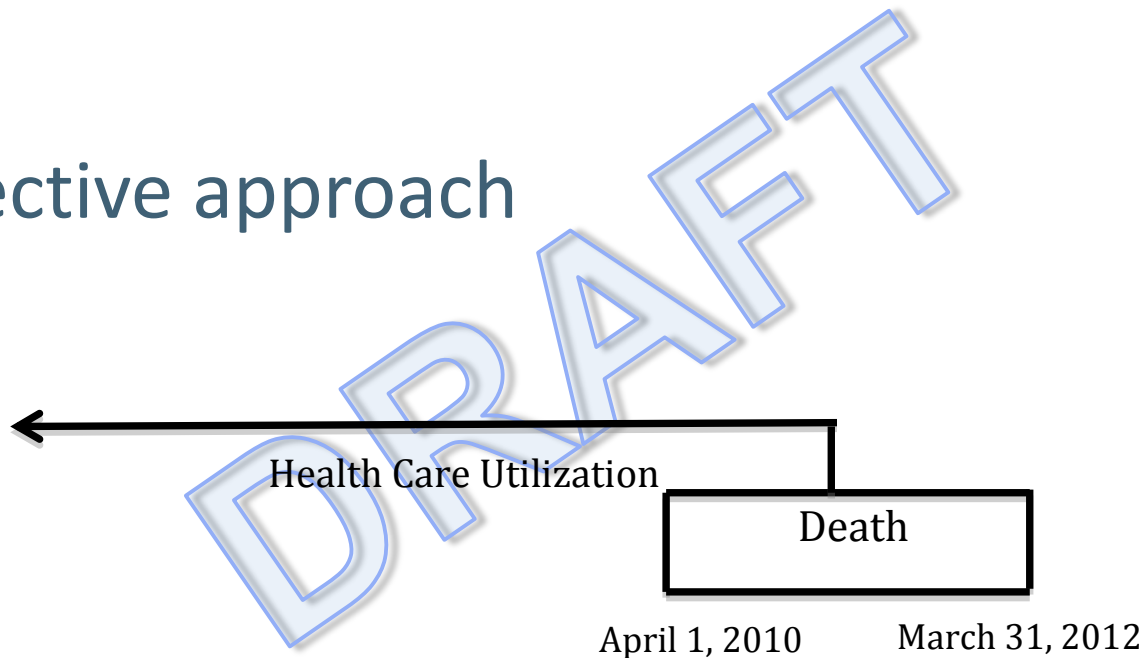


- Analysis for Central East LHIN on behalf of Declaration of Partnership and Commitment to Action – Hospice & Palliative Care
- Objectives:
 - Determine whether health admin data can be used to identify palliative care delivery
 - Describe distribution of palliative care utilization across Ontario's health sectors (LTC, home care, rehab, CCC)
 - Measure regional and sub-regional differences

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Methods

Retrospective approach



- Data source: Registered Persons Database (RPDB)
- From date of death, looked back 12 months

Sample Palliative Care Codes

Sector	Database & Codes
Physician Services	OHIP: K023, A945, G512, B966, K700
Inpatient Hospital	DAD ICD 10 Codes: Z51.5 NACRS Provider Service Code: 00121
Home Care	HCD: SRC admission, service, or discharge 95 RAI-HC: P2S = 1 or 2; RAI-CA: B2c, B4
Long-term Care	OHIP code W872, K023
Complex Continuing Care	OHIP code W882, K023



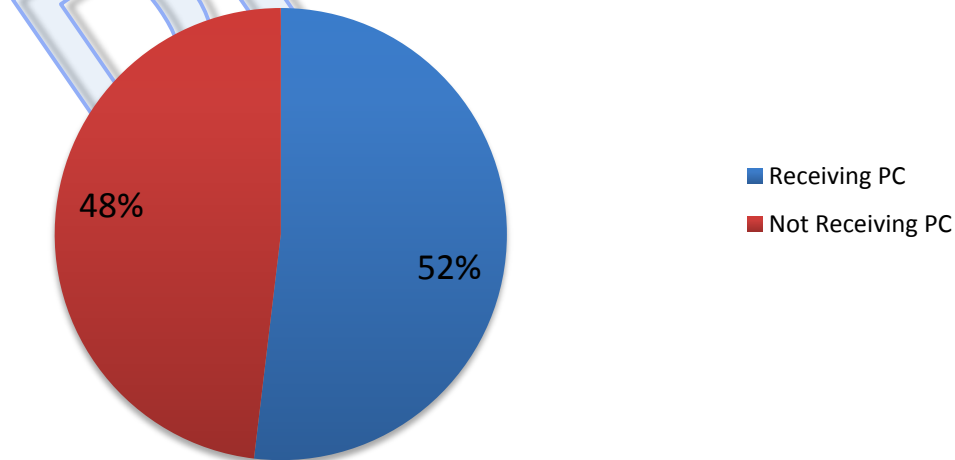
Data availability

CIHI Database Available*	Provinces/Territories Available**
Discharge Abstract Database (DAD)	All provinces and Territories except Quebec
Continuing Care Reporting System (CCRS)	Yukon, British Columbia, Saskatchewan, Manitoba ⁺ , Ontario ⁺ , Nova Scotia, Newfoundland and Labrador. ⁺ provinces reporting data for complex continuing care
Home Care Reporting System (HCRS)	Yukon, British Columbia, Manitoba, Ontario, Nova Scotia
National Ambulatory Care Reporting System (NACRS)	Mainly Ontario and Alberta, with minor representation from Manitoba and Nova Scotia

Results

- 1) How many decedents (n=177,817) are receiving palliative care in last year of life?

Percentage of Total Decedent Cohort Receiving and Not Receiving Palliative Care



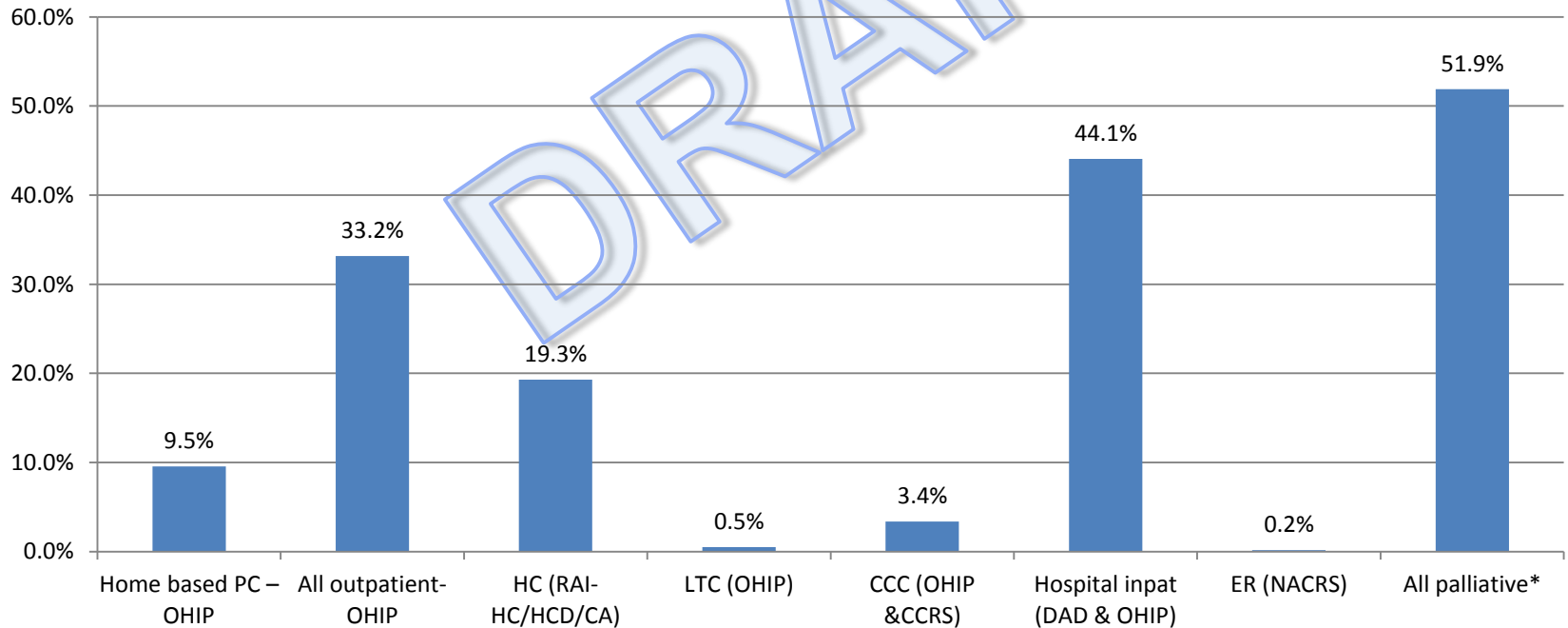
Who's receiving Palliative Care?

Table 2: Socio-demographic characteristics of decedent cohort who received at least 1 palliative service in the last year of life

Characteristic	No. (%) of decedents		
	Palliative Care n = 92,276	No Palliative Care n = 85,541	All n = 177,817
Female	47,187 (52.6%)	42,553 (47.4%)	89,740
Male	45,089 (51.2%)	42,988 (48.8%)	88,077
Age, yr			
<19	337 (12.3%)	2,414 (87.7%)	2,751
19-44	1,568 (28.4%)	3,948 (71.6%)	5,516
45-54	4,497 (47.5%)	4,962 (52.5%)	9,459
55-64	10,469 (56.6%)	8,036 (43.4%)	18,505
65-74	16,731 (59.6%)	11,364 (40.4%)	28,095
75-84	27,636 (56.4%)	21,372 (43.6%)	49,008
85-94	26,157 (49.4%)	26,789 (50.6%)	52,946
95 +	4,881 (42.3%)	6,656 (57.7%)	11,537
Neighborhood Income			
Quintile 1 (Q1)	20,484 (50.3%)	20,226 (49.7%)	40,710
Q2	19,450 (53.0%)	17,270 (47.0%)	36,720
Q3	17,593 (52.2%)	16,110 (47.8%)	33,703
Q4	17,449 (53.1%)	15,423 (46.9%)	32,872
Q5	16,734 (54.4%)	14,033 (45.6%)	30,767
Rurality			
Urban	79,538 (53.1%)	70,183 (46.9%)	149,721
Rural	12,527 (48.4%)	13,371 (51.6%)	25,898

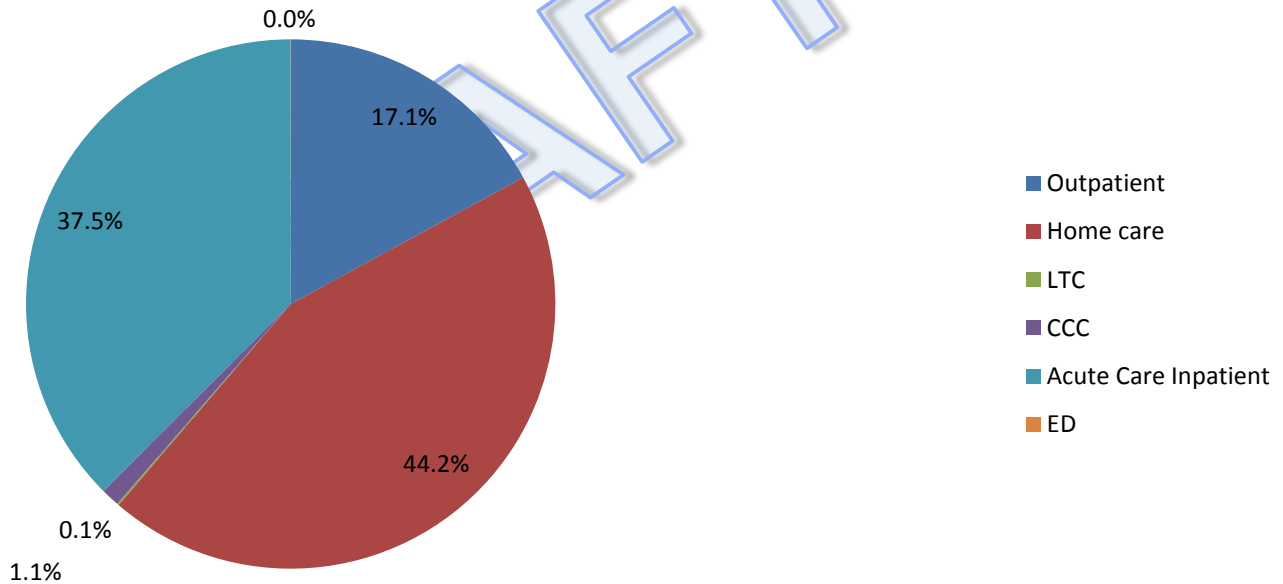
Where is palliative care being provided?

Proportion of Decedents Captured as Receiving Palliative Care, by Sector



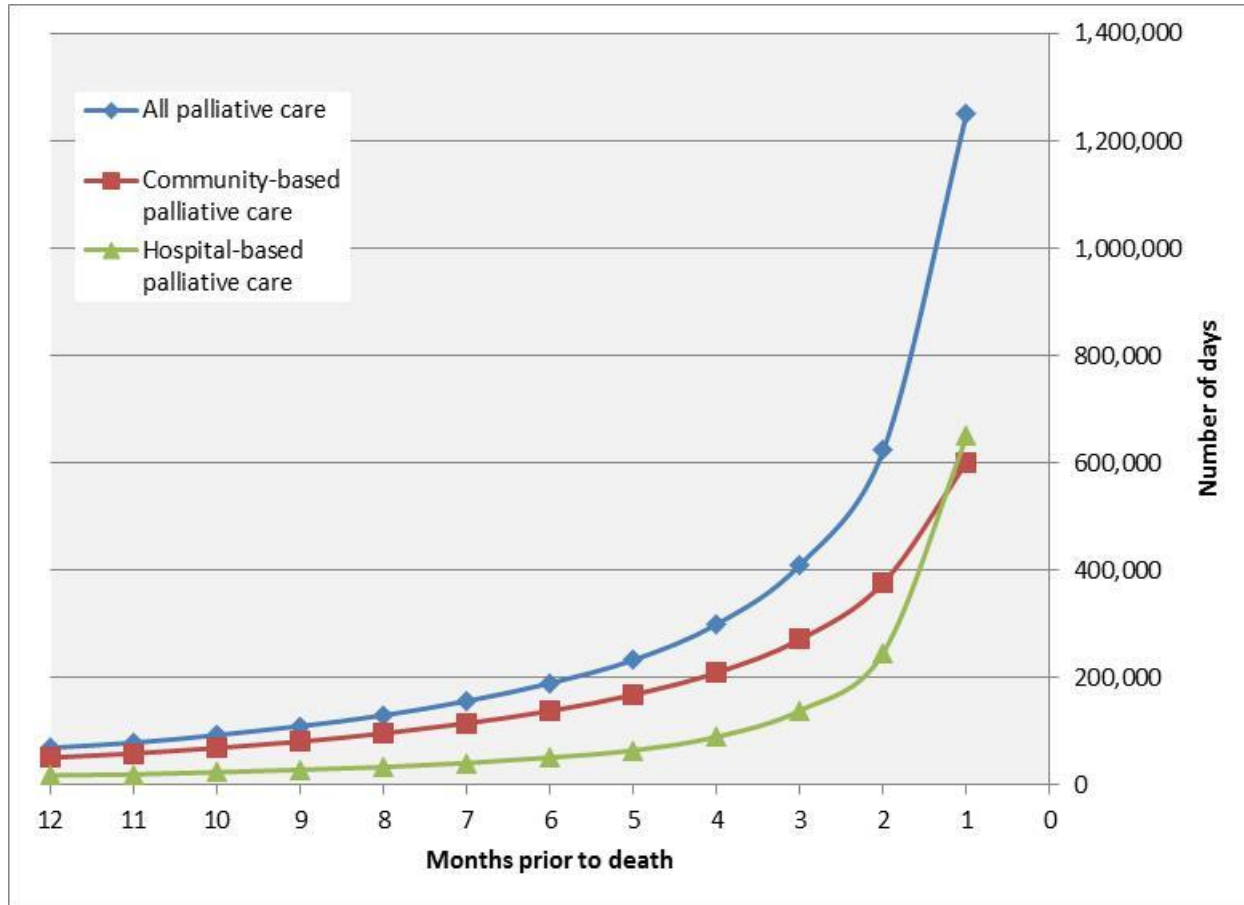
Total Days of PC Delivered by Sector

Proportion of total days of palliative care delivered to all decedents in the last year of life by health sector, Ontario, FY 2010/11-FY 2011/12



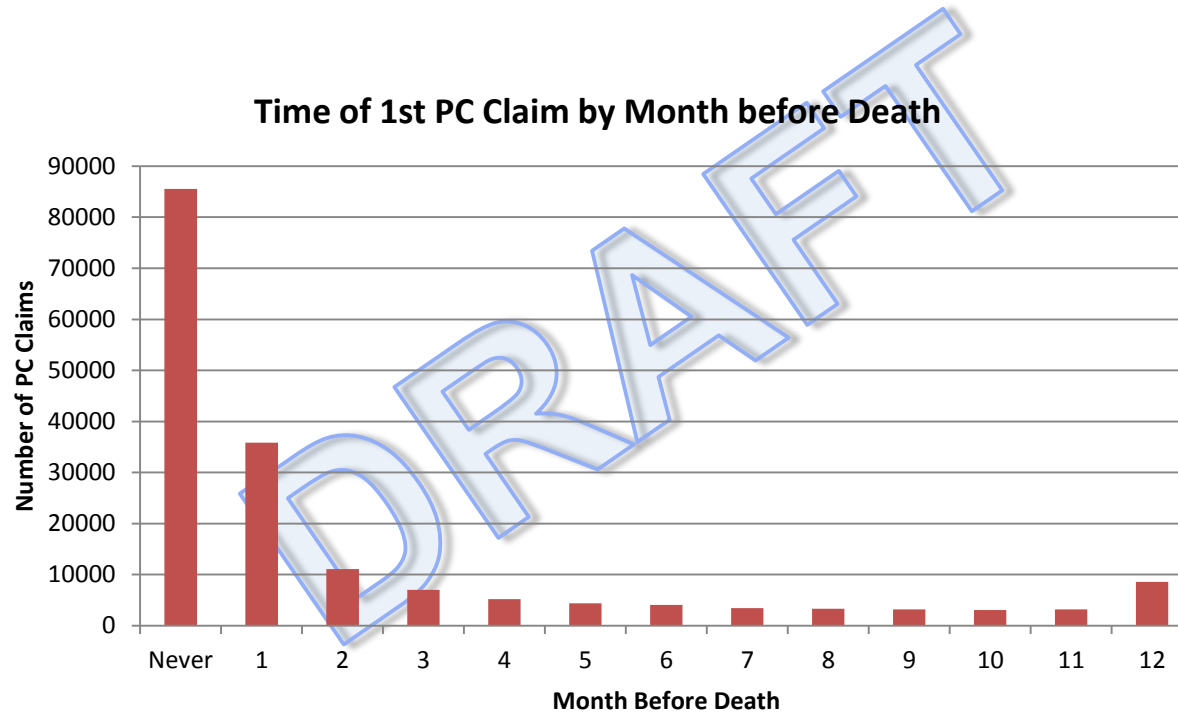
- Home care & inpatient acute care: most days: 44.2% and 37.5%, respectively
- Physician based outpatient palliative care days were next at 17.1%,
- CCC, ER: an insignificant proportion.

Timing of Palliative Care



- About half (49.1%) of all days of palliative care delivered was performed in the last 2 months prior to death.

Initiation of PC



- 38.8% initiated in last month
- 50.8% initiated in last 2 months

Overall health care cost

- Palliative vs. no palliative care cohorts

Palliative Care Initiation (Prior to Death)	Decedents (n)	Average Cost
0 – 7 days	16,422	\$38,570
8 – 30 days	19,949	\$45,692
31 – 60 days	10,847	\$52,292
61 – 90 days	6,886	\$58,513
91 – 180 days	13,636	\$66,074
181 – 360 days	24,536	\$76,739
All Palliative Care	92,276	\$57,424
No Palliative Care	83,199	\$44,023

Use and Cost of PC Patients

- Higher Cost: Driven largely by Hospitalizations
- Difficult to interpret
 - Hospital costs dominate palliative care costs
 - Palliative care being identified in hospital → inflation of cost from ID method?
 - E.g., 2 similar patients near EOL → person who ends up in hospital (and thus has higher costs) = person who has higher chance of being ID'ed as being palliative

Discussion

- Use palliative care codes with caution
- Future studies should focus on sector specific palliative care – emphasis on community care
- What we envision as home based PC:
 - Only 9.5% receive home visit by physician
 - Only 19.3% receive “palliative” home care

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Discussion

- Underservice vs. underreporting?
 - Still...less than 1 in 5 (19.1%) of decedents will get a visit in the last year of life
- Rule of 50's (approximately):
 - 50% decedents get PC
 - 50% of PC days delivered in last 50 days
 - 50% of PC initiated within 50 days of death

Conclusions

- Much of EOL care still occurs in hospital – including palliative care
- Room for improvement
- Majority of population prefers to die at home; but majority die in institutions
 - Palliative home care & physician home visits can help bridge this gap for the population
- Addressing barriers → potential large gain

THE END
QUESTIONS?

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