

Are Family Physicians still part of the Primary Care Palliative Care team in the community?

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Background

- In Canada ...
 - the comprehensiveness of Family Physician (FP) services is DECLINING
 - At the same time, services are being EXPANDED for patients dying at home
 - Includes home care (HC) teams
- Past research suggested home visits by FPs have NOT increased among all patients dying due to cancer

Objective

- Are FPs more likely to make home visits to the dying when patients are part of the provincial home care program (HC)?



Methods

Design

- Retrospective, population based
 - Linked multiple administrative health databases & Statistics Canada information

Subjects

- All confirmed deaths due to cancer in the Canadian province of Nova Scotia, Canada in 2003
 - Limited to:
 - Adults (\geq 18 years of age)
 - Not a long term care residence during the last 6m of life

Nova Scotia (NS), Canada



- Eastern Maritime province
- Population: ~950,000
- 55% urban
- 13.6% aged 65+
- Provincial home care program introduced June 1995

Data sources

- NS Vital Statistics
- QEII Oncology Information System (OPIS)
 - Cancer registry, radiation, oncology
- NS Continuing Care, SEAscape
- NS Medical Services Insurance Physician Services
- Hospital discharge data for NS (CIHI)
- 2001 Canadian census information

Measures

Outcome

- FP home visits*
(at least one versus none)

Predictor of interest

- NS home care program enrolment

Potential co-variates

- Sex, age
- Cancer cause of death
- Total co-morbidities
- Distance to closest cancer centre
- Total inpatient days*
- Survival
- Urban or rural residency
- Neighbourhood income

* During the last 6 months of life

Analysis

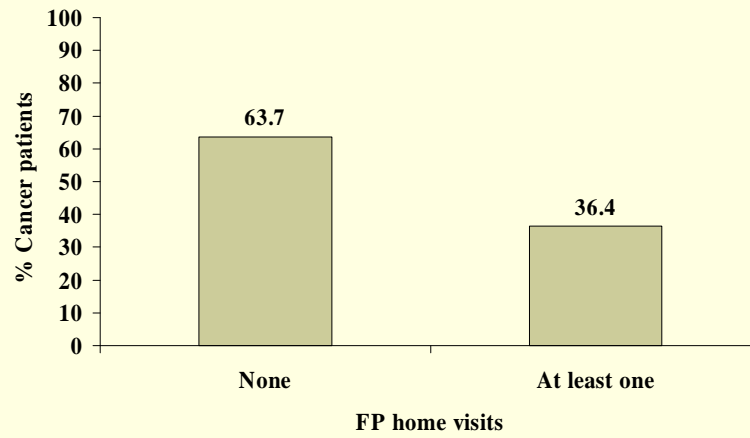
- Descriptive
- Cross tabulations by receipt of FP home visit or not
- Crude and adjusted multivariate logistic regression

Results

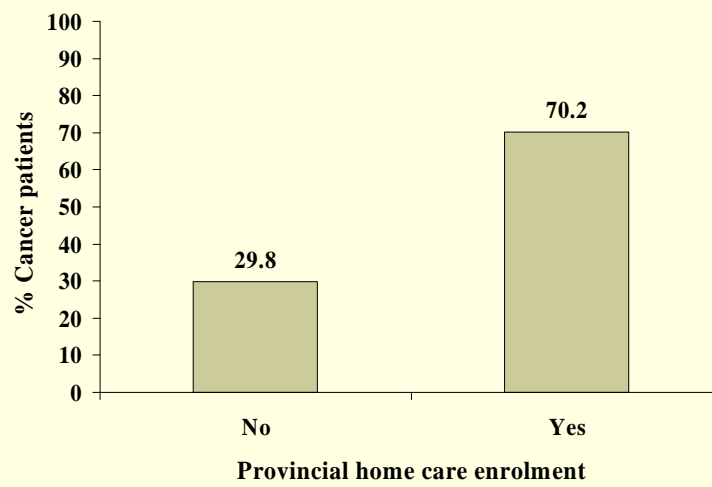
Subjects

- 2224 eligible deaths
- 54% male
- Mean age 71 years (SD 12.6); median 73
- 27% died due to lung cancer
- 68% survived at least 121 days (4 months)
- 58% urban residency

Cancer patients receiving at least one FP home care visit



Percent of patients with NS home care program enrolment



Multivariate regression results

- Patients enrolled in the provincial HC programs were almost **4 times** more likely to have received an FP home visit (adjOR= 3.8; 95%CI= 3.0-4.8)*

*Adjusted for: distance to cancer centre, survival, cancer cause of death, total inpatient days, urban/rural, neighbourhood income quintile

Significant covariates ...

Characteristic	Adjusted OR (95% CI)
Geographic indicator	
Urban	1.0
Rural	0.7 (0.5, 0.8)
Neighbourhood income	
Upper	1.0
Upper-middle	1.1 (0.8, 1.4)
Middle	0.9 (0.7, 1.2)
Lower-middle	0.8 (0.6, 1.0)
Low	0.7 (0.5, 1.0)
Cancer cause of death (e.g. selected sites)	
Colorectal	1.0
Lung	0.7 (0.5, 1.0)
Breast	0.7 (0.4, 1.0)
Prostate	0.6 (0.3, 0.9)

Significant covariates:

Characteristic	Adjusted OR (95% CI)
Distance to closest cancer centre (km)	
0-10	1.0
11-50	1.1 (0.8, 1.4)
50-120	1.4 (1.0, 1.8)
121+	1.7 (1.3, 2.4)
Survival (days)	
0-61	1.0
62-120	1.6 (1.1, 2.4)
121-183+	1.5 (1.2, 2.0)
Total inpatient hospital days	
0	1.0
1-14	0.5 (0.3, 0.6)
15-31	0.4 (0.3, 0.6)
32+	0.3 (0.2, 0.4)

Discussion

- Although not prospective research, it appears that of patients who die and who were part of the Provincial homecare program, they were substantially more likely to have had family physician participation “in-home” care.
- This is good news from the “integrated” Palliative Care Program perspective: interdisciplinary and both primary/secondary services involved

Discussion

- Rural patients and those from lower income areas less likely to receive home visits
- Those at great distances (be they rural or not) to a cancer centre were more likely to receive home visits
- Continuing challenge to provide care at home for those with short survival