

Do patients retain their family doctor after entering long-term care? A population-based retrospective cohort study.

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INTRODUCTION

What is Relational Continuity of Care (CoC)?

"A therapeutic relationship between a patient and one or more providers that spans various health care events and results in accumulated knowledge of the patient and care consistent with the patient's needs"¹



Why is CoC important?

- Improves patient-provider satisfaction, lowers healthcare costs, and reduces ED and acute care utilization^{2,3}
- Particularly beneficial to patients with complex needs (ie. elderly)
- Elderly (65+) project to make up 20% of Canada's population by 2024⁴

Why did we conduct this study?

- Retaining care from the same family doctor is a **key aspect of CoC**
- Gap in knowledge:** no literature on this subject pertaining to LTC residents and the community-to-LTC transition

OBJECTIVES

Objective #1

Determine the proportion of LTC residents who retain care provision from their community family doctors.

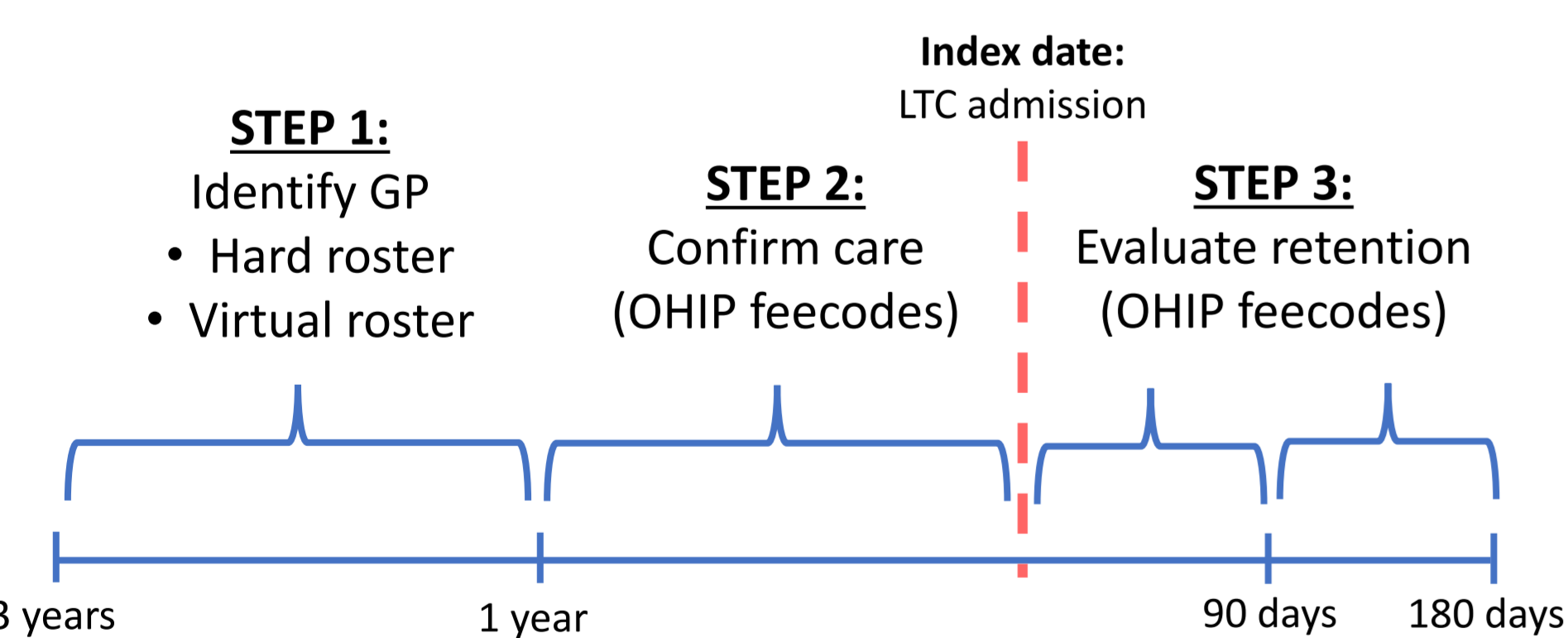
Objective #2

Describe LTC resident, physician and facility characteristics associated with retention of the family doctor.

METHODS

Cohort created using linked ICES databases:

- Ontarians aged 60 and over
- First admission into an Ontario LTC home
- Admitted between April 1st, 2014 – March 31st, 2017



Exclusions: OHIP ineligible, discharged home during 180 days, death within 120 days, unadministered RAI-MDS assessment at index

Primary Outcome:

"Care Retained" = OHIP billing by same GP during step 3 (days 0-90 AND 91-180)

"Care NOT Retained" = No/partial OHIP billing during step 3

Secondary Outcome – assessment of covariates

- LTC Resident:** age, sex, language, rurality, income, physical/cognitive health, number of chronic/prevalent conditions
- Physician:** sex, country of medical education, years since graduation, panel size, rural practice, LTC practice
- Facility:** number of beds, community rurality, distance from GP clinic

RESULTS – LTC Resident Characteristics

- Less than 1 in 8 LTC residents retain their family doctors in the LTC home
- Residents with **greater physical/cognitive impairment** have lower retention
- Residents with **dementia** have lower retention

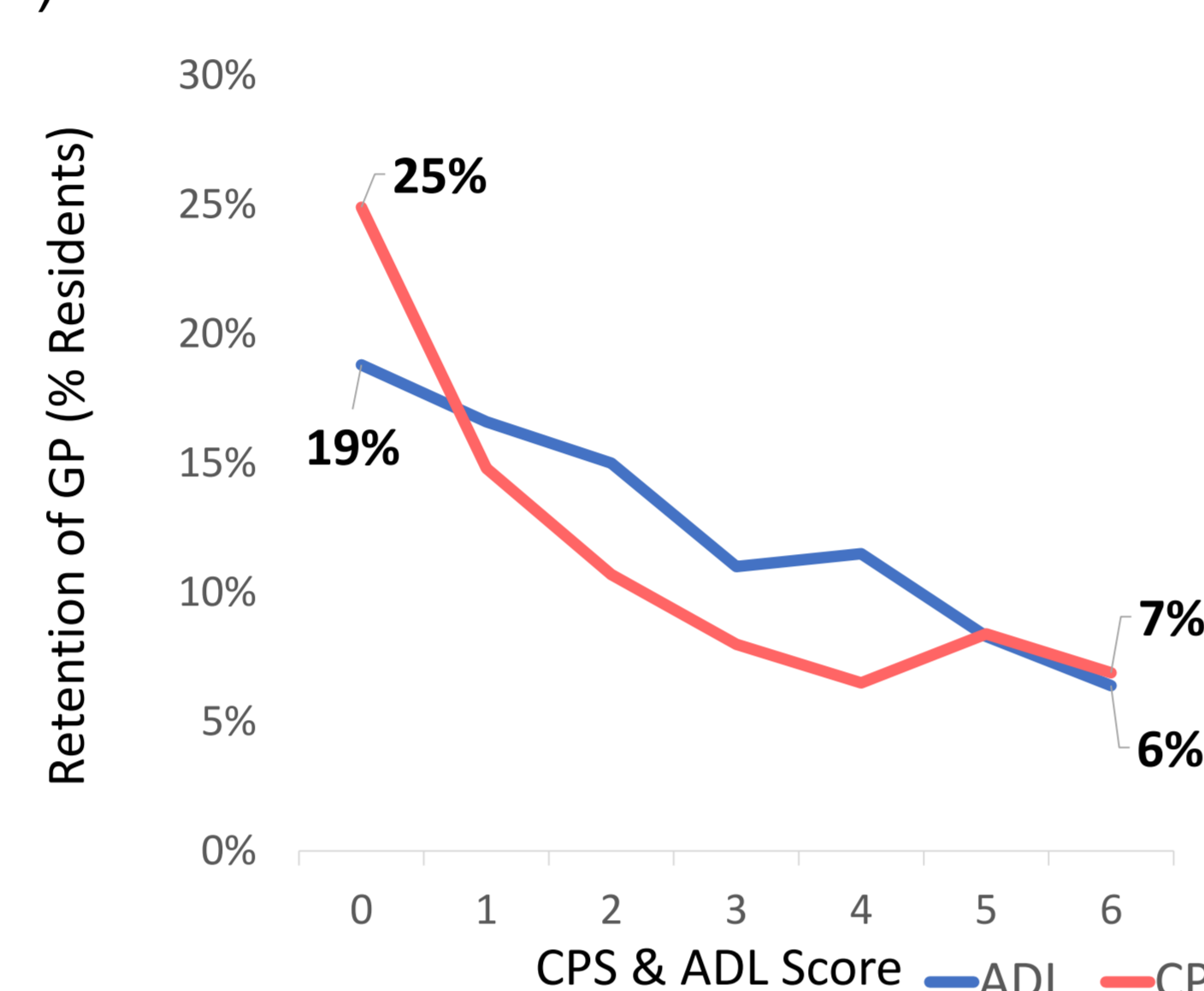


Figure 2. Percentage of LTC residents who retain their family doctors compared to their Activities of Daily Living (ADL) and Cognitive Performance Scale (CPS) scores. Scores are formulated from 0-6, where 0 indicates minimal impairment and 6 indicates total dependence on personnel.^{5,6}

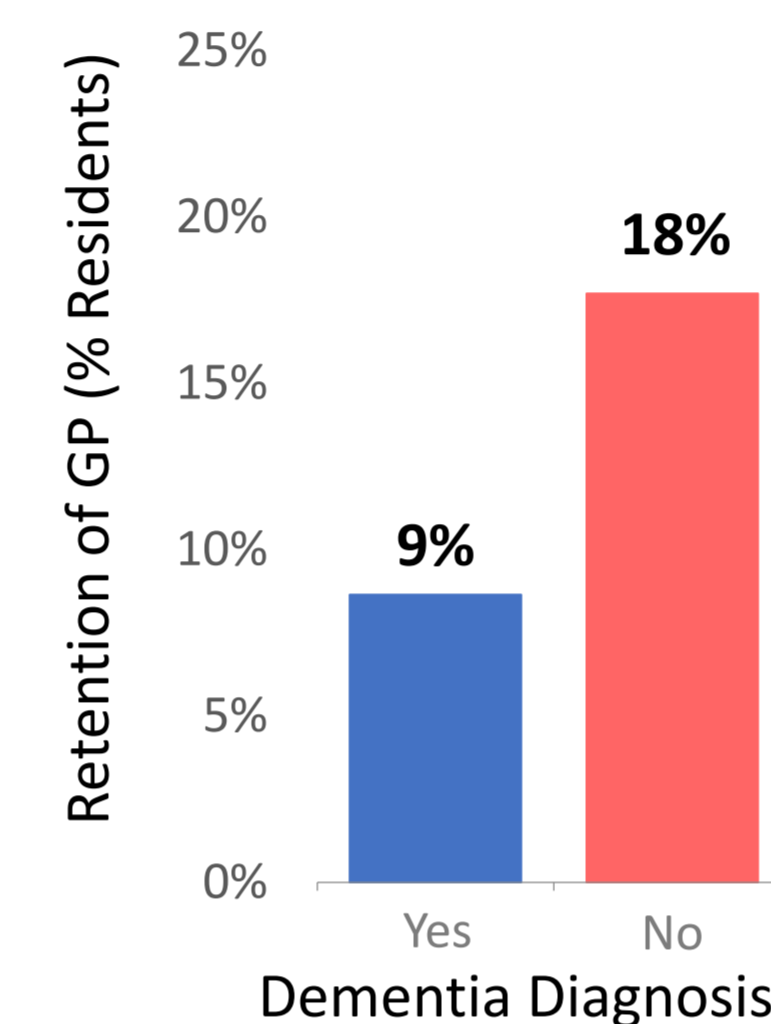
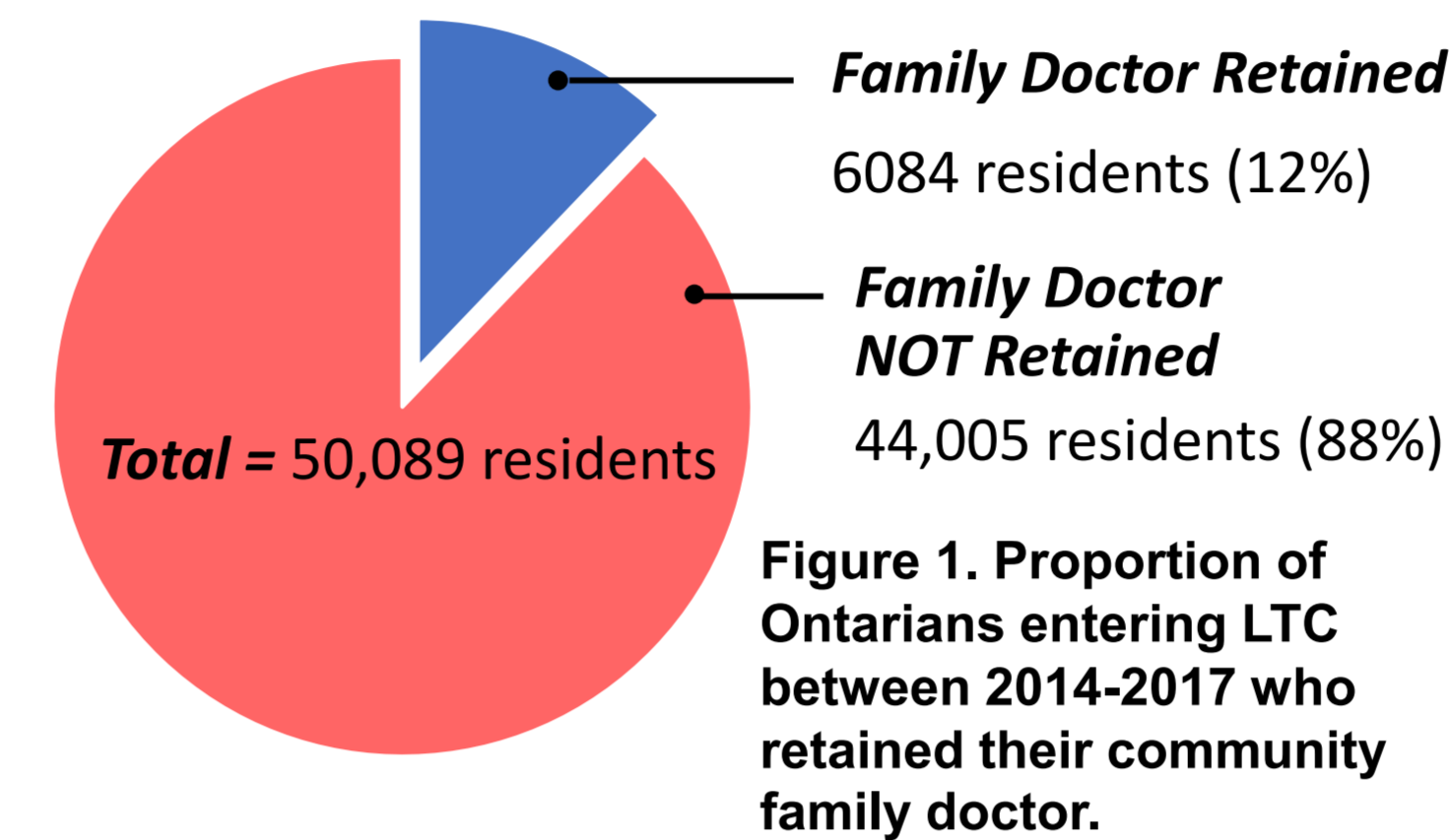


Figure 3. Percentage of LTC residents who retain their family doctors as a function of their dementia diagnosis at LTC-entry.



Variable	OR [95%CI]	P-Value
ADL score (ref = 0)		
4	0.78 [0.67-0.91]	0.0019
5	0.70 [0.60-0.82]	<.0001
CPS score (ref = 0)		
1	0.65 [0.59-0.72]	<.0001
2	0.52 [0.46-0.58]	<.0001
Dementia (ref = no)		
Yes	0.80 [0.67-1.02]	<.0001

*Not all scores are shown due to limited space

Facility & Geographic Characteristics

- Rural LTC Facilities have greater family doctor retention than urban facilities
- Greater LTC – clinic distances are associated with lower retention
- Major metropolitan areas do not facilitate retention

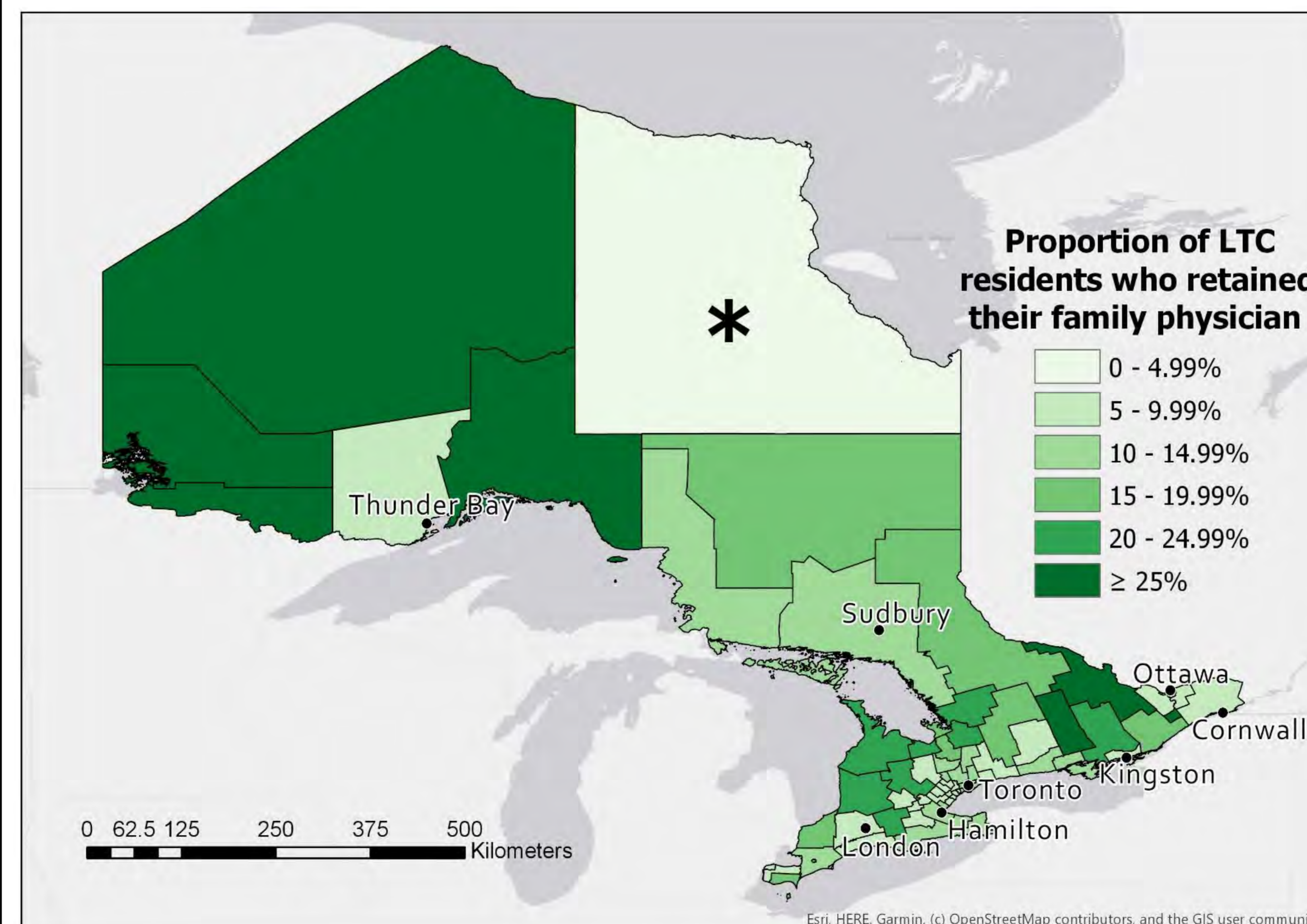


Figure 5. Proportion of LTC residents who retained their family doctors stratified by Ontario Local Health Integration Network (LHIN) Sub-Regions. Proportions were calculated by dividing the number of LTC residents in our cohort who retained their doctor by the total resident population of each sub-region. Sub-region boundary files were obtained from Statistics Canada and are derived from 2016 Census data. *Indicates a LHIN sub-region with <5 residents.

Family Physician Characteristics

- Greater retention in doctors with **previous LTC experience**
- Rural family doctors** tend to retain more LTC residents
- Male doctors** and **Canadian medical school graduates** are each associated with greater retention of their patients in LTC

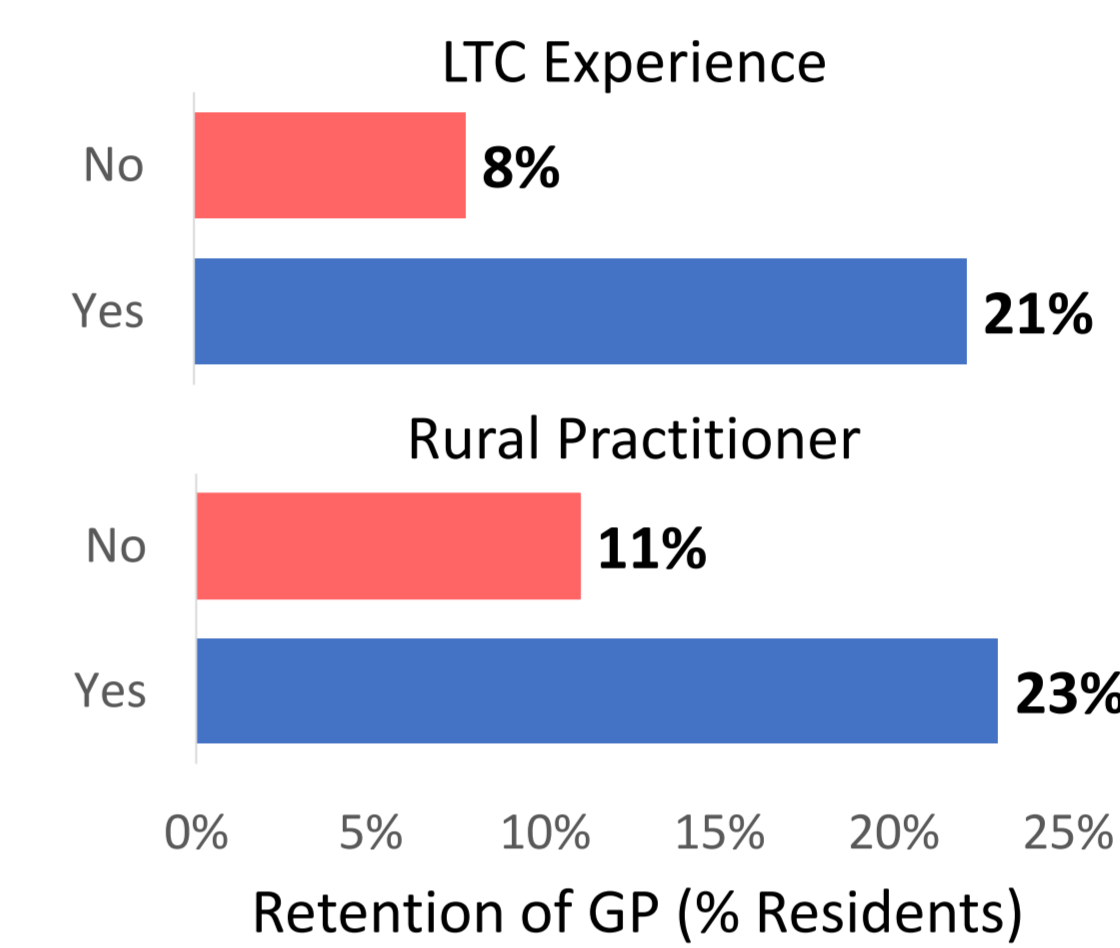


Figure 4. Percentage of LTC residents who retained their family doctor according to doctor practice patterns. LTC experience was defined as having billed an LTC OHIP feecode in the past year. Rural doctors practice in communities of ≤10,000.

Variable	OR [95%CI]	P-Value
Sex (ref = M)		
F	0.90 [0.83-0.98]	0.0159
Canadian Med. Grad (ref = yes)		
No	0.89 [0.81-0.97]	0.0109
Rural (ref = no)		
Yes	1.70 [1.52-1.90]	<.0001
LTC experience (ref = no)		
Yes	2.64 [2.45-2.85]	<.0001

*Not all factors are shown due to limited space

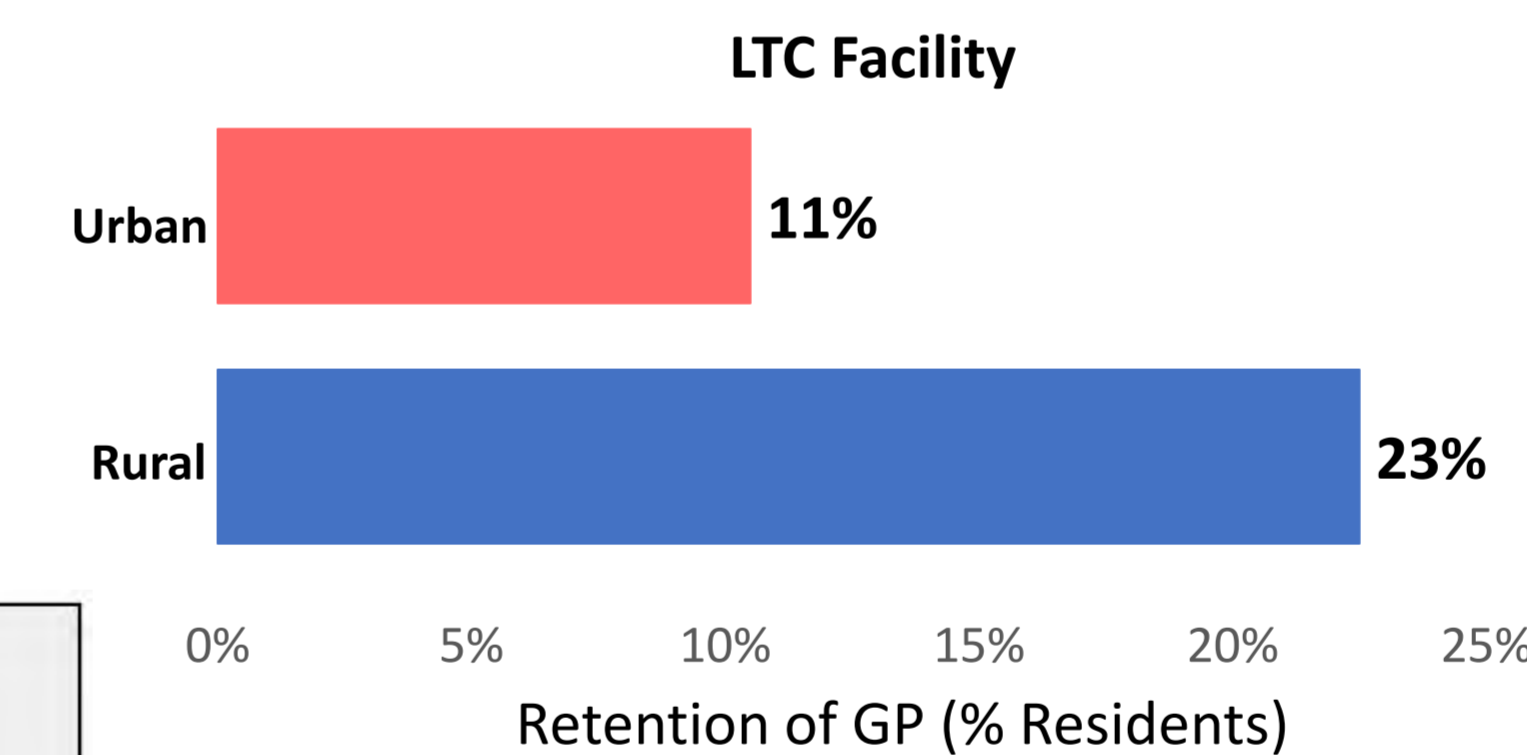


Figure 6. Percentage of LTC residents retaining their community doctors according to rurality of LTC facility. A rural LTC facility is defined as a facility located in a community with a population ≤ 10,000.

Variable	OR [95%CI]	P-Value
Facility Rurality (ref = urban)		
Rural	2.23 [1.78-2.79]	<.0001
LTC-to-clinic distance (ref = 0-10km)		
11-20km	0.85 [0.77-0.93]	0.0006
21-30km	0.79 [0.68-0.92]	0.0023
30+ km	0.41 [0.35-0.48]	<.0001

	Family Doctor Retained	Family Doctor NOT Retained
Urban setting		
Mean ± SD	7.7 ± 38.5 km	12.8 ± 60.5 km
Median (IQR)	3.4 (1.5-7.9) km	4.3 (1.8-10.0) km
Rural setting		
Mean ± SD	12.2 ± 48.5 km	22.0 ± 78.5 km
Median (IQR)	1.4 (0.0-12.5) km	3.97 (0.7-20.7) km

CONCLUSIONS

Physician retention into LTC is low in Ontario – less than 1 in 8 residents retain their community doctor

Factors influencing retention:

- Resident Health** – Healthier patients tend to keep their doctors



Family Doctors
LTC experience, rural practice, sex and medical education affect retention

- Geography** – Shorter LTC-to-clinic distances and rural facilities are linked to greater retention



ACKNOWLEDGEMENTS

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- This poster template was obtained from Critical Care Forum 2019.

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