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Title

Association between access to primary care and ED use among community dwelling persons with dementia

Priority 1 (Research Category)

Healthcare Services, Delivery, and Financing

Presenters

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Abstract

Context: Community dwelling persons living with dementia (PLWD) require comprehensive primary care (PC) for diagnosis and ongoing management, however, distribution of PC is varied, leading to inequitable access. The relationship between these inequities and emergency department (ED) use for PLWD is not well understood.

Objective: The objective of this study was to understand how measures of access are associated with the likelihood of ED use in urban and rural contexts among PLWD.

Study Design and Analysis: This population based cross sectional study used linked health administrative databases to examine the association between access to primary care as measured by travel time, house calls, and relational continuity, and likelihood of having one or more ED visits for community dwelling PLWD in Ontario, Canada. We used a 2-year observation window and multilevel logistic regression models to quantify the link between access to PC and ED use, adjusting for age, sex, level of deprivation, level of comorbidity, primary care program, and residence in rural area. We conducted analyses on the entire study group, and then stratified by rural or urban residence of PLWD to further understand access and ED use in different settings.

Setting or Dataset: This study is set in Ontario, Canada, using data from provincial administrative databases including primary care physician billing data, discharge abstracts, and ambulatory care.

Population Studied: Community dwelling persons living with dementia

Intervention/Instrument: none

Outcome Measures: one or more ED visits during the observation window

Results: 56,371 community dwelling PLWD were included in the study group, including 52,948 urban and 3,423 rural dwelling individuals. Rural residence resulted in 1.77 odds of ED use compared to urban dwelling PLWD. After stratifying, among rural PLWD, travel time to PC greater than 20 minutes was

associated with decreased odds of ED use (0.72), while among urban PLWD a higher odds of ED use, at 1.13. Lower relational continuity was associated with increased likelihood of ED visits, with rural dwelling PLWD having higher odds than urban for this variable (1.87 and 1.56, respectively).

Conclusions: Reducing ED use for PLWD requires different approaches in rural and urban settings. Urban dwelling PLWD can reduce ED use through improved geographic accessibility to PC. A focus on continuity of care is applicable for both urban and rural settings.