International Journal of Population Data Science

Journal Website: www.ijpds.org

Ontario's stroke report cards: Cross-continuum data linkage allows evaluation of system of care

Hall, R¹, Khan, F¹, Levi, J¹, Ma, H², Martin, C³, Moher, C⁴, Kelloway, L⁵, Linkewich, E⁶, and Bayley, M⁷

¹ICES

²Centre for Urban Health Solutions at St Michael's Hospital

³Kingston Health Sciences Centre

⁴Royal Victoria Regional Health Centre

⁵CorHealth Ontario

⁶Sunnybrook Health Sciences Centre

⁷Toronto Rehabilitation Institute

Introduction

Report cards or scorecards typically reflect one particular sector along the care continuum; however, stroke patients typically require acute care, inpatient rehabilitation and community care highlighting the need to link data sources to demonstrate the interdependencies between and across sectors.

Objectives and Approach

1) Identify stroke best practice indicators from across the care continuum; 2) develop a one page report card that reports on the quality of the stroke system of care through data linkage and 3) visually impactful knowledge translation tool. The indicators cover five health care sectors starting with pre-hospital stroke symptom onset, then to management of the acute event, to institutional and community-based rehabilitative care, reintegration into the community and secondary prevention. The report card is a knowledge translation tool that identifies gaps in best practice, provides achievable benchmarks of regional and provincial stroke system performance to drive system change.

Results

Using data linkage techniques, seven administrative datasets are used to populate the 20 indicators in the annual Ontario stroke report card. Indicator performance was trended by comparing the previous 3 years' results to the most recent year of data. Fifteen of 17 indicators improved (11 statistically significant) compared to the previous three years and 2 indicators did not change / declined. Performance benchmarks were calculated using Achievable Benchmarks of CareTM methodology and 14 of 16 performance benchmarks improved since 2014/15. There was wide variation across indicators with only 4 indicators showing a reduction

in regional variation. The Ontario stroke report card can be viewed at <https://www.ices.on.ca/Publications/Atlases-and-Reports/2017/Stroke-Report-Cards>.

Conclusion/Implications

The Ontario stroke report card spans the stroke care continuum, provides a snapshot of Ontario's stroke system performance. Data linkage is essential for a system-wide opportunity to evaluate and influence system performance. This cross-continuum approach and report card format could be applied to other health related conditions.