

Trends in All-Cause Mortality and Inpatient and Outpatient Visits for Ambulatory Care Sensitive Conditions during the First Year of the COVID-19 Pandemic: A Population-Based Study

Authors : Tetyana Kendzerska, David T. Zhu, Michael Pugliese, Douglas Manuel, Mohsen Sadatsafavi, Marcus Povitz, Therese A. Stukel, Teresa To, Shawn D. Aaron, Sunita Mulpuru, Melanie Chin, Claire E. Kendall, Kednapa Thavorn, Rebecca Robillard, Andrea S. Gershon

Abstract : The impact of the COVID-19 pandemic on the management of ambulatory care sensitive conditions (ACSCs) remains unknown. To compare observed and expected (projected based on previous years) trends in all-cause mortality and healthcare use for ACSCs in the first year of the pandemic (March 2020 - March 2021). A population-based study using provincial health administrative data. General adult population (Ontario, Canada). Monthly all-cause mortality, and hospitalizations, emergency department (ED) and outpatient visit rates (per 100,000 people at-risk) for seven combined ACSCs (asthma, COPD, angina, congestive heart failure, hypertension, diabetes, and epilepsy) during the first year were compared with similar periods in previous years (2016-2019) by fitting monthly time series auto-regressive integrated moving-average models. Compared to previous years, all-cause mortality rates increased at the beginning of the pandemic (observed rate in March-May 2020 of 79.98 vs. projected of 71.24 [66.35-76.50]) and then returned to expected in June 2020—except among immigrants and people with mental health conditions where they remained elevated. Hospitalization and ED visit rates for ACSCs remained lower than projected throughout the first year: observed hospitalization rate of 37.29 vs. projected of 52.07 (47.84-56.68); observed ED visit rate of 92.55 vs. projected of 134.72 (124.89-145.33). ACSC outpatient visit rates decreased initially (observed rate of 4,299.57 vs. projected of 5,060.23 [4,712.64-5,433.46]) and then returned to expected in June 2020. Reductions in outpatient visits for ACSCs at the beginning of the pandemic combined with reduced hospital admissions may have been associated with temporally increased mortality—disproportionately experienced by immigrants and those with mental health conditions. The Ottawa Hospital Academic Medical Organization

Keywords : COVID-19, chronic disease, all-cause mortality, hospitalizations, emergency department visits, outpatient visits, modelling, population-based study, asthma, COPD, angina, heart failure, hypertension, diabetes, epilepsy

Conference Title : ICPHSS 2022 : International Conference on Public Health and Social Sciences

Conference Location : San Francisco, United States

Conference Dates : September 27-28, 2022