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Editorial

The Next Wave of Health Care Strain Related to COVID-19: Heart Failure Patients Coming Back in Force—We Must Not Fail Them

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In preparation for the expected wave of critically ill patients, the initial COVID-19 response focused on minimizing in-person healthcare encounters and reallocating resources to patients with COVID-19. Strict physical distancing to flatten the curve, coupled with dramatic downscaling of services, have thus far been successful in avoiding a calamitous surge of COVID-19 in most Canadian jurisdictions. As we recalibrate our approach to healthcare delivery, recognizing that COVID-19 will have a drawn out and sustained impact on healthcare, attention is turning towards addressing the backlog of procedures and surgeries. Although chronic health conditions may be less conspicuous, the toll of deferred care cannot be understated. Patients with heart failure (HF) have gone largely unmentioned.

Prior to the pandemic, the management of patients with HF often required a combination of in-person clinical assessment, interdisciplinary care with frequent monitoring, and titration of guideline-directed medical therapy.[1] With the knowledge that patients with HF, once infected, were at particularly high risk of COVID-19 morbidity and mortality, a new approach to the delivery of HF care was needed.[2] In response, many HF providers pivoted rapidly, transitioning to a telehealth or virtual platform to meet the needs of their patients.

Unfortunately, public health warnings have had the unintended consequence of causing "COVID fear", discouraging patients from seeking medical attention, even those with acute needs. To this point in time, there has been a dramatic reduction in both HF emergency department presentations and hospitalizations.[3,4] In theory, urgent HF hospitalizations should not have been not affected by hospital or health authority directives, particularly in institutions serving large urban populations.[3] So where are the HF patients? A logical hypothesis is that self-quarantine may decrease the precipitants of HF exacerbations. Barghash and Pinney suggest, almost tongue in cheek, that reduced hospitalizations may be due to fewer dietary indiscretions and improved medication adherence, or perhaps that virtual care altogether may outperform face-to-face encounters.[4] The reality is more likely that patients with non-COVID-19 related illnesses are choosing to "weather the storm" and defer seeking medical attention, with potential dire consequences.[1,3]

Using a validated ICES-derived administrative dataset for HF, we determined the prevalent HF population in Ontario for 2018 and 2019. Using a linear extrapolation, we estimated that as of February 2020, there were approximately 305,000 patients with HF, among 14.5 million Ontarians, before the pandemic (Fig. 1). Based on historical person-year rates, we expect these patients would have nearly 2300 HF hospitalizations and 2800 emergency department visits per month. This is the "missing" tidal wave of HF patients which may overwhelm the acute care sector over the coming months.

Using the ICES historical prevalent HF population, we determined the proportion that had a HF-related hospitalization or emergency room visit within 90 days. Using this as an estimate, approximately 5% of HF patients (~15,000) would have high-risk features that require urgent clinic services to avoid dire consequences.

Healthcare service providers need to prepare for this surge of patients. Public health messaging must resonate with the same urgency as the beginning of the COVID-19 crisis. These patients deserve our attention now more than ever. Patients should be encouraged to seek medical attention in the setting of acute exacerbations and not avoid in-person assessments for fear of COVID-19. Similar to the guidance from the Canadian Cardiovascular Society in continuing

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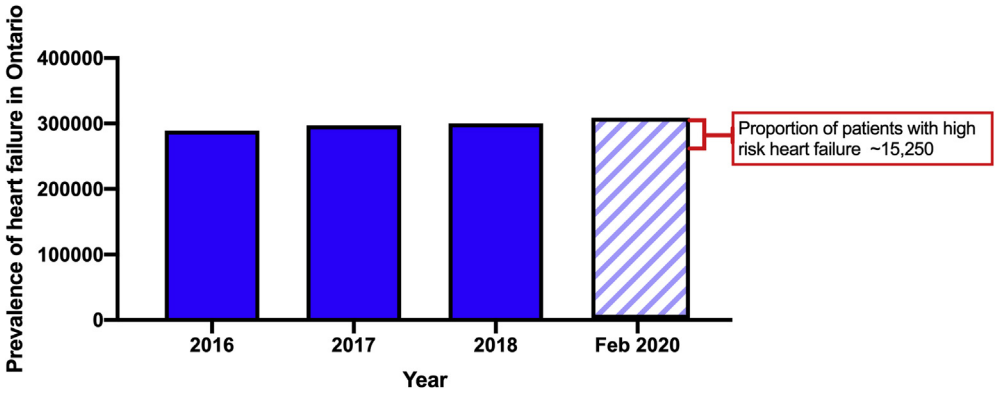

Figure 1. Prevalence of heart failure in Ontario with **dashed bar** showing projected prevalence of ~305,000 patients at the onset of the COVID-19 pandemic. Among these patients, 15,250 (5%) are deemed high risk requiring an urgent in-person visit.

angiotensin-converting enzyme inhibitors/angiotensin receptor blockers and ongoing optimization of guideline-directed medical therapy during COVID-19, there needs to be clear messaging to clinicians and patients that regular in-person evaluations and investigations for higher-risk patients cannot be deferred.[1] This heightened awareness is going to be crucial to prevent the unintended consequence of increased HF deaths.

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Disclosures

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