**Aims**

1. Describe hospitalizations for COVID-19 in Canada
2. Debunk the myth that COVID-19 is not more severe than influenza
3. Explore whether we can predict who will die from COVID-19 in hospital

**Method**

- Using the GEMINI database, collected electronic data from seven large hospital sites across the Greater Toronto Area
- Included in analysis: all adults with COVID-19 or influenza discharged from inpatient medical services and medical-surgical-intensive care units (ICUs) between November 1, 2019 and June 30, 2020 (Wave 1)
- Validated accuracy of seven externally developed risk scores to predict mortality among patients with COVID-19

**Results**

1. **Who is getting hospitalized with COVID-19?**

   - Median age 66
   - 58% more than 65
   - 12% have long-term care
   - 32% have hypertension
   - 17% have diabetes
   - 19% have immunosuppression

   **Figure 1: Characteristics of the COVID-19 cohort**

2. **COVID-19 vs. influenza**

   - 3.5x greater mortality
   - 1.5x greater ICU
   - 1.5x larger hospital stay

   **Figure 2: COVID-19 vs. influenza**

3. **COVID-19 is more severe in older adults, but still very serious in younger adults.**

   **Figure 3: In-hospital mortality, intensive care unit care, and readmission indicators—by age**

**Best performing tools for predicting in-hospital mortality in COVID-19:**

- **ISARIC-4C**
- **GEMINI/GeMQIN**
- **MyPractice**

**GeMQIN Community of Practice (CoP)**

The GeMQIN community on Quorum uses a private online space for all members to connect and share. Sharing resources harnesses the power of a community and accelerates improvement as members can begin from a common framework. Below are recent examples of member-shared resources available on Quorum to inform the work of your teams:

- **COVID-19 general medicine admission order set** shared by Physician Champion, Anna Ahmed, Hamilton Health Sciences Centre
- **COVID-19 resources** shared by Physician Champion Nazlin Safavi, Humber River Hospital:
  - Awake prone positioning order set
  - COVID-19 General Medicine ISARIC4C admission order set
  - COVID-19 staff training YouTube videos
- **The Rounds Table podcast** shared by Physician Champion, Mike Pralick, Mount Sinai Hospital

**December CoP Call: Experiences and Lessons Learned From COVID-19 in the GTA**

- **Dr. Moira Kapral (University Health Network)** shared insights on the GTA Hospital Incident Management System (HIMS). GTA IMS provides a regional approach to optimizing hospital capacity during COVID-19 surges to lessen the burden on over-capacity hospitals and enable equitable access to health care. Since it was initiated on November 17, 2020, 167 transfers occurred across the GTA at the time of the call. Most transfers to date have been to and from GM units, highlighting the importance of GM services in the height of the pandemic.

**January CoP Call: The Bigger COVID-19 Picture—Hospital and Community Partners (Virtual)**

- **Dr. Anna Ahmed, Mohamed Panja, Steven Wong, and Haroon Youssef (Hamilton Health Sciences and St. Joseph's Healthcare System)** shared three exciting collaborative initiatives that address gaps in care during the pandemic:
  - Outpatient Clinics—established to reduce the burden on emergency departments (EDs) and fill the gap of specialty clinics that were closed. Collaboration with anesthesiology preop clinics made time-sensitive scheduled surgeries (mostly oncology) possible that would have otherwise been delayed or cancelled.
  - LTC-CARES—enhances support for long-term care partners. This program optimizes collaboration across specialists and sectors to deliver high-quality patient-centered care through virtual/telephone consultation and other expedited services.
  - Connected Health Hamilton—a COVID-19 Remote Monitoring Project to provide outpatient care to COVID-19 patients that are discharged from the ED and COVID-19 wards, reducing strain on hospital resources and readmissions.

**February CoP Call: Critical Care Triage During COVID-19 (Virtual)**

- **Dr. James Downar (The Ottawa Hospital)**, Division Head of Palliative Care at the University of Ottawa, led an engaging discussion on the development of an Adult Critical Care Emergency Standard of Care for a Major Surge

**Coming Up**

Hospital-level reports are on the horizon. We are assembling a Report Development Committee and are looking for engaged members from our community who would be interested in participating. We are looking for all roles including GIM physicians, hospital administrators, data analysts, and measurement specialists. Expectations of members include:

- Providing key input on indicator selection, and report development
- Ability to commit approximately 2 hours per month

If you are interested or know someone in your organization who would be interested, please email us at OH-HQO_GeMQIN@ontariohealth.ca. For more details about membership and responsibilities view the draft Terms of Reference on Quorum.

**Upcoming Community of Practice Calls:**

- April 21/21 12 p.m.: Palliative care supports and an automated system for identifying patients having an elevated risk of 3-year mortality
- May 18/21 12 p.m.: Lessons learned from other provincial quality programs
- Jun 16/21 12 p.m.: Re-engaging with quality improvement—thinking forward

To learn more about GeMQIN and how you can get involved please visit our website. We welcome all hospitals across Ontario to join the community of practice by contacting us at OH-HQO_GeMQIN@ontariohealth.ca.

If you would like to share your hospital’s work in the next update or your ideas about program activities, please forward them to the same email address!