

COVID-19 Through a Quality Lens: Critical Care – Working Together to Improve Care

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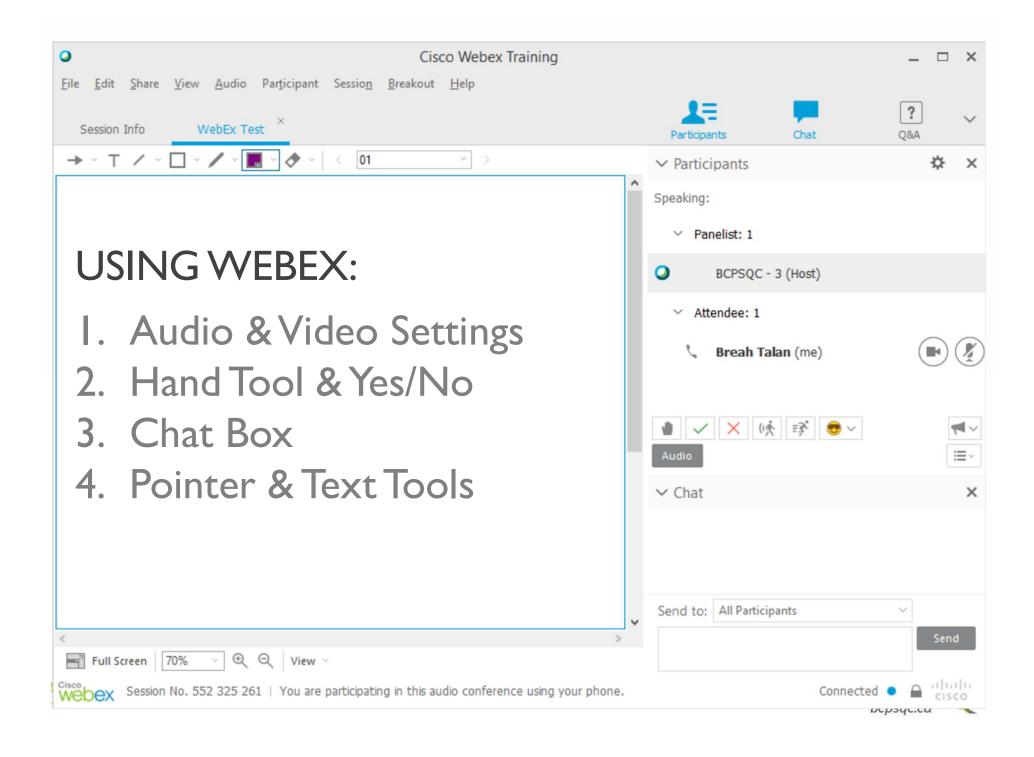


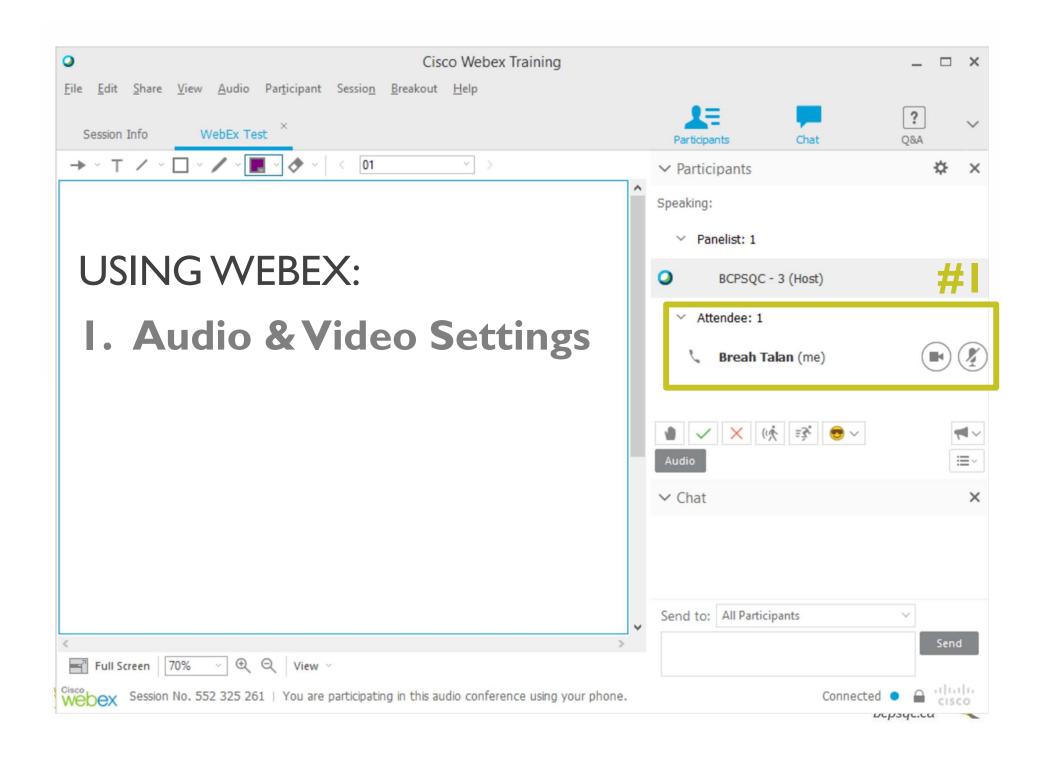
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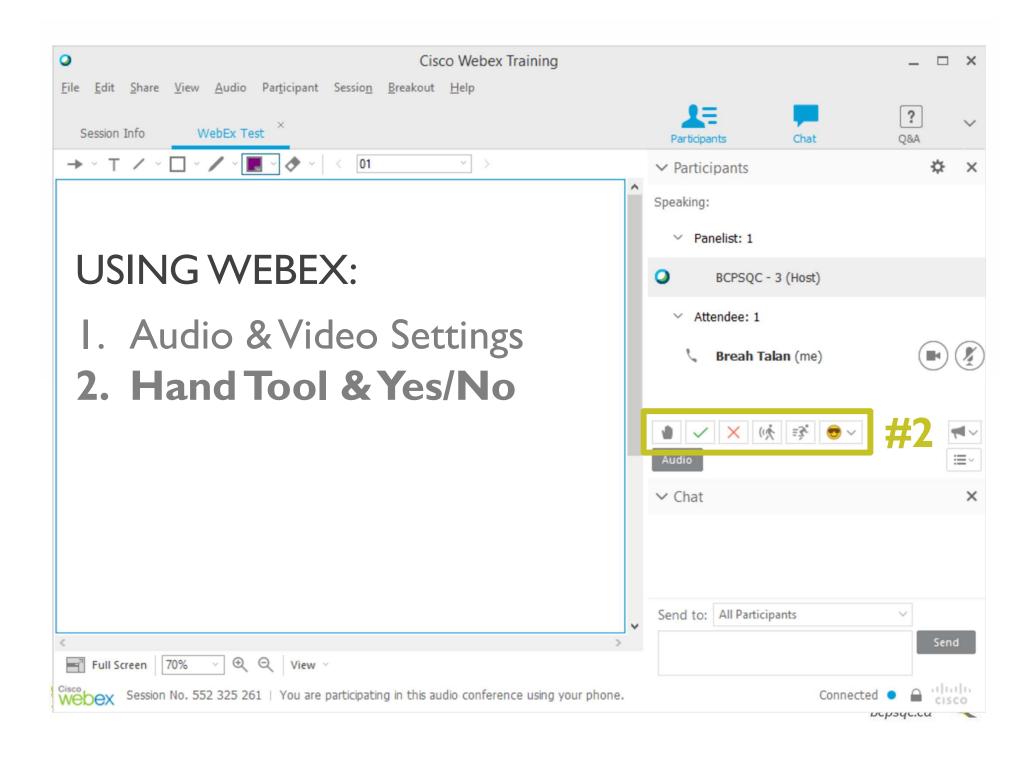
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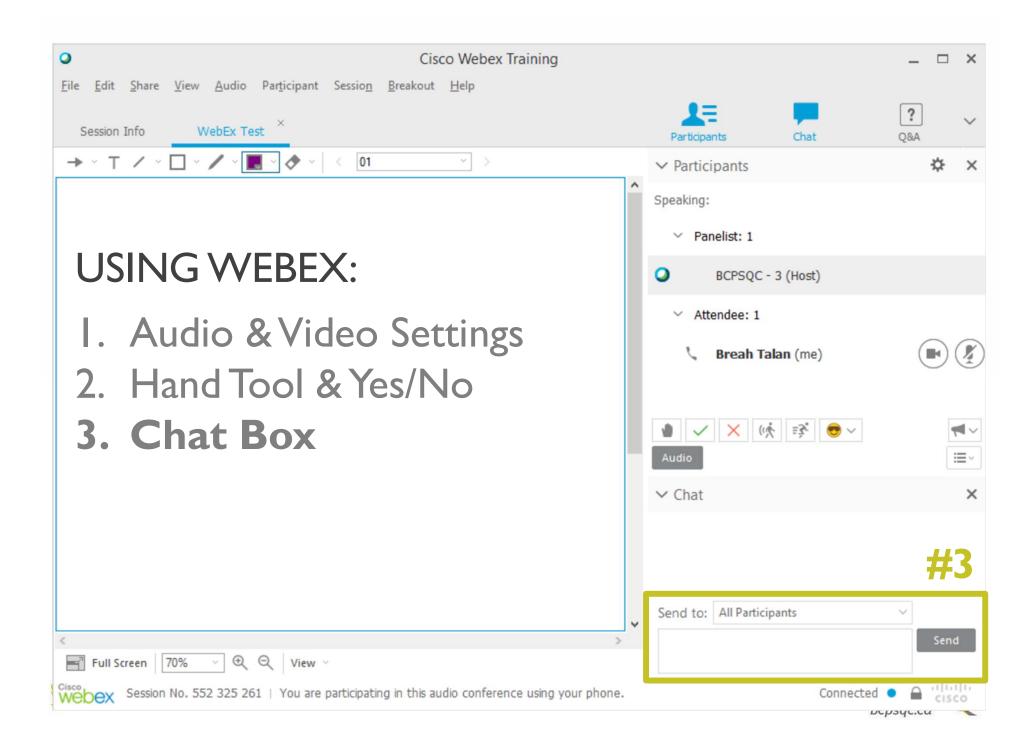


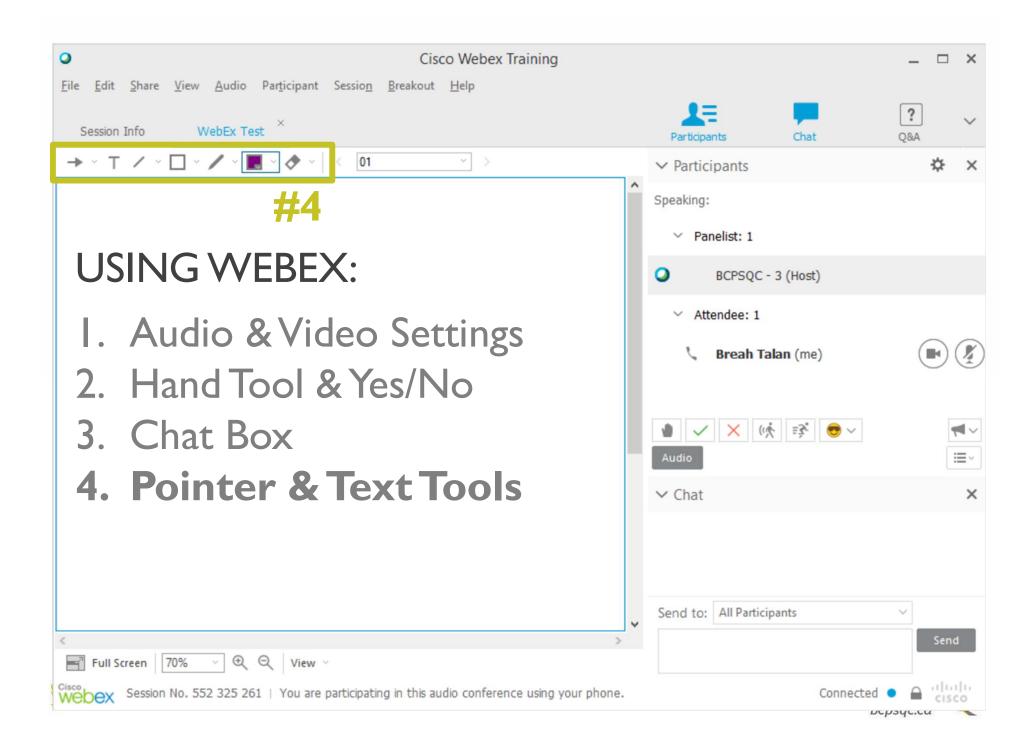


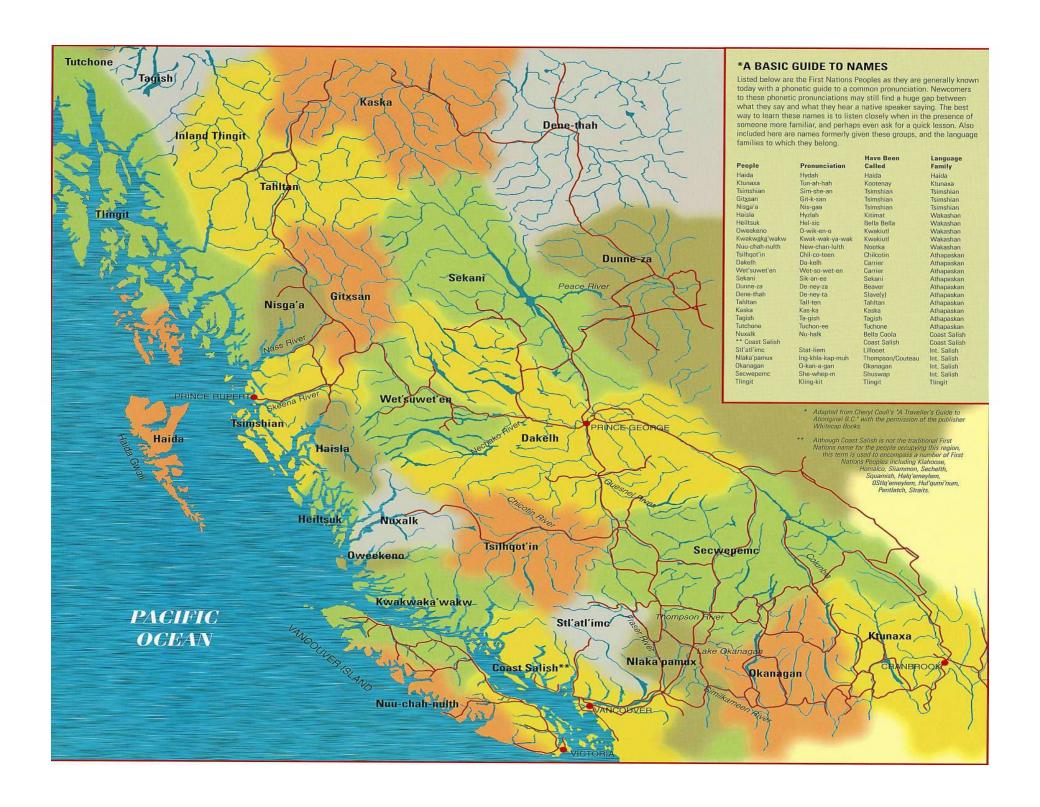














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Plan for Today

Overview of critical care landscape

Share approaches for battling the enemy (COVID)

Key takeaways





Critical Care – Working Together to Improve Care



The Fight Against the Evil COVID Monster





Once upon a time... long, long ago...in 2019... there was a land of many Kingdoms...





















The Kingdoms were separated by many rivers and mountains...

Protecting their own objectives...

Siloed....



How much is your work impacted by silos?

Not at all

Somewhat

A lot!



Everything changed in 2020...

The Kingdoms, once siloed, were brought together by a looming enemy threatening them all...







Approaches for Battling the Enemy: Forming Alliances to Protect the Land







1. Forming Alliances to Protect the Land

- Lessons learned:
 - Break down barriers through engagement
 - Develop individual relationships to build group
 - Show value
- Results:
 - Regular connections
 - Working together



What strategies have you used to break down silos?



Approaches for Battling the Enemy:Building an Army







2. Building an Army – Allocating Resources to Defend the Land

- Determine needs and build up defenses
 - Ventilators, medications, personal protective equipment, testing, etc.
- Lessons learned:
 - Provincial lens enables extra protection
 - Not about taking away but reinforcing supplies



Approaches for Battling the Enemy: Wizardry to Predict the Future And Share Prophecies







3. Data Modeling – Wizardry to Predict the Future and Share Prophecies

- Provincial COVID-19 Monitoring Solution (PCMS)
- Data-driven decision making
- Lessons learned:
 - A bed is not just a bed



How many ways are there to count beds in health care?

 $1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5 \rightarrow \uparrow$



3. Data Modeling – Wizardry to Predict the Future and Share Prophecies

- Lessons learned:
 - A bed is not just a bed
 - Common language needed
- Challenges:
 - Isolation beds
 - Not all critical care beds are the same
 - Disconnect between theory and practice



Wizard of the Land





Approaches for Battling the Enemy:Share Dueling Strategies







4. Clinical Sharing – Share Dueling Strategies

- Reduce anxiety and fear
 - Share experiences and best practices
- Lessons Learned:
 - Sharing a little leads to sharing a lot
 - Art of medicine
- Results:
 - Reduced mortality
 - Cross-collaboration on research



RESEARCH

Baseline characteristics and outcomes of patients with COVID-19 admitted to intensive care units in Vancouver, Canada: a case series

Anish R. Mitra MD MPH, Nicholas A. Fergusson MSc, Elisa Lloyd-Smith PhD, Andrew Wormsbecker MD, Denise Foster RN, Andrei Karpov MD MHSc, Sarah Crowe NP, Greg Haljan MD, Dean R. Chittock MD MS(Epi), Hussein D. Kanji MD MPH, Mypinder S. Sekhon MD, Donald E.G. Griesdale MD MPH

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ABSTRACT

BACKGROUND: Pandemic severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is associated with high intensive care unit (ICU) mortality. We aimed to describe the clinical characteristics and outcomes of critically ill patients with coronavirus disease 2019 (COVID-19) in a Canadian setting.

METHODS: We conducted a retrospective case series of critically ill patients with laboratory-confirmed SARS-CoV-2 infection consecutively admitted to 1 of 6 ICUs in Metro Vancouver, British Columbia, Canada, between Feb. 21 and Apr. 14, 2020. Demographic, man-

agement and outcome data were collected by review of patient charts and electronic medical records.

RESULTS: Between Feb. 21 and Apr. 14, 2020, 117 patients were admitted to the ICU with a confirmed diagnosis of COVID-19. The median age was 69 (interquartile range [IQR] 60-75) years, and 38 (32.5%) were female. At least 1 comorbidity was present in 86 (73.5%) patients. Invasive mechanical ventilation was required in 74 (63.2%) patients. The duration of mechanical ventilation was 13.5 (IQR 8-22) days overall and 11 (IQR 6-16) days for patients successfully discharged from

the ICU. Tocilizumab was administered to 4 patients and hydroxychloroquine to 1 patient. As of May 5, 2020, a total of 18 (15.4%) patients had died, 12 (10.3%) remained in the ICU, 16 (13.7%) were discharged from the ICU but remained in hospital, and 71 (60.7%) were discharged home.

INTERPRETATION: In our setting, mortality in critically ill patients with COVID-19 admitted to the ICU was lower than in previously published studies. These data suggest that the prognosis associated with critical illness due to COVID-19 may not be as poor as previously reported.



State of the Land

- Expanding scope of partnerships between kingdoms
- Building new castles
- Using common magic
- Impact on care





Key Takeaways

- Consistency
- Inertia
- Walk the walk
- Solve the problems



Questions?