Supplemental Box: 1: Barriers and constraints cited by stakeholders and the collaborative resolutions noted during the ideation and implementation stages of clinic development

Constraints Cited	ollaborative Resolutions	
Lack of funding source	Initial investment from Department of Medicine's <i>Centre for Quality,</i> <i>Innovation, and Safety</i> (C-QuINS) Overtime, a successful application to provincial government for ongoing funding support	
Over-stretched emergency department resources	Collaborating with stakeholders in paramedic, emergency medicine, and inpatient respirology, we designed a direct admission pathway to bypass the emergency department, and have decompensating patients admitted directly to the dedicated COVID respirology unit Protocols adjusted over the course of the pandemic to reflect changing resources and patient population demands	
Concern for risk management and patient safety	 Development of clear and explicit protocols for escalating care to LUC3 physician, Paramedics, Emergency Medicine, and Inpatient Care teams 7 days a week call schedule staffed by specialists in Internal Medicine Creation of a database to track quality and patient safety outcomes Regular audits of quality and patient safety outcomes 	
Limited clinical staffing to provide timely service	 Ongoing staff recruitment of physicians to provide clinical care Addition of nursing team to help support daily phone calls Addition of increased administrative support to facilitate increased patient population in further waves 	
Accessing courier resources	Courier services availability fluctuated throughout pandemic Team members identified as Supplier Leads	
Limited access to pulse oximeters	Rapid adjustment to identify new oximeter suppliers	
Integration with changing Public Health testing and provincial pandemic response	Ongoing collaboration, including regular meetings with local public health and provincial authorities to streamline process and ensure equitable care for the community	

Wave	Start Date	End Date	Variant most frequently identified if mutation testing was performed
1	February 26, 2020	August 31, 2020	Mutation testing not performed
2	September 1, 2020	February 28, 2021	Wild-type
3	March 1, 2021	July 31, 2021	Alpha
4	August 1, 2021	December 14, 2021	Delta

2. Data used for variants identified by waves are derived from local public health data publicly available online (<u>https://www.healthunit.com/novel-coronavirus#</u> "COVID-19 Cases in Accessed May 31, 2022.) See below for Appendix Data. <u>https://app.powerbi.com/view?r=evJrIjoiMzE5MzJIOTItOWE2ZS00MDNILTlkNDEtMTcyYTg5OGFhMTFiIiwidCl6</u> <u>ImRjNTYxMjk1LTdjYTktNDFhOS04M2JmLTUwODM0ZDZhOWQwZiJ9</u>