Memorandum

SUBJECT: CorHealth COVID-19 Cardiac Memo #14 - **RECOMMENDATIONS FOR AN APPROACH TO RESUMING IN-PERSON OUTPATIENT CARDIOVASCULAR REHABILITATION SERVICES IN ONTARIO**

TO: Outpatient Cardiovascular Rehabilitation Stakeholders

FROM: Office of the CEO, CorHealth Ontario

DATE: June 17, 2020

TIME: 10:00 AM

VERSION: #1

DISCLAIMER: The information in this document represents general guidance based on current practice and available evidence. The document was developed by provincial clinical experts, reflecting best knowledge at the time of writing, and is subject to revision based on changing conditions and new evidence. This information is *intended to* be "guidance rather than directive," and is *not meant to replace clinical judgment, regulatory body requirements, organizational, or hospital policies*. Reference to Infection Prevention and Control (IPAC) or Personal Protective Equipment (PPE) in this document should not replace or supersede the IPAC and PPE protocols or directives in place at your hospital.

Recommendations for an Approach to Resuming In-Person Outpatient Cardiovascular Rehabilitation Services in Ontario

PREAMBLE

COVID-19 is an unprecedented crisis and poses a significant risk to the community as the landscape is rapidly evolving. On March 15, 2020, the Ministry of Health (MOH) issued Directive #2 for Health Care Providers (Regulated Health Professionals or Persons who Operate a Group Practice of Regulated Health Professionals) requesting that all hospitals ramp down all non-essential services, elective surgeries, and other non-emergent clinical activity. Subsequently on May 26, 2020, an amendment was issued for Directive #2 indicating that all deferred non-essential and elective services carried out by Health Care Providers may be gradually restarted subject to the requirements of this Directive. A memo from Ontario Health accompanying the amendment stated that subject to requirements, Health Care Providers are in the best position to determine which services should continue to be provided remotely vs. in person.

On June 8, 2020, Ontario Health provided further recommendations to support the gradual return to full scope of service for outpatient care, primary care, and home and community care. CorHealth Ontario (CorHealth) has worked with cardiovascular rehabilitation (CR) experts and stakeholders across the province to discuss how best to preserve care capacity for those cardiovascular patients in greatest need while gradually restoring health care capacity in the context of COVID-19. The following guidance and recommendations reflect advice from this engagement.

GUIDING PRINCIPLES

1. Keeping front line health care providers healthy and patients protected is vital.
2. Minimizing the impact of COVID-19 on the mortality and morbidity of patients with cardiovascular disease is a priority.
3. Aligning with province- and hospital-specific infection prevention and control policies and protocols exist is important.
4. Promoting clinical activities aimed at preserving hospital resources (e.g., health care human resources, personal protective equipment, procedure rooms, intensive care units, emergency departments) while also providing high-quality care is a priority.

BACKGROUND

During the initial stages of the COVID-19 pandemic there were significant decreases in access to in-person clinical management and CR. While many programs successfully transitioned to providing CR using virtual platforms, many CR programs are struggling to maintain staff required to provide virtual care and have temporarily closed. It is well documented that participation in traditional, centre-based, supervised CR is associated with decreased mortality and morbidity[1] and health care utilization[2]. Alternative virtual (e.g., home-based and tele-rehab) CR program models have also shown benefits in exercise capacity and quality of life[3,4]. As such, there is a significant risk that prolonged closures or reduced access for individuals in need of CR can lead to a decline in health status, and greater morbidity/hospitalization and mortality in the near future[5].

On May 12, 2020, CorHealth released a memo to support virtual CR delivery during the COVID-19 pandemic. On June 8, 2020, Ontario Health released the document Recommendations for Regional Health Care Delivery During the COVID-19 Pandemic: Outpatient Care, Primary Care, and Home and Community Care which provides high-level recommendations to support key planning criteria for increasing care delivery during the pandemic.

As Ontario begins the gradual resumption of in-person ambulatory care services, CorHealth Ontario has been engaging with CR experts and other stakeholders across the

[1] Anderson, L, Oldridge N, Thompson DR, et al. Exercise-Based Cardiac Rehabilitation for Coronary Heart Disease Cochrane Systematic Review and Meta-Analysis. J. Am. Coll. Cardiol. 2016; 67:1–12

[2] Alter D, Yu B, Bajaj RR, Oh P. Relationship Between Cardiac Rehabilitation Participation and Health Service Expenditures Within a Universal Health Care System. Mayo Clinic Proceedings. 2017; 92: 500-511

[3] Anderson L, Sharp GA, Norton RJ, et al. Home-based versus centre-based cardiac rehabilitation. Cochrane Database of Systematic Reviews 2017; Issue 6

[4] Rawstorn JC, Gant N, Direito A, et al. Telehealth Exercise-Based Cardiac Rehabilitation: A Systematic Review and Meta-Analysis. Heart 2016;102: 1183–1192

[5] The New "Virtual Reality"; Practical Approaches to the Delivery of Cardiac Rehabilitation Care during the COVID-19 Crises. Guidance from the CCS COVID-19 Rapid Response Team. Canadian Cardiovascular Society. June 2020

province to discuss the gradual return to their full scope of services during the COVID-19 pandemic, including planning for the resumption of in-person CR. The following guidance and recommendations in this memo reflect advice from this engagement.

ASSUMPTIONS

The following guidance memo was developed with the following assumptions in mind:

- The key planning criteria and associated recommendations for implementation outlined in the document by Ontario Health released on June 8, 2020, are satisfied before any increase in care activities.
- Where applicable, virtual care should continue to be the cornerstone model of delivery.
- Despite the critical need to provide virtual CR options, there are situations where in-person services are necessary. The delivery of CR will need to include both virtual care and in-person care options.
- Some regions/programs will be better positioned to resume virtual or in-person CR activity than others due to differences in capacity and/or rates of COVID-19 cases.
- Local CR programs and providers are in the best position to determine which clinical services are best delivered virtually or in-person, assuming the necessary provincial, regional, local and applicable health regulatory college requirements are met.
- Resumption of in-person CR services will be a gradual process.
- The virtual care landscape will continue to evolve (e.g., patient and provider experience, organizational models/ workflow processes, health care provider responsibilities, organizational leadership/champion, compensation models, digital health etc.)
- The delivery of CR will need to accommodate to the potential ebb and flow of care delivery restrictions along the COVID-19 pandemic trajectory.[6]

[6] The New "Virtual Reality"; Practical Approaches to the Delivery of Cardiac Rehabilitation Care during the COVID-19 Crises. Guidance from the CCS COVID-19 Rapid Response Team. Canadian Cardiovascular Society. June 2020

PATIENT CONSIDERATIONS FOR IN-PERSON CARDIOVASCULAR REHABILITATION (CR) PROGRAMMING

All CR programs are encouraged to provide virtual programming for all eligible patients when and where possible. For all patients referred to CR, an initial consultation should be carried out to identify patient need, ability and interest for virtual, in-person or a combination (hybrid) model of CR programming.

Consider the following criteria for in-person visits:

- A patient requires an in-person clinical and/or functional assessment by a health care provider to gather critical information for informing care decisions that is not possible to gather accurately and confidently in a virtual platform (e.g., people who are high risk for a cardiac event, have complex comorbidities, underlying frailty or have clinical, psychological, or behavioural issues)
- A patient does not have access to or is unable to use virtual technology for the purposes of participating in a safe and effective CR program and cannot be supported to do so by a caregiver or family member (e.g., privacy is needed for the discussion, language barriers or social determinants of health)
- Patient choice/preference where there is program capacity to accommodate

PATIENT ASSESSMENT

As provincial directives gradually lift restrictions within the pandemic, re-introduction of in-person services, including formal exercise testing, can be gradually resumed depending on the local environment and resources. A phased approach for resuming in-person patient assessment that occurs at intake, throughout the program as needed or at discharge is provided in Table 1 below.

Table 1. Phased approach for resuming in-person CR patient assessment

	AMBULATORY CARE RESTRICTIONS		
	Severe	**Moderate**	**Minimal**
Patient assessment	In-person NA	Up to 25% of pre-COVID volumes Eligible patient populations as outlined above (in-person considerations) Consider gathering as much information as possible in advance through virtual methods (e.g., phone) to limit patient time in-person During an in-person intake, consider including orientation to virtual care platforms used to support virtual CR by your program to help enable this option for some individuals	25-50% of pre-COVID volumes Patients eligible may extend to lower-risk cohorts Consider combining an initial exercise orientation session or other CR services during the same visit as the intake assessment. During an in-person intake, consider including in-person orientation to virtual care platforms used to support virtual CR by your program to help enable this option for some individuals
Functional Capacity Assessment			
Self-reported	Physical activity and functional capacity questionnaires Walk and talk test		
Virtual observation	Patient exercising Consider 6MWT[7]		
In-person observation	NA	Supervised, in-person testing/assessment protocols such as 6MWT, observation of patient exercising	
Formal exercise testing	NA	Up to 25% of pre-COVID volumes where available In the initial phase of recovery, programs may consider use of GXT rather than CPET to help minimize potential respiratory exposures that may be associated with CPET*	Return to usual GXT and/or CPET testing practices to optimize exercise prescription and functional capacity improvements Consider a thoughtful 'new normal' approach considering less formal exercise testing where appropriate

NA - not available; GXT-Graded Exercise Test; CPET-Cardiopulmonary Exercise Test; 6MWT- 6 Minute Walk Test

**The decision to proceed with GXT or CPET in CR programs and the requirements for PPE should be made in accordance with policies and practices in the respiratory and cardiology diagnostic labs in your local hospital and/or clinic*

[7] Salvi D, Poffley E, Orchard E, Tarassenko L. The Mobile-Based 6-Minute Walk Test: Usability Study and Algorithm Development and Validation. *JMIR Mhealth Uhealth*. 2020;8(1):e13756

DELIVERY OF CARDIOVASCULAR REHABILITATION (CR) CORE COMPONENTS

A phased approach for resuming in-person delivery of the CR core components in individual and/or group sessions is provided in Table 2 below.

Table 2. Phased approach for resuming in-person delivery of CR core components

	AMBULATORY CARE RESTRICTIONS		
CR program core component	**Severe**	**Moderate**	**Minimal**
Initial exercise orientation	In-person not available	Up to 25% in-person orientation to exercise depending on usual practice May combine with intake appointment	25-50% in-person orientation to exercise depending on usual practice May combine with intake appointment
Exercise supervision Aerobic and resistance training		Up to 25% of pre-COVID class size	25-50% of pre-COVID class size Important to consider structured peer support arrangements to meet patient-identified needs
Counselling and/or appointment for risk factor management (1:1)		Up to 25% of pre-COVID volumes	25-50% of pre-COVID volumes
Education (Group)		Not likely Small group education may align with small group exercise sessions	Not likely Small group education may align with small group exercise sessions
Peer group support		Not likely outside of in-person interaction with small group exercise sessions	Not likely in-person dedicated peer support activity outside of combining with exercise or education activity

ADDITIONAL CONSIDERATIONS

There are many additional considerations and requirements for resuming in-person CR programming that must meet public health guidelines and promote a safe environment for the provision of in-person health services by health care professionals. For example, the Ontario Ministry of Health published COVID-19 Operational Requirements: Health Sector Restart guidelines on May 26, 2020 (Version 1.0), which provide operational details and requirements to support the gradual restart of all deferred non-essential and elective services carried out by Health Care Providers (HCPs). Additionally, the aforementioned document released by Ontario Health on June 8, 2020, provides eight planning criteria for the ambulatory care setting.

While recognizing that requirements outlined by the MOH directives must be met prior to resuming in-person CR services, the following list provides tips for promoting distancing for in-person CR services to minimize infection risk.

TIPS TO CONSIDER WHEN PROMOTING DISTANCING FOR IN-PERSON CR SERVICES

- Temporal distancing
  - Expand schedules to weekends or evenings
  - Space appointments to allow time for cleaning in between
  - Offer in-person classes with rotating or staggered schedules
  - Limit the frequency of classes or session duration and supplement care with virtual options
- Numerical distancing
  - Use smaller group sizes for group activities
  - Implement a 'no visitor' or 'patients only' policy in the facility
- Physical distancing
  - Move/remove equipment or make use of alternate physical arrangements to increase spacing (at least 6-12 feet but distance should be determined in collaboration with local infection control advice). Increase this distance for patients exercising at high intensity
  - Place markers at 6-foot intervals to encourage and guide patient physical distancing
- Personal equipment distancing
  - Encourage patients to bring own equipment (e.g., resistance training bands, blood pressure or heart rate monitors) rather than using centre-based equipment where possible

Additional general considerations for CR programs as they determine when and how to safely resume in-person rehabilitation are outlined in the document by the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) Considerations for Resuming In-Centre Cardiac and Pulmonary Rehabilitation Program Services.