1. Introduction

CCS represents the entire spectrum of cardiovascular healthcare professionals. A clear, concise statement is desired for the community cardiologist/health care provider in a clinic setting who is managing cardiovascular disease during the COVID-19 pandemic. Hospitals are currently focused solely on providing care for patients with urgent and emergent cardiovascular disease. The public is instructed to avoid hospitals, unless absolutely necessary.

This may mean that patients who should attend the Emergency Department for urgent and emergent conditions risk are not doing so. Consequently, optimal care for common cardiac conditions, such as acute coronary syndromes, heart failure, and atrial fibrillation may be delayed. Evidence from China and Italy suggests a marked drop in acute cardiac presentations with presumed consequences when medical attention is not sought. The unintended sequelae may be increased cardiovascular morbidity and mortality during this pandemic.

Community cardiologists play a pivotal role in pre-emptive care. This will limit visits to the emergency department, prevent hospital admissions, direct patients to the most appropriate specialized care and reduce the burden on family physicians. Rather than abbreviating or eliminating patient access, efforts should be focused on patients who require timely assessment, and directing triage, diagnostic testing, and important, effective therapies for the at-risk public. Guidance on the provision of accessible urgent care to at-risk patients is outlined below.

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2. Principles

**Be a champion**: Lead the people around you in advocating for best practices to reduce transmission of COVID and flatten the curve (see Figure below).

**Teamwork**: It is critical that hospitals focus on the sickest and highest-risk patients. In the COVID era, it is important that community cardiologists play a central role in preventing emergency department visits and hospitalizations and support early discharge of hospitalized cardiac patients. This includes urgent care, satellite, and outreach clinics to ensure access to care.

**Regional planning.** Coordinate with other providers and services to ensure access to urgent cardiac clinical assessment, using ambulatory facilities, particularly Emergency Departments. Sites are encouraged to increase consultant availability to increase capacity for urgent assessments, which could involve recent retirees. Patients assured of rapid access are likely to accept reassurance and comply with follow-up.

**Triage.** Community cardiologists have a leadership role in the triage of referrals with active clinical decision-making, regarding prioritizing referrals and determining the best course of action for investigation, care and follow-up. The CCS guidance document on ambulatory management and diagnostic testing during the COVID-19 crisis is a useful resource (www.ccs.ca).

**Diagnostic testing.** Access to selective diagnostic testing is necessary after clinical assessment that incorporates risk prioritization and maximizes telehealth and videoconferencing for initial review. Testing should focus on clinically urgent situations where tests would result in immediately actionable data, or potentially disclose high-risk or life-threatening disease. Routine tests should be deferred wherever possible.

**Providing patient-focused care.** Promote telemedicine (by telephone, or virtual care when technology is available and practical for patients). In some cases, an in-office visit may be necessary, with appropriate precautions. Consider faxing prescriptions or providing verbal prescriptions to pharmacies to reduce the amount of time a patient spends in public waiting in the pharmacy. Ensure adequate follow-up is arranged to avoid visits to the Emergency Department. Most jurisdictions support full reimbursement for virtual care, and some have introduced temporary billing codes for telephone visits/virtual care.

**Show your commitment.** Implementing these changes will involve additional effort and reduced efficiency initially but are a tangible message of our commitment to patients. We are responsible physicians who recognize that these measures are necessary for optimal patient care.

**Take time to plan.**
- Take inventory of personal protective equipment (PPE) and restocking.
• Office location hours may change and impact access (e.g., mall hours).
• Consider office exposure and measures to reduce contamination (see below)
• Be vigilant about physician and staff exposure risk, which will result in 14-day isolation or illness.
• Ensure a plan is in place for your call group, including back up call schedules in the event of member illness.
• Protect your home from exposure if working in a high-risk area like a hospital.

3. Diagnostic Testing

a) All patients undergoing testing should be screened for symptoms of COVID infection (fever, new cough or difficulty breathing) at the time of test booking, and again when presenting for testing. See screening recommendations below.

b) All tests other than urgent or semi-urgent should be deferred. Pre-test clinical review conducted or directed by a Physician (telehealth or virtual consultation) should determine urgency. Diagnostic testing staff should not take primary responsibility for triage. Insist that test requisitions contain sufficient information to facilitate appropriate triage.

c) Conduct testing that minimizes exposure but answers the clinical question, including a preference for testing that requires minimal interaction, exposure and risk. Examples include patch monitors and treadmill testing without accompanying imaging, to reduce staff exposure.

d) Put quality assurance practices in place to manage the inevitable backlog of requisitions. Use the principles outline in the CCS Guidelines and Choosing Wisely resources to discourage unnecessary testing. Non-urgent requisitions should be deferred or returned to the ordering physician, and staff should work with them to determine an appropriate time frame the referring physician is comfortable waiting for the requested cardiac investigations.

4. In-Person Office Care

If a patient’s condition requires an in-office visit, we recommend the following protocols:

a) Implement a policy of mandatory screening of all patients (and caregivers who will be accompanying them) before they attend the office. Several screening tools are outlined under resources below.

b) Have staff call the patient the day before their appointment to confirm their attendance, and to complete a screening questionnaire with the patient (and accompanying caregiver). Staff and office voicemail should convey the need for screening. Once a patient has been screened, sign and date the questionnaire and place in the patient chart. A patient with a high-risk screen should be directed to 811. A borderline screen should lead to physician follow-up.

c) The office entrance should include clear signage regarding the COVID screening process that the patient and caregiver should expect. Consider the languages necessary to best serve the population, and reflect that in any signage. Keep the medical office assistant window closed except when in use with a patient. If consent for testing is obtained, consider verbal consent to minimize contact and paper.
d) Schedule appointments to ensure minimal waiting persons in the waiting room. Move chairs two meters apart to ensure social distancing. Any items that cannot be easily cleaned (e.g., pamphlets, newspapers, magazines, stuffed toys) should be removed. Offer the option of the patient (and caregiver) to wait in their vehicle and text or call them when it’s time for their appointment.

e) Add additional hand sanitizer stations throughout your clinic. Ask staff to regularly check on the availability of hand sanitizer and soap.

f) Minimize clinical decisions that lead to additional diagnostic testing (such as medication adjustment with associated blood work).

5. Cleaning the Clinic


b) Healthcare organizations’ terminal cleaning and disinfecting protocols for cleaning after discontinuation of contact and droplet precautions should be followed. See PHAC’s information here.

c) Recommend and facilitate increased hand hygiene. Increased frequency of cleaning and disinfecting high-touch surfaces is essential in controlling microorganism fomite spread during a respiratory infection outbreak (e.g. phones, elevator buttons, washrooms, tables). Environmental cleaning products registered in Canada with a Drug Identification Number (DIN) and labelled as a broad-spectrum virucide are sufficient. All surfaces, especially those that are horizontal and frequently touched, should be cleaned and disinfected at least twice daily, and whenever soiled.

6. Supporting Office Staff

a) The opinions and recommendations regarding PPE are dynamic and variable according to jurisdiction. The local Medical Officer of Health/Public Health guidelines, including those around the merits of masks and gloves for staff or the public, should be observed. As of March 25, 2020, PPE is not recommended for asymptomatic low-risk patients or care providers, though there is a trend to advocate for more mask use and PPE in general, which must be balanced by concerns regarding adequate supply for future use. Staff should be educated in rigorous hand hygiene and social distancing tactics. Consider appointing an office champion.

b) Frequent communication is vital to reduce staff anxiety. Offer daily COVID-19 updates, implement daily virtual huddles, or share daily hospital bulletins or CCS guidance documents.

c) Open communication regarding home and work status is key. It may be necessary to defer staff vacation time. Home supports may be difficult to access, particularly child care.

d) Determine your policy regarding “excused from work”. A request to be off work may come from a patient for a variety of reasons, including patients in essential services such as health care workers. Weigh the risk of exposure and infection consequences in the workplace in rendering your judgment. There is no current decision framework for this difficult decision.
e) CCS has compiled a list of links to proposed and implemented resources from federal and provincial/territorial governments that provide support for businesses, employees and employers in response to the pandemic.

7. Resources

a) CCS home page for latest COVID-19 updates
b) Screening tools (all are free access)
   i. Alberta Health Services COVID-19 Self-Assessment Tool
   ii. BC COVID-19 Symptom Self-Assessment Tool
   iii. Manitoba COVID-19 Screening Tool
c) American College of Cardiology COVID website
d) PPE guidance (self-directed learning module) Alberta Health Services
e) PPE donning guidance (poster), World Health Organization, English
   PPE donning guidance (poster), World Health Organization, French
   PPE doffing guidance (poster) World Health Organization, English
   PPE doffing guidance (poster) World Health Organization, French
f) Selection and Use of Personal Protective Equipment (PPE), Government of Canada
g) Choix et utilisation de l’équipement de protection individuelle (EPI), Gouvernement du Canada

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