Providing Care for Our Patients with COVID@Home

Primary Care Providers (PCP) have continued to support their patients throughout the pandemic. This document provides a simple framework for PCPs to utilize when following theirown patients with COVID@Home.

The framework presents the care broken down into two manageable steps when a patient is first identified as being diagnosed with COVID-19:

A. Initial Assessment and Risk Stratification
B. Ongoing Monitoring Visits

A. Initial Assessment and Risk Stratification

1. Confirm with patient the Date of diagnosis and Date of onset of symptoms
2. Provide education and support with patient about importance of self-isolation (see Public Health document for self-isolation) for patients and others in the household
3. Undertake assessment of symptom presence and severity with particular focus on (consider using the Hamilton Family Medicine Community COVID Ward Monitoring Document):

Symptoms

- Breathlessness (severity and stability)
- Cough
- Chest tightness
- Fever
- Fatigued
- Light-headedness
- GI Upset

Red Flags (if present consider ED transfer)

- Hemoptysis
- Confusion
- Decreased urine output
- Syncope
- Cold clammy skin
- Non-blanching rash

Perform assessment of Medical Risk Factors

- Pregnancy
- COPD
- CKD
- CVD
- Diabetes
- Liver disease
- Asthma
- Smoking
- Malignancy
- Autoimmune
- Immunosuppressed
- Substance use
- Hypertension

Perform assessment of other Contextual Risk Factors

- Occupational risk
- > 60 years
- Living with elderly
- Financial insecurity
- Under-housed
- Living alone
- Living with young children
- Mental health history
- Lack of access to Food
- Lack of support/care

4. Provide patient general COVID-19 care advice:

   i. Advise patient to get access to pulse oximeter. If patient does not have means oraccess to a pulse oximeter, consider supporting their access through requesting pulse oximeters through this process

   ii. Advise patient to undertake a daily (or twice daily) assessment of their symptoms(presence and relative change) and monitor their O2 saturation and heart rate (Record on the Mississauga COVID@Home Self Care and Self-Monitoring document)

   iii. Set expectations about the general course of the illness (see COVID SymptomTimeline)

   iv. Advise patient to rest and conserve energy (increased episodes of triggereddyspnea linked with increased pulmonary damage)

   v. Advise patient to focus on hydration

   vi. Advise patient to change positions to aid breathing (See COVID Timed Position Change Document)

5. Risk Stratify the patient

High Risk* **	**Average Risk**	**Low Risk**
Any age with medical comorbidities(medical risk factors from above including pregnancy)		Otherwise healthy adults; asymptomatic adults
Patients who are unvaccinated		
Patients with symptom deterioration		No comorbidities
Patients with any of the safety netflags *(only food/income insecure patients in phase 1)*		No safety net flags
Age >60	40-60 years old with no medical comorbidities	Age 1-39 with no medical comorbidities
Monitor Daily for 10 days	Monitor every 1-2 days x 5 days; then recommend self-monitor for additional 5 days depending on progress	Monitor. Consider self-monitoring only; check-ins determinedby individual patient (consider at 7 days)

***** If the patient stratifies as high risk, they are eligible to be followed also by a member of the Interprofessional Monitoring Team as part the COVID@Home Monitoring Program (See Mississauga COVID@Home Monitoring Program Document)**

6. Consider assessment of patients eligible for COVID-19 therapeutics
    - Ontario Science Table Therapeutics Guideline
    - MH Primary Care Network Novel Therapeutics Webinar

7. Give clear guidance about whom to contact if symptoms get worse, for example:

Call 911 if:	Call clinic if:
○ You have severe trouble breathing OR ○ You have severe chest pain ○ You are confused or not thinking clearly ○ You pass out (lose consciousness) ○ If monitoring O2 saturation < 88%	○ You have new or worse trouble breathing ○ Your symptoms are getting worse ○ You start getting better and then get worse ○ You have severe dehydration (e.g. dry mouth, light-headed or producing little urine) ○ If monitoring O2 saturation that < 93% but ≥ 88%

8. Determine how ongoing follow-up and monitoring will occur and communication that to the patient

B. Ongoing Monitoring Visits

1. Confirm with patient preferred method of virtual consult (telephone vs. video)
2. Utilize HFAM Community COVID-19 Ward Monitoring Template to structure and document your regularly scheduling monitoring visits

   Downloadable versions are available here for the following EMRs

   i. OSCAR
   ii. Telus PS Suite
   iii. Accuro

3. Check mental health and well being
4. Check access to food, support or carer availability, financial or house stress
5. Determine if the patient is still safe to be managed at home by screening for red flags (if present consider transfer to ED*)
6. Goals of care discussion if appropriate
7. Determine if risk has been re-stratified and refer (if appropriate) to the COVID@Home Monitoring Program
8. Establish date and time for next monitoring visit

*** Red flag symptoms: If present, consider if patient should transfer to ED**

Respiratory	Other
○ Severe shortness of breath at rest ○ Difficulty in breathing ○ Increasing significant fatigue ○ Blue lips or face ○ Hemoptysis	○ Cold, clammy, mottled or pale skin ○ Reduced level of consciousness or new confusion ○ Little or no urine output ○ Pain or pressure in the chest ○ Syncope

Mississauga COVID@Home Monitoring Program Description

The Mississauga COVID@Home Monitoring Program aims to augment the care of patients with COVID-19 provided by their Primary Care Provider (PCP) with a more intensive level of monitoring. It also aims to provide linkages to community support services and system navigation (if appropriate).

The following program description will outline at a high level the various aspects of the program:

1. Referral Sources
2. Eligibility
3. Intake
4. Pulse Oximetry
5. Monitoring Visits
6. Escalation Process
7. Discharge

1. Referral Sources

The following are anticipated referral sources:

- Community-based PCPs have identified their patient with COVID-19 (based upon PCR, RATS or clinical diagnosis), have undertaken a STANDARDIZED RISK ASSESSMENT of the patient and judged the patient to be High Risk for deterioration. It is anticipated that PCPs will provide care for the bulk of their patients with COVID-19.
- Individuals who have been assessed in the Hospital or ED from COVID-19 symptoms
- Individuals who have been contacted by Public Health as known COVID-19 patients

Referrals to the COVID@Home Monitoring Program can be initiated by submitting a completed referral to the Mississauga Health COVID@Home Program (see www.moht.ca for the referral form). This will trigger a triage to one of the COVID@Home Monitoring Teams currently housed within the Mississauga Health Interprofessional Primary Care Teams:

- CarePoint Health
- Credit Valley Family Health Team
- Summerville Family Health Team

2. Eligibility

Patients will be judged for eligibility based upon the follow criteria

- Inclusion criteria
- Community-dwelling individuals
- > 18 years of age
- Risk stratified as High Risk
- Agree to be followed by Monitoring Team

Exclusion criteria

- Under-housed / homeless
- Unable to use a telephone or video call
- Unable to follow instructions and complete self-monitoring tasks
- Unable to self-manage

3. Intake

Upon receipt of the referral, the Monitoring Team will undertake an Initial Assessment and Risk Stratification, similar to that completed by the PCP prior to referral. If the patient is judged to be unwell or if their Initial Assessment demonstrates Red Flags they will be directedto the ED.

At the point of intake, the patient's primary method of contact will be established and expectations about the frequency of virtual assessments will be communicated. The patient's emergency contact will also be established. Patients will be taught how to undertake at a minimum twice daily (may be as frequent as every 2-4 hours) symptom assessments and Pulse Oximeter assessments (O2 Sat and HR). Patients will be offered use of the Virtual Care platform (Vivify Health) which will allow them to complete the twice daily symptom assessment and their oxygen saturation and upload directly on a smart phone or tablet device. Patient are not required to use the Vivify Health platform to be enrolled in COVID@Home.

Patients will be sent electronically and oriented to the Patient Resource Documents including:

- Mississauga COVID@Home Self Care and Symptom Monitoring
- Mississauga COVID@Home Patient Symptom Timeline
- COVID@Home Timed Position Changes
- Public Health How to Self-Isolate
- Pulse Oximetry Patient Instructions

4. Pulse Oximetry

PCPs are encouraged to advise patients to acquire their own pulse oximeter immediately upon diagnosis of COVID-19. If patients are unable to procure their own pulse oximeter the COVID@Home program can provide one for them. Patients can contact the COVID@Home intake team (phone number on referral form) to request access to a pulse oximeter.

5. Monitoring Visits

The Monitoring Teams will perform regular virtual consults (ranging from twice per day to once every two days) with patients who are enrolled to the Program. While performing the virtual consults, the Monitoring Team Clinician will utilize the HFAM Community COVID-19 Ward Monitoring Template OR the Vivify Health COVID-19 digital pathway as a way of documenting symptom severity and change over time. Monitoring visits will occur during the hours of 0900 – 1700 (Monday to Saturday).

6. Escalation Process

The Monitoring Team Clinician will be continuously assessing during their virtual consults the development of worrisome symptoms. A referral to the ED will be considered ifany of the following are detected:

- HR >110, SPO2 consistently ≤ 92%, RR >24
- Severe shortness of breath at rest (e.g. Breathlessness RR >30 despite normal O2 saturation)
- Difficulty in breathing (work of breathing)
- Reducing O2 saturation
- Pain or pressure in chest
- Decreased oral intake or urine output (dehydrated, needing IV fluids)
- Cold, clammy or pale mottled skin
- New onset of confusion, becoming difficult to rouse, syncope
- Blue lips or face
- Coughing up blood
- Other symptoms indicating severe illness, or significant or rapid deterioration including markedly increased fatigue (if O2 Saturation are not available).

When considering whether or not to send a patient to the ED, the Monitoring Team will attempt to contact the PCP and review the state of their patient's health. However, if they are unable to reach the PCP in a timely manner, the Monitoring Team will act consistent with the patient's best interest.

7. Discharge

Patients will be deemed to be discharged from the COVID@Home Monitoring Program when one of the following occurs:

- The patient passes through the initial 10 days of their illness and has sufficiently recovered from their COVID-19 symptoms
- The patient is transferred to the ED and is admitted to acute care.

Upon discharge from the program, the COVID@Home Monitoring Team will provide a brief summary of the patient's course in the program to the patient's PCP.

Community COVID19 Ward Monitoring

INSTRUCTIONS:

- This form is to be started when a patient has received a positive result on a COVID-19 test and will be monitored and managed by primary care.
- When saved, the form will appear in the left column on the patient's OSCAR eChart as "COVID Monitoring Record".
- **It is important the same form is used for each monitoring visit.** To do this, open the patient's eChart and open the same form again from the left menu.
- **If you save a change to this form and close it, you must refresh the patient's eChart before opening this form again in order to see the changes you made.**

Risk Level

See Guide to Risk Assessment (https://hfam.ca/clinical-pathways-and-evidence/covid/assessment-diagnosis-and-management-of-covid/guide-to-risk-assessment/)

◉ High	○ Average	○ Low
MONITOR Daily for at least 14 days	MONITOR Every 2 days x 8 days; then recommend self-monitor for additional 7 days depending on progress	MONITOR Consider self-monitoring only; check-ins determined by individual patient. (Consider at 7 days)

Isolation and Contact Tracing

Test Data and Isolation Period

Date of Positive Test

2021-01-26

Date of First Symptom **OR** ☐ **No Symptoms**

2021-01-25

End of Isolation Period

2021-02-05

Data Checklist

- ☑ Download lab from OLIS to chart
- ☑ Add COVID code to Disease Registry (080)
- ☑ Add "COVID19 [month/year]" to medical history
- ☑ Add COVID code to billing (080)

Patient Isolation/Contact Tracing Education Checklist

- ☑ Patient was contacted by Public Health after positive test result OR
- ☐ Send Tickler

? Used Public Health Guide (https://hfam.ca/wp-content/uploads/2020/12/Instructions-for-individuals-who-tested-positive-for-COVID-19.pdf) to provide or reinforce Public Health's direction on self isolation and identifying/contacting contacts *

Home Equipment Inventory

Patient has or can borrow:

- ☐ BP cuff
- ☑ Thermometer
- ☑ Send Tickler

? Pulse oximeter (NOTE: May direct to YouTube video on using pulse oximeter at https://www.youtube.com/watch?v=ghUTSH-PYio (https://www.youtube.com/watch?v=ghUTSH-PYio))

*(*NOTE: Recommend directing patients to Hamilton Public Health (https://www.hamilton.ca/coronavirus/covid-19-have-symptoms-or-been-exposed (https://www.hamilton.ca/coronavirus/covid-19-have-symptoms-or-been-exposed)) and HFAM Patient Resources (https://hfam.ca/patient-resources/ (https://hfam.ca/patient-resources/)) for more information. These may be provided verbally and/or sent electronically through VirtualClinic+ (https://app.wellclinics.ca/app/surveys/show-surveys).)*

COVID-19 Monitoring Visits

IMPORTANT: To access a new row for data entry, save the form, exit, refresh the patient's OSCAR eChart and open this form again from the eChart's left menu.

Please follow specific history and exam details per HFAM Monitoring Template (https://hfam.ca/clinical-pathways-and-evidence/covid/assessment-diagnosis-and-management-of-covid/monitoring-template/). Also see tips for assessing Dyspnea (https://hfam.ca/clinical-pathways-and-evidence/covid/assessment-diagnosis-and-management-of-covid/tips-for-assessing-dyspnea-virtually/) and Vitals (https://hfam.ca/clinical-pathways-and-evidence/covid/assessment-diagnosis-and-management-of-covid/assessing-vital-signs-virtually/) virtuall

	Symptom Presence (and Relative Change) or Absence						**Vitals**							
Date	Dyspnea	Cough	Fever	Loss of Taste/ Smell	GI Upset	Other	RR	HR	BP	T	O2 Sat (%)	Hydration	Red Flags	Safe to Continue

2021-01-27	◉ Y ○ N ○ Better ◉ Worse ○ Stable	○ Y ◉ N Note	◉ Y ○ N ○ Better ○ Worse ◉ Stable	○ Y ◉ N Note	◉ Y ○ N ○ Better ○ Worse Stable	○ Y ◉ N Note	16 Note	88 Note	N/A Note	37.8 Note	98 Note	○ Concern ○ Satisfactory Note	◉ Y ○ N Note	○ Y ◉ N Note
	Note		Note		Note									
	Notes													
2021-01-28	◉ Y ○ N ○ Better ○ Worse ◉ Stable Note	○ Y ◉ N Note	◉ Y ○ N ○ Better ○ Worse ◉ Stable Note	○ Y ◉ N Note	◉ Y ○ N ○ Better ○ Worse ◉ Stable Note	○ Y ◉ N Note	Note	Note	Note	38.0 Note	98 Note	○ Concern ○ Satisfactory Note	○ Y ○ N Note	○ Y ○ N Note
	Notes													
2021-02-22	○ Y ○ N Note	○ Y ○ N Note	○ Y ○ N Note	○ Y ○ N Note	○ Y ○ N Note	○ Y ○ N Note	Note	Note	Note	Note	Note	○ Concern ○ Satisfactory Note	○ Y ○ N Note	○ Y ○ N Note
	Notes													

Next Visit Date

2021-01-29

☐ **On Call Notified if Visit on Weekend**

OR

Discharge Date (https://hfam.ca/clinical-pathways-and-evidence/covid/assessment-diagnosis-and-management-of-covid/discharge/)

Note

Other Areas of Assessment/Support

Area	Concern?	Notes	Referral?	Referral Instructions
Mental Health	○ Y ◉ N Send Tickler ?		○ Y ◉ N Send Tickler ?	
Access to Food	○ Y ◉ N		○ Y ◉ N Send Tickler ?	
Access to Caregiver(s)	○ Y ◉ N		○ Y ◉ N Send Tickler ?	

Access to Needed Supports	○ Y ◉ N		○ Y ◉ N Send Tickler ?	
Financial Health	Y N		Y N Send Tickler ?	
Housing	Y		Y	
	◉ N		◉ N Send Tickler ?	

Patient Advice/Education Checklist

Please refer to "Patient Advice Guide" (https://hfam.ca/clinical-pathways-and-evidence/covid/assessment-diagnosis-and-management-of-covid/patient-advice-guide/)

☑ Illness course explained

☑ Information about hydration and comfort medications given: Note

Note

☑ Direction given to limit exertion and education provided about breathing position:

☑ Return to care instructions given

☑ Advice given about regular medications (SADMAN (https://www.rxfiles.ca/rxfiles/uploads/documents/SADMANS-Rx.pdf)): ☐ N/A OR Notes:

On diuretic. GI upset minimal and good oral intake but knows to flag if in

Note

☑ Management of comorbidities discussed:

Summary of Goals of Care Conversation (if relevant and appropriate)

N/A Full escalation of care if worsens

Save

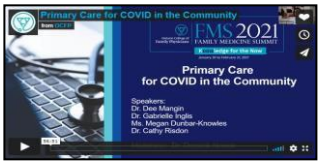
This form was developed by the McMaster University Department of Family Medicine and may be modified and used as needed, subject to retaining this acknowledgement in all versions. In the spirit of collaborative improvement, we welcome your feedback. (mailto:oscarmcmaster@fammedmcmaster.ca) Thank you v1.4

Ontario Health Central

COVID@Home

Tools and Resources Supporting Primary Care Providers

Ontario Health COVID@Home tools and resources to support primary care providers in the community who wish to remotely monitor their patients who have mild to moderate COVID-19. All efforts to support monitoring COVID-19 patients in the community strive to help ease constraints on the health care system.

RESOURCE	INFORMATION	HOW TO ACCESS
COVID@Home Monitoring for Primary Care Community of Practice CoP	Ontario Health (through Health Quality Ontario) has developed a COVID@Home Monitoring Community of Practice for Primary Care. Members will gain access to information about clinical pathways based on best evidence and other tools and resources.	1. Visit quorum.hqontario.ca. 2. Sign up to create an account. 3. Visit the Quorum site and **JOIN GROUP**. *You will be notified by email when granted access* 
Ontario Health Resource Toolkit: *COVID@Home* Monitoring for Primary Care	Supports primary care team implementing a remote home monitoring system for COVID-19 patients by providing information on: 1. Clinical content and suggested best practices. 2. Quality improvement building blocks.	Click here to access Ontario Health's COVID@Home Resource Toolkit. 
Mainpro+ Certified Video Primary Care for COVID in the Community	This 1-credit-per-hour online Group Learning program certified for up to 1 Mainpro+Ⓡ credit. To receive your certificate, contact the FMS team at fms@ocfp.on.ca after watching the session.	 Click here (*scroll down*) to access the video
COVID-19: Remote Consultations	Created by the Ontario Family of Physicians to provide a quick guide to assessing patients by video or voice call.	Review the algorithm for remote monitoring for COVID-19 patients. 
Oxygen Saturation Monitors for your COVID+ patients	As part of the COVID@Home initiative, the Ministry of Health has procured a stockpile of oxygen saturation monitors to be distributed to primary care professionals and teams who wish to provide enhanced monitoring of their COVID-19 positive patients at home.	Click here to learn more. Click here to complete the **Oxygen Saturation Monitor Eligibility and Intake Form** to order O2 saturation monitors for your COVID+ patients.

QUESTIONS?

COVID@Home monitoring
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Clinical pathways for COVID@Home monitoring
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