

Virtual Health COVID-19 accessible solution toolkit

The Office of Virtual Health (OVH) provides strategic direction and leads Virtual Health initiatives at PHSA. In response to COVID-19, OVH and the Digital Health Team at PHSA have developed a **Virtual Health toolkit that is specifically for use during the COVID-19 pandemic**. It features solutions that you may already have on your mobile phone or desktop – or will be easy to get – so you can deliver services to your patients efficiently.



Privacy and security for all virtual health solutions: Some of the recommended solutions in this toolkit have completed Privacy Impact Assessments, while others have a PIA in progress. Under the emergency response due to COVID-19, PHSA is collaborating with the Ministry of Health to expedite privacy and security review of virtual health solutions on behalf of all B.C. health authorities.

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ACCESSIBLE SOLUTIONS AT A GLANCE

SOLUTIONS	ZOOM VIDEO/AUDIO VISIT CHAT	SKYPE for BUSINESS VIDEO/AUDIO VISIT CHAT	FACETIME VIDEO/AUDIO VISIT CHAT	TEXT MESSAGING TEXT	EMAIL EMAIL	TELUS Home Health Monitoring MANAGING PATIENTS DIAGNOSED WITH COVID-19 or ARE AT HIGH RISK
PROVIDER NEEDS						
Virtual Health Visit 1:1 or 1:many	✓	✓	✓	X	X	X
Document sharing	✓	✓	X	X	✓	X
Messaging	✓	✓	✓	✓	✓	
Remote monitoring	X	X	X	X	X	✓
DEVICE COMPATIBILITY						
Mobile device (iOS/Android)	✓	✓	✓ iOS (Apple) only	✓	✓	X
Desktop/ Laptop	✓	✓	✓ macOS (Apple) only	X	✓	✓
PRIVACY AND SECURITY						
Privacy review	✓	✓	✓	✓	Canadian privacy laws apply to accounts based in Canada; excludes Hotmail & Gmail	✓
Security review	✓	✓	✓	X	Canadian privacy laws apply to accounts based in Canada; excludes Hotmail & Gmail	✓
Patient consent required	✓	✓	✓	✓	✓	✓

The following descriptions for each solution contain information on:

- Best use
- Privacy and security
- A step-by-step guide on how to get started
- Technical requirements
- Risks and limitations

ZOOM

***Zoom will be accessible through mobile devices using cellular data until March 31 while IMITS works on increasing bandwidth. Please ensure wifi is turned off on your cellular device.**

Beginning in April Zoom will be available on desktops following clinical priority areas identified by Clinical Programs.* If you would like a Zoom licence, please email officeofvirtualhealth@phsa.ca

Zoom is a tool that enables participants to have Virtual Health Visits, audio calls and chat messaging (during a video session or at any time) and allows participants to share content on their desktops, such as documents and presentations.

Using Zoom, you can connect with patients as well as staff, physicians and clinicians across PHC, PHSA, VCH, BCCSS, FHA, and the other B.C. health authorities.

People outside the health organizations can attend meetings via a guest link.

When to use it

- For one-on-one and group virtual visits (including live screen sharing, file sharing, chat during sessions)

Best use

- Scheduled consult or on-demand (by sharing a link)

Technical requirements

- PHSA staff can use the desktop application installed on your PHSA computers. We recommend using a headset and camera for better audio and video experience.
- Patients can join meetings using most iOS, Windows and Android devices newer than 2012. We recommend smart phone (iOS and Android), tablet (iSO and Android) and Windows PC for patients.

Privacy and Security

- Because the PIA is pending completion by PHSA Privacy Office, under emergency response due to COVID-19, PHSA is collaborating with the Ministry of Health to expedite privacy and security review of Virtual Health solutions on behalf of all B.C. health authorities.

Risk and limitation

- Bandwidth capacity: health authority infrastructure and performance load to support simultaneous sessions and performance (use case dependent)
- Potential to send meeting invite to an uninvited recipient
- Unintended sharing of personal identifiable information
- Lack of meeting invite password encryption
- Policy constraints if user is on external Wi-Fi or public setting

GET STARTED with ZOOM

<small>STEP</small> 1	<p>Introduce Virtual Health to patients</p> <p>Introduce Virtual Health to patients by phone/email/text. Check the technical readiness of your patients. Inform patients of the risk associated with Virtual Health and obtain informed consent to move forward. Make a note of patient’s preference as appropriate.</p> <p>Ensure you are using a mobile device and that the wifi on your device is turned off.</p>
<small>STEP</small> 2	<p>Schedule a Virtual Health Visit</p> <p>Contact the patient to schedule a visit. Obtain the patient’s personal email. When scheduling a visit, the patient’s email must be added in order for them to receive a meeting invite.</p>
<small>STEP</small> 3	<p>Communicate patient Quick Tips as needed</p> <p>Patients can join a meeting from their internet browser without needing to download anything. To join, patients simply click the meeting link provided in their email. The link will open their default browser and take them to the meeting.</p> <p>Supported browsers:</p> <ul style="list-style-type: none"> • Internet Explorer 10 or higher • Microsoft Edge 38.14393.0.0 or higher • Google Chrome 53.0.2785 or higher • Safari 10.0.602.1.50 or higher • Firefox 49.0 or higher
<small>STEP</small> 4	<p>Conduct Virtual Health Visit</p> <p>Prior to the visit, choose a private location with reliable internet access.</p> <p>At the time of the appointment, click the link in your email invitation or copy and paste the link to your Chrome browser.</p> <p>In the unlikely event of technical issues, please switch to a telephone visit with patient. Supporting materials can be sent to patient via email or SMS.</p> <p>After the visit, email/text the patient experience survey link. Document encounter in patient record as usual.</p>

SKYPE FOR BUSINESS



Microsoft Skype for Business (SfB) is a tool that enables participants to talk, see and hear each other. It also has instant messaging (IM) and allows participants to share content on their desktops, such as documents and presentations.

Everyone with a PHSA, VCH and PHC network account has a SfB account. With SfB, you can connect with staff, physicians and clinicians across PHC, PHSA, VCH, BCCSS, FHA and the other B.C. health authorities via instant messaging, videoconferencing and audio conferencing. People outside the health organizations can attend meetings via a guest link. Go to the [IMITS InfoCentre](#) to find resources to get started with SfB.

PHSA Office of Virtual Health (OVH) has led two demonstration projects to conduct Virtual Health Visits with patients using SfB. PIA and STRA has been completed for SfB.

SfB and consumer Skype are different and there is no interoperability at this point. We recommend SfB for connecting with patients virtually in light of COVID-19 if you already have SfB installed on your device.

When to use it

- For one-on-one and group Virtual Health Visits (including live screen sharing, file sharing, chat during sessions)

Best use

- Scheduled consult and follow ups

Technical requirements

- PHSA staff can use the desktop application installed on PHSA computers. Your SfB is integrated with your Outlook email. We recommend using a headset and camera for better audio and video experience.
- Patients can join meetings using most iOS, Windows and Android devices newer than 2012. We recommend smart phone (iOS and Android), tablet (iSO and Android), and Windows PC for patients.

Privacy and Security

- Complete – PIA 20180112

Risk and limitation

- Health authority infrastructure and performance load to support simultaneous sessions and performance (use case dependent)
- Potential to send meeting invite to an uninvited recipient
- Unintended sharing of personal identifiable information
- Lack of meeting invite password encryption
- Policy constraints if user was on external Wi-Fi or public setting
- Known compatibility issues with MacBook
- No analytics available via the solution

GET STARTED WITH SKYPE for BUSINESS

Ready to conduct Virtual Health Visit with patients using Skype for Business? You may find the typical workflow helpful.

<p><small>STEP</small> 1</p>	<p>Introduce Virtual Health to patients Introduce the Virtual Health Visit to patients by phone/email/text. Check the technical readiness of your patients. Inform patients of the risk associated with Virtual Health and obtain informed consent to move forward. Make a note of patient’s preference as appropriate.</p>
<p><small>STEP</small> 2</p>	<p>Schedule a Virtual Health Visit Contact patient to schedule a visit. Obtain the patient personal email. When scheduling a visit, patient’s email must be added as resources. See user guide for step by step instruction.</p>
<p><small>STEP</small> 3</p>	<p>Provide patient Quick Tips Email patients Virtual Health patient checklist.</p>
<p><small>STEP</small> 4</p>	<p>Conduct Virtual Health Visit Prior to the visit, choose a private location with reliable internet access. At the time of the appointment, tap or click the link in your email invitation, follow prompts, and join the meeting. In the unlikely event of technical issues, please switch to a telephone visit with patient. Supporting materials can be sent to patient via email or SMS. After the visit, email/text the patient experience survey link. Document encounter in patient record as usual.</p>
<p><small>STEP</small> 5</p>	<p>Log the result in Tracker OVH will contact you regularly to understand your VH experience so far and provide support as needed.</p>

FACETIME



FaceTime connects you and your patients virtually through audio or video calls from your iPhone, iPad, and iPod touch to other iOS devices, even a Macintosh computer equipped with a FaceTime camera. You can use FaceTime over Wi-Fi or over cellular on supported iOS or iPadOS devices. If you and your patient have any of the above Apple devices, you can get started with FaceTime. You may use PHSA provided iOS devices or your personal iOS devices.

When to use it

- For one-on-one and one-to-group Virtual Health Visits

Best use

- Ad hoc consults
- follow ups
- check-ins

Technical requirements

- You and your patient need an email address associated with Apple ID or phone number
- Access to Wi-Fi or cellular data connection
- Any Apple devices such as iPhone, iPad, iPod touch or Macintosh computer
- Turning off all 'cloud' functions

Privacy and Security

- Because the PIA is pending completion by PHSA Privacy Office, under emergency response due to COVID-19, PHSA is collaborating with the Ministry of Health to expedite privacy and security review of virtual health solutions on behalf of all B.C. health authorities.

Risk and limitation

- Unintended sharing of personal identifiable information
- Lack of meeting invite password encryption
- Apple devices required
- Potential to send meeting invite to an uninvited recipient
- Policy constraints if user was on external Wi-Fi or public setting
- No analytics available via the solution

GET STARTED with FACETIME

<p>STEP 1</p>	<p>Introduce Virtual Health to patients</p> <p>Introduce the FaceTime option to patients by phone/email/text. Check the technical readiness of your patients. Inform patients of the risk associated and obtain informed consent to move forward. Make a note of patient’s preference as appropriate.</p>
<p>STEP 2</p>	<p>Set up Virtual Health Visit</p> <p>Ensure patient is comfortable with FaceTime. Contact patient to schedule a visit. Obtain the patient personal email or cell phone number.</p> <p>When scheduling a visit, patient’s email associated to Apple ID or cell phone number must be added as resources.</p>
<p>STEP 3</p>	<p>Conduct a Virtual Health Visit</p> <p>Prior to the visit, choose a private location with reliable internet access.</p> <p>In the unlikely event of technical issues, please switch to a telephone visit with patient. Supporting materials can be sent to patient via email or SMS.</p> <p>After the visit, email/text the patient experience survey link. Document encounter in patient record as usual.</p>
<p>STEP 4</p>	<p>Log the result in Tracker</p> <p>OVH will contact you regularly to understand your VH experience so far and provide support as needed.</p>

TEXT MESSAGING



SMS (Short Message Service) text messaging is a low-barrier communication method to connect with patients and is available on all cell phones.

When to use it

- Quick check-ins and follow up
- Appointment reminders
- Educational information exchange

Best use

- 2-way exchange of text (SMS) and images (MMS) with patients/clients

Technical requirements

- PHSA cell phone that can be used by the health care team
- Turning off all 'cloud' functions to only use SMS text messaging

Benefits

- Easy to use if you have a PHSA cell phone – no account set up
- Easy for patients to use if they have a cell phone
- Fast, convenient, accessible

Privacy and Security

- Privacy Review completed by OVH

Risk and limitation

- Patient has health care team cell phone number – could make phone calls
- No guarantee that patient is viewing/will respond to messages
- No guarantee that message is received – SMS text message has a 98% delivery rate globally
- Could be sent to the wrong patient
- No encryption/not secure
- Difficult to document text message conversations in patient records (EMR)
- Undefined period of time that patient's cell phone number and text conversations stored on PHSA cell phone
- No analytics

GET STARTED USING SMS TEXT

<p><small>STEP</small> 1</p>	<p>Introduce Virtual Health to patients Introduce Virtual Health to patients by phone/email/text. Check the technical readiness of your patients. Inform patients of the risks associated with texting and obtain informed consent to move forward. Make a note of patient’s preference as appropriate.</p>
<p><small>STEP</small> 2</p>	<p>Add patients cell phone number to your PHSA cell phone Storing patient contact info can include:</p> <ul style="list-style-type: none"> • Patient’s name • PHN • Cell phone number
<p><small>STEP</small> 3</p>	<p>Text the patient tips listed below: Copy and paste these key points to patients:</p> <ol style="list-style-type: none"> 1. Do not email or text us if you have an emergency. If you have an emergency, call 9-1-1 or go to the closest emergency department 2. This phone is not continuously monitored 3. Connect with us for: Quick check-ins and follow up; appointment reminders; educational information
<p><small>STEP</small> 4</p>	<p>Text message with patient</p> <ul style="list-style-type: none"> • Quick check-ins and follow up • Appointment reminders • Educational information
<p><small>STEP</small> 5</p>	<p>Log the result in Tracker Document encounter in patient record as usual. OVH will contact you regularly to understand your experience so far and provide support as needed.</p>

EMAIL



Email is a complementary method of communication, to be used along with other methods. It is a form of one-way communication – it does not allow for an immediate exchange of ideas.

When to use it

Email can be used to communicate with patients/clients for:

- Content that is longer than a text message
- Content often saved for future reference
- Attachments such as prescriptions, instructions, test results, etc.

Best use

- Appointment reminders, follow ups, check-ins
- Provide directional, important and timely information
- Share detailed information and data, such as educational information
- Ensure there's a record of your communication
- Direct the receiver to an online source for more information
- Provide brief status updates

Technical requirements

- PHSA cell phone, desktop or laptop that can be used by the health care team
- Access to the Internet through Wi-Fi or cellular data
- PHSA staff email account
- Patient's personal email account

Benefits

- Secured and encrypted for PHSA staff email
- Patient needs to login to email account with username and password to retrieve email
- Archived

Privacy and Security

Email accounts based in Canada (for example, Canadian providers such as TELUS) are covered by Canadian privacy laws, but those based in the United States (such as Gmail and Hotmail) are subject to American privacy laws.

Risk and limitation

- No guarantee that patient is viewing/will respond to email
- Could be sent to the wrong patient
- Difficult to document text message conversations in patient records (EMR)
- No analytics
- Policy constraints if user was on external Wi-Fi or public setting

GET STARTED with EMAIL

<p>STEP 1</p>	<p>Introduce Virtual Health to patients Introduce the option to patients by phone/email/text. Check the technical readiness of your patients. Inform patients of the risk associated and obtain informed consent to move forward. Make a note of patient’s preference as appropriate.</p>
<p>STEP 2</p>	<p>Add patient’s personal email address to your patient contact list in your PHSA email account Storing patient contact info can include:</p> <ul style="list-style-type: none"> • Patient’s first and last name • PHN • Patient’s email address
<p>STEP 3</p>	<p>Provide patient email tips below Copy and paste these key points to patients:</p> <ul style="list-style-type: none"> • Do not email or text us if you have an emergency. If you have an emergency, call 9-1-1 or go to the nearest emergency department. • This email account is not continuously monitored. • Connect with us for: Quick check-ins and follow up; appointment reminders; educational information.
<p>STEP 4</p>	<p>Email patient</p> <ul style="list-style-type: none"> • Longer content than SMS • Content often saved for future references • Attachments such as prescriptions, instructions, test results, etc.
<p>STEP 5</p>	<p>Log the result in Tracker Document encounter in patient record as usual. OVH will contact you regularly to understand your Virtual Health experience so far and provide support as needed.</p>

TELUS HOME HEALTH MONITORING

The HHM platform uses remote patient monitoring technology to monitor a patient's health, specific to COVID-19, share this information electronically with health care teams.

When to use it

Monitoring and tracking COVID-19 "contact" and "case" patients

Best use

- Monitoring Protocols: BC CDC COVID-19 daily monitoring questionnaire in major languages to be completed asynchronously on their own device
- Patient Access: Web-based Patient application accessible from patient's own device (BYOD) through Chrome browser
OR
- Patient Tablet delivery across BC with remote installation support if patient does not have access to a device or to the internet (to promote equitable access)
- Clinician Access: Web-based Clinician Dashboard to monitor and track patients accessed from any HA-approved hardware and across clinical pathways

Technical requirements

- Patient's email address to set up account → access on web browser only (no app download)
- Health care team member needs account → access on web browser only

Benefits

- Monitoring of COVID-19 contact and case patients in your health authority
- Daily questionnaire for patients to answer and provide health status

Privacy and security

- Privacy review pending, Ministry of Health reviewing COVID-19 HHM
- Security review pending, PHSA reviewing COVID-19 HHM

Risk and limitations

- Cloud services required to manage large demands on system
- Privacy and Security elements with identified medium to low risks
- Accessible on health authorities sites only – pending amendment from MoH to enable access from anywhere and greater flexibility
- Technical support/trouble-shooting: Currently TELUS offers technical support to all users of the HHM system, the introduction of the BYOD models requires a new support model be

developed. Working closely with providers to identify resources and build infrastructure to support technical components.

GET STARTED with TELUS HHM

Note: Clinical workflow recommendations from TELUS for HHM are pending, and not available at this time. We hope to have this information for you shortly.

AFTER THE PANDEMIC: INTEGRATE VIRTUAL HEALTH INTO YOUR PROGRAM

The solutions identified in this COVID-19 Virtual Health toolkit have been matched to clinical priorities and are ready for immediate use. While this toolkit has been developed specifically for use during the COVID-19 pandemic, there are opportunities to collaborate with the Office of Virtual Health on initiatives that are testing longer-term solutions for Virtual Health.

Step 1: Identify your clinical need

Step 2: Select the right solution(s) for your clinical need

Step 3: Connect with OVH

Tell us how we can help you. Send us an email at officeofvirtualhealth@phsa.ca and an OVH lead will be assigned to your program to help you pick the right solution and get started.

Benefits of connecting with OVH

- **Seamless support:** OVH will tag team with IMITS to provide you all the seamless support you may need. IMITS has expertise in technical support, information management and device management; OVH has expertise for integration of Virtual Health into your care delivery model. As a team, we will provide you testing support, technical support, troubleshooting, and other need-based support.
- **Reporting and analytics:** OVH will monitor the overall status of Virtual Health at PHSA. This includes reporting and analytics services, so you can focus on what you do the best – provide quality care.

APPENDIX

I. PATIENT CONSENT FORM

Consent to participate

Client Name: _____ Client Cell phone number: _____

Client email associated to solution ID: _____

Client understands points listed above and agrees to use solution to communicate with provider

Date: _____ (DD/MM/YYYY)

II. VIRTUAL HEALTH PATIENT AGREEMENT

[Insert your program name here] is pleased to offer you Virtual Health as an option to receive care and services. Virtual Health will enable you to stay at the comfort of your own home in light of the COVID-19.

Virtual health is a patient-centered care model focused on connecting patients, families and providers, through the use of technology to promote wellness, specialty care and improved outcomes. We believe using technology to deliver health services is the natural evolution of health in the digital world, and many patients have requested virtual options.

With Virtual Health, your providers can connect with you via Virtual Health Visit and Clinical Digital Messaging. In a Virtual Health Visit you are able to see, hear and speak to your health care providers in the same way as an in-person visit, using technology. Clinical Digital Messaging will be delivered via SMS text and email.

In collaboration with you, we will assess, evaluate and continuously improve our Virtual Health service.

If you agree to participate, you will be asked to share your email address with our clinical program in accordance with the Freedom of Information and Protection of Privacy Act.

If you choose to participate, it is important for you to understand:

- We will require your email address to send you the visit invitations, instructional materials, survey links, and other information as needed.

- You are required to have an electronic device. We recommend Android, iOS, Mac, and Windows devices newer than 2012.
- PHSA staff do not check emails or texts every day or at all hours.
- Text and email are not appropriate for emergency. If you have an emergency, call 911.

We would like to inform you that:

- Email message - Emails sent to some webmail services (e.g. Gmail, Hotmail etc.), may be stored/routed outside of Canada (for example, in the United States).
- SMS text - Depending on who your cell phone plan provider is with (such as Telus or Shaw), appointment information and general check-in messages we send to you may be stored and routed outside of Canada.

Due to the fact that future emails and text messages will contain personal information about you, including your name, email and appointment information, the Freedom of Information and Protection of Privacy Act requires that we obtain your consent before we continue.

We will collect the personal information listed below to confirm your identity and enable you to access Virtual Health visits. We will only send your personal information to the personal webmail address which you have provided to us. All of the information which you provide to us, including information about the care you receive, will be kept completely confidential.

If you choose not to consent, you will not be able to access Virtual Health.

CONSENT: Do you voluntarily agree and give your consent for Virtual Health [Insert your program name here] to email and text your personal information to you?

OVH and the Digital Health Team at PHSA have developed a **Virtual Health toolkit that is specifically for use during the COVID-19 pandemic**. It features solutions that you may already have so you can deliver services to your patients efficiently.

OVH and the Digital Health Team at PHSA have developed a Virtual Health toolkit for use during the COVID-19 pandemic. It features solutions that you may already have so you can continue to provide care to your patients and keep them at home.