

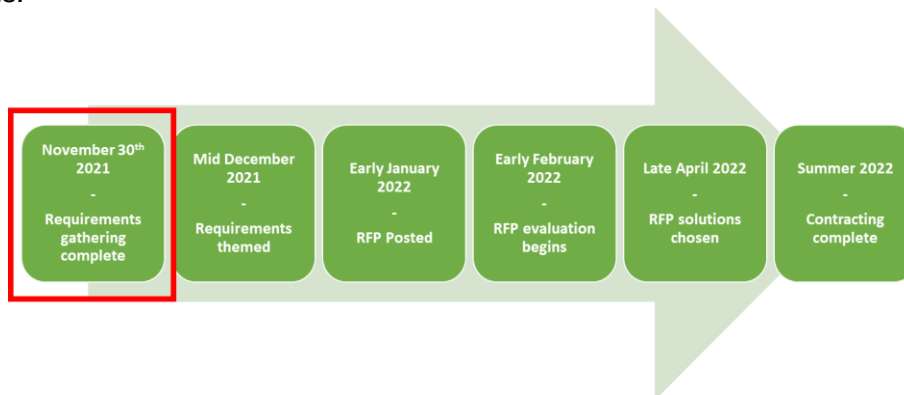
# PHSA Office of Virtual Health Remote Patient Monitoring Request for Proposal Clinical Requirements Gathering Session: Pre-session Overview

## Background

The PHSA Office of Virtual Health (OVH) team is embarking on a Request for Proposal (RFP) process to find new Remote Patient Monitoring solution(s) to better meet clinical needs. OVH participated in a national Request for Pre-Qualified Vendors (RFPQ) with Canada Health Infoway in the spring of 2021. During this process we reached out, and engaged, many of you and your clinical leaders to document and share clinical requirements. In addition, we have been working with many PHSA program areas on current RPM initiatives (BCEHS, BC Women's, BC Cancer, BCCDC) which has also helped us understand and learn about additional clinical needs. At this time we are looking to validate, and add to our list of requirements, as well as provide an opportunity for others to participate if they weren't able to during the initial RFPQ process that took place earlier in the year.

## Timelines for RFP Process

*We are in the "Requirements Gathering" stage where we are focusing our efforts on validating and gathering clinical requirements.*



## Clinical Engagement and Requirements Gathering

Understanding clinical and patient requirements is a key step in moving towards obtaining a solution that results in quality care and positive clinician and patient experiences. During the clinical requirements gathering session we will ask a series of questions and your responses will help provide the clinical requirements. There is a lot of cover in a 1 hour session, therefore we will be using an online interactive tool during the session in order to try and obtain as much information as possible, while being mindful of your time.

Below is the list of questions we will ask, as well as some of the most common answers (or clinical requirements) that we have heard so far (Appendix A). Reviewing these is not mandatory prior to the session, but review beforehand may give you some time to gather your thoughts before the session.

If in the 1 hour timeframe we cannot cover everything, we also have an online survey option with the same questions that you can use that to finish or add additional requirements you think of after the session.

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## Appendix A: Questions and Compiled Responses from RFPQ

Clinical Question		Most common answers we have heard so far	
Current Use of HHM			
If you are currently using HHM, what are beneficial features? Are there any shortcomings or lessons learned?		<ul style="list-style-type: none"><li>▪ Able to obtain information from patients regularly</li><li>▪ Able to see themes in the patients' data and recognize if interventions are needed earlier</li><li>▪ Able to track the patients' data over time</li><li>▪ Need increased ability to customize the monitoring interviews at the patient level</li><li>▪ More flexibility in creating questions for the monitoring interviews</li><li>▪ Equipment is not always reliable</li><li>▪ To submit biometric data it requires the patient to hit a "submit" button on the tablet</li><li>▪ Would like to use some biometric devices that are not currently available</li><li>▪ Would like the data to flow into the clinical information system</li></ul>	
Objective for RPM			
How do you envision RPM being used with your patients? Key objective, patient population, and problem you are trying to solve.		<p>Population Type</p> <ul style="list-style-type: none"><li>▪ Acute and chronic condition</li><li>▪ Community and primary care</li><li>▪ Specialty care, special populations, complex care</li><li>▪ Marginalized populations</li><li>▪ General wellness</li></ul> <p>Objectives:</p> <ul style="list-style-type: none"><li>▪ Questionnaires to clients – recognize deterioration sooner, early intervention, reduction of readmission and hospitalization</li><li>▪ Better understand the side effects of treatment and intervene earlier to provide support with side effects</li><li>▪ Questionnaires to inpatients at predetermined intervals to help clinicians manage caseload and identify those needing additional support</li><li>▪ Support education for patients as they learn how to live with their condition</li><li>▪ Check in with patients on a regular basis and have a solution to help flag if further follow up is needed</li><li>▪ Support patients after discharge as they go home</li></ul>	
Monitoring Capabilities, Device, and Features			
Will you require support to do the monitoring or will you manage monitoring within your own program?		<ul style="list-style-type: none"><li>• Yes, I wouldn't be able to do the monitoring myself, I would be looking for a service that I can refer patients for monitoring</li><li>• Yes, I would like to do the monitoring within our clinic or department but this would be hard with the current number of staff. We would need help with onboarding new staff or roles</li><li>• No, we could rearrange how we work in our clinic and do the monitoring within our current team</li></ul>	

Do you envision using biometric devices as part of the monitoring? If so which ones? HR, blood pressure, oxygen saturation, temperature, blood sugar, weight, spirometer, stethoscope? Others?	<ul style="list-style-type: none"> <li>Heart rate, blood pressure, O2 sat, respiratory rate, temperature</li> <li>Spirometry and lung function</li> <li>Cardiac tracing (ECG, PEP)</li> <li>Physical activity, sedentary times, pedometer</li> <li>Height and weight in kg</li> <li>Blood glucose</li> <li>INR/coagulation status</li> <li>Our patients have devices they use that already collect data (cardiac implanted devices or own glucometers) we would like that data used</li> </ul>
How often would monitor quantitative (measurable) data?	<ul style="list-style-type: none"> <li>Every day</li> <li>Few times a week</li> <li>Custom, depends on the patient's needs at the time</li> <li>Sporadic but approximately once a month</li> <li>Never, I wouldn't use biometric data with my patient population</li> </ul>
What and how often would you monitor and gather qualitative data? (e.g. Assessment questions, standard scales, food intake, activity logs etc.)	<p>What?</p> <ul style="list-style-type: none"> <li>Mood</li> <li>Food and drink intake</li> <li>Physical well being and symptoms (nausea/vomiting)</li> <li>Medication side effects</li> <li>Pain</li> <li>Social experience and interactions</li> </ul> <p>How?</p> <ul style="list-style-type: none"> <li>Use existing standard scales</li> <li>Answer regular questions</li> <li>Being able to provide a log (e.g. Food intake log)</li> <li>Free text</li> </ul>
Do you want to provide patients devices or enable them to use their own devices (tablets, phones, wearables), or a combination of both?	<ul style="list-style-type: none"> <li>They have their own biometric devices now, we would like to integrate with those (such as their own glucometer or consumer purchased BP)</li> <li>Most of my patients use a phone or technology and want to use these</li> <li>Looking for a combination so they can use their own communication device if they like, but if they don't have one we would like to offer one to them</li> <li>Would like to use a combination of patients' own communication device (phone, tablet) with provided biometric devices</li> </ul>
Do you want to be alerted when patient's data is out of range or depending on how they answer their assessment questions? If so, how would you want to receive the alerts? Who should receive the alerts? Do you want the solution to trigger or provide information or education messages to the patient?	<ul style="list-style-type: none"> <li>Monitoring clinician should get the results and be alerted when out of range</li> <li>Ability to divert alerts to another care team member when staff busy or on vacation</li> <li>Alerts based on single out of range value, or trends or a combination of single value and symptoms</li> <li>Would like to be notified (text message, email) if patient goes out of range on something pre-determined</li> <li>Layered alerts – high, medium, low and specific triggers for each</li> </ul>
Do you want the ability to collect non-standardized information such as patient comments, notes, or free text?	<ul style="list-style-type: none"> <li>Patient to enter info in a variety of ways custom per program</li> <li>Free text – long paragraphs or limited # of characters</li> </ul>

Do you want the ability to send reminders to patients? I.e. to complete monitoring or other care related reminders?	<ul style="list-style-type: none"> <li>Customized patient schedule for the day i.e. When to take medications, appointment reminders, daily routine for those with executive functioning challenges</li> <li>Reminder via fitbit or wearable technology so client doesn't have to log in to another platform</li> <li>Patient to be able to customize how often they receive reminders and what reminders they want to receive</li> </ul>
What length of time you would want to monitor your patient? I.e. Weeks, months, years, lifetime etc.	<ul style="list-style-type: none"> <li>Ability to monitor and compare trends based on specified time periods</li> <li>Monitor for a few weeks</li> <li>Monitor for a few months</li> <li>Monitor the patients entire lifetime</li> </ul>
<b>Patient Experience, Digital Literacy, Accessibility</b>	
Do you want the RPM solution to be available in other languages?	<ul style="list-style-type: none"> <li>Yes provided in multiple languages</li> </ul>
What other accessibility needs should we consider for your population?	<ul style="list-style-type: none"> <li>Hard of hearing, visual impairment, cognitive deficits</li> <li>Homeless, shelter, poverty</li> <li>Correctional centres</li> <li>Rural areas and poor network connectivity</li> <li>Lack of access to technology</li> </ul>
What is your patient's preferred method(s) of communication? I.e. Phone, texting, email, other.	<ul style="list-style-type: none"> <li>Text, email, video call, mobile app</li> <li>Custom per patient</li> <li>Phone calls</li> </ul>
What types of device do your patients commonly use? Computers (desktop or laptop), smart devices (phones, tablets, iPads), Others (wearables etc.)	<ul style="list-style-type: none"> <li>Basic phone</li> <li>Smart phone and computer</li> </ul>
If recommending RPM to patients, what type of support would you want them to receive, and who should be responsible to provide this?	<ul style="list-style-type: none"> <li>Want the ability to customize the modality depending on the patient and their preference</li> <li>Clients have low digital literacy so need a solution that is simple, intuitive and easy to use</li> <li>Have something that patients can call for technical help so the clinicians don't have to provide troubleshooting</li> </ul>
Where do your patients tend to reside? (Specific region or all over BC? Urban or Rural or both?	<ul style="list-style-type: none"> <li>Rural, remote</li> <li>Travelling internationally/nationally</li> <li>All over BC</li> <li>Within and outside the lower mainland</li> </ul>
<b>Care Team, and Communications</b>	
What other care providers are involved in your patients care outside of your direct care team? Do you want to share data with them? How would you want to share the data?	<ul style="list-style-type: none"> <li>Groups: GP, specialty providers, allied, clinicians, student and residents, counsellors and therapists, art and music therapy, pharmacists</li> <li>Need different permission and user types so they can login and see the data</li> <li>Would like the ability to generate reports and send those to other care providers in the patients circle of care</li> <li>Ability to assign actions to healthcare providers outside the program</li> <li>Integrate with primary and community EMR's</li> </ul>
<b>Clinician Experience</b>	
What type of technology does your care team prefer to use i.e. Computer, phone, tablets or iPads.	<ul style="list-style-type: none"> <li>All</li> </ul>
Would you prefer to access the RPM software from a web browser, desktop	<ul style="list-style-type: none"> <li>Ability to access from desktop, laptop, smartphone</li> <li>Access from on site at hospital and from home remotely</li> </ul>

app, app on your phone or combination? Where will you access the software from (work network/home/private office)?	<ul style="list-style-type: none"> <li>Staff shouldn't have to log in to another device or platform a text or email would be more accessible</li> <li>Combination of all and outreach only have cell phone so from phone</li> </ul>
What type of customization do you want from the solution? i.e., based on workflow, patient interviews, dashboard layout.	<ul style="list-style-type: none"> <li>Ability to customize to the patient's needs, ask the questions and monitor what is appropriate and needed for that patient</li> <li>Ability to communicate and do what is right for the patient, do they need regular text check-ins only or do they need a full monitoring plan they do on a regular basis</li> </ul>
<b>Documentation and Electronic Health Record Integration</b>	
Do you use electronic health records to document patient information? List all	<ul style="list-style-type: none"> <li>CST Cerner</li> <li>Plexia</li> <li>Meditech</li> <li>Paris</li> <li>Promis</li> <li>Firstnet</li> <li>ichart</li> </ul>
Would you want to document in the RPM solution?	<ul style="list-style-type: none"> <li>Require ability to document via multiple modes – electronic health record, paper charts</li> </ul>
Is there any type of report that you will need from the RPM solution? Will you need to export reports or data from the RPM solution? Ability to print, email or fax?	<ul style="list-style-type: none"> <li>Would like to generate reports with the patient's trends to other care providers</li> <li>Would like to see the patient's trend over time</li> <li>Would like to see reports on how the system is being used and monitor for quality improvements purposes</li> </ul>
Do you obtain data from other solutions that you would want incorporated into your monitoring or the RPM solution? i.e. Data from an implanted device or home ventilator?	<ul style="list-style-type: none"> <li>Ventilators</li> <li>Feeding pumps</li> <li>Implanted cardiac devices</li> <li>glucometers</li> </ul>
<b>Support</b>	
Do you currently provide support to clinical programs to implement and sustain RPM solutions? Who provides this support? What would be helpful to you and your team?	<ul style="list-style-type: none"> <li>Yes right now we provide the patients with their RPM kit and help them set it up</li> <li>The vendor provide technical support, but still clinicians end up helping the patient</li> </ul>
<b>Other</b>	
Are there any other requirements we haven't asked about?	
Would you want the ability to collect patient feedback on the solution/service directly from the RPM platform?	