Project Charter

RPM: Remote Patient Monitoring

BGW Analysts (Group 6)

National Project Management System

Business Projects-IT-Enabled

Analysis Phase

Public Works and Government Services Canada
Travaux publics et Services gouvernementaux Canada

Canada

This NPMS (National Project Management System) document template is based on the Treasury Board Project Charter Template.

Catalogue No. ISBN

This document is available in alternative formats
and on the Treasury Board of Canada Secretariat's Web site at the following address:www.tbs-sct.gc.ca

This NPMS (National Project Management System) document template is based on the Treasury Board Project Charter Template.

© Her Majesty the Queen in Right of Canada, represented by the President of the Treasury Board, 2008
Catalogue No. ISBN

This document is available in alternative formats
and on the Treasury Board of Canada Secretariat's Web site at the following address:wwww.tbs-sct.gc.c

Table of Contents

Section 1. Charter Introduction

Document Change Control

Revision Number	Date of Issue	Author(s)	Brief Description of Change
1.0	October 8, 2023	BGW Analysts	First draft of project charter
1.1	October 10, 2023	BGW Analysts	Revisions of project charter
1.2	October 16, 2023	BGW Analysts	Finalization of project charter

Executive Summary

BGW has been tasked with creating a project which aims to provide a solution for remote patient monitoring for the UVic health authority. This project is needed to provide both patients more user-friendly devices and clinicians with better workflows. In the current state, patients are unsatisfied with current devices and clinicians have difficulty navigating through the confusing data monitoring interfaces. So, UVic Health Authority has expressed their need for this project. BGW aims to provide a solution that is useable by both clinicians and patients.

The project main goals are as follows:

- Improve patient satisfaction by elevating quality of care and patient outcomes.
- Improve care provider satisfaction by creating a project that at the very least does not add any additional burden to the care team.
- Increase functionality for the remote patient devices, such examples include voice-calling function that allows patients to reach care providers 24/7.

This may be subject to change in further iterations of this project if the contract is renewed or extended.

Throughout this project the main milestones for the project are project approval, completed development of wireframes, the creation of functional prototypes, comprehensive testing of the device and final approval/ deployment of the device. The key deliverables for the project are the kick off meeting, the project management plan, meeting notes, and performance reports.

Project risks are data integrity, privacy/security, budget overrun. After assessing these risks, we aim to mitigate them during the planning and imitating stage of the project. Data integrity makes sure to ensure recoverability and connectivity—all of which are important to the UVic health authority. Privacy and security are important to consider as patient information is sensitive in nature. It has been expressed by the UVic health authority that budget overrun must be minimized. Thus, there are plans to ensure that budget information is monitored by project managers throughout the process.

The estimated total cost for this project is $240, 000.

Authorization

This project charter formally authorizes the existence of the project, RPM: Remote Patient Monitoring, and provides the project manager with the authority to apply organizational resources to project activities described herein. If there is a change in the project scope, the project charter will be updated and submitted for re-approval.

_____ _____

Maxine Stroganoff Date
Executive Sponsor
Co-Director, UVic Health Authority

_____ _____

Jeremy Constanople Date
Project Sponsor
Home-Health Department Manager, UVic Health Authority

_____ _____

Kacey Friesen Date
Project Manager
System Analyst, BGW Analysts

Section 2. Project Overview

Project Summary

Due to the dissatisfaction with the current UVic Health Authority remote patient monitoring devices, a new device is needed to improve the current system. This project aims to provide clinicians and patients with better user experience when using the device. It aims to improve clinician workflow processes and improve usability and user experience for patients. The features of this device will include a clear user interface, GPS functionality, and connectivity with care providers 24/7.

2.1.1 Project Goals, Business Outcomes and Objectives

Currently, the devices used by the UVic Health Authority for remote patient monitoring are out-dated, lack functionality, lack interoperability, and have poor user experience. The RPM project aims to provide a modern solution to these problems. Listed below are major goals, objectives, and business outcomes the project needs to achieve to satisfy stakeholder and complete the project. Overall, the goal is to improve the current device by ensuring that the solution meets all requirements through continual communication and prototype development.

No.	Goals	Objectives	Business Outcomes
1	*Improve Patient Satisfaction*	• *Provide a solution elevate the quality of care and overall experience*	• *Increased patient satisfaction*
2	*Improve Interoperability*	• *Integrate the device with the existing health information system*	• *Reduced manual system interface*
3	*Improve Patient Safety*	• *Implement an accident alerting system* • *Utilize a GPS function*	• *Decreased hospitalization rate* • *Reduced severity of incidents*
4	*Improve Communication*	• *Provide a voice-calling function*	• *Increased patient satisfaction*
5	*Improve Care Provider Satisfaction*	• *Provide a solution that does not create an additional burden to the care team*	• *Increased care provider satisfaction* • *Increased care team acceptance*
6	*Improve Stakeholder Satisfaction*	• *Provide online survey for stakeholder request*	• *More quickly response stakeholder request*

2.1.2 Project Scope

The RPM project will ensure the development of a device that is usable, user friendly, and functional is delivered to the UVic Health Authority. This project is not only about device creation but aligning technology with current healthcare demands.

2.1.3 Scope Definition

This project aims to deliver a comprehensive remote patient monitoring device which will enhance both provider experience and patient care. Key functionality of this project is to ensure that patients have comfortable and user-friendly device to carry around with them and for healthcare providers they have a device that seamlessly integrates with their current workflows. Some example features of this device are constant connectivity with healthcare providers, an integrated dashboard for care providers, and limited GPS location tracking.

2.1.4 Boundaries

Activities In Scope	Activities Out of Scope
1. Design a clear user interface for clinicians	1. Make different screens for extra dashboards for clinician view
2. Establish a clear communication channel	2. Establish multiple communication channels
3. Develop a user-friendly interface for patients by reducing abilities	3. Interface is only available on this device
4. Implement GPS function localized to within the health authority	4. Potential for expansion of GPS location to other health authorities
5. Lighten weight for devices	5. Create a case that can attach to the device
6. Clinicians can log into the system and view the assigned devices	6. Providing clinicians the ability to edit this list
7. Training program will be provided for clinicians and patients using the device	7. Communication with providers not using the device and family members of patients
8. Patient monitoring can be filtered based on high, medium, and minimal risk	8. Other filters are not supported
9. Provider login system	9. Advanced multi-factor authentication will not be included in the scope

For the each of the scope boundaries, they will be explained below.

1. For clinicians, there must be an interface that is usable and clear to ensure quality of care is high. This interface is a necessary component of the project scope. On the other hand, having additional dashboard may help clinicians but it is out of scope.
2. This device must have a clear communication channel to ensure patients are able to communicate with healthcare providers and ask for help when necessary. Due to the nature of this project, multiple communication channels will not be a part of the project scope.
3. For patients, having an easy-to-understand interface for the device is important to ensure that information about the device and the patient can be utilized. For example, it should be clear to the patient how to call for help and check on information such as battery life. This interface is only available on this device not available for different sized monitors.
4. The GPS functionality and tracking abilities will be localized to within the health authority. This will ensure more precise accuracy of the device and ensure clinicians are not being forced to supervise large areas with many different patients. This is important to ensure quality of care.

5. The current device has been stated to be very bulky and heavy after a survey has been conducted from current patients. This project aims to reduce the device weight by 30%. It was also suggested to create a case to attach the device to, but this is out of scope.
6. Clinicians are required to login to view the managed list of devices to ensure a continuum of care. Due the safety precautions only certain members of the technical support team and security team have access to edit the list.
7. Training on device usage will be provided to clinicians and patients to ensure they know how to effectively use the device. There will be optional training sessions and a short manual provided to patient and three mandatory training sessions for clinicians.
8. Clinicians can filter patients based on risk. This will allow clinicians to have enhanced information on those who are at higher risk and require more attention. But this is the only filter available for
9. There will be a provider login system when viewing the dashboard to ensure a level of safety for patients. But due to the limited scope and period this will not include multi-factor authentication (MFA).

Milestones

Project Milestone	Description	Expected Date
1. RFP	Create a Request for Proposal	October 6, 2023
2. Kick-off meeting	Meeting with stakeholders and vendor	October 10, 2023
3. Requirement gathering	Communicate with healthcare providers and patients to ensure prioritization of functionality and features are considered	October 16, 2023
4. Wireframe development	Ensure that wireframes are developed and available for demonstrations for the UVic Health Authority approval team	October 23, 2023
5. Prototype development	Prototypes will be developed to ensure that	November 2, 2023
6. Final product	Produce the final product	November 28, 2023
7. Approval from stakeholders	Stakeholders sign off	December 4, 2023

Deliverables

Project Deliverable 1: Integrated Remote Patient Monitoring (RPM) Device	
Stakeholder:	UVIC Health Authority, BGW Analysts
Description:	A comprehensive monitoring system that unit various other monitoring devices into one cohesive system. This system will be designed to be user-friendly for patients, while also providing clinicians with up-to-date data access and interaction abilities.
Acceptance Criteria:	- The system successfully integrates the various monitoring functions outlined by UVic Health Authority - It demonstrates ease-of-use in preliminary tests with a select group of patients and clinicians - It has a high compatibility with UVic Health’s existing health information system

Project Deliverable 1: Integrated Remote Patient Monitoring (RPM) Device	
Due Date:	**31st October 2023**
Project Deliverable 2: Add 24/7 Voice-Calling Function to Device	
Stakeholder:	UVIC Health Authority, BGW Analysts
Description:	A reliable voice-calling feature that is integrated into the remote patient monitoring system, allowing patients to instantly connect with their designated care team.
Acceptance Criteria:	- Seamless voice connectivity with minimal disturbances - Fast response times from the healthcare team during testing - Positive feedback from test group regarding its clarity and reliability
Due Date:	**15th November 2023**
Project Deliverable 3: Comprehensive Training and Documentation	
Stakeholder:	UVIC Health Authority, BGW Analysts
Description:	Detailed and easy to understand user manuals and training sessions for both patients and healthcare providers to ensure efficient and smooth use of the new system.
Acceptance Criteria:	- Training sessions cover all primary functions of device - A significant reduction in queries or issues reported by users post-training - Positive feedback from healthcare providers on the clarity and utility of training documentation and sessions
Due Date:	**1st December 2023**

Dependencies

Dependency Description	Critical Date	Contact
The project requires basic hardware and a stable network connection from another project for infrastructure upgrades	October 25	Amelie Wang
New policies and procedures related to the patient monitoring device need to be released along with this project	November 2	Eleonora Stoynova, Jerry Jiang
Training materials for both patients and physicians are to be released at the same time	November 25	Sherry Gu, Risk Kuang
The altering system and voice calling system for this project are required for a related project for nursing	December 12	Kacey Friesen

Project Risks

No.	Risk Description	Probability (H/M/L)	Impact (H/M/L)	Risk Management Plan	OPI

No.	Risk Description	Probability (H/M/L)	Impact (H/M/L)	Risk Management Plan	OPI
1	Data Integrity	L	H	Implement regular data audits and backups. Provide training to clinical staff on data entry and validation procedures.	Katie Yoo
2	Privacy/ Security	M	H	Incest in encryption software and multi-factor authentication. Conduct regular security audits and update security protocols.	Eric Who
3	Budget Overrun	H	M	Monitor expenses closing with weekly reviews. Set aside a contingency budget. Implement a change control process for any scope changes.	Samantha Chu

Section 3. Project Organization

Roles and Responsibilities

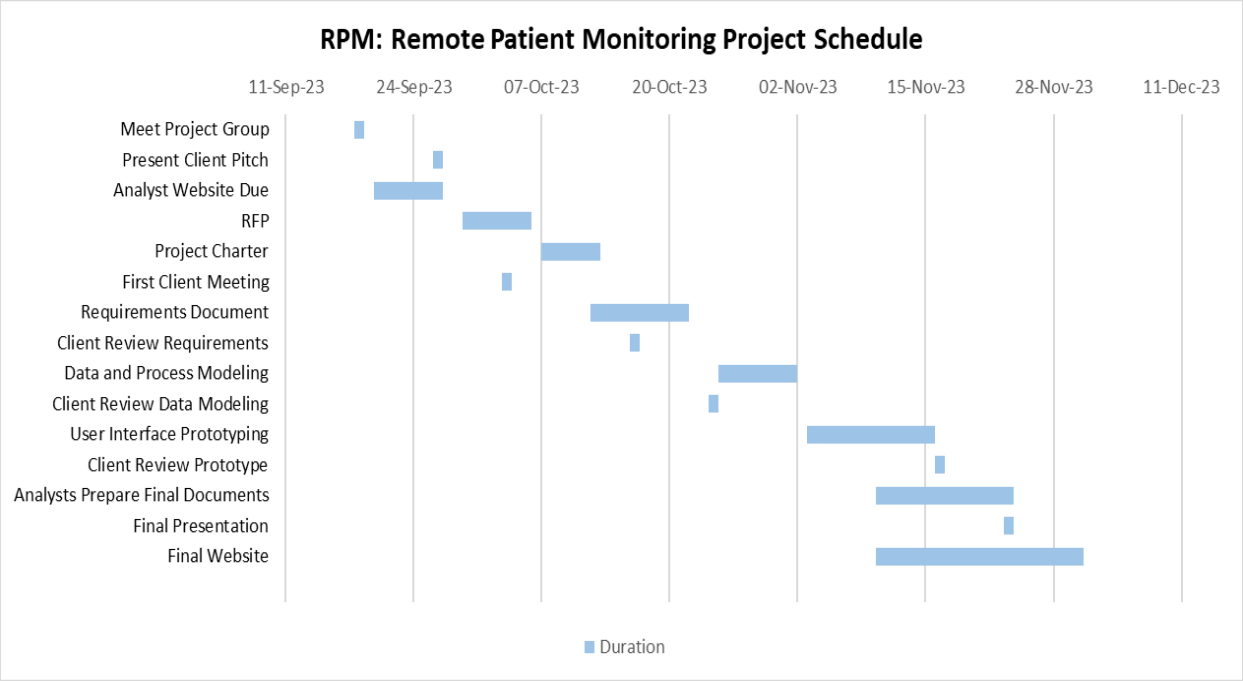
Project Role	Responsibilities	Assigned to
Project Manager	**Gather Request, Design, Deployment**	**Kacey Friesen**
Business Analysts	**Build the system, Testing, Operation**	**Amelie Wang, Eleonora Stoynova, Jerry Jiang, Sherry Gu, Risk Kuang**
Project Review Committee	**Review and approve project applications/ proposals, provide guidance for project based on expertise**	**UVic Health Authority Committee**

Work Breakdown Structure

Task Name	Description
Kick Off Meeting	• **Meet with stakeholders to ensure they support the project**
Request for Proposal	• **Create a document listing the background information and key functionality of the device**
Meet with Vendor	• **After selecting a vendor, have an initial meeting to discuss the project and gather support**
Gather Requirements	• **Reach out to clinics and hospitals to see what the key requirement for the device is and prioritize those**

Task Name	Description
Create Project Charter	• **Create a document that goes over the project at an elevated level**
Create Requirement Documents	• **Create a document that lists all the requirements in terms of priority and iterations of the device implementation**
Create Project Management Plan	• **Determine the budget** • **Plan for quality, human resource management, risk management, stakeholder management** • **Perform qualitative risk analysis**
Burndown Chart	• **Create and manage a chart to determine project progress**
Include a 24/7 Voice-Calling Function	• **This is a key functionality that must be included in the care provider interface**
Create an Integrated Remote Patient Monitoring (RPM) Device	• **Create the prototype which includes all functionality** • **Ensure test and incorporate user feedback**
Provide training and create clear documentation	• **After prototype creation is complete, ensure that there is training for end users** • **Ensure documentation remains clear and concise**
Finalize website	• **Review the final documentation for the project and upload to the website**
Official sign off on project	• **Get key stakeholder to sign off on the project and shift work to operational team**

Gantt Chart



Section 4. Glossary and Acronyms

Term	Definition
Remote Patient Monitoring	- Use of a technology to collect health data from a patient then transmit it to healthcare providers for analysis - Enables real-time monitoring of patient health outside of a hospital
Wireframe	- A visual representation of an application's layout to show the arrangement of interface elements - Used to outline structure and functionality in the design process before finalizing user interface
Acronym	**Name in Full**
MFA	Multi-Factor Authentication