Telehealth API

High Level Business Requirements Document

**Version: 1.0**

**Author: Adam Smeal**

**Version**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Changes | Date Created | Author |
| 1.0 | First Draft |  |  |
|  |  |  |  |

**Stakeholders**

|  |  |  |
| --- | --- | --- |
| Role | Name | Position |
| Project Sponsor \* |  |  |
| SME |  |  |

\* *denotes signing authority*

Table of Contents

[1 Executive Summary 4](#_Toc445720478)

[1.1 Project Overview 4](#_Toc445720479)

[1.2 Business Objectives 4](#_Toc445720480)

[1.3 Assumptions 4](#_Toc445720481)

[1.4 Dependencies 4](#_Toc445720482)

[1.5 Constraints 4](#_Toc445720483)

[2 Risk Analysis 5](#_Toc445720484)

[3 Requirements 6](#_Toc445720485)

[4 Appendix 7](#_Toc445720486)

# Executive Summary

## Project Overview

*Given the urgency of needing to stand up a Telehealth program and limitations of American Well, we have decided to stand up a custom solution based on Microsoft Teams.*

## Business Objectives

1. Seamlessly Integrate with scheduling systems (RMS/SES/Varian) via HL7
2. Integrate with provider calendars
3. Email Patient link to meeting
4. Connect patient and provider via video conferencing
5. Maintain supportability for patient and/or provider issues

*[State the benefits of the project. This section may be omitted if the benefits have already been documented in a project charter/scope document.]*

## Assumptions

1. Teams is licensed
2. Anonymous users can join meeting
3. All providers have teams
4. All APIs available

*[ State any and all assumptions relevant to the project.]*

## Dependencies

1. Azure hosting
2. Client credentials for teams
3. Graph APIs
4. EWS APIs

*[State any relevant dependencies that may affect the project or what is stated in the requirements document, i.e. other projects, hardware or software purchases, etc.]*

## Constraints

1. Time
2. People

*[Any limitations imposed on the solution that do not support the business or stakeholder needs.]*

# Risk Analysis

|  |  |  |
| --- | --- | --- |
| # | Risk Description | Risk Mitigation Plan |
|  |  |  |
|  |  |  |

*[State any known risks to the project. Risk may be added to the document at any time during the project as more information is discovered. This section may be omitted if risks are tracked in a separate document.]*

# Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Type | Description | Priority | New/Existing | Source |
|  | Functional | Accept appointment requests | mandatory | new | ACS |
|  | Functional | Place event on calendar | mandatory | new | ACS |
|  | Functional | Email Patient Invite | mandatory | new | ACS |
|  | Functional | Accept appointment update requests | Mandatory | New | ACS |
|  | Functional | Accept appointment cancel requests | Mandatory | New | ACS |

*[State WHAT capability/functionality is desired to achieve the business objective.]*

* *Type: list the type of requirement*
  + *Functional*
  + *Interface*
  + *Performance*
  + *Security*
  + *Reporting*
* *Description: the text of the requirement*
* *Priority: mandatory, optional*
* *New/Existing: whether the current solution fulfills this requirement or it is new (optional for new solution)*
* *Source: the initials of the person/stakeholder who asked for the requirement*

# Appendix

Diagram

Description automatically generated

1. Mirth receives HL7 from scheduling system
2. Mirth calls Telehealth API (via APIM)
3. API creates teams meeting as WSA account
   1. This is because at the time Graph API only allows meetings to be scheduled as a user not on behalf of user (RBOC)
   2. This also means that every Teams meeting that brings a patient and provider together is scheduled as the WSA user and the patient and provider are attendees
4. API puts event on calendar
   1. New scheduling system moved provider calendars to 0365 so graph is used with client creds
   2. Old scheduling system requires EWS so any appt from RMS provider will fall back to EWS
      1. Brian Kelly had to create a special user with special perms to manage these calendars (creds in code)
5. API emails patient
   1. This also goes out via graph an the template is hardcoded in html in a file in the code, better approach would be sendgrid
6. API supports updates
   1. Basically checking old value vs new and making changes as necessary (ie, if appt time changes it will move the calendar event on provider calendar)
   2. Updates record in cosmos
7. API supports cancels
   1. If its cancelled we remove the event from calendar and update the record