

DEPARTMENT OF VETERANS AFFAIRS

Grassroots Innovation

VHA Innovation Program (10P7I)

VA118-12-C-0067

Remote Veterans Apnea Management Portal (REVAMP)

Monthly Progress Report

March 5, 2013

Intellica

Improving Healthcare Through Intelligent Computer Applications

REVAMP

Project Management

Meetings/Deliverables:

- 02/07/13 REVAMP Technical Interchange Meeting
- 02/07/13 Delivery of REVAMP Prototype 4
- 02/14/13 REVAMP Technical Interchange Meeting
- 02/21/13 REVAMP Technical Interchange Meeting
- 02/21/13 Delivery of REVAMP Prototype 5
- 02/28/13 REVAMP Technical Interchange Meeting

ReVamp Software Status

- 99% Demographics Page
- 99% Treatment Tree
- 99% Encounter / Progress notes
- 99% Graphic HUB completed showing
- 99% Machine data import process
- 99% Diagnosis List
- 99% Content Management
- 99% Secure messaging
- 99% Patient questionnaires
- 99% Administration Screen
- 99% Patient Portal
- 99% Patient Notifications
- 99% System Development

User Experience

Demonstration during 02/07/13 meeting (Prototype 4, CPAP Interface)

Demonstration during 02/21/13 meeting (Prototype 5 Release Notes)

Demonstration during 02/28/13 meeting (Clarification for Feedback Document)

Gantt (new changes due to contract modification)

Task Name	Duration change	Finish Date
Final System Delivery	180 to 210 days	Thu 4/11/13
Technical Manual	180 to 210 days	Thu 4/11/13
Source Code	180 to 210 days	Thu 4/11/13
Auto-populate with Integration TIU/MDWS	New Item	Thu 4/11/13

Planned Accomplishments

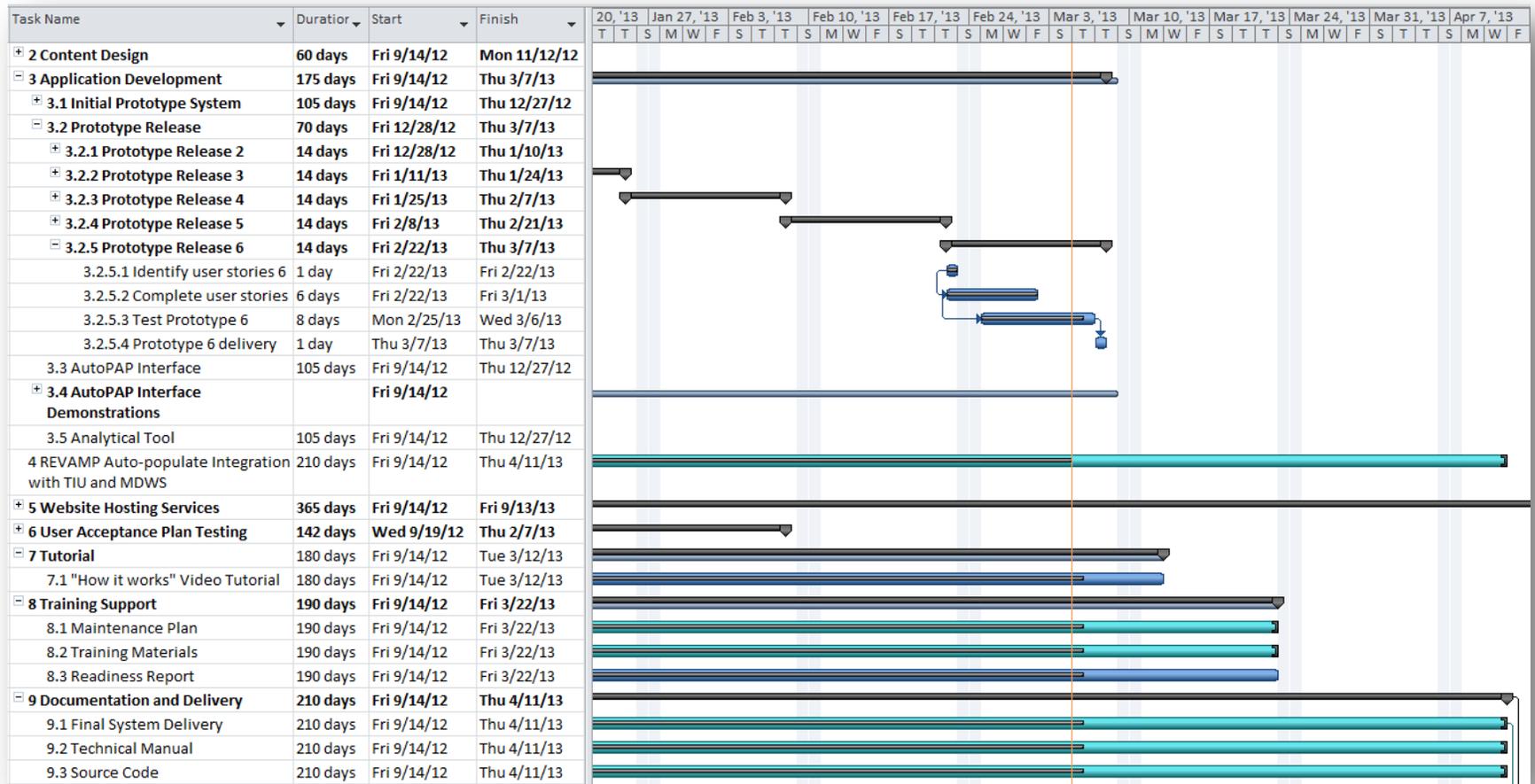
- 03/05/13 Monthly Report
- 03/07/13 Delivery of REVAMP Prototype 6
- 03/12/13 Delivery of REVAMP System (without contract modification features)



Improving Healthcare Through *Intelligent Computer Applications*



Overall Project Plan



Currently Here

Critical Path Activities – Status as of 28 February 2013

- Kickoff - Complete
- User Stories/Requirements – Complete
- Set up AutoPAP Data Exchange - In Progress (Finalizing Set Up with Philips/ResMed)
- Veteran-facing Portal development - In Progress (Nearly Completed)
- VA-facing Portal development - In Progress (Nearly Completed)
- AutoPAP Interface development - Complete
- Analytical Tool development - Complete
- User Acceptance Testing - Complete
- Final Prototype - TBD
- Data Collection - TBD
- Data Analysis, Evaluation, Reporting - TBD
- Final Delivery – TBD

Project Plan Current Prototype Development

Task Name	Duration	Start	Finish	17, '13	Feb 24, '13	Mar 3, '13	Mar 10,								
				T	T	S	M	W	F	S	T	T	S	M	W
3.2.5 Prototype Release 6	14 days	Fri 2/22/13	Thu 3/7/13	[Gantt bar spanning from Fri 2/22/13 to Thu 3/7/13]											
3.2.5.1 Identify user stories 6	1 day	Fri 2/22/13	Fri 2/22/13	[Gantt bar for 1 day on Fri 2/22/13]											
3.2.5.2 Complete user stories	6 days	Fri 2/22/13	Fri 3/1/13	[Gantt bar spanning from Fri 2/22/13 to Fri 3/1/13]											
3.2.5.3 Test Prototype 6	8 days	Mon 2/25/13	Wed 3/6/13	[Gantt bar spanning from Mon 2/25/13 to Wed 3/6/13]											
3.2.5.4 Prototype 6 delivery	1 day	Thu 3/7/13	Thu 3/7/13	[Gantt bar for 1 day on Thu 3/7/13]											

Currently Here



Improving Healthcare Through *Intelligent Computer Applications*



Open Action Item Summary

Action Item	Owner	Due Date	Status
Provide Intellica with IP Addresses for VA-Facing Users	VA- Mr. Blake Henderson Intellica- Mr. Jeff Fisher	2/15/2013	Pending – VA will verify if all IP addresses have been sent.
Follow up on contract modification.	VA- Mr. Blake Henderson	ASAP	Complete – Contract modification was approved and project updated accordingly.
Coordinate to get de-identified real data from Philips for testing.	Intellica – Mr. Craig Rebo	3/7/2013	Not Complete – 03/05/13- Philips said formatting has changed, Intellica went to verify, but there were no files in the folder. 02/11/13- IP Addresses have been updated, file type XML instead of CSV. 02/01/13 – IP address needs to be updated, Philips will let Intellica know when this is done. Interface has been set up and tested, it is functioning correctly/Intellica was able to retrieve data, it is ready for live data.
Finalize data retrieval from ResMed	Intellica – Mr. Craig Rebo	3/7/2013	Not Complete – Next step is to have EasyCare Online account set up. Dr. Kuna has enquired about this. Interface has been set up and tested, it is functioning correctly/Intellica was able to retrieve data. Ready for live data.
SAQLI Layout and Functionality	VA - Dr. Kuna	ASAP	Not Complete – Need final layout and functionality desired for SAQLI

Risk/Issue Tracker

Severity:

Low:  Moderate:  Significant:  Severe: 

Trend:

Steady:  Improving:  Deteriorating: 

Severity	Focus Area	Risk/Issue Description	Last Update	Mitigation Path	Trend	Owner
	AutoPAP interface	ResMed and Philips receive the CPAP data from the patient. Intellica needs access to this data.	02/28/13 Probability: L Impact: H	Communicating with ResMed and Philips regarding method of accessing data. Communicating with VA regarding agreements between the companies and VA.		Mr. Craig Rebo
	AutoPAP interface	Patient data will be received and needs to be matched to patient records. At times a patient may change machines.	02/28/13 Probability: L Impact: H	Communicating with ResMed and Philips to know how data can be identified. Incorporating fields in patients' records to ensure data is linked correctly.		Mr. Craig Rebo

Compilation of Technical Interchange Meeting (TIM) Minutes for February

Technical Interchange Meeting Minutes

From

Thursday, 7 February 2013

Topics Covered:

Status of Application

Intellica is delivering Prototype 4 along with the Release Notes and User Acceptance Test Results Report today, 7 February.

Questionnaires

1. Mr. Lago stated that there will be a slider added to the Sleep Apnea Quality of Life Index questionnaire, replacing the text box.
2. Mr. Lago also brought up that the Pittsburgh Sleep Quality Index (PSQI) cannot be scored using the algorithms that Dr. Kuna sent to Intellica. This needs to be addressed further so Mr. Lago will send Dr. Stepnowsky the algorithms to facilitate the discussion.

User Stories and Target Process

1. Ms. Smith went over the User Stories associated with the Prototype 4 release, highlighting some of the entries in the Target Process application for all to see.
2. Ms. Smith also demonstrated the change made for the height and weight function.
3. Sleep Specialist has replaced the word Provider as requested by the VA.

Data Transfer

1. Mr. Rebo demonstrated the process of the application querying the Philips and ResMed databases and importing the data.
2. Noted during the demonstration is that the patient data will have to be refreshed following data transfer into the processed folder.
3. Dr. Stepnowsky asked about a single or multi-graph view. The application allows the user to select either the single or multi-graph view. It currently defaults to the single view but if the VA desires, Intellica will change the default to a multi-graph view.
4. One of Intellica's Systems administrators will be working the script for the secure file transfer protocol (SFTP) of the Philips and ResMed data.

Case Management

1. The Case Management view was presented during the meeting:
 - Green checks indicate complete
 - Yellow triangle indicate due this week
 - Red circles indicate overdue
2. Clicking on an individual patient record opens up to display a list of items associated with the patient's care. Passed due items are highlighted in yellow.
3. Dr. Stepnowsky suggested filtering records by a 'Due this week' and 'Overdue'. Intellica stated that it can be done.

Sleep Apnea Symptoms Function

1. This asks the patient to list and rate the five (5) symptoms that are most bothersome.
2. Dr. Stepnowsky noted that the function does not contain instructions. Intellica agreed and stated that instructions will be added.

Other

1. VA is working the contract modification. Sprint 5 content will be driven to a large degree by the contract modification.
2. The next REVAMP meeting will be Thursday, 14 February and will include a presentation of the updates included in Sprint 4 and Sprint 5.

Technical Interchange Meeting Minutes

From

Thursday, 14 February 2013

Topics Covered:

Status of Application

Intellica is working on the User Stories for Prototype 5 along with correcting any bugs identified during testing.

Prototype 5

3. Ms. Smith went over the User Stories that are being completed for Prototype 5 (listed in the REVAMP project's Wiki page).
4. The developers are also addressing bugs found during debugging test cycles.

Wiki Page

4. Intellica brought up that the Wiki page seems to be accessible by the general public and wanted to verify if this was how it was supposed to function.
5. Ms. Smith will contact Mr. Henderson regarding this concern.

User Acceptance Testing

5. The tests in the User Acceptance Testing report were done within Intellica.
6. Once live patients are using the system, actual patient feedback can be gathered.

Usability

4. Dr. Stepnowsky mentioned it would be good to discuss usability in the application.

5. When in the Message Center, in order to change the list of recipients the User needs to click on the button to select the recipients and remove or add check marks.
 - a. Instructions to do this will be added to the User Manual.
6. Users may try to delete the recipients by highlighting the recipient name and clicking backspace. This would cause the User to get kicked off the application because the browser sees this as a command to go back one page.
 - a. Intellica will look into changing the backspace command to 'delete' instead of going back one page. This way, although it will not delete the names on the display, the User will no longer get kicked off.
7. Events Date and Status Date columns in Events tab will be made narrower to allow for more space in the comments column.
8. Intellica will look into making the graphical display customizable by User (Single Graphics or All Graphics).
9. The graph area was moving down for Users with certain screen resolutions.
 - a. Mr. Santana modified this in Prototype 5 so that now the display is dynamic and adjusts to the size of the screen.
10. Raw data will be removed from the Patient/Veteran facing portal graphical hub to avoid confusion.
11. When the Patient/Veteran goes to the Education section and clicks to see a video, it is not clear that they have to click the start arrow on the black screen.
 - a. Intellica will add instructions to help the User know what they need to do.
12. Intellica will add a browser compatibility explanation in the login page.
 - a. VA said Intellica could add links or direct the patient to where they can go to download a newer browser (possibly a pop-up).

Questionnaire Graphs

1. Dr. Kuna brought up the question of whether or not graphs are useful for questionnaire data, since there are so few points that will be showing up throughout the program (most will only end up with three data points by the third month).
2. Dr. Stepnowsky will look into this and VA will let Intellica know their decision.
3. If Questionnaire Graphs are kept, one possibility is to add a Questionnaire data tab in the Summary section.

SAQLI Questionnaire

3. Intellica will add instructions to the SAQLI questionnaire.
4. The SAQLI questionnaire had three sections:
 - a. First Section: User selects as many items as he/she wants
 - b. Second Section: User ranks five of the items from 1 to 5
 - c. Third Section: User indicates severity of 5 problems selected
5. Intellica will remove the '1 through 7' text.

Technical Interchange Meeting Minutes

From

Thursday, 21 February 2013

Topics Covered:

Status of Application

Intellica has completed User Stories for Prototype 5, along with correcting bugs identified during testing cycle.

Prototype 5 Demo

5. Ms. Smith went over the User Stories that were completed for Prototype 5 (Release Notes for Prototype 5 were sent out with the invitation and are listed in the REVAMP project's Wiki page).

CPAP labels

1. Intellica will look into the possibility of identifying if the patient has a CPAP or APAP machine to know which label to display in their record, otherwise all CPAP/APAP labels will be changed to PAP.

Case Management

1. Intellica will add a legend to the Case Management page to explain the icons (e.g. yellow triangle due this week, etc).
2. This information will be in the User Manual as well.

SAQLI

1. VA asked if there is a way to allow a patient to enter a different symptom in a text field.
 - a. Intellica will look into whether or not this is feasible.

2. Dr. Kuna and Dr. Stepnowsky will meet to go over the SAQLI and come up with how they want it to function.
3. Intellica will wait until a final version is agreed upon before making any modifications.

Live Data

1. Intellica has been emailing back and forth with Philips.
2. Intellica was able to retrieve data from Philips, but the formatting was not the same as the formatting that had been given to Intellica originally.
3. Philips is correcting the formatting and will let Intellica know when the changes are done.

Sandbox Accounts- Wiki Page

7. Dr. Stepnowsky mentioned he was no longer able to access the Wiki page.
8. The Wiki page was changed from public to private and Users now need to have a sandbox User Name and Password in order to access the Wiki page.
9. Mr. Henderson will help Dr. Stepnowsky get a sandbox account.

Sandbox TIU Contract Modification

1. The contract modification came through regarding adding TIU features to the application.
 - a. Users will be able to send the note to CPRS.
 - b. Users will be able to look up patients on CPRS.
2. Intellica will need the CPRS Note Titles to which the notes can be written.
3. Intellica needs sandbox accounts to work on this.
4. Patients will not have sandbox accounts, thus the second phase of the project will continue to be on the website everyone has had access to throughout the current phase project.

Other

1. Dr. Kuna emailed Intellica a document with feedback earlier in the week.
2. The document will be discussed next week during the REVAMP Technical Interchange Meeting (TIM).
3. Dr. Kuna will go over Intellica's response to the document to address any questions.
4. Intellica will go over the document again with other team members.

Technical Interchange Meeting Minutes

From

Thursday, 28 February 2013

Topics Covered:

Status of Application

Intellica is completing the User Stories for Prototype 6, along with correcting bugs identified during the testing cycle.

Prototype 6

6. Ms. Smith went over the User Stories associated with Prototype 6.
7. Ms. Smith reviewed the TPID's from the 18 February document along with Dr. Kuna's feedback from the document that he returned earlier in the week.

Note Tab Removal

2. Dr. Kuna wants everything on one page. Eliminating the Note Tab will force the user to write out a diagnosis. Dr. Kuna stated that he does not have a problem with this type of configuration.
3. Intellica will continue looking into whether this is a possibility with the current configuration of the application.

My HealthVet

3. It was noted that the REVAMP application does not have the functionality to interact with My HealthVet.

Event Tab

6. Assessments are assigned as a group or as an individual assessment.
 - a. Dates are assigned in the Event Tab.
7. For the follow-up questionnaires, the reminder to accomplish the assigned questionnaires is set to three (3) days prior.

- a. Dr. Kuna and Dr. Stepnowsky discussed what would be the optimum reminder in days prior as well as a past due reminder.
 - b. It was settled upon as a three (3) and one (1) day reminder prior to the due date and a two (2) day past due reminder if the patient fails to complete his or her assigned assessments. **This is only if possible, and it may not be possible due to time constraints.
8. Dr. Kuna suggested adding text stating that once the assessments are completed, the patient cannot change his or her response.
 9. Dr. wants 'Baseline Questionnaire' to 'Initial Evaluation'.
 10. A message telling the patient about the required video viewing will pop up once the assessments are completed.

Sleep Apnea Quality of Life Index (SAQLI)

1. The document provided by Dr. Kuna with the desired layout and functionality was discussed.
2. It was noted that the bottom part of the Sleep Apnea Quality of Life Index (SAQLI) is missing.
3. This portion can be viewed in the Follow-up SAQLI that is currently on the website.
4. Intellica needs a document with the entire desired layout and functionality in order to be able to proceed with creating the questionnaire that will satisfy the VA's needs.

Treatment Related Symptoms

1. Dr. Stepnowsky discussed the slider sensitivity noting that a combo box is also available but suggested the possibility of adding sensitivity to the slider, allowing for fractions (decimals) to be selected and adding fractions to the combo box choices also, as opposed to integers only.

Templates

1. Ms. Smith demonstrated a template feature and stated that more tags will be added to the template function.

Live Data

4. Intellica has been coordinating with Philips and ResMed regarding data transfer and file structures. Philips is coordinating within and resolving their file formatting errors. We are close to resolving all issues with both data sources.
5. Intellica will include Dr. Kuna in all communications with Philips and ResMed.
6. Intellica requested that the VA let them know when they would like to 'Go Live' so that Intellica can make sure to start collecting data in the Analytic tool for the final report.

CPAP Machines

10. Dr. Kuna informed Intellica that the VA does not allow for the recycling of CPAP machines from patient to patient. Each patient gets a fresh machine. Therefore, the building up of a data set of CPAP machine serial numbers is unnecessary. Intellica will restructure this feature.