**Sprint 4 Plan - Check Up Health Care - Start Date: 11/24/2019**

**GOAL)** In Sprint 4, we are going to create a Procedure Pricing Index so users can see a hospital's procedures cost rating in comparison to other hospitals offering the same procedure. We will also create a Hospital Pricing Index so users can see how the expensive one hospital is in comparison to the country's average.

**USER STORY 1)**

**As a user, I want to see a specific procedure's pricing rank amongst other hospitals that offer the same procedure**

- TASK 1) Calculate procedure pricing index by collecting all hospitals that offer DRG code: X, finding the average and standard deviation of the data, and ranking them based on the score (6)

- TASK 2) Append the procedure score and index columns to the database (1)

| ….. | AverageCharge | Year | Procedure Score | Procedure Index | Hospital Score | Hospital Index |
|---|---|---|---|---|---|---|
| | # | # | 0.03 | 3 | 0.001 | 3 |
| | # | # | -0.01 | 2 | 0.001 | 3 |
| | # | # | .12 | 4 | 0.001 | 3 |
| | # | # | -.12 | 1 | 0.001 | 3 |

- TASK 3) Create a script that updates the procedure score and index column (3)

- TASK 4) Update front end to display new procedure indexes whenever a hospital's procedure is compare amongst others (4)

❖ **Total for User Story 1) 14 Hours**

**USER STORY 2)**

**As a user, I want to see a hospital pricing index in comparison to other hospitals in the US or near me.**

- TASK 1) Calculate hospital pricing index by summing the scores of a hospital's procedure indexes and then dividing by the number of procedures offered (4)

- TASK 2) Append the hospital score and index columns to the database (1)

| ….. | AverageCharge | Year | Procedure Score | Procedure Index | Hospital Score | Hospital Index |
|---|---|---|---|---|---|---|
| | # | # | 0.03 | 3 | 0.001 | 3 |
| | # | # | -0.01 | 2 | 0.001 | 3 |
| | # | # | .12 | 4 | 0.001 | 3 |
| | # | # | -.12 | 1 | 0.001 | 3 |

- TASK 3) Create a script that updates the hospital score and index column (3)

- TASK 4) Update front end to show a hospital's pricing index before clicking on it to compare a procedure to other hospitals (4)

❖ **Total for User Story 2) 12 Hours**

**USER STORY 3)** *From Sprint Backlog*

**As a user, I want to be able to compare the prices of hospitals near me**

- TASK 1) Implement Front-End and Back-End request handling for current location with hospital locations. (3)

- TASK 2) Maintain design such that users can compare via location or by name lookup (2)

**Total for User Story 3) 5 Hours**

**USER STORY 4)**

**As a developer, I want the version controller for this project to be properly documented and organized so contributors will be able to implement new features easily.**

- TASK 1) Reorganize GitHub with all project folders, ensuring that code paths are not going to affect scripts (2)

- TASK 2) Remove all unnecessary files we used in previous sprints that we do not need anymore (1)

- TASK 3) Update README so team members can see which dependencies are needed, packages to install, and project file descriptions (2)

❖ **Total for User Story 4) 5 Hours**

**TEAM ROLES)**

**Kyle :** Create skeleton code that loops through every single DRG in our database, and returns a list of hospitals and their charges for that specific code. Work with Sergey and Dagmawi to calculate scoring and index value.

**Rohan :** Implement front end modules to include the procedure index and hospital index whenever that hospital's name or procedure is displayed

**Sergey : SCRUM Master :** Create unit tests for the procedure and hospital indexes. The unit test is made to ensure hospitals are within the correct range of ranks based on their pricing information.

**Jacob :** Write descriptions for each python script we used. Write documentation for our database including column name descriptors and data references.

**Shant :** Look through current project directory and determine if files can be organized better via methods of reducing complexity. Prepare project for release.

**Dagmawi : SCRUM Master :** Work with Kyle to loop through collections of data in order to create the procedure and hospital score/index algorithm

**INITIAL TASK ASSIGNMENTS)**

**Kyle :**

User Story 1 & 2: Conceptualize pricing and hospital index to determine what users want to see when comparing multiple hospitals.

User Story 3: Work with Rohan to ensure Flask responses are formatted correctly

**Rohan :**

User Story 1 & 2: Add pricing and hospital index information to display module

User Story 3: Work with Kyle to calculate distance between user and nearby hospitals using X,Y coords

**Jacob :**

User Story 4: Look over GitHub and report ambiguous files.

**Sergey :**

User Story 1: Look up ranking algorithms based on pricing information

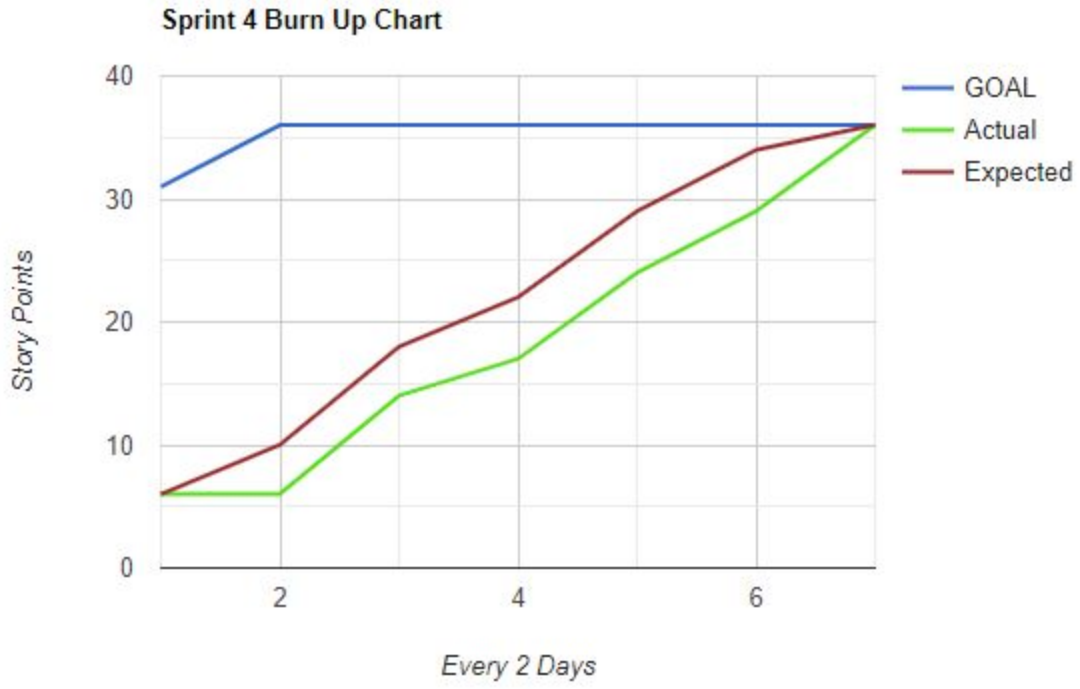
**Shant :**

User Story 4: Look over GitHub for structural improvements.

**Dagmawi:**

User Story 1 & 2: Conceptualize pricing and hospital index to determine what users want to see when comparing multiple hospitals. Look up Ranking algorithms based on pricing information

**BURN UP CHART)**




**SCRUM BOARD:**

https://scrumy.com/checkuphealthcare

**SCRUM TIMES:**

TA Meeting: Mondays, 4 - 4:30PM
Team Meetings: Everyday 7PM