

Correlating Patient Feedback to Avoidable Readmissions and Patient Experience Outcomes



Sponsor Company: Tallahassee Memorial Healthcare

By: Hailey Skoglund, Gus Lipkin, & Maverick Hope

Data Analytics Capstone I

Background

- Tallahassee Memorial Healthcare (TMH) is a private, not-for-profit community healthcare system that serves a region of 17 different counties throughout north Florida and southern Georgia.
- We have three research questions centered around patient feedback
 - We are currently working on research question two and will move to one and three next

Patient Readmission rates are a nationally recognized measure used for quality control and one that TMH is actively working to reduce. Can we identify patient response characteristics that are more likely to lead to readmission?



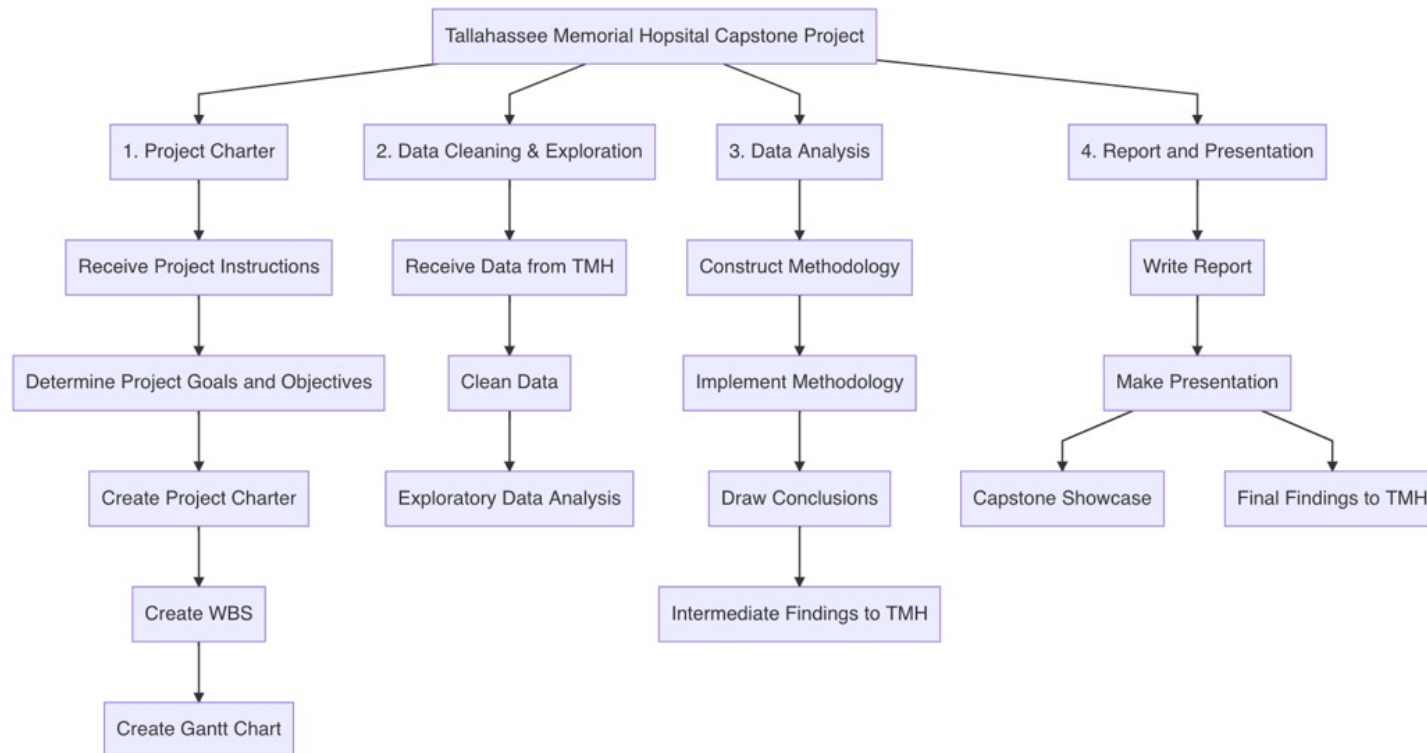
Current Goal

Project Charter

1. General Project Information			
Project Name:	Correlating Patient Feedback to Avoidable Readmissions and Patient Experience Outcomes		
Executive Sponsors:	Tallahassee Memorial Healthcare		
Department Sponsor:	Griselle Centeno		
Impact of project:	Provides information that can help Tallahassee Memorial Healthcare reduce avoidable readmission and improve HCAHPS scores		
2. Project Team			
	Name	Department	E-mail
Project Manager:	Hailey Skoglund	Business	hskoglund7612@floridapoly.edu
Team Members:	Maverick Hope	Analytics	mhope5765@floridapoly.edu
	Gus Lipkin		glipkin6737@floridapoly.edu
3. Stakeholders			
Tallahassee Memorial Healthcare			
Tallahassee Memorial Healthcare patients			
4. Project Scope Statement			
Project Purpose / Business Justification			
To improve the quality measures of Tallahassee Memorial Healthcare specifically higher HCAHPS scores and a lower readmissions rate.			
Objectives (in business terms)			
HCAHPS are very important in healthcare and are tied to reimbursement therefore an improvement in score will lead to more funding for Tallahassee Memorial Healthcare.			
Deliverables			
Final findings will be reported to Tallahassee Memorial Healthcare in April 2022			
Scope			
This project will look at TMH's data on readmissions, HCAHPS, and phone surveys to find out if certain responses on the phone surveys are correlated with readmissions and low HCAHPS scores			
Project Milestones			
Inception- 09/01/2020			
Receive data from TMH- 11/7/2020			
Exploratory data analysis – 11/15/2020			

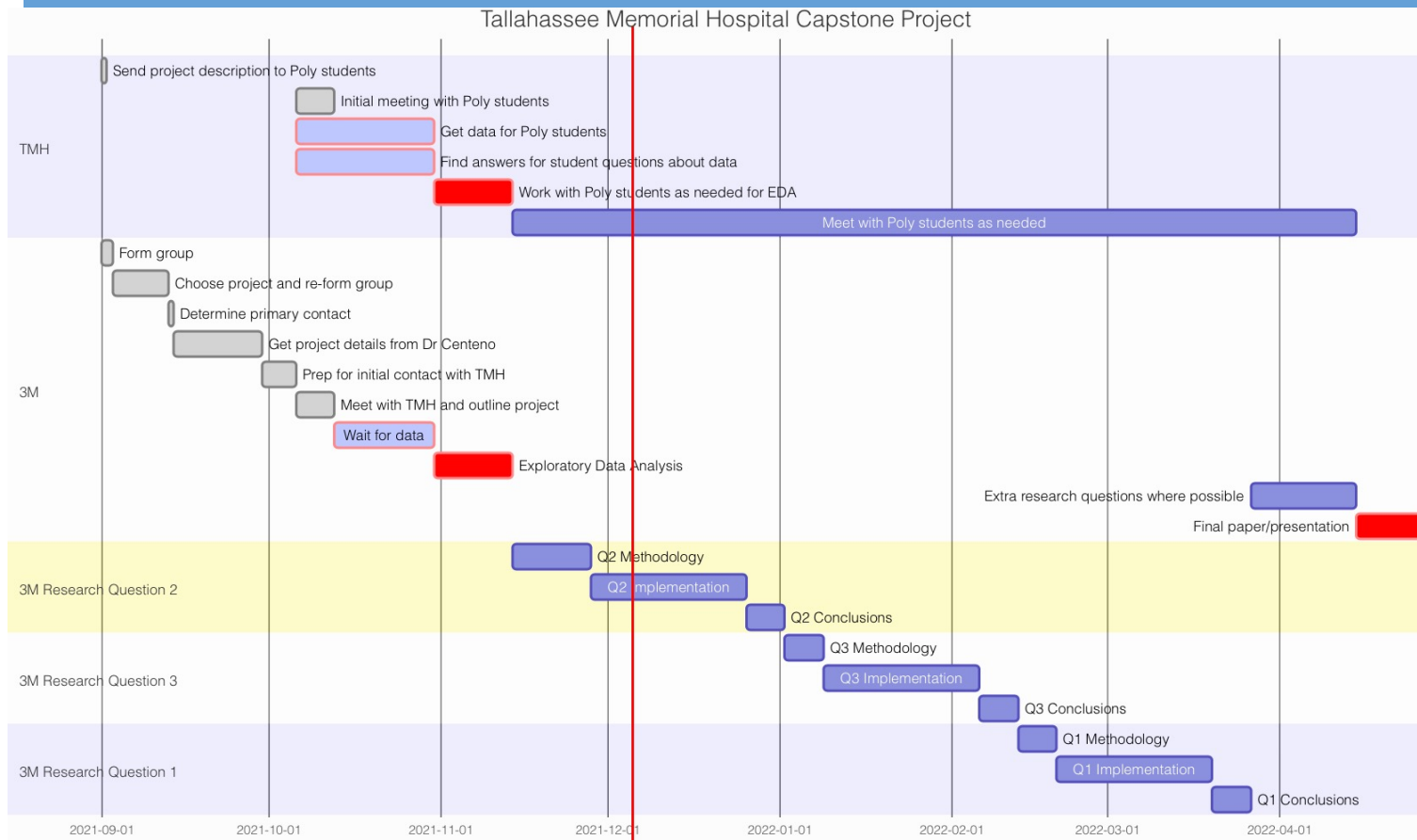
- A standard project charter that reiterates our project goals and guidelines

Work Breakdown Structure



- A nice work breakdown structure

Gantt Chart



- A pretty Gantt chart updated on December 5, 2021

Data



Connect Calls



Encounters



Readmissions



Surveys

Connect Calls

- Connect calls are automated follow-up phone calls within a day of patient discharge
- Consist of a series of questions that can be flagged for follow-up depending on the response



Encounters

- A list of every visit to the hospital where you are checked in
- Basic demographic data
- Small amounts of hospital data such as attending physician, principal diagnosis, and discharge unit



Readmissions

- Builds on Encounters by detailing which encounters are readmissions
- Has much of the same data as encounters, but this time for the subsequent visits



Surveys

- This is where the HCAHPS survey data comes from
- Has an EncounterID and the entire survey response from the patient



Can we identify the patient response characteristics that have the strongest relationship to the two outcomes (readmittance vs non-readmittance)?

Research Question Two

Analysis



- Readmitted patients generally...
 - gave lower ratings
 - were more poorly informed about their care
 - were more likely to have been admitted through the ER

Next Steps

- Continue investigating the differences between survey responses for patients that were readmitted and not readmitted
- Construct a regression to try and model readmission and use that to identify which variables are the best predictors

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