

Project Management Plan

All the information is based on having a time span of 14 weeks, between the first meeting and the final presentation.

To start forming the project management plan, I define the **audience** as follows:

- The staff from the medical agency and from the hospitals and clinics that receive staff via the medical agency.
- The decision makers from the medical agency and the hospitals and clinics that receive staff via the medical agency.
- Influenza Patients. Ultimately, they are the ones concerned as it's important they get qualitative help when they have the flu. But they will not receive communication regarding the project.

For the staff I expect a lower level of data proficiency and familiarity with jargon. Therefore, the information in the report and presentation should be clear and easy to understand.

The decision makers are at management level and educational professionals with some level of data-proficiency. For them, the report and presentation does not have to include basic information.

Stakeholder Communication

Meetings:

At the start of the project, I'll have a meeting with staff and decision makers in person, from both the medical agency as well as the hospitals and clinics involved. The goal of this meeting is to ask all relative questions (clarifying, funneling, adjoining, elevating, and privacy- and ethics-related questions) that I have. Business requirements are discussed, and I give the details of the communication plan.

Around week 10, the interim report will be shown and discussed with the staff and decision makers via an online meeting.

Calls:

Weekly calls will be planned with the decision makers, to keep them in the loop of the project status and to inform them about any urgent issues or delays that might occur.

Written communication:

Emails will be sent out if a delay or urgent issue arises. With an invitation to call about it within the next four days.

After finishing the analysis, I will record a video presentation that I send out by email to the stakeholders.

Schedule and Milestones

Week 1 and 2:

- Meeting in person with staff and decision makers, for an introduction and to ask all questions necessary.
- Design Data Research Project
- Formulate a research hypothesis

Week 3 and 4:

- Describing data sets that are available
- Evaluating relevance and limits of data sets
- Creating a data profile for each data set included in the analysis
- Including information on data types, data integrity issues, conducted cleaning and summary statistics for each profile

Week 5 and 6:

- Data quality measurement
- Data transforming into one cohesive data set

Week 7 and 8:

- Correlation test for key variables
- Statistical hypothesis testing

Week 9 and 10

- Creating Interim Report
- Presenting Interim Report during an online meeting with the stakeholders

Week 11 and 12

- Creating a data visualization design checklist
- Designing different type of visualizations using the checklist

Week 13

- Spatial Analysis
- Textual Analysis

Week 14

- Creating a narrative to communicate research findings and insights to my research.
- Publishing the analysis as a Tableau Storyboard.
- Recording the video presentation of the analysis for the stakeholders and sending it to them via email.

Project Deliverables

Weeks 1 & 2: Project questions list and hypothesis during the first (offline) meeting.

Weeks 10: Interim Report in written.

Week 14: Dynamic storyboard in Tableau and a video presentation of the final analysis

Answering questions from task 1.2

Which people are most vulnerable to getting the flu?

Is every year the same group of people the most vulnerable to getting the flu?

The project brief shows that the most vulnerable patients are adults over 65 years, children under 5 years, and pregnant women, as well as individuals with HIV/AIDs, cancer, heart disease, stroke, diabetes, asthma, and children with neurological disorders.

The context does not show if this is the same group every year.

How long is the flu season?

Is the duration of the flu season the same in every state?

The context does not give any information on how long the flu season takes, it does mention that each state has a different population composition, meaning that some states will have more vulnerable populations. An assumption that can be made is that the flu season is longer in those more vulnerable populations.

Why does the medical staffing agency need help?

Does the medical staffing agency distribute their staff the same way every year?

Because some patients, particularly those in vulnerable populations, develop serious complications and end up in the hospital. Hospitals and clinics need additional staff from the medical staffing agency to treat these extra patients. The analysis is needed to inform the medical staffing agency on when, where and how many staff to send.

The context does not show whether the medical staffing agency has been sending their staff the same way every year.

Hypotheses

1. If patients have access to flu shots, then they don't end up in a hospital or clinic.
2. If a hospital or clinic has more staff available, then less or no people will die from having the flu.
3. If the care for influenza becomes more affordable, then the number of patients that can be helped increases.
4. If you are younger than 5 years old, then the chances of dying from the flu are higher.

Data Wishlist

- Patients under 5 years – influenza deaths, per state
- Patients under 5 years – influenza deaths, per year
- Patients under 5 years – influenza deaths, per month
- Patients under 5 years – influenza deaths, per gender
- Influenza deaths – influenza deaths under 5 years
- Influenza deaths under 5 years – vaccination status