# **Project Management Plan**

**Motivation:** The United States has an influenza season where more people than usual suffer from the flu. Some people, particularly those in vulnerable populations, develop serious complications and end up in the hospital. Hospitals and clinics need additional staff to adequately treat these extra patients. The medical staffing agency provides this temporary staff.

**Objective:** Determine when to send staff, and how many, to each state.

**Scope:** The agency covers all hospitals in each of the 50 states of the United States, and the project will plan for the upcoming influenza season.

#### **Stakeholder Communication**

#### Stakeholders:

- Medical agency frontline staff (nurses, physician assistants, and doctors)
- Hospitals and clinics using the staffing agency's services
- Influenza patients
- Staffing agency administrators

Communication with Influenza patients will only be provided by Press Releases

#### Meetings:

- Initial Project Meeting: Online
  - o Identify points of contact from every party, these will be the individuals who receive communications regarding this project.
  - Go over questions that will help create a staffing plan that is effective for the upcoming flu season.
- Preliminary Data Analysis Meeting: Online
  - Key points of contact attend meeting to discuss the preliminary data analysis results/insights.
  - o Discuss the need for changes to project plan.
- Data Analysis Meeting/Staffing Plan: Online
  - Key points of contact attend meeting to discuss the final data analysis results/insights.
  - o Discuss Staffing Plan for upcoming flu season.
- Check In Meeting 1: online
  - Discuss how the plan is working and not working.
  - o Gain feedback on how the plan can be improved.
- Check in Meeting 2: online
  - Are the adjustments to staffing plan working?
  - o Do more adjustments need to be made?
- Post Season Meeting: online
  - o Evaluate the staffing plan's effectiveness over the season.

Discuss new ideas for the next flu season.

#### Written Communication

- All written communications will be e-mail.
- Weekly status updates will be delivered to the points of contacts to distribute as they see fit amongst their organization.
- Meeting Summaries will be delivered to attendees after meetings held.
- Staffing assignments will be delivered to hired staff.
- Written Report will be delivered via e-mail.

#### Calls

• Urgent requests will be handled by phone as will any changes to project plan.

# Emergency/Contingency Plan

- Issues arising as urgent will be delivered via e-mail or a phone call within 2 business days.
- Additional Online Meetings can be planned to address issues if needed.

#### **Schedule and Milestones**

#### Week 1:

- Initial Project Meeting
- Research
- Source Data

# Week 2:

- Initial Data Review
- Formulate Hypothesis
- Data Cleaning

### Week 3:

- Complete preliminary data analysis
- Test Hypothesis
- Preliminary Data Analysis Meeting

### Week 4:

- Complete Data Analysis
- Re-test Hypothesis
- Written Report on findings
- Create Visualizations

### Week 5:

- Create Dashboard for clients
- Create Staffing Plan

### Week 6:

- Written Report
- E-mail Written Report to Stakeholders

### Week 7:

- Prepare Final Presentation
- Data Analysis/Staffing Plan Meeting

### Week 8:

- Implement Staffing Plan
- Press Release regarding findings and plan to the public

### 3 weeks into Flu Season:

• Check In Meeting 1

### 8 Week into Flu Season:

• Check In Meeting 2

# Post Flu Season:

- Post Season Meeting
- Update Final Report with remarks from final meeting
- Prepare ideas for the next Flu Season

# **Project Deliverables**

- Written Report
- Final Presentation

# Audience

- Medical agency frontline staff (nurses, physician assistants, and doctors)
- Hospitals and clinics using the staffing agency's services
- Staffing agency administrators

#### Context

- When does the flu season begin?
  - o It begins in October or November, peaks from December to February. WebMD
- How long does the flu season last?
  - Flu Season can last into May. <u>CDC</u>
- Does the Flu Season begin at once in every state?
  - A heat map of the United States showing the activity level for each state every week shows us that the flue hits at different times depending on the state. CDC
- Who is likely to suffer from complications of the flu?
  - o Immunocompromised patients
  - Adults 65 years and older
  - o Children under 5 years
  - o Pregnant Woman
  - o Those who suffer from stroke, diabetes, and asthma
  - Children with neurological disorders CDC
- What are the current nurse staffing levels of each state?
  - o Table showing the staffing levels of each state as of September 2022. NurseJournal
  - Utah has the lowest number of nurses per 1,000 population.
  - District of Columbia has the highest number of nurses per 1,000 population.

# **Hypothesis**

- If a state has a high population of vulnerable patients, influenza presents a higher risk of hospitalizations and mortality.
- If the patient is a child 5 and under or an adult 65 and over, they have a higher chance of suffering from complications of the flu and even death.
- If the state is already short of nursing staff, then they will be severely understaffed when the flu season hits.
- If the state has low vaccination rates, there will be a higher mortality rate.

### **Data Wish List**

- Prior 10 years of data of the staffing assignments for the staffing agency
- Census data on population by age group per state
- Prior 10 years of data on influenza mortality per state
- Prior 10 years of data on hospitalizations per state
- Prior 10 years of data on flu season starts, waves, and ends
- Prior 10 years of data on vaccination rates per state
- Guidelines for each state on staff to patient ratio