

Influenza Presentation Outline (year 2009 - 2017)

Intro

According to the CDC, influenza is responsible for **18-26 million** medical visits, **410,000- 740,000 hospitalizations**, and **about 113, 081 deaths** in America. With Medical agency frontline staff (nurses, physician assistants, and doctors) shortages, and an increasing pandemic, it is imperative to identify key indicator states that will need more help during this flu season.

Motivation for analysis

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.

Assumption

1. Vulnerable populations suffer the most and are more likely to be hospitalized
2. Flu shots decrease chance of becoming infected

Findings

When: Flu Season:

Flu season peaks at winter (December - February). The winter period is followed by the spring season, followed by autumn and lastly summer.

The following states have the most flu deaths:

High Priority

1. California a. 4, 905, 567 population of people over 85
b. 65, 079 flu related deaths of people over 85
2. New York a. 3, 975, 956 population of people over 85
b. 52,729 flu related deaths of people over 85
3. Texas a. 2, 825, 768 population of people over 85
b. 38, 559 flu related deaths of people over 85
4. Pennsylvania a. 2, 742, 519 population of people over 85
b. 37, 012 flu related deaths of people over 85
5. Florida a. 4, 172, 560 population of people over 85
b. 35, 089 flu related deaths of people over 85

6. Illinois a. 2, 085, 811 population of people over 85
b. 34, 114 flu related deaths of people over 85

7. Ohio a. 2, 064, 246 population of people over 85
b. 33, 050 flu related deaths of people over 85

- 8. North Carolina
- 9. Massachusetts
- 10. Michigan
- 11. Alaska
- 12. District Columbia
- 13. Vermont
- 14. Wyoming

Medium Priority

- 1. Delaware
- 2. North Dakota
- 3. Montana
- 4. South Dakota
- 5. Idaho
- 6. Rhode Island
- 7. Maine
- 8. New Hampshire
- 9. Wisconsin
- 10. New Jersey
- 11. Virginia
- 12. Tennessee
- 13. Missouri
- 14. New Mexico
- 15. Minnesota
- 16. Nebraska
- 17. Utah
- 18. Iowa
- 19. Hawaii
- 20. Connecticut
- 21. Oregon
- 22. Kansas
- 23. Indiana

Low Priority

1. Georgia
2. Maryland
3. Washington DC
4. Colorado
5. West Virginia
6. Arkansas
7. Arizona
8. Kentucky
9. Oklahoma
10. Louisiana
11. Alabama
12. South Carolina
13. Nevada
14. Mississippi

Intervention:

1. Provide additional staff for flu vaccine clinics from November.
2. Have staffing in place from December - February to increase available staffing especially in areas with high populations, increased influenza deaths and areas with shortage of medical staff.

Limitations

1. Analysis limited to data available, and accuracy of data collected.
2. Mandatory reporting to state data base should include all positive flu results, not just participating clinics.
3. Flu visit data limited to people who have access to health care, organizations participating in reporting, people seeking medical care, medical professionals' ability to recognize symptoms presented, ability of patients to communicate identifying symptoms, protected information, etc.
4. Previous years of the organization's performance reviews and outcomes associated with intervention staff unavailable (key to evaluating effectiveness of interventions and where improvement is needed)
5. Cause of death limited to reporting. i.e., pneumonia as cause of death may have been result of influenza, though influenza is not listed as cause of death.

Monitoring

- Send Monthly evaluation team to staffing sites to track progress.
- Hold Monthly meetings with problem areas to address any concerns, problems, areas of improvement, etc. Allowing for open communication in these areas.
- Monitor death decrease from previous year and any improvement is to be noted, also, areas of increased mortality should also be addressed.
- Setup monthly evaluation with assigned staff through supervisors. And supervisors should provide reports and note efficacy in assigned areas.
- Setup a pre and post season of supervisors or liaisons meeting with clients to obtain their needs and reflect on efficacy of staffing as assigned.
- Allow for open communication as needed
- Have reserve pool for emergencies or back up.

- Compare results with previous years at agency.
- Provide evaluation forms for managers/ directors on units where staff is provided.
- Provide evaluation forms for hospital supervisors (nursing, pharmacy, medical doctor, etc.)
- Provide evaluations for HR in hospitals and clinics where staffing is provided.

Story Board Link

<https://public.tableau.com/app/profile/titi.adigun/viz/PREPARINGFORINFLUENZASEASON2/Fluseasonandgettinghelp?publish=yes>

Video Presentation Link

<https://vimeo.com/770096062>