

STORY TELLING DESIGN CHECKLIST

Data Viz with Tableau

OVERVIEW “HOSPITAL ADVERSE EVENTS, CALIFORNIA”

1. Project background and summary

i This project's objectives are to determine counts and rates of adverse events among patients during their hospital stay in order to provide perspectives on complications with highest counts in relation to hospital location. This project will also dig to analyze rates of preventable hospitalizations, as well as vaccine preventable disease cases in the state of California. The meaningful findings will be used in regards of quality improvement and infection control in the healthcare facility.

2. Stakeholders – an author and member of APIC

Audience:

- **Quantitative audience snapshot:** APIC (Association for Professionals in Infection Control and Epidemiology) members, healthcare personnel, surgeons, infection control practitioners - M/F, all have medical/healthcare education background
- **Qualitative audience snapshot:** *Persona 1: Donna Haiduven, PhD, RN, CIC*

3. Persona 1 APIC member and author: Donna Haiduven, PhD, RN, CIC



Role: active APIC member and articles author, advocating for patient safety

Age: 65

Gender: Female

Education: B.S.N University of South Florida
M.S.N University of Miami
Ph.D University of California

Goals:

- She wants to share findings on hospital adverse events with clinicians and APIC member
- She wants to understand the trend of vaccine preventable disease in the community, California
- She is trying to determine if specific hospital location has correlation with cases

Challenges and needs:

- Data might not be as clean
- She's not good with data visualization
- She wants to attract hospital's attention about adverse events that occur in their facility

Subject-matter experts: Hospital quality improvement, infectious disease

4. What - dataset

i **Data sources** – California health and human services

Datasets analyzed – Hospital general information, hospital adverse events by county, rates of preventable hospitalization, vaccine-preventable disease cases by county, (csv data).

Data quality – TBD

Data Timeliness – Last update: 2019

5. Why

i **Business Case/Other Goals** – Create either single or multi-frame data infographic of a story of hospital adverse events and preventable-hospitalization cases, as well as vaccine-preventable disease cases in California.

Intended Outcome – featured data viz with interactivity shared through APIC website

6. How- deliverable

i **Format(s)** – Single frame infographic dashboard, narrated story points, etc.

Presentation vehicle – Tablet, desktop, big projector screen, etc.

7. Project specific challenges

i *Foreseeable challenges may include the quality of data and how much data point is missing. However, this project is expected to serve as an exercise for data mining and data visualization with Tableau.*