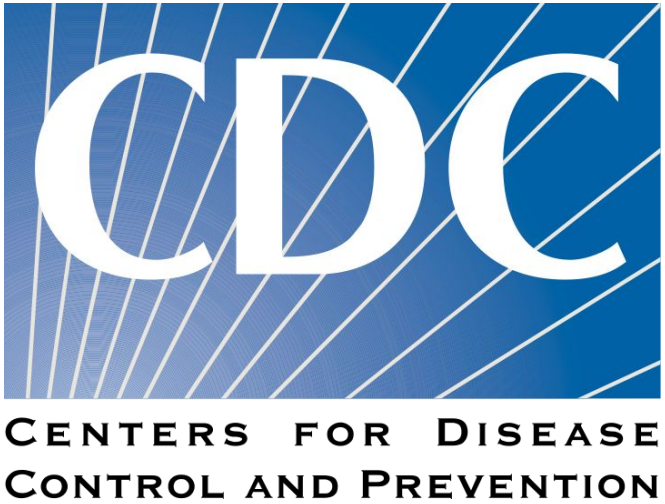
Health Disparities in Transgender People in the U.S.

Introduction

Data Source

- The CDC's 2019 Behavioral Risk Factor Surveillance System (BRFSS)
    - Over 234,000 respondents were asked, "Do you consider yourself to be transgender?"
    - I focused only on respondents who answered yes or no to this question



Data Questions

1. Are there health disparities between transgender (trans) and cisgender (cis) people in the U.S.?
2. If so, what regions have the greatest health disparities between transgender and cisgender people?
3. What health disparities exist among transgender people of different demographics?
4. How might the GMLA help reduce these disparities?

Methodology

Methodology

1. Retrieved data and converted from XPT to CSV
2. Cleaned and categorized data in Python
3. Defined key measures
4. Calculated key measures in Python
5. Created interactive dashboard in Tableau, validating measures with Python throughout

Methodology: Cleaning and Categorizing Data in Python

- Subset dataframe to only the columns I needed
- Replaced numeric placeholders with the corresponding values in the BRFSS codebook
  - ```
    cdc._AGE_G = cdc._AGE_G.replace(1, 'Age 18 to 24')
    cdc._AGE_G = cdc._AGE_G.replace(2, 'Age 25 to 34')
    cdc._AGE_G = cdc._AGE_G.replace(3, 'Age 35 to 44')
    cdc._AGE_G = cdc._AGE_G.replace(4, 'Age 45 to 54')
    cdc._AGE_G = cdc._AGE_G.replace(5, 'Age 55 to 64')
    cdc._AGE_G = cdc._AGE_G.replace(6, 'Age 65 and older')
    ```
- Used for loops as needed to create columns that categorized the data

```
cdc['trans'] = ""
for ind,row in cdc.iterrows():
    if row.TRNSGNDR == 'Yes, male to female' or row.TRNSGNDR == 'Yes, female to male' or row.TRNSGNDR =
        cdc.at[ind, 'trans'] = 'Transgender'
    elif row.TRNSGNDR == 'No' or row.TRNSGNDR =="Don't Know/Not Sure" or row.TRNSGNDR == 'Refused':
        cdc.at[ind,'trans'] = 'Cisgender'
    else:
        cdc.at[ind,'trans'] = 'Unknown'
```
```

Methodology: Defining Key Measures

- Poor health
    - When asked, ”Would you say that in general your health is:” and given a list of options, the respondent chose “Poor”

Percent of Transgender People with Poor Health	>	Percent of Cisgender People with Poor Health	=	Disparity
Percent of Transgender People with Poor Health	−	Percent of Cisgender People with Poor Health	=	Severity of Disparity

Methodology: Calculating Key Measures in Python

- Used for loops to get the percentages of trans and cis people with poor health nationally and by region
- Example: Percentages of poor health nationally

```
trans_poor_health = 0
total_trans = 0
cis_poor_health = 0
total_cis = 0
for ind,row in cdc.iterrows():
    if row.trans == 'Transgender' and row.GENHLTH == 'Poor':
        total_trans += 1
        trans_poor_health += 1
    elif row.trans == 'Transgender':
        total_trans += 1
    elif row.trans == 'Cisgender' and row.GENHLTH == 'Poor':
        total_cis += 1
        cis_poor_health += 1
    elif row.trans == 'Cisgender':
        total_cis += 1

print(str.format('Percent of Trans People with Poor General Health: {}%', round((trans_poor_health/total_trans)*100,2)))
print(str.format('Percent of Cis People with Poor General Health: {}%', round((cis_poor_health/total_cis)*100,2)))
print(str.format('Point Difference: {} points', round((round((trans_poor_health/total_trans)*100,2) - round((cis_poor_health/tota
```

```
Percent of Trans People with Poor General Health: 9.01%
Percent of Cis People with Poor General Health: 5.23%
Point Difference: 3.78 points
```

Dashboard

Recommendations

Findings: Question 4

- A good start to reducing these disparities we've covered would include:
  - Focusing extra efforts and resources on trans people in the **Midwest and Northeast**
  - Focusing extra efforts and resources on the **high risk demographic groups** of trans people we covered
  - Focusing extra efforts and resources on ensuring trans people have access to **healthcare coverage** and knowledgeable **primary care physicians**

Questions?