Tulane University Health Policy Case Competition

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Outline

I. Policy Target
   A. COVID-19 Vaccination by Demographics in Louisiana
   B. Current Trends in Vaccination
   C. Interpretation and Target Demographics

II. Alternative Policies
   A. Policy Initiatives
   B. Policy Strategies
   C. Policy Analysis
   D. Timeline
Vaccination Trend by Regions

Vaccination Rate

- Darker Blue indicates a higher vaccination rate
- Higher vaccination rates around big cities
- Large patch in Southwest Louisiana has a low vac. Rate
- Low vaccination Rate patches in North part of Louisiana

Income
- Southwestern LA: higher income but a low vaccination rate
- Northern LA: Lower-income = low vaccination rate

Poverty Rate
- The greater poverty rate in North Southwestern LA corresponds with Income distribution

Political Stances
- Mostly Republic Parishes
- No big swing margin from 2016 data → very predictable

Black Population

Hispanic Population

White Population
- Southwest LA: More populated White with low vaccination rates
- North LA: Patches of low vaccination rate; high white and black populations but low income; Hispanic population distribution follows the vaccination rate map (higher population = higher vaccination rates)
- Black population is highly populated throughout LA; The distribution follows the Poverty rate map
Low Vaccination Rate in Louisiana

Lower than the U.S. Average

Vaccination Status U.S. Total vs. Louisiana

<table>
<thead>
<tr>
<th>Percentage (%)</th>
<th>Given At Least 1 Shot</th>
<th>Fully Vaccinated</th>
<th>Doses Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Total</td>
<td>66</td>
<td>57</td>
<td>82</td>
</tr>
<tr>
<td>Louisiana</td>
<td>53</td>
<td>47</td>
<td>79</td>
</tr>
</tbody>
</table>

Lower Vaccination Rate among Young Populations

Percentage of Residents Given At Least 1 Shot in Louisiana

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-69</td>
<td>75</td>
</tr>
<tr>
<td>50-59</td>
<td>70</td>
</tr>
<tr>
<td>40-49</td>
<td>65</td>
</tr>
<tr>
<td>30-39</td>
<td>60</td>
</tr>
<tr>
<td>20-29</td>
<td>55</td>
</tr>
<tr>
<td>10-17</td>
<td>50</td>
</tr>
</tbody>
</table>

Uniquely, Louisiana has Higher Vaccination Rates Among Black and Hispanic than White

Vaccination Rate by Race & Ethnicity

<table>
<thead>
<tr>
<th>Race &amp; Ethnicity</th>
<th>Vaccination Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>54</td>
</tr>
<tr>
<td>Black</td>
<td>46</td>
</tr>
<tr>
<td>Hispanic</td>
<td>51</td>
</tr>
<tr>
<td>Asian</td>
<td>69</td>
</tr>
</tbody>
</table>

Note: Lower% indicates a lower vaccination rate.
Timeline Analysis

Policy Outcomes

1 shot 1 pound
- A small spike in new doses

Mass Vaccination site
- Enhanced access
- Relatively high level of new doses
- Biased Samples?

Monetary Incentives (Shots for $100, $500 bonus, etc….)
- No noticeable spikes
- maintained the new doses level
- Not enough incentives

Spike of 4th Covid Wave
- Large spike in new doses
- Better effects from rules than from bonus
- Urgency

Main Takeaway

Monetary incentives helped with limitations

The main Driver = Ideology around Vaccines

Policies: target the concern directly; not solely incentivize materialistically
Target Populations and Factors

Deterring Factors of Vaccination

- Misinformation from Social Media
- Government Skepticism
- Lack of Urgency
- Logistics of Getting a Vaccine (Access, Time, Transportation)
- Impact on Labor/Financial stability
- Community-based Misbelief

Target Populations

<table>
<thead>
<tr>
<th>Young Adults</th>
<th>Misinformed Adults</th>
<th>Negative Experience with American Health Care</th>
<th>12-17 Teens</th>
</tr>
</thead>
</table>
| - Often don’t feel the need to get vaccinated  
- Second Lowest Vaccination Rates  
- More asymptomatic  more likely to spread | - Political stance might influence  
- Highly tailored Social Media content leads to biased access to information | - Especially Ethnic groups  
- Finding it Difficult to trust the system | - The Government Recently approved Pfizer Vaccine for 12+  
- Parental consent required for vaccination |
Alternative COVID-19 Policy Initiatives

- Free Saints Tickets
- Paid Time Off
- Social Media
- Parent Discussions
- Referral System
- Minority Vaccination Pop-ups
Saints Tickets Incentive – Young Adults

- 481,359 unvaccinated Louisianan young adults (18-29 years old)
- 1.8 million+ followers on Instagram; New Orleans Saints integral to Louisianan culture
- Most 2021 Saints home games have tickets available for below $50.
- Assuming the incentive shifts the decisions of 40% of young adults, the total cost is $19.254 million.
Utilizing TikTok and Snapchat Influencers

By fall of 2020, 69% of US teenagers were TikTok users, and the upward trend of the app's influence has not slowed.

In 2018, 35% of US teens stated they spend most of their screen time on Snapchat.

Louisiana government has already created a vaccination TikTok and celebrities have shown interest.

Celebrities like Joe Burrow, Drew Brees, and Charli D'Amelio would offer low-cost broad reach to LA teens and young adults.
Subsidization of Paid Time off with Proof of Vaccine

UNVACCINATED US POPULATION

- Concerned they "might need to miss work if the side effects of the vaccine make them feel sick for a day or more.
- Not concerned about missing work for side effects

- Focus is on construction and food service workers
- If 50% are persuaded, total cost would be $16.7 million
- More cost-effective than "Shot for $100"
Parent Discussions

- **Town halls**: a 30-minute presentation by pediatricians + free dinner.
  - After-work time
  - Football practice – less worries about childcare
- Parents can discuss their concerns with each other and/or with the *doctors*.
- Set-up in every public school district in LA
  - Expected cost: > $5 million dollars.
- Measure success: Increase in *number of vaccinated students* at schools
Minority Pop-up Clinics

- 38% of Louisiana’s population is non-White, and they make up approximately 25% of the state’s unvaccinated population

- Clinics that will be:
  - Conveniently located
  - Run by diverse members
  - After-work hours
  - No appointment, proof of ID, or proof of residency

- Western University of Health Sciences - Pomona, California - 30,000 vaccinations

- Expected cost: <$5 million
Referral System to compensate recommenders

- $100 → to sway approximately 20%
- In New York, 20,000+ vaccinations
- Given a total unvaccinated population of 2,206,642 in Louisiana, and a referral of $60, the total cost is expected to be $19,860 million.

➢ An estimate of 15% of all unvaccinated becoming vaccinated was chosen.
## Policy Analysis

<table>
<thead>
<tr>
<th></th>
<th>Saints Tickets</th>
<th>Social Media</th>
<th>Paid Time Off</th>
<th>Parent Discussions</th>
<th>Minority Pop-Up Clinics</th>
<th>Referral System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$19.254 million</td>
<td>$5 million</td>
<td>$16.7 million</td>
<td>$5 million</td>
<td>$5 million</td>
<td>$19.86 million</td>
</tr>
<tr>
<td>Political Feasibility</td>
<td>Highly feasible</td>
<td>Highly feasible</td>
<td>Moderately feasible</td>
<td>Highly feasible</td>
<td>Moderately feasible</td>
<td>Highly feasible</td>
</tr>
<tr>
<td>Scope of Reach</td>
<td>Targeted (18-29 y/o)</td>
<td>Targeted (15-25 y/o)</td>
<td>Targeted (Construction and Food Service)</td>
<td>Targeted (Parents of children)</td>
<td>Targeted (minorities and undocumented)</td>
<td>Broad (All LA citizens)</td>
</tr>
<tr>
<td>Intensity of Persuasion</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Equity</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Moderate</td>
<td>High</td>
</tr>
</tbody>
</table>

Policy Selection: Referral System- Broad, Highly Equitable, and High Intensity through the Utilization of Relationships and Financial Incentives
Referral System Timeline - 6 months

- **November 1, 2021**: Spreading information about the referral system through billboards, news outlets, and government websites.

- **November 15, 2021**: Referral system is implemented across the state of Louisiana, documentation of referrals is done on-site of vaccine.

- **December 1, 2021**: Compensation begins to be sent via visa gift cards through USPS in unmarked letters or electronically or pick-ups.

- **March 2022**: Referral system is re-evaluated to assess the efficacy through the number of referrals made and whether to continue further.

**Feedback Loop for Low Number of Referrals**

- **Change** in Advertising methods
  (Community-based intervention to address misbelief - School, Church, Sport groups)

- **Expanding** Referrals to Organization
  (Organizations receive the benefits too)

- **Re-evaluate** the efficacy
Thank you for listening.
References (Cont.)