Advancing Data Quality through Technology

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Overview

• History of Data Use at the Local Health Department
• Geofencing
• Campaigns Results and Data Use
• Future Endeavors
Early on...

- Data collected through mandated certificates/records
- Reports consisted of individual records bound together and limited analysis
- Data disseminated primarily in physical copy
As technology advanced...

- Data collected more efficiently allowing for more time on analysis and innovation
- Use of statistical software more readily available
- Design software used to create better visualizations of data
- Data disseminated through website and web-based tools
Improving media campaign data: Geofencing

- A method to utilize the location of cellular devices to provide targeted messaging to a group of people
- Used fairly often in the corporate world:
  - Sending coupons/discounts
  - Advertisements about promotions
Terminology

• Clicks:
  – The metric used for the number of times an advertisement is selected. Also reported as Click Through Rate (CTR)
  – Baseline for CTR usually somewhere between 0.12 and 0.17%

• Conversions:
  – Number of devices that make it to a desire location after a targeted ad/campaign
How does it work?

• Digital boundaries are drawn around specific geographic areas
• When a cellular device is identified as coming into the area, targeted advertisements and messaging are then shared with the person
• This can occur through:
  – Standard extended display
  – Social media websites
How does it work?

Source: geospatialworld.net
HIV Campaign

- Time frame – August 21st - November 30th
- Comprised of extended display advertisements, Facebook, and email
HIV Campaign

- Program staff identified initial geofenced locations for ad targeting (N=50)
  - Restaurants/bars, barbers/salons, county agencies, etc
- Final conversion zones also identified by staff (N=8)
  - Hospitals, health departments, and partner agencies
HIV Campaign

• Geofenced locations’ click through rates ranged from 0.00% to 0.46%, overall for the campaign was 0.20%

• Over 3,800 individuals made it to a conversion zone after viewing or clicking on the advertisement
  – Over 75% were at a local hospital
HIV Campaign

Click Through Rates (%)

Number of Geofenced Locations

Restaurant/Bar
Barber/Salon
Other
Click through rate comparisons

- Email: 2.28%
- Facebook: 0.11%
- Geofencing: 0.20%
  - 0.20-0.21% CTR for breakout by geofence site type
Syringe Exchange Campaign

- Time frame: August 21st – November 30th
- Extended display, Facebook, and email
Syringe Exchange Campaign

- Click through rates varied from 0.00% to 0.65%; for all sites combined it was 0.19%
- 57 consumers who viewed the ads made it to the conversion area at the local health department
Syringe Exchange Campaign

Number of Geofenced Locations

Click Through Rates (%)

- Exchange
- Vape
- Mental Health
- Other

Click Through Rates (%): .00-.04, .05-.09, .10-.14, .15-.19, .20-.24, .25-.29, .30-.34, .35-.39, .40-.44, .45-.49, .50-.54, .55-.59, .60-.64, .65-.69
Click through rate comparisons

- Email: 2.21%
- Facebook: 0.26%
- Geofencing: 0.19%
  - Mental health location: 0.18%
  - Exchange: 0.39%
Implications for the campaigns

• These results can be paired with other information collected through the campaign to identify opportunities
  – Targeting which specific ads and delivery routes provide the best click through rates
  – Replacing lower performing geofenced sites
  – Using performance of click through rates to identify areas for additional outreach
Key findings

• Performance across both geofencing campaigns was close to 0.20%
• Geofencing provides a way to measure if advertising drives people to certain locations
• Analysis of CTR can help determine if specific ads are better than other at achieving action
Limitations

- Geofencing measures devices not people
- Separating impact of geofencing from other concurrent messaging may be difficult
- Other messaging venues do not use the same conversion points
Where do we go from here?

- Campaigns are still underway
- Compare conversions across geofenced sites
- Looking at testing rates from local hospitals to see how campaign may be impacting this metric
Thank You

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