Utilizing Advanced Mobile Technology for Public Health Promotion and Education
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INTRODUCTION

- Today’s information economy presents new opportunities for health education specialists to promote health through social media.
- Geofencing is one such opportunity that sends banner ads to the electronic devices of those located in a restricted geographic area.
- The banner ads are image-based and contain a link to a website.
- Geofencing was utilized in West Greenville, a small community in Pitt County, to direct community members to participate in Tell a Story Save a Life, a diabetes education awareness campaign.
- The purpose of this poster is to explain what is known about the new technology and its potential for public health impact and what needs to be further understood.

MAP OF WEST GREENVILLE

INTERVENTION

- A virtual boundary was drawn around West Greenville, NC (~7,200).
- Banner ads that included a link to personally recorded diabetes narratives were disseminated using geofencing technology.
- Participants were instructed to listen to the stories, vote for their favorite, and complete a survey for a chance to win one of ten $25 gift cards.
- The website also included resources for the prevention, management, and treatment of diabetes and prediabetes.

Help your community.
Vote for your favorite story.
Enter to win a $25 gift card.

Click Here

Theoretical Basis

- Health communication theory supports the use of gain-framed messaging over fear-based messaging.
- In addition, we tested the message in the target population and found that there was a preference for the messaging displayed on our banner ad.

Definitions

- Impressions: the total number of times your ad was displayed to someone
- Clicks: the number of times someone tapped on your ad
- Click-through rate (CTR) = clicks/impressions: percentage of impressions that generated a click

RESULTS

- Impressions: 147,018
- Clicks: 223
- Click-through rate (CTR) of 0.15%.
- The most popular applications through which a banner ad was received were Pixel Art, TextNow, and Wordscapes.

Benefits

- Restricting a population by exact geographic location
- Obtaining responses from a hard to reach population
- Leveraging a mobile application that the user already has downloaded

Limitations

- What little is known about the quickly evolving technology for public health purposes and its effectiveness
- Health education specialists must have reliable communication with a tech expert to utilize the location-based marketing as a tool

IMPLICATIONS FOR PUBLIC HEALTH

- Using geofencing to send effective health-related messages could result in positive implications for public health.
- Natural disasters and emergency response
  - Hurricanes and flooding in NC or wildfires in northern California
- Health promotion
  - High STD rate in a specified area; Community walking program

CAVEATS

- Popular social media platforms like Facebook, Instagram, and Snapchat have their own geofencing system.
- Cost calculated in CPM = cost per 1,000 impressions (e.g. $15.00/CPM - $1500 would result in 100,000 impressions)

Crash Course

- Understand the technology
- Test the messages
- Prepare the community to be receptive to the messages

REFERENCES

Winterer, S. Geofencing marketing guide for Facebook, Instagram, Google, & Snapchat Marketing 2019. Published Jan 7, 2019. https://www.digitallogic.co/blog/geofencing-geotargeting-advertising-online-marketing/


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