Using Digital Technology to Promote Healthy Food Access

August 6, 2015 2:00 pm Eastern

Alyse Sabina, Aetna Foundation
Andrea Parker, Northeastern University
Adrienne Markworth, Leah’s Pantry
Ken Cook, Environmental Working Group

Grantmakers In Health with Sustainable Agriculture and Food Systems Funders
Using Digital Technology to Promote Healthy Food Access

Grantmakers in Health
August 6, 2015

Alyse B. Sabina, MPH
National Program Director
Aetna Foundation, Inc.
Our Mission

To promote wellness, health, and access to high-quality health care for everyone, while supporting the communities we serve.

Our Pillars

- Utilizing technology to advance innovations and promote healthy choices
- Increasing access to healthy foods and opportunities for physical activity in underserved communities
- Health equity: Bridging the health divide
Digital Health Initiative

To identify existing innovative approaches that improve health outcomes and scale them to have transformative impact

Expected Outcomes

- Strengthen evidence base of digital health strategies that promote healthful choices at the community level, specifically within minority and underserved communities
- Demonstrate impact and scalability of effective digital health strategies to improve community health outcomes and that have the potential for positive societal impact
- Promote and empower people and communities to take ownership of their health
- Showcase scalable innovative community solutions that can have a positive impact on vulnerable populations
Supporting Healthy Eating Through Innovation

• Advancing technological innovations to ensure affordable access to locally grown fresh fruits and vegetables
• Empowering communities to make healthful choices
• Strengthening local economies
Thank You

Alyse B. Sabina, MPH
National Program Director
sabinaa@aetna.com
Using Digital Innovation to Achieve Health Equity

Andrea Grimes Parker, Ph.D.
Assistant Professor
College of Computer & Information Science
Bouvé College of Health Sciences
Northeastern University

August 6, 2015

www.ccs.neu.edu/~andrea | a.parker@neu.edu | @andreagparker
Outline

. Digital Innovation: Capacity Building Opportunities

. . User-Centered Design (UCD) & SDOH

. . . . 3 Points: Systematic Review & National Evaluation

. . . . . Summary
Digital Innovation: Capacity-Building Opportunities

Organizational

Community

Interpersonal

Intrapersonal

Knowledge (e.g., SMS interventions)

Skills (rehearsal environments, e.g., games)

Social support (e.g., online communities)

Modeling (e.g., fitness apps)

Access (e.g., PHRs, telemedicine)

Introducing Resources (e.g., exergames)

Policies (e.g., Wifi access)

Initiatives (e.g., digital incentive programs)
Digital Innovation

- Impacting: behaviors, knowledge, attitudes...
  - What else?

User-Centered Design (UCD)

Useful
does what’s required

Usable
natural, productive interaction

Used
people want & enjoy interaction

identifying user needs, desires & values
User-Centered Design (UCD)
3 POINTS:
SYSTEMATIC REVIEW & NATIONAL EVALUATION
Systematic Review

• How are mHealth tools being designed to address health disparities? How effective are they?

• 11 Databases
  — (e.g., ACM Digital Library, IEEExplore, Science Direct, PubMed, CINAHL, MEDLINE, PsycInfo)

• Final corpus = 77 Papers
  — Infant wellness, diabetes self-management, weight loss, heart disease, obesity prevention, etc.
National Evaluation

• 17 Projects
  – Digital Approaches to Addressing Health Disparities
    • Many focused on nutrition
  – Knowledge, attitude, behavioral & organizational impacts
    • Increased FV consumption, understanding of how to choose healthy foods, etc.

Advocacy Support
Informational Tools
Games & Gamification
Goal Setting & Tracking
Modeling & Social Connectedness
Clinical
(1) The Community is Critical

Systematic Review

• Community organizations
  – Very involved w/ recruitment
• But, limited involvement in delivery
• Real-world interactions help to facilitate efficacy
  – Enabling delivery
    • “There is a readiness among African American men to accept interventions that are vetted by their community leaders and carried out within familiar community settings.” Sultan et al. 2014
  – Strengthening community ties
    • “Remote nurses … helped build participants’ social connection with the program, which the text messages then reinforced and strengthened.” Nundy et al. 2014
(1) The Community is Critical
AF Evaluation

- “Some seniors were less than capable [of text messaging] *but because they trust the messenger* (Pastors and Health Ministers), *they were willing to try.*” (Text4Wellness)

- “The text messages were effective both because they provided timely information but also because they *strengthened the relationship of the health ministers with the participants.*” (MOBIL-ize)

- Developed *“supportive relationships with adult Y staff members.”* (Y-MVP)
(2) Technology: Grounding & Scope

Preliminary findings

- Opportunities for expanding design space
  - Beyond text messaging & information delivery

  - Better theoretical foundation (present in 47% of papers)
(3) Enriching the methodological toolkit

Preliminary findings

- Systematic Review
  - Most reported formative work (57%)

- AF Evaluation
  - surveys, interviews, focus groups
  - “Many times folks do not know specifically what they might want to accomplish, they do not know what the possibilities are.”

- Need for greater use of user-centered design methods
  - Participatory design
  - Cultural & technology probes
  - Experience sampling method
Summary: The Opportunity

• Design & evaluation within a SDOH, ecological frame
  – UCD methods

• Technology design: grounding & scope
  – Theory
    • Health behavior, sociotechnical
  – Beyond SMS
  – Personalization

• Integration: health technology + community organizations
Funding Health Equity Technology Projects

Adrienne Markworth
Executive Director
Leah’s Pantry
• Cooking and nutrition workshops
• Staff training and development
• Online interventions (Eatfresh.org)
• Community-based recipe development
• Trauma-informed programming
• San Diego Food Systems Alliance – fiscal sponsorship

[Website URL] www.leahspantrrysf.org
Find Recipes

Select Filter...

Recipe of the Month

[Image of a dish]
• Anchor product – [www.eatfresh.org](http://www.eatfresh.org)

• Eatfresh.org Text-Based Nutrition Ed

• Eatfresh.org Mini-Course – public launch 10/1/15
it's not what the software does. it's what the user does.

@hugh
After the build...

- Just because it’s a good product doesn’t mean anyone is going to use it.
- How can the product plug into an existing system?
- Hackathons, sigh
A Social Ecological Framework for Nutrition and Physical Activity Decisions

Social and Cultural Norms and Values
- Belief Systems
- Heritage
- Religion
- Priorities
- Lifestyle
- Body Image

Sectors of Influence
- Government
- Public Health and Health Care Systems
- Agriculture
- Marketing/Media
- Community Design and Safety
- Foundations and Funders
- Industry
  - Food
  - Beverage
  - Physical Activity
  - Entertainment

Environmental Settings

Individual Factors
- Demographic Factors
  (e.g., age, gender, socioeconomic status, race/ethnicity, disability status)
- Psychosocial Factors
- Knowledge and Skills
- Gene-Environment Interactions
- Other Personal Factors

Food and Beverage Intake
Physical Activity

Homes
Schools
Workplaces
Recreational Facilities
Foodservice and Retail Establishments
Other Community Settings
California Department of Public Health
Network for a Healthy California
2010-2011 Project Directory

It's hard to learn when you're hungry.

17 million children live in food insecure households
Enter your address and zip code or cross streets and city to find stores nearby which accept SNAP cards

e.g. 48104, 85 2nd St, San Francisco or Mission and 16th, 94106

Submit

or, text message your address to:

(415) 889-8650

Espanol  Chinese  English
Competition vs. Collaboration

Listen for “I am successful because everyone around me is doing a great job, and I know how to leverage this work with technology” instead of “we can solve this problem with this great app.”
Adrienne Markworth
Executive Director
Leah’s Pantry
adrienne@leahspantrrysf.org
415-710-2729
• More webinars on this topic?
• New topics you want to tackle or learn more about?
• Innovative work that you want to share?
• A question you want to pose to your colleagues?

Contact us at heal@gih.org