New England HIV Implementation Science Network
Technology and Social Media Work Group

Summary of January 21, 2015 Meeting

Chair: Trace Kershaw (Yale University)
CIRA staff facilitators: Gai Doran, Jim Pettinelli

Participants:
Tashuna Albritton Consultation Center, Yale University
Larry Brown Department of Psychiatry, Brown University
Stephen Cadby AIDS Project New Haven
Alberto Cifuentes, Jr. School of Social Work, University of Connecticut
Deborah Cornman Center for Health, Intervention, and Prevention, U of Connecticut
Daniel Davidson University of Connecticut
Pete Donohue Center for Interdisciplinary Research on AIDS
Kristi Garamel Brown University
Dini Harsono Center for Interdisciplinary Research on AIDS
Thomas Keegan Yale Institute for Network Sciences
M. Barton Laws School of Public Health, Brown University
Erin McBurney Center for Interdisciplinary Research on AIDS
Linda Niccolai Yale School of Public Health
David Novak OLB Research Institute, Online Buddies, Inc.
Elaine O’Keefe Center for Interdisciplinary Research on AIDS
Jacob van den Berg Program Director, Brown University AIDS Program
Jaclyn White Yale University, Graduate School of Arts and Sciences

1. Introductions and Approval of January 7 Summary

Participants introduced themselves, and the summary of the January 7 meeting was approved.

2. In terms of technology, what are unique considerations for each potential subgroup?

a. Adherence/care

- Provider-patient communication between and before and after encounters. Bidirectional communication between patient and provider could improve therapeutic alliance and care. Could have structured elements as well as just a channel of communication.
- Support of ART adherence. For example, using an app as a reminder. Perhaps, though, non-adherence is not really about forgetting or needing reminders. That applies to a few people, but diagnosing other reasons is important.
Bart Laws has been using advanced machine learning techniques that can take directed, more tailored responses; talking with video game developers to use technology to communicate.

- Reminder for taking medications, for refilling prescriptions. Use apps to track missed doses and learn about triggers for missed doses.
- Some type of chat room for social support, sharing tips that work for people, etc.
- Apps to increase motivation. Increasing motivation depends on diagnosing reasons.
- Using incentives or positive behavioral reinforcement strategies through apps. Should also connect it with some sort of social outlet or network to connect with other HIV-positive individuals.
- Could do E-counseling to support adherence. Digital counselors. There is some precedent for that in areas other than HIV.
- One of Larry Brown’s apps is a game; increases knowledge and improves self-efficacy. Could integrate apps with some form of conditional incentives. They are testing now, doing small RCT. Have feasibility and acceptability. There have been evaluations of games in other diseases (International Conference on Communication in Healthcare).
- Regarding differences between adherence and primary prevention, patient motivation is likely different for adherence and prevention — you would need a real draw for people (in to your app) if they are negative.
- Mems caps could send record to provider. How to involve the care provider in the intervention by integrating data into the patient’s medical record.
- Linkage to care is a critical gap in cascade. Could use apps for Disease Intervention Specialists, partner referral potentially. Both CT and RI departments of health are interested in ways to enhance efficacy/reach of DIS workers.

b. Primary prevention

- PrEP support. We don’t have a lot of experience yet with PrEP, but especially in smaller cities where the prescriber may be distant, electronic support could be applicable. An app linking people to PrEP providers.
- Games might be good way to go with primary prevention since they can be engaging. Lynn Fiellin has a game for adolescents.
- We need to study beliefs, motivations and explanatory models in primary prevention.
- Several primary prevention programs have been digitized though not as apps as far as we know. Is there an opportunity for this group here?
- Combination of video and games and VR
- Social media support for education and support of safer behavior.
- GIS-based app to direct people to care/locate places to get tested.
- A partnership seeking app or website for men who are looking for safe sex though driving young populations off of the very apps they are most engaged in, to another health-related app, is a tough sell. Promoting primary prevention on the very apps they are on may be more advisable.
- Social media focused on reducing stigma and changing norms around seeking HIV prevention, diagnosis and care – a structural-level intervention. Stigma is
associated with anonymous sex. Stigma is also associated with PrEP and not necessarily using condoms all the time. Any approach to prevention should offer all types of options -- condoms, harm reduction, PrEP, etc. -- and explain them in an objective, non-judgmental way so consumers can make better choices.

- Lisa Easton’s work (UConn) is around using existing apps for MSM.
- Steven Cadby’s group is outreaching using the most popular apps ie Grinder and adding a link in the conversation to a more detailed prevention website.
- “Ask the DOC” chat for health questions. Link to pharmacists. Has ethical and technology challenges.

3. Refining ideas

Adherence and prevention do cleave, with overlap at PrEP. MSM could be a sub-group within primary prevention. Other sub-groups could be youth, people of color, women, and older adults. Adherence and prevention present different technology opportunities and problems. Different approaches will cater to different populations. It is important to find common ground, and we should acknowledge the unique and particular needs of each population. Populations are most relevant to prevention, adherence is more about the individual. Hard to reach populations are about prevention, and engagement in care with separate issues to some degree.

Two sub-groups rose to the top: Adherence and prevention. The group agreed that we would stay together as one group for now to explore these two areas further.

4. Assessing interventions currently being implemented in the New England region

CIRA will email the Technology and Social Media work group members and ask for information on (a) the interventions we, ourselves, are conducting/researching; and (b) other interventions we know of in our regions that are related to technology and adherence and prevention. We can also ask the state departments of health what they are funding in HIV programs involving technology/social media. We are already seeking information from them on current funding of D/EBIs. We will review the consolidated list at our February 5 in-person meeting in Sturbridge.
5. **Key Stakeholders? Who else needs to be involved?**

- Relevant CBOs once we know what we're doing.
- IRB representative.
- Information security/technology person.
- Web/app developers/designers.
- Social media/communications/marketing specialists.
- Health communication specialists.

6. **Group Members Biographies:** What are the essential elements that we should include?

- Main interest/approach to technology.
- Area of HIV projects outside of technology.
- Skill sets and research interests – what do you bring to the group. *CIRA will create a check box for members to tick off which will be included in an emailed survey to members later in January/early February.*
- Current collaborations with HIV providers/practitioners and reverse (providers' research collaborations).

7. **Next? In-Person Work Group Meetings and Workshop**

   **Thursday, February 5, 2015**
   **9:30 a.m. to 3:30 p.m.**

   **Publick House Historic Inn**
   277 Main Street
   Sturbridge, MA 01566

8. **Funding Opportunities**

   a. **CIRA/LTB CFAR Joint Pilot Project Funding**
      
      *Letter of intent due date - Monday, February 2, 2015*
      *Full application due date - Friday, March 20, 2015*

   b. **NIH Dissemination and Implementation Research in Health**

   c. **CDC Mobile Messaging Intervention to Present New HIV Prevention**
d. Improving Delivery of HIV Prevention and Treatment through Implementation Science and Translational Research, PA-14-129 (R21)

e. Advancing Interventions to Improve Medication Adherence
   i. PA-14-334 (R01) http://grants.nih.gov/grants/guide/pa-files/PA-14-334.html
   ii. PA-14-335 (R21) http://grants.nih.gov/grants/guide/pa-files/PA-14-335.html