



Future Directions and Funding Priorities for HIV and Technology-Based Research at NIMH

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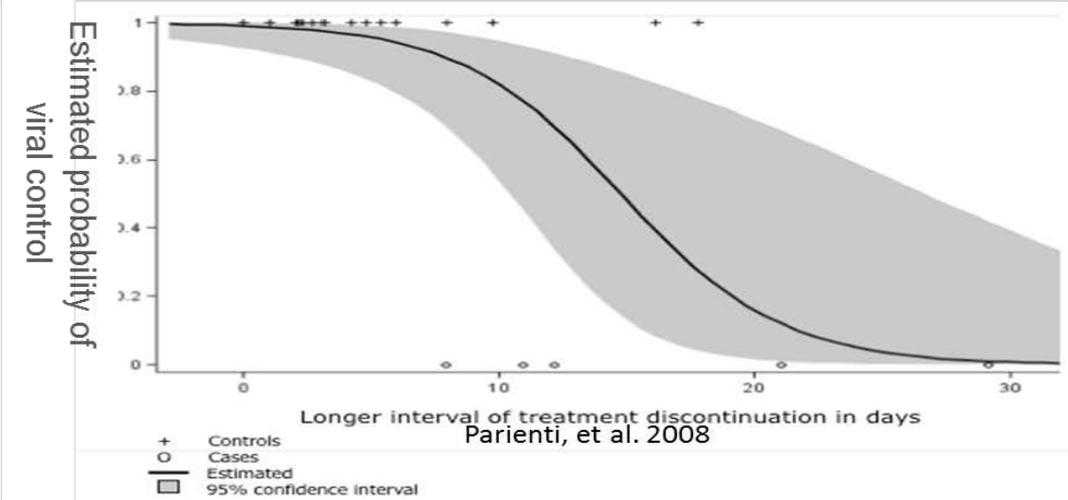
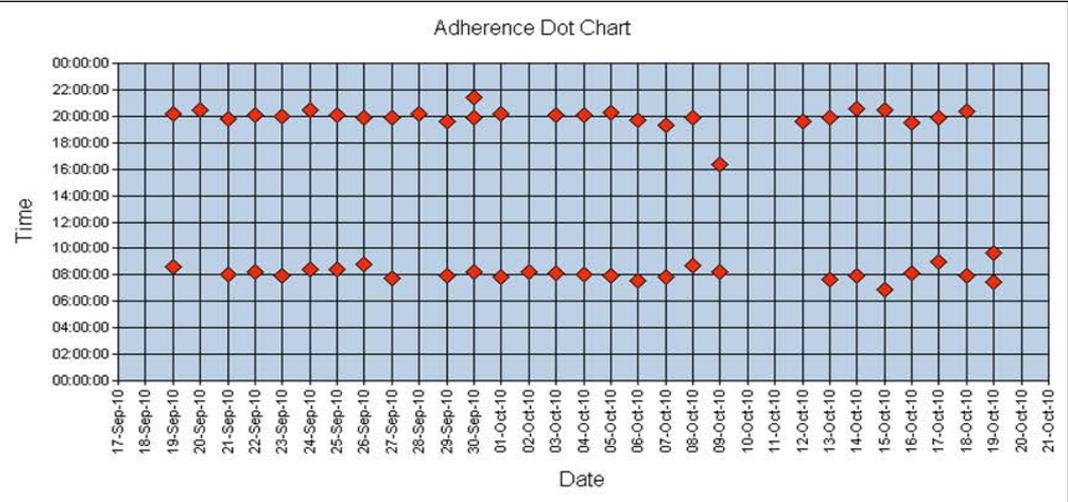


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Overview

- Findings from NIMH funded research in this area
- The benefits and challenges to the use of technology in HIV research
- NIMH Priorities
- Funding Opportunity Announcements

Monitoring Adherence in Real-Time Through Wisepill



R01MH054907, K23MH087228 & K24MH087227

Haberer 2013 AIDS
Haberer 2010 AIDS Behav



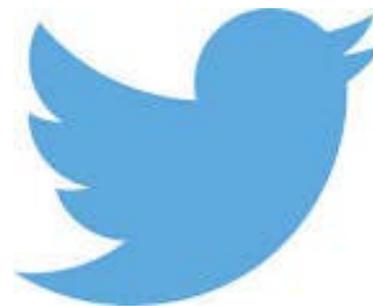
How to Handle Invalid and Suspicious Data

- Web-survey data collection is efficient and timely.
- Findings suggest that pre and post hoc decisions about how to handle suspicious data are needed.
- An approach that is too conservative, may harm the validity of the study.
- Studies should detail how they handle fraudulent and suspicious entries in their publications.

Recruitment/Surveillance Strategies



webRDS



KIU! Online HIV/STI Prevention Program for YMSM

- Intervention for diverse YMSM upon receiving an HIV negative test result
- Feasible and acceptable
- Participants in the intervention arm had a 44% lower rate of unprotected anal sex acts at the 12-week follow-up ($p < 0.05$) compared to an HIV information control condition.
- Now funded as a 3 city RCT by NIDA (R01DA07)

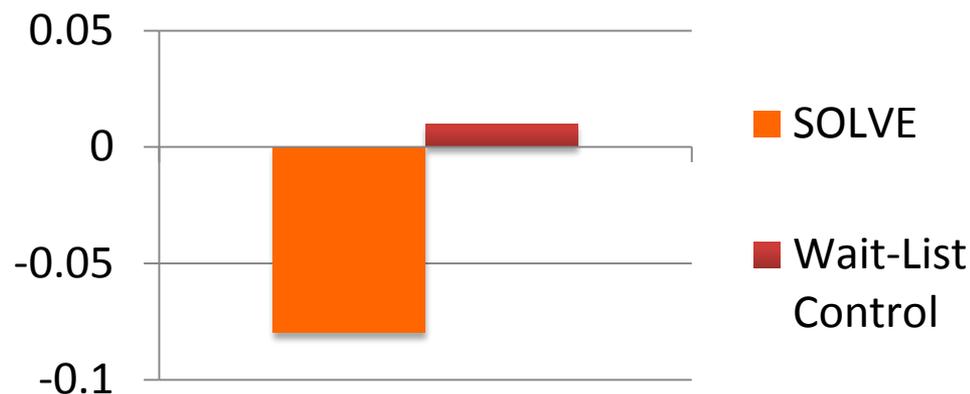
HAVE FUN. STAY SAFE.

KEEP IT UP



Socially Optimized Learning in Virtual Environments (SOLVE)

- An interactive game designed to reduce MSM's sexual shame.



- Participants in the SOLVE treatment condition reported greater reduction in shame, which in turn influenced reduction in UAI at 3 month follow-up.

Using Facebook to Increase HIV Testing Among MSM of Color

- 95% of intervention participants and 73% of control participants communicated voluntarily on Facebook.
- 44% of the intervention group vs. 20% of the control group requested home-based testing kits.
- African-American and Latino MSM found home-based tests to be an acceptable HIV testing method.



Novel, Theory Based Internet HIV Intervention for Young Black MSM

- HealthMpowerment.org



Building healthy communities online

- Multiple features – live chats, quizzes, personalized health journals, & decision support tools
- Demonstrated good content acceptability, usability and satisfaction ratings

Online Peer-to-Peer Social Support for ART Adherence

- Evaluation of “Thrive with Me” – an online social support intervention to improve ART adherence among HIV+ gay or bisexually-identified men.
- Feasible (90% retention) and acceptable (in Information Quality, System Quality, and Perceived Usefulness).
- Modest effects on adherence in the overall sample; however, significant effects among current drug-using participants.



Why use technology?

Advantages

- Reaching people where they are instead of having them come to us
- Can tailor an intervention to the individual without losing program fidelity
- Overcome barriers to uptake
- Anonymous
- Scalable and cost effective

Disadvantages

- Relying on self-motivation to find the information and then come back – lower follow up rates
- Ethical issues – informed consent, confidentiality
- High development costs
- Avoiding fads
- Selection bias
- Potential for fraudulent data

Finding the right balance between...



technology-enabled
interactions

human interactions

Where do we need to go?

From

- Feasibility and usability
- Applying the same technologies (web, phone, etc) to traditional face-to-face interventions
- Focusing on the program or platform

To

- Impact
- Using new technologies in novel ways
- Gaining a better understanding of how technology based interventions work

NIMH Priorities

- Studies that optimize the accuracy and validity of self-report (e.g. ARV adherence, sexual behavior)
- Develop & test the acceptability, feasibility, validity, & accuracy of novel technologies for “real-time” or prospective monitoring of behavior
- Develop & test technology-assisted approaches that provide real-time feedback loops to participants regarding their behavior
- Increasing regular HIV testing among YMSM (home testing, social networking approaches?)
- More targeted technology based interventions for PLWHIV
- Enhancing our understanding of the ethical challenges of conducting HIV-related research using new technologies

Division of AIDS Research

Discovery, Development, and Testing of Novel Interventions to Advance HIV Prevention and Care

- New Intervention Approaches
- Structural and Cultural Barriers
- Mediators/Moderators

- MSM
- Adolescents
- Ethnic Minorities
- Cultural components
- International
- Active Ingredients
- Principles
- Validation

Advancing the Impact of Effective HIV/AIDS Prevention and Treatment Interventions

- Rapid Uptake
- Capacity Building
- Engagement in Communities
- Partnerships: PEPFAR, CDC, USAID
- QA/QC

Examples of Current NIMH Sponsored Announcements

PA-11-271	NIMH	Advancing the Impact of Effective HIV/AIDS Prevention and Treatment Interventions (R01/R03/R21/R34)	2011-07-26	2014-05-08
PA-11-272				
PA-11-273				
PA-11-274				
PA-11-275	NIMH	Discovery, Development, and Testing of Novel Interventions to Advance HIV Prevention and Care (R01/R03/R21/R34)	2011-07-26	2014-05-08
PA-11-276				
PA-11-277				
PA-11-278				

Keep an eye on this space as we refresh FOAs and post new FOAs regularly!

<http://www.nimh.nih.gov/about/organization/dar/aids-related-funding-opportunity-announcements-foas.shtml>

Examples of Current NIMH Co-Sponsored Announcements

PA or PAR #	Institute	Title	Date Posted	Expiration Date
PAR-14-028	NIH	Mobile Health: Technology and Outcomes in Low and Middle Income Countries (R21)	2013-12-11	2015-02-20
PAR-13-323	NIH	Increased Knowledge and Innovative Strategies to Reduce HIV Incidence - iKnow Projects (R01)	2013-08-08	2016-01-08
PA-13-288 PA-13-292	OBSSR	Behavioral and Social Science Research on Understanding and Reducing Health Disparities (R21/R01)	2013-08-02	2016-09-08
PAR-12-244	NIH	Ethical Issues in Research on HIV/AIDS and its Co-morbidities (R01)	2012-07-24	2015-01-08
Parent PAs				
PA-13-302	NIH	Research Project Grant (Parent R01)	2013-08-02	2016-09-08
PA-13-303	NIH	NIH Exploratory/Developmental Research Grant Program (Parent R21)	2013-08-02	2016-09-08
PA-13-304	NIH	NIH Small Research Grant Program (Parent R03)	2013-08-02	2016-09-08



THANK YOU!

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Questions?



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