How can our research make a difference?
Issues in translating an evidence-based HIV prevention intervention into practice

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How does research regarding developing an intervention have an impact?

• Need to have an efficacious intervention (typically tested in RCT)

• For community-based organizations (CBOs) & health departments (“funders”) to hear about it -- can’t just publish in professional journals

• Intervention needs to be disseminated so CBOs & health departments hear about it

• Needs to be implemented effectively in real world
Dissemination in the U.S.

• The CDC is strongly urging that community-based organizations (CBOs) implement evidence-based interventions, and mostly only funding EBIs

• Conferences, funding mechanisms, information from organizations are distributing information about EBIs (e.g., Diffusion of Evidence Based interventions - DEBI)

• Thus *dissemination* of information about EBIs tends not a big problem in the U.S. (but little dissemination outside of U.S.)
Focus of Today’s Talk: 
*Implementation* Issues

- **Paper implementation**: organizations have materials about how to implement the program and say that they are implementing it - but really are not implementing the EBI ("*looks good on paper*")

- **Performance implementation**: organizations are putting procedures and processes in place in such a way that the elements of the intervention are resulting in the desired processes ("*actually performing the intervention*"")
Little Attention on Implementation of EBIs in HIV/AIDS Prevention

Specifically:

• How well are HIV prevention EBIs translated from science to practice?

• What are the barriers and facilitators to effective implementation of EBIs?

• What can be done to help in the effective implementation of EBIs?

• Are adaptation issues important to consider?
What is “Effective Implementation”?

- Implement the EBI’s *core elements*
- Core elements are implemented according to the guiding principles/theories that underlay the intervention
- Implementation with “fidelity”
- High fidelity can include tailoring/adapting when necessary for community context and/or the population - if do so while maintaining the core elements & guiding principles
Background: HIV prevention intervention for young gay/bisexual men (YGM)

- When began developing an intervention for YGM, they were not recognized as group at risk for HIV.
- Group at arguably highest risk for HIV in U.S.
- Of major importance: YGM do not seek services for risk reduction, do not want to attend AIDS organizations, do not want to participate in small groups, workshops.
- Implications: can’t rely on small group or individual-level interventions - requires community-level approach.
YGM vulnerable to HIV for reasons that exist at multiple levels

• Young men engage in high risk sex for a variety of reasons:
  • *individual factors* (e.g., perception that safer sex is dull, low risk perception, internalized homophobia, loneliness, low self-efficacy)
  • *interpersonal factors* (e.g., unable to negotiate safer sex w/partner, fear of rejection, being in love)
  • *social factors* (e.g., lack of support for safer sex, norms that support drug use)
  • *Environmental/structural factors* (e.g., only “risky” venues to meet other YGM, no place just to be yourself where you’re accepted for who you are)

• Need an intervention approach that addresses issues at multiple levels
Other considerations in developing HIV prevention approach for YGM

• Wanted to develop intervention that encompasses the ideals of community-based participatory research (CBPR):
  • Community ownership of approach: run by community, for community
  • Empowerment
  • Adaptable

• But most CBPR approaches likely to develop intervention unique for that time/place/community

• Goal: to develop effective intervention that can be adapted by any community for its own context; promotes community ownership of intervention; while also being replicable
The Mpowerment Project (MP): Found effective in reducing risk among YGM in 2 randomized, controlled trials in U.S.
Guiding Principles: Based on Formative Research & Theories of Behavior Change

- Social Focus
- Empowerment
- Peer Influence
- Diffusion of Innovations
- Multi-Level
- Sex Positive & Affirming of all Orientations
- Community Building
Social Focus

- Address young gay and bi men’s social needs, desire to have interactions with other YGM
- Link HIV prevention to the fulfillment of these and other unmet needs
- Infuse HIV prevention into all social activities
Empowerment

• Behavior change is most lasting when we’re actively involved in creating and implementing solutions to our own problems

• Young men are the decision makers of the Project

• Increases motivation to be part of project
Peer Influence

- Peer-influence is very powerful for youth
- Mobilizes peers to act as agents of change within their social networks: support each other to be safe sexually

MPowerment Detroit
Sex Positive & Affirming of All Sexual Orientations

- Enrich and strengthen young men’s sexual identity and pride about their sexual orientation
- Eroticize safer sex—not just focused on condoms
- Promotional events are uplifting, fun
- Pride about ethnic/racial background

Atlanta, Georgia

Dayton, Ohio

Detroit, Michigan
Community Building

- Creates a healthy community
- Promote supportive friendship networks
- Disseminate a norm of safer sex throughout a community
Core Elements

- Core Group & Volunteers
- Coordinators
- M-Groups
- Formal Outreach
- Informal Outreach
- Project Space
- Publicity Campaign

Informal Outreach

Formal Outreach

M-Groups

Project Space

Core Group, Coordinators
Core Group/Volunteers

- 15-20 Core Group members
- Decision-making body for project
- Key to community empowerment
- From diverse parts of community
- They and other volunteers (along with paid staff) run the intervention

FUSION - Ft. Lauderdale FL 2008
Project Space

- Young gay/bi men’s community center
- Space for most events and activities, drop-in hours
- Resources and referrals
- Home-like, safe, gay-positive atmosphere
- Decorated to support safer sex (condoms distributed, safer sex posters, gay positive images)
Outreach Model

**Formal Outreach**

- Outreach Events (Large, Medium, Small)
- Outreach Team
- Outreach Team Performance

**Informal Outreach**

- Conducted through social networks
Formal Outreach Events

- Attracts men to project
- Promote safer sex
- Allows young men to meet each other, build community
- Have fun
- Attract men into other Project activities
- Reaches higher-risk YGM
- Appeal to a variety of men with large, medium and smaller events

Walton Manors, Florida
Small Group (“M-Group”)

- Biggest “dose” of HIV prevention intervention: skills-building focus
- 8-10 young gay/bi men
- 1 time group
- Focus on: clarifying misperceptions, increasing communication & negotiation skills, eroticizing safer sex, condom use practice; variety of exercises, role plays
- Especially: teaches YGM and motivates them to conduct informal outreach
- 3 hours long
- Promoted as way to meet other young gay/bi men, fun, discussion of important issues (NOT a “safer sex workshop”)
The TRiP Project
(Translating Research into Practice)

• Longitudinal study of 72 CBOs implementing the Mpowerment Project around the U.S.

• Nearly the universe of CBOs at the start of the study (now we estimate 125-150 CBOs have implemented it)

• Recruited the CBOs into the study as they contacted us for information about the Mpowerment Project (we provide all trainings and materials on the Mpowerment Project)

• Each CBO followed for 2 years

• Focus of this study: How is the intervention implemented and can we help?
Methods

- Each CBO assessed at baseline, 6, 12, 24 months

- Phone interviews covered:
  - Thorough description of intervention (semi-structured interview, extensive notes taken)
  - Some quantitative measures
  - At each CBO, interviewed intervention coordinators ("front line staff"), supervisor (Director of HIV Education), 1 - 2 volunteers

- $N = 2 - 5$ people per CBO at each wave of data collection; total 647 interviews

- Mostly qualitative study
MP Technology Exchange System - MPTES: An intervention for CBOs

- Integrated system of materials to help CBOs understand how to implement the Mpowerment Project
- Developed initially with funding from CDC’s REP Project (Replicating Effective Programs)
- Uses mixed media approaches
- Developed with input of community working group - diverse CBOs and Health Departments, who gave *substantial* feedback over the course of many meetings
- Written materials all reviewed by editor with training in adult education
- Emphasis has always been on technology “exchange” vs. *transfer*: indicates that learning was bi-directional & acknowledged as such
MPTES
MP Technology Exchange System

- Manuals (overview & M-group): visuals, graphics, nice layout, index; many called it a “bible”; inexpensive
- Videos (overview & M-group)
- 3 Day Training: uses role plays, interactive exercises, group processing: NOT didactic
- Technical Assistance (TA) Program
- Website - [www.Mpowerment.org](http://www.Mpowerment.org): materials from different projects, visuals, chatroom on topics
Technical Assistance

- TA Specialists had run the intervention, both in trials and subsequently in CBOs
- “Client-centered,” using empowerment approach (problem-posing dialogue) focusing on guiding principles and core elements
- Attempted phone contact every 2 weeks
- Primarily focused on front line staff, i.e., the coordinators
Fidelity

• External rated fidelity:
  • TA specialists kept extensive notes on TA episodes, issues arising in each CBO
  • TA specialists and evaluator read all TA notes and all interview notes per organization
  • External rated fidelity score: ranged 1 - 10 (1 = no fidelity, 10 = high fidelity)
  • Extensive work conducted to reach shared understanding of fidelity ratings

• Self rated Fidelity
Fidelity Results

• CBOs ranged tremendously in fidelity of implementation

  • Some CBOs implemented the intervention with complete fidelity: *performance implementation* (and often involved tailoring it for population & community)

  • Other CBOs had very poor fidelity, simply unable or unwilling to implement the intervention: *paper implementation* (“MINOs”: MP in name only”)

• CBOs’ fidelity of implementation showed tremendous fluctuation over time: surprising to us
Fidelity of Implementation at CBOs with more than 1 Coordinator at Baseline to 2 Years
Adaptation Issues

• Some adapted MP very effectively
  • Used guiding principles to adapt, strive to keep same processes occurring (eg, peer influence)
  • Benefits of skillful adaptation:
    • Made MP more culturally compatible, sensitive
    • More compelling for population
    • Increases sense of ownership
• Others adapted poorly
  • Dropped core elements without consideration of guiding principles
  • Often altered without thought about purpose (eg, M-group)
MPTES utilization over time correlates with both fidelity scores

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<th>BASELINE</th>
<th>6 MONTHS</th>
<th>12 MONTHS</th>
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<tr>
<td></td>
<td>Fidelity-self report</td>
<td>Fidelity-external rating</td>
<td>Fidelity-self report</td>
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<tr>
<td><strong>Materials Utilization</strong></td>
<td>.30*</td>
<td>.40**</td>
<td>.32*</td>
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<td><strong>Interactive TA</strong></td>
<td>0.03</td>
<td>-0.05</td>
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*p < .05; **p < .01
TA Over Time Predicts Fidelity at 24 months (N=49)

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<th>TA on what topic</th>
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<td>M-groups</td>
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<td>.31*</td>
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<td>Outreach</td>
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<td>.36*</td>
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<td>Informal Outreach</td>
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<td>.39**</td>
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<td>Publicity</td>
<td>.30*</td>
<td>.32*</td>
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<td>Project Space</td>
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<td>.38**</td>
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<td>Coordinators</td>
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<td>.27+</td>
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<td>.26+</td>
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<td>Supervision</td>
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<td>Evaluation</td>
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<tr>
<td>Community Issues</td>
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*p<.05  
**p<.01  
***p<.001
Adaptation & Fidelity

• Some staff discount intervention because not developed with population initially

• Other staff reflect on intent of intervention (guiding principles, core elements) and adapt for population quite successfully

• Likewise, some implementations are high fidelity and others quite low - don’t know how to adapt, can’t apply guiding principles

• Range in what they need: some need very concrete ideas about adaptation, others can do translation to their population effectively considering theory (we are currently learning from them)
Organizational Characteristics Predict Fidelity (N=40-48)

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<tr>
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<th>External (R)</th>
<th>Self (R)</th>
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<td>Annual MP budget</td>
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<td>.30+</td>
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<td>Number Paid Staff on MP</td>
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<td>.56***</td>
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<td>Organizational Functioning</td>
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<td>Agency self-perception of efficacy to implement MP</td>
<td>.47**</td>
<td>.49***</td>
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<tr>
<td>Staff turn-over</td>
<td>.15</td>
<td>.29*</td>
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Qualitative Analysis Methods

- All notes & commentaries entered into database (including from TA providers & evaluator)
- Preliminary analyses of the data generated broad themes/organizing codes
- Monthly analysis meetings focused on emerging issues across CBOs
- Summary notes later systematically compared with organizing codes
- All themes/codes were generated from data (not determined beforehand)
Original Assumption about Barriers & Facilitators to Effective Implementation

Expected that coordinators would be, by far, most important:

Aimed most MPTES at them
Complex Intervention:
Requires Sufficient Resources

• Not a simple intervention to implement: multiple components (because is multi-level approach)

• Challenging to conduct community mobilization, empowerment, community building: trying to change entire community

• Intervention requires a minimum of 1.5 staff and dedicated project space: too often had neither sufficient staffing nor space

• But not the only barrier/facilitator - takes more than $$
Knowledge about Intervention

- Coordinators who understand the intervention better implement it more effectively
- But many staff do not understand core elements: rarely read manual, did not attend trainings
- Do not know how to start
- Supervisors ("organization management") who do not know the intervention do not supervise staff effectively
- Funders sometimes do not understand the intervention, write contractual language that does not match intervention
Planning for Intervention before Implementation

- Anticipating potential barriers (e.g., finding project space & qualified coordinators) facilitates implementation
- Understanding of program facilitates making necessary policy changes
- If plan ahead, can consider program goals and determine if have sufficient resources or if need to look for more
- Organizational management may never open manual, go to training or website
Belief in Efficacy of Intervention

• When believe intervention is likely to work with population - more likely to implement with fidelity (adaptation issues)

• But - people at all levels (Coordinators, supervisors, funders) may be skeptical of science/scientists/research, and feel uncertain that intervention is relevant and effective

• Forced by funding mechanisms to implement interventions that do not believe in - builds resentment

• Sometimes discomfort with some parts of intervention: e.g., that young MSM are decision-makers
Desire to Change Agency’s Existing Prevention Approach (Adopt Innovation)

• CBOs need to want to change their existing approach to HIV: but many CBOs are committed to previous programs and staff
• Sometimes re-label their existing approaches or think it’s “similar” (so don’t need to change)
• 20+ years of counseling & testing and individual outreach (sitting at a table at a bar) - hard to change
Expectation that Should Evaluate Program’s Ongoing Functioning & Make Changes as Needed

• Reflect on how project functions and subsequent ongoing revision - part of empowerment
• Coordinators & volunteers critically analyze program functioning & reach
• Supervisors support critical self-analysis
• On going evaluation necessary to keep program relevant for community
Doing the Work of Implementing the Intervention & Being Held Accountable

- Given the complexity of the intervention - many different components – need to accomplish many tasks
- Some coordinators had poor job performance
- Lack of oversight by CBO (supervision), lack of holding staff accountable for job performance
- Funders may not know what they should expect, given level of funding
Organizational Stability

- High coordinator turnover affects implementation:
  - In first 6 months: 35% of CBOs had turnover
  - In first year:
    - 56% had turnover
    - 23% had turnover multiple times
- CBOs struggle with funding
- CBOs having turmoil have difficulty implementing innovative approaches
Appropriateness of Individual for Coordinator Position

- Position is lynchpin of entire intervention
- Starts the diffusion processes, critical aspect of intervention
- Sometimes coordinators are social isolates, not part of the community/population, shy about work, poor interpersonal skills: *not good fit*
Community Size

- Communities need enough YGM to sustain a community level intervention
- Very difficult to conduct intervention in very small town or rural area (although have seen effective implementations in such areas)
Proximity to Gay Magnet City

• If a larger ‘gay mecca’ is close by, YGM are not necessarily attracted to a local project - more fun going to the big city

• In addition, can go to magnet city and be anonymous vs. staying in own community
Acceptance of Young MSM

- Fear of political controversy makes it difficult to successfully implement the intervention
- CBOs must accept and support young MSM
- Homophobia (both in the organization and in the community) is a barrier
Creating Alignment:
New Systems Approach to Implementation

Develop an Enhanced MPTES to address issues that function at the system, and with more tips on adaptation.
Barriers & Facilitators to Translating an EBI to Practice: A Systems View

• Must address how the entire system handles innovation

• The front line staff (coordinators) are critical:
  - the right people for the job
  - understand the intervention
  - believe it will lead to desired outcomes
  - receive supervision and be held accountable

• But not sufficient only to focus on them

• Entire system must prepare for, and accept and support innovation
  - CBOs (including Executive Directors, supervisors)
  - Funders
Role of Organizations

- Management needs to **understand** the intervention (the innovation):
  - Including the financial and human resources required
  - Intervention’s core elements & guiding principles (the rationale)
- Management needs to **plan** for implementation:
  - How program will fit with existing organizational policies
  - Necessity of hiring the right people for position
  - How will obtain and use training, TA, and materials
  - Assess if they fully accept and want to work with target population
Role of Funders

- Funders must have at least some understanding of intervention
- Some belief in intervention’s efficacy
- Release RFAs that match the intervention
- Conduct reviews of proposals by people who are knowledgeable about interventions
- Develop contractual language that matches intervention
An Intervention aimed at CBOs can help in implementation with greater fidelity

• The right kind of assistance is helpful
  
  • Written materials & training most effective at first: more generic information
  
  • Over time individually-tailored TA was related to fidelity; perhaps because addresses CBOs’ unique issues
  
  • Theorizing that must provide more concrete, directive approaches, in terms that health departments require

• Assistance has to be provided to and targeted at each of level of the system: to front line staff, agency’s management, and funder, using mixed media

• Addressing adaptation issues since are related to increased outcome expectations (belief that intervention will be efficacious)
More organizational focus: reach Executive Directors & Supervisors so they understand intervention, plan ahead, hold staff accountable, and supervise effectively

- Reach Funder(s) so they know what the intervention is and how to hold CBOs accountable
- Make everything both conceptual AND concrete, including in terms of “deliverables”
- Provide proactive TA to Executive Staff and Health Departments and other funders
- New modules for priority populations - Black, Latino, API, Youth, Rural, Large Metro Areas.
- Greater focus on helping CBOs make plans,
The Mpowerment Project Team

Greg Rebchook, Ben Zovod, Scott Tebbetts, John Hamiga, David Sweeney
(not pictured:) Robert Williams, Paul Cotton, Luis Guttierez-Mock, Yavante Guess-Thomas