



# HHS Public Access

Author manuscript

*J Psychoactive Drugs*. Author manuscript; available in PMC 2016 July 01.

Published in final edited form as:

*J Psychoactive Drugs*. 2015 ; 47(3): 239–247. doi:10.1080/02791072.2015.1050535.

## Translation of the Risk Avoidance Partnership (RAP) for Implementation in Outpatient Drug Treatment Clinics

**Margaret R. Weeks,**

Institute for Community Research, 2 Hartford Sq. W., Ste. 100, Hartford, CT 06106, USA

**Kristin Kostick,**

Center for Medical Ethics and Health Policy, Baylor College of Medicine, Houston, TX 77030, USA

**Jianghong Li,**

Institute for Community Research, Hartford, CT 06106, USA

**Jennifer Dunn,**

Institute for Community Research, Hartford, CT 06106, USA

**Paul McLaughlin,**

Hartford Dispensary, Manchester, CT 06040, USA

**Phil Richmond,**

Hartford Dispensary, Manchester, CT 06040, USA

**Shonali Choudhury,**

University of Miami School of Nursing and Health Studies, Coral Gables, FL 33124, USA

**Chinekwu Obidoa,**

Department of International & Global Studies, Mercer University, Macon, GA 31207, USA

**Heather Mosher,** and

Institute for Community Research, Hartford, CT 06106, USA

**Maria Martinez**

Hartford Dispensary, Manchester, CT 06040, USA

### Abstract

**Background**—Scientific literature increasingly calls for studies to translate evidence-based interventions into real-world contexts balancing fidelity to the original design and fit to the new setting. The Risk Avoidance Partnership (RAP) is a health promotion intervention originally designed to train active drug users to become Peer Health Advocates.

**Objectives**—A theoretically driven approach was used to adapt RAP to fit implementation in outpatient methadone treatment clinics and pilot it with clinic patients.

**Methods**—Ethnographic observations and process tracking documented the RAP translation and pilot experience, and clinic and community characteristics relevant to program implementation.

Clinic administrators, staff, and patients were interviewed on their values, capacities, interest in RAP, perceived challenges of implementing RAP in drug treatment clinics, and experiences during the pilot.

**Results**—Findings indicated that RAP core components can be met when implemented in these settings and RAP can fit with the goals, interests, and other programs of the clinic.

**Conclusions**—Balancing fidelity and fit requires recognition of the mutual impacts RAP and the clinic have on each other, which generate new interactions among staff and require ongoing specification of RAP to keep abreast of clinic and community changes. Collaboration of multiple stakeholders significantly benefited translation and pilot processes.

### Keywords

Peer intervention; intervention translation; implementation; drug treatment clinics; HIV

---

## INTRODUCTION

Increasing literature calls for studies to translate evidence-based risk reduction interventions into real-world contexts to bridge the gap between research and practice to improve public health (Flaspohler et al. 2012; Rohrbach et al. 2006; Schackman 2010). Of primary importance in translational research is how interventions are adapted to new contexts and the potential contradiction between the need for fidelity to the original design and fit to the new setting (Solomon, Card & Malow 2006; Wandersman 2009). Outcomes of evidence-based programs are demonstrated to improve with adherence to theoretically and empirically identified core components (Carroll et al. 2007; Castro, Barrera & Martinez 2004; Fixsen et al. 2009). Yet, modifications are necessary to ensure that the intervention matches the needs, capacities, interests, cultural perspectives, and values of program implementers and recipients, and that it is suited to the new context (Breitenstein et al. 2010; Damschroder et al. 2009; Wandersman et al. 2008).

HIV, hepatitis, and other sexually transmitted infections (STI) are significant threats to the health and well-being of people with drug addictions and have direct implications for their networks, sex partners, and other community members. Drug use remains a primary driver of disease transmission in the U.S., the mechanisms of which include sharing injection solutions and equipment, commercial sex work, and sex-for-drugs exchanges to support addiction. Significant literature demonstrates the risk reduction benefits of drug treatment (Metzger & Navaline 2003; Pollack, D'Aunno & Lamar 2006). However, those who relapse appear to re-engage in risk soon after leaving treatment, indicating the need for sustained risk reduction support for drug users both within and outside of treatment (Metzger & Navaline 2003).

To respond to this need, we translated and piloted a drug-user peer intervention called the Risk Avoidance Partnership (RAP) for implementation in outpatient treatment clinics. RAP is an evidence-based program originally tested in a community setting with active drug users trained as Peer Health Advocates (PHAs). Trained PHAs implemented a semi-structured peer intervention promoting risk/harm reduction of HIV, hepatitis, STI, and TB with their

drug-using peers, sex partners, and others in their networks and neighborhoods (Dickson-Gomez et al. 2011; Li et al. 2012; Weeks et al. 2009; Weeks et al. 2006; Weeks et al. 2009). Thus, RAP is a two-tiered intervention: the PHA Training Curriculum (Weeks et al. 2004) is the first (staff-delivered) tier; the RAP Peer-delivered Intervention is the second (PHA-delivered) tier. Table 1 lists core components of the RAP model.

An intensive, mixed methods study (2001–2009) of the original RAP model demonstrated its efficacy in a non-treatment community setting to significantly reduce drug-related risks among trained PHAs and diffusion of effect through PHAs' untrained drug-using networks (Dickson-Gomez et al. 2006; Li et al. 2012; Weeks et al. 2009). Participation in the training and PHAs' subsequent intervention delivery to peers also resulted in both groups reducing their drug use and increasing entry into drug treatment. Other outcomes in PHAs and their contacts included improved attitudes toward risk reduction and health promotion and increased empowerment and engagement in risk/harm reduction efforts in their neighborhoods and communities.

Strong evidence of the original RAP's efficacy and diffusion suggested the importance and timeliness of translating it for real-world implementation in different settings (Glasgow 2003; Green & Glasgow 2006), such as outpatient drug treatment clinics. To do so, two research questions needed addressing:

1. How must RAP be modified to fit clinic settings while maintaining core components so that PHAs who are clinic patients can reach and affect not-in-treatment drug users while improving their own treatment success?
2. How can RAP be integrated into the context of the clinic organizational structure, staff capacities and responsibilities, other programs, and community setting, and how might these affect RAP implementation process and outcomes?

The RAP translation was guided by two related theories in implementation science, Damschroder's consolidated framework (Damschroder et al. 2009; Damschroder & Hagedorn 2011) and the theory of organizational readiness for change (Fuller et al. 2007; Simpson 2009; Weiner 2009). These integrate several multilevel change theories at the organizational, individual, and community levels. Five key components include: 1) the intervention, its design, complexity, cost, and use of methods familiar to providers that mesh with their routine practices; 2) community (outer setting), including patient needs, local resources, peer pressures, policies, and community characteristics that may impact implementation; 3) clinic organization (inner setting), its structural characteristics, communication networks, culture, implementation climate, resources, and motivations for change; 4) individuals (staff, administrators, patients) in the clinic, their knowledge and beliefs, willingness to change, values, capacity, attitudes toward the innovation, efficacy and level of commitment to implement it; and 5) process of implementation, including planning, engaging key people at different levels and in key roles, identifying opinion leaders and "champions" of the innovation, training and technical assistance to support implementation, executing the program, and reflecting on and evaluating the experience. Implementation science can benefit from detailed, qualitative case examination of how these constructs are

specified and how they interact in the process of translating interventions for use in new contexts.

We describe here our experiences with the systematic adaptation of RAP for use in outpatient methadone treatment clinics. We present issues, challenges, and lessons that emerged during the intervention translation and pilot process. Implications of this experience for advancing implementation science and for future efforts to implement RAP or other peer intervention programs in drug treatment clinic contexts are discussed.

## METHODS

This study had two primary components. The first was to translate RAP for clinic implementation by reviewing RAP materials and design to assess fit with drug treatment clinic contexts, treatment goals, and community settings. The second was to pilot the modified RAP to assess feasibility, acceptability, and need for further revisions in preparation for a larger implementation trial. The study was a collaboration between a community-based research organization, which designed and tested the original RAP intervention, and a behavioral healthcare organization that offers long-term outpatient substance abuse treatment for opiate and other addictions in eight communities in Connecticut.

We used qualitative ethnographic methods to document the RAP translation and pilot in treatment clinics. Researchers observed and documented all meetings with clinic staff and administrators throughout the study. This included observations and documentation of all sessions to modify the RAP PHA training curriculum and peer intervention content, to decide on program administrative structure, and to specify implementation process in the clinic context. Ethnographers also conducted audiotaped in-depth interviews with 31 staff and 23 patients on clinic characteristics, various aspects of the RAP intervention, and perceived fit of RAP to the treatment setting, goals, and patients' needs. To explore community settings, researchers conducted mapping focus groups with clinic patients and staff in five clinics in different communities. During the pilot, clinic staff implemented four cycles of the PHA training curriculum with patients from two clinics. Ethnographers observed the training of clinic staff to prepare for RAP implementation. They also observed and documented implementation of the RAP PHA Training Curriculum with patients, including observing two in-office sessions and 4–6 community outreach sessions for each of the four pilot training cycles. Audiotaped interviews were conducted with 9 clinic staff and 9 PHAs regarding their experiences during the pilot.

All qualitative data were coded for key themes in Atlas.ti. The research team developed the coding scheme based on key concepts related to the theoretical framework described above. Two researchers applied theme codes to five interviews, which were reviewed and discussed until consensus was reached on code applications and coding protocols.

All participants (clinic staff, administrators, and patients, all of whom were adults) provided verbal or written informed consent before participation. Researchers kept clinic staff and patient identities confidential and reported only in aggregate form to clinic administrators

and staff. Protocols for the conduct of this study were approved by the Institutional Review Board of the Institute for Community Research.

## RESULTS

### RAP Intervention Design, Content, and Fit to Clinic Settings

A leadership team of researchers and clinic administrators and staff conducted a series of sessions to review RAP core components and adapt the intervention materials and procedures for implementation in outpatient drug treatment clinics. The general values and principles of harm reduction, health advocacy, and community empowerment (RAP core component #1) were also core values of the umbrella clinic administration, though we did not assume that all clinic staff held the same views as administration. One facilitator from the original RAP study had joined the clinic staff of clinic. Because of her strong sense of ownership of RAP, she became the RAP “champion” (Damschroder et al. 2009) for other staff whom she trained as program Facilitators.

Our detailed review of RAP indicated that no substantive or procedural changes were needed to fit the curriculum, peer intervention content and delivery method, and PHA field manual (Flipbook) to outpatient treatment clinic settings (core components #5, #6, and #7). However, during review meetings, the study’s leadership team discussed dilemmas for RAP implementation with clinic patients, including whether to use cash or non-cash incentives with clinic patient PHAs who complete the training program (core component #8). Clinic administrators decided on a modest cash incentive of \$45 for patients who completed all 9 training sessions. These incentives and PHA outreach materials, including backpack to carry prevention supplies and outerwear with the project name/insignia, plus PHA training curricula and laminated Flipbooks for each trainee, represent some of the programmatic costs to implement RAP.

Clinic staff also discussed PHA recruitment protocols and patient eligibility criteria (core component #4), specifically, standards for how long a patient should be in treatment before being recruited as a PHA to safeguard his/her treatment goals. The original standard the leadership team set was six months. However, further discussion regarding potential benefits of peer intervention delivery to enhance treatment outcomes led the group to relax that standard and allow a minimum of one month in treatment for basic eligibility, with further determination by counseling staff familiar with each patient regarding his/her readiness to commit to the program and safely engage in community outreach intervention delivery. Thus, researchers and clinic staff agreed that recruitment of PHAs cannot be random. Rather, it must be based on subjective assessment of eligibility on a case-by-case basis to determine patients’ treatment security, and the likelihood that candidates can complete the RAP training and carry on their new role as PHA after the training ends.

Clinic leadership team members also discussed potential risks for patients engaging in health advocacy in the community with out-of-treatment drug users (Kostick, Weeks & Mosher 2014). Of significant concern was the need to address core component #2. This required identifying locations near the clinics where trainees could safely practice peer intervention delivery to potential drug users without encountering triggers to relapse, a task clinic staff

could accomplish by conducting formative community assessment and mapping (described below). In general, clinic leaders indicated they believed the potential benefits of RAP participation would outweigh the risks if the patient completed the PHA training and was provided ongoing supports (core component #9).

### **Formative Assessment of Community (Outer) Settings**

Before piloting RAP, we conducted formative assessments to identify appropriate outreach locations for clinic patient PHAs to deliver peer intervention during and after the training (core component #2). These assessments were designed to generate up-to-date information about risky and safer locations in the communities of each clinic. Additionally, finding comfortable and acceptable places for trainees to conduct outreach located near the clinic was expected to facilitate training completion.

Community mapping used a group interview format with a convenience sample of 5–8 patients and 1–2 staff from each of six clinics. Participants were provided large scale maps of the local town and asked to indicate and describe locations where drug use and sales take place (high-risk locations) and where substance users hang out or access services but do not use or sell drugs (low risk locations).

Notably, clinic staff appeared to have limited information about the towns in which the clinic was situated regarding “hot spots” of drug activity and drug-user hang-out locations, though they were familiar with service locations where drug users could be reached in safer contexts. This was partly because many staff did not live in the community where they worked, though they frequently referred patients to local services. Also, few staff engaged in community outreach; most were unfamiliar with key settings where drug users could be reached. Clinic patients, especially those with shorter treatment histories, were more familiar with the continuously changing locations of drug risk, sales, and informal gathering locations—crucial information for planning outreach activities. Thus, to conduct core component #2 it was necessary to engage clinic patients who had deep knowledge of the neighborhoods outside the clinic.

### **Clinic Staff and Organizational Readiness Affecting RAP Implementation**

During the organizational assessment period, interviews with staff across several clinics revealed additional issues relevant to RAP implementation in clinics. Staff perceived potential benefits of the RAP training and peer intervention delivery for some patients. They noted empowerment, greater knowledge, improved self-esteem, willingness to reduce their own risks, and public health, as likely beneficial outcomes of RAP. Nearly all staff indicated their support for the principles of harm reduction and belief in the potential of addicts (in- or out-of-treatment) to become PHAs (core component #1). Also, nearly all staff indicated high potential patient interest in becoming PHAs. Further, they identified specific assets already present in their clinics, including diverse patient support programs (life training, career preparation, Patient Advisory Committee) which RAP would complement.

However, interviews also revealed cautions for RAP implementation in clinics. Several staff remarked on the challenges of their caseloads, with little capacity to do much beyond that. Drug counselors in particular indicated the need to designate specialized staff to this

program. Staff also identified barriers for patient participation, including housing and transportation. Moreover, staff reiterated concern for patient well-being and sustained abstinence, confirming the need to screen potential RAP participants carefully and ensure they have adequate treatment stability to secure their recovery and that they can avoid certain outreach locations.

On the basis of findings from clinic staff interviews and community mapping, the project leadership team made several specifications to RAP for clinic implementation. Achieving core component #3 would require hiring staff or shifting existing staff off some or all of their present tasks to implement RAP. These designated staff would be responsible for learning the PHA Training Curriculum and implementing RAP as a separate program, but integrated with the other therapeutic clinic programs. These staff would need to have deep understanding of the drug-using community outside the clinic and significant experience and comfort with street outreach in order to train clinic patients to do the same. Moreover, the supervisor of these project staff would also need to learn the RAP curriculum and understand the program adequately to support project staff, ensure the program is implemented with fidelity over time, and oversee management of RAP incentives and resources at the clinic. Thus, staffing and supervision represent additional costs the clinic must fund to implement RAP.

### **RAP Pilot Implementation and Feedback**

The training-of-trainers (TOT) of RAP Facilitators and a clinic supervisor was organized as a mock PHA training program. Role plays included group facilitation techniques, interactive presentation of curriculum content, and predicting and preparing for possible PHA clinic patient responses, challenging questions, and different levels of participation. This was designed to build staff commitment to the program and buy-in to RAP principles and goals. Substantial capacity building, support, and ongoing reinforcement training appeared necessary to prepare uninitiated clinic staff to deliver the PHA curriculum and implement RAP with fidelity. Facilitators received three 5-hour training workshops to review and roll-play the full curriculum at least twice and resolve planning and administrative details, followed by co-facilitation and feedback from the Trainer for three PHA training cycles, and subsequent periodic observation and coaching.

After training the RAP Facilitators, 4–5 patients were selected for each of four PHA pilot training cycles, based on eligibility and drug counselors' recommendations. All 17 patients who initiated the PHA training during the pilot (of 19 recruited) completed the 9-session program according to schedule and received the \$45 incentive.

Observations of PHA training sessions revealed several challenges for staff and patients. Staff needed to be able to recognize and avoid community areas where drug use or sales were happening. Also, several PHA trainees indicated certain streets where they felt uncomfortable doing outreach because of risks to themselves. PHAs found the peer-intervention documentation forms too complicated to complete while on the streets, exemplifying the challenge of maintaining fidelity to the original design for process evaluation in real world practice. This limited their own and clinic staff's ability to monitor their efforts in order to assess their successes and commitment to the program. During

outreach training sessions, some PHAs made use of the RAP Flipbook and reported liking it because it helped generate and focus their conversations with contacts. However, staff and project ethnographers also observed that some PHA trainees did not refer to it during outreach, particularly in public settings. Subsequently, Facilitators placed greater emphasis on the importance of the Flipbook as a guide to cover material accurately and completely and reviewed ways to incorporate use of the Flipbook into encounters in different types of circumstances (core component #7). These adjustments suggest the need for ongoing debriefing with staff and patients in the program and micro adjustments to the training program while working with patient trainees.

Ethnographic documentation of training and outreach sessions indicated that PHA trainees were able to deliver the RAP intervention to people they encountered on the streets, and that staff were able to support them. As observed in the original RAP trial (Dickson-Gomez et al. 2006; Weeks et al. 2006), community members began to recognize the PHAs and seek them out for prevention materials. This appeared to reinforce PHAs' confidence and increased their motivation to continue. The PHA curriculum indicates the importance of highlighting PHAs' social identity of peer/public health advocate as a critical training component to support their sustained interest and efforts in peer intervention delivery. During observed post-training debriefing sessions with RAP clinic staff and PHAs, several patients described being inclined to continue delivering peer intervention after completing the training because they perceived a positive impact on high-risk people in the community. Several reported continuing outreach and health advocacy in homeless shelters, with friends and family, and in other community settings in their daily lives. However, as observed in the original RAP trial, a few PHAs expressed frustration with the occasionally mixed reception of their intervention efforts, particularly by some active drug users who had different priorities.

After completing the training, many PHAs asked RAP Facilitators what came next, signifying their desire for continued support and interaction with the program. Clinic staff established monthly meetings for trained PHAs and additional group outreach at PHAs' request (RAP core component #9). However, some PHAs also indicated the desire for ongoing incentives or other markers of personal achievement or progress to remain committed to the same level of effort on the program (core component #8).

### **Integration of RAP Implementation with Clinic Structure and Drug Treatment Goals**

Several additional findings emerged. Because it is a separate program, specific supports were needed to keep RAP staff connected to other clinic staff and administrators and for RAP to be integrated with mainstream treatment goals and clinic programs. RAP Facilitators needed to work closely with drug counselors when recruiting patients into the program and partnered with counselors of trained PHAs to remind them of ongoing PHA meetings and supports. Conversely, RAP staff encouraged PHAs' drug counselors to recognize the patient's RAP efforts and reinforce his/her new identity as a health advocate. For this to succeed, drug counselors needed sufficient understanding of RAP to know how to support PHAs and reinforce the beneficial outcomes of their peer intervention efforts.

Sustaining motivation and incentives for PHAs to continue delivering peer intervention after training generated another challenge in the treatment setting. PHAs frequently asked



whether RAP work could substitute for required group counseling sessions and count as evidence that the patient was ready to receive weekly take-home doses of methadone. RAP Facilitators agreed that PHAs' contributions to public health and the benefits to themselves of the health advocate role demonstrate the value of this work for their addiction recovery. However, other staff and administrators cautioned against the potential for abuse of this incentive and the difficulty of monitoring PHAs' actual peer intervention engagement. They also pointed out the unknown replacement benefit of PHA work compared to group or individual counseling sessions with a therapist for treatment efficacy and sustained recovery from addiction. Because PHA training and peer intervention are not directly part of a substance abuse treatment modality, RAP activities need to be coordinated with each PHA's treatment plan to ensure the program is tailored to patients' different stages of recovery.

## DISCUSSION

### Implications for RAP Implementation in Clinics: Lessons Learned

Several findings have implications for RAP implementation in clinic settings related to key components of the consolidated framework (Damschroder et al. 2009) and organizational readiness theories (Lehman, Greener & Simpson 2002). In balancing fidelity to RAP core components and fit to outpatient clinics, only minor adjustments were needed to the PHA training to identify local outreach locations and specify participation incentives and patient eligibility. Further, many community (outer) settings can potentially accommodate RAP PHA training and peer intervention delivery. However, addressing core component #2 (community assessment) during the pre-implementation phase is critical to identify places where clients can reach drug users in safer contexts. Additionally, because of the changing nature of the drug-using community and other local dynamics (e.g., policing activity), community assessment requires repeating periodically, and patient participation is necessary.

Likewise, many clinic (inner) settings can provide administrative and staffing structure, ongoing supports, and a cultural climate congruent with RAP's core values. However, attention is needed to assure sufficient staff capacity (time, expertise, training) to implement the program with fidelity, get buy-in, and mitigate concerns about RAP principles (core component #1), staff burden, or patient safety. At minimum, all clinic staff should receive an introduction to the program with opportunities for questions about RAP requirements and potential burdens on staff and patients. Input of non-RAP clinic staff increases the likelihood of successful RAP implementation and ongoing clinic-wide support for PHAs' peer intervention efforts. This may also promote integration of RAP into other programs to treat addiction. RAP needs Facilitators to have outreach experience and comfort conducting PHA training in community locations (core component #3), as well as sufficient training, technical assistance, and administrative support over time to ensure capacity and oversight needed for ongoing implementation with fidelity. In our RAP pilot in the clinic, this amounted to about 15 hours of training and periodic coaching and debriefing to resolve emergent challenges.

RAP implementation is likely to improve with a "champion" within the clinic (Damschroder et al. 2009) who has adequate skills and commitment to endorse and advocate for the

program over time. The successful champion would need to learn RAP goals and core components thoroughly to support Facilitators in balancing program fidelity and clinic fit during implementation. The champion would also need to be able to negotiate linkages with other clinic staff and administrators to assure ongoing intermingling of RAP with other clinic programs to achieve treatment goals and requirements.

Patients trained as PHAs also need multiple supports to continue peer intervention after the training (core component #9). These include recognition of their unique health advocate role, monthly meetings, and organized group outreach. This structure and routine fits well with other therapeutic activities of the clinic. PHAs might also need other incentives, such as opportunities to build PHA work into employment.

Findings also addressed our second research question regarding impacts of RAP and the clinic on each other during implementation. To ensure successful implementation in clinics, RAP must be integrated with other therapeutic and support activities. RAP and other clinic staff must remain in close communication to select patient candidates to become PHAs (core component #4) and to reinforce the benefits and goals of RAP and encourage sustained PHA efforts (core components #8 and #9). Weekly discussion, post-training debriefing, and periodic review of implementation challenges were needed to assure attention to RAP core components while meeting the needs and goals of the clinic and its patients. Also, fit evolves over time (Castro, Barrera & Martinez 2004), indicating need for ongoing reassessment of adherence to core components and their adjustment.

Required financial and other resources, staffing, administration, infrastructure, capacity building, and ongoing technical support for both staff and participants to implement RAP may be challenging for drug treatment clinics. In our pilot, RAP-specific costs included funding for two part-time Facilitators assigned specifically to the project, so as not to overburden existing staff. Costs also included a portion of time of a clinical supervisor/Trainer and clinic administrator for ongoing staff support and program oversight, training materials (e.g., PHA curriculum, RAP Flipbook), peer intervention prevention supplies, and PHA incentives. These costs and time allocations will vary from one town or clinic to another, and also depend on the number of PHAs trained and frequency of training cycles. Nevertheless, they may require a separate source of financing from those supporting routine clinic treatment programs and services.

Despite these challenges, RAP could uniquely contribute to the clinic's mission. Preliminary evidence from this study suggests both short-term and longer-term health and psychosocial benefits for patients who participate in the program. Further, RAP has potential to enrich links between the clinic and the communities it serves by contributing to public health. These benefits could outweigh the costs of implementing RAP as a long-term supplemental program for patients.

### **Implications for Implementation Science**

Our ethnographic case observation of the RAP translation and pilot in drug treatment clinics provided a unique look at how clinic staff sought to achieve the fidelity/fit balance in this context. Observational research can contribute to implementation science by

operationalizing theoretical components of the consolidated framework and organizational readiness theories (Damschroder & Hagedorn 2011; Fuller et al. 2007). Meeting observations documented specification of RAP core components to fit with clinic implementation and revealed staffs' concerns for patient safety and desire to enhance addiction recovery. Likewise, ethnographic study of the program adaptation and pilot offered the opportunity for real-time evaluative feedback. In this participatory translation process, clinic staff and administrators, in partnership with researchers, examined and deliberated each aspect of RAP in relation to the broader clinic goals and with deep understanding of the clinic structure, inter-staff relations, clinic resources, and other programming, as well as the existing clinic requirements to help patients achieve treatment outcomes. Process observation of the PHA training also provided the opportunity to document implementation challenges both in the clinic (inner setting) and the community (outer setting) with the available human and material resources and supports.

In-depth interviews facilitated examination of staffs' and patients' ethical concerns for maintaining patient safety during outreach (Kostick, Weeks & Mosher 2014). These interviews also revealed the personal benefits and challenges patients perceived of peer intervention delivery as they became bridges between drug users in the clinic and in the community. Clinic staff who implemented the program delineated the benefits they perceived for patients and the barriers to conduct RAP while remaining integrated with the larger clinic. Ongoing interviews of staff, patients, and administrators were important for documenting the iterative reassessments of RAP fit within the clinic, staff ability to maintain RAP core components, and unanticipated or emergent issues during implementation.

Of notable importance was the collaboration of multiple stakeholders, including clinic administration, front-line staff, patients, and researchers in this translational pilot. Collaboration was key to successful preparation of RAP for implementation in this new setting and for assessing the challenges and benefits of doing so. Community/research collaboration also improved the likelihood that findings from the pilot would generalize to other experiences of RAP clinic implementation.

This study had several limitations. All RAP translation and pilot efforts were conducted within a single umbrella organization of eight community clinics; findings may not generalize to other clinic/community contexts. Likewise, the number of clinic staff and patients interviewed is relatively small and may not be representative of other clinics and their patient populations. Furthermore, a larger efficacy trial is needed to demonstrate both short-term and long-term outcomes of RAP participation by clinic patients, and broader replication of the intervention may produce different implementation outcomes than those of this pilot.

Implementing RAP may allow drug treatment clinics to expand and enhance the array of options they offer patients to help them remain abstinent, build self-esteem, skills and capacity, and improve their health and treatment outcomes. Further, RAP implementation may allow clinics to contribute to public health in their communities and increase their reach to not-in-treatment drug users. RAP has potential to expand clinic capacity, including bridging treatment components and improving staff interactions with clinic patients who

engage in these public health efforts. With adequate program supports, RAP has potential to offer a new level of skill, opportunity, and recovery support for patients who complete the program, bolstered by their new identity and capacity as community Peer Health Advocates.

## Acknowledgements

We wish to thank Maria Aguilera, Hector Colon, Chris Heneghan, Zahira Medina, Carmen Nuñez, Loren Radda-Sanchez, Zulma Rios, and Eduardo Robles for their significant contributions to this study.

**Funding:** This work was supported by the National Institute on Drug Abuse at the National Institutes of Health (NIH) [grant numbers R34DA030248, R01DA13356, and R25DA031608] and affiliated with the Center for Interdisciplinary Research on AIDS funded by the National Institute of Mental Health at NIH [P30MH062294]. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health, the National Institute on Drug Abuse, or the National Institute of Mental Health.

## REFERENCES

- Breitenstein SM, Gross D, Garvey CA, Hill C, Fogg L, Resnick B. Implementation fidelity in community-based interventions. *Research in Nursing & Health*. 2010; 33(2):164–173. [PubMed: 20198637]
- Brown ER. Community action for health promotion: A strategy to empower individuals and communities. *International Journal of Health Services*. 1991; 21:441–456. [PubMed: 1917205]
- Carroll C, Patterson M, Wood S, Booth A, Rick J, Balain S. A conceptual framework for implementation fidelity. *Implementation Science*. 2007; 2:40. [PubMed: 18053122]
- Castro FG, Barrera M, Martinez CR. The cultural adaptation of prevention interventions: Resolving tensions between fidelity and fit. *Prevention Science*. 2004; 5(1):41–45. [PubMed: 15058911]
- Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*. 2009; 4:50. [PubMed: 19664226]
- Damschroder LJ, Hagedorn HJ. A guiding framework and approach for implementation research in substance use disorders treatment. *Psychology of Addictive Behaviors*. 2011; 25(2):194–205. [PubMed: 21443291]
- Dickson-Gomez J, Weeks MR, Convey M, Li J. Social psychological processes of enhanced HIV risk reduction among peer interventionists. *Journal of Community Psychology*. 2011; 39(4):369–389. [PubMed: 25414528]
- Dickson-Gomez J, Weeks MR, Martinez M, Convey M. Times and places: Process evaluation of a peer-led HIV prevention intervention. *Substance Use & Misuse*. 2006; 41(5):669–690. [PubMed: 16603454]
- Fixsen DL, Blase KA, Naoom SF, Wallace F. Core implementation components. *Research on Social Work Practice*. 2009; 19(5):531–540.
- Flaspohler P, Lesesne CA, Puddy RW, Smith E, Wandersman A. Advances in bridging research and practice: Introduction to the second special issue on the Interactive Systems Framework for Dissemination and Implementation. *American Journal of Community Psychology*. 2012; 50(3–4)
- Fuller BE, Rieckmann T, Nunes EV, Miller M, Arfken C, Edmundson E, McCarty D. Organizational Readiness for Change and opinions toward treatment innovations. *Journal of Substance Abuse Treatment*. 2007; 33:183–192. [PubMed: 17434708]
- Glasgow RE. Translating research to practice: lessons learned, areas for improvement, and future directions. *Diabetes Care*. 2003; 26(8):2451–2456. [PubMed: 12882877]
- Green LW, Glasgow RE. Evaluating the relevance, generalizability, and applicability of research: Issues in external validation and translation methodology. *Evaluation & the Health Professions*. 2006; 29(1):126–153. [PubMed: 16510882]
- Kostick K, Weeks MR, Mosher H. Participant and staff experiences in a peer-delivered HIV intervention with drug users. *Journal of Empirical Research on Human Research Ethics*. 2014; 9(1):6–18. [PubMed: 24572079]

- Lehman WEK, Greener JM, Simpson DD. Assessing organizational readiness for change. *Journal of Substance Abuse Treatment*. 2002; 22:197–209. [PubMed: 12072164]
- Li J, Weeks MR, Borgatti S, Clair S, Dickson-Gomez J. A social network approach to demonstrate the diffusion and change process of intervention from Peer Health Advocates to the drug using community. *Substance Use & Misuse*. 2012; 47:474–490. [PubMed: 22428816]
- Merzel C, D'Afflitti J. Reconsidering community-based health promotion: promise, performance, and potential. *American Journal of Public Health*. 2003; 93(4):557–574. [PubMed: 12660197]
- Metzger D, Navaline H. HIV prevention among injection drug users: the need for integrated models. *Journal of Urban Health*. 2003; 80(4 Suppl 3):iii59–iii66. [PubMed: 14713672]
- Metzger D, Navaline H. Human immunodeficiency virus prevention and the potential of drug abuse treatment. *Clinical Infectious Diseases*. 2003; 37(Suppl 5):S451–S456. [PubMed: 14648463]
- Pollack HA, D'Aunno T, Lamar B. Outpatient substance abuse treatment and HIV prevention: An update. *Journal of Substance Abuse Treatment*. 2006; 30:39–47. [PubMed: 16377451]
- Rhodes, T.; Hartnoll, R. *AIDS, drugs and prevention: Perspectives on individual and community action*. London: Routledge; 1996.
- Robertson A, Minkler M. New health promotion movement: A critical examination. *Health Education Quarterly*. 1994; 21(3):295–312. [PubMed: 8002355]
- Rohrbach LA, Grana R, Sussman S, Valente TW. Type II Translation: transporting prevention interventions from research to real world settings. *Evaluation & the Health Professions*. 2006; 29(3):302–333. [PubMed: 16868340]
- Schackman BR. Implementation science for the prevention and treatment of HIV/AIDS. *Journal of Acquired Immune Deficiency Syndromes: JAIDS*. 2010; 55(Suppl 1):S27–S31. [PubMed: 21045596]
- Simpson D. Organizational Readiness for Stage-Based Dynamics of Innovation Implementation. *Research on Social Work Practice*. 2009; 19(5):541.
- Single E. Defining harm reduction. *Drug and Alcohol Review*. 1995; 14:287–290. [PubMed: 16203323]
- Solomon Y, Card JJ, Malow RM. Adapting efficacious interventions - Advancing translational research in HIV prevention. *Evaluation & the Health Professions*. 2006; 29(2):162–194. [PubMed: 16645183]
- Wandersman A. Four keys to success (theory, implementation, evaluation, and resource/system support): high hopes and challenges in participation. *American Journal of Community Psychology*. 2009; 43(1–2):3–21. [PubMed: 19184411]
- Wandersman A, Duffy J, Flaspohler P, Noonan R, Lubell K, Stillman L, Blachman M, Dunville R, Saul J. Bridging the gap between prevention research and practice: The Interactive Systems Framework for dissemination and implementation. *American Journal of Community Psychology*. 2008; 41(3–4):171–181. [PubMed: 18302018]
- Weeks MR, Convey M, Dickson-Gomez J, Li JH, Radda K, Martinez M, Robles E. Changing drug users' risk environments: Peer Health Advocates as multi-level community change agents. *American Journal of Community Psychology*. 2009; 43(3/4):330–344. [PubMed: 19326208]
- Weeks MR.; Convey, M.; Martinez, M.; Dickson-Gomez, J.; Woods, O.; Ortiz, C.; Rooks, R.; Stillo, J. *Risk Avoidance Partnership: A Training Curriculum for Peer Health Advocates to Prevent HIV and other Drug Related Risks and Harm*. Hartford, CT: Institute for Community Research; 2004.
- Weeks MR, Dickson-Gomez J, Mosack KE, Convey M, Martinez M, Clair S. The Risk Avoidance Partnership: Training active drug users as Peer Health Advocates. *Journal of Drug Issues*. 2006 Summer;:541–570. [PubMed: 19337568]
- Weeks MR, Li J, Dickson-Gomez J, Convey M, Martinez M, Radda K, Clair S. Outcomes of a peer HIV prevention program with injection drug and crack users: The Risk Avoidance Partnership. *Substance Use & Misuse*. 2009; 44:253–281. [PubMed: 19142824]
- Weiner BJ. A theory of organizational readiness for change. *Implementation Science*. 2009; 4:67. [PubMed: 19840381]

**Table 1**

## Core Components of the Risk Avoidance Partnership (RAP) Program

<i>General</i>	1	Underlying principles, values, and theoretical concepts of peer and public health advocacy (Brown 1991), community empowerment for health promotion (Merzel & D'Afflitti 2003; Robertson & Minkler 1994), and harm reduction (Rhodes & Hartnoll 1996; Single 1995)
<i>Procedural</i>	2	Formative community assessment to understand the local target population, their network ties and risk contexts, appropriate peer outreach locations, and local resources and services
	3	Experienced, supportive, non-judgmental staff to facilitate PHA training who understand addiction, accept the concept of harm reduction, know the local drug-using population, are experienced and comfortable with community outreach, and believe in the potential of drug user peer health advocacy
	4	Recruitment of drug-using community members to be PHAs, who are willing to complete the training and deliver health promotion intervention to other drug users
<i>Intervention Content</i>	5	Use of the RAP PHA Training Curriculum (Weeks et al. 2004; Weeks et al. 2006) to train drug users to be effective health advocates and peer interventionists through role modeling and interactive engagement
	6	Guided standardized RAP Peer-delivered Intervention (Weeks et al. 2004), in which PHAs provide prevention <i>education, materials, and demonstrations</i> to at-risk personal network members and community members
<i>Supports</i>	7	Use of the RAP Flipbook (Weeks et al. 2004), a PHA field manual designed to improve fidelity of RAP peer intervention delivery
	8	PHA training incentives (cash or non-cash) and material supports to conduct community outreach (e.g., backpack to carry prevention materials, clothing with visible project insignia for community recognition)
	9	Ongoing meetings to provide PHAs opportunities to regroup with staff and other PHAs for mutual support, retraining, and to restock with prevention supplies to continue PHA work