Overview of Prevention for Positives, ARTAS, PCC, and Medication Adherence

Shared Action

December 13, 2011

Outline

- Review evidence based interventions and PHS for people living with HIV
- Provide overview of ARTAS (linkage to care) and Personalized Cognitive Counseling
- Review interventions related to medication adherence

WHAT ARE EVIDENCE-BASED INTERVENTIONS FOR PEOPLE LIVING WITH HIV?

EBIs for PLWH

- Healthy Relationships
- Together Learning Choices (TLC)
- Partnership for Health
- CLEAR
- Willow
- Connect
- Holistic Health Recovery Program (HHRP)

Healthy Relationships

- **Primary Author**
  - Seth Kalichman, Ph.D.

- **Intervention**

  A five session cognitive-behaviors skills-building intervention designed to:
  - Reduce sexual risk behaviors
  - Build behavioral skills
  - Enhance self-efficacy for practicing risk reduction behaviors
  - Promote intentions to change risk behaviors
  - Develop strategies for changing behaviors

Healthy Relationships

- **Intervention (cont'd)**
  - Each session two-hours in length; delivered two sessions per week over the course of 2.5 weeks
  - The intervention message was presented in the context of managing stress associated with disclosing HIV status and practicing safer sex behaviors
  - Intervention used movie and video clips and role plays to model and practice new behaviors

Healthy Relationships

- **Target Population**
  - Men and women living with HIV

- **Race/Ethnicity of Study Population**
  - 74% African American
  - 22% White/Caucasian
  - 4% Other

- **Theoretical Framework**
  - Social Learning Theory

Healthy Relationships

- **Research Outcomes**
  - Lower rates of unprotected sex
  - Lower rates of sex with HIV negative partners at 3 and 6 month follow-ups
  - Estimates of HIV transmission risk for male-to male and male-to-female transmission were lower for a projected 12 month period

Together Learning Choices (TLC)

- **Authors**
  - Mary Jane Rotheram-Borus, PhD

- **Intervention**

  A group-level skills-building intervention designed to help youth living with HIV reduce transmission risk behaviors and increase their treatment adherence.
  - Module I: Staying Healthy
  - Module II: Act Safe

- **Intervention (cont'd)**
  - HIV-positive youth identify their risk behavior triggers and modify their patterns of substance use as well as increase self-efficacy of condom use and negotiation skills.
  - The modules are delivered in sequence by male and female facilitators to mixed gender groups of HIV-positive youth.
  - Group discussions, role-play, video, exercises, and goal setting encourage the ability to effectively reach goals, solve problems, and effectively respond to stressful situations.
  - Sessions are 2 hours each, conducted weekly.

Together Learning Choices (TLC)

- **Target Population**
  - Youth living with HIV between 13-24 years old

- **Race/Ethnicity of Study Population**
  - 37% Hispanic
  - 27% African American
  - 19% White
  - 17% Other

- **Theoretical Framework**
  - Social Action Theory

Together Learning Choices (TLC)

- **Research Outcomes**
  - Increase in positive lifestyle changes
  - Increase use of positive coping styles
  - Increase in social support
  - Decrease in the number of unprotected sex acts
  - Decrease in number of sexual partners
  - Decrease in alcohol, marijuana, and illicit drug use

Partnership for Health

- **Primary Author**
  - Jean Richardson, Ph.D.

- **Intervention**
  - A brief, provider-delivered counseling program designed to improve patient-provider communication about safer sex, disclosure of serostatus, and HIV prevention

Partnership for Health

For the provider

- Use consequences frame messages with higher risk HIV-positive patients
- Use either frame with lower risk HIV-positive patients.
- Reinforce safer behavior with all patients

For the patient

- Protect yourself
- Protect your partner
- Disclose your serostatus appropriately

Framing Communication

- Providers learn how to frame messages as either advantages (or gain) frame or consequences (or loss) frame.
- Learn the importance of linking behavior with an outcome.
- Linking information, behavior, and outcomes is an important strategy to increase motivation.

Brief Counseling Outline

- Explain what the Partnership for Health is.
- Ask one or two questions about your patient's sexual behaviors and/or disclosure. Ask about problems they are having staying safe.
- Discuss some or all of the following three messages. Use consequences frame for patients who engage in high-risk behaviors.
- Set behavioral goal(s) with the patient or suggest some ideas if the patient cannot think of any.
- Ask if there are questions and provide referrals if needed.
- Deliver a supportive message, encouraging the patient to work on the goals and to check in with you at the next visit.

Partnership for Health

- **Target Population**
  - HIV-positive men and women in care setting, age 18 years and older
- **Race/Ethnicity of Study Population**
  - 40% White
  - 36% Hispanic
  - 17% African American
  - 7% Other
- **Theoretical Framework**
  - Stages of Behavior Change Model

Partnership for Health

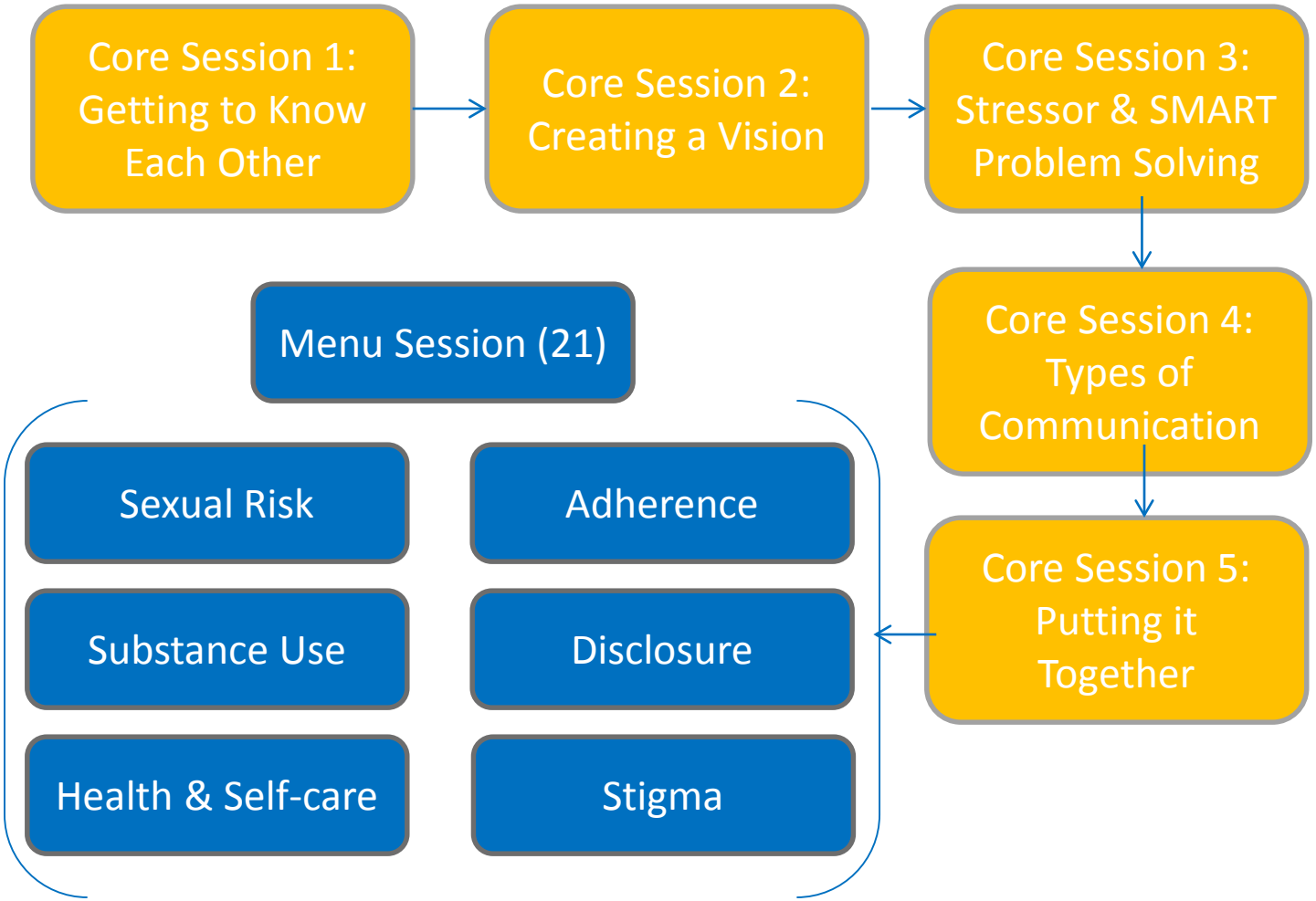
- Research Outcomes
  - Among participants who had 2 or more sex partners at baseline, UAV was reduced by 38% ($P<0.001$) among the loss-frame intervention
  - UAV at follow-up was significantly lower in loss-frame compared to the control
  - Patients who had 2+ sex partners or at least one casual partner and who received loss-framed messages were significantly less likely to engage in unprotected anal or vaginal sex

CLEAR

- **Primary Author**
  - Mary Jane Rotheram-Borus, PhD

- **Intervention**
  - A client-centered program delivered one-on-one using cognitive behavioral techniques aimed to provide clients with the skills necessary to be able to make healthy choices for their lives.

CLEAR Sessions



CLEAR

- **Intervention (cont'd)**
  - Can be implemented as a stand-alone intervention or integrated into CRCS
  - Must be delivered using client-centered approach
  - Core sessions must be implemented in sequential order.
  - Selection of the menu sessions are based on client's prevention goal(s) identified during the core sessions.
  - Each session is about 60-75 minutes, conducted weekly by experienced counselors or mental health professionals with formal clinical training

CLEAR

- **Target Population**
  - Males and females ages 16 and older living with HIV/AIDS or at high-risk for HIV
- **Race/Ethnicity of Study Population**
  - 42% Hispanic
  - 26% African American
  - 23% White
  - 8% Other
- **Theoretical Framework**
  - Social Action Theory

CLEAR

- **Research Outcomes**
  - Increase in the proportion of protected sex acts with all partners (58% versus 22%)
  - Increase in the proportion of protected sex acts with HIV negative partners (73% versus 32%)
  - Statistically significant decrease in the number of HIV negative partners

Willow

- **Primary Author**
  - Gina M. Wingood, Ph.D.

- **Intervention**
  - A four session group intervention designed for women living with HIV to enhance coping skills, improve quality of life, increase safer sex, and reduce STD.

Willow

- **Intervention (cont'd)**
  - Each session is 4 hours, delivered weekly
  - Delivered by 2 skilled adult female facilitators with at least 1 of whom is a woman living with HIV/AIDS
  - Use materials that are gender and culturally appropriate to foster self-worth and self-efficacy

Willow

- **Intervention (cont'd)**
  - Train women in coping, decision making, goal setting, condom negotiation, and proper condom use skills
  - Teach about social support networks, STD and HIV reinfection, and consistent and proper condom use
  - Inform women about aspects of healthy and unhealthy relationships and types of abuse
  - Use an educational and informational focus in the sessions as opposed to a counseling and services provision focus

Willow Sessions

Session 1: Gender Pride and Social Support	*Session 2: Coping Skills*	*Session 3: Condom Use*	*Session 4: Healthy Relationships*
• to explore the concepts of gender pride and what it means to be a woman • to emphasize self-love, pride, and the positive qualities of being a woman • to discuss having and prioritizing personal values • to identify ways by which women can increase the various forms of social support	• to discuss stress, its effects, and coping strategies • to identify various life stressors and learn ways to cope with stress • to explore communication styles and how they affect relationships • to establish an assertive communication goal.	• to reinforce the correct and consistent use of condoms • to provide information about STDs and HIV reinfection • to encourage the development of more positive attitudes about condoms • to provide an opportunity to practice correct condom use.	• to delineate differences between healthy and unhealthy relationships • to outline the types of abuse in relationships.

Willow

- **Target Population**
  - HIV+ sexually active women aged 18 or older
- **Race/Ethnicity of Study Population**
  - 84% African American
  - 15% White
  - 1% Other
- **Theoretical Framework**
  - Social Cognitive Theory and Theory of Gender and Power

Willow

- **Research Outcomes**
  - Fewer episodes of unprotected vaginal sex at 6- and 12-months
  - Fewer reports of new bacterial STDs (Chlamydia and gonorrhea) at 12-month
  - Less likely to report never using condoms at 6- and 12 months
  - Demonstrated increase in condom use self-efficacy, condom use skills, and HIV knowledge

Connect

- **Primary Author**
  - Nabila El-Bassel, Ph.D.

- **Intervention**
  - A six session, relationship-based intervention that teaches couples techniques and skills to enhance the quality of their relationship, communication, and shared commitment to safer behaviors

Connect

- **Intervention (cont'd)**
  - Works with couple in 3 to 5 facilitated sessions.
  - Each session is about 1.5 to 2 hours in length.
  - An orientation meeting is conducted with each partner individually prior to starting the 5 sessions
  - Emphasize the relationship as the target of change, redefining sexual risk reduction from individual protection to protecting and preserving the relationship.
  - Discuss ideas about relationship fidelity and the need to reduce HIV/STD risk among couples.

Connect

- **Intervention (cont'd)**
  - Identify how gender differences, stereotypes, and power imbalances influence safer-sex decision making and behaviors.
  - Use video-based scenarios to model good communication and negotiation of safer sex to stimulate discussions and role-plays.
  - Use modeling, role-play, and feedback to teach, practice, and promote mastery in couple communication, negotiation, and problem-solving and social support enhancement.
  - Apply couple communication, negotiation, problem-solving, and goal-setting skills to the learning, performance, and maintenance of behaviors to reduce HIV/STD risk.

Connect

- **Target Population**
  - Heterosexual women or men, 18 and over and their main sexual partners
- **Race/Ethnicity of Study Population**
  - 54% female partners, 48% male partners were African American
  - 38% female partners, 42 % male partners were Latino/a
- **Theoretical Framework**
  - AIDS Risk Reduction Model and Ecological Perspective

Connect

- **Research Outcomes**

  Couples at 3- and 12-months after the intervention:

  – Significantly decreased the number of unprotected sexual acts

  – Significantly increased the rates of condom use

Holistic Health Recovery Program

- **Primary Author**
  - Arthur Margolin, PhD and S. Kelly Avant, PhD

- **Intervention**

  A 12-session, manual-guided, group level program aimed to promote health and improve quality of life. Specific goals are:
  - abstinence from illicit drug use or from sexual risk behaviors
  - reduced drug use
  - reduced risk for HIV transmission
  - improved medical, psychological, and social functioning

Holistic Health Recovery Program

- **Intervention (cont'd)**
  - Utilize a harm reduction approach to behavior change
  - Each session are 2 hours long
  - Cofacilitated by 2 substance abuse counselors who have experience working with HIV-infected substance abusers and have background on harm reduction concepts
  - Recommend that there be 1 male and 1 female counselor
  - At least 1 of the counselors cofacilitating the interventions has a master's degree in a counseling discipline.

HHRP Sessions

- Session 1 Setting and Reaching Goals
- Session 2 Reducing the Harm of Injection Drug Use
- Session 3 Harm Reduction with Latex
- Session 4 Negotiating Harm Reduction with Partners
- Session 5 Preventing Relapse to Risky Behavior
- Session 6 Health Care Participation
- Session 7 Healthy Lifestyle Choices
- Session 8 Introduction to the 12-Step Program
- Session 9 Overcoming Stigma
- Session 10 Motivation for Change: Overcoming Helplessness
- Session 11 Moving Beyond Grief
- Session 12 Healthy Social Relationships

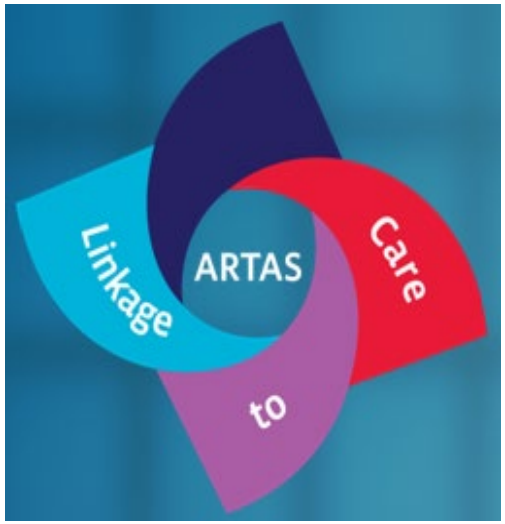
Holistic Health Recovery Program

- **Target Population**
  - HIV + Injection Drug Users
- **Theoretical Framework**
  - Information-Motivation-Behavioral Skills Model

Holistic Health Recovery Program

- **Research Results**
  - Were less likely to engage in risky sex or drug related behaviors at 3, 6, and 9 month follow-ups.
  - Demonstrated a greater improvement in prevention behavioral skills.
  - Demonstrated a greater decrease in opiate use, cocaine use only up through the 6 month assessment
  - Demonstrated a greater reduction in addiction severity
  - Were less likely to report medication non-adherence
  - More likely to report 95% or greater medication adherence

Questions?



WHAT IS ANTI-RETROVIRAL TREATMENT AND ACCESS TO SERVICES (ARTAS)?

ARTAS

- **Primary Author**
  - Harvey A. Siegal, Ph.D. and Richard C. Rapp, M.S.W.

- **Intervention**
  - An individual-level time limited intervention to link individuals who have been recently diagnosed with HIV to medical care.

ARTAS Core Elements

- Build an effective, working relationship between the Linkage Coordinator and each client.
- Conduct a strengths-based assessment of client and encourage client to identify/use his/her strengths, abilities, and skills to link to medical care and accomplish goals
- Facilitate the client's ability to identify and pursue his/her own goals and develop a plan to accomplish goals

ARTAS Core Elements

- Maintain a client-driven approach when conducting sessions
- Conduct active, community-based case management by meeting each client in his/her environment and outside the office
- Coordinate and link each client to available community resources
- Advocate on each client's behalf, as needed, to link him/her to medical care and/or other needed services

ARTAS Sessions

- Session One: Building the Relationship
- Session Two: Emphasizing Personal Strengths
- Session Three: Learning to Make Contact
- Session Four: Reviewing Progress
- Session Five: Completing the Work

ARTAS

- **Target Population**
  - *Any* individual who is recently diagnosed with HIV (typically defined as within 6–12 months) and willing to participate in the intervention.

- **Race/Ethnicity of Study Population**
  - 6.9% White
  - 27.6% Latino
  - 59.3% African American
  - 6.2% Other

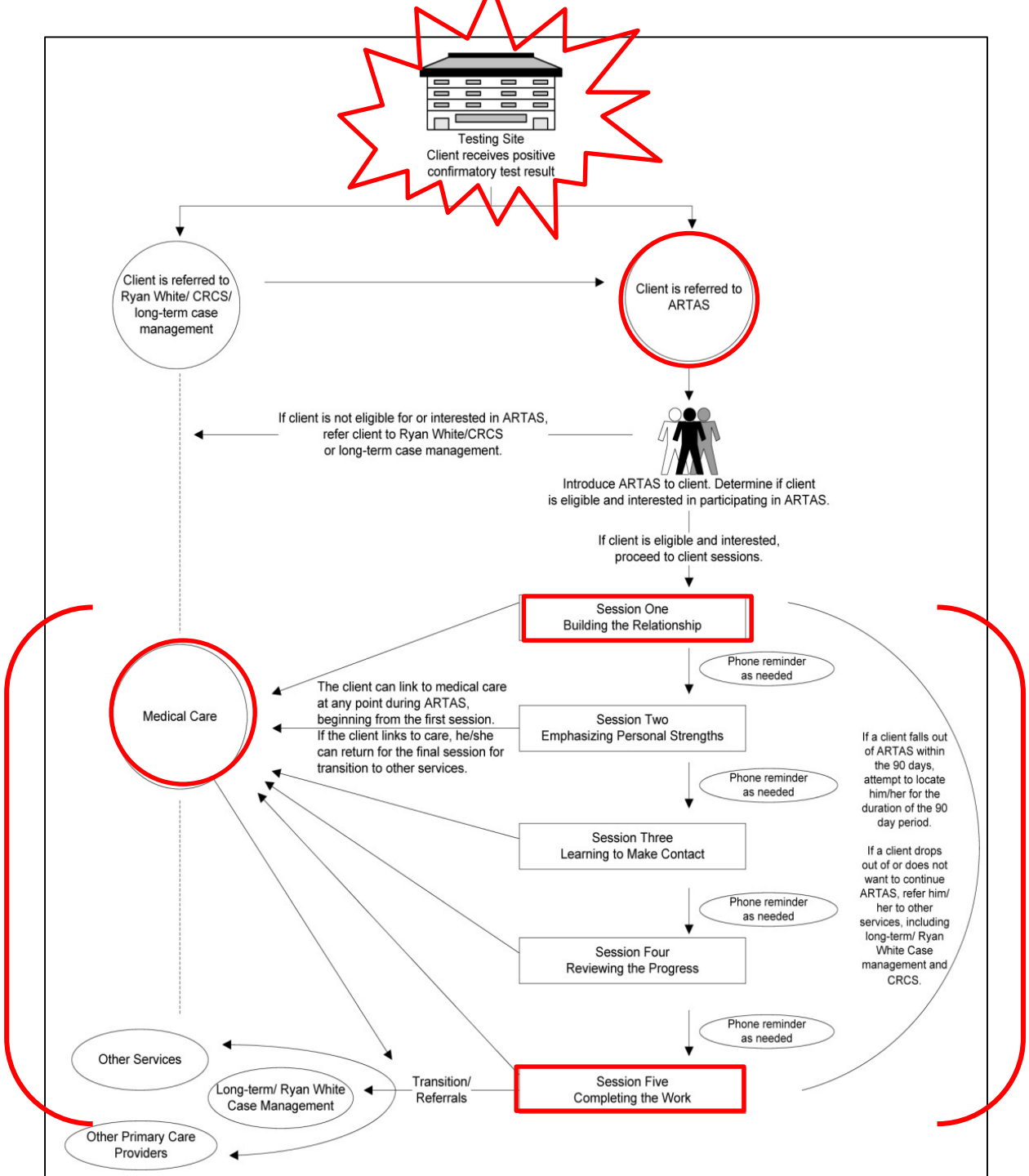
- **Theoretical Framework**
  - Strength Based Case Management and Cognitive Behavioral Theory

Strengths-Based Case Management

- Encourage clients to identify and use their strengths, abilities, and assets to accomplish goals
- Recognize and support client control over goal-setting and the search for needed resources
- Establish an effective working relationship with the client
- View the community as a resource and identify informal sources of support
- Conduct case management as an active, community-based activity

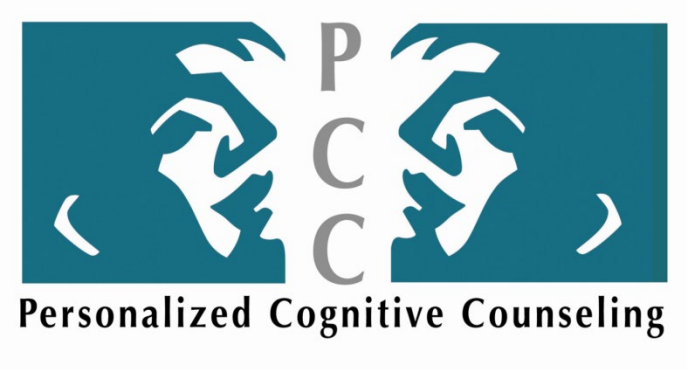
Linkage Coordinators

Counselors


Testing Site
Client receives positive confirmatory test result
Client is referred to Ryan White/ CRCS/ long-term case management
Client is referred to ARTAS
If client is not eligible for or interested in ARTAS, refer client to Ryan White/CRCS or long-term case management.
Introduce ARTAS to client. Determine if client is eligible and interested in participating in ARTAS.
If client is eligible and interested, proceed to client sessions.
Session One
Building the Relationship
Phone reminder as needed
Medical Care
The client can link to medical care at any point during ARTAS, beginning from the first session. If the client links to care, he/she can return for the final session for transition to other services.
Session Two
Emphasizing Personal Strengths
Phone reminder as needed
Session Three
Learning to Make Contact
Phone reminder as needed
Session Four
Reviewing the Progress
Phone reminder as needed
Session Five
Completing the Work
Transition/ Referrals
Other Services
Long-term/ Ryan White Case Management
Other Primary Care Providers
If a client falls out of ARTAS within the 90 days, attempt to locate him/her for the duration of the 90 day period.
If a client drops out of or does not want to continue ARTAS, refer him/her to other services, including long-term/ Ryan White Case management and CRCS.

ARTAS

- Research Outcomes
  - 78% of HIV-infected persons who met with a linkage case manager had stayed in care 6 months later (versus 60% of those who received a passive referral)
  - 65% of those who met with a linkage case manager had stayed in care 12 months later (versus 49% of those who received a passive referral).



WHAT IS PERSONALIZED COGNITIVE COUNSELING (PCC)?

PCC

- **Primary Author**
  - James Diley, Ph.D.

- **Intervention**
  - An individual-level, single session (30-50 min) counseling intervention designed to reduce UAI among MSM who are repeat testers for HIV
  - Conducted as a component of Counseling, Testing, and Referral Service (CTRS)
  - Provide the service with counselors trained in HIV counseling and testing and in the PCC intervention.

PCC

- **Intervention (cont'd)**
  - Use the *PCC* questionnaire specifically tailored to identify key self-justifications used by clients in the target population.
  - Focus on the person's self-justifications (thoughts, attitudes and beliefs) when deciding whether or not to engage in high risk sexual behavior.
  - Explore the circumstances and context for the risk episode in detail (before, during, and after event).
  - Clarify how the circumstances and self-justifications are linked to the decision to engage in high-risk behavior.
  - Guide the clients to re-examine the thinking that led to their decisions to have high-risk sex and identify ways they might think differently

PCC

- **Target Population**
  - MSM who previously tested for HIV, are HIV negative, had UAI since their last test with a male who was not their primary partner, and that partner's serostatus was positive or unknown.

- **Race/Ethnicity of Study Population**
  - 64.3% White
  - 11.8% Latino
  - 7.5% African American
  - 16.4% Other

- **Theoretical Framework**
  - Ron Gold's Cognitive Theory of Behaviors

PCC

- **Research Outcomes**
  - UAI decreased by more than 60% to 1.9 episodes at 6 months in the PCC arm
  - At 6 months, men receiving PCC reported significantly less risk than those in control arm
  - Risk reduction in the PCC arm was sustained from 6 to 12 months
  - Significantly more PCC participants were very satisfied with the counseling experience (78.2%) compared to control arm (59.2%)

Five Steps of PCC

Step 1. Recall a Recent Memorable Episode of UAI	• Briefly introduces *PCC* and asks the client to think of a recent memorable episode of UAI. • Through conversation, the counselor helps the client identify an appropriate incident.
Step 2. Administer *PCC* Questionnaire	• Asks the client to complete the *PCC* Questionnaire, with the specific episode in mind.
Step 3. Draw Out the Story, and Ask About Thoughts and Feelings	• Asks to tell the story of the recent episode of UAI—what led up to it, how it happened, what happened afterward. • Asks what his thoughts and feelings were leading up to the episode, during, and after.
Step 4. Identify Self-Justifications and Discuss Them	• Asks how and to what extent he thought about HIV and the possibility of transmission during the episode • Asks what he thinks about the self-justifications that he expresses.
Step 5. What Will You Do in the Future?	• Asks what he thinks will happen in the future. • What does he think he will do in a similar situation?

Counselors' Qualifications and Training?

- Training as an HIV antibody test counselor.
- Experience providing HIV test counseling.
- Training and experience in a helping field (psychology, social work, counseling).
- Experience with and dedication to pursuing cultural competence with the populations of clients to be served.
- Comfort with and knowledgeable about men who have sex with men.
- Comfort with discussing sex frankly using everyday language.
- Completion of training to learn the PCC intervention

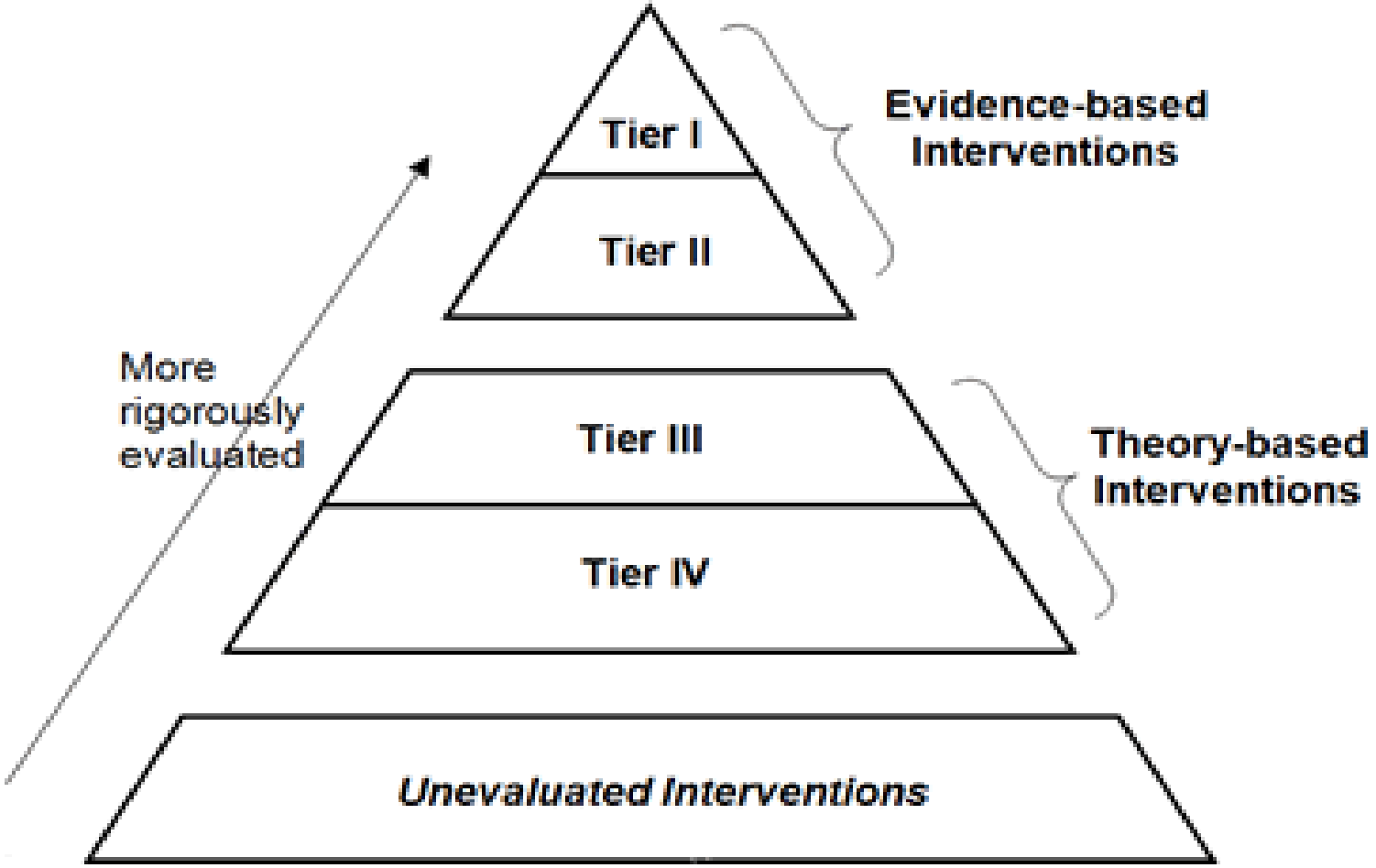
Clinical Supervisors' Training and Qualifications

- Master's level training as a counselor, social worker, or therapist with a degree in psychology, social work, counseling, or a similar helping field.
- At least one year of experience as a clinical supervisor.
- Completion of training to learn the PCC intervention.

(PCC Clinical Supervisors may be available through the CDC or the CDC can provide names of qualified agencies or people with whom your agency can contract.)

WHAT ARE INTERVENTIONS RELATED TO MEDICATION ADHERENCE?

CDC Tiers of Evidence Framework



Compendium of Evidence-Based HIV Behavioral Interventions

- **Medication Adherence Chapter (new!)**
  - EBIs focusing on medication adherence behaviors among persons living with HIV and proven to either reduce HIV viral load or improve HIV medication adherence behaviors.
  - 8 MA EBIs identified from the scientific literature published or in press from January 1996 through December 2009; updated Dec 2010
    - 8 **good** evidence interventions
    - 8 individual and group level interventions

Medication Adherence Interventions

- Adherence Through Home Education and Nursing Assessment (ATHENA)
- Directly Administered Antiretroviral Therapy (DAART) for Drug Users
- Directly Administered Antiretroviral Therapy (DAART) in Methadone Clinic
- Pager Messaging
- Partnership for Health*
- Peer Support
- Sharing Medical Adherence Responsibilities Together (SMART Couples)
- Helping Enhance Adherence to antiRetroviral Therapy (Project HEART)

CDC Capacity Building Branch Priority Medication Adherence Strategies

- Helping Enhance Adherence to antiRetroviral Therapy (Project HEART)
- Pager Messaging
- Peer Support
- Partnership for Health*
- Sharing Medical Adherence Responsibilities Together (SMART Couples)

Project HEART

- **Intervention**
  - 5-session individual/dyadic and group-level problem-solving intervention
  - Intervention sessions include a patient-identified support partner and patients and support partners work through a series of problem-solving activities to identify and address adherence barriers.
- **Target Population**
  - HIV-positive clinic patients who are antiretroviral treatment-naïve

Project HEART

- **Race/ethnicity of study population**
  - 83% African American
  - 12% White
  - 3% Other
  - 2% Hispanic

- **Theoretical framework**
  - Problem-solving model
  - Self-determination theory
  - Social support model

Project HEART

- **Authors**
  - Koenig, L.J., Pals, S.L., Bush, T., Pratt Palmore, M., Stratford, D., & Ellerbrock, T. V.

- **Research Outcomes**
  - At 3-months post-initiation of intervention, a significantly greater proportion of intervention participants achieved ≥ 90% adherence, as assessed by MEMs caps, than comparison participants (46% vs. 28%)

Pager Messaging

- **Intervention**
  - Individual-level intervention where each patient receives a 2-way pager and a message schedule customized to the patient's daily medication regimen.

- **Target Population**
  - HIV-positive clinic patients who are antiretroviral treatment-experienced or -naïve

Pager Messaging

- **Race/ethnicity of study population**
  - 47% White
  - 30% African American
  - 12% Other or Mixed Race
  - 11% Hispanic

Pager Messaging

- **Authors**
  - Simoni, J. M., Huh, D., Frick, P. A., Pearson, C. R., Andrasik, M. P., Dunbar, P. J., & Hooton, T. M.

- **Research Outcomes**
  - Across all three assessment time points, participants in the pager messaging intervention arms (i.e., pager messaging only and pager messaging with peer support) were significantly more likely than participants in the comparison without pager messaging to achieve an undetectable viral load

Peer Support

- **Intervention**
  - HIV+ ART-adherent patients serve as peers and participate with participants in 6, twice-monthly 1-hour group meetings and help participants to identify ART barriers and generate problem solving strategies.
- **Target Population**
  - HIV-positive clinic patients who are antiretroviral treatment-experienced or -naïve

Peer Support

- **Race/ethnicity of study population**
  - 47% White
  - 30% African American
  - 12% Other or Mixed Race
  - 11% Hispanic

- **Theoretical framework**
  - Social cognitive theory
  - Social support theory

Peer Support

- **Authors**
  - Simoni, J. M., Huh, D., Frick, P. A., Pearson, C. R., Andrasik, M. P., Dunbar, P. J., & Hooton, T. M.

- **Research Outcomes**
  - Participants in the peer support intervention arms (i.e., peer support only and peer support with pager messaging) were significantly more likely than participants in the comparison arm without peer support to report 100% adherence over time between baseline and 3 months post-initiation of intervention

Partnership for Health

- **Intervention**
  - A brief, provider-delivered counseling program designed to improve patient-provider communication about safer sex, disclosure of serostatus, and HIV prevention

- **Target Population**
  - HIV-positive clinic patients who are antiretroviral treatment-experienced

Partnership for Health

- **Race/ethnicity of study population**
  - 40% White
  - 39% Hispanic
  - 15% African American
  - 6% Other

- **Theoretical framework**
  - Mutual participation model of patient care

Partnership for Health

- **Authors**
  - Milam, J., Richardson, J.L., McCutchan, A., Stoyanoff, S., Weiss, J., Kemper, C., Bolan, R

- **Research Outcomes**
  - At 11 to 18 months post-initiation of intervention, the percentage of participants reporting > 95% medication adherence was significantly greater in the intervention arm than in the comparison arm (85.9% vs. 69.8%)

Partnership for Health

- **Research Outcomes cont.**
  - When restricting the analyses to the subgroup of participants with > 95% adherence at baseline, intervention participants in one medication adherence intervention clinic were more likely than participants in the 4 pooled safer sex comparison clinics to report > 95% adherence at the assessment time point
  - At 11 to 18 months post-initiation of intervention, intervention participants were less likely than comparison participants to have a detectable viral load, i.e., > 500 copies/mL

Partnership for Health Core Elements

- Providers delivering the intervention to HIV+ patients in HIV outpatient clinics
- The clinic adopting prevention as an essential component of care
- All clinic staff trained to facilitate prevention counseling into standard practice
- Waiting room posters and brochures used to reinforce prevention messages delivered by the provider
- Supportive relationships built and maintained between the patient and the provider
- During routine visits, the provider initiates at least a 3-5 min discussion with the patient on protection, partner protection, and disclosure*
- The provider incorporates good communication techniques and use of consequence=framed messages for patients or clients engaged in high risk sexual behavior*
- Referrals provided for needs that require more extensive counseling and services
- The prevention message integrated into clinic visits so that every patient is counseled at every visit*

SMART Couples

- **Intervention**
  - HIV-serodiscordant couple-level intervention of four sessions with a nurse practitioner designed to foster partner support, medical care adherence, and safer sex behaviors

- **Target Population**
  - Heterosexual and homosexual HIV-serodiscordant couples, with poor medication adherence in the HIV-positive partner

SMART Couples

- **Race/ethnicity of study population**
  - 62% African American
  - 24% Latino

- **Theoretical framework**
  - Ewart's social action theory
  - Self-regulation theory

SMART Couples

- **Authors**
  - Remien, R. H., Stirratt, M. J., Dolezal, C., Dognin, J. S., Wagner, G. J., Carballo-Dieguez, A., Jung, T. M
- **Research Outcomes**
  - Key intervention effect was increased medication adherence

Discussion

- What are the capacities needed of public health staff in implementing these strategies?
- What workforce development is still needed?
- Enhanced Comprehensive HIV Prevention Planning
- National HIV/AIDS Strategy