Risk Reduction (RR) Review Methods

The <u>Prevention Research Synthesis (PRS) Project</u> efficacy review process for identifying HIV Risk Reduction (RR) evidence-based behavioral interventions is conducted using well-established systematic procedures for searching and reviewing the intervention research literature. The information presented below describes the RR search strategy for identifying relevant articles, RR study eligibility criteria for inclusion in the review, and RR study coding procedures for reviewing the quality of the evidence. A detailed overview of the PRS search strategy is available in the article <u>Developing a comprehensive search strategy for evidence based systematic reviews</u> in the open access journal <u>Evidence Based Library and Information Practice</u>.

Once included in the review, the <u>PRS RR efficacy criteria</u> are used to determine if an HIV risk reduction intervention is best-evidence or good-evidence.

RR Search Strategy

Using a comprehensive and systematic search strategy, the PRS project developed a cumulative database of the HIV, AIDS, and STD prevention research literature. This cumulative database is continually updated using both automated and manual search components.

The automated search component involves the annual search of four electronic bibliographic databases (EMBASE, MEDLINE, PsycINFO, and Sociological Abstracts). The PRS project also conducted a systematic search of the AIDSLINE database prior to its discontinuation in December 2000. These searches identify articles that focus on HIV/AIDS or STD behavioral prevention.

The manual search consists of regularly reviewing journals (see below) to identify articles not yet indexed in the electronic databases. These journals are inclusive across the five PRS reviews that are currently being conducted (i.e., Linkage to, Retention in, and Re-engagement in HIV Care (LRC), Risk Reduction (RR), Medication Adherence (MA), Structural Interventions (SI), PrEP Interventions (PrEP), and the Overview of Reviews Project (ORP)). As of February 2022, the journal list totals 27 titles. Each year the PRS database is surveyed to determine which journals retrieve the most relevant citations for each review. The hand search list of journals is modified to reflect recent publishing trends, and therefore the list of journals may change on a year-to-year basis. Quarterly, team members screen all issues of the journals published within the 3 previous months to locate relevant articles. In addition, reference lists of published articles, HIV/AIDS Internet listservs, and unpublished manuscripts submitted by study authors are examined for related materials.

For each eligible intervention study, the PRS cumulative database is searched to identify all articles reporting descriptive or outcome data from the same intervention. All articles describing the same intervention study are considered linked reports. Additional details about these search strategies and procedures can be obtained by contacting PRS.

RR Study Eligibility

Once articles are identified through the systematic search, they are screened to determine eligibility for the PRS individual- and group-, or community-level intervention efficacy review. To be included in the review, studies *must meet each* of the following inclusion criteria:

- Focus on an HIV, AIDS, or STD behavioral intervention
- Outcome evaluation with a comparison arm
- Published or accepted for publication in a peer–reviewed journal
- Conducted in the United States or a U.S. territory
- Focus on a priority population (determined by CDC) current priority populations: people with HIV (PWH), men who have sex with men (MSM), transgender people, people who use drugs (PWUD), Black or African American women, and youth
- Report any of the following relevant outcome data:
 - Behaviors directly impacting HIV risk*:
 - Sex risk behaviors (e.g., abstinence, mutual monogamy, number of sex partners, negotiation of safer sex, condom use, refusal to have unsafe sex)
 - Drug injection behaviors (e.g., frequency of injection drug use, needle sharing)
 - Biologic measures of HIV or other STD infections (e.g., prevalence or incidence measures of hepatitis, HIV, or other STDs)
 - HIV testing (if HIV test results are reported)

Interventions that focus on the following types of prevention are <u>not</u> currently included in the PRS RR efficacy review:

- Substance abuse treatment only
- Needle exchange

- Partner counseling and referral services
- Policy changes
- School-based curricula

RR Study Coding Procedures

Pairs of trained content analysts independently code each eligible study with PRS RR efficacy criteria for each eligible study. This coding includes all linked articles reporting information on the same intervention study. All discrepancies between coder pairs are reconciled. If the study does not report critical information needed to determine intervention efficacy, the PRS team contacts the principal investigator of the study to obtain the missing information or to seek additional clarification. The final efficacy determination for each study is reached by PRS team consensus.

*Note: There are multiple options to reduce the risk of acquiring or transmitting HIV. These options include using medicines to treat HIV (<u>Treatment as Prevention or TasP</u>), using medicines to prevent acquisition of HIV (<u>pre-exposure prophylaxis or PrEP</u>), and <u>reducing risk behaviors</u>. The CDC stresses that some options are more effective than others and combining prevention strategies may be even more effective. See <u>here</u> for more information on the effectiveness of different strategies at preventing HIV acquisition or transmission. Whereas this systematic review focuses on reducing sex and drug risk behaviors, PRS conducts other systematic reviews

focusing on <u>linkage to, retention in, and re-engagement in HIV care</u>, <u>HIV medication adherence</u>, <u>structural</u> interventions, and PrEP.

PRS Manual Search Journal List* (n = 27)

AIDS

AIDS and Behavior

AIDS Care

AIDS Education and Prevention

AIDS Patient Care and STDs

American Journal of Public Health

BMC Infectious Diseases

BMJ Open

Clinical Infectious Diseases

Cochrane Database of Systematic Reviews

Current HIV/AIDS Reports

Current Opinion in HIV and AIDS

HIV Medicine

International Journal of STD & AIDS

JAIDS J of Acquired Immune Deficiency Syndromes

Journal of HIV/AIDS & Social Services

Journal of the Association of Nurses in AIDS Care

Journal of the International AIDS Society

Lancet HIV

Open Forum Infectious Diseases

PLoS Medicine

PLoS ONE

Public Health Reports

Sexual Health

Sexually Transmitted Diseases

Sexually Transmitted Infections
Systematic Reviews

^{*}Last updated February 2022