HIV MEDICATION ADHERENCE (MA) EFFICACY REVIEW METHODS

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

Once included in the review, the PRS MA efficacy criteria are used to determine if an HIV medication adherence intervention is best-evidence or good-evidence.

MA Search Strategy

Using a comprehensive and systematic search strategy, PRS developed a cumulative database of the HIV, AIDS, and STD prevention research literature. This cumulative database is continually updated using both automated and manual searches conducted annually to keep the HIV/AIDS and STD behavioral prevention literature up to date.

The automated search component involves searching the following electronic bibliographic databases: CINAHL, EMBASE, MEDLINE, and PsycINFO for articles focusing on HIV/AIDS, antiretroviral therapy or treatment, and adherence.

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 four PRS reviews that are currently being conducted (i.e., Risk Reduction (RR), Medication Adherence (MA), Overview of Reviews Project (ORP), and LRC). As of January 2015, the journal list totals 61 titles. The list of journals changes according to published reports found through the PRS process. Each year the PRS database is surveyed to determine which journals retrieve the most relevant citations for each Efficacy 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, PRS team members screen all issues of the journals published within the 3 previous months to locate relevant articles. In addition, PRS also examines the reference lists of published articles, HIV/AIDS Internet listservs, and unpublished manuscripts submitted by study authors.

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 and are included in the review process for that study. Additional details about these search strategies and procedures can be obtained by contacting PRS.

MA Study Eligibility

Once articles are identified through the systematic search, they are screened to determine eligibility for the PRS medication adherence efficacy review. To be included in this review, studies must meet ***each*** of the following inclusion criteria:

- HIV Medication Adherence Intervention with:
  - Educational/behavioral component OR
  - Treatment delivery methods or monitoring devices to facilitate adherence
- Published or accepted for publication in a peer–reviewed journal
- Conducted in the United States or a U.S. territory
- Outcome evaluation report with a comparison arm
- Report any of the following relevant outcome data:
  - Behavioral measures of adherence: EDM (e.g., MEMs caps), pill count, pharmacy refill, self-report
  - Biologic measure of adherence: HIV viral load

Interventions that focus on the following types of prevention are **not** currently included in the PRS medication adherence efficacy review:

- Interventions comparing treatment efficacy or adherence outcomes of different medication treatment regimens

MA Study Coding Procedures

Pairs of trained content analysts independently code each eligible study using the PRS MA efficacy criteria. 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.

PRS Manual Search Journal List (n = 61)

Academic Emergency Medicine
Addiction
AIDS
AIDS and Behavior
AIDS Care
AIDS Education and Prevention
AIDS Patient Care and STDs
AIDS Reviews
American Journal of Drug and Alcohol Abuse
American Journal of Preventive Medicine
American Journal of Public Health
Annals of Behavioral Medicine

Annals of Emergency Medicine
Annals of Pharmacotherapy
Antiviral Therapy
BMC Health Services Research
BMC Infectious Diseases
BMC Public Health
BMJ
Clinical Infectious Diseases
Cochrane Database of Systematic Reviews
Current HIV/AIDS Reports
Current Opinion in HIV and AIDS
Drug and Alcohol Dependence
Evaluation and Program Planning
Health Education & Behavior
Health Education Research
Health Psychology
HIV Clinical Trials
HIV Medicine
International Journal of STD & AIDS
JAIDS J of Acquired Immune Deficiency Syndromes
JAMA Journal of the American Medical Association
JAMA Pediatrics
JBI Database of SR & Implementation Reports
Journal of Adolescent Health
Journal of Consulting and Clinical Psychology
Journal of Health Care for the Poor & Underserved
Journal of Health Communication
Journal of HIV/AIDS & Social Sciences
Journal of Infectious Diseases
Journal of Sexually Transmitted Diseases
Journal of Substance Abuse Treatment
Journal of the Association of Nurses in AIDS Care
Journal of the International AIDS Society
Journal of the Int'l Assoc of Providers in AIDS Care
Journal of Urban Health
Lancet
Lancet Infectious Diseases
Morbidity and Mortality Weekly Report
Patient Education and Counseling
Perspectives on Sexual & Reproductive Health
PLoS Medicine
PLoS ONE
Psychology, Health & Medicine
Public Health Reports
Sexual Health
Sexually Transmitted Diseases
Sexually Transmitted Infections
Substance Use & Misuse
Tropical Medicine & International Health

Additional details about the MA Chapter or the Prevention Research Synthesis (PRS) Project can be obtained by contacting PRS.