

USPSTF Methods: Assessing Evidence and Analytic Frameworks

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Goal: Brief overview of how we assess evidence and use analytic frameworks

Disclaimer: Views mine, not USPSTF

The U.S. Preventive Services Task Force...

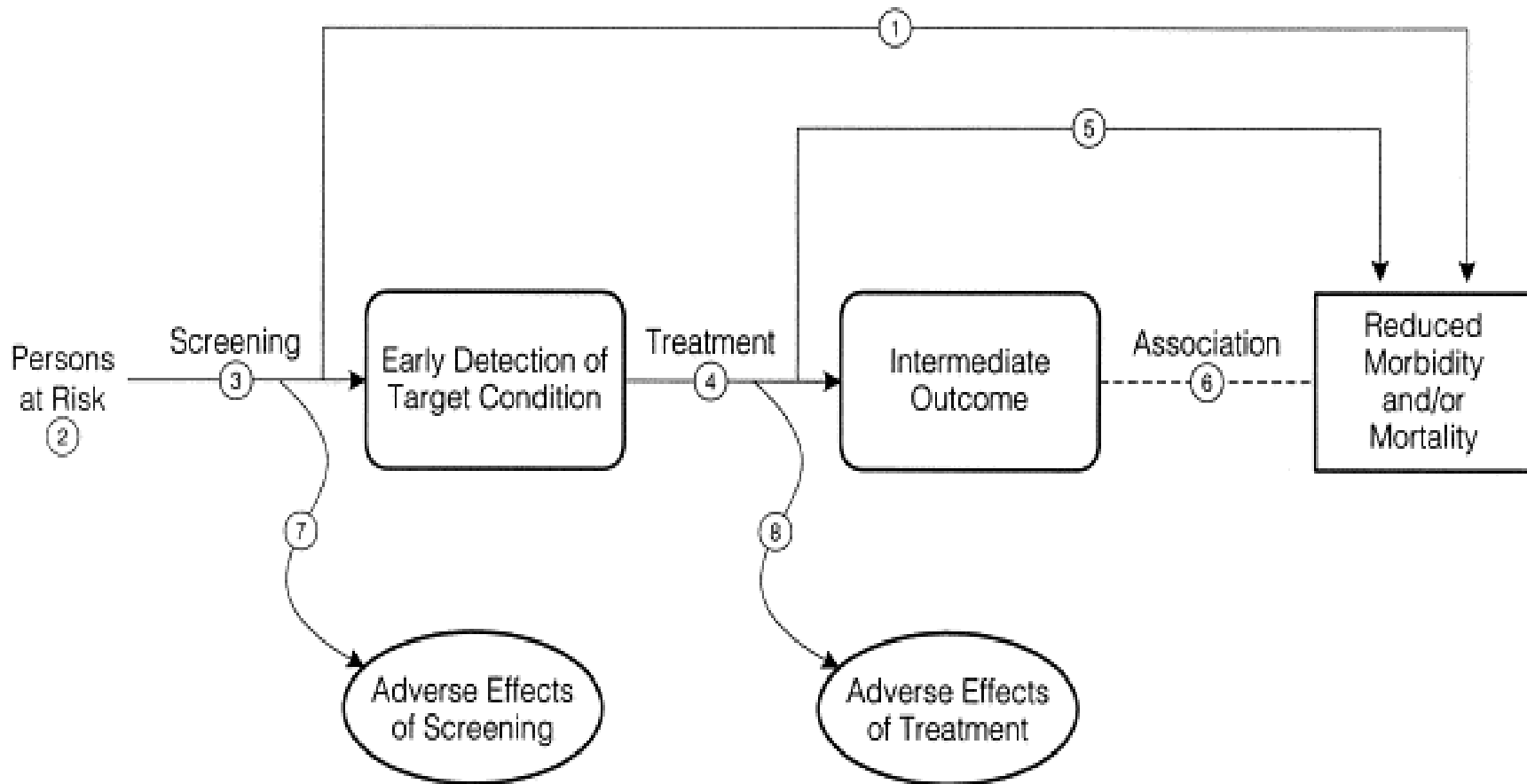
- Independent, volunteer panel of national experts in prevention and evidence-based medicine
 - The USPSTF scope for clinical preventive services include:
 - screening tests
 - counseling
 - preventive medications
 - Recommendations address only services offered in the primary care setting or services referred by a primary care clinician
 - Recommendations apply to adults and children with no signs or symptoms (or unrecognized condition)

Research Plan Development

Research Plan (key aspects of SER protocol)

- Analytic Framework & Key Questions
- Contextual Questions
- Literature Search Strategy
- Admissible Evidence (Inclusion/Exclusion) Criteria

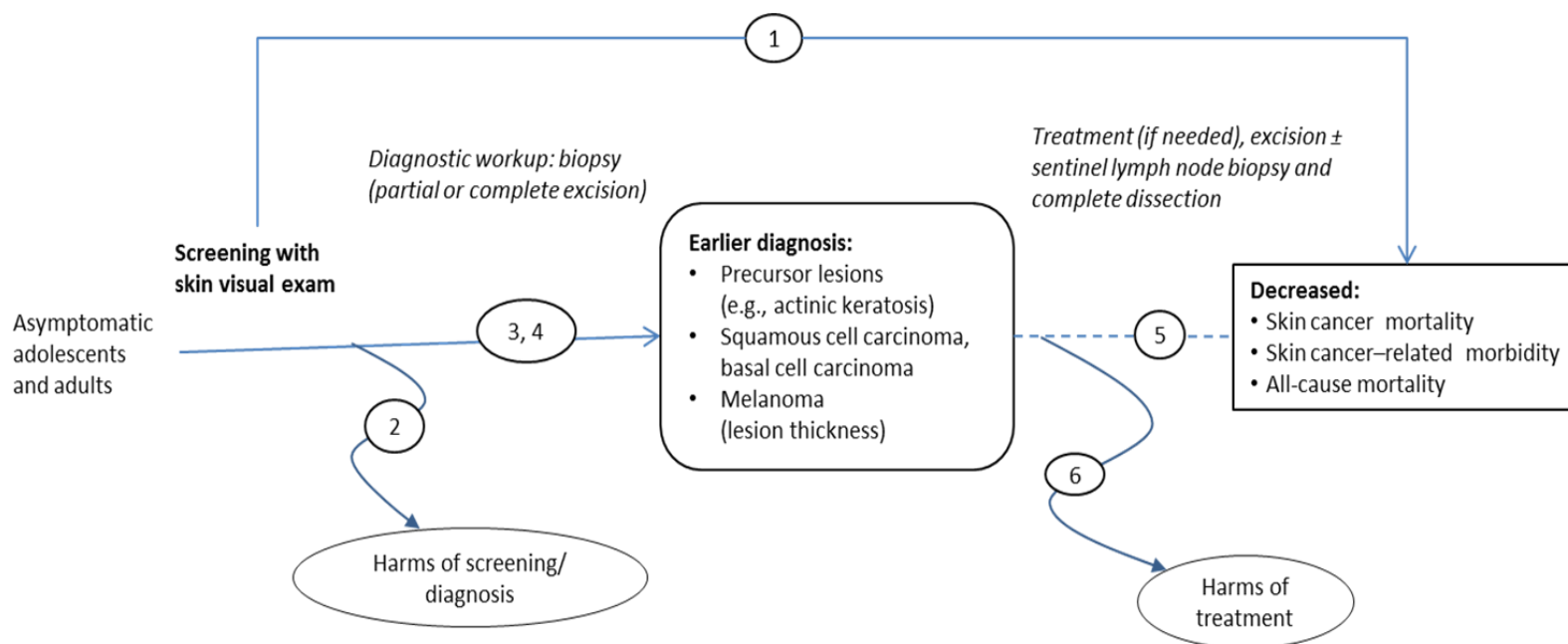
Analytic Framework for Screening



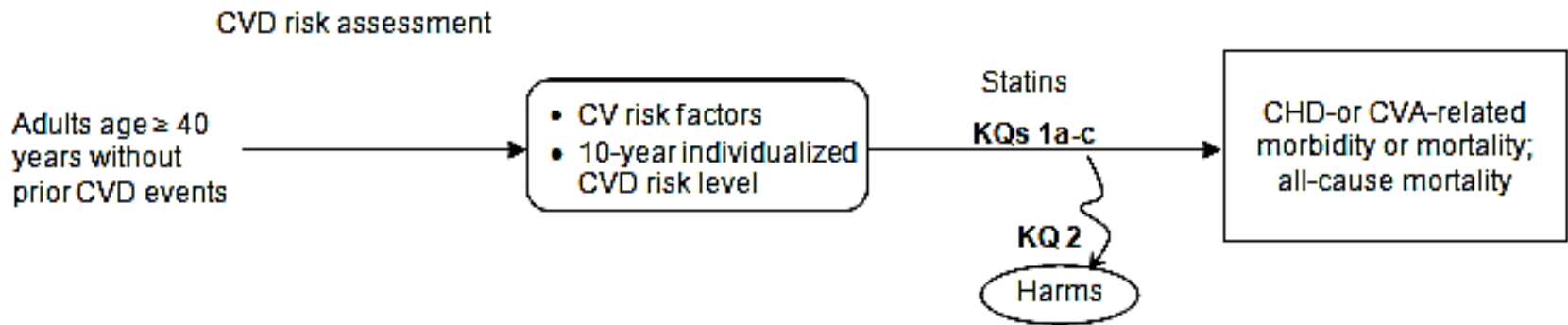
Developing Analytic Framework and Key Questions

- Lays out the chain of logic for a clinical preventive service from patient identification through health outcomes
- Specifically identifies harms as well as benefits for each action
- Not a: decision tree, causal model, care pathway, treatment algorithm
- Varies by type of clinical preventive service: screening, chemoprevention, behavioral counseling/intervention

Analytic Framework - Screening

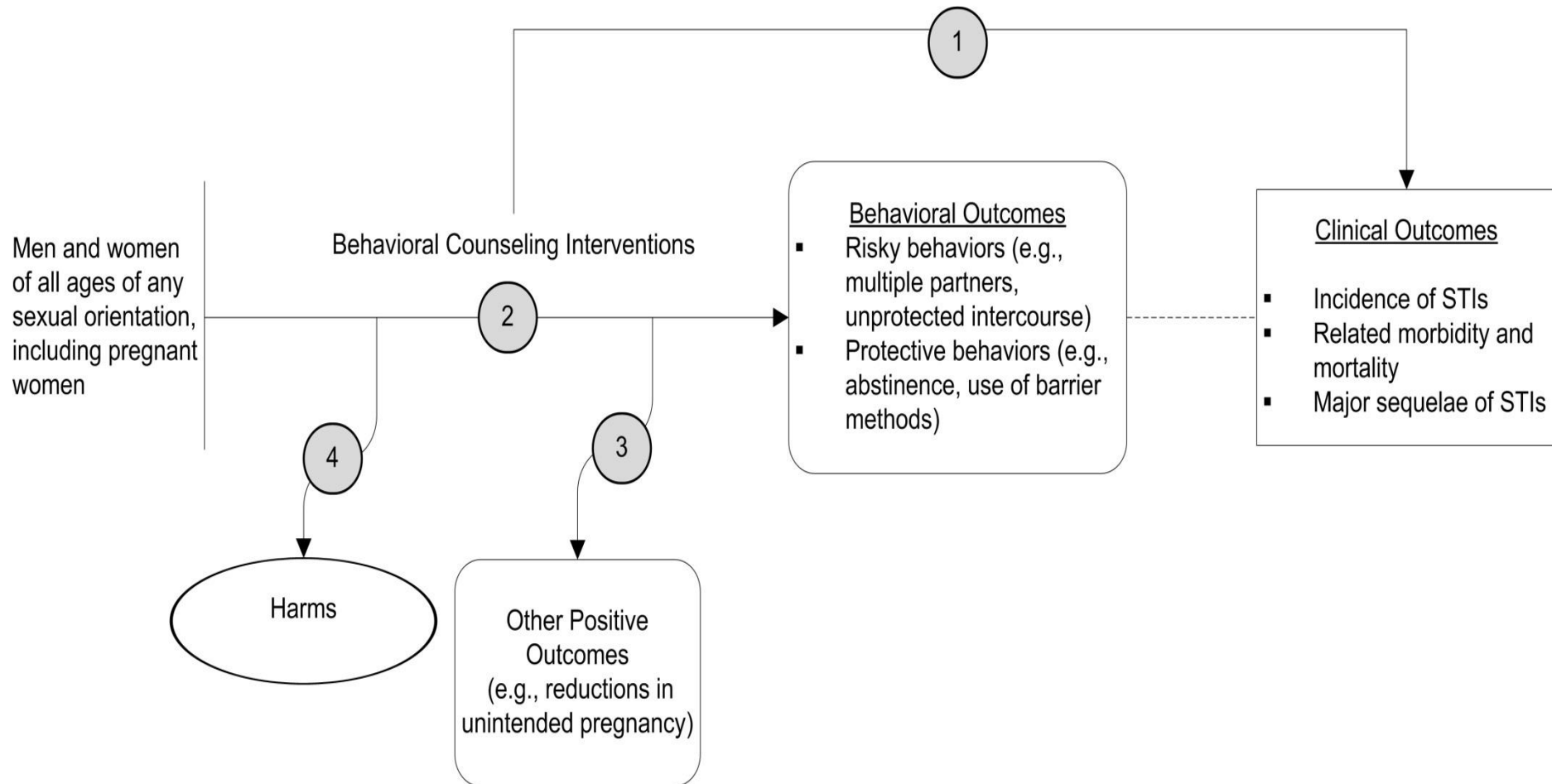


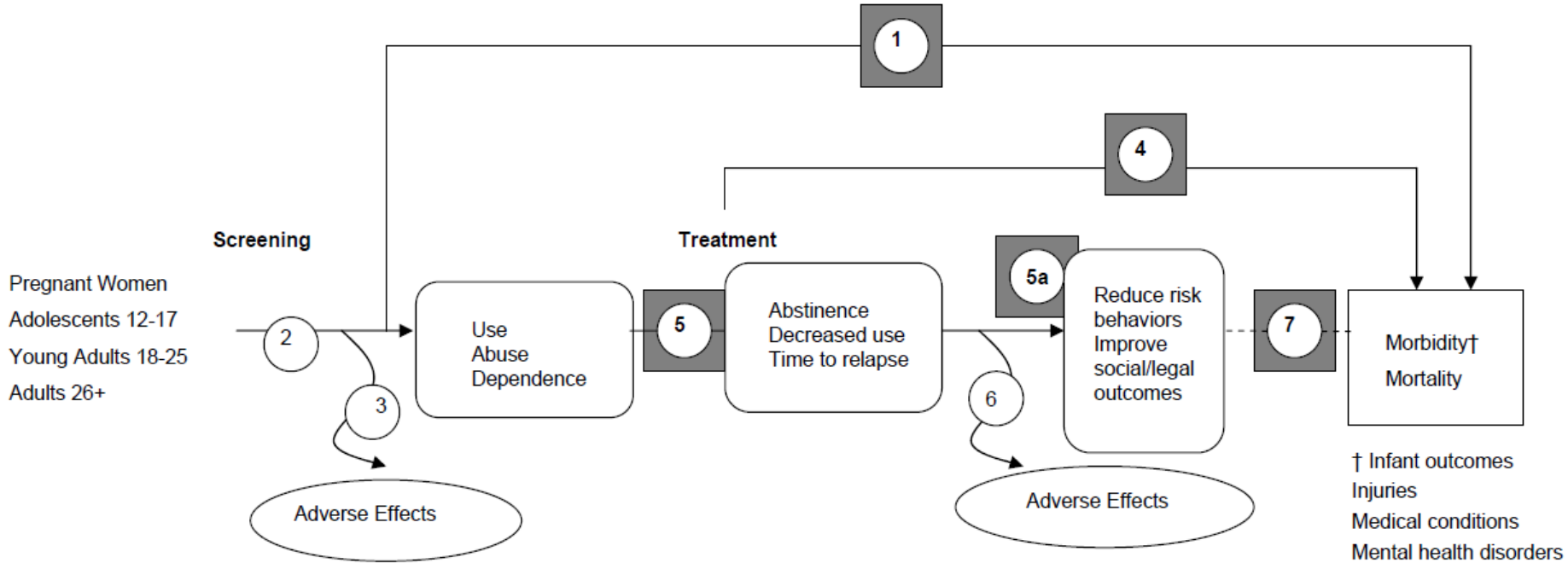
Analytic Framework – Preventive Medication



Abbreviations: CVD = cardiovascular disease; CHD = coronary heart disease; CVA = cerebrovascular accident (stroke)

Analytic Framework: Behavioral Counseling Interventions to Prevent STIs





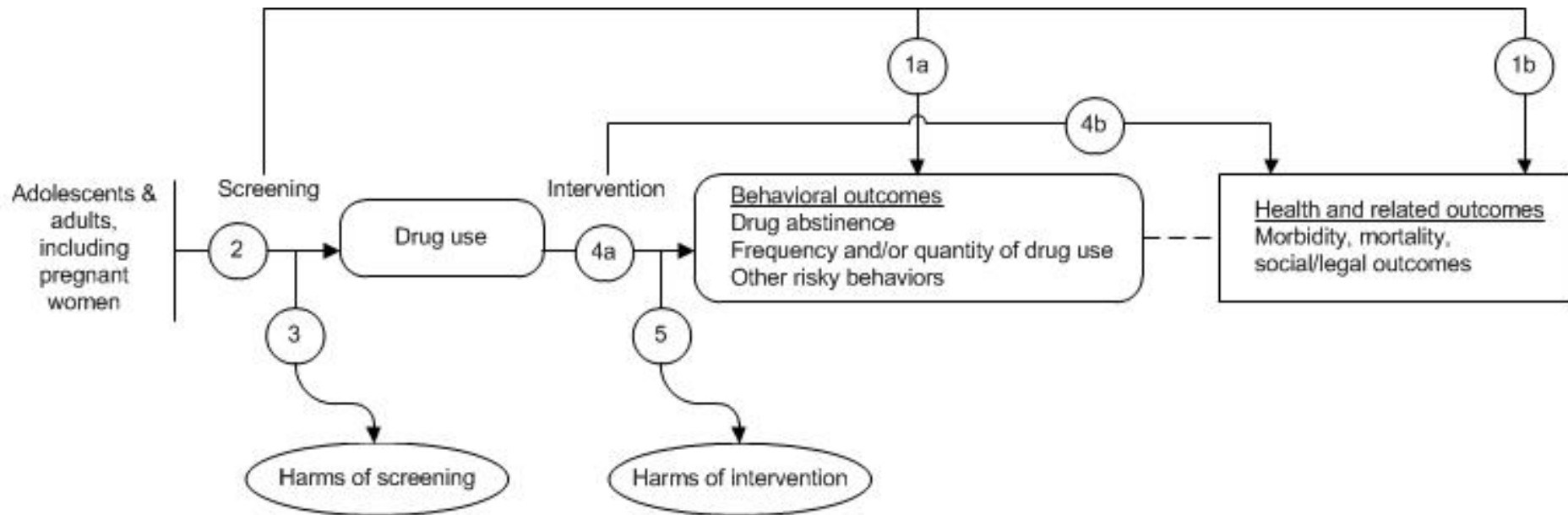
- KQ 1** Is there direct evidence that screening for drug misuse reduces morbidity and/or mortality?
- KQ 2 Do screening tests accurately detect drug misuse?
- KQ 3 Does screening for drug misuse result in adverse effects?
- KQ 4** Does treatment for drug misuse among individuals identified through screening improve morbidity and/or mortality?
- KQ 5** Does treatment for drug misuse among individuals identified through screening result in decreased drug misuse?
- KQ 5a** Does treatment for drug misuse reduce risk behaviors/improve social/legal outcomes?
- KQ 6 Does treatment for drug misuse result in adverse effects?
- KQ 7** Is decreased use or abstinence following drug misuse reliably associated with reduced morbidity and/or mortality?

Grey box = critical key question

**Drugs included are opiates, cocaine, marijuana, and mixed drugs*

Polen MR, Whitlock EP, Wisdom JP, Nygren P, Bougatsos C. Screening in Primary Care Settings for Illicit Drug Use: Staged Systematic Review for the U.S. Preventive Services Task Force. Evidence Synthesis No. 58, Part 1. (Prepared by the Oregon Evidence-based Practice Center under Contract No. 290-02-0024.) AHRQ Publication No. 08-05108-EF-s. Rockville, MD, Agency for Healthcare Research and Quality, January 2008.

Screening for Drug Use in Adolescents and Adults



<https://www.uspreventiveservicestaskforce.org/Page/Document/final-research-plan/drug-use-in-adolescents-and-adults-including-pregnant-women-screening>

How does the analytic framework help?

- Provides a roadmap for key questions and assessing both direct evidence and indirect pathways that connect intervention to outcomes
- Direct evidence is usually not available, therefore indirect evidence pathway important
- Assessing indirect evidence pathway raises questions about what types of evidence is included, how to relate intermediate outcomes (eg, less drug use) to health outcomes (eg, drug overdose, morbidity, mortality)

Thanks