

Risk Assessment Tools and the Identification of Individuals at High-Risk of HIV infection in the Delivery of Oral PrEP

Megan S Dunbar¹, Emily Donaldson¹, Anabel Gomez¹, Jack Clancy², Mitchell Warren¹, Elizabeth Gardiner¹

¹ Prevention Market Manager (PMM), AVAC, USA, ² Formerly AVAC

BACKGROUND

The World Health Organization recommends oral PrEP for individuals at substantial risk for HIV. In response, countries are mobilizing to expand access to oral PrEP. Demonstration studies and early implementation efforts have used a variety of **risk assessment tools** to help identify and enroll individuals at substantial risk for HIV infection. Accurate identification of individuals at substantial risk is a critical component of any PrEP program to help ensure that PrEP is offered to those who can benefit the most, to maximize population-level HIV prevention impact and to optimize investments.

METHODS

To understand more about the relative strengths and weaknesses of current tools we conducted an analysis of risk assessment tools to answer the following questions:

- What risk assessment tools are used in the delivery of oral PrEP and how are they used?
- How well do tools help identify those at substantial risk of HIV infection?
- How best can implementers use these tools to assess risk in oral PrEP delivery moving forward?

We triangulated data from three methodological approaches to address these questions:

1) Collection of Tools: We invited all PrEP demonstration and implementation projects known to AVAC to share risk assessment tools resulting in 31 tools being included in the analysis.

2) Convening of Implementers: At the IAS 2107 conference, we invited a group of implementers, researchers and modelers to discuss issues of risk assessment in the rollout of oral PrEP.

3) Tool Mapping and Analysis: We mapped collected tools across the key elements of the risk assessment, including target population, indicators assessed and perceived strength and weaknesses of the tools in identifying those as substantial risk.

RESULTS

What tools are used and how are they used?

Figure 1. Overall description of tools

TOTAL TOOLS: 31 tools/processes were assessed (focused on sub-Saharan Africa and other LMICs)	
CURRENTLY 24 IN USE BY ORAL PREP PROGRAMS: <ul style="list-style-type: none">• 10 from research or implementation studies• 13 from demonstration projects or national implementation• 1 developed through a validation exercise	FOR PROGRAM ADAPTATION OR SELF-ASSESSMENT: <ul style="list-style-type: none">• 7 tools developed or in development as resources for programs to adapt for use during implementation or for self-assessment - not currently in use for a specific project.

Figure 2. How are risk assessment tools being used?

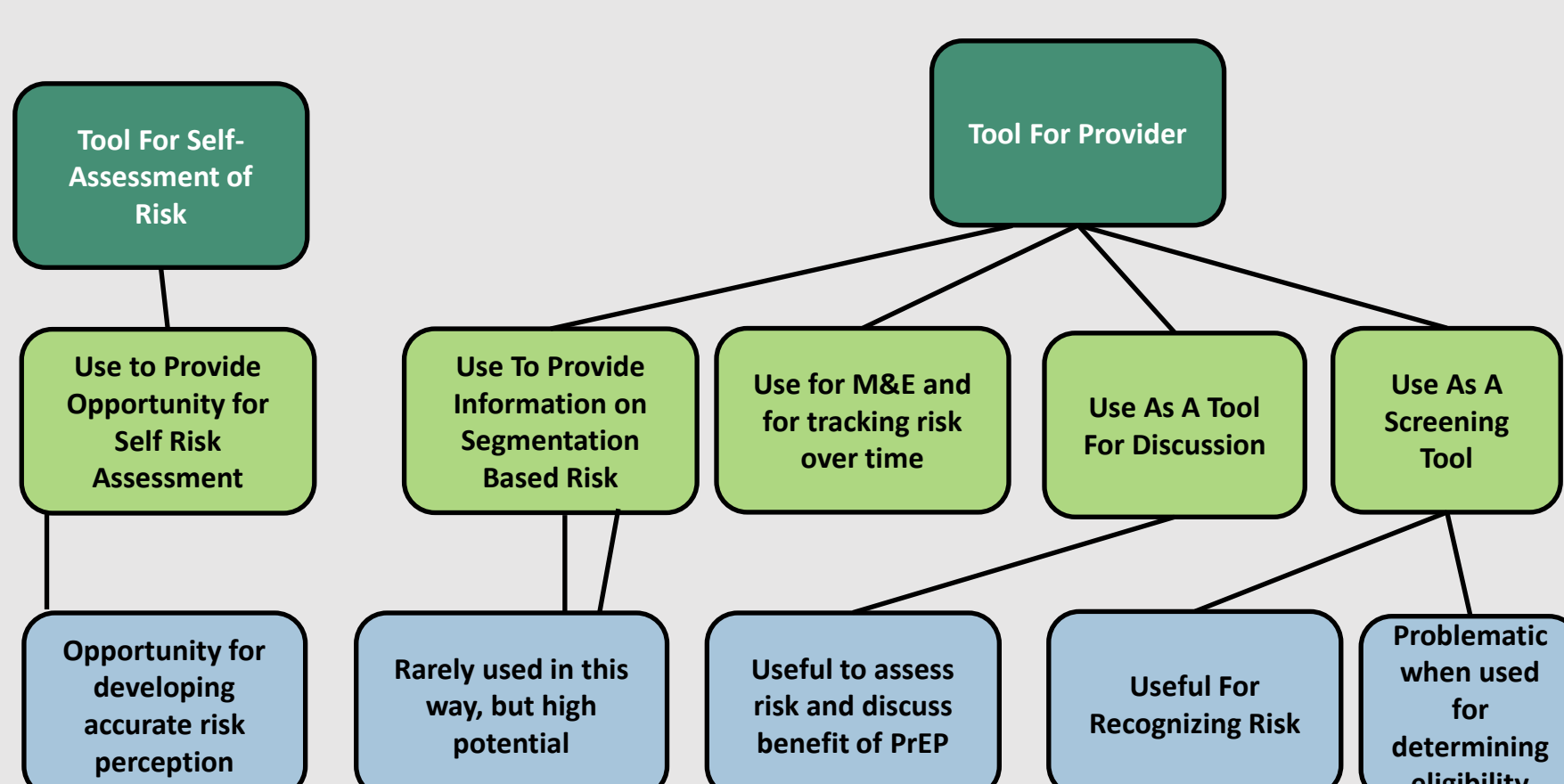
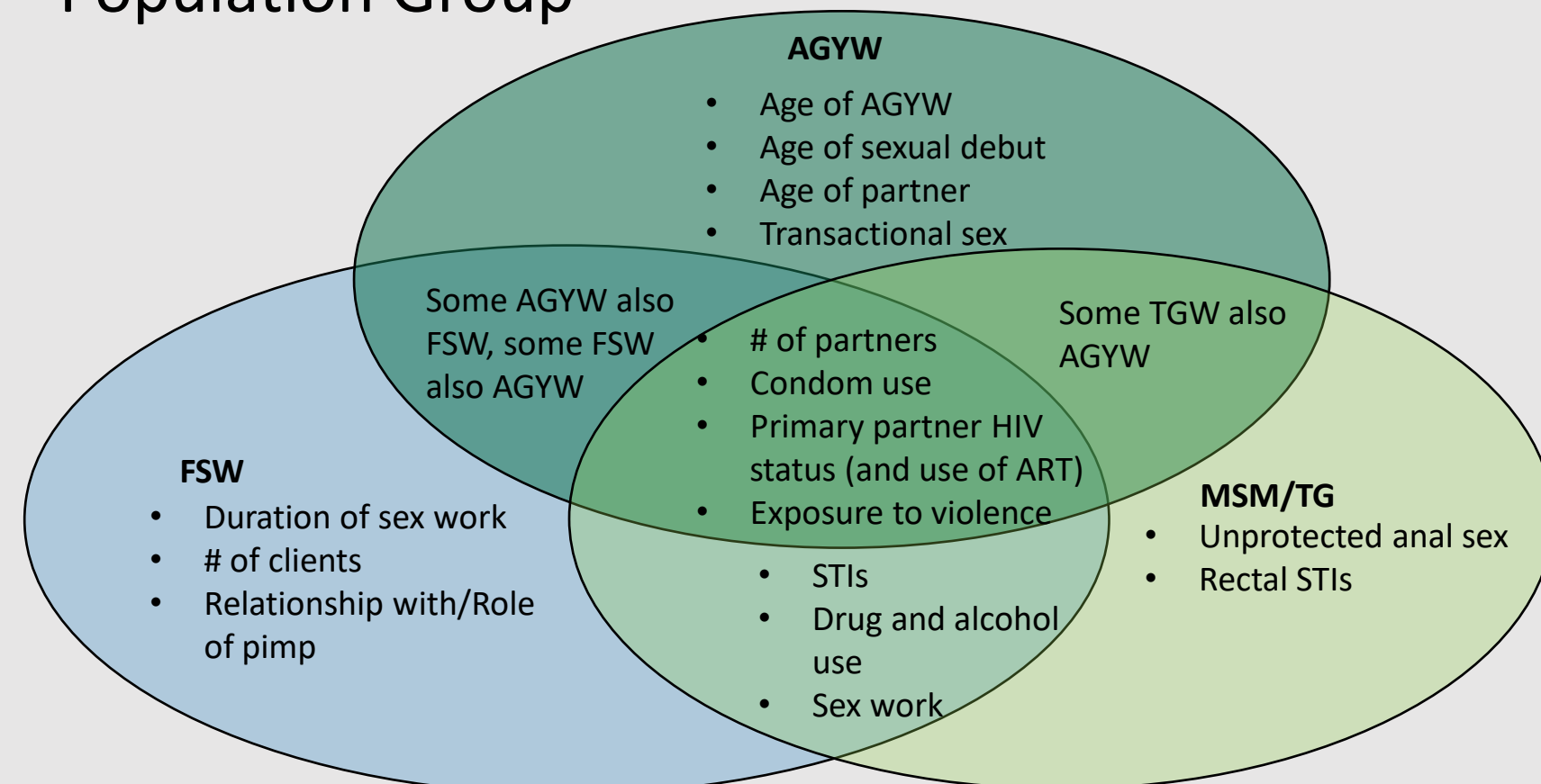


Figure 3. Key Risk Criteria Used in Current Tools by Population Group



How well do they identify those at risk?

Utility of Risk Scores

Some tools are designed to screen eligibility by generating risk scores and thus eligibility for oral PrEP) or through identifying criteria that a client must meet before the offer of oral PrEP.

Only 3 tools have been scientifically validated:

- Kahle, Sero-discordant couples: Scores >5 associated with incidence of 3/100PY;
- Balkus, adult women: Scores >5 associated with incidence of 5/100PY; >3 with incidence of 2 to 4/100 PY
- Pintye, pregnant women: Scores >6 associated with incidence of 7/100PY

While these offer a clear assessment of risk, current tools are only valid for specific groups with limited generalizability and their accuracy is dependent on self-reports of sensitive behaviors that clients may not always feel comfortable disclosing.

Tools can be highly effective in helping providers and clients initiate a conversation about risk and the potential benefits of oral PrEP, and provide guidance to providers on who should be offered oral PrEP.

Perspectives from the field:

“The more we move into programmatic delivery of PrEP, the less I like using them (risk scores)...not because of the accuracy issues, but because if someone is seeking PrEP, there’s a reason – whether they want to tell us what it is or not.” - Program implementer, Kenya

How can these tools be used to assess risk?

Building accurate risk perception & guiding providers:

The primary role for a risk assessment tool is to assist potential users to build an accurate understanding of their own risk, and guide providers to share information about and potentially offer oral PrEP to clients who could benefit from it.

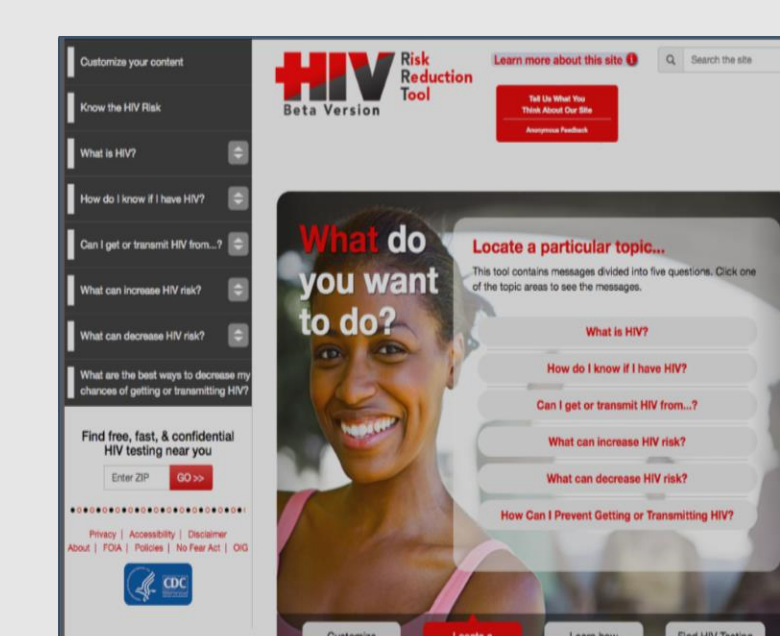
Monitoring and Evaluation: Quantitative tools can be used to estimate the average level risk among the client population on oral PrEP to help programs reach those at greatest risk, and support clients as their risk changes over time.

Self Assessment: While provider led tools can be a useful way to promote greater understanding of risk among clients, there is also a need for more widely available tools that allow for innovative, sex-positive ways to promote self-assessments of risk and that aid individuals in understanding

their own risk and the potential benefits of different prevention options, including for oral PrEP.

Perspectives from the field:

“A better approach (to risk assessment) is to put the tool in the prep user’s hand, for them to reflect on “is this (oral PrEP) for me?”...young women really like a tablet based tool. It gives them a chance to reflect on risk without calling it risk, and think about and explore PrEP as a positive choice to enhance their health.” - Research & program implementer, South Africa



CONCLUSIONS AND RECOMMENDATIONS

1. Creating opportunities to build accurate understanding about risk (or vulnerability to HIV) is critical for optimizing individual benefit, epidemiological impact and cost-effectiveness in the delivery of oral PrEP. However, risk (or vulnerability) assessment tools are only one part of the process to identify the most at risk.
2. Using tools to screen for eligibility is problematic; however, quantitative risk assessments can be useful, particularly for evaluation purposes.
3. Ensuring high-risk individuals enroll in PrEP may require a re-framing or movement away from the notion that “PrEP is for those at risk” to a more positive frame promoting wellness and protection against vulnerability to HIV.

Primary Recommendation: Ensure PrEP programs use a comprehensive approach to identifying those at greatest risk for HIV – in which risk tools play a role but are not the only way to identify risk. Components of program framework should include:

- Building both environmental and individual risk assessment into the program design.
- Generating demand for oral PrEP through promoting accurate risk perception and understanding of the potential benefits of oral PrEP.
- Combining self- as well as interactive client and provider risk assessment
- Using risk assessments in M&E to improve program delivery, ensure the most efficient and cost-effective program investments in identifying those at risk and enrolling those who want it on PrEP.