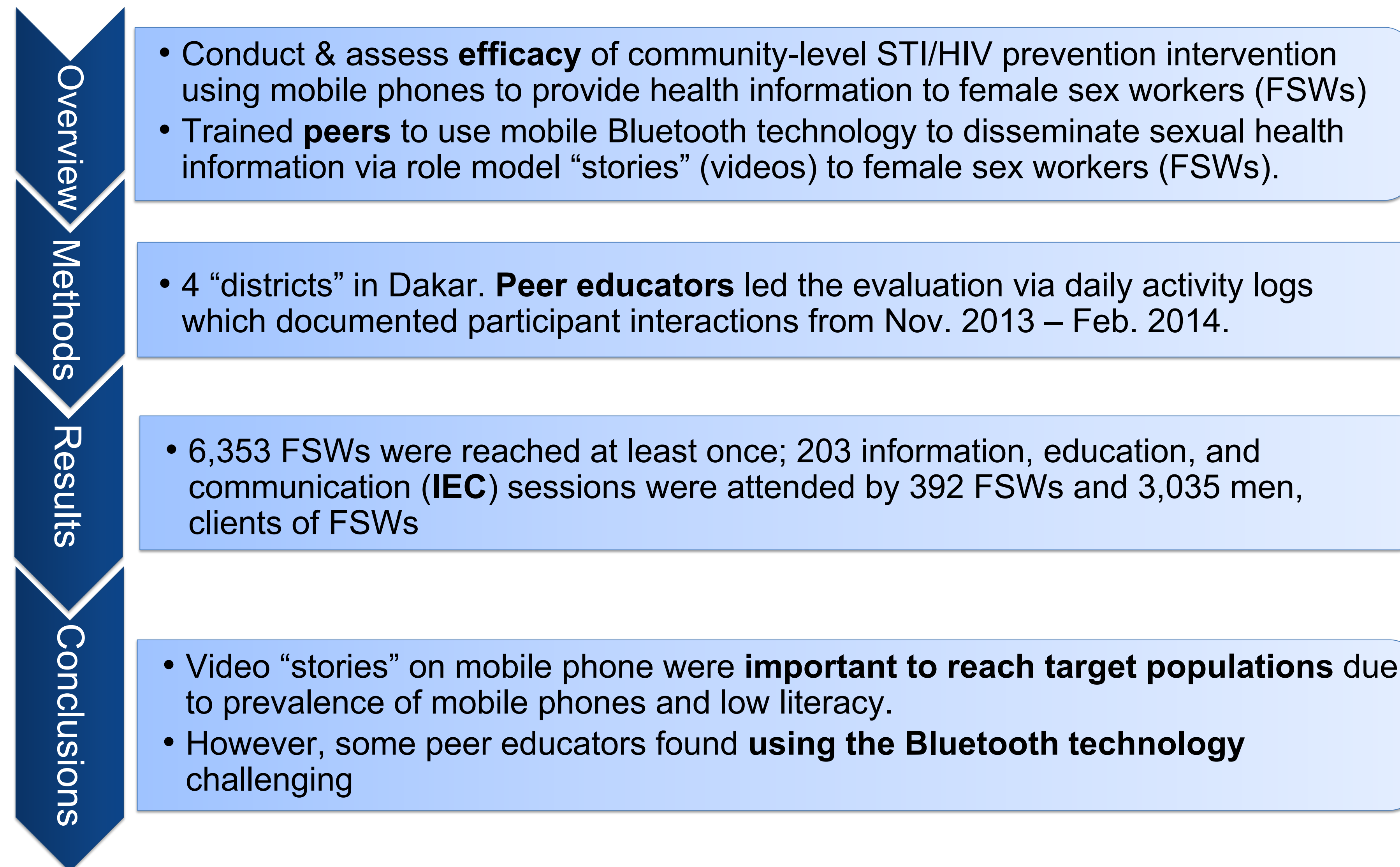


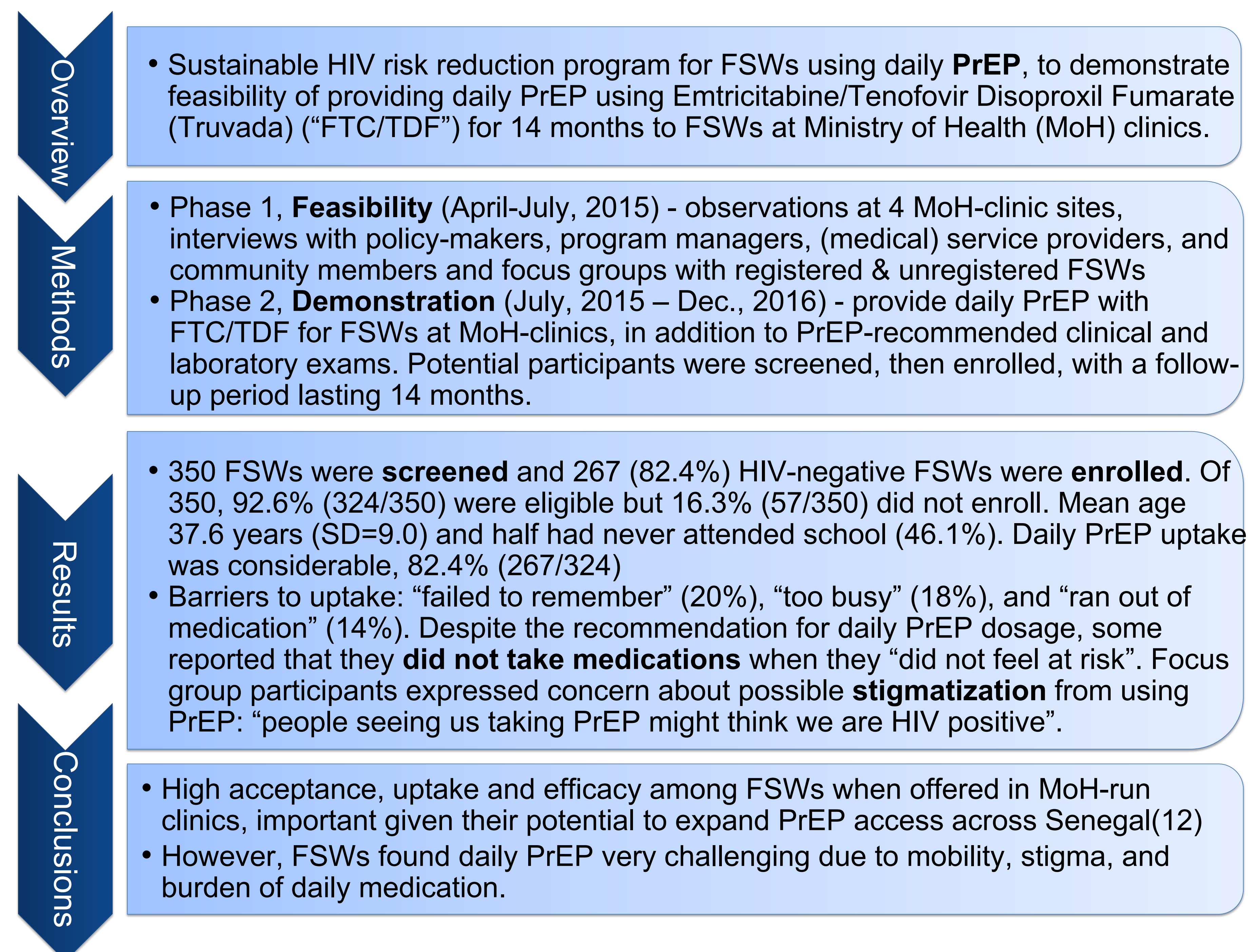
Background

- 35.3 million people are living with HIV/AIDS; 70% of those infected live in sub-Saharan Africa and 58% of those infected in this region are **women**(1)
- Various interventions **educate and promote** healthy behavior to reduce transmission risk(2) and **medication** (e.g., HIV Pre-Exposure Prophylaxis (PrEP))(3).
- Sexual health **education** provides risk information and steps to **reduce risk**(4), and they have been tailored for **individual and environmental circumstances**, specifically for women(5). But, access to accurate and easy to understand sexual health information **remains a barrier** to reducing HIV risk behavior(6, 7).
- Despite the need to consider biomedical, behavioral, and socio-cultural factors(8), literature has not described **how to design and execute** community health informatics interventions using both health **educational** and **pharmacological** approaches known to reduce HIV transmission risk.
- We summarize **two interventions** which used proven approaches to reduce HIV risk based in Dakar, Senegal – PROMISE (behavioral) and PrEP (medication) – to answer the following research question: *What is the role of information in designing and conducting an HIV education and prevention intervention for high-risk groups based on lessons learned from a behavioral and a medication-based intervention?*

PROMISE – Information & Education (2011-2014)



PrEP– Daily Medication (2014-2018)



Results

- Place and **time** and **medium** were critical to the accessibility of health information.
 - Despite community-based efforts to include members of the study population in critical decisions concerning how the PrEP intervention was designed and executed, opportunities for **further clarification** remained
- Interventions should incorporate **how access** to health information is empowering, even among the utmost vulnerable populations.
 - The **large scale** of PROMISE, and the use of peer educators in health promotion efforts targeting FSWs, illustrates stage two of a four stage community empowerment model used to assess community empowerment in advocating for FSWs(9).

Discussion

- Offers vital **context** to design and execute **interventions** that promote access to information and healthy behavior for vulnerable populations
- For PROMISE, technology was a key factor in scalability, but also a source of challenges, **consistent** with literature for low-literacy populations (10). Transient nature of FSWs was **obstacle** for daily PrEP.
- Providing **access** to accurate, **socially** and **culturally appropriate** health information is important to inform the design and execution of interventions that attempt to translate **basic** (e.g., PrEP) and **clinical** research (e.g., PROMISE) to personal behaviors that show the potential of improving health and wellness.
- For future work, community health informatics and information science researchers focused on **translation** from the “bench” (and clinic) to communities should consider findings concerning enabling **access** to information and **persistent barriers**, especially for vulnerable populations around the world.