A conjoint experiment on PrEP delivery: mapping the preferences of at-risk populations

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Problem Statement

HIV prevalence among high-risk groups:

- Men who have sex with men- 15.5% (Health Research Union 2022a)
- Female sex workers - 1.4% (Government of Georgia 2023)
- And people who inject drugs - 0.9% (Health Research Union 2022b)

- Oral PrEP is available nationwide, but uptake remains low among women
- Georgia will introduce a pilot of injectable Lenacapavir for men who have sex with men starting in October, 2026

Goal

- This study uses a choice-based conjoint (CBC) experiment to quantify preferences among female sex workers, women who use drugs and men who have sex with men.
- It aims to identify optimal PrEP delivery models to support equitable scale-up in Georgia.

Implementation Framework

- The conjoint experiment was guided by Random Utility Theory, which assumes that individuals select the alternative that provides the highest perceived utility.
- This framework allows estimation of the relative importance of PrEP service attributes and trade-offs individuals make when considering PrEP uptake.
- It explains:
  - Attribute importance
  - Trade-offs
  - Preference differences across groups

Stage 1: identification of barriers and facilitators

Rank	Barrier	COM-B	Total Votes
1	Limited awareness of PrEP	Capability	45
2	Stigma/self-stigma (clinic visits)	Opportunity	37
3	Low perceived HIV risk (“no need”)	Motivation	27
4	Limited awareness of HIV/STI risks	Capability	23
5	Perceived side effects/interactions	Capability	14

Facilitator	COM-B	Groups Mentioned
Increase awareness & education	Capability	5
Routine provider discussion of PrEP	Capability	5
Inclusive marketing (beyond MSM)	Opportunity	5
Accessible information in Georgian	Capability	5
Expand access points / neutral delivery settings	Opportunity	5
Injectable PrEP options	Opportunity	5

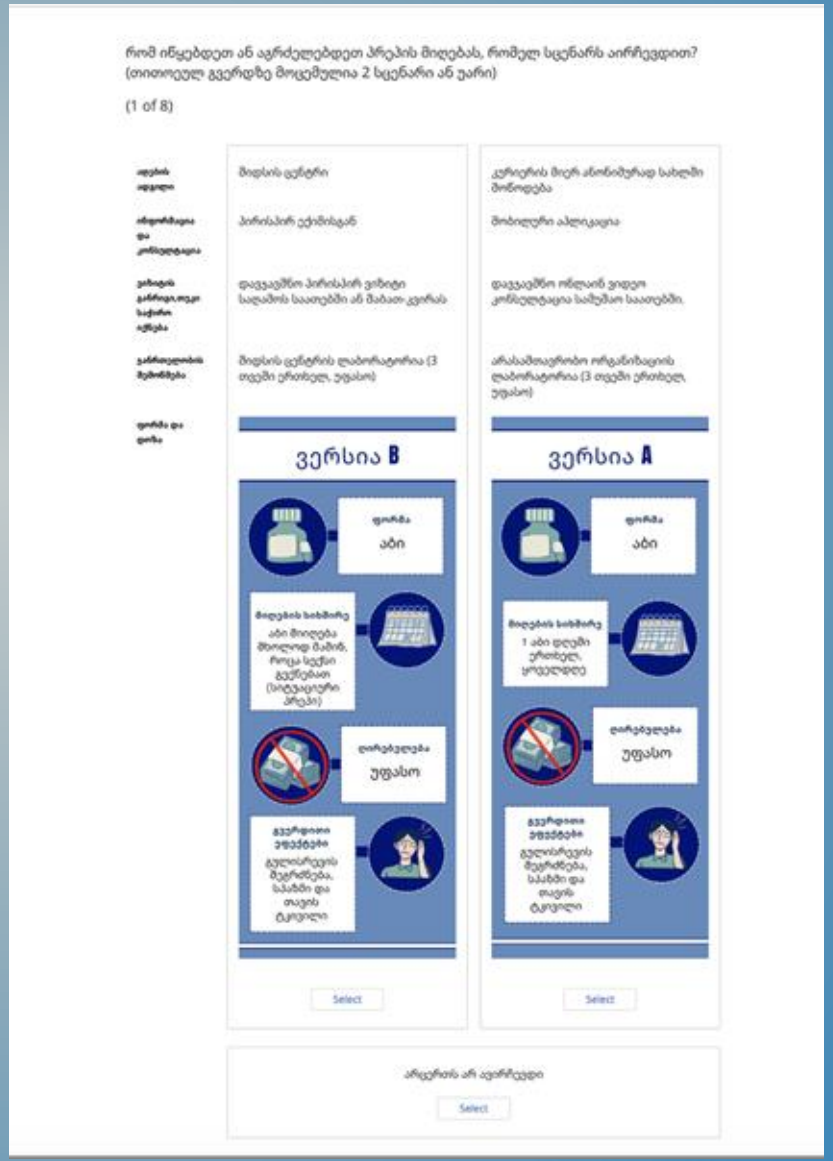
Mgebrishvili T, Kirtadze I, Otiashvili D, Sherozia M, Oliveros D, Altice FL (2026) Barriers and facilitators to pre-exposure prophylaxis uptake among high-risk women and men who have sex with men in Georgia: A pre-implementation mixed-methods study using nominal group technique and the COM-B model. PLOS Glob Public Health 6(6): e0006301. https://doi.org/10.1371/journal.pgph.0006301

Stage 2: choice-based conjoint experiment (CBC)

Attributes	Levels
Accessibility and convenience of getting PrEP	• AIDS center • Community/harm reduction organization • PHC • Pharmacy • Anonymous courier delivery
Counseling or support	• In-person clinician • Peer navigator • In person with a pharmacist • Live video with clinician • Mobile app
Cost and formulation preferences	• Daily oral pill for free • On-demand oral pill for free (**for MSM only)** • Long-acting injectable cabotegravir ~450 GEL/year. • Lenacapavir injection ~110 GEL/year • Vaginal Ring ~438 GEL/year **(for women only)**
Health check-ups and follow-up	• Clinic labs every 3 months (free or state costs) • NGO labs every 3 months (free or state cost) • Home self-swab kits + online follow-up (free) • Private lab every 3 months (~300 GEL/visit)
Visit schedule	• Evenings/weekends for in person visit • Pre-booked time slots for in person visit • Evenings/weekends for TelePrEP • Pre-booked time slots for TelePrEP

Methodology for conjoint experiment

- Implemented in Sawtooth Lighthouse Studio
- Each participant completed 8 choice tasks
  - Chose between 2 service options + “none”
- 12 survey versions were generated (balanced, efficient design)
- Attribute presentation order was partially randomized to reduce bias: the first two attributes were held constant across tasks, while the remaining attributes were randomized to reduce potential order effects.
- Design ensured high statistical efficiency (low standard errors <0.05)



Questionnaire content

- Preamble
- Screening Questions
- Sociodemographic Characteristics
- Conjoint-Based Choice (CBC)
- Additional Segmentation Questions
- Awareness and Knowledge of PrEP
- Primary and Modified Risk Score for Women
- HIV Incidence Risk Index for MSM (HIRI-MSM)
- Intersectional Anticipated Discrimination Scale (InDI-A)

Conclusions and Next Steps

- Identify preferred PrEP delivery models
- Inform national PrEP strategy
- Support rollout of injectable PrEP

Anticipated Challenges and Questions

Challenges:

- Due to harsh drug policies, along with arrests and raids targeting people who use drugs, recruitment is difficult.
- The online survey make it difficult to reach men who have sex with men.

Question for the discussion:

- What is the best way to use pre-implementation study findings to inform the implementation of innovative PrEP and communicate them to decision-makers?

Thank you!