

Access to Healthcare and Preferences across PrEP Modalities among Young Men Who Have Sex in the U.S.: A Latent Class Analysis study



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Overview

We identified three latent classes of YMSM based on their interactions with health services and providers. Membership to the shared decision-making class was associated with better access to healthcare and higher odds of choosing next generation PrEP modalities over daily oral PrEP

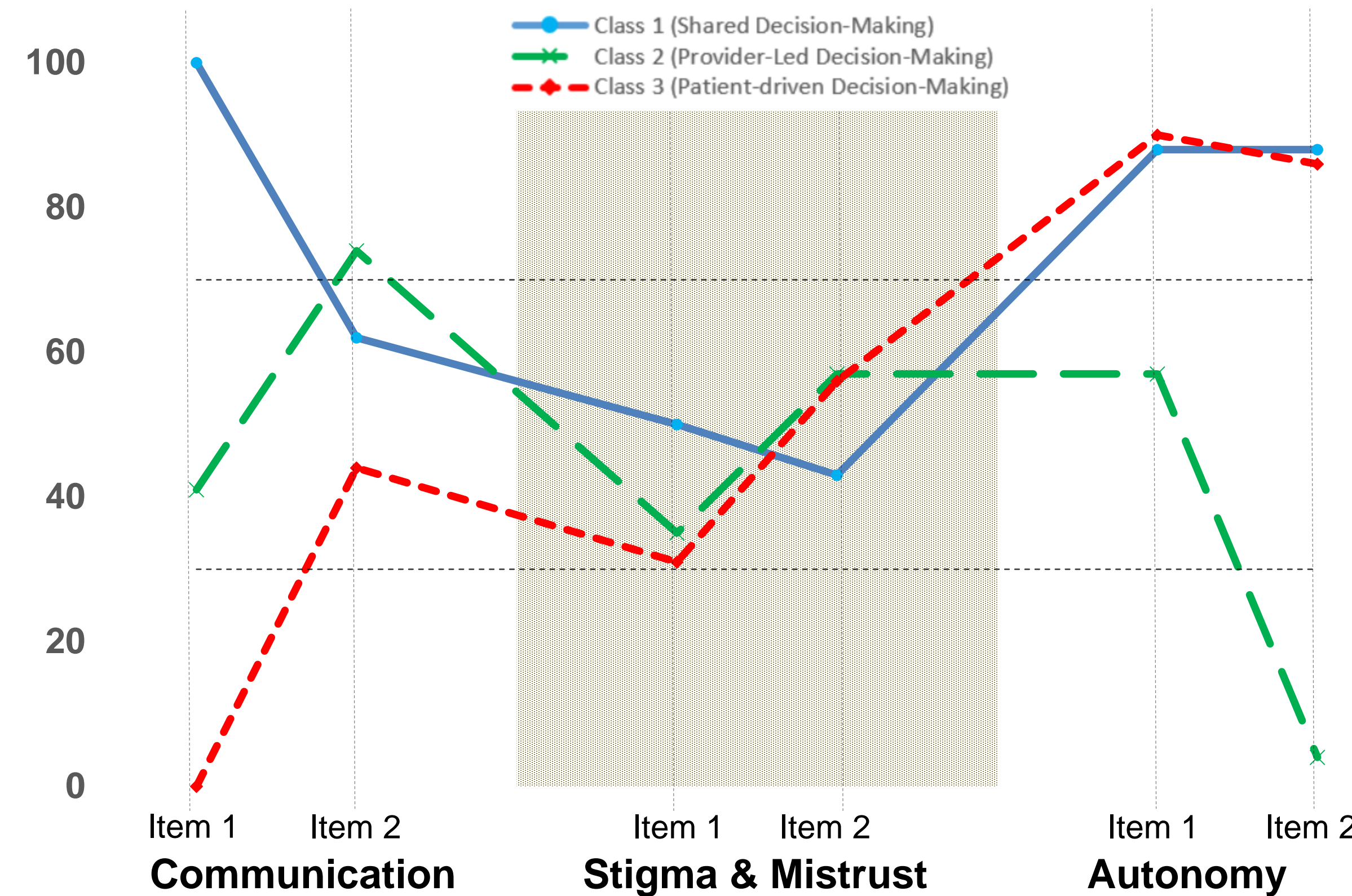
Background

- Young men who have sex with men (YMSM) in the U.S. are at increased risk of HIV acquisition
- Daily oral pre-exposure prophylaxis (PrEP) is highly efficacious to prevent HIV transmission but uptake among YMSM is low
- Next generation PrEP modalities that do not involve daily oral medication may facilitate access to effective HIV prevention
- Next generation PrEP implementation relies on patient-provider communication and YMSM's ability to navigate health systems
- We (i) identified latent classes of YMSM based on patterns of interactions with healthcare and examined (ii) associations between latent classes and access to HIV prevention services and (iii) preferences across five different PrEP modalities (i.e., daily oral, event-driven oral, rectal douche, IV broadly neutralizing antibodies, PrEP implants, and PrEP injectable).

Methods

- **Oct/2020-June/2021:** Online survey with U.S. YMSM ages 15-24
- **Sample:** N=737, Mean age=21.1 years (SD=2.27), 44% non-White, 80% identified as gay (see Suppl. Table linked in QR code)
- **Latent class analysis (LCA):** (a) communication with providers (2 indicators), (b) stigma and mistrust in healthcare (2 indicators) (c) autonomy in sexual health decisions (2 indicators)
- **Logistic regression:** Associations between most likely class membership and measures of access to healthcare
- **Exploded logit model:** Associations between most likely class membership and preferences across PrEP modalities

Latent Classes



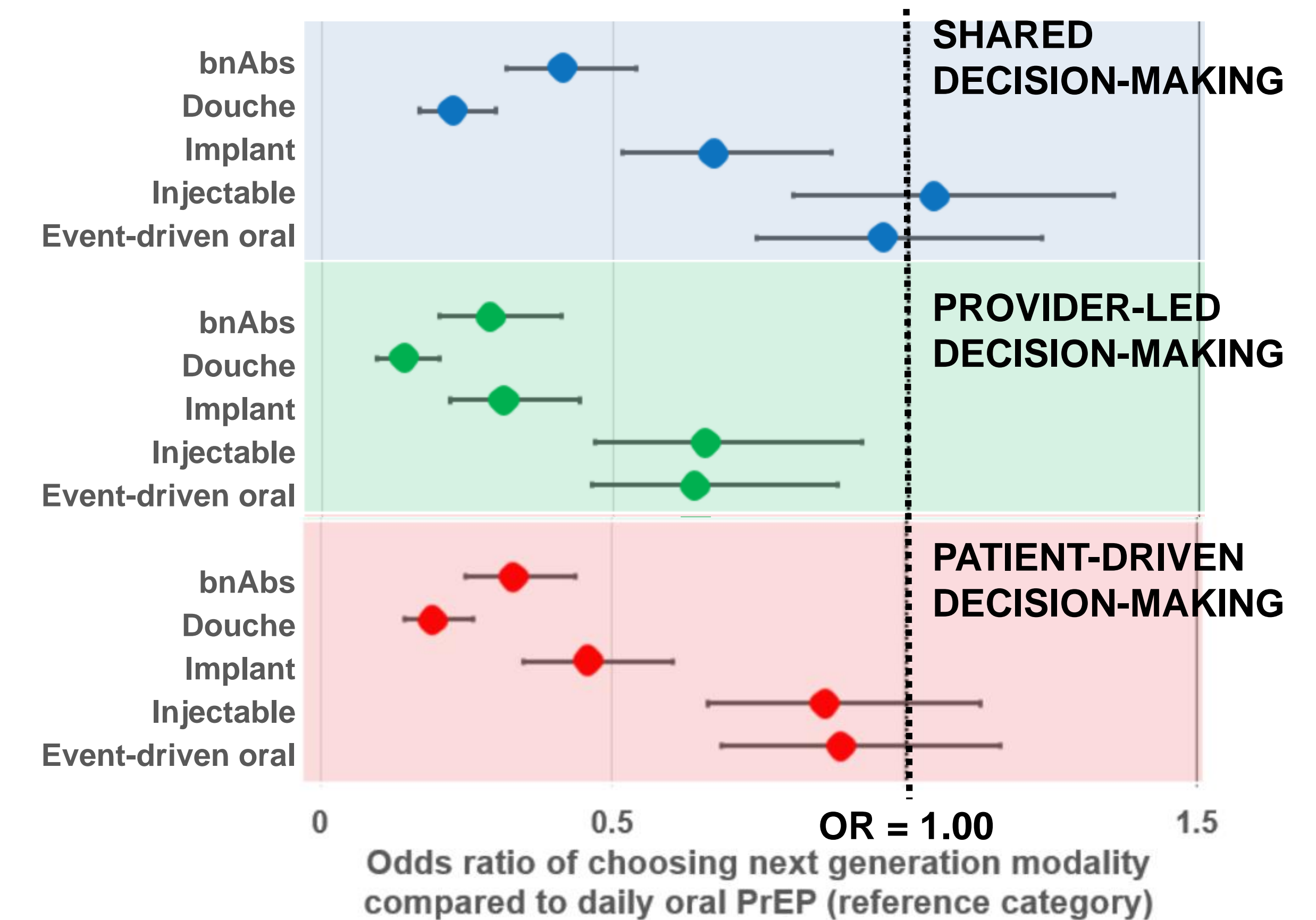
- Latent Class 1 (33%): SHARED DECISION-MAKING**
 - High communication, high autonomy, moderate mistrust
- Latent Class 2 (26%): PROVIDER-LED DECISION-MAKING**
 - High communication, low autonomy, moderate mistrust
- Latent Class 3 (40%): PATIENT-DRIVEN DECISION-MAKING**
 - Low communication, high autonomy, moderate mistrust

Access to Healthcare

Most likely class membership	Health needs met	Has insurance	HIV test (ever)	PrEP awareness	PrEP use	
	aOR	aOR	aOR	aOR	Current aOR	Past aOR
1: Shared DM	REF	REF	REF	REF	REF	REF
2: Provider-driven DM	0.32 ***	0.10 ***	0.26 ***	0.20 **	0.43 **	0.46 *
3: Patient-led DM	0.42 ***	0.13 ***	0.21 ***	0.61	0.26 ***	0.37 **

Adjusted coefficients control for age, social constructs of race/ethnicity, and sexual identity
 *p<0.05 **p<0.01 ***p<0.001

Preferences for PrEP modalities



- None of the classes preferred next generation PrEP over daily oral PrEP
- The patient-driven decision-making class were less likely to choose any of the next generation modalities over daily oral PrEP compared to the other classes
- Provider-led decision-making was associated with lower odds of choosing PrEP implants compared to the shared decision-making class

Conclusions

- Shared decision-making (i.e., high communication with providers and high autonomy in clinical decision-making) is associated with access to healthcare and HIV prevention services
- Subgroups of YMSM engaging in shared decision-making with providers and have better access to HIV prevention services may be the ones most likely to initiate next generation PrEP., whereas youth not being reached by existing services may face challenges to access next generation PrEP
- Future studies should evaluate the role of interventions to promote shared clinical decision-making (e.g., provider training, decision aids) in enhancing access to HIV prevention services and promoting acceptability of next generation PrEP modalities.

Acknowledgements

The authors would like to thank research participants and the Youth Advisory Board (YAB) at University of Pennsylvania for their contributions to this study. This work was made possible through support from the National Institute of Child Health and Human Development (NICHD) (U19HD089881, PIs: Biello/Bauermeister). DTdS is supported by the Agency for Healthcare Research and Quality (AHRQ) (T32 HS026116-03). The content is solely the responsibility of the authors and does not necessarily represent the official views of the funding agency.