PEP-in-Pocket (PIP): Long-Term Follow-Up of On Demand HIV Post-Exposure Prophylaxis

Toronto General
Toronto Western
Princess Margaret
Toronto Rehab
Michener Institute

Maxime J. Billick¹, **Karla N. Fisher²**, Samantha Myers³, Darrell H. S. Tan^{1,3}, Isaac I. Bogoch^{1,2,4,*}

¹Division of Infectious Diseases, Department of Medicine, University of Toronto, Toronto, Ontario, Canada ²HIV Prevention Clinic, Toronto General Hospital, Toronto, Ontario, Canada ³Division of Infectious Diseases, St. Michael's Hospital, Toronto, Ontario, Canada ⁴Division of Infectious Diseases, Toronto General Hospital, University Health Network, Toronto, Ontario, Canada



PEP-in-Pocket (PIP) = Another Option for HIV Prevention

Identify PIP Candidate

Self-reports 0-4 higher-risk HIV exposures per year

This may include individuals who:

- Almost always use condoms, but infrequently don't (or can't)
- Have had a condom break
- Have decided to stop using PrEP, and want a back-up plan
- Infrequently share injection drug equipment
- Have difficulty accessing PEP in emergency situations

Initiate PIP Care

Provide a full 28-day prescription for PEP + counselling

Individuals are provided with a full 28-day prescription for PEP **before an exposure occurs** and counselled on circumstances that warrant initiation of medications.

Individuals are also instructed to follow up with their PIPprovider within one week of initiating medications to complete routine bloodwork and HIV/STI screening.

Schedule Routine Visits

Regularly evaluate HIV risk & PIP appropriateness

Individuals using PIP are encouraged to attend routine follow-up visits every 5-6 months for HIV/STI screening and re-evaluation of their HIV prevention modality.

Patients may transition between PIP and PrEP based on evolving HIV risk.

BACKGROUND

Pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP) are two established methods to prevent HIV infection, however gaps in HIV prevention care remain, particularly for individuals who report a low frequency of higher-risk or unplanned HIV exposures.

PEP-in-Pocket (PIP) aims to address these gaps in care by prospectively identifying individuals who have infrequent HIV exposures and proactively providing a full 28-day prescription for PEP, along with counselling on when to initiate medications and where to seek follow-up care. Should an exposure occur, individuals have immediate access to time-sensitive and evidence-based HIV prevention care through self-initiation of PIP.

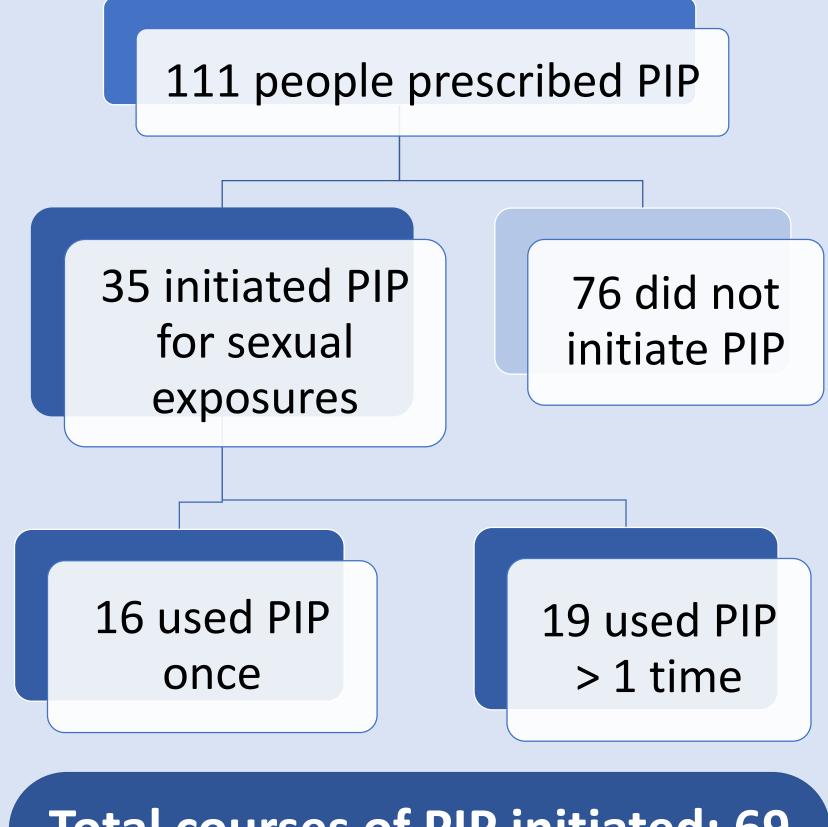
In summary, PIP:

- Harnesses the known high effectiveness of PEP for HIV prevention
- Provides patients with autonomy over their HIV prevention care
- Eliminates inconvenient and costly emergency department visits
- May reduce patient attrition
- Mitigates the lack of evidence for on-demand PrEP for those with very infrequent HIV exposures

METHODS

This is a retrospective evaluation of the clinical characteristics and outcomes of patients using PIP at two HIV prevention clinics in Toronto, Canada between January 2016 and December 2022. Patients who were initially referred for PrEP or PEP were offered PIP if they reported a low frequency (0-4 per year) of higher-risk HIV exposures of any type.

RESULTS



Total courses of PIP initiated: 69
Follow up at 6-months post-PIP initiation was 98.6%.

No HIV seroconversions.

178.2 combined patient-years

- 104 (94%) identified as gbMSM
- 7 (6%) identified as female
- Average age: 37 years [22-69]

Average time using PIP: 1.6 years

Bacterial STIs

n = 111

Data from 90 participants

 20 episodes of self-reported or lab-detected STIs in 14 individuals (15.6%) using PIP

PIP ⇔ **PrEP** Transitions

- 33 (29%) switched PrEP ⇒ PIP
- 35 (31%) switched PIP ⇒ PrEP

CONCLUSIONS

PIP may be a valuable HIV prevention modality for individuals with a low frequency of higher-risk HIV exposures by facilitating timely access to HIV prevention care.

PEP-in-Pocket should be considered as a biomedical HIV prevention option for individuals at risk for infection.

LIMITATIONS & FUTURE DIRECTIONS

This is a retrospective study among mostly gay, bisexual and other men who have sex with men (gbMSM). We are currently conducting a prospective cohort study that incorporates community outreach to other key populations and evaluates the efficacy, appropriateness and cost-effectiveness of PIP. We aim to increase the number of PIP providers and improve access to PIP.

AUTHOR CONTACT INFORMATION

*Dr. Isaac I. Bogoch; Isaac.Bogoch@uhn.ca