

# PRIMP PrEP Cascade Results: Only a minority of healthcare encounters among PrEP-eligible gbMSM lead to PrEP initiation

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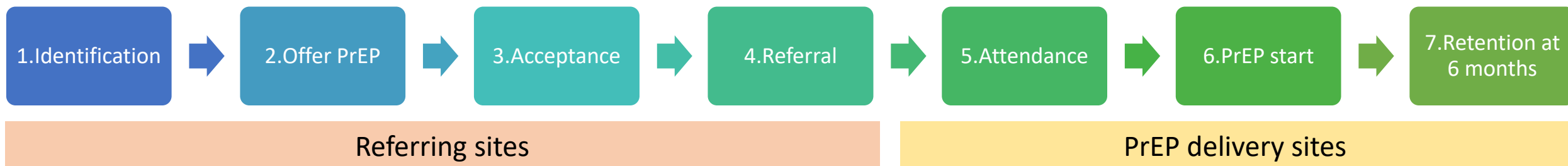
# Background

- The PrEP cascade is a useful tool for evaluating the health system's ability to link individuals to PrEP
- PRIMP is a multi-part implementation science study of the PrEP cascade among gay, bisexual and other men who have sex with men (GBM) in urban British Columbia & Ontario

# Methods

- We documented the number/ proportion of healthcare encounters meeting each step in a 7-step cascade
- Used electronic and paper records at 17 sites in Toronto, Ottawa, Hamilton, Vancouver, Victoria
  - ON: 8 referral sites, 6 delivery sites
  - BC: 3 combined referral/delivery sites

*Figure 1. PrEP Cascade*



# Methods – continued

- PrEP eligibility (step 1) was based on Canadian guidelines (Fig. 2)
- For each cascade step, we
  - assessed for differences between BC & ON over five 6-month periods (P1-P5) using Spearman's rank correlation coefficients
  - compared overall results between provinces using Chi-square tests

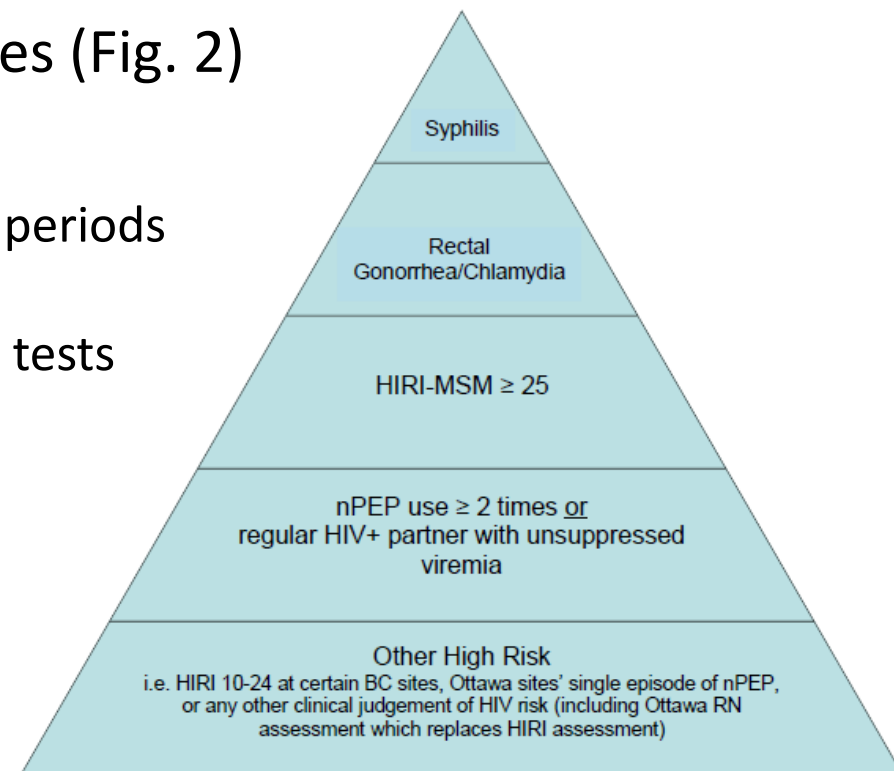
Period 1: Dec 2018 – May 2019

Period 2: Jun 2019 – Nov 2019

Period 3: Dec 2019 – May 2020

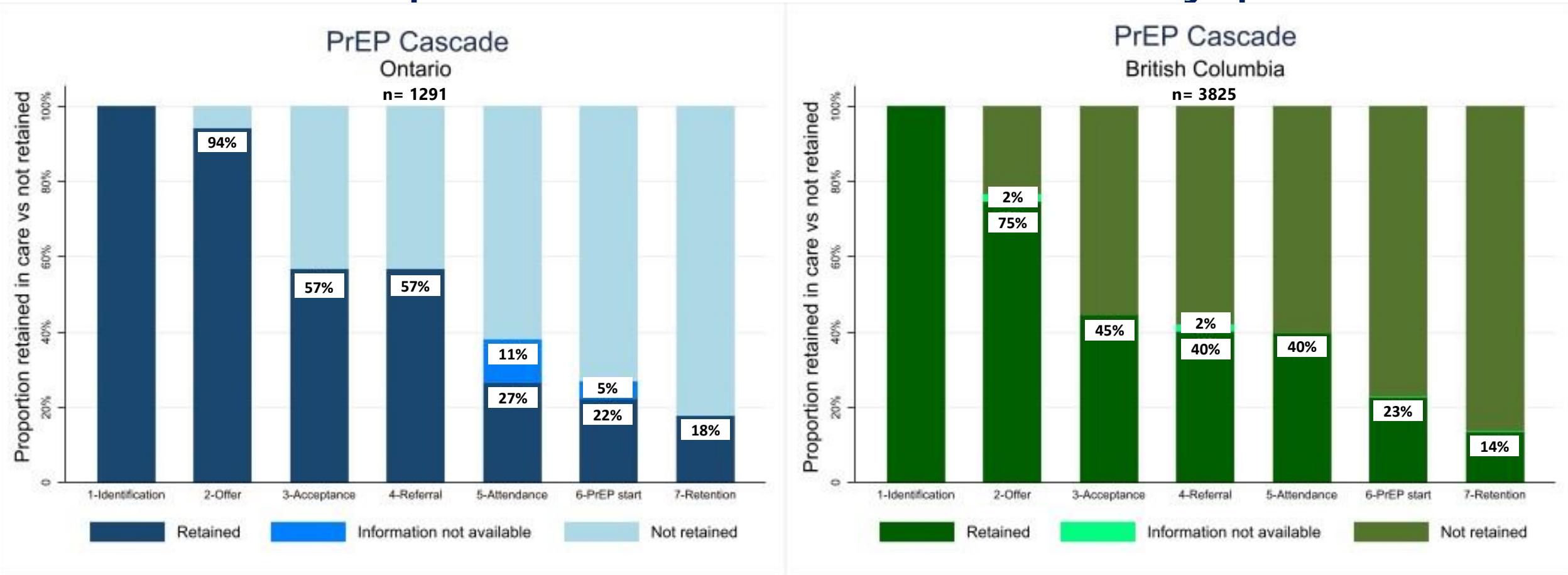
Period 4: Jun 2020 – Nov 2020

Period 5: Dec 2020 – May 2021



**Figure 2. Hierarchy of PrEP Criteria**

# Results: Comparison of overall results by period



**Largest gaps:**

Eligible individuals **declining PrEP** > **Failure to attend** PrEP clinic (ON) and **Recommending PrEP** to eligible GBM (BC)

# Results

Province	Overall (ON and BC)						ON	BC	
	P1	P2	P3	P4	P5	p-value <sup>a</sup>			
Cascade step\Period							Overall	Overall	p-value <sup>b</sup>
Identified	1	1	1	1	1	-	1.00	1.00	-
PrEP recommended	.68	.86	.83	.95	.89	0.104	0.94	0.75	<0.001
Accepted referral	.51	.43	.43	.45	.44	0.805	0.57	0.45	0.090
Referred for PrEP	.51	.38	.36	.45	.44	0.747	0.57	0.40	.016
Attended PrEP clinic	.46	.32	.28	.35	-	0.600	0.27	0.40	0.051
PrEP initiated	.25	.23	.17	.29	-	0.800	0.22	0.23	0.886
Retained on PrEP	.14	.15	.12	.13	-	0.400	0.18	0.14	0.440

# Conclusions

- The large majority of healthcare encounters with GBM meeting evidence-based criteria for PrEP did not result in PrEP initiation
- New interventions to optimize the PrEP cascade are urgently needed.

# Funding



<sup>a</sup> p-value for Spearman test for trend across periods

<sup>b</sup> p-value for Chi-square test for differences between provinces.