

Improvements in ART Initiation Over Time After Diagnosis Among Indigenous People Living with HIV in British Columbia, Canada

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I have no disclosures or conflicts of interest to report.

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Territory Acknowledgement

I would like to acknowledge that I am presenting today from the ancestral, traditional, and unceded territory of the **Musqueam, Tsleil-Waututh, and Squamish First Nations**



Background

- The Treatment-as-Prevention strategy (TasP) relies on early identification and **early** treatment of HIV^{1,2}
- Indigenous People living with HIV (IPLWH) often experience disproportionate rates of HIV, along with delayed initiation and uptake of ART³
- Access disparities and disproportionate rates of HIV among Indigenous Peoples can be contextualized and rooted in the historical and ongoing impacts of colonization, marginalization and dispossession in Canada

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2. Gardner EM, McLees MP, Steiner JF, del Rio C, Burman WJ. The spectrum of engagement in HIV care and its relevance to test-and-treat strategies for prevention of HIV infection. *Clin Infect Dis*. 2011;52(6):793-800. doi:10.1093/CID/CIQ243

3. Mill JE, Jackson RC, Worthington CA, et al. HIV Testing and Care in Canadian Aboriginal Youth: A community based mixed methods study. *BMC Infectious Diseases*. 2008;8:132. doi:10.1186/1471-2334-8-132



The STOP HIV/AIDS Program Evaluation (**SHAPE**) Study

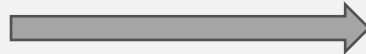


- Initiated in 2016
- Longitudinal cohort
- PLWH living in BC, 19+



Baseline survey

18 months



Follow-up #1

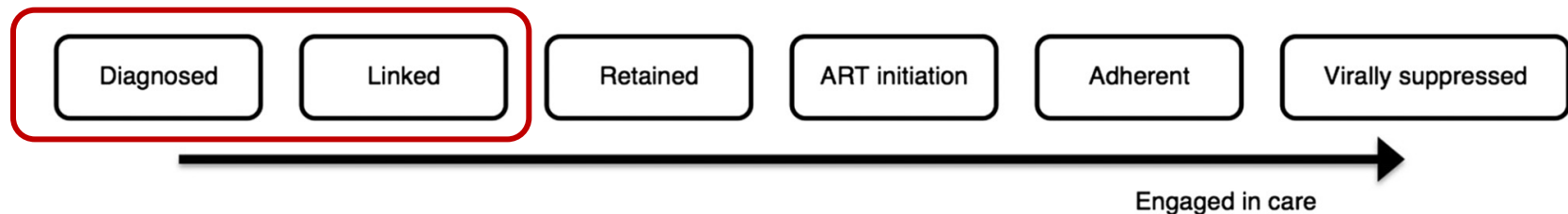
18 months



Follow-up #2

Objectives

With the recognized need to examine IPLWH's care experiences and areas for improvement, specifically, in regards to care linkage, this study aimed to examine longitudinal changes in time-to-ART initiation among IPLWH in British Columbia (BC) and examine factors associated with delays in ART initiation



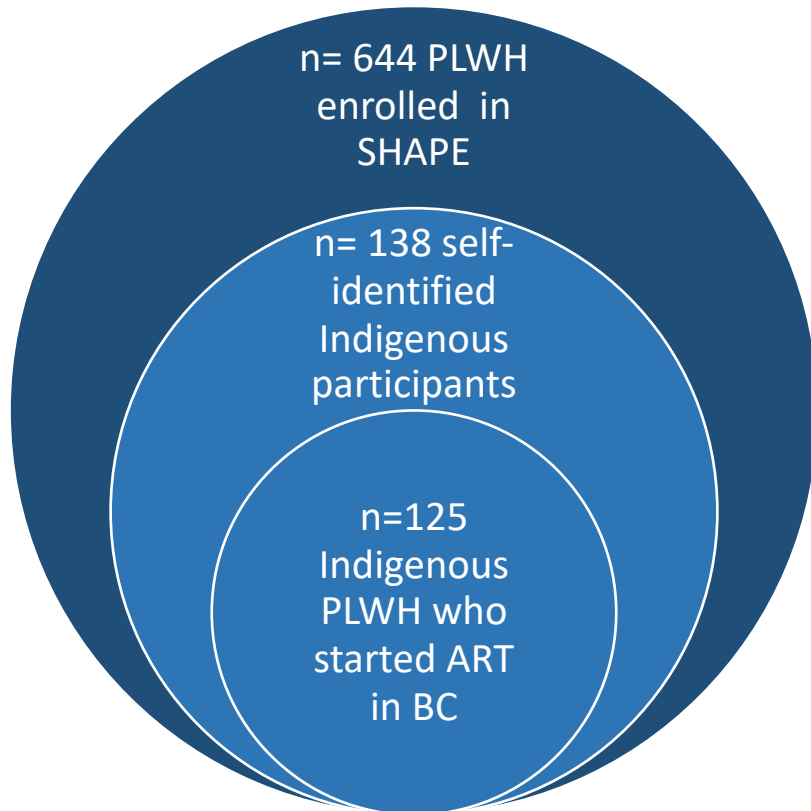


Methods

- Analysis utilized data from the STOP HIV/AIDS Program Evaluation (SHAPE) study and the BC HIV Drug Treatment Program (DTP) to **examine factors associated with time to ART initiation among IPLWH**
- We examined sociodemographic variables and measures of homelessness, substance use and mental health, and classified participants based on their year of HIV diagnosis
 - Treatment eras were defined as *'Prior to 2000'*, *'2000-2009'* and *'2010 or later'*
- **Univariable and multivariable linear regression was used to model time-to-ART initiation**

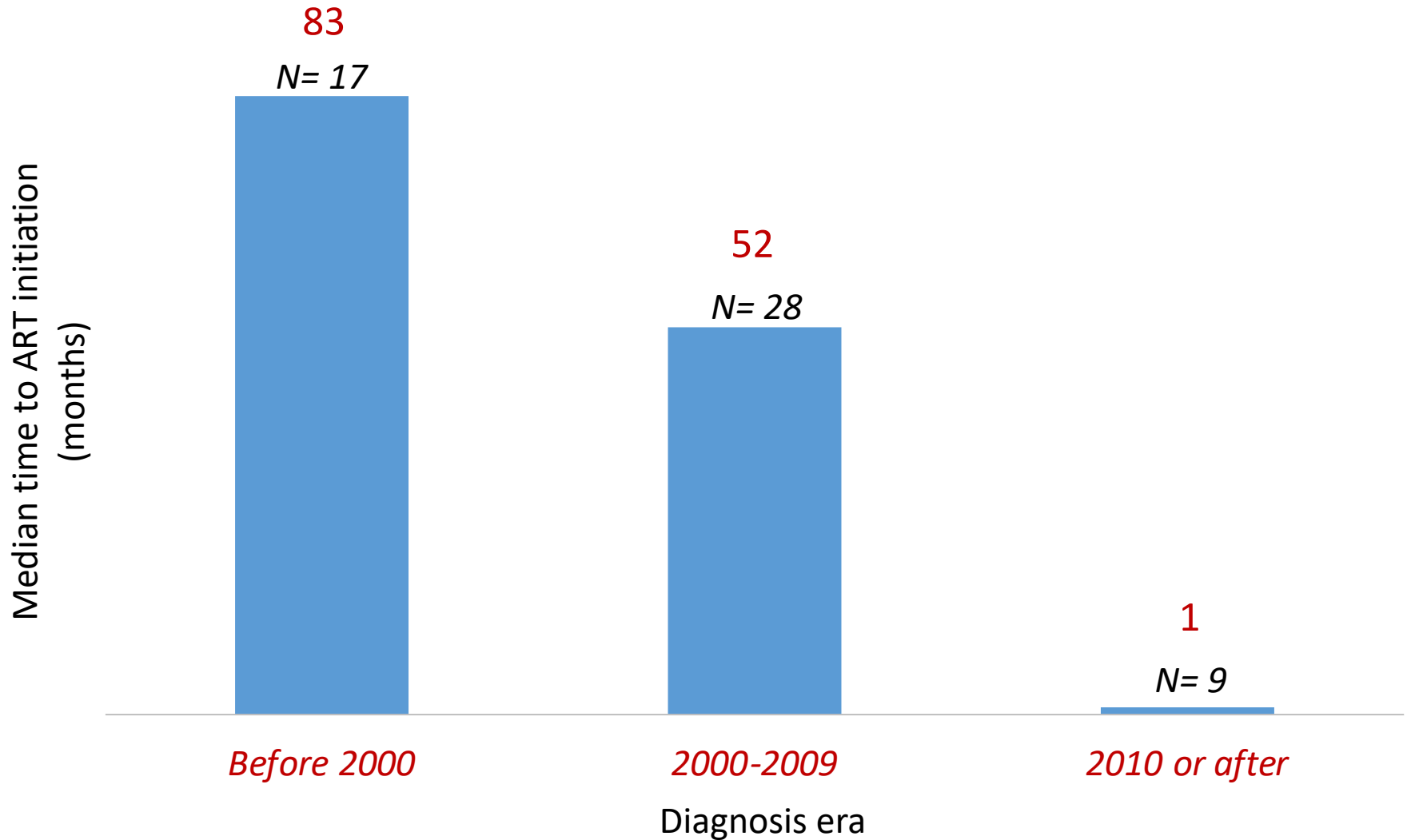


Results: Participant Characteristics



Sample characteristics	n (%)
Female	60 (48%)
History of incarceration	71 (57%)
Diagnosed with at least one mental health disorder	83 (66%)
Living outside of Greater Vancouver	52 (42%)
Indigenous identity	
First Nations	83 (66%)
Metis	28 (22%)
Inuit/other	14 (11%)
Diagnosis era	
Prior to 2000	38 (30%)
2000-2009	66 (53%)
2010 or later	21 (17%)

Median time to ART initiation by diagnosis era





Results

	Linear Regression (Unadjusted)			Multivariable COX PH Model (Adjusted)		
	Estimate	95 CI	p-Value	Estimate	95 CI	p-Value
Year of HIV diagnosis						
Prior to 2000	ref			ref		0.0001
2000- 2009	-30.45	-54.22 -6.68	0.0131	-43.06	-69.22 -16.90	0.0018
2010 or later	-75.19	-107.06 -43.32	<.0001	-86.33	-124.32 -48.35	<.0001
Mental health diagnosis ever						
Never diagnosed with a mental health disorder	ref			ref		
Has been diagnosed with at least one mental health disorder	31.05	4.49 57.62	0.0228	13.27	-13.54 40.08	0.3240
Drug abuse						
None to moderate	ref					
Substantial to severe level	-4.63	-29.90 20.64	0.7146			
Homelessness ever						
No	ref					
Yes	0.23	-30.84 31.30	0.9882			

In our multivariable model, only **HIV diagnosis between 2000-2009, and 2010 or later were associated with a reduced time-to-ART initiation**, compared to being diagnosed prior to the year 2000



Conclusion

- There have been **significant improvements made in time to ART initiation over treatment eras among IPLWH in BC**, demonstrating advancements made in HIV care for IPLWH
- Improvements may be attributed to a wide variety of factors, such as improvements in specialized HIV services, pharmacological developments, de-stigmatization and increased availability and accessibility of ART

Discussion

Study Limitations:

- First positive HIV test dates were obtained from self-report data in the SHAPE baseline survey, introducing potential recall bias
- Small sample size
- Findings may not be entirely generalizable among other demographics of IPLWH, as Indigenous peoples and identities are extremely diverse across Canada

Future research:

- Further examination of not only barriers to care, but also existing facilitators and successful care strategies will help move towards a **better understanding of what ideal HIV care looks like for IPLWH**



Acknowledgements

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