

Background

- Saskatchewan (SK) has the highest rates of HIV in Canada, driven largely by an epidemic of injection drug use (IDU) and disproportionately affecting younger woman through heterosexual transmission.
- HIV care in Saskatoon is primarily accessed at two clinical sites: the Royal University Hospital Positive Living Program (PLP) and the Westside Community Clinic (WSCC). While the clinic at RUH is a specialized infectious disease clinic, providing specialized acute care, the WSCC provides community-based access to primary care and addictions support.
- The two clinics provide care to ~2000 patients living with HIV - the largest clinical population in the province.
- Offering different, yet complimentary clinical care, the HIV care cascades of these two sites offer insights into the HIV epidemic in Saskatchewan over time, specifically changes in patient demographics; intersectional considerations and the impact of COVID-19 pandemic on patient outcomes.
- The analysis provides insight into the two care models and identifies gaps and priority areas unique to this patient population.

Methods

- A retrospective chart review was conducted of demographic and clinical data for diagnosed Persons With HIV (PWH) across two clinic sites - PLP and WSCC.
- Variables extracted from electronic medical records for analysis, including baseline characteristics at diagnosis, demographics, risk factor, laboratory data, medications, and appointment data.
- Three time periods were analyzed and compared:
 - 2019** (May 1, 2019 - April 30, 2020);
 - 2020** (May 1, 2020 - April 30, 2021);
 - 2021** (May 1, 2021 - April 30, 2022).
- Inclusion Criteria:** 'Active' patients (have received at least one HIV clinic visit within the data cut off period); HIV diagnosis confirmed by Western blot; have received clinical care from care provider at either PLP or WSCC.
- Definitions of 'Cascade of Care':** 'Total' = Number of cases for time period; 'Active' = patient received an HIV-related appointment within previous two calendar years; 'Engaged in Care' = HIV-related appointment within calendar year; 'On ARVs' = HIV medication prescribed within calendar year; 'Viral Suppression' = most recent viral load within time period between <200 copies/ml -> target not detected.

Results

Figure 1: 2019 HIV Care Cascade (PLP and WSCC)

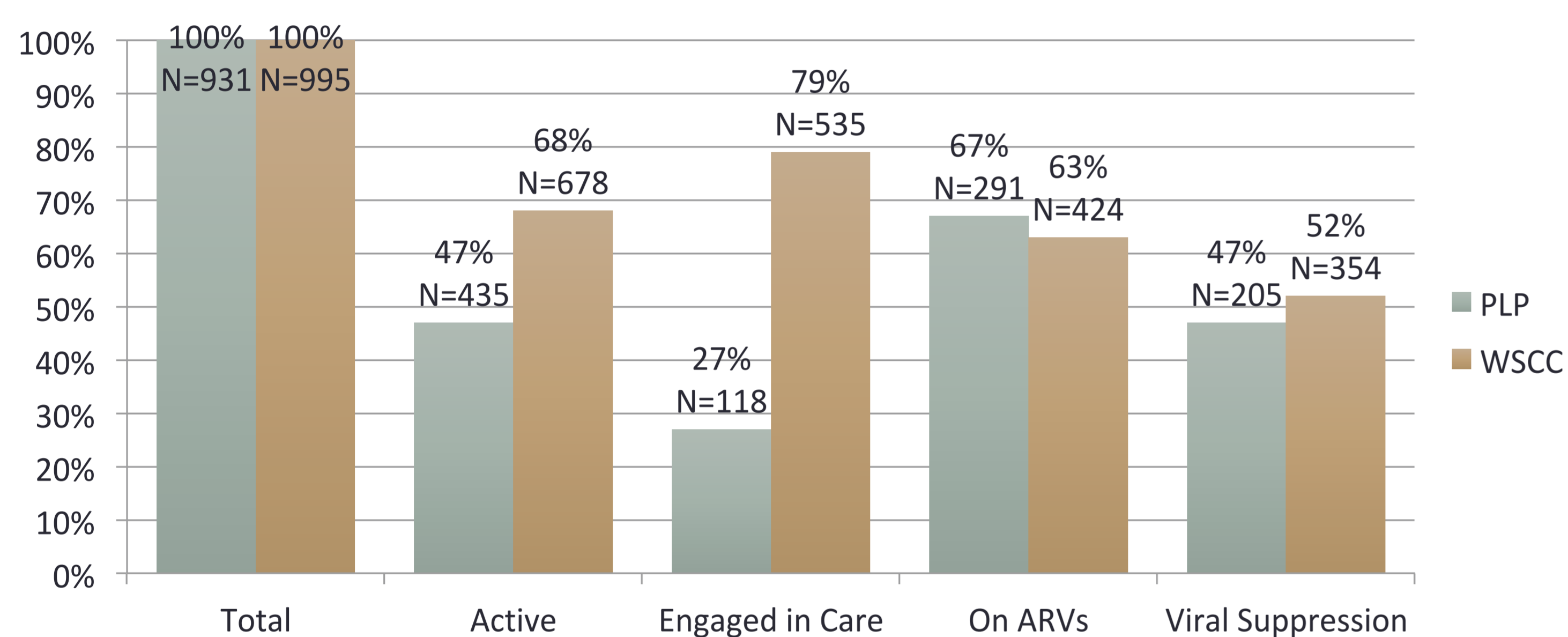


Figure 2: 2020 HIV Care Cascade (PLP and WSCC)

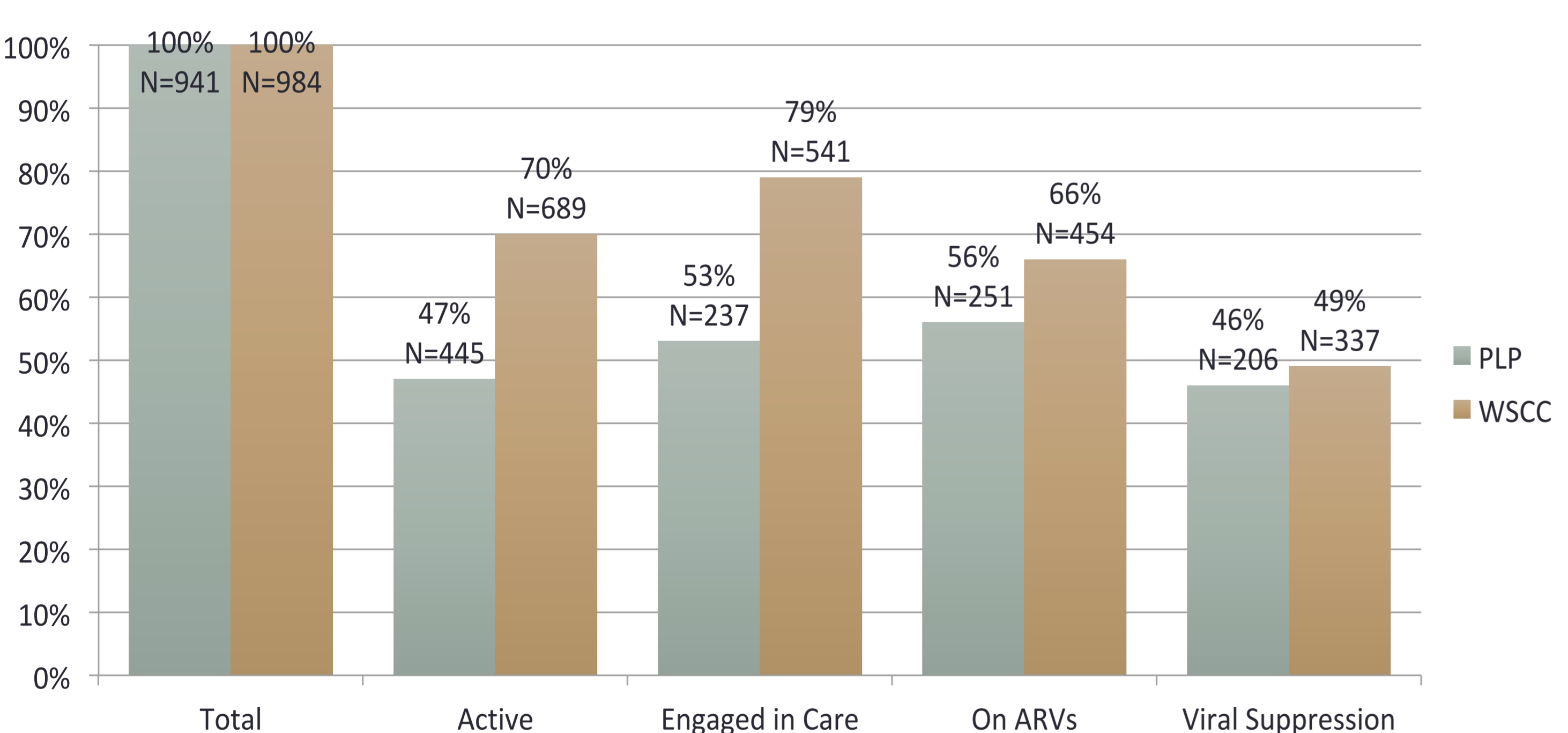
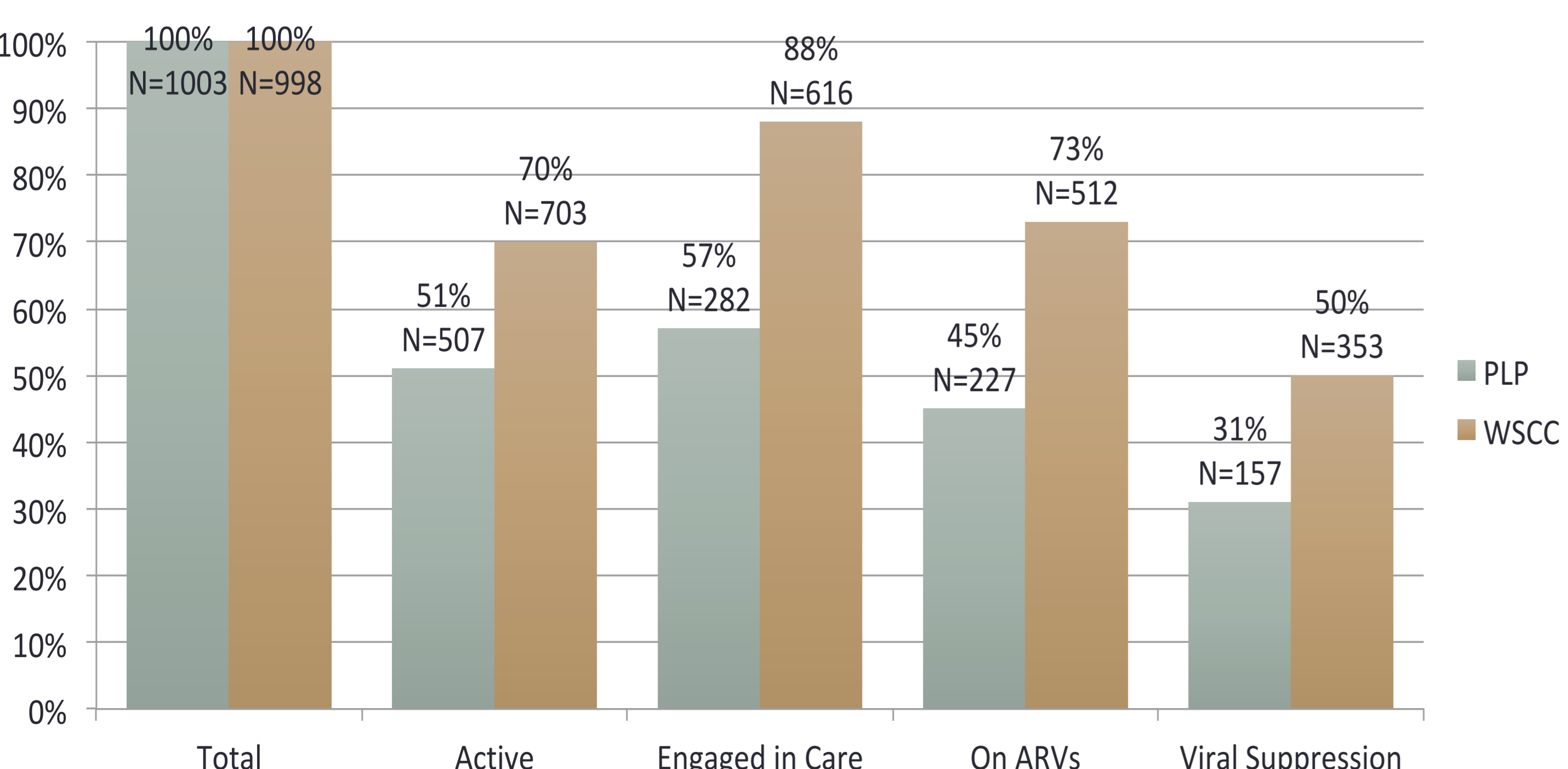


Figure 3: 2021 HIV Care Cascade (PLP and WSCC)



Findings

- The PLP, offering care in an acute setting, marked a decrease in those on ARVs from 67%-45% during 2019-2021, corresponding to a decrease in suppression rates from 47%-31% during the COVID-19 pandemic.
- Offering community-based primary care, the WSCC increased engagement in care from 79%-88% during 2019-2021, with an increase in patients on ARVs from 64%-73% over the same time period.
- There is a large number, averaging 50% in the PLP acute care setting and 30% in the WSCC community based setting, that are lost to follow-up.
- Engagement in care and viral suppression rates among the patient population is remarkably low in the acute care, hospital based care model.
- Despite a high rate of engagement in care within the community-based care model, only an average of 50% of the patient population has met viral suppression during the 2019-2021 time period.
- The WSCC community-based model of care model has seen a progressive advancement in cascade outcomes, being relatively undisrupted during the COVID-19 period, with a consistent 79% PWH engaged in care. However, the pandemic period adversely impacted cascade outcomes for the acute hospital-based PLP clinic, reflected by a drop from 67% to 56% of patients on ARVs, and an overall trend of moderate cascade decline, with the lowest during the peak period of the pandemic lockdown in May, 2020.

Conclusions and Lessons Learned

- Despite disruption in the access and provision of health care during the COVID-19 pandemic, the WSCC community-based model continued to maintain consistent clinical outcomes and ongoing patient support.
- Gaps in the care continuum offer insights to advocate for adaption of the community-based delivery model to target solutions to expand outreach, supporting the petition for more resources for access and engagement in care for a large cohort of PWH seeking care in Saskatoon.
- An evaluation of the HIV care models providing care in Saskatoon is needed to meet the growing needs and demands of the HIV population, including an increase in community-based services and outreach supports.