Appendix 5 (as supplied by authors): Treatment Considerations

NIHB Claimants

ICES databases do not capture NIHB or federally-funded healthcare services. Lack of NIHB prescription claims constitutes a significant limitation to capturing HCV treatment records among First Nations individuals in Ontario. However, the NIHB program is the payer of last resort after other provincial or third-party coverage is exhausted.[1] Therefore, if an individual is covered by another public or private health care plan, they are required to submit their claims to the other plans first.[1] For information about individuals who may have only had NIHB coverage during the study period and thus did not have their prescription claims recorded in the administrative datasets, through the *Access to Information and Privacy Act,* we examined aggregate data regarding the number of NIHB claims and claimants for HCV medications from 1999 to 2016 (unpublished). From these data, we observed that even at the highest number of claimants per year (~59 in 2016), our findings would not be substantially impacted as a large gap would remain between the genotyped and treated stages. In addition, because the aggregate data captured individual claimants each year, we estimate that the number of individuals with their first treatment dispensation record would be considerably lower.

Changes in Treatments and Eligibility Criteria

Many of the eligibility restrictions for the public funding of direct acting antiviral treatments for HCV were lifted in 2017 in Ontario.[2] One of the most common eligibility criteria for treatment, significant liver fibrosis, was lifted in March 2017 in Ontario.[3] Despite the introduction of pangenotypic treatment regimens in 2018, crude analyses of prescribing trends demonstrated relative consistency after 2017. Using our treatment DIN definitions from Appendix 2 Table S2, we examined the annual number of unique individuals with record of first HCV treatment dispensation in Ontario (N=30,165), as well as among all individuals who identified as Status First Nations (N=810). The largest increases were observed at 2015 and 2017 with year to year changes thereafter being minimal. Substantial declines were

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observed in 2020, likely due to the effects of public health measures in response to the COVID-19 pandemic which limited the progress made in expanding access to HCV care and treatment. We used data up until 2018 to be consisted with the availability of PHO HCV testing data and examined post-treatment SVR and reinfection based on RNA testing trends.

Table S9. Crude annual number of unique individuals with their first HCV treatment dispensation record in ODB each year from earliest date available (1997) to 2020.

Year	All individuals at earliest HCV treatment dispensation	Status First Nations Individuals at earliest HCV treatment dispensation
1997	19	0
1998	66	0
1999	283	<=5
2000	238	<=5
2001	230	<=5
2002	188	<=5
2003	566	<=5
2004	834	<=5
2005	859	<=5
2006	780	11
2007	977	7
2008	877	<=5
2009	1011	8
2010	862	12
2011	831	8
2012	687	15
2013	768	8
2014	422	15
2015	2016	34
2016	2688	74
2017	4702	165
2018	4679	155
2019	3703	165
2020	1879	114

* Cell sizes <=5 cannot be reported or able to be recalculated to comply with ICES privacy rules.

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