



BC Centre for Disease Control

Provincial Health Services Authority

Increased hepatitis C screening and diagnosis after transfer of health care responsibility to public health system in British Columbia Correctional Centres

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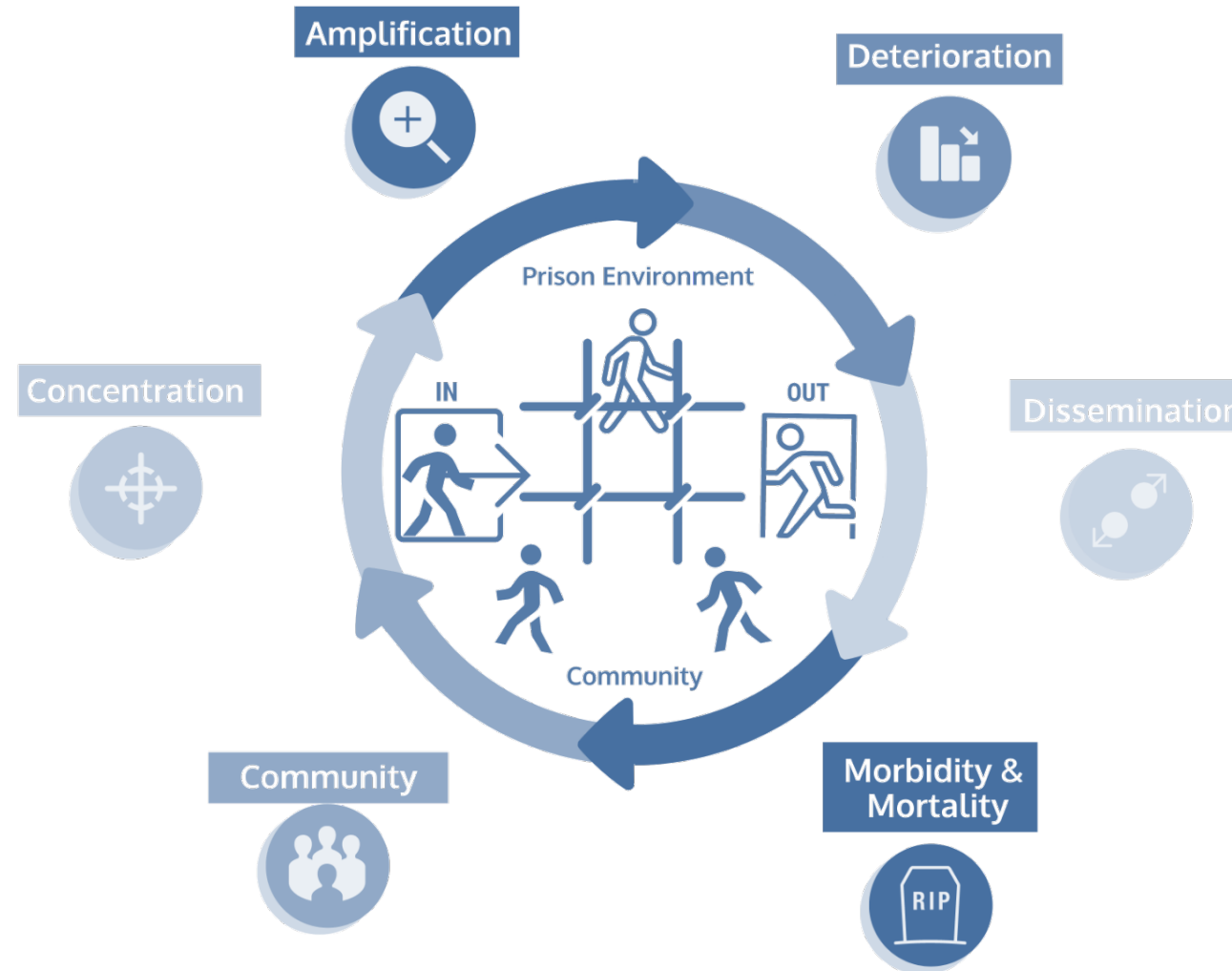
Disclosure of Potential Conflict of Interest

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Hepatitis C virus (HCV) among people in prison



References:

1. **Kamarulzaman A.**, et al. Prevention of transmission of HIV, hepatitis B virus, hepatitis C virus, and tuberculosis in prisoners. *Lancet* 2016
2. **Awofeso N.** Prisons as social determinants of hepatitis C virus and tuberculosis infections. *Public Health Rep.* 2010
3. **Fahmy N.**, et al. Access to Primary Care for Persons Recently Released From Prison. *Ann Fam Med.* 2018

HCV in Canadian prisons



The prevalence of HCV infection among people in prison in Canada is estimated to be from

3.5% to 39.8%¹

In 2018/2019, there was an average of 37,854 adults in prison per day in Canada², which equates to an about

12,000 people

living with **HCV** in prison here.

References:

1. **Bartlett S., et al.** Hepatitis C Virus Prevalence, Screening, and Treatment Among People Who Are Incarcerated in Canada: Leaving No One Behind in the Direct-Acting Antiviral Era. *Clinical Liver Disease* 2020.
2. **Stat Can.** Adult and youth correctional statistics in Canada, 2018/2019 <https://www150.statcan.gc.ca/n1/pub/85-002-x/2020001/article/00016-eng.htm>

BC Provincial Corrections context



- Canadian correctional system;
 - Sentence of ≥ 2 years = Federal Institution
 - Sentence < 2 years/remand (unsentenced) = Provincial/ Territorial (P/T) Correctional Centre



- Responsibility for health services in corrections historically with Ministry of Public Safety & Solicitor General or Ministry of Justice



- In line with Nelson Mandela Rules¹, responsibility for health care in all 10 provincial correctional centres in BC was transferred from BC Corrections to the BC Ministry of Health (Provincial Health Services Authority) in Oct 2017²

1. United Nations Office on Drugs and Crime 'The United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules)' 2015

2. BCMHSUS, Correctional Health Services <http://www.bcmhsus.ca/our-services/health-services-for-people-in-custody/correctional-health-services>

HCV testing in prisons



- HCV treatment is cost effective strategy to improve health outcomes among people who are incarcerated¹



- In prisons where HCV prevalence has been reduced to $\leq 1\%$ ('near elimination'), **at least 90%**^{2,3,4} of prison entrants received HCV testing



- Not much data available on overall proportion of prison entrants receiving HCV testing in Canada or globally

References:

1. Dalgic O.O., et al. Improved Health Outcomes from Hepatitis C Treatment Scale-Up in Spain's Prisons: A Cost-Effectiveness Study. *Sci Rep* 2019; 9(16849)
2. Mazur W. Management of Hepatitis C in Delaware Prisons: Approaching Microenvironmental Eradication. *Delaware Journal of Public Health*. 2020;4
3. Bartlett S., et al. Demonstration of Near-Elimination of Hepatitis C Virus Among a Prison Population: The Lotus Glen Correctional Centre Hepatitis C Treatment Project. *Clinical Infectious Diseases* 2018.
4. Crespo J., et al. Is HCV elimination possible in prison? *Revista Espanola De Sanidad Penitenciaria* 2017.



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1. What proportion of people entering BC Provincial Correctional Centres receive an HCV test each year?
2. Did any changes in HCV testing patterns in BC Provincial Corrections occur after the transfer of health services or during the COVID-19 pandemic?

Data source & method



- BC Centre for Disease Control (BCCDC) Public Health Laboratory (BCCDCPHL) does >95% of all HCV testing in BC, and this data is directly integrated in to the BCCDC STBBI DataMart of the Public Health Reporting Data Warehouse (PHRDW)



- Data from STBBI DataMart were used to determine number of
 - anti-HCV tests
 - HCV RNA tests
 - HCV genotype teststhat were ordered from provincial correctional centres in BC over a 10 year period from April 1st 2011 to March 31st 2021



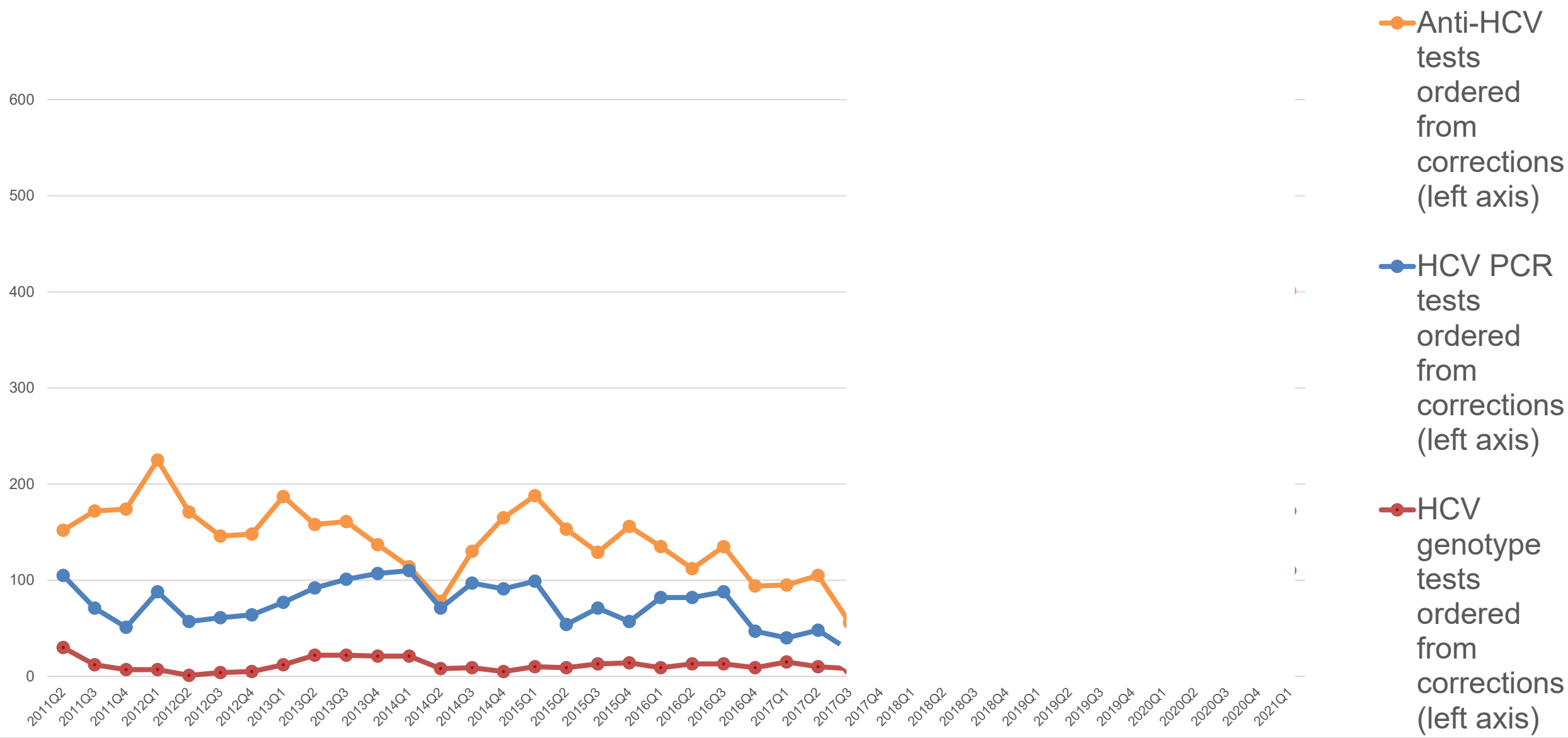
- Number of new HCV diagnoses ('first time positive') assessed by counting number of HCV tests that returned positive result, where this was first time client ever had positive HCV test result at BCCDC PHL.
 - Number of tests ordered were grouped in to quarterly periods (Q1, Q2, Q3, Q4)
 - Intake numbers for each calendar year supplied by BC Corrections



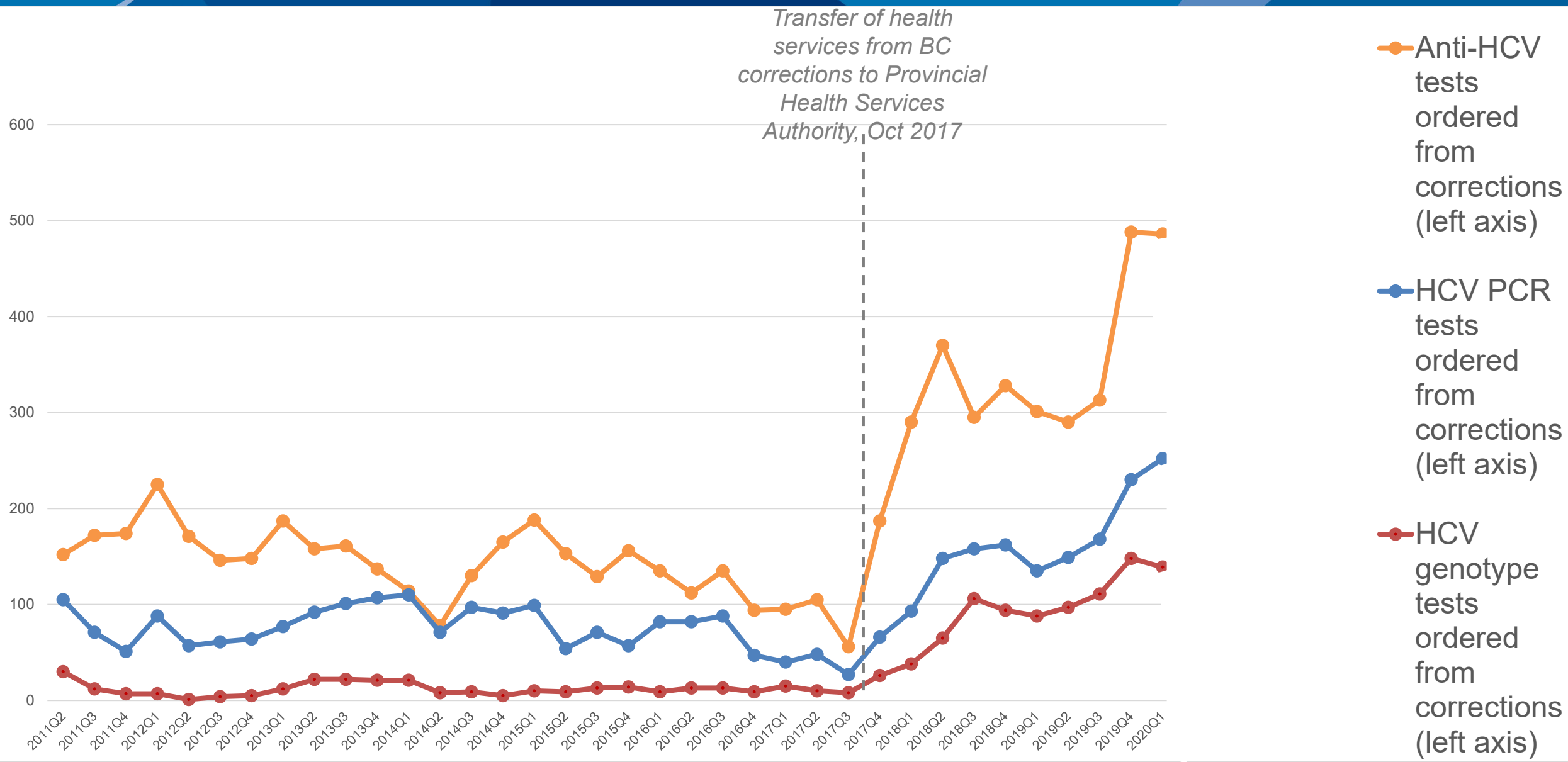
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Results

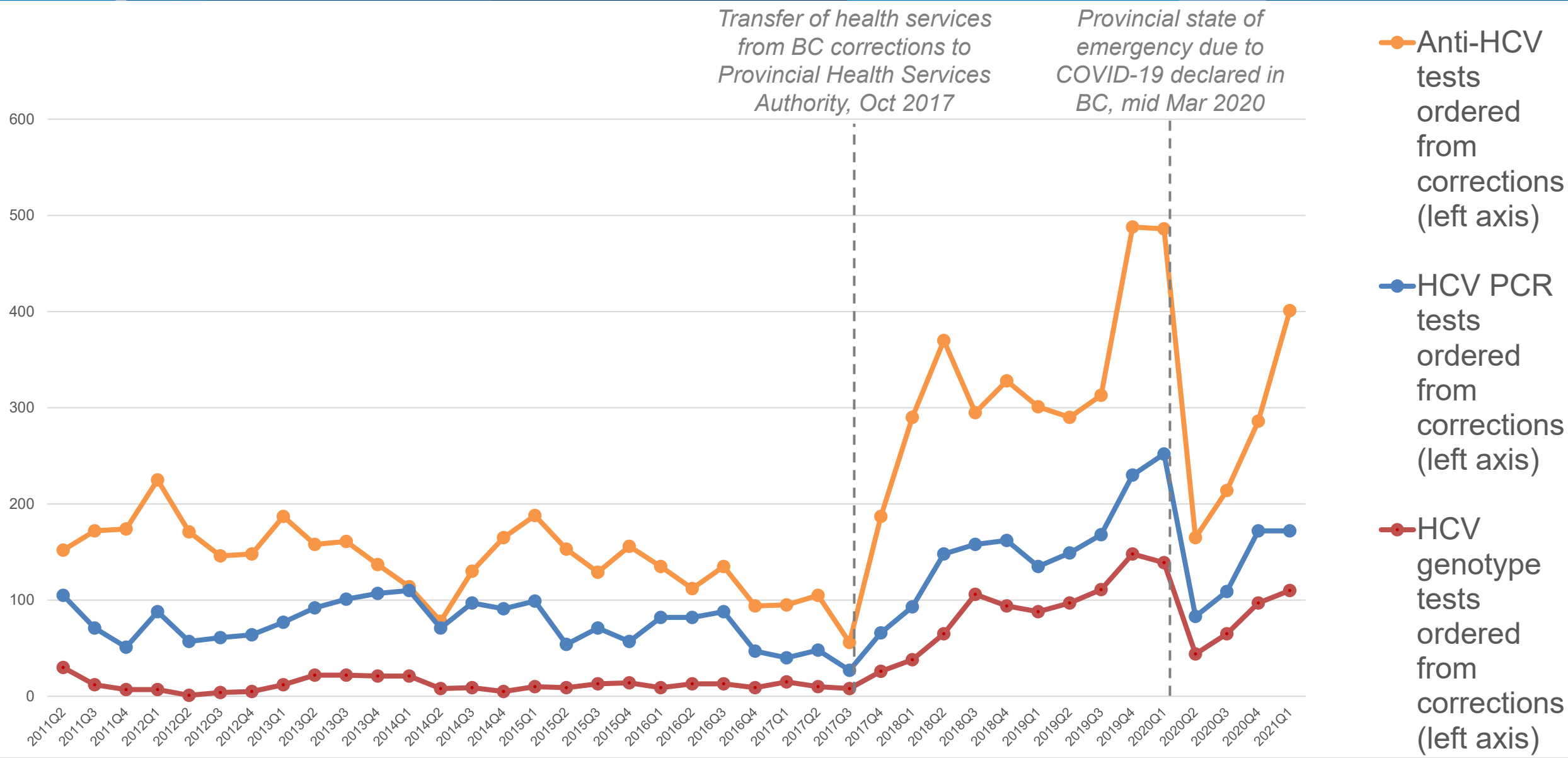
HCV tests ordered from BC Provincial Correctional Centres



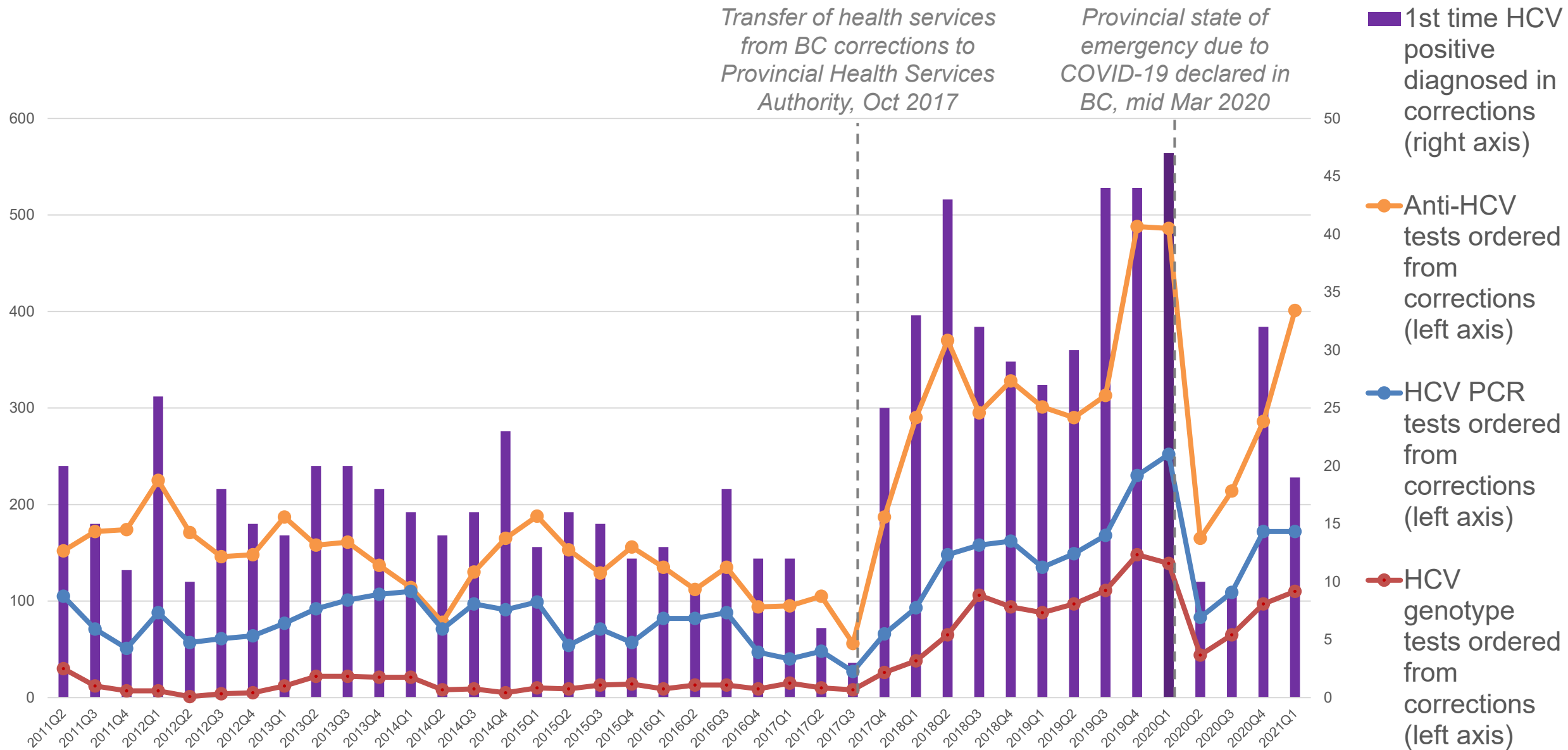
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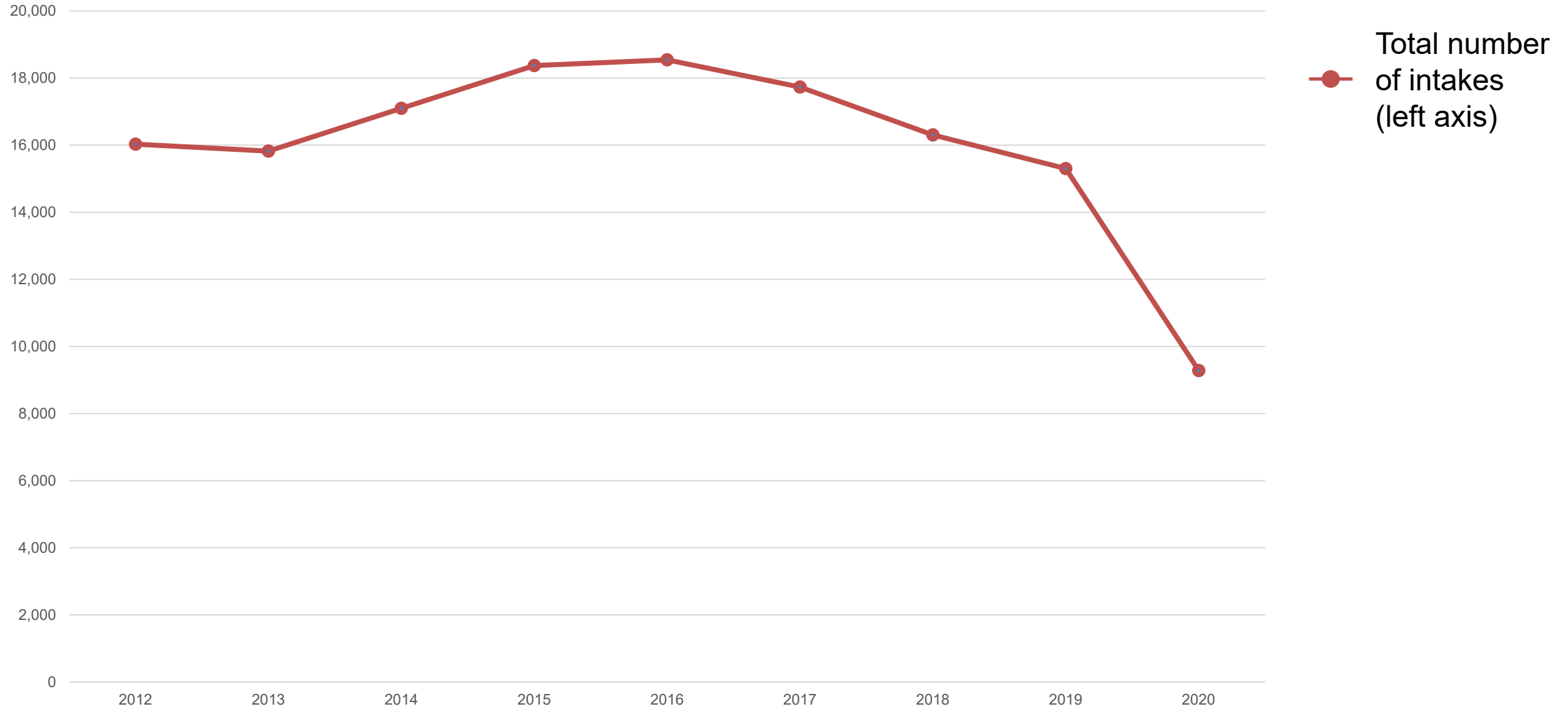
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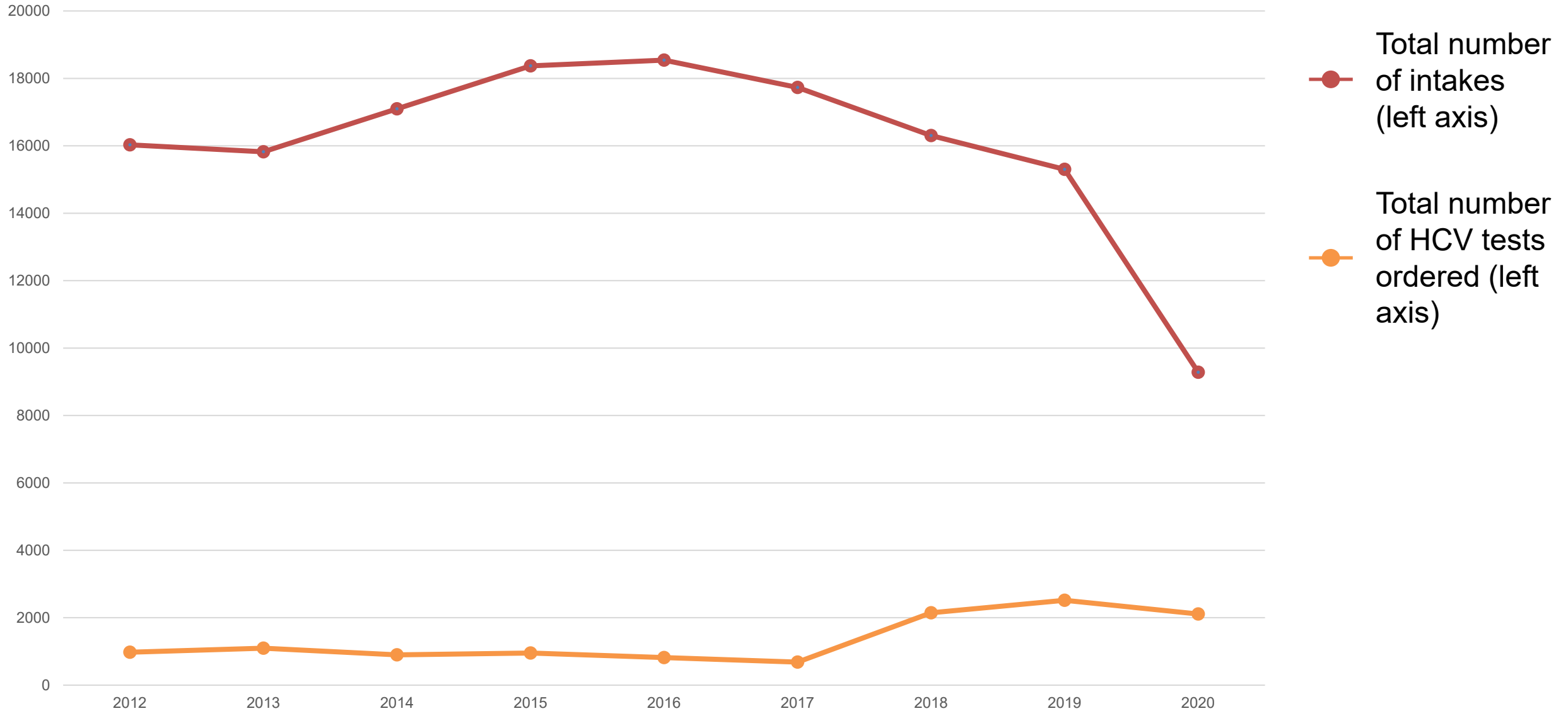
1st time positive HCV diagnoses in Corrections



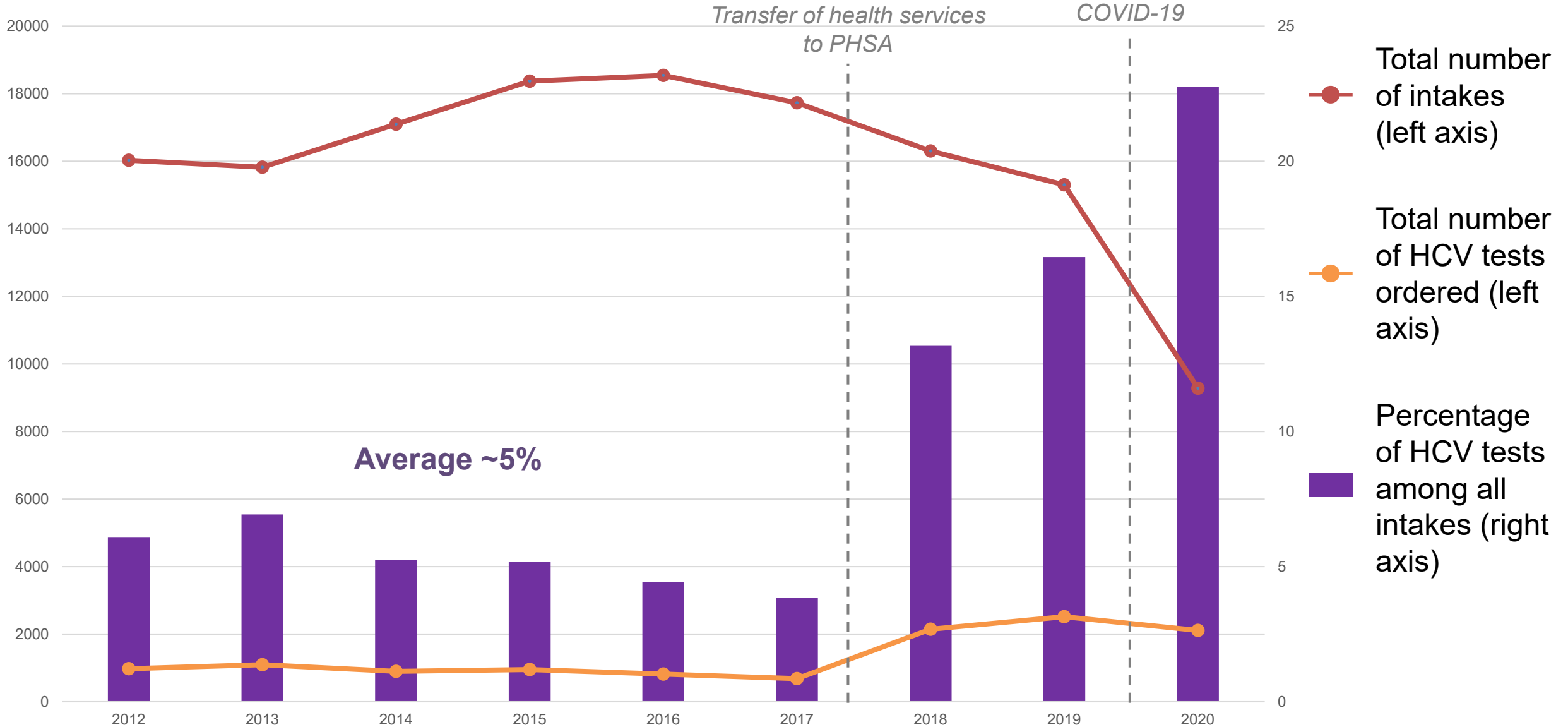
HCV tests proportional to intakes



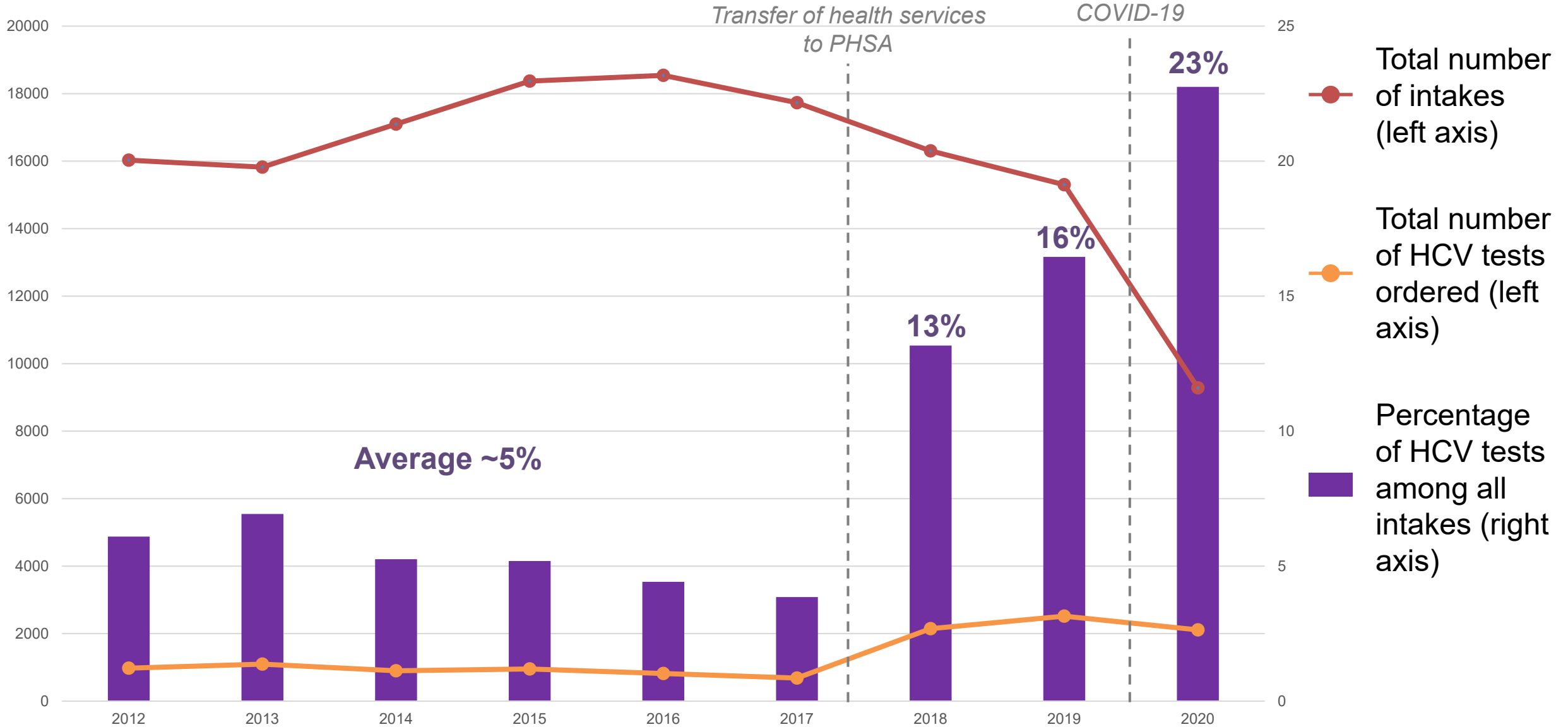
Tests proportional to intakes



Tests proportional to intakes



Tests proportional to intakes





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Key findings & Implications

Key findings



- Transfer of health services from BC Corrections to the PHSA preceded large increase in volume of HCV tests ordered from BC provincial correctional centres



- Despite COVID-19, 101 people received a new HCV diagnosis from a test ordered in BC provincial corrections in 2020; a 77% increase compared to 2017

Implications



- Transferring responsibility for health services in correctional settings may lead to improvements in HCV outcomes such as testing uptake & diagnosis

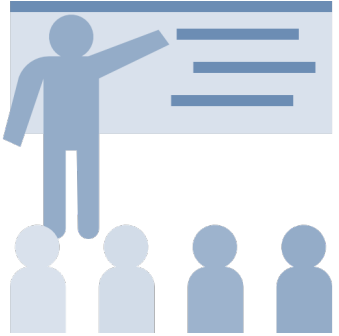


- Decarceration strategies employed in response to the COVID-19 pandemic resulted in lower number of overall HCV tests ordered from corrections in 2020, but the overall proportion of people tested increased.

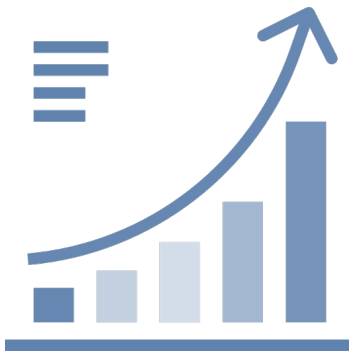


- HCV testing coverage in BC Provincial Correctional Centres may still not be high enough to facilitate an HCV elimination strategy

Next steps



- BCCDC & BCMHSUS launched an STBBI testing & linkage to care policy/guideline co-design project in April 2020 (**See poster #200**)



- Additional data is required to be able to create HCV prevalence estimates and an HCV care cascade for people provincially incarcerated in BC

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Provincial Health Services Authority



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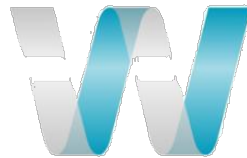


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Thank you for listening!

Questions? Comments?

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