

# Rapid Migration to Telemedicine in a Boston Community Health Center is Associated with Maintenance of Effective Engagement in HIV Care

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## INTRODUCTION

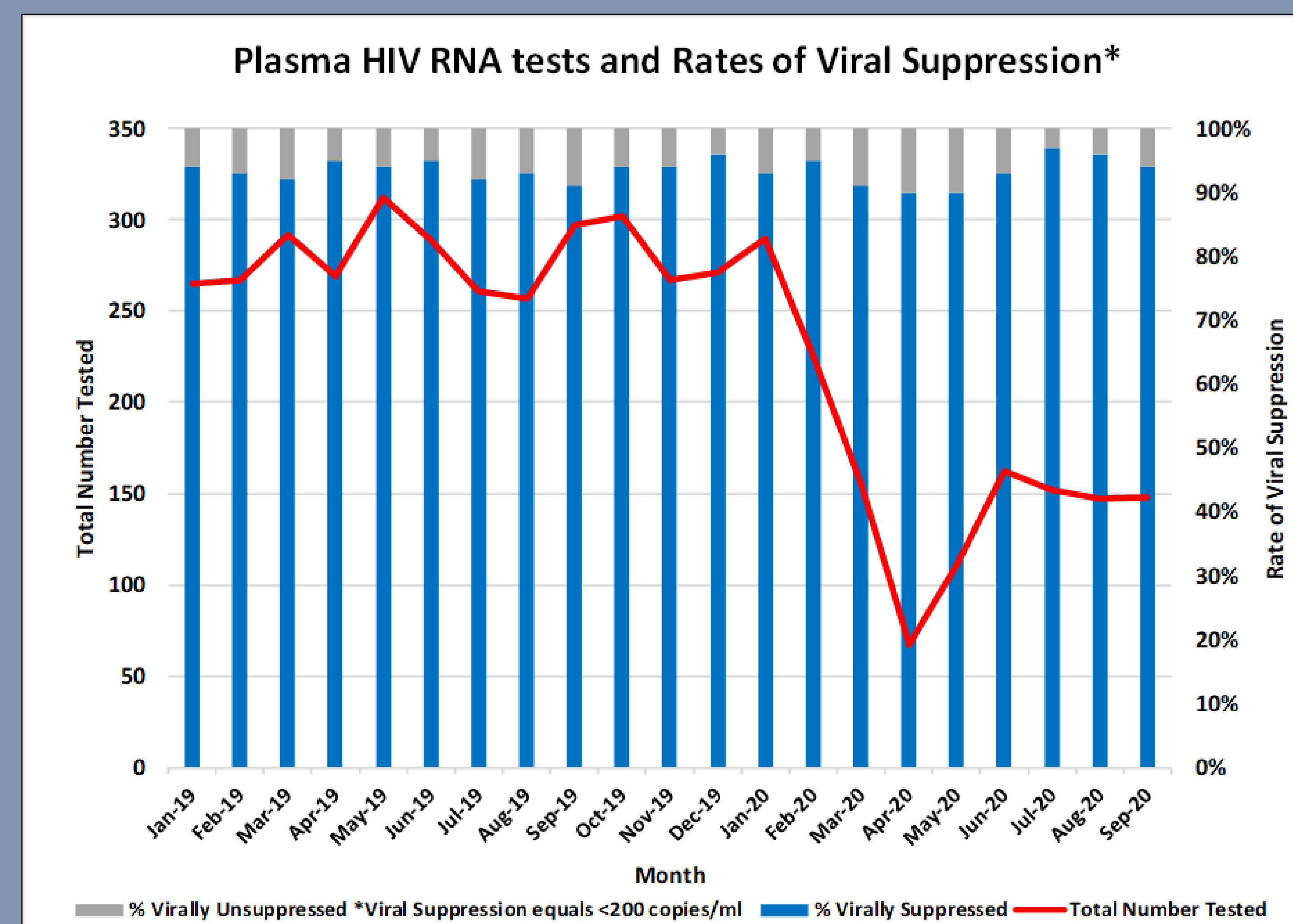
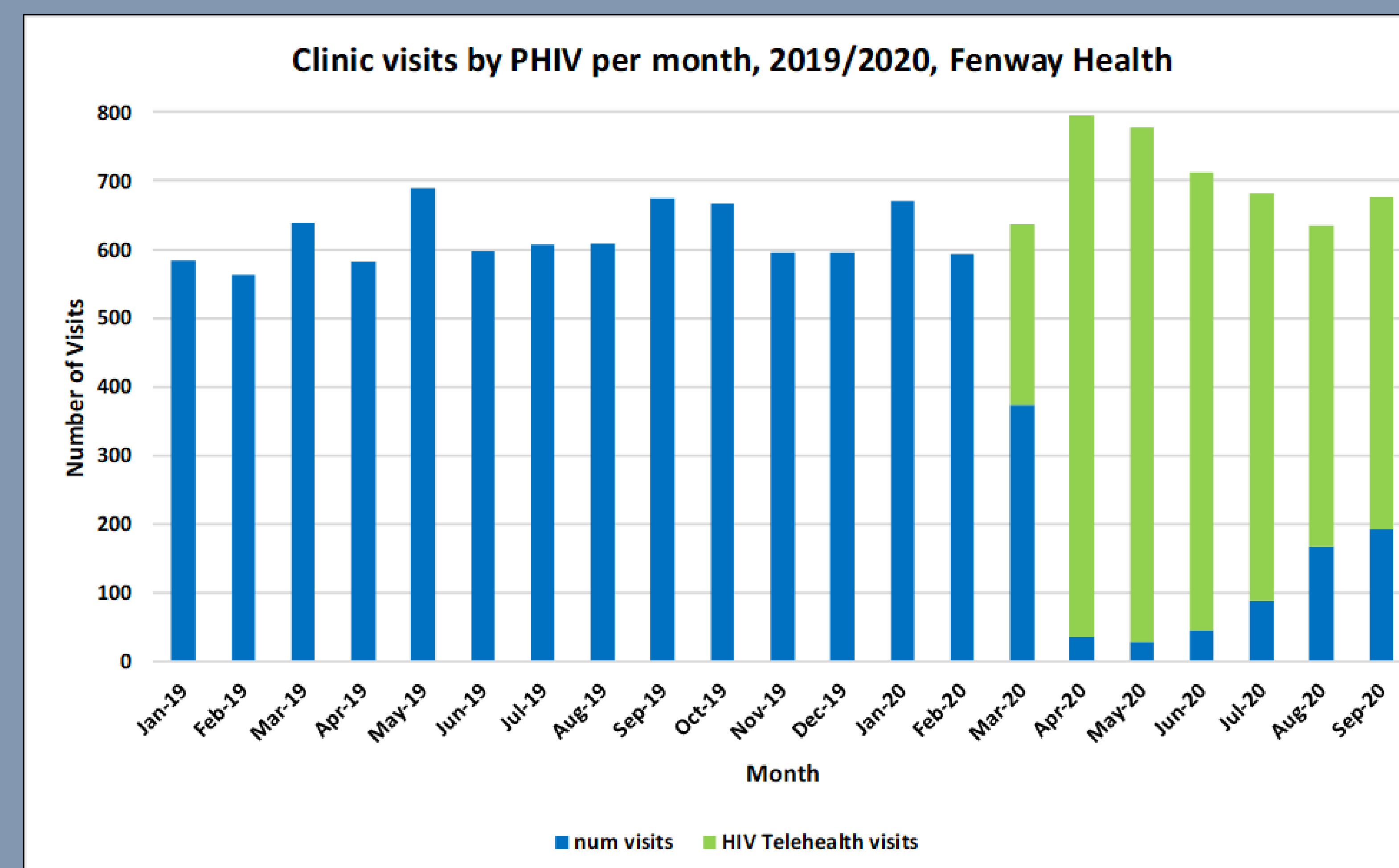
- The COVID-19 pandemic has disrupted many health care activities globally.
- Optimal HIV care requires routine access to knowledgeable providers and laboratory monitoring.
- The focus of the current presentation is the impact of the COVID-19 pandemic on HIV primary care in a Boston community health center (CHC) that has specialized HIV, sexual and gender minority care for decades.

## METHODS

- The CHC has used the Centricity Practice Solutions™ electronic medical record (EMR) system since 1997.
- The current analyses used data abstracted from the EMR, testing for significant differences in HIV care utilization using the Student t-test to compare means, and chi-square tests to assess proportions.

## RESULTS

- There were 2,016 HIV+ patients among 25,606 patients (7.9%) engaged in primary care in 2019, who had between 563 and 689 in-person visits per month.
- Monthly visits for HIV care increased ( $p<0.0001$ ) in the first two months of 2020 (mean=633, sd=54.4) compared to 2019 (mean=617, sd=40.6), but dropped dramatically in March through May 2020 respectively (mean=146, sd=196.3;  $p<0.0001$ ).
- As the state began to reopen (June, 2020), monthly visits for HIV care steadily increased from 45 to 192 monthly visits from June through September (mean=124, sd=68.2) – still well below the mean visits in the same months in 2019 (mean=622, sd=35.6) ( $p<0.0001$ ).
- In March 2020, there were 264 telemedicine visits by HIV+ patients, increasing to a high of 758 and 750 telemedicine visits in April and May 2020 (mean=754, sd=5.7;  $p<0.0001$ ), respectively. As the state began to reopen, telemedicine visits for HIV+ patients declined from 668 to 485 between June through September (mean=553, sd=94.5;  $p<0.0001$ ).



- When telemedicine and in-person visits were combined, mean number of visits per month by HIV+ patients were higher in March-September 2020 (mean=702, sd=87.0) compared to the same seven-month period in 2019 (mean=628, sd=35.6;  $p<0.0001$ ).
- The mean number of plasma HIV RNA viral load (VL) tests performed each month between March and September 2020 was 134 (range 67-162, sd=34.0)—lower ( $p<0.0001$ ) than the same seven-month period in 2019 (mean=282, range 257-312, sd=20.4).
- Among those tested, monthly rates of virologic suppression (<200 copies/ml) ranged from 91-96% in 2019 (monthly average=93.3%).
- 80% had an undetectable VL (<20 copies/ml) as their last measurement in 2019.
- In March through September 2020, the monthly rates of VL suppression ranged from 90-97% (monthly average=93.8%;  $p=0.849$  compared to 2019 average) and 66-80% had undetectable VL.

## CONCLUSION

The COVID-19 pandemic led to a significant decrease in in-person visits by HIV+ at a Boston CHC, but with a rapid use of telemedicine, patient engagement, as expressed by in person or on-line visits, does not appear to be adversely affected as evinced by continued high rates of VL suppression.