

Simplified test & treat protocols to eliminate HCV & HBV in Uzbekistan

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BACKGROUND

In July of 2017, in the Republic of Uzbekistan, the Cabinet of Ministers made a Decree to provide additional measures to prevent the spread of infectious diseases. This expansive decree specifically addresses the need to gradually increase the diagnosis of hepatitis B virus (HBV) and hepatitis C virus (HCV). In Dec 2019, a pilot elimination program using decentralized testing, simplified diagnostic algorithms and treatment of uncomplicated cases by general practitioners was initiated.

OBJECTIVE

An estimated 3.5 million people are infected with HBV or HCV in Uzbekistan¹. This study tested the feasibility of eliminating HBV & HCV if the testing and treatment protocols were simplified to support a national program.

METHODS

Nurses were trained to use rapid HCV antibody and HBsAg to screen patients at polyclinics. Rapid creatinine and HIV tests were used to test HBsAg+ patients before they were referred to GPs for treatment. Blood was collected from HCV+ cases for core antigen/PCR, creatinine and APRI. Cirrhotic patients were referred to a specialist while other patients were referred to GPs who were trained by specialists to treat patients. A centralized registry was used to collect patient data as they moved from screening to prescription refill.

RESULTS

More than 60,000 people were screened over six months at polyclinics. 69% of HBV+ were linked to care and 73% of patients received a prescription. 54% of HCV+ were linked to care and 74% of viremic patients received a prescription in spite of lower patient engagement with healthcare systems due to COVID-19. There were large geographic variations in HBV and HCV prevalence across Tashkent and nationally. 65% of HBV patients discontinued treatment following initiation; 48% of HCV patients discontinued treatment following initiation. Wide variances among GPs and specialists in percent of eligible patients initiating treatment were observed.

Figure 1. HBV and HCV Cascade of Care

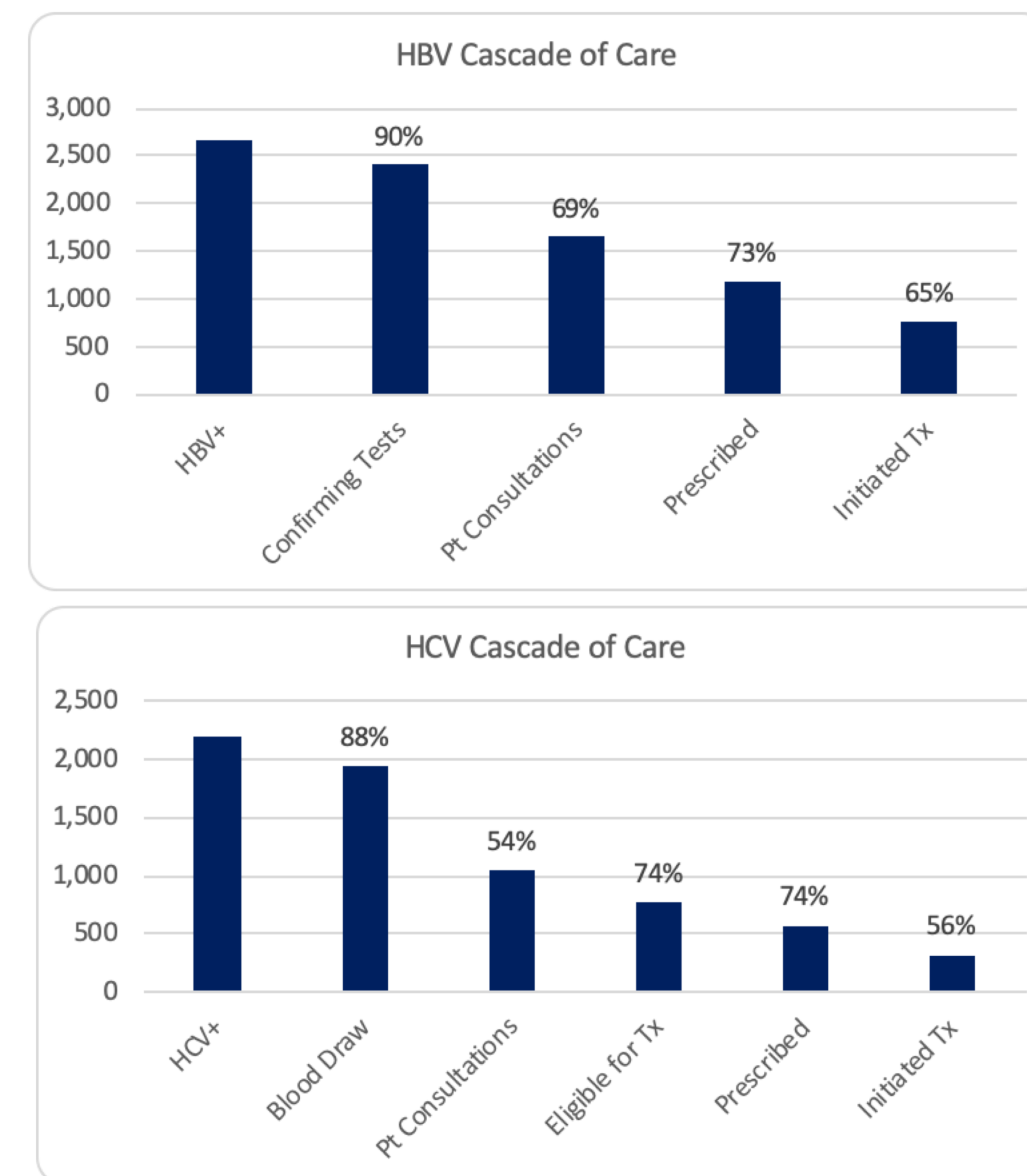


Figure 2. Hepatitis Prevalence by Region of Birth and Residence

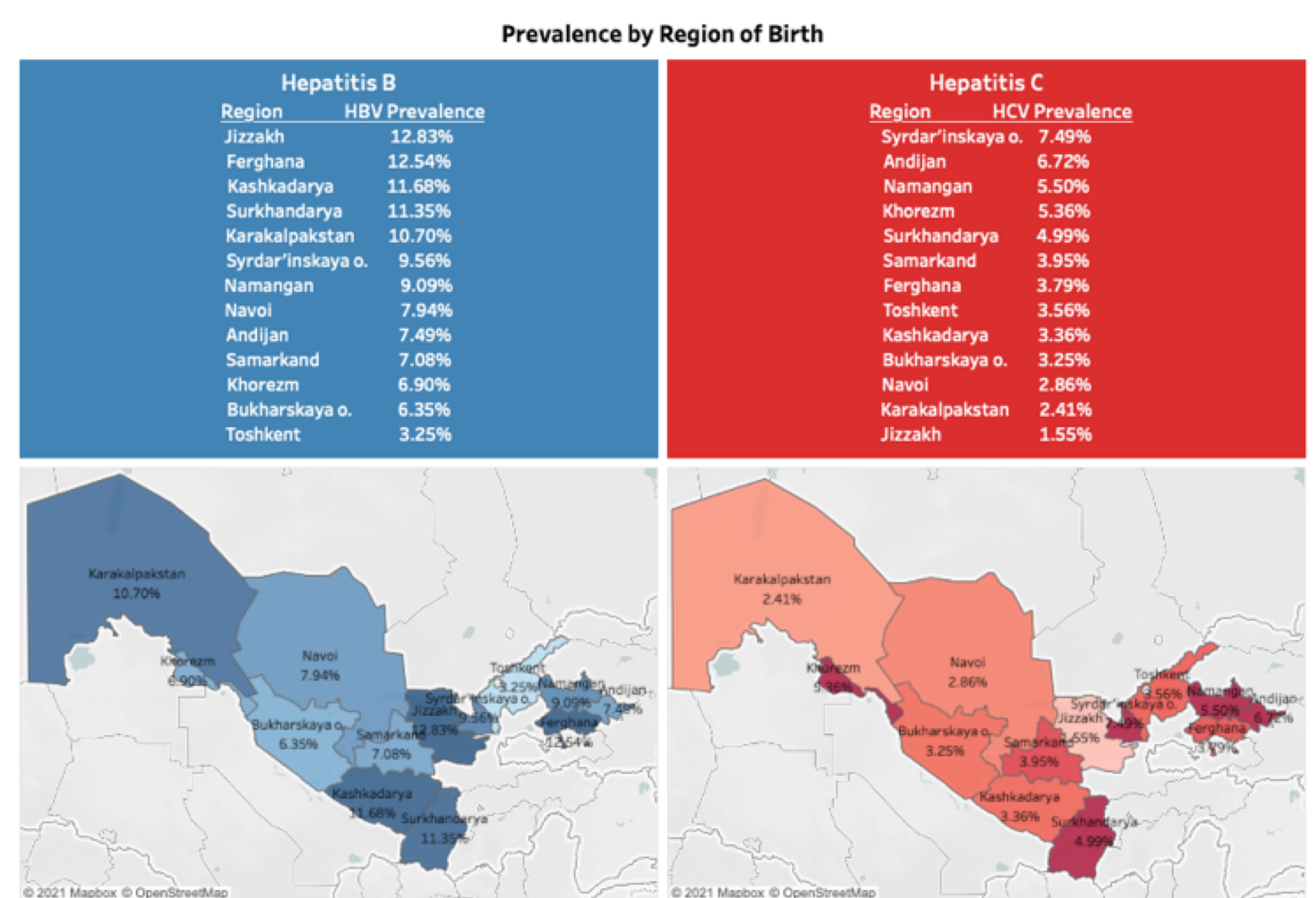
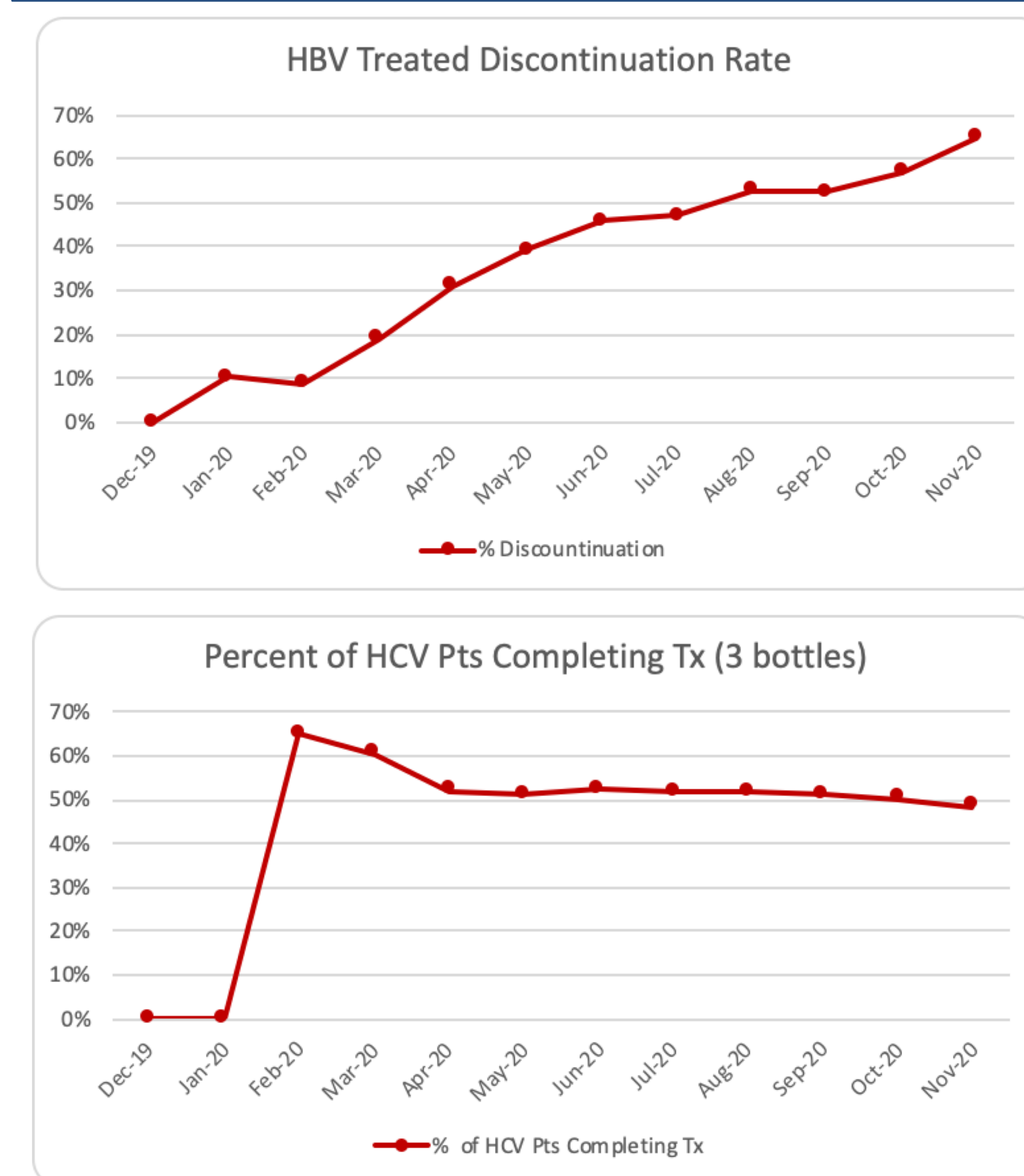


Figure 3. Treatment Discontinuation Rates



Hepatitis Prevalence by Region of Residence (in Tashkent)

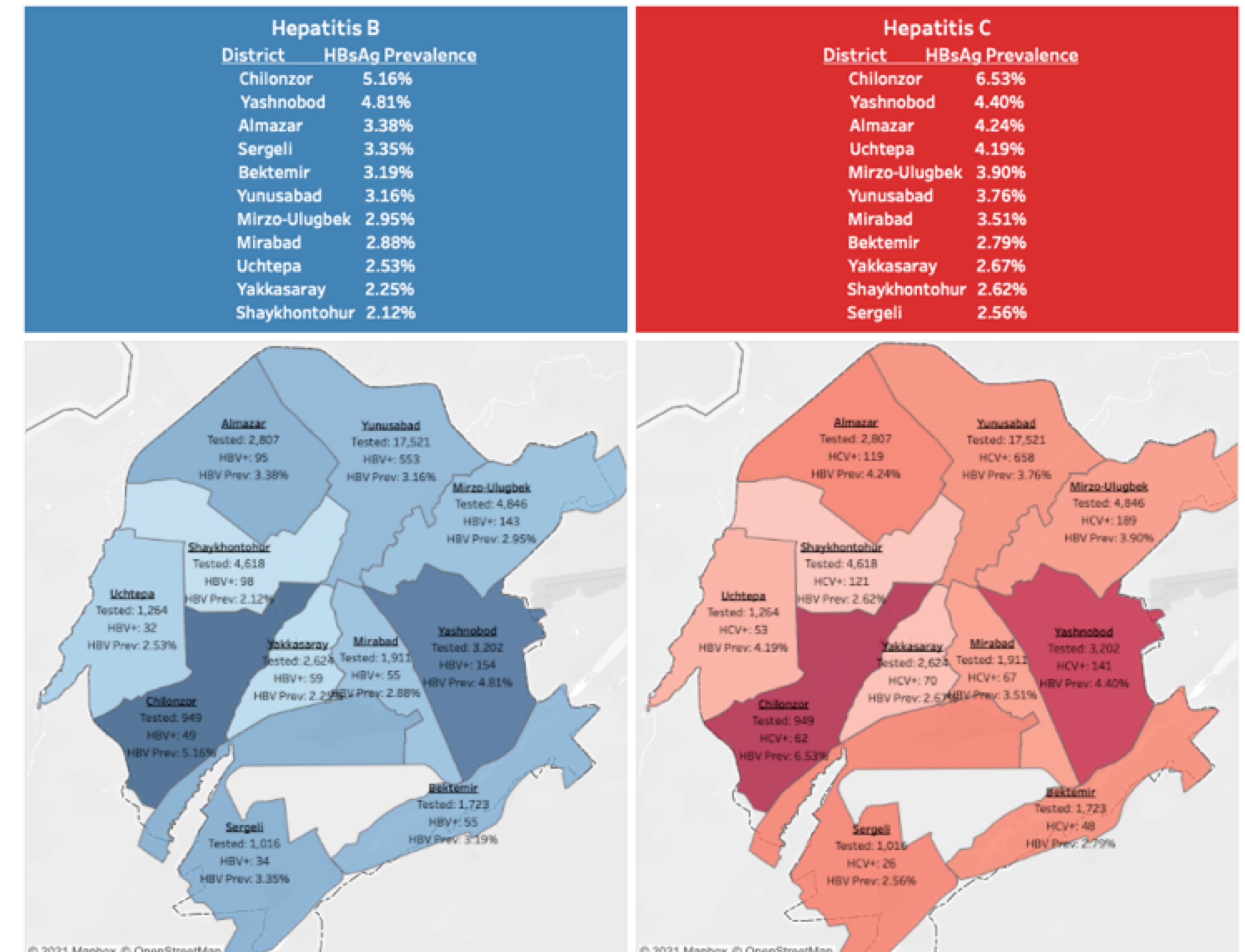
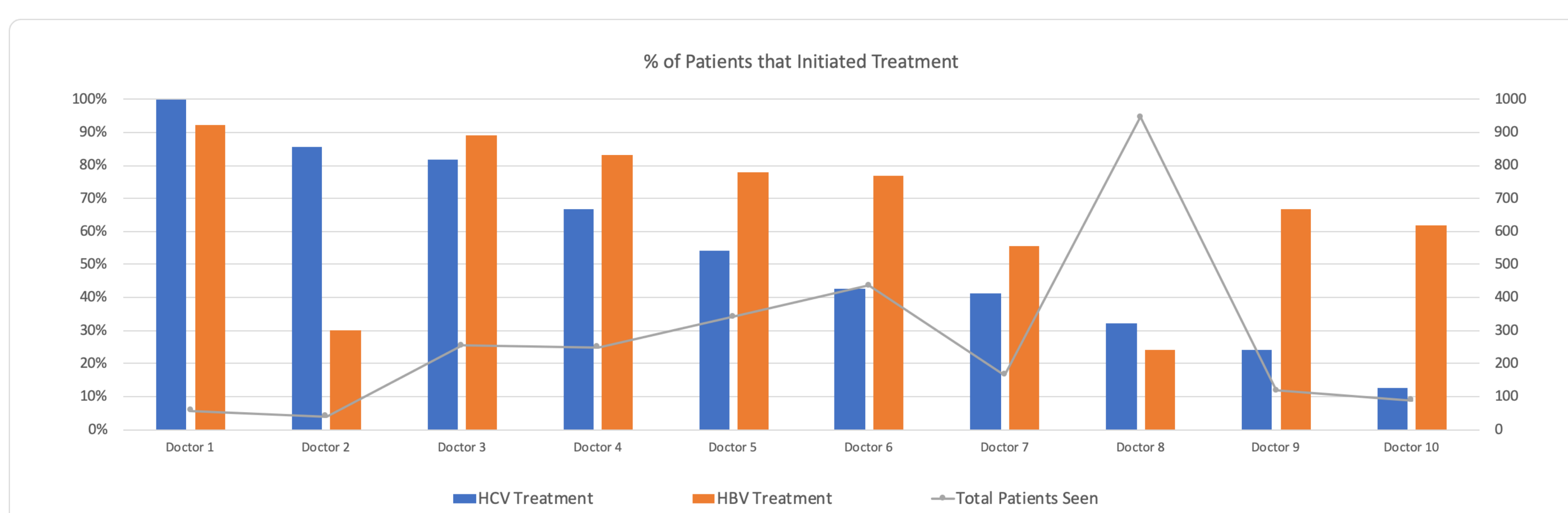


Figure 2. Percentage of Eligible Patients Initiating Treatment, by Doctor



CONCLUSIONS

A simplified test/treat protocol can be used to screen and treat large numbers of HCV+ and HBsAg+ patients using nurses and GPs who are accessible throughout the country. Patients with advanced liver disease still require specialist consultation. The study highlighted hotspots in the country that could be prioritized in a national program. Future programs would benefit from research to understand factors affecting treatment initiation rates among doctors and addition of patient navigators to reduce treatment discontinuation rates.

REFERENCES

1. The Center for Disease Analysis Foundation. Lafayette, CO: CDA Foundation, 2021. Available from <http://cdfound.org/polaris/> (Accessed [Jan 2021])

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