

The Impact of the COVID-19 Pandemic on Care Delivery at a Student-Run Free Clinic

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Background

- The COVID-19 pandemic disrupted delivery of healthcare across socioeconomic strata and clinic types by preventing essential services from being delivered to those in need¹.
- Clinics adapted by integrating telehealth appointments and services to ensure continuity of care².
- This study assessed the impact of the pandemic on some of the more common adult primary care services provided at the Interprofessional Community Clinic (ICC), a student-led free clinic in Lake County, IL.

Methods

- A retrospective chart review was conducted for patients seen by internal medicine, family medicine, and telemedicine between 2018 and 2023 (n=282).
- Pregnant patients and pediatric patients were excluded.
- “Pre-COVID” (n = 221): 2018-2019
- “COVID impacted” (n=120): 2020-2022
- “COVID recovery” (n=70): 2023
- Outcomes were laboratory services received (HbA1C lab draws), vital signs recorded (blood pressure), and vaccines administered (influenza and pneumococcal), as key indicators of standard primary care.
- Changes in rates may indicate pandemic disruption.

Results

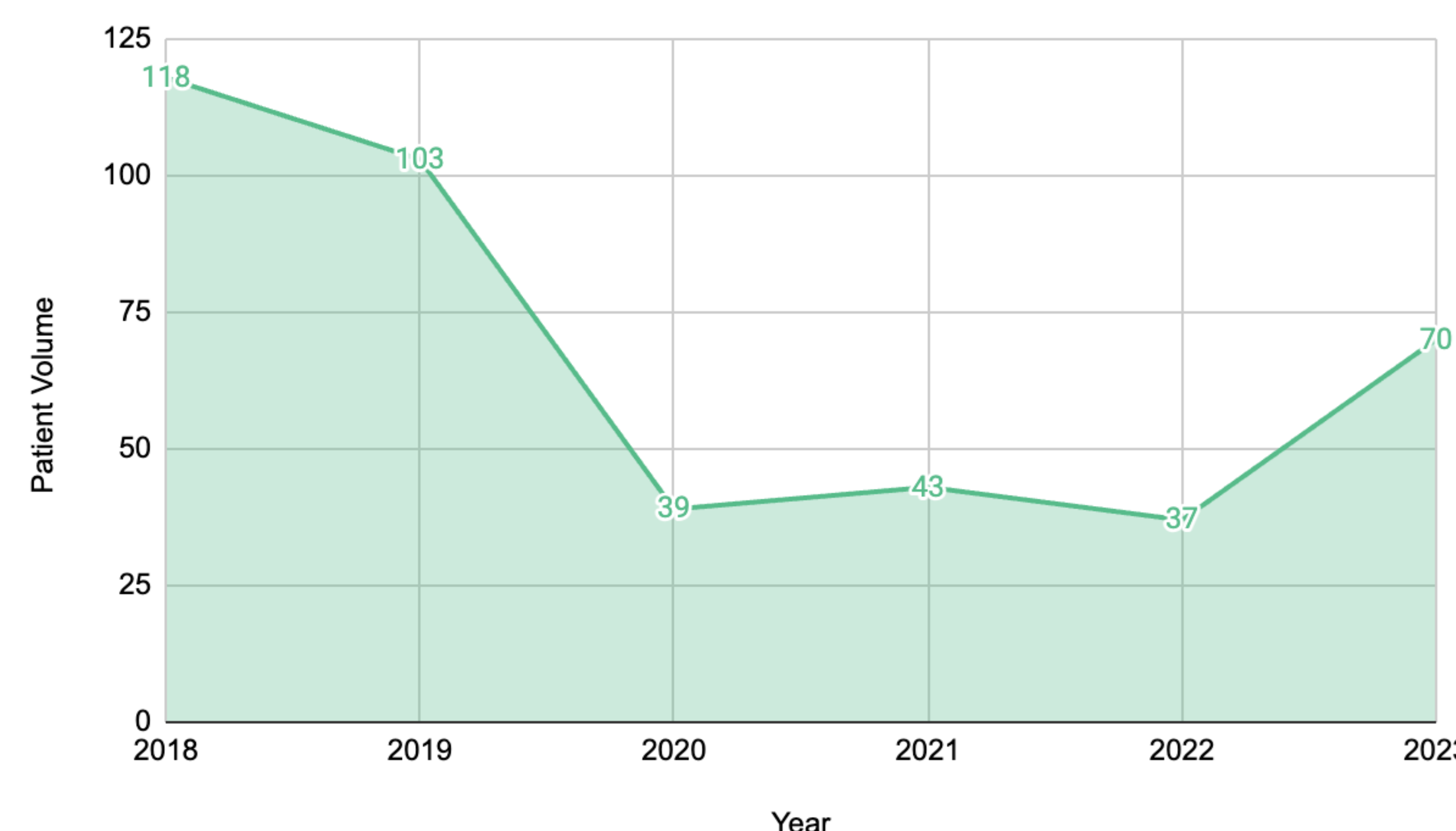


Fig 1. Tracking patient volume at the ICC before, during, and after the COVID-19 pandemic

	HbA1C	BP	Influenza	Pneumococcal
Variation between groups	0.0079	0.034	0.0045	0.0012
Variation within groups	0.037	0.027	0.12	0.0048
P-value	0.75	0.29	0.94	0.72

Fig 3. Two-way ANOVA of clinical metrics pre and post-COVID-19 pandemic

- There was a precipitous drop in patient volume during the COVID-19 pandemic (Fig. 1), that coincided with a decline in delivery of key services during the “COVID-impacted” phase (Fig. 2).
- There were no significant differences (Fig. 3) in any outcome measures before and after the COVID-19 pandemic.
- HbA1C and BP measurement rates recovered to the pre-pandemic level after resumption of in-person services.
- Both influenza and pneumococcal vaccine uptake did not recover to pre-pandemic levels.
- The relatively small sample size may account for the lack of statistical significance.

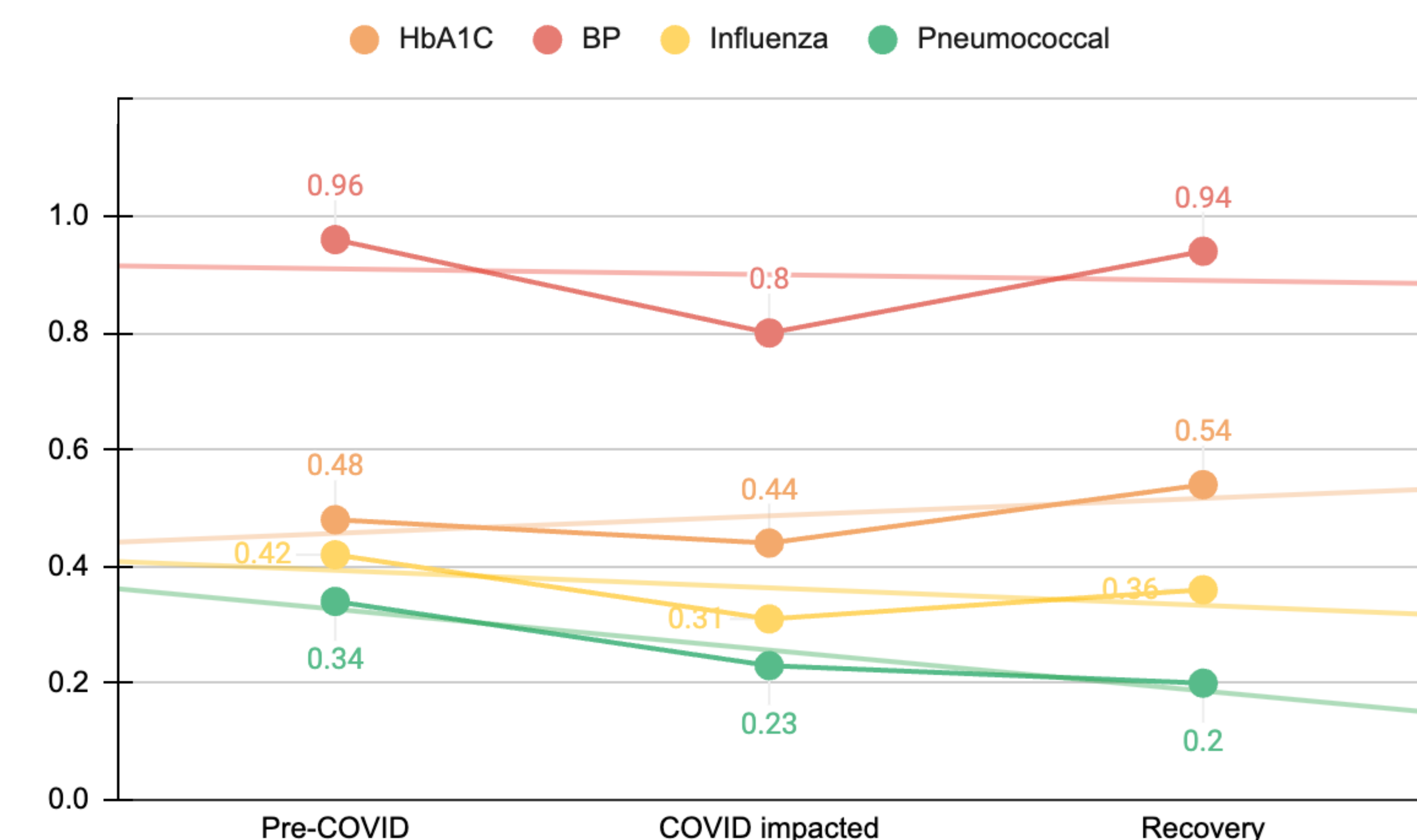


Fig 2. Rates of HbA1c measurements, blood pressure measurements, influenza vaccine administration, and pneumococcal vaccine administration

Discussion

- The pattern of findings suggests that patients did not have significant trouble accessing lab services, based on the rate of HbA1C measurement.
- Changes in BP readings, although not statistically significant, may be attributed, in part, to patients initially lacking in-home sphygmomanometers, or issues with documentation. Clinics that rely primarily on telehealth may consider providing assistance in purchasing sphygmomanometers.
- Both pneumococcal and influenza vaccine administration rates may have been impacted by the inability to carry out the ICC annual vaccination drive and staff reduction³.
 - Not every patient is eligible for pneumococcal vaccine. Changes may reflect a demographic shift.
- The present findings illustrate the strain put on health clinics during the pandemic, as well as the adaptability and recovery of the ICC.

Citations

