Since March 2020, the COVID-19 pandemic has been a major shock to the continued provision of essential health services across the globe. One of the World Health Organization’s key recommendations for maintaining basic health services is to strengthen the monitoring, analysis, and reporting of health service utilization throughout the outbreak. At Data for Impact (D4I), we developed methods to better understand the magnitude, geographical distribution, and evolution of COVID-19’s effects on health service utilization. In this newsletter, we present D4I work from three countries: the Democratic Republic of the Congo (DRC), Uganda, and Bangladesh.

In all three countries, we used data available through routine health information systems to develop time trends models that replicate the trajectories of health service utilization before the onset of COVID-19 (January 2017 to February 2020). We then used these models to estimate what levels of service utilization would have been if COVID-19 had not occurred, starting in March 2020 and looking at the first full year of the pandemic. We obtained the estimated “COVID-19 effects” by taking the difference between the observed and predicted values of service usage.

**Estimating National and Area-Specific COVID-19 Effects on Health Service Use in the DRC**

This study examined the effects of COVID-19 on the utilization of basic health services in the DRC at the national level and for three areas: Kinshasa, other urban areas, and rural areas. We found that COVID-19 effects varied greatly by service, type of area, and timing. In Kinshasa, all services were affected immediately and more severely. Other urban areas experienced negative effects that tended to be delayed. In contrast, rural areas were much less affected by COVID-19.
Health Service Utilization in Uganda

In Uganda, we examined the effects of COVID-19 on utilization of basic health services at the national level and for the capital city, Kampala. COVID-19 effects varied greatly by type of service. Effects were felt at the national level but had a greater magnitude in Kampala. The most severe effects were on outpatient services and child illness visits. Vaccination-related services experienced initial negative effects but recovered faster than other services.

Estimating the Effects of COVID-19 on Immunization Services Use in Bangladesh

This Bangladesh study revealed that COVID-19 severely affected vaccinations (pentavalent, MR, and BCG) during the first months of the pandemic. However, vaccination rates quickly recovered and exceeded predicted levels of utilization, likely compensating for the initial effects.

More from D4I

- Case Management Information Systems Assessment Toolkit
- FUTURES Project Theory of Change
- A Guide for Conducting Alternative Care Data Review Meetings in Uganda