OVERVIEW: COVID-19 has had significant effects across all functions of the healthcare system in sub-Saharan Africa. Limited resources in health facilities, overcrowded hospitals, shortages of health care providers (HCPs), lack of guidelines on the continuation of non-COVID-19 services, and discouragement among HCPs due to lack of materials have created difficulties in accessing and utilizing essential healthcare services. The ARISE Network undertook a multi-country study in Burkina Faso, Ethiopia, and Nigeria to better understand these impacts and potential mitigation strategies.

HEALTH SERVICE INTERRUPTIONS
Over 50% of HCPs reported partial or complete interruptions in immunization, vitamin A supplementation, nutrition preventive services, malnutrition management, antenatal care (ANC), iron and folic supplementation, family planning, HIV treatment services, and surgeries. Interruptions were higher in Nigeria than in Burkina Faso or Ethiopia.

CHILD HEALTH CARE ACCESS
Community members in rural sites in Burkina Faso and Ethiopia faced greater difficulty accessing child health care than in urban areas: 34% of respondents in Nouna faced difficulty accessing malnutrition management compared to 1% in Ouagadougou.

MATERNAL HEALTH CARE ACCESS
23%, 22%, and 20% of all community respondents faced difficulty accessing ANC, iron and folic acid, and family planning, respectively. Similar to child services, rural respondents faced greater difficulty in access except in Nigeria, where access was generally more difficult.

PRESCRIPTION PATTERNS
Prescription patterns varied, with over 40% of Nigerian HCPs reporting increased prescriptions of antibiotics and antimalarials but 75% in Burkina Faso reporting no change. The proportion of HCPs reporting increased prescriptions was greater among those whose services were highly disrupted.

STUDY BACKGROUND
The effects of COVID-19 on essential health service utilization are not well documented, and such evidence is critical to enable the planning of services to avoid preventable mortality and morbidity. This study aimed to characterize the impacts of the COVID-19 pandemic on health services from the perspectives of both HCPs and community members in sub-Saharan Africa.

The ARISE Network conducted phone-based interviews with 900 HCPs in urban settings and 1,797 adults from urban and rural sites in Burkina Faso, Ethiopia, and Nigeria. HCPs who practice medicine or nursing were sampled from professional association lists. Adults were sampled from Health and Demographic Surveillance Systems and other surveys. Computer-assisted telephone interviews (CATI) were conducted from July to November 2020.

The ARISE Network is conducting additional surveys including new topics and additional countries over the coming months to continue building the evidence base on various impacts of COVID-19 in sub-Saharan Africa.
This study was undertaken by the Africa Research, Implementation Science, and Education (ARISE) Network and supported by the Bill and Melinda Gates Foundation, Heidelberg Institute of Global Health, and Harvard T.H. Chan School of Public Health. For more information, see Assefa et al. (in press). Reported Barriers to Healthcare Access and Service Disruptions Caused by COVID-19 in Burkina Faso, Ethiopia, and Nigeria: A Telephone Survey. American Journal of Tropical Medicine and Hygiene, 2021.

**Policy Recommendations**

Understanding the impacts of COVID-19 on health care access and utilization is essential in order to mitigate both the short and long-lasting adverse effects, especially in resource-limited communities. Our findings underscore the following policy recommendations:

1. Health authorities must urgently collaborate with multiple stakeholders to ensure routine health services and identify novel and adaptive approaches to recover the functions of primary health systems in the COVID-19 era.
2. Actions that strengthen the health system and remapping of the referral networks between facilities are needed to maintain efficient patient flow for essential health services.
3. Task shifting policy and redistribution of healthcare providers and outreach services for chronic health care in the community is needed for controlling the harmful effects of service interruption and reduced access.