Improving Access to and Take-Up of Skilled Birth Attendance

Context

Between 1990 and 2008, maternal mortality in Nigeria fell from 1,100 to 545 per 100,000 live births, and neonatal mortality from 45 to 40 per 1,000 live births. Despite this progress, 33,000 mothers and 241,000 newborns still die yearly, and an estimated 70% to 75% of these deaths are preventable. Furthermore, from 2008 to 2013, the maternal mortality ratio did not change significantly. In 2013, only 60% of pregnant women in Nigeria attended one or more antenatal visits and just 38% of childbirths took place under the supervision of a skilled birth attendant.1

To contribute to the reduction of maternal and newborn deaths in Nigeria, the Subsidy Reinvestment and Empowerment Programme Maternal and Child Health Project (SURE-P MCH) was launched on January 1, 2012, using funds from the removal of subsidies on petroleum. SURE-P MCH consisted of an innovative combination of interventions that target both supply of and demand for maternal health services. International evidence suggests that both supply-side and demand-side factors are important influences on health service utilization.

SURE-P MCH was initially launched in 500 public primary health care facilities and their catchment areas, spread across Nigeria’s 36 states and the Federal Capital Territory (FCT). This brief describes a non-experimental evaluation of the SURE-P MCH project’s impact on access to skilled birth attendance (SBA) and antenatal care (ANC) within the catchment areas of these 500 facilities.

1 Nigeria 2013 Standard Demographic and Health Survey (DHS).
**Intervention**

SURE-P MCH was a large-scale project that eventually reached 1,000 primary health centers and their catchment areas, spread across Nigeria’s 36 states and the FCT. In each of these areas, the project implemented a package of interventions addressing the supply of and demand for maternal health services. Three key supply-side measures were included: improving primary health care facilities’ infrastructure; providing adequate midwife staff for primary health care facilities; and ensuring steady supplies of drugs, consumables, and other commodities for the provision of quality maternal and child health services. Demand-side interventions consisted of communication activities to change behavior and promote maternal health services, as well as a pilot conditional cash transfer (CCT) scheme targeting pregnant women which was implemented in a limited number of facilities. It is important to note, however, that the analysis presented here is for SURE-P MCH’s early implementation and therefore does not capture the effect of the CCT.

**Impact Evaluation**

**Study Questions**

This non-experimental impact evaluation seeks to answer two key questions:

1. Were women living in SURE-P MCH project areas more likely to give birth in a health care facility? In other words, did SURE-P MCH increase the rate of institutional deliveries?
2. Were pregnant women living in SURE-P MCH project areas more likely to receive antenatal care because of SURE-P MCH? In other words, did SURE-P MCH increase the rate of antenatal care?

**Outcomes of interest**

1. The rate of institutional birth deliveries (IBD)
2. The proportion of pregnant women receiving four or more antenatal care visits (ANC)

**Study Methods**

The analysis uses household data from the 2013 Demographic and Health Surveys (DHS). Geographic data collected by the research team and the Nigeria Millennium Development Goals Information System is used to determine if a particular household is within or outside of SURE-P MCH project areas. Areas within 2.5 kilometers of the nearest SURE-P MCH-supported facility were classified as treated. Areas more than 2.5 kilometers from the nearest SURE-P MCH supported facility but within 2.5 kilometers of another source of primary healthcare were classified as control.

The analysis uses a difference-in-differences study design to compare the change in IBD and ANC.
in SURE-P MCH project areas between 2008 and 2013, relative to changes in the same indicators and time frame in non-project areas. Statistical tests corroborate that the latter exhibited parallel trends to the former in years before SURE-P MCH was implemented, thereby serving as a valid counterfactual.

**Key Findings & Policy Lessons**

SURE-P MCH was, in its first 9 months of implementation, effective in increasing the rate of institutional birth deliveries. Mothers living in SURE-P MCH-supported catchment areas were 6.7 percentage points more likely to give birth in a health care facility than they would have been in the absence of the SURE-P MCH implementation. This is an important result particularly considering the lack of change in skilled birth attendance in the decade preceding the program.

Results do not show that SURE-P MCH was effective in improving antenatal care use in the project’s first 9 months. This suggests that greater emphasis is needed to overcome demand-side barriers to care-seeking. Although SURE-P MCH included a Conditional Cash Transfer program to address such demand-side barriers, its effects could not be included in this analysis.

A possible explanation for the lack of evidence that SURE-P MCH improved ANC is that, at 85%, coverage in project areas was already high before the project started. This suggests that there is vast geographical inequality in the access to ANC. SURE-P MCH and similar programs in the future should carefully consider their targeting approach. Though SURE-P MCH aimed to target underserved populations, project areas consistently performed better than comparison areas did even before the SURE-P MCH started. This imbalance suggests that the project is reaching only a subset of its target, and strategies to reach those even more at risk should be developed.

Routine health system monitoring systems and data on Nigeria’s health care facilities need urgent improvement. This study intended to include data
from these routine monitoring systems, but found up to 80% of observations were missing. Furthermore, no national health facility-level data is consistently collected. This greatly limits the understanding of the state of Nigeria’s primary health infrastructure and human resources, and how they vary across different parts of the country.

Finally, the SURE-P MCH Program and the National Primary Health Care Development Agency of Nigeria are to be commended for their openness and transparency in subjecting the program to a process of rigorous impact evaluation. Future policies and programs would benefit from incorporating experimental impact evaluations from their outset.

This impact evaluation was implemented as a collaboration between the Nigerian Ministry of Health, the World Bank Development Impact (DIME) team, University College London, Imperial College London and Harvard University. For more details on these results, please contact DIME (dime@worldbank.org).