

In April 2018, a team of local and international health organizations launched a partnership to ensure that hospitals throughout Guinea can deliver safer and more reliable anesthesia—a necessary service for any surgical operation, including emergency childbirth procedures like C-sections. The project—implemented under Jhpiego's Health Services Delivery initiative—was designed to lower maternal and newborn mortality by pairing world-class anesthesia technology with hands-on, simulation-based mentorship so health providers across the country have the equipment and skills to deliver high-quality anesthesia care.

KEY STATS*

Total Population 12.6 million

Women of Childbearing Age 2.5 million

Public Hospitals
35 (2 tertiary, 33 district)

Anesthesia Providers 43 total (MDs & nurses)

Maternal Mortality Ratio 679 deaths/100,000 births

Newborn Mortality Ratio 25 deaths/1,000 births

C-Section Rate 2.4% of childbirths

Unreliable Electricity 73.3% of population

2hr+ from Emergency Care 37.3% of population

INTERVENTIONS



Anesthesia Technology: Equip 18 hospitals with the Universal Anaesthesia Machine (UAM)—the world's only CE-certified anesthesia machine that can generate its own medical oxygen & work without electricity; ensure annual preventive maintenance, equipment repairs, & remote service through global & local support teams





Clinical Skills Training: Administer a hands-on, simulation-based training program for anesthesia providers at each project hospital, including:

Certifying a team of Guinean anesthesiologists as lead project trainers at a top West African surgical training institute

Conducting a capacity building course in Conakry using physiciansupervised simulation to refresh & refine techniques in obstetric, pediatric, & general anesthesia

Ensuring ongoing skills evaluation & mentorship



Technical Capacity Building: Train & certify local biomedical technicians to provide basic maintenance & repairs for the UAM & a suite of other medical equipment needed for emergency childbirth care

The project will be monitored for its impact on surgical care, anesthesia capacity, medical equipment reliability, & maternal & newborn healthcare.

PROJECT PARTNERS















*Sources: 1) Averting Maternal Death and Disability (AMDD), "Emergency Obstetric and Newborn Care," Columbia University. 2) Ouma P, Maina J et al: "Access to emergency hospital care provided by the public sector in sub-Saharan Africa in 2015: a geocoded inventory and spatial analysis," *The Lancet Global Health*, 2017. 3) World Bank. "Sustainable Energy for All Database," 2014. 4) WHO, UNICEF, UNFPA, World Bank Group: "Trends in Maternal Mortality" & "Child Mortality Estimation," WHO, 2016. 5) Beltran A, Ye J et al: "The Increasing Trend in Caesarean Section Rates: Global, Regional and National Estimates: 1990-2014," *PLOS One*, 2016.

