Rwanda is one of the smallest countries in Africa, bordered by Uganda, Burundi, Tanzania and Democratic Republic of Congo. It is known as the Land of a Thousand Hills with a population of 13,477,805. It has been 27 years since Rwanda came out of one of the most devastating genocides in world history. After the 1994 genocide against Tutsi, Rwanda started from scratch to rebuild the health system destroyed. The strengthening of the health system in Rwanda is a foundation for socio-economic support and the cornerstone of the country's renewal.

The Rwandan health sector is a pyramidal structure and consists of three levels: Primary, Secondary and Tertiary (as shown in the diagram below).

Rwanda currently operates a well-functioning, decentralized public healthcare service system. It is comprised of 1700 health posts, 500 health centers, 38 district hospitals, four provincial hospitals and eight referral hospitals, including two Teaching Hospitals. Rwanda also has a vibrant private health services sector, comprised of two general hospitals, two eye specialty hospitals, 50 clinics and polyclinics, eight dental clinics, four eye clinics, and 134 dispensaries.

All public facilities transfer the patients following the pyramidal structure seen above. Private facilities may refer to any level of the private or public health system. Referrals depend on the condition and needs of the patient.

Among 50 hospitals of secondary and tertiary levels, 49 have newborn intensive care units. They follow a referral flow depending on the health conditions of the newborn. In Rwanda, 12% of babies are born prematurely. Newborn mortality rate is 16 per 1000 live births and 30% of newborn deaths are caused by preterm birth complications.

Rwanda has worked to reduce neonatal mortality through newborn survival initiatives, with a National Neonatal Care Protocol and the establishment of neonatal care units (NCUs) in every public hospital to care for sick and small newborns. Through the efforts to improve care for sick and small newborns, more preterm and/or low birth weight (LBW) babies are surviving into childhood, yet there is poor health, nutrition, and developmental outcomes among children born preterm and LBW at one to three years in rural Rwanda.

High rates of developmental delay (52.6%) exist for infants. This is most significant among children born prematurely and/or LBW (67.5%) when compared to children born at term ages at age two to three years (51.1%).

Developmental Care

The Ministry of Health and Partners in Health have created the Pediatric Development Clinic with support from UNICEF and specialists from Boston Children’s Hospital. The interdisciplinary program is intended to improve health outcomes for babies at risk of death or developmental delays. It is the first program of its kind in Rwanda.

The clinic started in April 2014 in Rwinkwavu District Hospital and has since expanded to four Districts: Kayonza,
Kirehe, Rutsiro and Musanze. The clinic allows health care providers to follow infants after they go home, through regular clinic appointments and community-based support. The program features a weekly nurse-led clinic at health facilities, social supports such as food and transportation money for vulnerable families, and training for staff members in caring for high-risk infants through simple interventions. High-risk families are identified by social workers and receive home visits and community-based support as well. The program also is linked with electronic medical records systems to improve care and tracking of patients’ outcomes.

**NIDCAP in Rwanda**

To bring NIDCAP into Rwanda, Heidelise Als, PhD (National NIDCAP Training Center, Boston) collaborated with two experienced NIDCAP Trainers, Natalie Wetzel, RN (NIDCAP Germany, Training Center Tübingen) and María López Maestro, MD (Hospital Universitario 12 de Octubre NIDCAP Training Center, Spain). These NIDCAP Trainers have started to train our team at Ruhengeri Referral Hospital (RRH). Given the travel restrictions due to the SARS-COV-2 pandemic, the training is being conducted online. At this time, our team of NIDCAP Professionals in Training at RRH consist of two registered midwives (Patrick Manibaho, RM, Marie Louise Uwimana, RM) and two medical doctors (Deborah Makasi, MD and Jean Damascene Ndahayo, MD).

Zoom meetings, recorded videos and bedside live streaming during observation are the preferred ways to conduct successful training. Workshops are scheduled based on availability of trainers and trainees, often twice a month. The NIDCAP Observation write-ups are sent via email for feedback. A reflective session occurs via zoom for review of the NIDCAP reports.

The NIDCAP observation is conducted in collaboration with NICU staff and family members. Healthcare professionals communicate in English. However, the communication with family members is done in Kinyarwanda, the main language spoken in the community.

The team is looking forward to achieving certifications as NIDCAP Professionals. Our longterm plan is to continue our training to become NIDCAP Trainers-in-Training and ultimately have a training center in Rwanda. Our goal is to train our fellow caregivers in hospitals across the country. Our group represents the first Sub-Saharan African hospital to receive NIDCAP training.

**References:**