Brief

A Regional Learning Network: An approach to scaling up quality maternal and newborn care in Uganda

Situation

Through its endorsement of the Sustainable Development Goals (SDGs) and the global Every Newborn Action Plan, the Government of Uganda has committed to ending preventable maternal and newborn deaths. These commitments are embodied in national policies and strategies, including the National Roadmap for Maternal and Newborn Survival, the Reproductive, Maternal, Newborn and Child and Adolescent Health (RMNCAH) Sharpened Plan, the newborn component of the National Child Survival Strategy, and the National Development Plan (NDP) II.

Despite these commitments, many women and children continue to die from complications in pregnancy, childbirth and in the first month. Each day there are 17 maternal deaths, 94 stillbirths and 110 neonatal deaths. Many of these deaths are from causes that are largely preventable. Babies die from complications of prematurity, complications at birth and neonatal infections. Four major factors account for maternal deaths: haemorrhage/bleeding, hypertension, unsafe abortions and sepsis.

The presence of a trained healthcare worker, along with basic medicines such as antibiotics, vital equipment and a clean environment to work in, can save the lives of nearly born and newborn babies. However, recent estimates indicate that only 57 percent of births in Uganda take place with a skilled healthcare worker present. Many of these health facilities are underequipped and understaffed. A 2013 assessment of 400 health centre (HC) IIs and IVs reported that 80 percent of maternal and neonatal complications were not correctly managed and only half had medications available.

Quality Improvement in Uganda

To address these issues, the Uganda Ministry of Health (MoH) conducted a thorough evaluation and revision of the Health Sector Quality Improvement Framework (QIF) and Strategic Plan in 2016. This plan provides a common framework for all public and private health institutions, partners and stakeholders to coordinate, plan, mobilize resources, implement, monitor and evaluate quality improvement initiatives with the goal “to ensure that by 2020, all people accessing the health services in Uganda attain the best possible health outcomes and improving consumer acceptability and satisfaction.” As part of their effort to strengthen the health system and improve quality of maternal and newborn care (MNH) and outcomes, the MoH piloted a Regional Learning Network (RLN) in Hoima starting in 2016 with support from Save the Children and the University Research Company (URC). This brief provides information about the RLN as an approach that could be used to advance high-quality MNH care in health facilities to support scale-up of high-impact, feasible interventions.
Hoima Regional Learning Network
The Hoima RLN is a cross-section sample of the public health system in Uganda and comprises multiple health facilities (HC III, HC IV, district hospitals, and regional referral hospital) within the catchment of the regional referral hospital. These facilities are linked through a quality improvement collaborative and referral system that provides quality maternal and newborn care services based on national standards and guidelines. The Hoima RLN has three objectives (Box 1).

**How the Regional Learning Network works**
The RLN facilitates the learning and dissemination of newborn care knowledge and skills throughout the region with the establishment of a training lab at the Hoima Regional Referral Hospital. Through in-service training and a focus on best practices in MNH, it is expected that a functional learning network for improved quality care for mothers and newborns will be established within and beyond health facilities in the region. Long-term outcomes expected include a reduction in facility-based maternal and neonatal mortality as well as facility-based fresh stillbirth rate.

**Process for setting up the Regional Learning Network**
- **Step 1:** Planning and adoption of the RLN concept through consensus-building meetings and scoping visits
- **Step 2:** Start-up activities through leadership identification, district entry meetings and selection of health facilities, training on RMNCAH score cards and sharpened plans, baseline assessment
- **Step 3:** Ongoing processes, including district coordination meetings, formation of quality improvement teams, skill building for health workers, data quality assessments, media engagement for advocacy, mentorship visits to health facilities, learning sessions
- **Step 4:** Monitoring, evaluation, dissemination of findings

**Box 1: Objectives of the Hoima Regional Learning Network**
1. Employ a quality improvement methodology using tools and methods adapted to the Uganda setting, including a learning lab based at the regional referral hospital, to address critical gaps in providing high-quality MNH care, with an initial focus on care for the small baby.
2. Produce new knowledge and synthesize learnings on the best approaches to improving MNH care through use of the QI methods and tools, with an initial focus on care for the small baby, by overcoming the largest barriers and achieving outcomes for patients and families that are in line with Ugandan national policies.
3. Document and share learning with other regional referral hospitals (horizontal spread) and lower-level facilities (vertical spread) and develop institutionalized mechanisms of spread.

**Status of maternal and newborn care services before the Regional Learning Network**
Before the RLN, the selected health facilities in Hoima Region had low capacity to provide quality MNH services. The baseline assessment revealed skills and practice gaps among health workers in provision of quality MNH care, such as inadequate basic essential newborn care, newborn resuscitation, use of the partograph to monitor labour and infection control, among others. For example, only 14 percent of staff understood indications for use of antenatal corticosteroids in women with preterm labour.

Necessary medical supplies were also limited with only 2 of 14 surveyed facilities having an oxygen cylinder, none having a pulse oximeter, and less than half having amp/gent and NG tubes. Functional equipment for neonatal resuscitation varied, with bags available in 10 of the 14 surveyed facilities but only 2 facilities reporting having suction catheters; 1 facility had a mask; and no facilities reported penguin suckers. The mortality of mothers and newborns was high as was the level of referral to the regional referral hospitals.
How the Regional Learning Network has improved quality of care

Strengthen the health workforce with clinical mentorship and skill-building opportunities: The RLN has established an onsite learning lab to facilitate hands-on skills training and adaptive learning by quality improvement (QI) mentors for and in-service practicum attachments. The clinical training program is targeted to train at least 160 health workers drawn from different facilities within the RLN. The QI mentors conduct on-site mentorship visits at health facilities and learning sessions to improve the performance of health workers. They have formed QI teams at each facility to help identify care deficiencies, plan for and implement QI cycles, and review data to improve MNH care.

Foster use of data for accountability: The RLN provided orientation and training to district leaders and health facility technical staff on the RMNCAH scorecard, a tool used to monitor district performance on selected indicators. This enables them to identify low-performing indicators and devise strategies to improve performance and accountability. Data quality assessments conducted at health facilities determine the accuracy, completeness, and timeliness of reported data on selected MNH indicators. These assessments are helping to highlight and guide improvements in data management, which will strengthen the system. Media trainings conducted in Hoima have strengthened the ability to report on maternal and newborn health with timely and accurate facility- and district-level data.

Ensure availability of appropriate communication, referral systems, supplies, commodities and infrastructure to support essential obstetric and newborn services: To improve service delivery, the RLN aims to improve communication channels across the health facilities and hospitals in the region. Before the RLN, referrals from lower level facilities to the regional referral hospital were not well documented enough to appropriately guide the next course of action and treatment. Since the establishment of the RLN, referrals are better documented by lower level facilities, and there has been a reduction in the number of unnecessary referrals made to Hoima Regional Referral Hospital from those facilities.

There has also been an internal re-organisation of the maternity ward at the Hoima Regional Referral Hospital to ensure there is designated space for the kangaroo mother care and newborn special care units, space for filing patient records and use of wall clocks. Informed by the RLN baseline assessment, procurement of basic equipment for the maternity ward and newborn special care unit, such as resuscitation tables, bags and masks, penguin suckers, oxygen concentrators, pulse oximeters and thermometers, has improved the hospital’s capacity to provide quality MNH specialised care. The district coordination committees have helped identify innovative solutions for addressing health system barriers such as delays, supplies and infrastructure as well as minimise unnecessary duplication of services in the districts.

Next Steps and Recommendations

The quality improvement work being done for the Hoima Regional Learning Network will continue in 2017 including the mentorship, the regional and district convening mechanisms and support on data quality and utilization at facility and district levels. Sharing and cross-learning will be facilitated through learning sessions between quality improvement teams, district leadership and the National Newborn Steering Committee on a quarterly basis. An end-line assessment will be conducted in mid-2017, collecting both qualitative and quantitative data to answer the learning questions.

As the learning process is still underway, lessons will be forthcoming following the endline survey. However, some key recommendations below have emerged based on the work done to date.
Recommendations from the Uganda Regional Learning Network approach

- **Engage local clinical leadership**: Quality improvement work must be led by local leaders who are native to the public health system in Uganda, either through a local professional body or an arrangement with the MoH Quality Assurance Department. International development partners may play a supporting role as needed. Engagement of technical staff beyond frontline health workers in QI processes spreads learning and ensures sustainability.

- **Invest in your local clinical leaders**: Sustainability and scalability of the RLN model will rely on strong, visionary leaders with clinical expertise and skills and the ability to mentor junior providers and influence senior health officials and national policy. Rising leaders need to be provided with opportunities to build their clinical and analytical skills; attend national meetings and working group; practice public speaking; write; publish; lead teams; and conceptualize, design and manage quality improvement initiatives. Participating in such capacity-building activities, rather than simply serving as an ad hoc clinical specialist consultant for quality improvement cycles, will build local clinicians’ capacity for leadership and influence.

- **Provide opportunities for health workers to improve clinical and QI skills**: A skills-building lab at the Hoima Regional Referral Hospital serves as a site for practicum attachment for health workers within the network, facilitating hands-on training and adaptive learning for lower level health workers. This investment in health workers aims to reduce staff attrition and the current acute shortage of health workers in the region. QI processes support practical application of the learning initiated at the skills-lab. These processes also require regular supportive supervision.

- **Provide proper equipment necessary for high-quality care**: Procurement of equipment found to be lacking during the baseline assessment, such as resuscitation equipment, incubators, and oxygen concentrators and cylinders, has improved the health facilities’ capacity to provide expected MNH care and is reducing unnecessary referrals to the regional referral hospital.

- **Ensure sustained resources for quality improvement efforts**: Continuous quality improvement is educational in nature, has no time-bounds and strives for best possible outcomes rather than minimum standards. This point is critical for establishing better care and a culture of quality care. As continuous quality improvement is as much about process as outcomes, it is not intended to be a one-off or intermittent activity and thus requires sustained investment of resources.

References


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