Assessing and improving quality of care for small babies: standards, implications and options for KMC implementation

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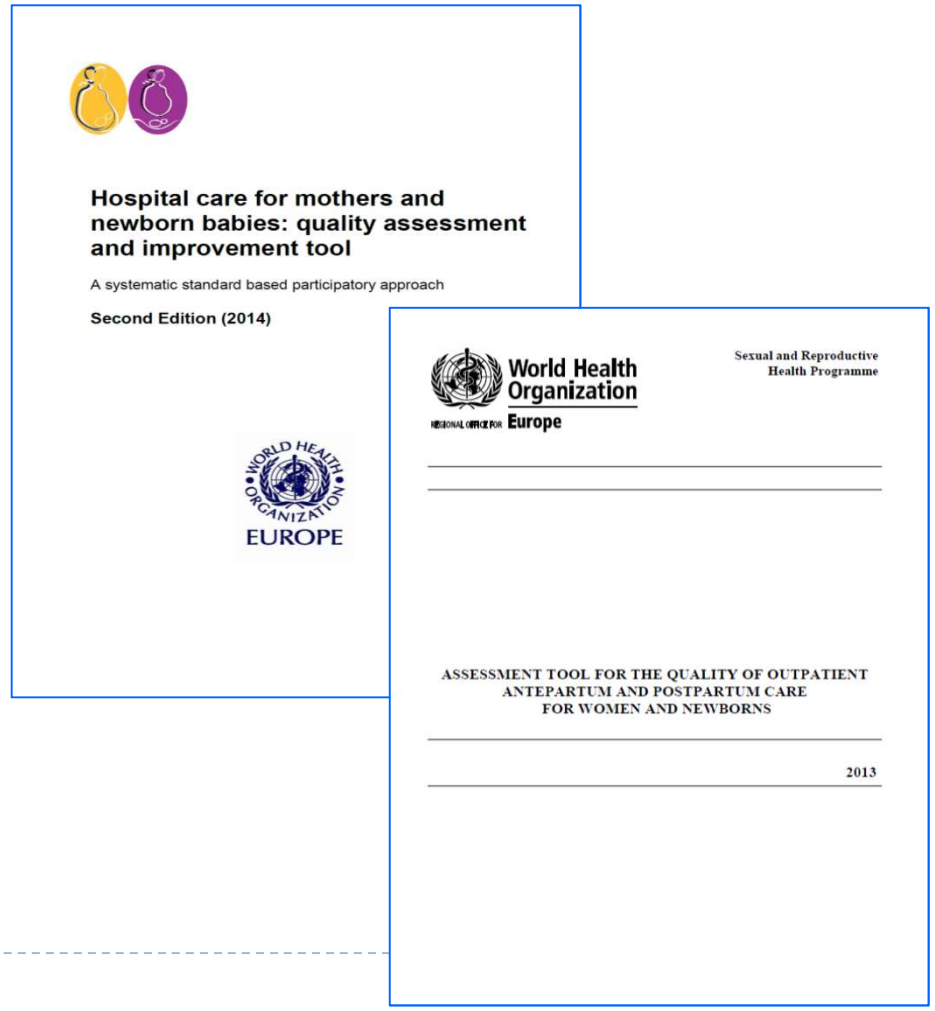
Objectives

- To present a participatory, action-oriented approach to QoC assessment and improvement
- To zoom into quality assessment items for small babies and KMC
- To report on the QoC assessment for small babies in a sample of hospitals in Brazil
- To discuss implications: need to avoid considering KMC in isolation; need for a common approach to quality assessment of KMC

The WHO EURO tools for quality assessment and improvement of maternal and neonatal care

The WHO EURO tools

- First developed in 2005 based on the WHO paediatric tool (2001), revised ed. in 2014
- Widely used in CEE/CIS countries, SS Africa, SE Asia and West Pacific, both as a single hospital initiative and within country-wide programs
- First used in Latin America in 2015 (Brazil) within a broader CNPq-funded project



WHO QA&I tool: informing principles

1. Checking availability of basic equipment and supplies is necessary but not sufficient: appropriate **use of resources** and **case management** should be assessed

2. Focusing on single key interventions is not enough; systematic attention to **all main components** that can guarantee continuum of MN care is necessary

3. Quality care includes holistic and respectful care; there is the need to collect **users' views** together with health staff views

4. A **participatory and supportive peer-to-peer approach** is necessary to raise awareness on problems **and** support attitude to find solutions

5. The whole **process** of quality improvement is an opportunity to build **commitment and capacity at both national and local level**.

SECTION 1 HOSPITAL SUPPORT SERVICES

1.1 Physical structures, staffing, and basic services
1.2 Statistics, health management information systems and medical records
1.3 Pharmacy management and medicine availability
1.4 Equipment and supplies
1.5 Laboratory support
1.6 Ward infrastructure

SECTION 2 CASE MANAGEMENT

2. Care for normal labour and vaginal birth
3. Care for caesarean section
4. Management of maternal complications
5. Essential neonatal care
6. Sick newborn care
7. Advanced newborn care
8. Monitoring and follow-up

SECTION 3 POLICIES

9. Infection prevention
10. Guidelines, training and audit
11. Access to hospital care and continuity of care
12. Mother and newborn rights

SECTION 4 INTERVIEWS

- Interview with staff
- Interview with pregnant women and mothers

SECTION 5 Summary assessment and draft Action Plan

The comprehensive assessment of all areas requires from 1 ½ to 2 ½ days for a multidisciplinary team of 4people

Methods: sources of information

1. Visit to hospital services
2. Medical records and admitted clinical cases
3. Other documents (statistics, protocols, etc)
4. Interviews with health professionals and mothers

Methods: how information is put together

- Information collected by different members of the team is discussed and a shared final score (range 0 to 3) is attributed to each section and subsection

- Strengths and weaknesses are indicated for each section and subsection

Products of the QA&I

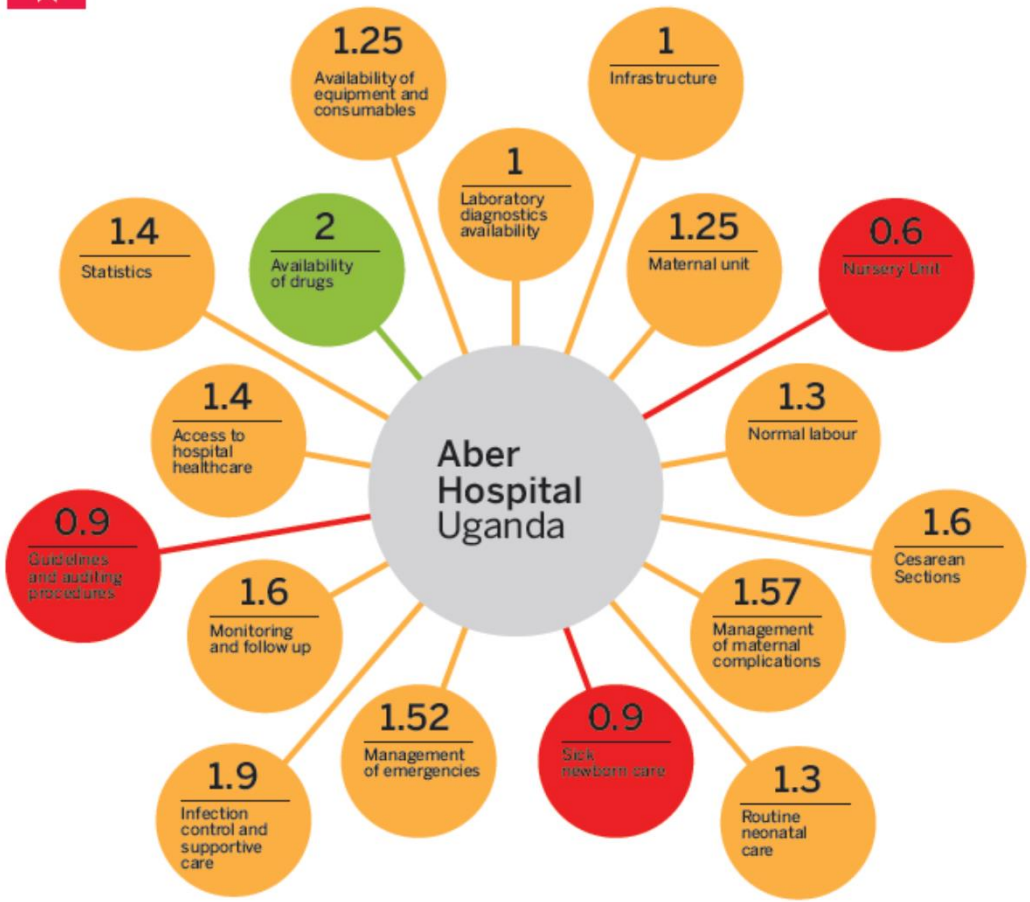
- Overall comprehensive diagnostics of the maternity hospital
- Identification of specific detailed gaps for each main area and its subsections
- Feedback on main strengths and weaknesses
- Plan of action

Doctors with Africa Cuamm
Mothers and Children First: the first steps - Uganda

MEDICI CON L'AFRICA
CUAMM
Doctors with Africa

Info: www.doctorswhithafrica.org

Figure 2. Quality of mother and neonatal healthcare services[2]



0 - 0.9
Sustantial improvements are needed in order to avoid serious threats to mothers and newborn health.

1 - 1.9
Improvements are necessary in order to avoid risks for women and newborn.

2 - 3
Improvements are needed in order to minimize potential threats to health of mothers and newborns while respecting their dignity and rights.

[2] Tool used: Assessment tool for the quality of hospital care for mothers, newborn and child, WHO 2009.

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Improving the Quality of Maternal and Neonatal Care: the Role of Standard Based Participatory Assessments

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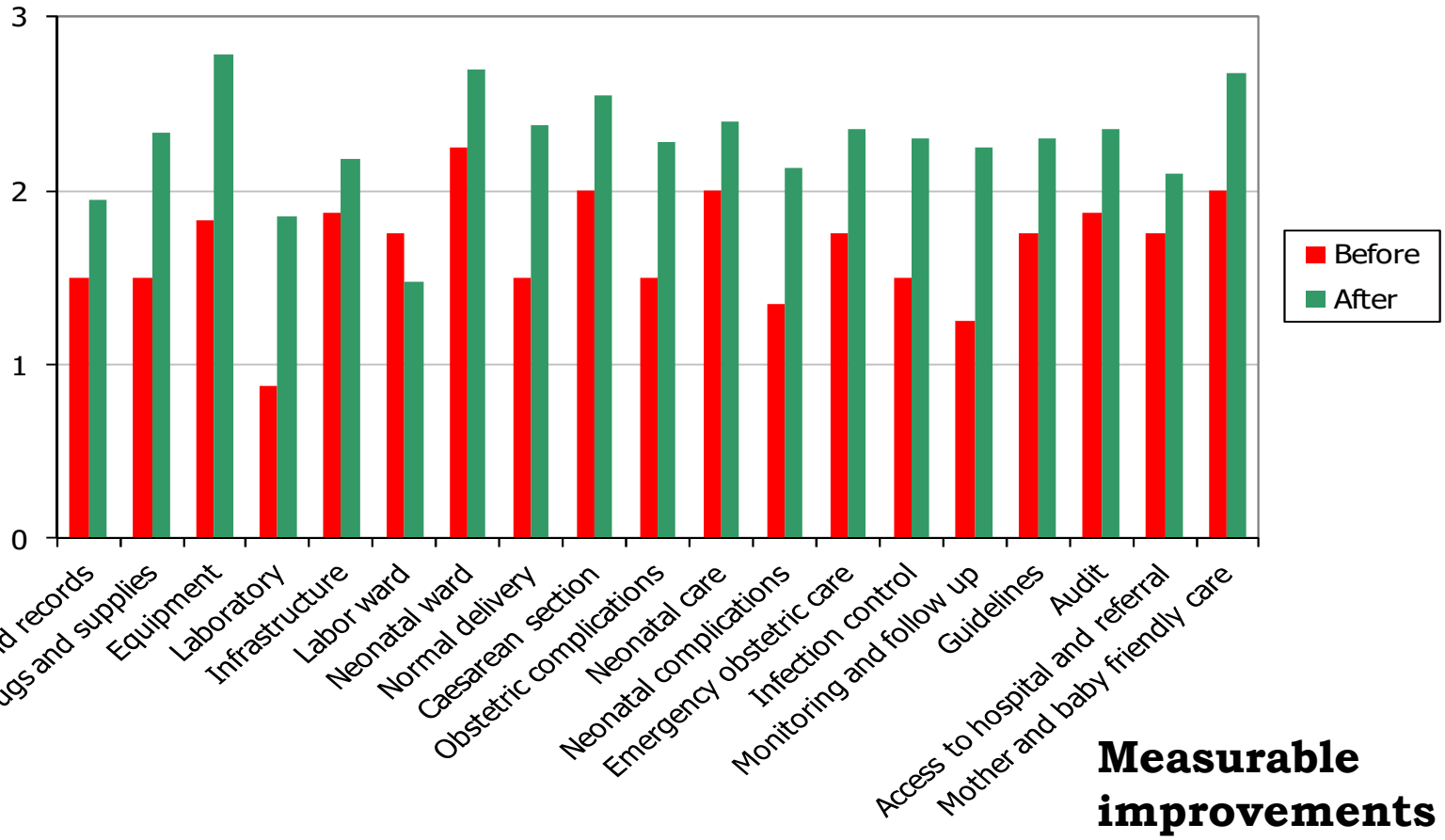


Measurable improvements

Standards, the case of KMC and small babies

Generic standards (*such as WHO M&N standards*) are not sufficient: going into details is crucial

Take for example standard 1 from WHO M&N standards:

Every woman and newborn receives evidence-based routine care and management of complications during labour, childbirth and the early postnatal period

- To be operationalized, standards must be broken down to many very detailed items, which are those to be assessed
- For each of these items, **gaps, causes and solutions** need to be identified and discussed
- This can be done only by experienced professionals, in a peer-to-peer approach, together with local staff

Zooming on case management

SECTION 2 - CASE MANAGEMENT

[…]

- 2. Care for normal labour and vaginal birth
- 3. Care for caesarean section
- 4. Management of maternal complications
- **5. Neonatal care**
- 6. Sick newborn care
- 7. Advanced newborn care
- 8. Monitoring and follow-up

5. Neonatal care

- 5.1 Neonatal care at birth and in the first 2 hours
- 5.2 Neonatal care in the maternity ward
- **5.3 Care for premature and LBW babies**

5.3 Care for premature and LBW babies

- 5.3.1 Setting for the care of premature and low birth weight (LBW) infants
- 5.3.2 Nutrition of premature and LBW infants
- 5.3.3 Clinical evaluation and monitoring
- 5.3.4 KMC Unit
- 5.3.5 Information and counselling at discharge

5.3.1 Setting for the care of premature and low birth weight (LBW) infants

- Existence of a dedicated area to facilitate closer observation
- 'Rooming-in' is continuous with their mothers
- Heat loss is minimized by kangaroo-care; babies wearing a cap on their head and socks
- Attention to environment (avoid overheating, draughts, cold air, etc)
- Infants are protected from animals and insects
- Mosquito nets for infants in malaria endemic areas

5.3.2 Nutrition of premature and LBW infants

- There are guidelines in use to prevent, detect and treat neonatal hypoglycemia, and they are followed
- There are no restrictions on the frequency or length of breastfeeding
- If the infant is unable to breastfeed, the mother is supported to start expressing within 4-6 hours from birth, and informed on effective techniques
- Expressed milk is given by cup or nasal-gastric tube when the infant is unable to feed or if the mother cannot stay with the infant all the time
- Sterile containers for expressed milk are provided by the hospital and mothers have facilities to express in a clean and comfortable area
- Breast pumps are used and functioning with process of cleaning, they are not shared unless designed to be adequately decontaminated
- Infant formula, glucose water, water or other fluids or foods are not given to the infant unless there is an evidenced based medical need
- If any exception to exclusive breastfeeding is recommended by the staff, the reason and the amount to be given is recorded

5.3.3 Clinical evaluation and monitoring

- All items included in the healthy newborn list should be checked
- Use an individual infant record for LBW infants
- Heart rate and breathing rate are checked and recorded every 8-12 hours, according to the clinical situation
- Temperature is recorded at least every 8-12 hours, according to the clinical situation
- Weight is recorded at least daily

5.3.4 KMC Unit

- Area equipped with adequate services for mothers (sleeping chairs/beds, hygienic services, food, room for contact with family members)
- Fathers are allowed to visit
- Skin to skin contact implemented at least 18 hours/day
- Observations about KMC duration and other aspects are recorded on the newborn chart
- Professionals assigned to KMC unit have received specific training

5.3.5 Information and counselling at discharge

- All items included in the healthy newborn list should be checked

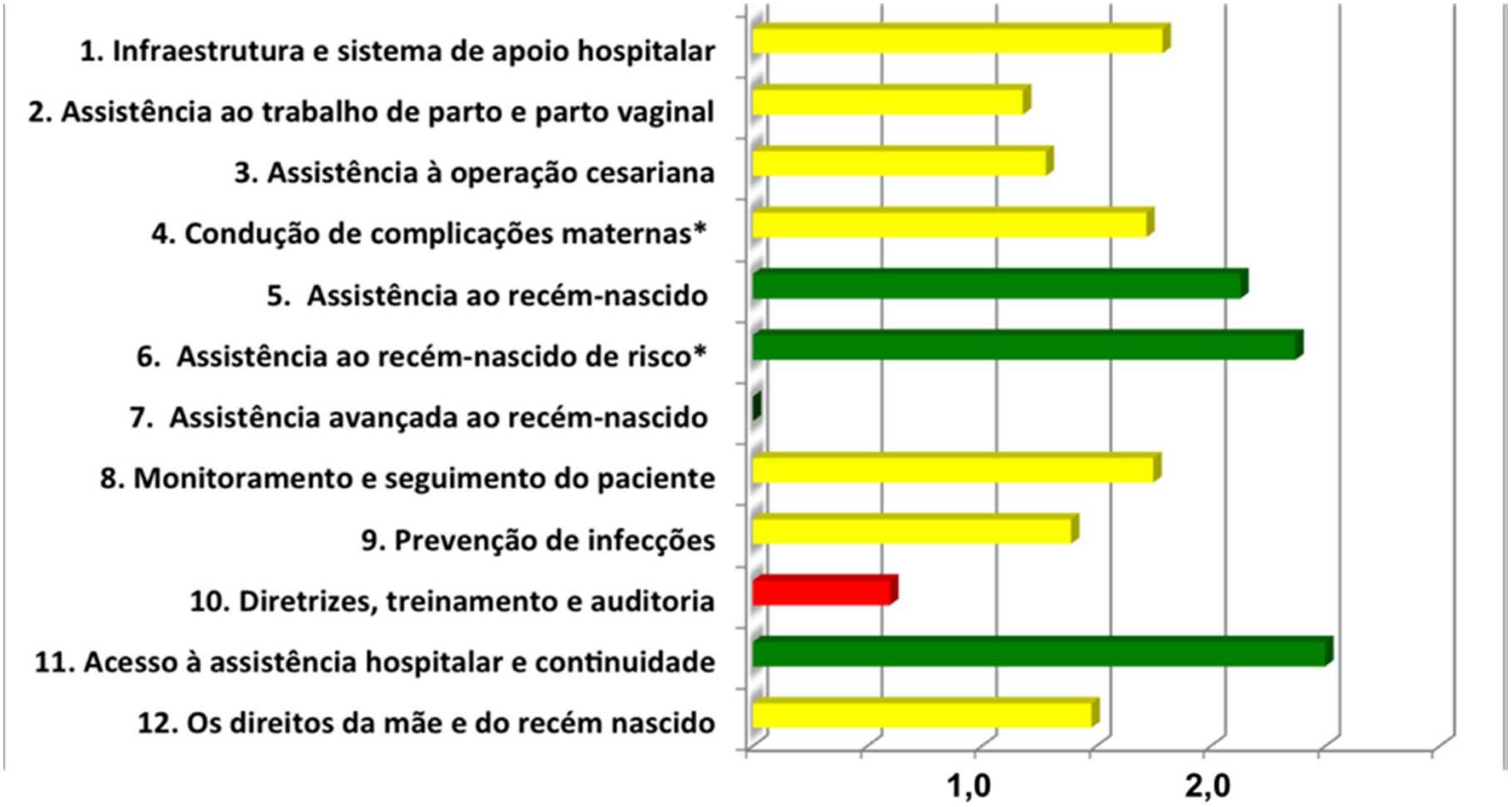
- Information and discussion should focus on the situation of this individual LBW infant:
  - Wellness
  - Feeding and nutrition
  - Care
  - Prophylaxis, vaccination
  - Planned follow-up

The Brazilian experience

Quality assessment and improvement in maternity hospitals in Brazil

6 maternity hospitals for a total of about 25.000 births /year

Example: summary scores for a maternity hospital – initial assessment



* Avaliação adaptada para a complexidade do serviço

Results: average scores and main gaps for KMC and overall care for small babies, example of 2 hospitals

Hospital	KMC		SB	
	Score	Gaps	Score	Gaps
H1	3	No recording of KMC hours/day	2	Lack of monitoring of weight No protocols for ATB use. Poor support to breast milk expression
H2	2	Facilities inadequate (room, hygenic services)	1.8	No thermal control at birth and poor skin-to-skin Failure of monitoring of feeding and growth Poor discharge information

Improvements at 1-year follow-up

Hospital	Improvements (all low cost!)
H1	Partner allowed in delivery room Improved infection control (washing hands etc.)
H2	Partner allowed in delivery room Reduced episiotomies Earlier initiation of BF Improved privacy in delivery room
H3	Partner allowed in delivery room Improved privacy in delivery room MN indicators made available
H4	Earlier initiation of BF Better thermal control Reduced environmental noise in nursery/intermediate care Improved training in obstetric emergencies
H5	Partner allowed in delivery room Training in neonatal resuscitation Improved privacy and better thermal control

Lessons learnt

1. Patchwork and incomplete implementation of KMC even in "politically favourable" context

- Not all hospitals implementing KMC in spite of national guidelines and legislation
- Definition of criteria for KMC not homogeneous
- Follow-up after discharge not ensured or ensured only partially

2. KMC not preceeded and accompanied by quality care at birth and after

- Some “essentials” of ENC (thermal control, skin-to-skin contact, early initiation of BF) lacking
- Key aspects of LBW care (feeding, growth monitoring , general care…) lacking
- Discharge information insufficient

All the above have considerable short and long term impact on survival, health, development and wellbeing

3. Follow-up is guaranteed only for medical conditions

- Little attention is paid to providing adequate, clear and culturally appropriate information to mothers and family members on how to deal with LBW babies at home
- Follow-up through connections with PHC is offered (not guaranteed) only by 1/6 hospitals
- There is little or no contact with social and educational services in order to provide support to families

Conclusions

- QI approaches need to be participatory and action oriented, to achieve results
- The described approach may be an option to consider
- Costs of assessment are limited if capacity for assessment is built and sustained
- We should go for a shared common list of assessment criteria for KMC
- First and foremost:

KMC should not be assessed (and improved) in isolation, but within comprehensive care for all babies and particularly for small babies

Thanks to the assessment team

Thanks for your attention!