

# Labor & Delivery Quality of Care Short Observational Index

## Session 4: Understanding the Short L&D Index

# Session objectives

- Review the Short L&D Index
- Discuss how to assess observed deliveries using the index

# What is a index?

- An **index** is a composite indicator that adds together scores from a list of different individual items that all represent a broader concept.
- For example, a wealth index is often calculated using indicators in DHS household surveys:

<b>Assets</b> Radio Television Telephone Refrigerator	<b>Services</b> Electricity Water supply Toilet facility
<b>Vehicle</b> Bicycle Motorcycle Automobile Tractor	<b>Flooring</b>  <b>Ownership of dwelling</b>

Source: Rutstein, Shea O. and Kiersten Johnson. 2004. The DHS Wealth Index. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro

# What is the Short L&D Index?

- The Short L&D Index is a tool for measuring the quality of intrapartum and immediate postpartum care through observation of care
- The Short L&D Index is a checklist of selected actions that are important during intrapartum and immediate postpartum care.
  - Deliveries observed using the Short L&D Index receive a quality score based on the performance/non-performance of these actions
- The Short L&D Index covers both mother and newborn and focuses on routine care (not complications)

# Why use the Short L&D Index?

- The Short L&D Index provides information about the **content** of L&D care
- The tool has been found to have high face, content, and criterion validity
  - Providers who perform the actions in the Short L&D Index are more likely to perform all the actions that are important during L&D care: **a higher score on the Short L&D Index is associated with better care quality**
- The tool has been piloted in Tanzania and found to be feasible for use as part of a quality assessment toolkit

# Who should use the Short L&D Index?

- The Short L&D Index is designed for use by regional, district, and facility supervisors who are clinical active and designated as Skilled Birth Attendants.
- The tool can also be used for L&D care quality measurement in evaluation and research studies

# Two versions of the Short L&D Index

- There are two versions of the Short L&D Index:
  - A comprehensive index – 20 items covering a full episode of L&D care, from intake through the first hour postpartum
  - A delivery-only index – 13 items covering the time of delivery and the first hour postpartum
- The appropriate version of the Short L&D Index should be selected by users based on available resources (time, observers, number of facilities)

# What actions are in the comprehensive Short L&D Index?

Asks whether woman has experienced headaches or blurred vision	Self-inflating ventilation bag (500mL) and face masks (sizes 0 and 1) are laid out and ready for use for neonatal resuscitation
Asks whether woman has experienced vaginal bleeding	Correctly administers uterotonic (timing, dose, route)
Checks woman's HIV status (checks chart or asks woman) and/or offers woman HIV test	Assesses completeness of placenta and membranes
Washes his/her hand before any examination	Assesses for perineal and vaginal lacerations
Takes blood pressure	Immediately dries baby with towel
Takes pulse	Places newborn on mother's abdomen skin-to-skin
Wears high-level disinfected or sterile gloves for vaginal examination	Ties or clamps cord when pulsations stop, or by 2 - 3 minutes after birth (not immediately after birth)
At least once, explains what will happen in labor to the woman and/or her support person	Takes mother's vital signs 15 minutes after birth
Uses partograph to monitor progress of labor	Palpates uterus 15 minutes after birth
Prepares uterotonic drug to use for AMTSL	Assists mother to initiate breastfeeding within one hour

# What actions are in the delivery-only Short L&D Index?

At least once, explains what will happen in labor to the woman and/or her support person	Immediately dries baby with towel
Uses partograph to monitor progress of labor	Places newborn on mother's abdomen skin-to-skin
Prepares uterotonic drug to use for AMTSL	Ties or clamps cord when pulsations stop, or by 2 - 3 minutes after birth (not immediately after birth)
Self-inflating ventilation bag (500mL) and face masks (sizes 0 and 1) are laid out and ready for use for neonatal resuscitation	Takes mother's vital signs 15 minutes after birth
Correctly administers uterotonic (timing, dose, route)	Palpates uterus 15 minutes after birth
Assesses completeness of placenta and membranes	Assists mother to initiate breastfeeding within one hour
Assesses for perineal and vaginal lacerations	

# Short L&D Index – why these items?

- The Short L&D Index seeks to reduce the burden of delivery observation – it therefore selects a small number of actions that have been found to be a good representation of overall care quality.
  - These are **NOT** the only actions that are important during L&D care.
  - The Short L&D Index is **NOT** a job aid, clinical guideline, or comprehensive checklist of everything that should happen during L&D care.

# Short L&D Index – standards of care

- Review the criteria that constitute the correct performance of each action in the Short L&D Index
  - Are there any actions with an ambiguous definition?
  - Are there any actions whose definitions have to be more specific or that have to be modified to reflect this country context?
  - Are there any actions that might be especially hard to observe or require extra practice?

# Short L&D Index – scoring

- Each observed delivery receives one point for each action that is completed in the Short L&D Index.
  - There is no partial credit – an action is either completely and correct done or it is not.
- Points are added to produce a delivery quality score.
  - The maximum raw score for the comprehensive index is 20 points. Dividing the raw score by 20 gives a percentage score.
  - The maximum raw score for the delivery-only index is 13 points. Dividing the raw score by 13 gives a percentage score.
- The average score across all deliveries observed at a facility should be used as the quality measure for that facility.
  - For example, if five deliveries are observed at a hospital using the comprehensive index and their scores are 11, 14, 12, 17, and 14, the hospital's Short L&D Index score is 13.6.

# Short L&D Index – recommended use

- Because of the resources required to observe delivery care, it is recommended that the Short L&D Index be used in facilities conducting  $\geq 2$  deliveries per day.
- The Short L&D Index should be used to make statements about care quality at the **facility** level, not the provider level.
- At least three deliveries should be observed at each facility before a statement is made about the quality of care at that facility.
  - However, data from just one delivery can be used to generate feedback for clinical mentoring or facility support.
- If possible, more than one healthcare provider should be observed to give a better picture of care at the facility.

# Short L&D Index – which version should I use? (1)

- The comprehensive index is preferable because it provides a more complete picture of care quality and is a stronger proxy for overall quality of care.
- However, if resources do not permit observation of full episodes of care, the delivery-only index is a good alternative
- The delivery-only index may be more suited to frequent, ongoing use (e.g., monthly or quarterly), while the comprehensive index may be better suited to periodic quality assessment (e.g., annually or at a project's baseline/endline).

# Short L&D Index – which version should I use? (2)

- A full episode of L&D care should be observed if using the comprehensive index.
- Delivery and one hour postpartum should be observed if using the delivery-only index.
- At any facility, it is recommended that just one version of the index be used for quality assessment at a single time point.

Thank you!

