

Piloting an Approach for Identifying Small Newborns Born at Home and Incorporating Targeted Message and Support

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Map of Federal Democratic Republic of Nepal according to Constitution 2015



### Background



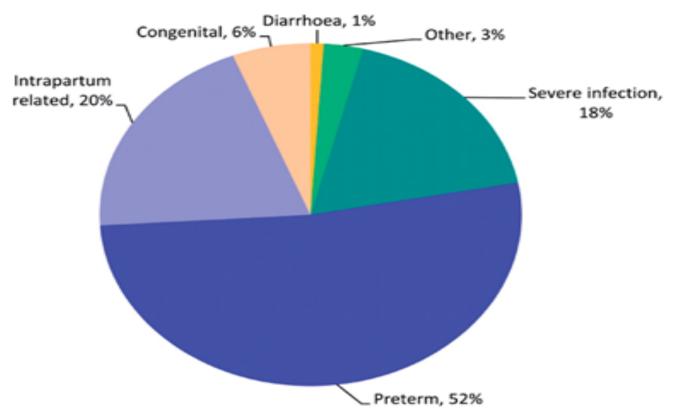
- More than 80% of neonatal deaths in sub-Saharan Africa and south Asia occur in small babies, and many could be prevented with simple newborn care.
- Neonatal Mortality not reduced as per targets.
- NMR-Comprises more than 60% of the under 5 Mortality.
- Hospital based study conducted in Nepal showed premature babies are 16 times more at risk of death compared to normal
- Small babies are also at a raised risk of longer term complications, including stunting, loss of human capital, and non-communicable diseases.



# Cause of neonatal deaths in Nepal

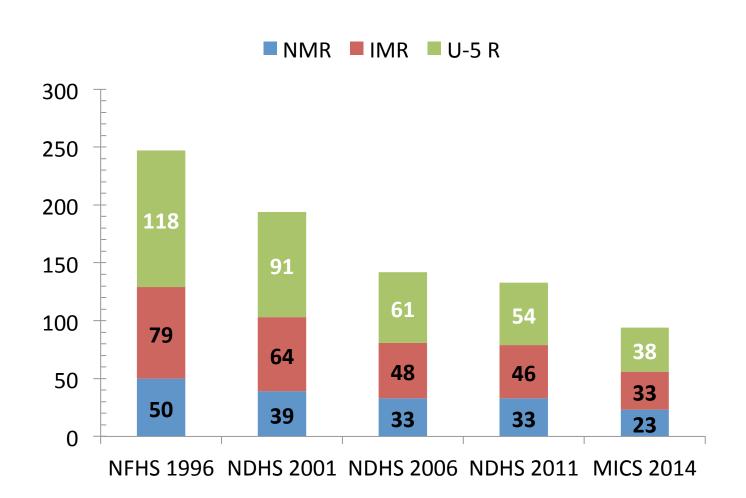


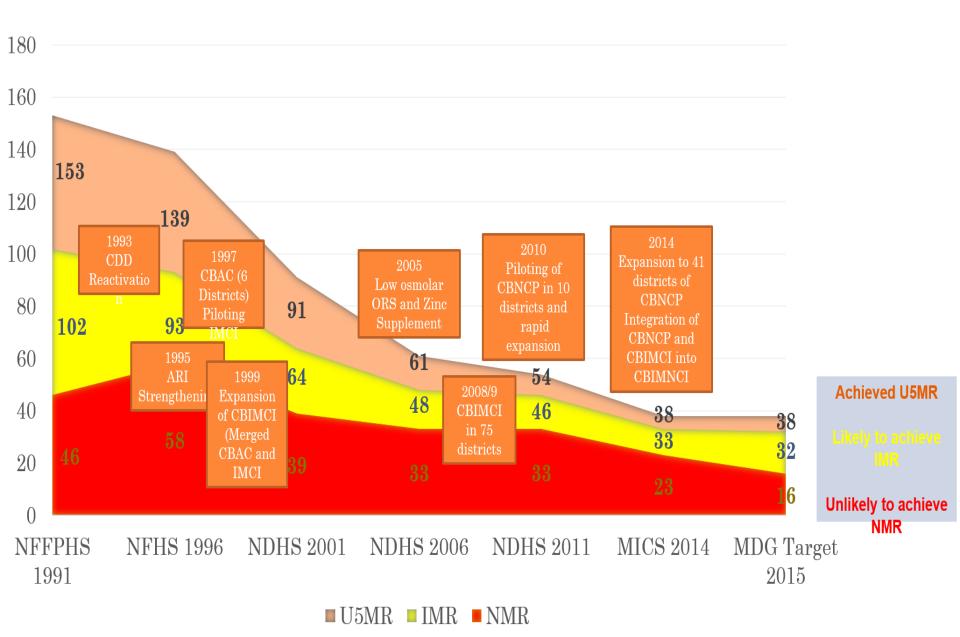
Estimated causes of mortality around the year 2010 for 20 000 neonatal deaths Data sources: Nepal-specific mortality estimates (Liu et al. 2012).



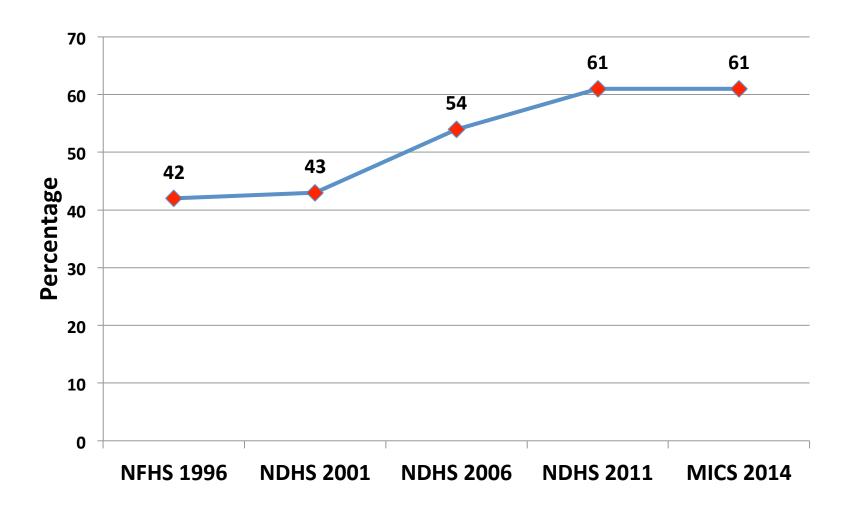
Y V Pradhan et al. Health Policy Plan. 2012;27:III57-III71

#### **Trend - Childhood Mortality Rate**





### Trend - Proportion of neonatal mortality among under-5 mortality





### Rationale of the intervention



- Low Institutional delivery and PNC
- •Integration of CB-IMCI & CB-NCP to CB-IMNCI
- Find out new community intervetion strategy



### **Program Intervetions**



 This program utilizes the fact that universal early initiation of certain behaviors can have a impact in reduction of mortalities associated with small babies and these behaviors can be initiated at the household level.

**Inability to feed**: Frequent feeding at 2 hours interval day and night and assisted feeding if the baby can't suck from the breast.

**Hypothermia**: Temperature maintenance by skin to skin contact as these babies are at high risk of hypothermia.

**Complications**: Early recognition of danger signs and early appropriate care seeking

These messages form the content of the IVR (Interactive Voice Response System) message.



## Why use foot Length card?

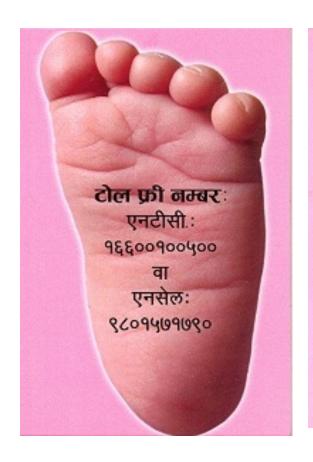


- A major problem in the community is identification of small babies and providing them with appropriate care.
- Foot length is a very simple screening tool that can be used at the community level for identification of small babies.
  - Card of 7.4 cm used in the pilot. (High sensitivity and low specificity) (Mullany et al. 2006)
  - Informed by studies done in various countries ( Nepal, India, Tanzania, Uganda, Taiwan)



#### Foot length card





- शिशु जन्मने बितिक्कै सुताएर
   चित्रकार्डले उसको दायाँ पैताला
   ठीकसँग नाप्नुहोस् ।
- शिशुको पैताला कार्ड भन्दा सानो
   छ भने शिशु खतरामा छ ।
- त्यसैले कार्डमा लेखिएको पैसा नलाग्ने नम्बरमा तुरून्त फोन गरी त्यसमा भनिए बमोजिम शिशुको स्याहार गर्नुहोस् ।
- साथै नजिकैको स्वयंसेविकासँग
   पनि सम्पर्क गर्नुहोस् ।

therma care skin to skin

Immediate and frequent breast feeding

Early care seeking and referral



### A two pronged approach



 This concept mainly utilizes the household and community portion with limited focus on further strengthening the health facilities.

An ideal program entails three prongs approach to a problem- Household, Community and Health facilities.CB-IMNCI will cover the HF part.



### Key steps of the program



1. Pregnant
woman
should receive
the card and
counseling on
its use

2. The caretaker should use the card correctly

3. The families should call the IVR system if their baby is identified small

4. The families should understand the messages

5. The families should apply the suggested behaviors



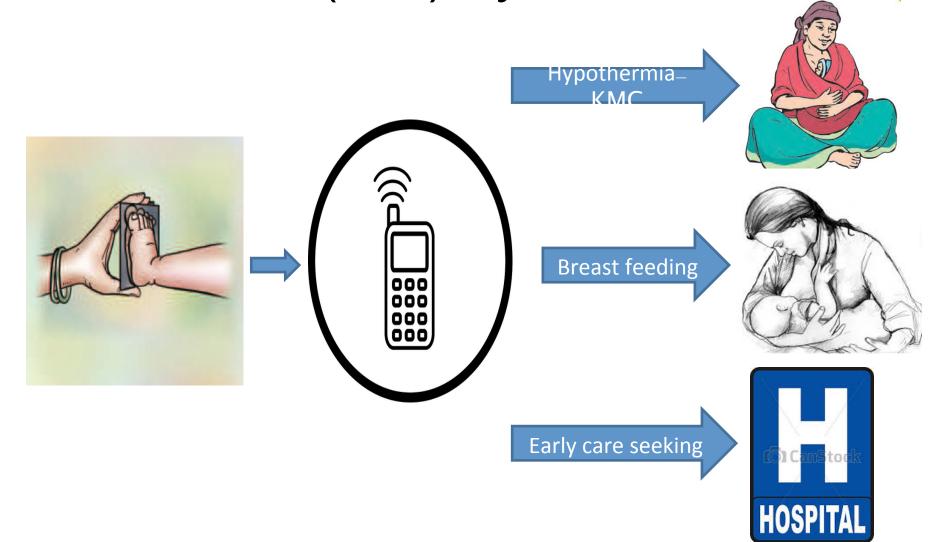
### Sustainability



- In the pilot districts (TA from Save the Children, SNL) the program has been integrated with existing programs (IMNCI and BPP) and keep it very light and scalable within the existing government health system which means very less extra programmatic inputs.
- This has limited the opportunities to check performance to a few aspects of the study.
- So a supplementary study is planned in +districts: Sarlahi to validate steps 2-4 of the program and if shown to be effective also the step 5 will be validated.



# Interactive Voice Response (IVR) System







## Thank You