The Last Ten Kilometers Project: The Past and The Present
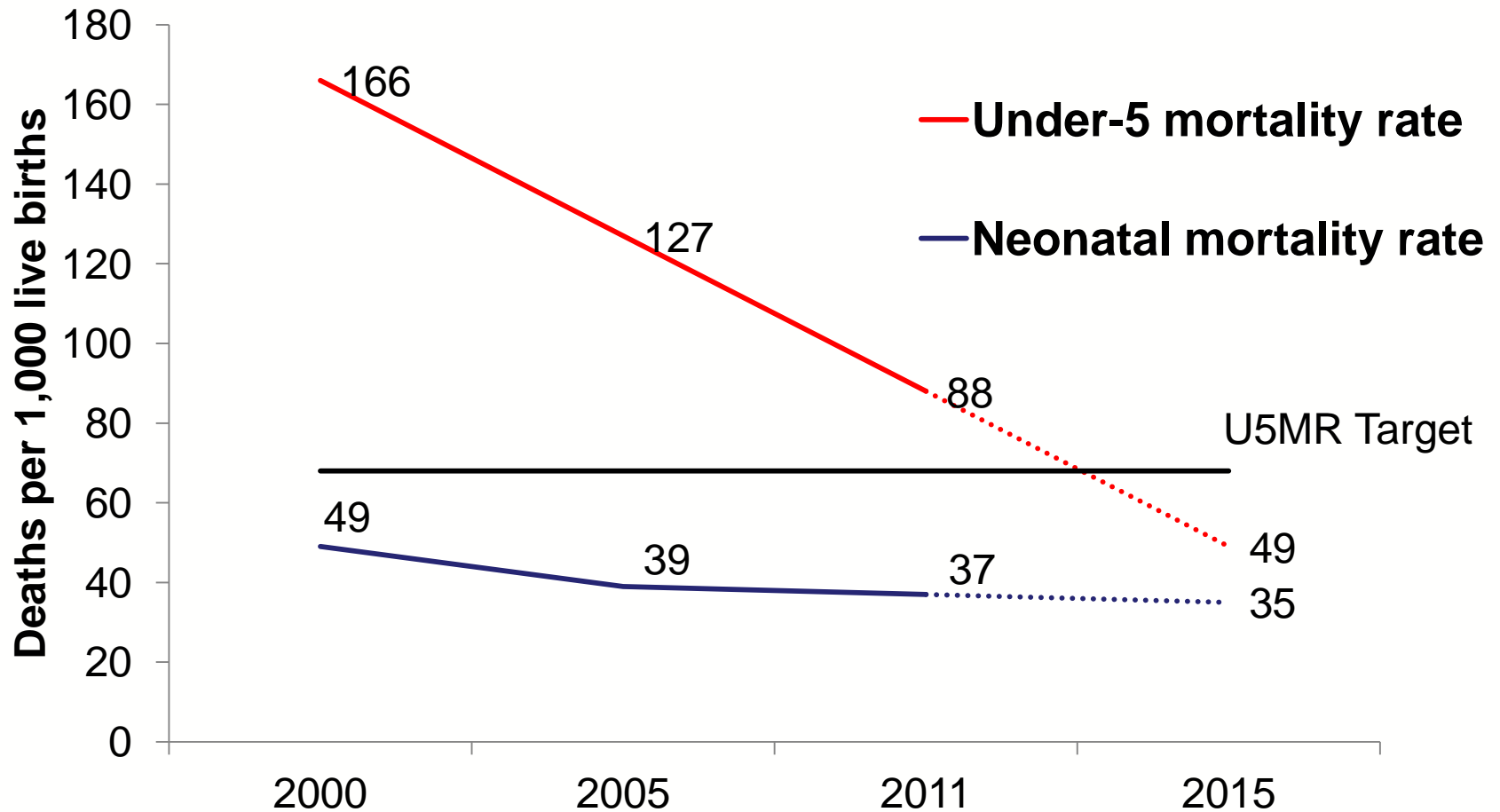
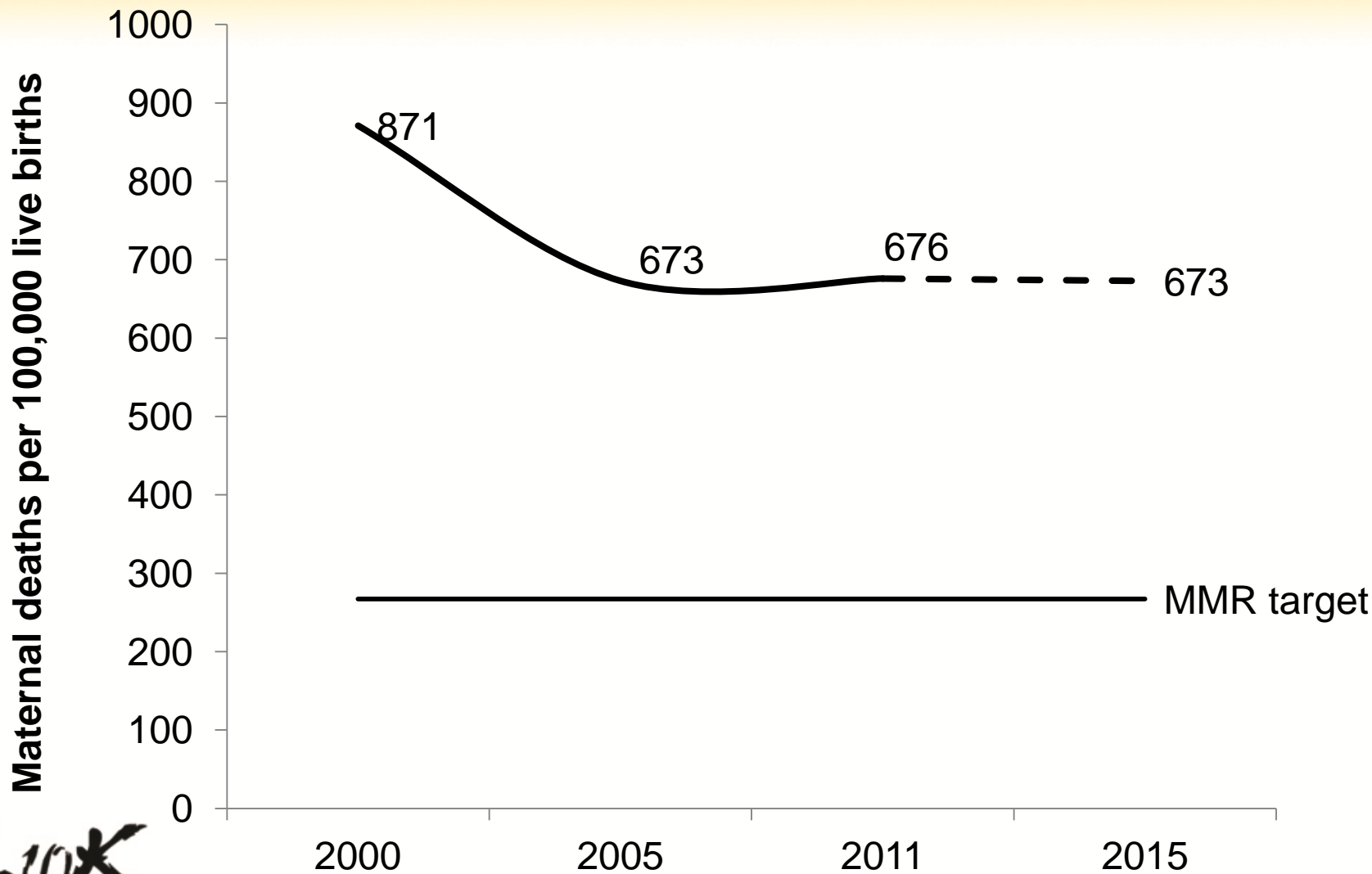JSI, Washington DC

July 18, 2013

Ethiopia: Background

- Population: 83 million (85% rural)
- Over 2.5 million people are added every year
- GDP per capita 370 USD
- On track towards achieving MDGs 4 & 6, i.e., improving child survival & combating HIV/AIDS, malaria, and tuberculosis
- However, improving maternal health related MDG 6 remains a challenge

Trends in U5 and Neonatal Mortality Rates in Ethiopia

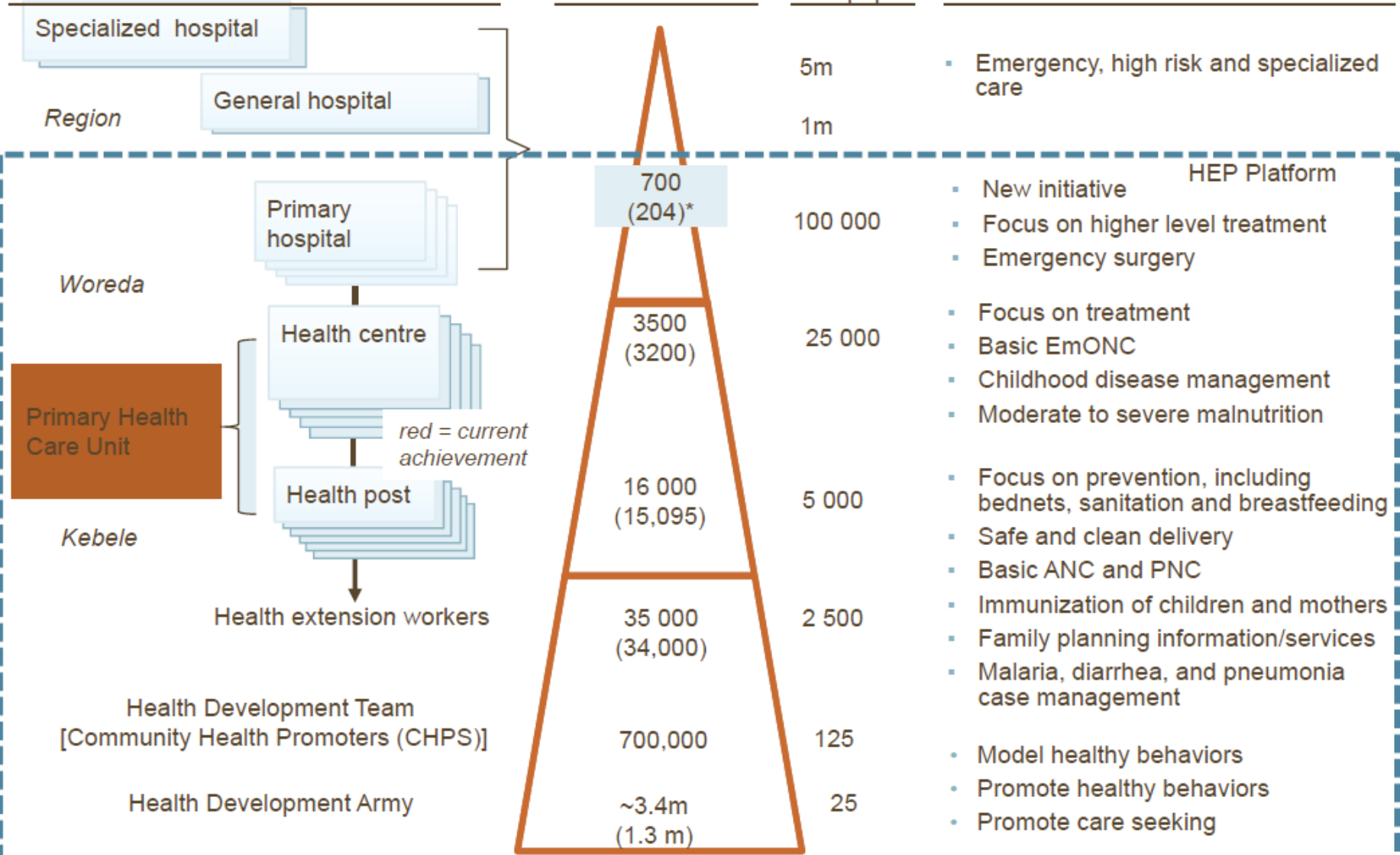# Maternal Mortality Ratio (MMR) Trend

Ethiopia Health System

Health care delivery system	No. of public facilities	Catchment area pop	Type of service offered
Specialized hospital		5m	• Emergency, high risk and specialized care
Region — **General hospital**		1m	
Woreda — **Primary hospital**	700 (204)*	100 000	**HEP Platform** • New initiative • Focus on higher level treatment • Emergency surgery
Health centre	3500 (3200)	25 000	• Focus on treatment • Basic EmONC • Childhood disease management • Moderate to severe malnutrition
Primary Health Care Unit — **Health post**	16 000 (15,095)	5 000	• Focus on prevention, including bednets, sanitation and breastfeeding • Safe and clean delivery • Basic ANC and PNC
Kebele — Health extension workers	35 000 (34,000)	2 500	• Immunization of children and mothers • Family planning information/services • Malaria, diarrhea, and pneumonia case management
Health Development Team [Community Health Promoters (CHPS)]	700,000	125	• Model healthy behaviors
Health Development Army	~3.4m (1.3 m)	25	• Promote healthy behaviors • Promote care seeking

red = current achievement

*Includes public + private facilities

Health Extension Program (HEP)

- Launched in 2004 to improve access and equity to primary health care

- It aims at transferring ownership and responsibility of improving health to individual households

- Two female HEWs, with one year pre-service training, posted at Health Post to serve 1,000 HHs (5,000 population)

Evolution of HEP

2004/ 2008 ESHE	• **Train and deploy 30,000 HEWs** • **Mainly primitive and preventive care: focused on hygiene, sanitation, family planning & immunization** • **Model family training** • **Community health promoters (CHP)**
2009	• **Safe & clean delivery** • **Implanon training launched** • **CHP density increased from 1:50 HHs to 1:30 HHs (*)**
2010	• **Implanon scale-up** • **ICCM launched (*)**
2011	• **ICCM scale-up (*)** • **IRT – community based maternal & newborn care (*)** • **Health development army (HDA)** • **Primary Health Care Unit**
2012-	• **Institutional delivery: Ambulance & BEmONC (*)** • **Neonatal sepsis pilot (*)**

(*) L10K & IFHP facilitated and supported

L10K Project

Goal:

Strengthen the bridge between Ethiopian families, communities and the HEP and contribute to the achievement of sustainable Maternal, Neonatal and Child Health (MNCH) improvements at scale

Project Period:

The past: Oct 2007 – Sep 2012

The present: Oct 2012 – June 2015 (supplemental period)

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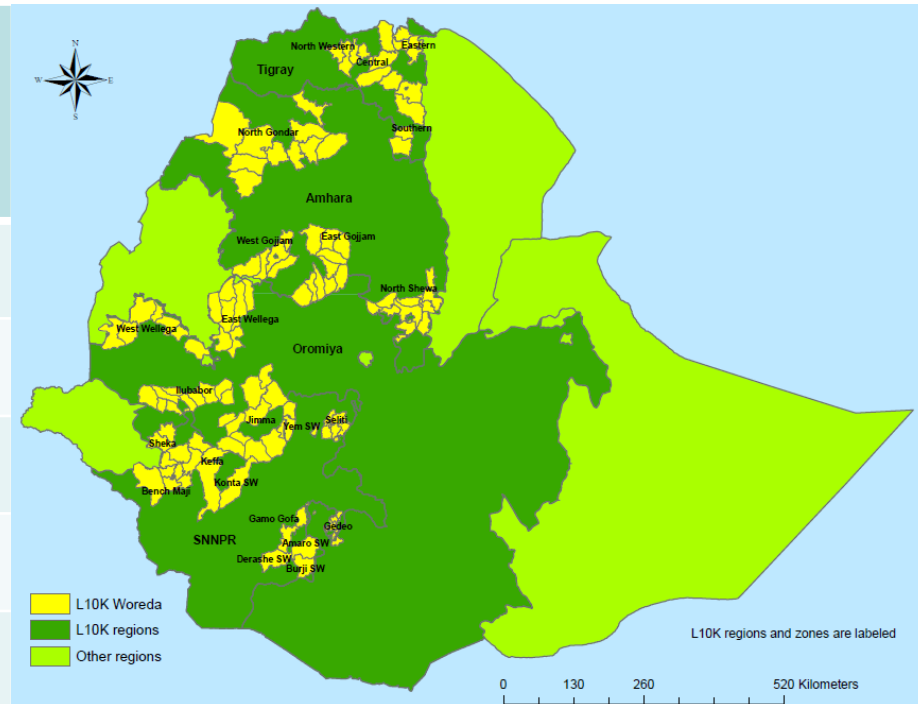
L10K Project

Principles:

- Works closely with the Ethiopian government, development partners, and provides technical and financial support to 12 civil society organizations

- Provides grants and technical support to 12 local CSOs to implement its 'platform'

- Implements community based strategies to improve interactions between households (HHs), communities and the Ethiopian health systems to improve MNCH at scale

- Demonstrates community based models for evidence based scale-up

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JSI

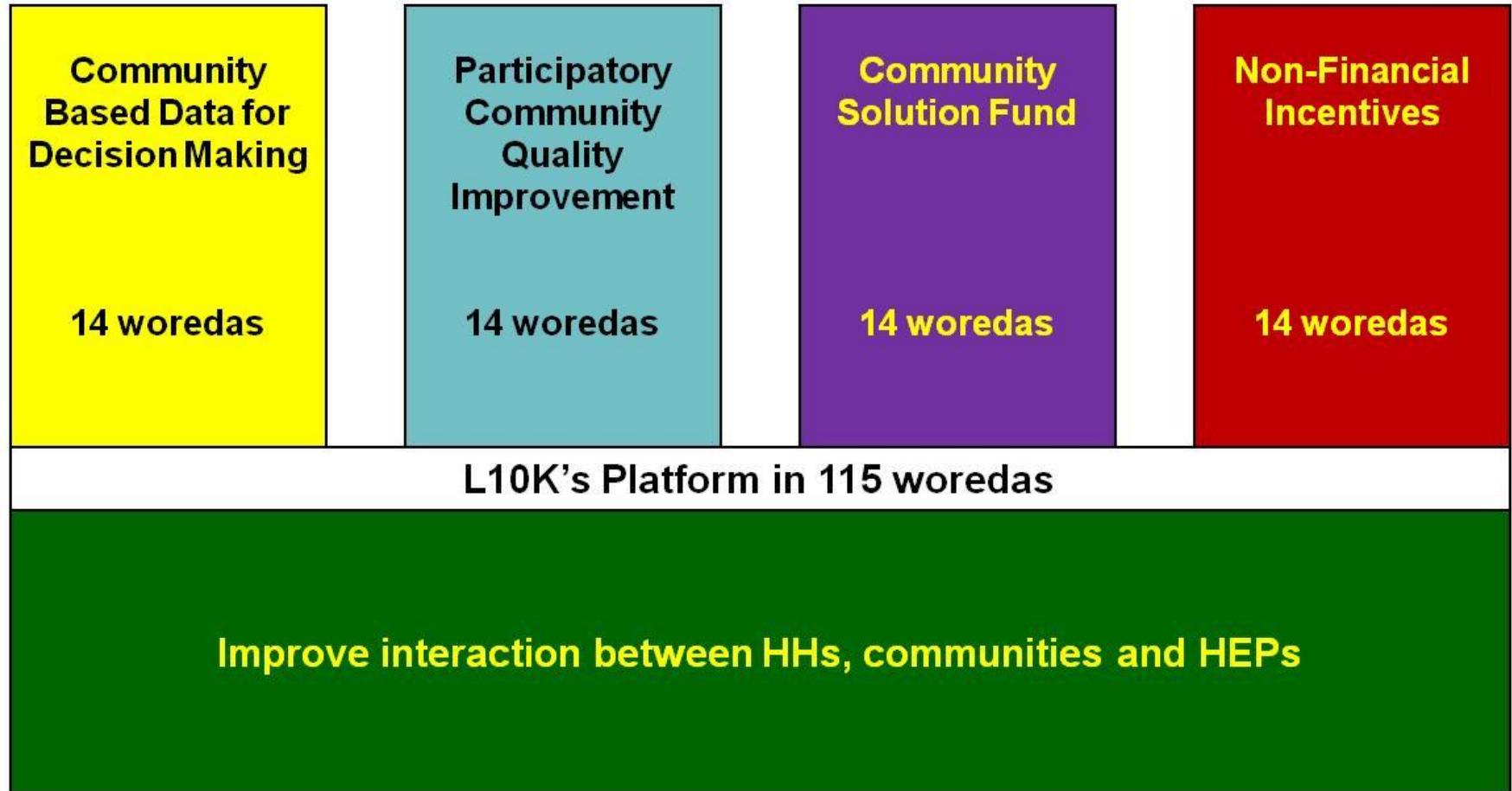# L10K Project Coverage

L10K Platform funded by Bill & Melinda Gates Foundation

Region	Woredas	Pop. (in millions)	% of Total Pop.
Amhara	35	4.7	27
Oromiya	35	3.6	13
SNNP	30	3.0	20
Tigray	15	1.7	40
Total	115	13.0	20

L10K Community Strategies: The Past

L10K Community Strategies: The Past

Community Based Data for Decision Making	Participatory Community Quality Improvement	Community Solution Fund	Non-Financial Incentives
14 woredas	14 woredas	14 woredas	14 woredas

L10K's Platform in 115 woredas

Improve interaction between HHs, communities and HEPs

L10K's Platform

- Enhance the skills of HEWs to provide community-based maternal, newborn, and child health (MNCH) services

- Facilitated the development of Family Health Card and its use to engage communities & HHs to take health actions to improve MNCH services

- Support HEWs to organize and support CHPs/HDAs for more, equitable services

- Anchor volunteerism in local institutions sustain MNCH outcomes

- Regular supportive supervision

- Woreda-level review meetings

Community Based Data for Decision Making (CBDDM)

CBDDM strategy to facilitate the use of data at lower level to improve performance :

- Use of mapping by CHPs/HDA members to facilitate the surveillance of 30 HHs in their command area to help HEWs provide targeted MNCH services by identifying households with need of services

- Use data for monitoring coverage indicators, identify gaps and draw actionable solutions to improve performance

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Volunteers using map of her catchment area

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CBDDM register
Pregnancy through deliver

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CBDDM Registry
PNC through infancy

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PCQI and CSF

Participatory Community Quality Improvement (PCQI)

- Enables greater involvement of the community to define, implement & monitor quality of MNH services
- Emphasizes responsibility for problem identification and solving by both the HEW and community

Community Solution Fund (CSF)

- Small grants mechanism to communities to enable them identify and address bottlenecks improved MNH

Non Financial Incentives

- Test non-financial motivational mechanisms to recognize the contribution of CHP/HDA and sustain their efforts

  - Qualitative assessments showed that having knowledge about healthier practices for themselves and to share with their neighbors, recognition of their efforts, training to be imperative for sustained engagement

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Midterm Assessment

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Methods

Baseline and midterm surveys (household & community) surveys conducted in Dec. 2008 & Dec. 2010

– Assess improvements in MNCH care practices between Dec. 2008 and Dec. 2010

– Assess program effectiveness:

  • Dose-response relationship: whether *kebeles* with higher program intensity were associated with better MNCH indicators

  • Difference-in-difference: Whether improvements in MNCH indicators in platform with CBDDM areas were higher than those in the platform only areas

  • Disparities in MNCH indicators (according to wealth, age, education, ad geography)
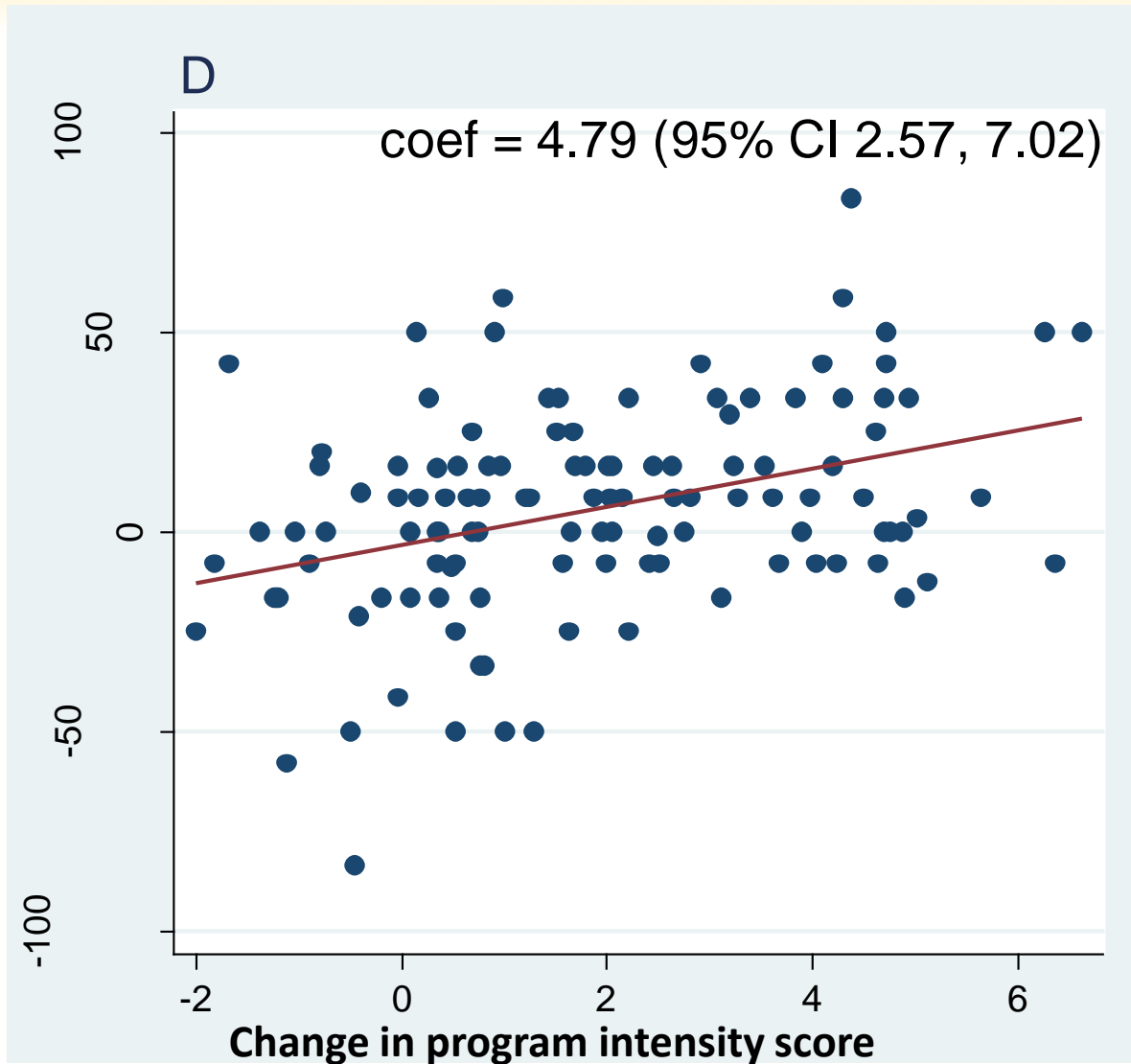
Improvements in MNCH Outcomes

Bar chart comparing 2008 and 2010 values for MNCH outcomes:

Outcome	2008	2010
CPR	30	41
ANC	50	69
TT2+	39	47
Skilled deliveries	11	15
Institutional deliveries	7	10
PNC	8	23
PNC in 48 hrs	2	7
Colostrums given	42	54
Delay bathing	27	47
Exclusive breastfeeding	64	80
Measles vaccination	70	76

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PLOS | ONE

Effect of Ethiopia's Health Extension Program on Maternal and Newborn Health Care Practices in 101 Rural Districts: A Dose-Response Study

Ali Mehryar Karim[1]*, Kesetebirhane Admassu[2], Joanna Schellenberg[3], Hibret Alemu[1], Nebiyu Getachew[1], Agazi Ameha[1], Luche Tadesse[1], Wuleta Betemariam[1]
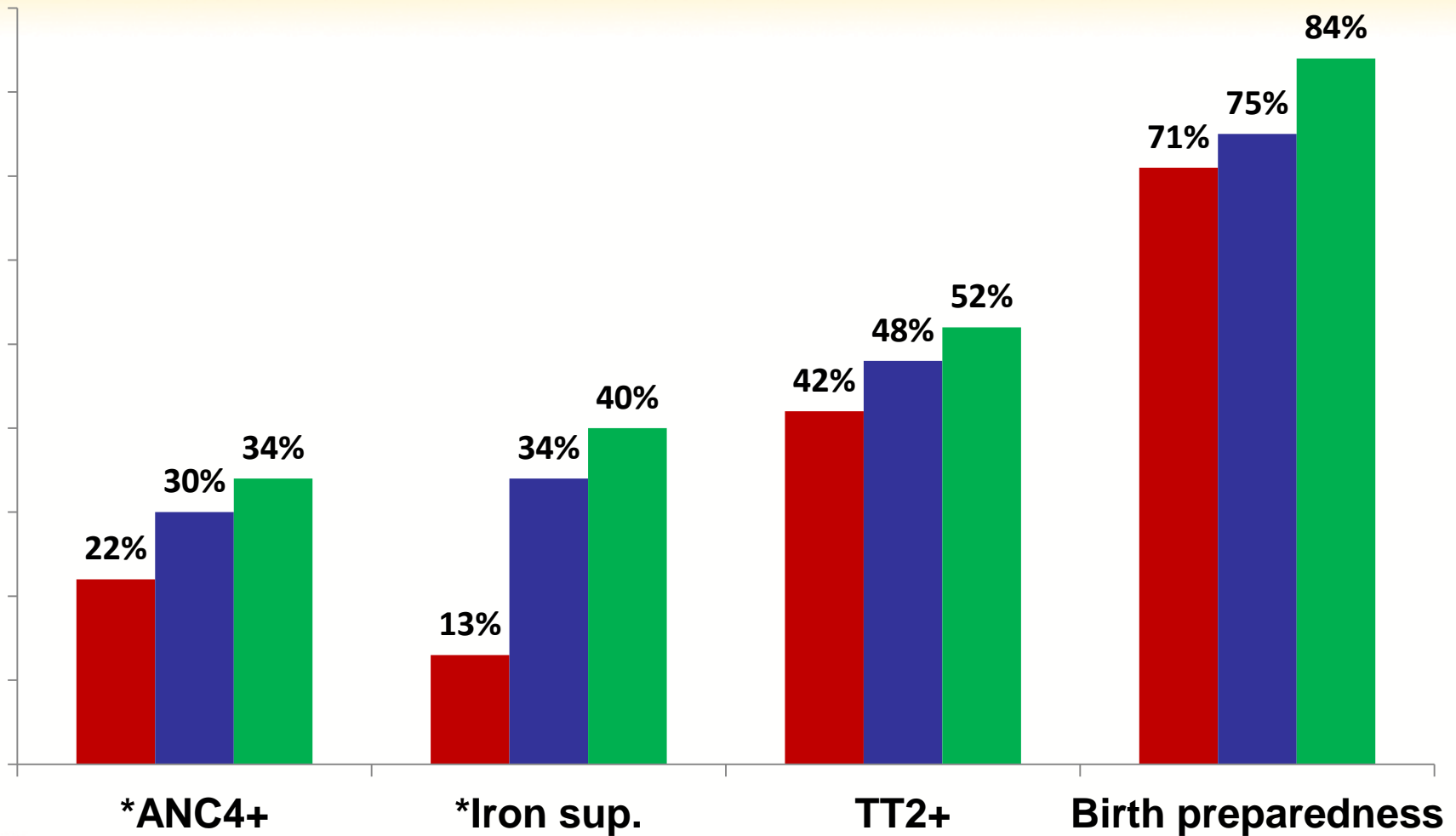
1 The Last Ten Kilometers Project, JSI Research & Training Institute, Inc., Addis Ababa, Ethiopia, 2 Federal Democratic Republic of Ethiopia, Ministry of Health, Addis Ababa, Ethiopia, 3 London School of Hygiene & Tropical Medicine, London, United Kingdom

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Dose-Response Relationship

Difference-in-Difference

Legend: ■ Baseline ■ Midterm (platform) ■ Midterm (platform & CBDDM)

*ANC4+: 22%, 30%, 34%
*Iron sup.: 13%, 34%, 40%
TT2+: 42%, 48%, 52%
Birth preparedness: 71%, 75%, 84%

*Statistically significant (two-tailed p<0.05) difference-in-difference

Summary of Findings

Effectiveness

- HEP is an effective platform to improve community-based MNCH at scale

- L10K support to HEP was critical

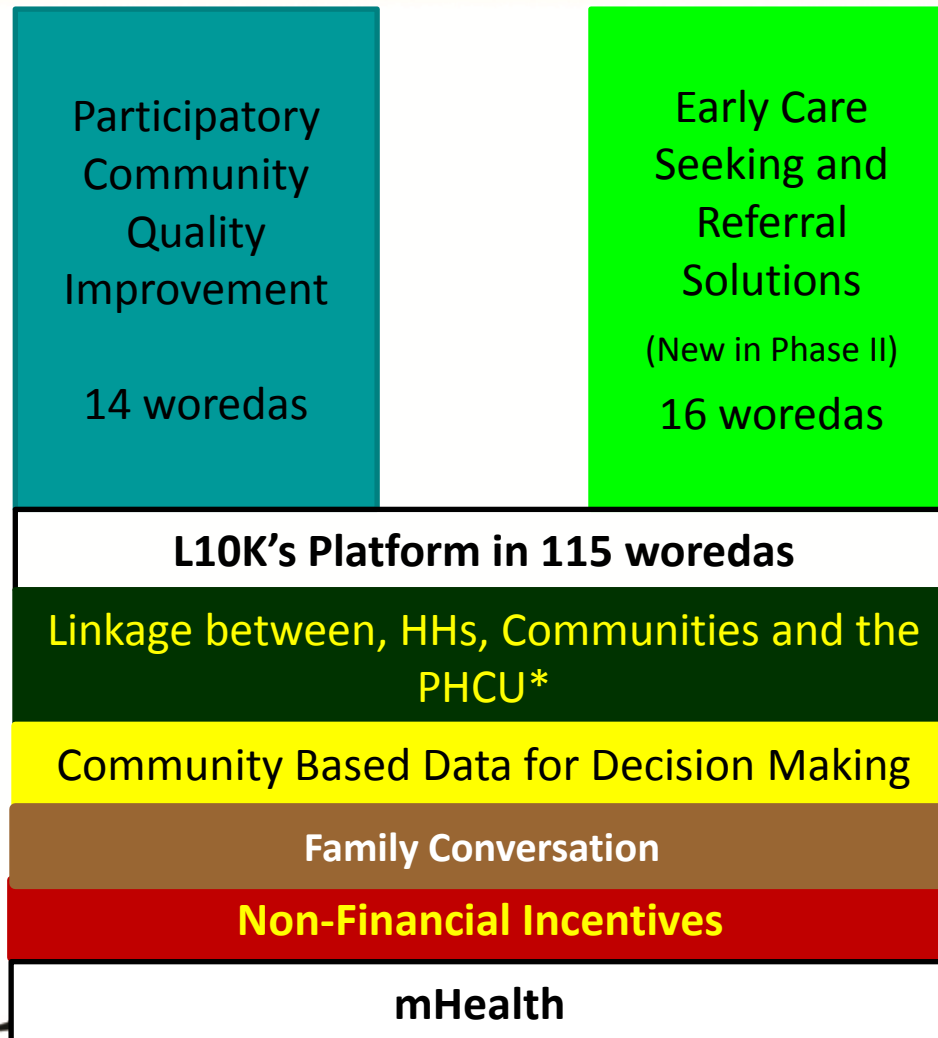- L10K/HEP had no effect on improving skilled deliveries

Equity

- Disparities in MNCH care practices were most prominent by education, followed by women's age, household wealth, and geography

Factors Driving Supplemental Strategies

- Midterm assessment findings – improvement in key MNCH indicators in general and the added value of CBDDM in improving key household behaviors and practices

- New government policies
  - Health Development Army
  - Strengthening PHCUs
  - Further improvement needed on delivery and postnatal care: early care seeking and referral solution

L10K Community Strategies: The Present

Participatory Community Quality Improvement 14 woredas	Early Care Seeking and Referral Solutions (New in Phase II) 16 woredas

L10K's Platform in 115 woredas

Linkage between, HHs, Communities and the PHCU*

Community Based Data for Decision Making

Family Conversation

Non-Financial Incentives

mHealth

Referral Solutions

Demonstrate innovative processes and solutions that improve effective care-seeking and response for critical maternal and newborn health conditions

3 Step Process

Step 1: Assess referral resources and gaps

Step 2: Participatory process to generate solutions

Step 3: Active management of referral

Leveraging Resources

Evolution of the HEP coupled with L10Ks strong MNCH platform has resulted in:

- ICCM expansion (UNICEF and USAID)
  - New technical area added to platform; platform being expanded to new woredas (217 woredas)

- Neonatal sepsis management to be added to platform (UNICEF)

- Resource for BEmONC strengthening added to complement the new referral work (USAID)