



*Countdown to 2015*  
*Maternal, Newborn & Child Survival*

# Countdown to 2015

## In-Depth Country

### Case Study:

# Afghanistan

Presented by:  
Nadia Akseer, MSc, PhD Candidate

University of Toronto  
Hospital for Sick Children  
Toronto, Canada

# Main Objectives

- To conduct a systematic, comprehensive assessment of RMNCH, nutrition, and survival trends in Afghanistan in the 2001-2014 “post-Taliban” era
- To perform an analysis of RMNCH-specific health systems components, policies, and financial flows
- To determine key predictors of change in health service utilization

# Data Sources: Household Surveys

- National surveys

<i>Survey</i>	<i>Year</i>	<i>Coverage</i>
Expanded Program on Immunization Census	2013	National & Provincial
National Nutrition Survey	2013	National & Provincial
National Nutrition Survey	2004	National
Afghanistan Health Survey	2012	National
Afghanistan Health Survey	2006	National
Multiple Indicator Cluster Survey	2010-11	National & Regional
Multiple Indicator Cluster Survey	2003-04	National & Regional
Afghanistan Mortality Survey	2010	National & Regional
National Risk and Vulnerability Assessment Survey	2011-12	National & Provincial
National Risk and Vulnerability Assessment Survey	2007-08	National & Provincial
National Risk and Vulnerability Assessment Survey	2005-06	National & Provincial

- Facility-based surveys: Balance Score Cards (2004 – 2013)
- Health workforce data (2005 – 2013)
- Telecommunications data: Mobile phone tower frequency/spread
- Security/casualties data: HMIS data from MoPH

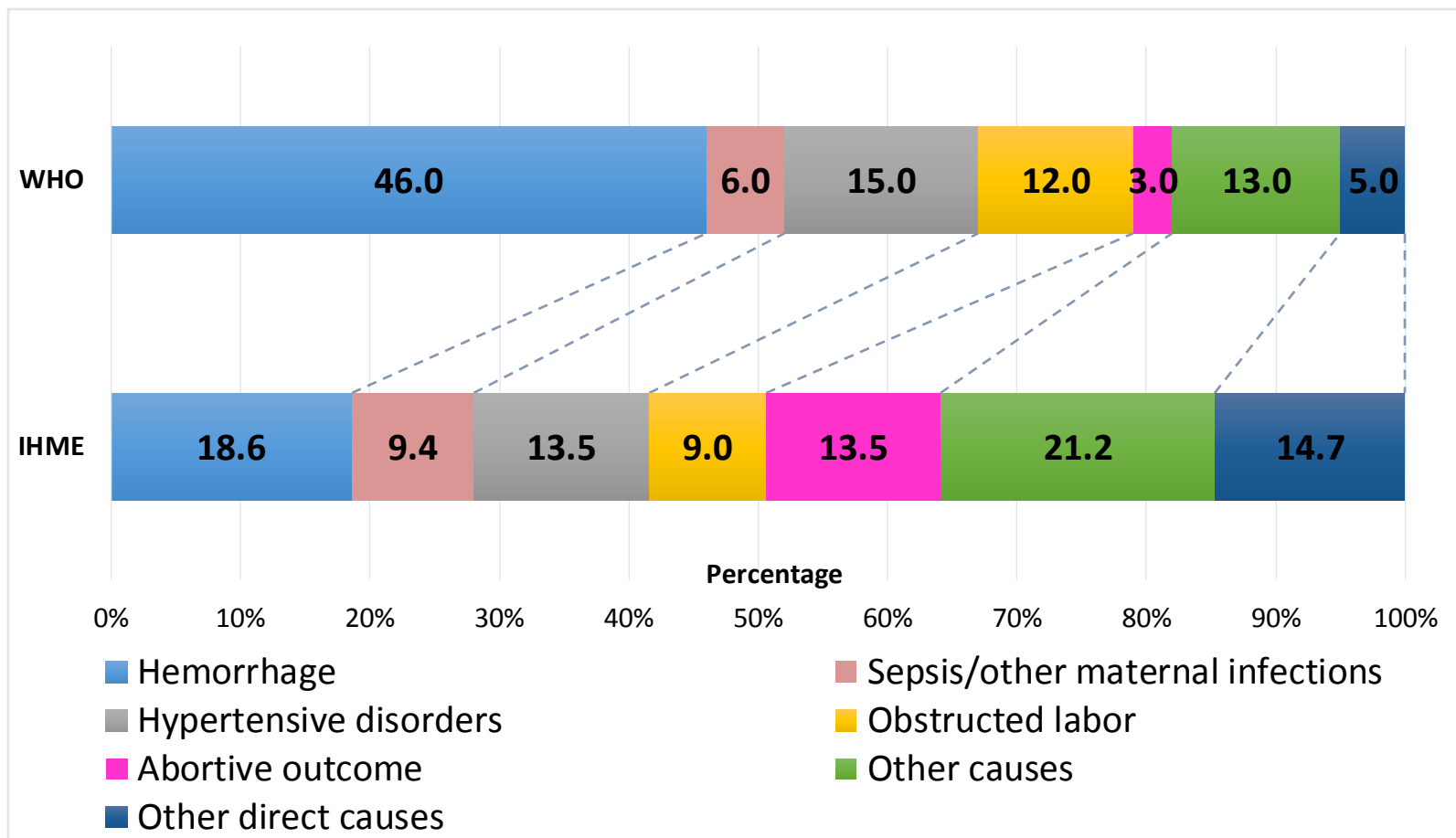
# Mortality Trends: MMR

- **Target:** Reduce MMR to 50% of it's 2003 level (i.e. reduce to 529 per 100K live births) by 2015
- **Result:** MMR decreased from 1057 in 2000 to 402 in 2013
  - Reduction of 62% between 2000 to 2013
  - ***Afghanistan has achieved MDG5a***

Source: UN-MMEIG, 2014

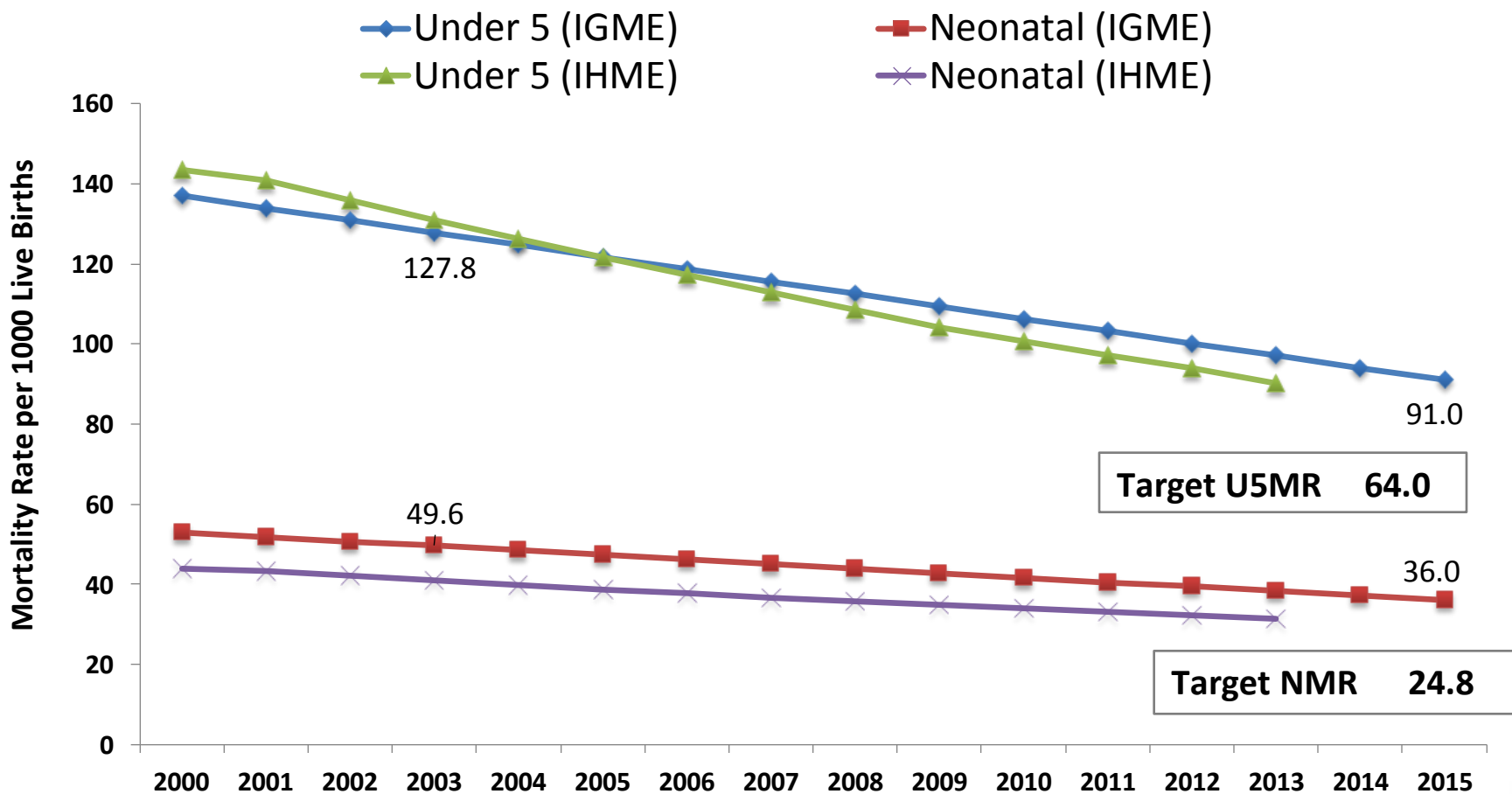
\*Note: IHME reports conflicting results indicating increase in MMR (885 in 2013)

# Causes of Maternal Death



*\*Respective sample sizes are:  
WHO n=63,585 (estimated for years 2003 to 2009)  
IHME n=8,778 (year 2013)*

# Mortality Trends: U5MR, NMR



# Neonatal Cause of Death

Major causes of neonatal (1-27 days) and post-neonatal death **have not changed from 2001 to 2013:**

## ***Neonatal***

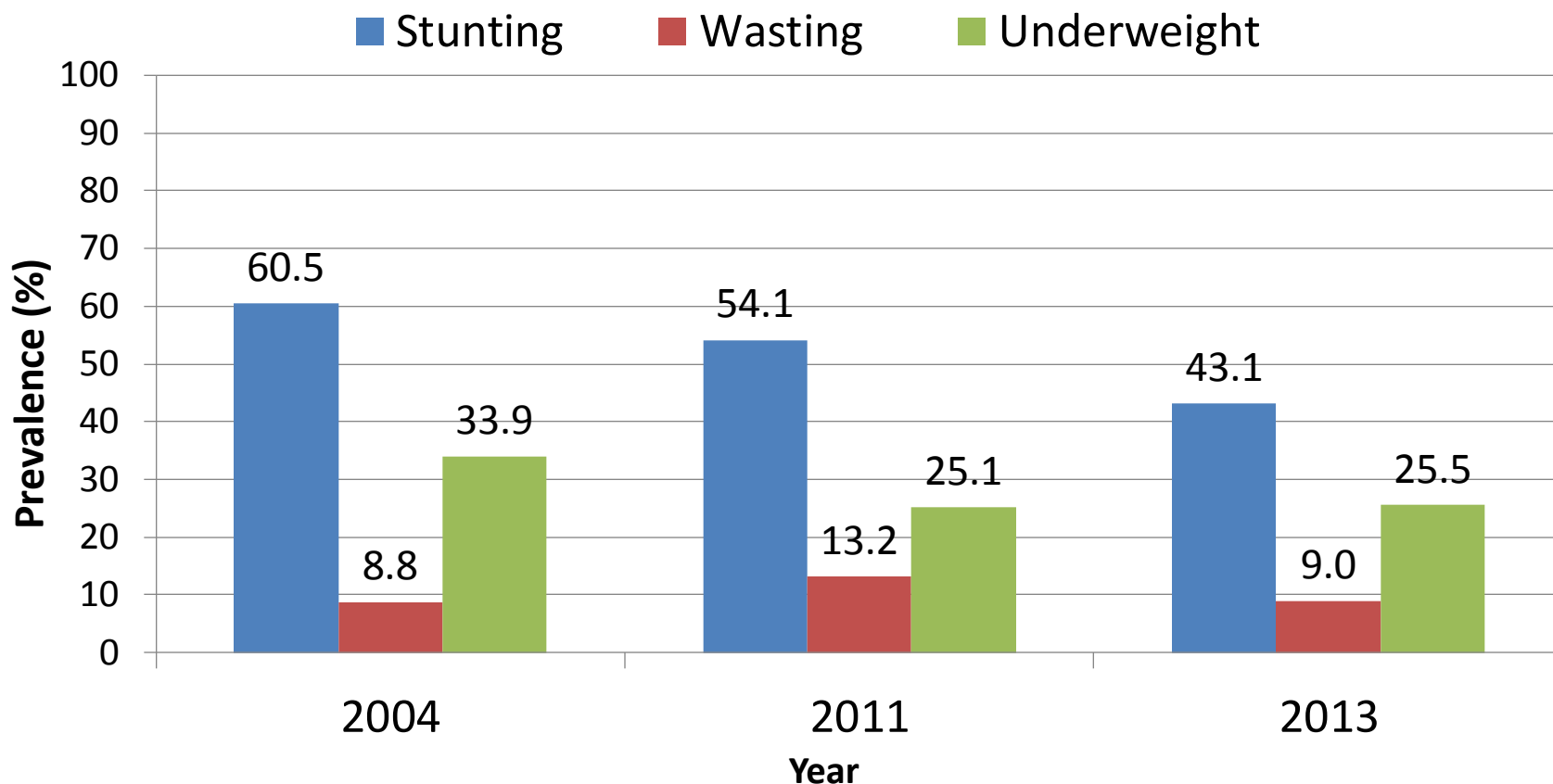
- Preterm birth complications (29% vs. 28%)
- Intrapartum related events (23% vs. 29%)
- Infections including sepsis, meningitis, and tetanus (20% vs. 23%)

## ***Post-neonatal***

- Diarrhea (24% vs 20%)
- Pneumonia (26% vs 28%)

# Nutrition

## Trends in anthropometric nutrition outcomes, children 6-59 months

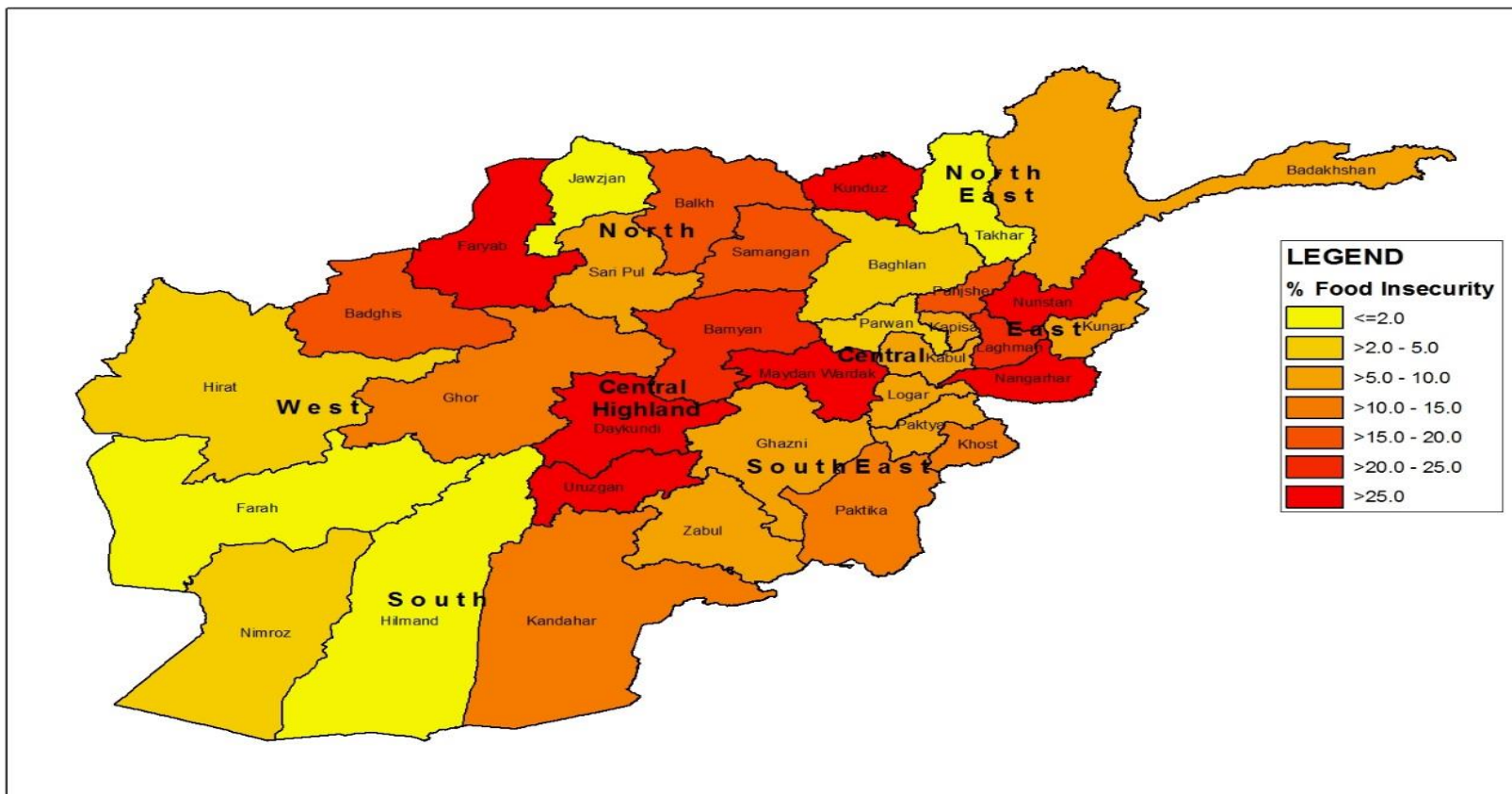


Sources: National Nutrition Survey, 2004, 2013. Multiple Indicator Cluster Survey 2010/11.



# Food Insecurity

## Prevalence of food insecurity across provinces in Afghanistan, 2013



Source: National Nutrition Survey, 2013

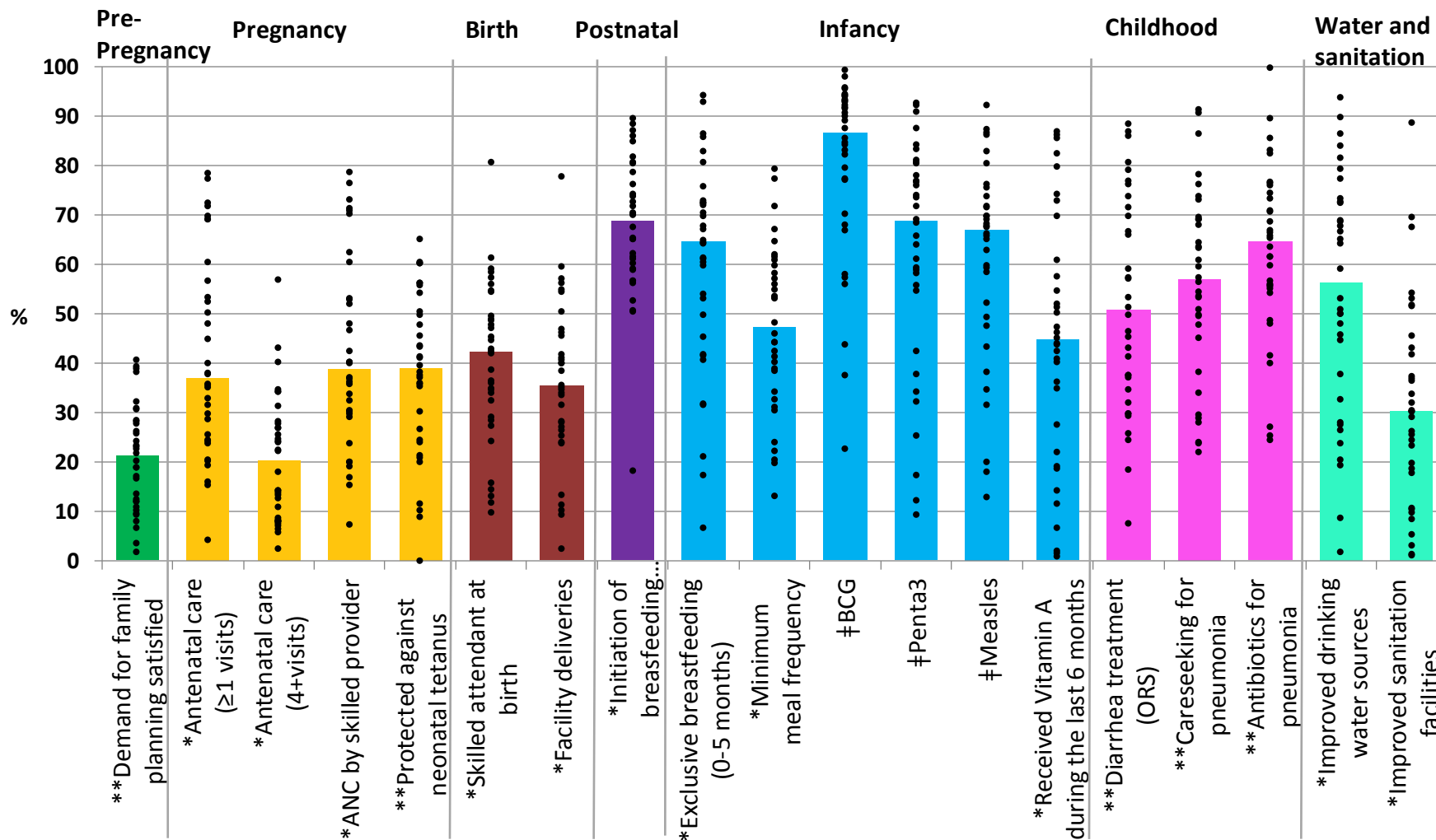
# Coverage Inequity: Provinces

Coverage of interventions varies across the continuum of care

Median national coverage of selected interventions

\*\*MICS 2010, \*NNS 2013 & ‡EPIC 2013

• Provincial Coverage (%)



## High-impact initiatives

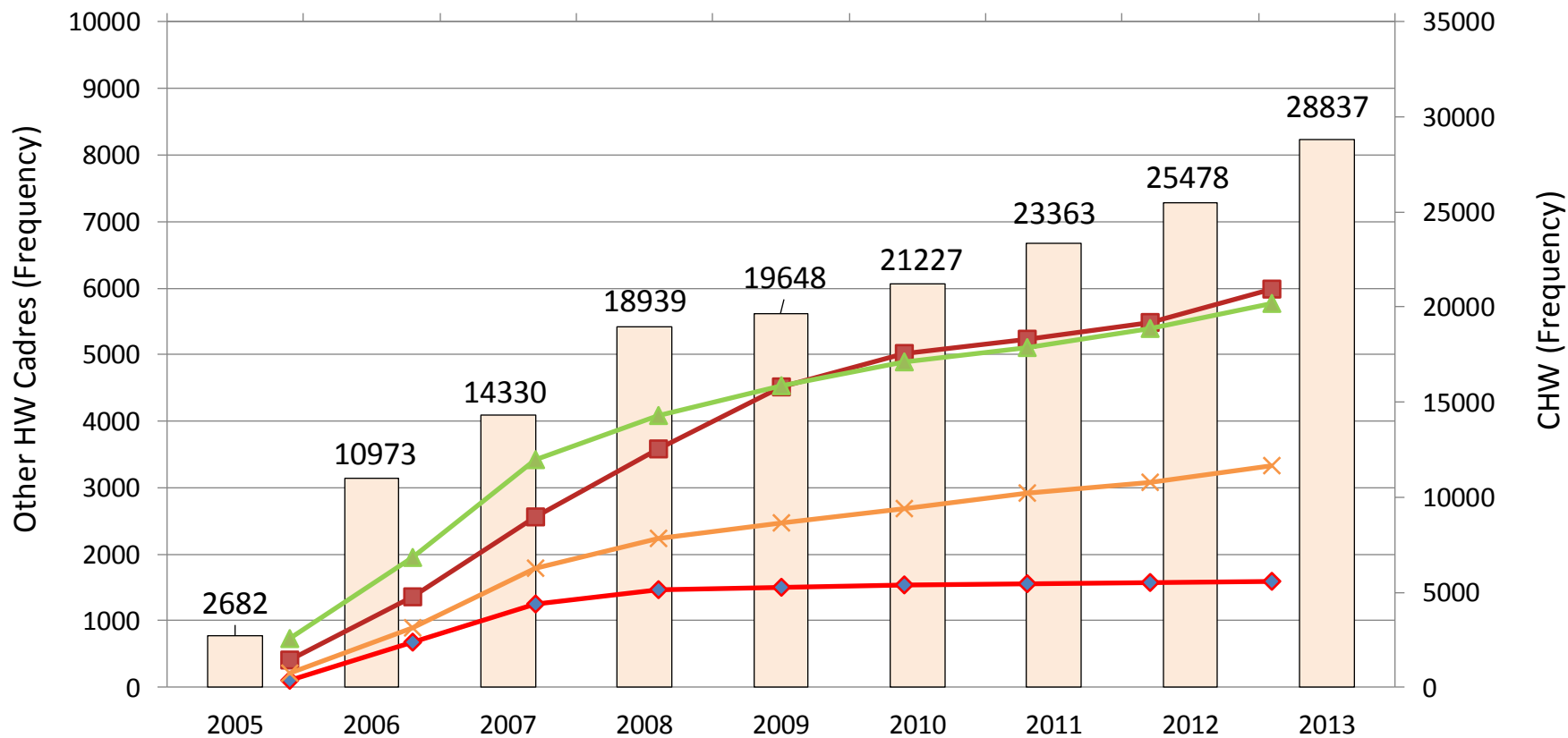
- Implementing the Basic Package of Health Services (BPHS)
- Adapting the contracting-out mechanism
- Implementing a standardized national salary policy to motivate health care workers to work in rural areas
- Implementing national programmes (EPI, Malaria, TB, HIV/AIDS, CBHI, Nutrition, etc.)
- Training midwives
- Implementing the Essential Package of Health Services (EPHS)

## Essential health system factors

- Strong stewardship by Ministry of Public Health
- Effective coordination and communication
- Regular monitoring
- Health management information system
- Health system performance assessment and facility surveys (Balance Score Cards) conducted through 3<sup>rd</sup>-party mechanisms

# Health Workforce

Community Health Workers MD Specialists MD Generalists Nurses Midwives



Source: HR department, MoPH Afghanistan

## Lives Saved Tool (LiST)

- Over 85% of all deaths could be averted by scaling up all intervention packages to 90% coverage level by 2025
  - Approx. 135,000 deaths averted annually
  - 84% of neonatal, 92% of post-neonatal, and 89% of maternal deaths

## Lives Saved Tool (LiST)

- **Most high impact:** + 50% in EmOC and immediate newborn care → ~9,900 newborn lives saved
  - + 90% → ~30,900 newborn/4,400 maternal lives saved
- Universal coverage of **immunization** → 30,700 child deaths averted annually
- **Water, hygiene, and sanitation interventions** scaled up by 75% from current levels → 16,100 child deaths averted
- **Infant and young child feeding** programs scaled up by 25% from current levels → ~12,100 post-neonatal lives saved

# Key Findings

- Afghanistan has made **remarkable progress** over a decade, but **vast subnational inequities remain**.
- **Donor support**, strong **stewardship**, effective **health policy** frameworks, improved **access to care**, and increases in **skilled health workers** contributed to success
- Further reductions in under-5 mortality require substantial **investment in newborn care** and in interventions to **target stunting**
- Contextual factors, including **education** and **infrastructure** (communication and transport systems), and **health system strengthening** are critically important



## Afghanistan must focus on

- **increased investments in social determinants of health**
- **interventions to address newborn survival**
- **Strategies to reduce health inequities**

### *Afghanistan Case Study Research Team*

Nadia Akseer, MSc, PhD (Candidate)

Ahmad S Salehi, MD, MSc, MBA, PhD (Candidate)

S M Hossain, MD, MPH, MBA

M Taufiq Mashal, MD, PhD

M Hafiz Rasooly, MD, MSc

Zaid Bhatti, MSc

Arjumand Rizvi, MSc

Zulfiqar A Bhutta, MD, PhD