World Health Organization

unicef

#EveryNewborn #EveryChildAlive

CHAPTER 6

Immediate action is needed

KEY MESSAGES

1. Expanding coverage of key interventions before, during, and after pregnancy could save the lives of nearly 2.9 million women, newborns and stillbirths by 2030 in **81 priority countries.**

2. 1.7 million newborn lives could be saved each year by investing in quality newborn care; almost half of this impact (747,400 newborn lives saved per year) would result from providing special and intensive hospital care for small and sick newborns.

3. Reaching the targets of the SDGs and the Every Newborn Action Plan to end preventable newborn mortality by 2030 requires transforming care for small and sick newborns through health system investments, stakeholder collaboration and engagement, implementation, information and innovation.

KEY MESSAGES

1. LIVES SAVED:

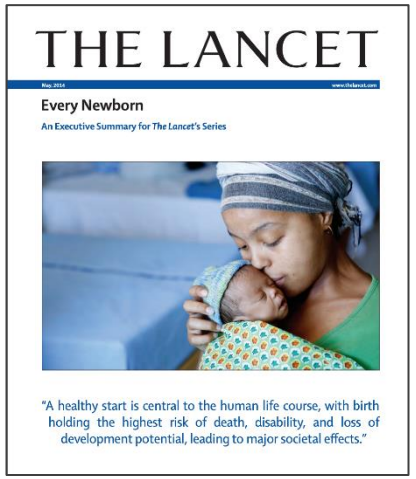
Expanding coverage of key interventions before, during, and after pregnancy could save millions of women, newborns and stillbirths.

Lives Saved Analysis

- The Lives Saved Tool is a mathematical modeling tool which allows users to estimate the impact of coverage of key interventions on mortality in low- and middle-income countries.
  - Widely used by UN agencies, government, implementing partners and academics for health planning and advocacy;
  - More details on the methods and data available at www.livessavedtool.org

- Chapter 6 presents results from an updated lives saved analysis based on information published in *The Lancet* Every Newborn series in 2014.

- A costing analysis is also presented.



Analysis Summary

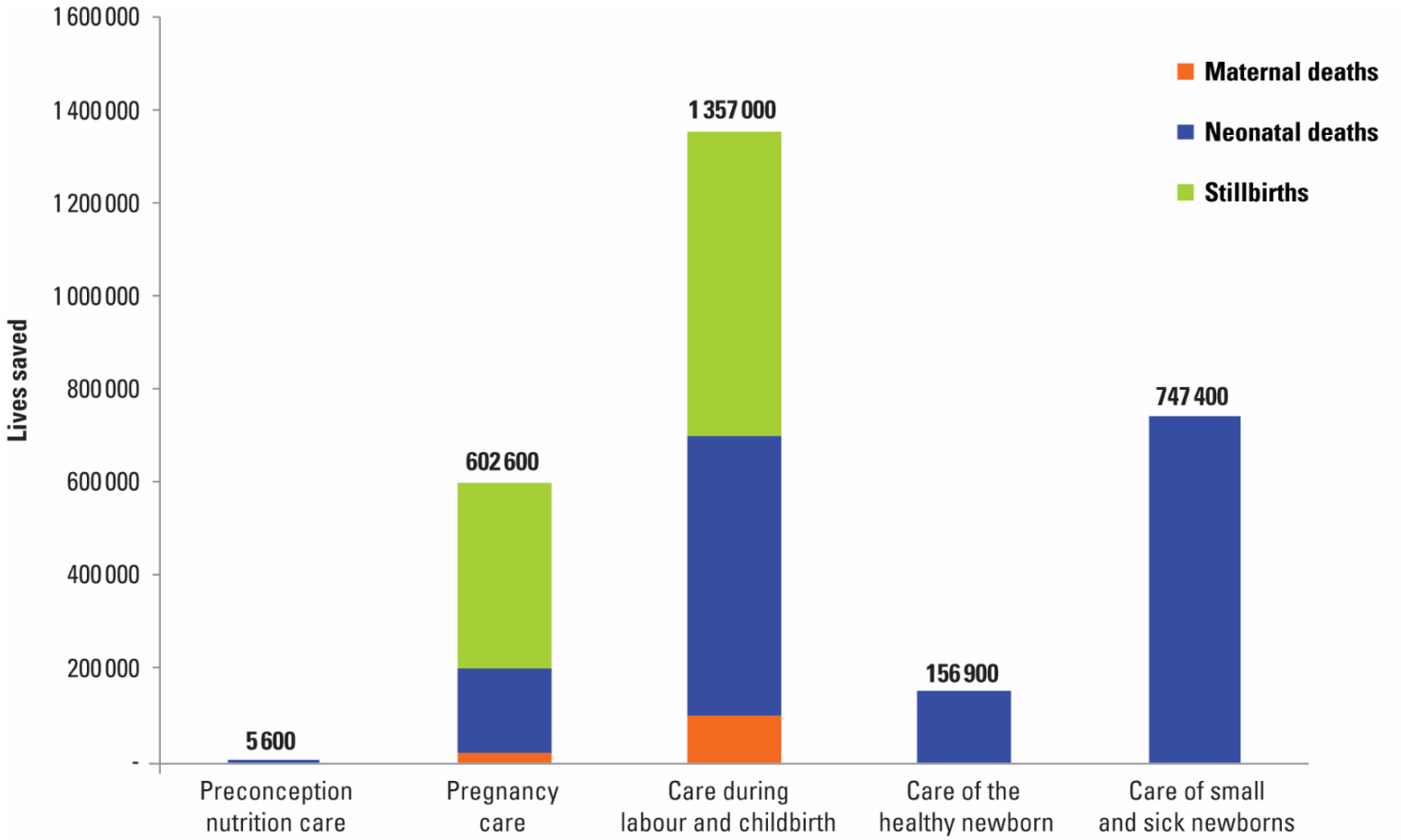
- 81 Countdown to 2030 countries
  - Countdown to 2030 priority countries account for 95% of maternal deaths, 90% of deaths among children <5 years of age
- Scenarios:
  - Baseline
  - Reaching ENAP targets for 2020 and 2025 (KMC, resuscitation, and antibiotics)
  - Closing the quality gap for facility births without comprehensive care
  - Closing the quality gap for facility births WITH comprehensive care
  - Universal coverage (95%) by 2025
- Start: 2016 | End: 2030
- Modeling to estimate cause-specific mortality decline and intervention attribution

Lives-saved analysis

Saving the lives of 2.9 million women, stillbirths and newborns by 2030 in 81 priority countries is achievable if coverage of key interventions is expanded before, during, and after pregnancy.

Lives saved	Number of deaths averted	Percentage of deaths averted
Maternal	134 300	39%
Neonatal	1 691 900 (of which 747 400 are small and sick newborns)	68%
Stillbirths prevented	1 051 700	43%
TOTAL	2 877 900	54%

Estimated effect of scaling-up interventions on maternal and neonatal deaths and stillbirths by 2030, from a 2016 baseline



Adapted from: Bhutta et al. 2014. Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost? *(2)*.

1.7 million newborn lives could be saved each year by investing in quality newborn care

747,400 newborn lives saved directly from special and intensive hospital care for small and sick newborns.

2. QUALITY CARE:

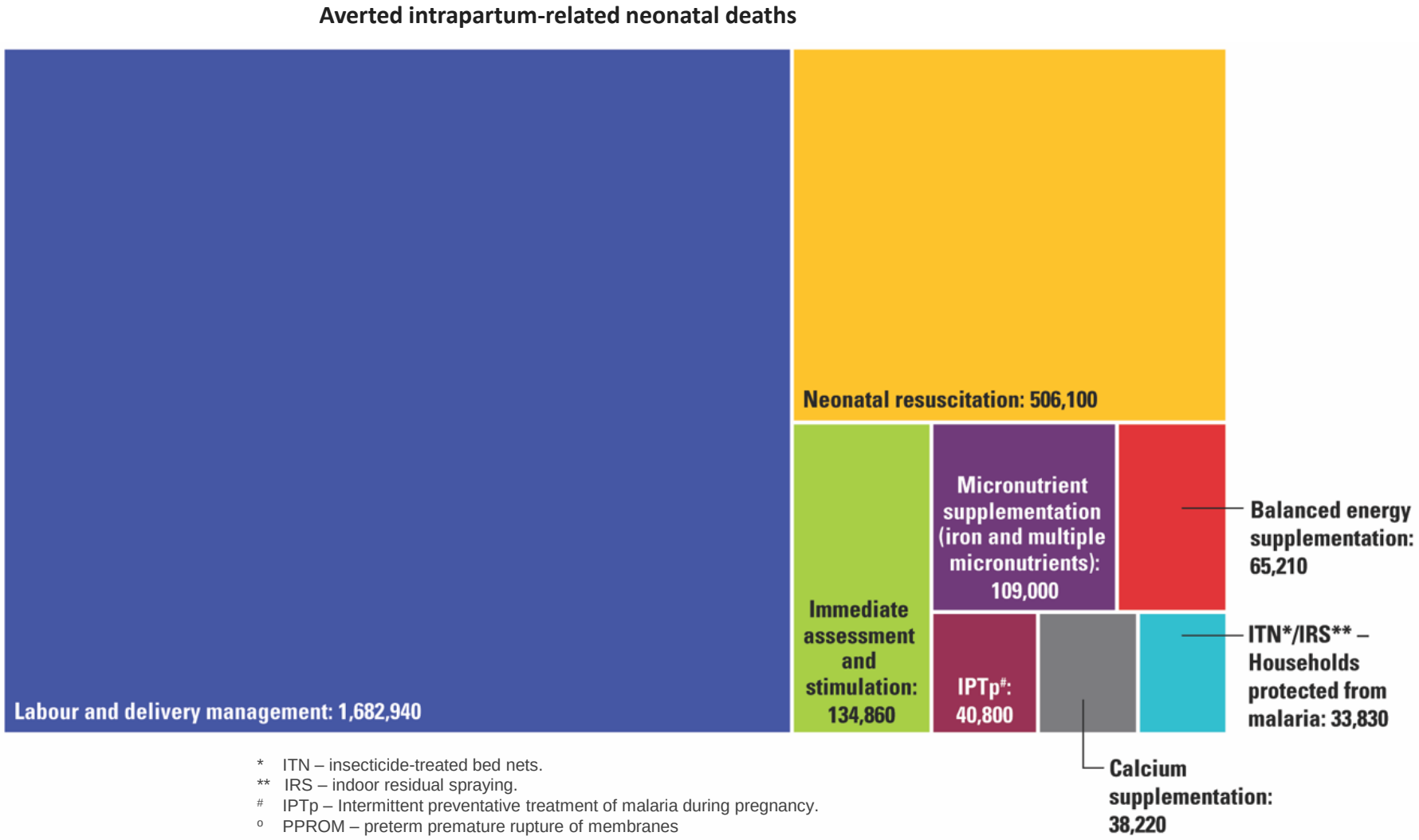
1.7 million newborn lives could be saved each year by investing in quality newborn care.

Closing the "quality of care gap" with special and intensive newborn care

- 28% of newborn deaths (n=667,200) could be averted in 2025 by addressing the quality gap in special and intensive newborn care
- Expanded case management of prematurity would account for ½ of impact

	Quality gap closed for all facility births (with special newborn care)		Quality gap closed for all facility births (with intensive newborn care)	
	Lives saved	Percentage of deaths averted	Lives saved	Percentage of deaths averted
Maternal	46 300	14.3%	46 300	14.3%
Neonatal	268 900	11.1%	667 200	27.6%
Stillbirths prevented	248 300	10.5%	248 300	10.5%
TOTAL	563 400	11.0%	961 800	18.8%

Estimated effect of interventions on intrapartum-related neonatal deaths

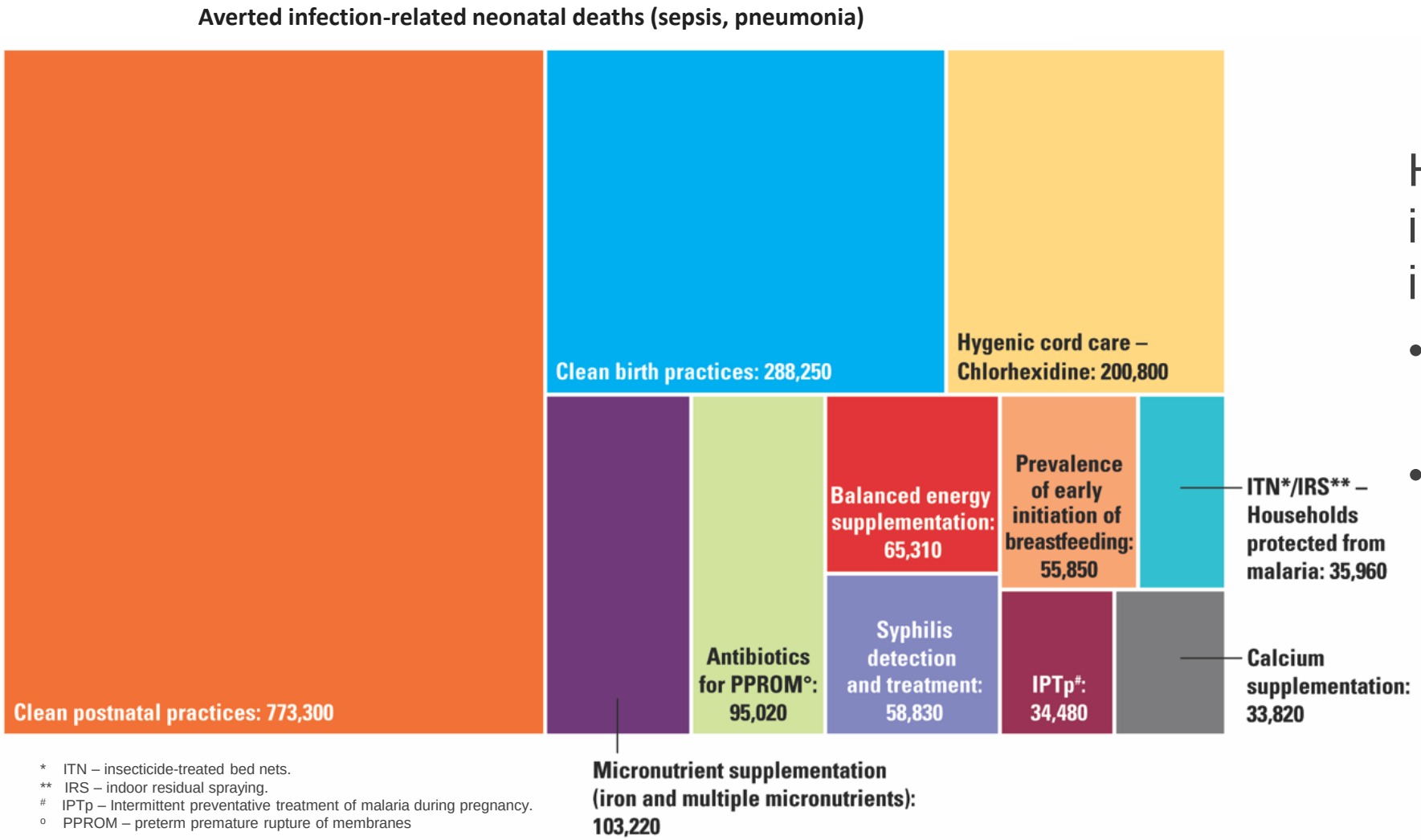


* ITN – insecticide-treated bed nets.
** IRS – indoor residual spraying.
# IPTp – Intermittent preventative treatment of malaria during pregnancy.
º PPROM – preterm premature rupture of membranes

Highest impact interventions on intrapartum related deaths:

- Appropriate labour and delivery management (64%)
- Neonatal resuscitation (19%)

Estimated effect of interventions on infection-related neonatal deaths



* ITN – insecticide-treated bed nets.
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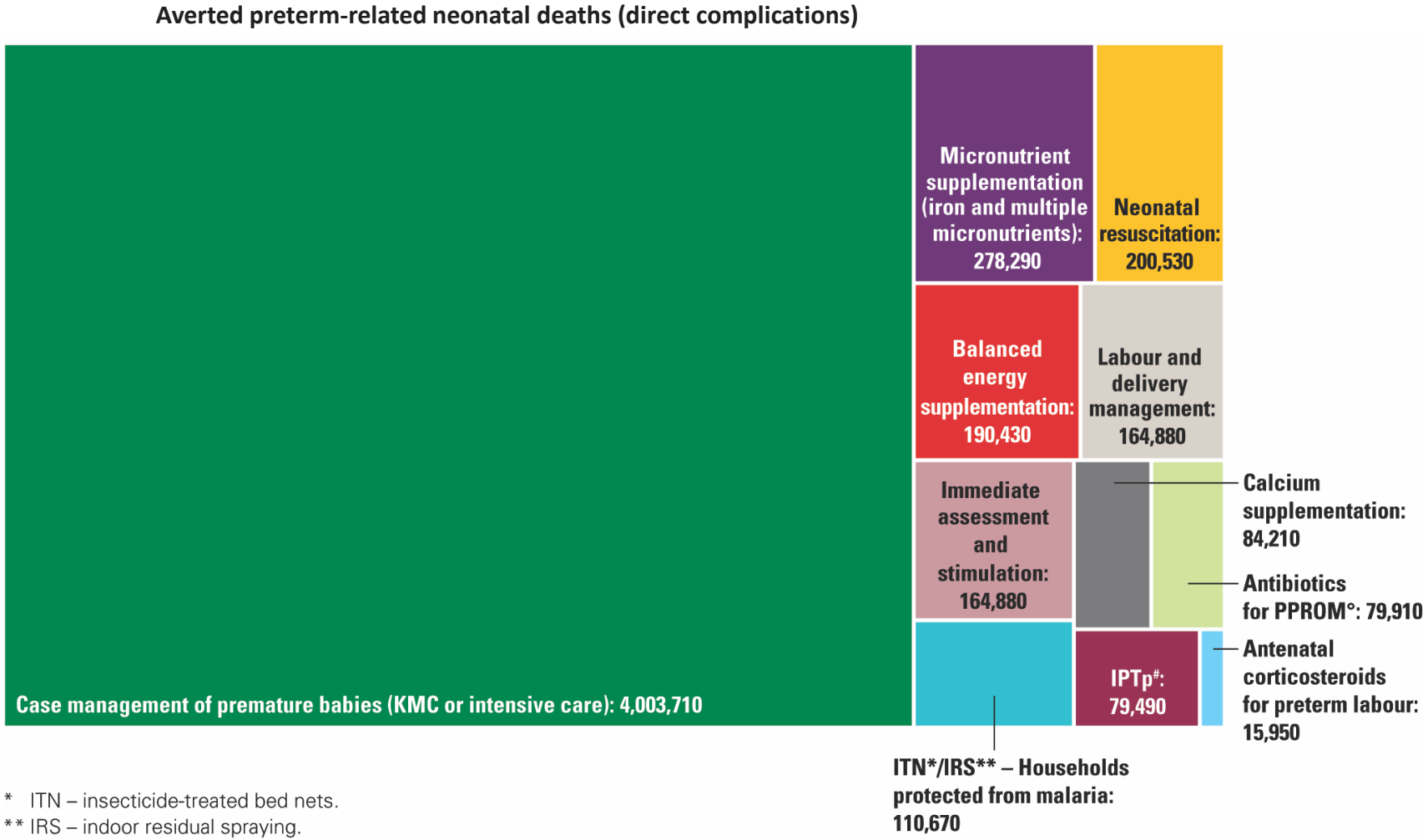
Highest impact interventions on infection-related deaths:

- Clean postnatal care practices (48%)
- Clean birth practices (18%)

Estimated effect of interventions on preterm-related neonatal deaths



* ITN – insecticide-treated bed nets.
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\# IPTp – Intermittent preventative treatment of malaria during pregnancy.
° PPROM – preterm premature rupture of membranes.

Highest impact interventions on preterm-related deaths:

- Intensive care and KMC (75%)

Impact on major causes of neonatal mortality

- Full scale-up of all interventions could result in
  - 86% fewer deaths due to prematurity
  - 76% fewer deaths due to intrapartum-related complications
  - 74% fewer neonatal deaths related to serious infections (eg. sepsis and pneumonia)

Cost of inpatient care for small and sick newborns

- **US$ 959.3 million** to scale-up inpatient care of small and sick newborns by 2025
  - US$ 0.20 per capita
  - US$ 1700 per newborn death averted

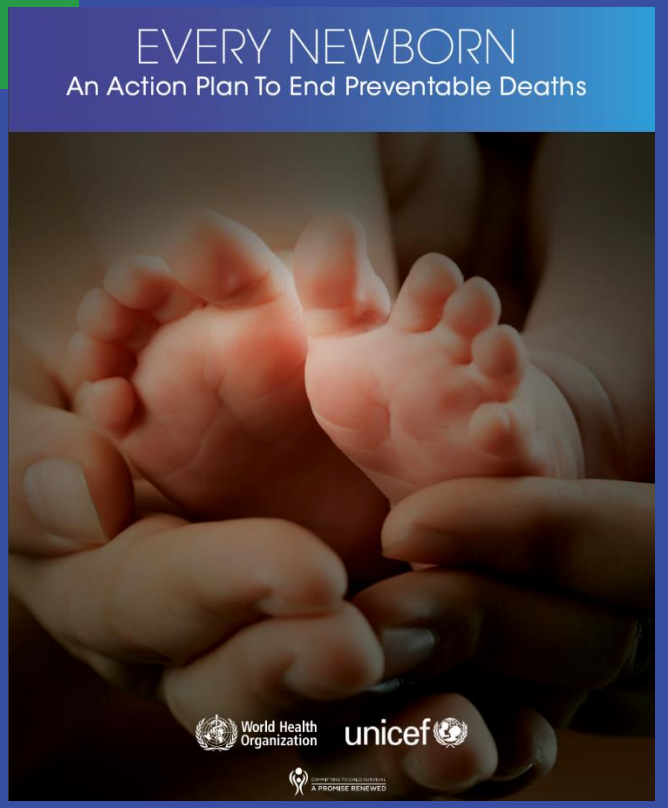
	Annual incremental costs in 2025 (US$ million)				
	Capital costs	Drug and supply costs	Workforce costs	Other recurrent costs	TOTAL COSTS
Total cost for comprehensive package*	1 187.3	2 115.5	1 995.3	347 301.0	5 645.3
Subtotal cost for care of the small and sick neonatal package	423.8	88.7	335.1	111.7	959.3

*Total package includes preconception nutrition care, antenatal care, care during labour and childbirth, immediate neonatal care, care of the healthy neonate and care of the small and sick neonate.
Table adapted from: Bhutta et al. 2014. Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost?

KEY MESSAGES

3. PATH TO 2030:

Ending preventable newborn mortality by 2030 requires transforming care for small and sick newborns.



The path to 2030

Requires:

1. Targeted advocacy and policy efforts
2. A focus on equitable, high-quality and affordable services
3. A family-centred approach
4. Health systems that ensure full access to high-quality essential and special newborn care
5. Health systems to scale-up their special and intensive newborn care services
6. Accurate, reliable data

Every Newborn Action Plan: strategic objectives

1. Strengthen and invest in care around the time of birth and care for small and sick newborns
2. Improve the quality of maternal and newborn care
3. Reach every woman and newborn to reduce inequities
4. Harness the power of parents, families and communities
5. Count and track every small and sick newborn

Strategic Objective 1: Strengthen and invest in care around the time of birth and care for small and sick newborns

Invest	• Develop/expand national ENAP strategies/action plans to include inpatient newborn care and allocate adequate financial resources • Design and invest in facility networks for inpatient newborn care • Assess available maternal and newborn care services for populations in humanitarian settings
Implement	• Ensure international newborn care standards and guidelines are adapted and available in facilities • Provide and monitor inpatient care for appropriate thermal management; infection prevention protocols and practices; availability of antibiotics and dosage instructions; optimal newborn nutrition support; safe delivery of oxygen & phototherapy
Inform	• Improve data collection efforts to increase understanding of where, when and why newborns are dying – and how this connects to care delays • Establish or refine HMIS to track and influence human resource decisions
Innovate	• Identify and procure diagnostics/equipment that are affordable, safe, effective and appropriate for use in low-resource settings • Test innovative parent/community/health-care provider partnership models to expand access to and use of facility-based services and post-discharge follow-up care

Strategic Objective 2: Improve the quality of maternal and newborn care

Invest	• Ensure each level of care has the necessary staff, equipment, commodities, supplies and diagnostics to deliver quality care; that the clinical space facilitates full participation of parents/family members to care for newborn • Establish/update evidence-based laws, policies and regulations around the newborn continuum of care to ensure non-discriminatory access to high-quality care for all newborns in need
Implement	• Deploy quality-improvement approaches that advance provider skills and competencies, promote parent engagement and minimize harm to the newborn • Encourage a facility ethos and environment that supports dignified and pain-free death for newborns who are too fragile to survive; compassionate bereavement care for parents and clinical staff
Inform	• Establish/strengthen MPDSR systems and protocols including notification of neonatal deaths w/in 24 hours • Develop, refine, validate indicators to reflect accurately the content and quality of care • Track longer-term outcomes for newborns w/ disabilities to better assess impact of inpatient care and services for early childhood development
Innovate	• Establish innovative approaches to motivate clinical staff and identify ways to evaluate the experience of care and prevent distress and burn-out • Design, test and scale-up new and innovative service-delivery approaches and cost-effective health-care technologies, including those specifically designed for low-resource settings

Strategic Objective 3: Reach every woman and newborn to reduce inequities

Invest	• Develop and enact country policies on UHC, including financial protection mechanisms that guarantee access to a comprehensive package of interventions for small and sick newborns • Design and implement a comprehensive plan for development of the health workforce
Implement	• Eliminate social and financial barriers that limit access to care, including for female newborns who are especially vulnerable in some populations • Ensure health-care services in humanitarian settings can adequately respond to projected needs, strengthen referral process from camps/informal settlements to static hospital facilities.
Inform	• Investigate the sociodemographic characteristics of newborns who are dying, establish national targets to reduce identified equity gaps • Use national/subnational data to design context-specific action plans for communities and the health system, which promote equitable access to inpatient and post-discharge follow-up care
Innovate	• Support implementation research to understand which programmatic interventions work, and why, and to refine services including post-discharge home visits by community health workers and women's groups • Design new finance schemes to protect families from catastrophic out-of-pocket expenses and to ensure equitable access to services for poor and marginalized families

Strategic Objective 4: Harness the power of parents, families & communities

Invest	• Establish policies, laws and regulations that support the newborn and are designed to promote partnerships and coalitions among parents, families and the health-care system • Engage private sector to support multimedia communication campaigns to change social norms, promote zero tolerance for preventable newborn mortality, and advocate for optimal care-seeking behaviours
Implement	• Promote family-centered care principles in the care of small and sick newborns • Design/implement campaigns to raise awareness about the care needs of small and sick newborns and the best ways to support affected families • Connect community health workers with local organizations to broaden community outreach and identify newborns who may need long-term or developmentally supportive care
Inform	• Engage affected parents and families to monitor inpatient newborn care services, as well as long-term developmental care for those with more specific needs. • Develop, validate, contextualize tools that measure types of support that parents, families, and newborns receive • Educate/engage men to understand the needs, risks and danger signs of pregnancy, childbirth, postnatal period
Innovate	• Consider and test telemedicine and digital tools to support parents in the care of their newborns • Involve patient/parent representatives in the design of new products, programmes and research proposals

Strategic Objective 5: Count and track every small and sick newborn

Invest	• Identify, refine, develop tools to assess service readiness and health outcomes of inpatient newborn care, as well as to evaluate referral processes and pathways and to shape resource priorities • Support long-term investment in functional and routine systems that can be integrated with the national HMIS.
Implement	• Design and use standardized neonatal inpatient records linked to perinatal datasets. • Support the use of validated indicators in national HMIS.
Inform	• Count every newborn in all settings, including humanitarian settings, using birth (and death) registration • Track NMR by gender and by birth weight groups in order to identify and respond to mortality patterns or trends
Innovate	• Use multi-domain tools to monitor at-risk newborns for complications • Establish indicators to evaluate the effectiveness of follow-up care for ongoing nutritional and developmental health needs • Establish metrics to track early childhood development interventions and to guide care delivery, supporting those at highest risk of development delays or disabilities

Research priorities to guide change

- High-quality, context-specific research is needed
  - Shared learning within and across countries

- The **Description, Discovery, Development and Delivery framework** highlights examples of key research priorities, and can be used to inform the design and delivery of care

- Where feasible, mothers, other parents and community representatives should be included in research design and monitoring processes

Everyone has a role to play to ensure a thriving next generation.