



First biennial progress report



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First biennial progress report

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CONTENTS

Acknowledgements.....	iv
Foreword.....	vii
Abbreviations.....	viii
Highlights: Early Essential Newborn Care (EENC) since 2013.....	ix
1. Introduction.....	1
2. Benchmarks of EENC scale-up readiness.....	11
3. Health facility EENC standards.....	15
4. Hospital impact indicators.....	23
5. Coverage indicators for EENC interventions.....	25
6. Impact indicators for newborn health.....	31
7. Financing: making resources available for long-term sustainability.....	33
8. Priority actions to consolidate gains and further scale up EENC in the next biennium.....	35
Annexes.....	37
Annex 1. Background data: causes and timing of newborn deaths.....	38
Annex 2. EENC interventions.....	39
Annex 3. EENC monitoring and evaluation framework.....	41
Annex 4. Validation of EENC M&E data from eight priority countries.....	48
Country profiles.....	53
Cambodia.....	54
China.....	56
Lao People's Democratic Republic.....	58
Mongolia.....	60
Papua New Guinea.....	62
Philippines.....	64
Solomon Islands.....	66
Viet Nam.....	68

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FOREWORD

WHO, Member States and stakeholders in the Western Pacific Region share a vision for mothers and their children: that every newborn infant have the right to a healthy start in life. But now one newborn infant dies every two minutes – often needlessly – in the Region.

Together, we have taken bold steps to address this grim statistic, with Member States endorsing the *Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014–2020)*. The plan aims to improve the quality of care for mothers and babies in health facilities, where the vast majority of children are born in the Region.

Two years after the action plan was launched, Member States are already reporting impressive results in tackling the issues surrounding newborn care in the Region:

- Early Essential Newborn Care (EENC) has now been introduced to twelve countries.
- More than 27 700 health workers have been coached in 2258 health facilities.

This is an amazing accomplishment. But even more important for mothers and babies is the sea change in care provided within these health facilities. Millions of babies will now have a better chance for a healthy start, thanks to the dedication of Member States, health providers and development partners.

As inspiring as this accomplishment is, however, far too many babies still do not benefit from EENC, sometimes even in the 2258 participating facilities.

We cannot rest on our success. Another 28 000 health facilities in the Region still must be brought on board. We must continue to accelerate our efforts to reach every mother and child in the Region.

Together, we must push beyond the era of the Millennium Development Goals and meet the even loftier targets for the Sustainable Development Goals: a global maternal mortality ratio of less than 70 per 100 000 live births with no country above 140; and a neonatal mortality rate of less than 12 per 1000 births in countries.

To reach these ambitious targets, we must work together with Member States and partners to bring high-quality EENC to all mothers and newborn infants in every stretch of the Region.



Shin Young-soo, MD, Ph.D.
Regional Director

ABBREVIATIONS

AIR	EENC Annual Implementation Review and Planning
CHERG	Child Health Epidemiology Reference Group
CPAP	continuous positive airway pressure
CRVS	civil registration and vital statistics
DHS	Demographic and Health Survey
EENC	Early Essential Newborn Care
HMIS	Health Management Information System
ICD-10	International Classification of Diseases – 10th edition
IGME	Inter-agency Group for Child Mortality Estimation
IRG	Independent Review Group
KMC	Kangaroo Mother Care
LBW	low-birth weight
MCH	maternal and child health
MICS	Multiple Indicator Cluster Survey
M&E	monitoring and evaluation
NCU	neonatal care unit
NGO	nongovernmental organization
NMR	neonatal mortality rate
PNC	postnatal care
SBA	skilled birth attendant
UNICEF	United Nations Children’s Fund
UNFPA	United Nations Population Fund
WHO	World Health Organization

HIGHLIGHTS

Early Essential Newborn Care (EENC) since 2013

Newborn deaths account for half of deaths of children under 5 years. Member States developed the *Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014–2020)* to support scaling up EENC interventions. Eight priority countries with the highest burden of neonatal mortality (Cambodia, China, the Lao People's Democratic Republic, Mongolia, Papua New Guinea, the Philippines, Solomon Islands and Viet Nam) are implementing the action plan. In September 2015, these countries convened to review progress and agree on priority actions. Progress was validated by an Independent Review Group. Following the September meeting and until July 2016, new country data that became available were validated by the group. This report summarizes progress in the eight priority countries and the agreed priority actions.

Most countries have five-year national action plans and have funded 12-month implementation plans for EENC, but none have fully incorporated EENC interventions into pre-service curricula.

Countries are adopting a facility-based approach to roll out EENC. Over 27 500 health workers have been coached from 2258 health facilities. Despite these achievements, EENC still has to be introduced in an additional 28 000 facilities in the Region. EENC quality improvement is being established in these facilities. Hospital teams collect and use data to identify and address areas for improvement so that clinical practices are adopted and sustained. Facility assessments show 72% of newborns are now placed in immediate skin-to-skin contact, close to 50% remain in skin-to-skin contact until completion of the first breastfeed and 80% are exclusively breastfed in the first days of life. However, only 7% of preterm babies receive Kangaroo Mother Care, a life-saving intervention.

The First Embrace communications campaign – comprising print materials, a short film and website – was launched in 2015 with an estimated earned media value of over US\$ 2 million. The campaign hashtag "#FirstEmbrace" was viewed 12.8 million times on the social media website Weibo. The film was viewed over 150 000 times on YouTube and the WHO Facebook page. Priority countries have developed country road maps to address challenges.

Priority actions include:

■ IMPROVING QUALITY OF SERVICE DELIVERY

Improving quality of service delivery by monitoring labour during intrapartum care; eliminating harmful practices (such as unnecessary induction and augmentation of labour, unnecessary caesarean sections, early bathing of newborns and prelacteal feeding); ensuring that stable babies born by caesarean section receive early and prolonged skin-to-skin contact; and introducing Kangaroo Mother Care for preterm and small babies. Countries will continue to do this by scaling up EENC coaching and the EENC quality improvement approach and by conducting annual implementation reviews linked with planning.

■ IMPROVING ROUTINE COLLECTION

Improving routine collection of EENC implementation and hospital impact indicators, ensuring that newborn health indicators are included in large-sample, population-based surveys, and strengthening registration and reporting of live births and neonatal deaths (numbers and causes).

■ MAKING FUNDS AVAILABLE

Making funds available by developing costed long-term plans, improving communication and advocacy with relevant ministries and development partners, and continued strengthening of universal health coverage to ensure sufficient resources are provided to fully implement EENC.

Introduction

NEWBORN MORTALITY IN THE WESTERN PACIFIC REGION

	00
	01
0 h	02 min
1 h	03
2 h	04

A newborn dies **every 2 minutes**

Putting newborns on the agenda: a regional call to action

A newborn infant dies every two minutes in the Western Pacific Region. This represents half of all deaths of children under 5 years. It is unacceptable, particularly when the knowledge and basic tools exist to save at least 50 000 newborn lives annually.^{1,2} In 2013, countries in the Western Pacific Region came together to collectively reduce newborn deaths. The result was the *Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014–2020)*, developed following intensive consultations with country programme staff and academics, technical experts and development partners, such as nongovernmental organizations, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) (Box 1). The action plan outlines an approach for implementing and scaling up evidence-based Early Essential Newborn Care (EENC) interventions by improving the quality, reach and demand for maternal and newborn services. At the sixty-fourth session of the WHO Regional Committee for the Western Pacific in October 2013, Member States noted the action plan and recognized the need for increased emphasis on newborn health in national programmes.³

1. Levels and trends in child mortality – Report 2013. New York, UNICEF, 2013 (estimate in 2012).
2. Calculated using LiST [The Lives Saved Tool, <http://www.jsph.edu/dept/ih/IIP/list/>] for Cambodia, China, the Lao People's Democratic Republic, Papua New Guinea, the Philippines and Viet Nam assuming full implementation of EENC interventions.
3. Progress Reports on Technical Programmes, 64th Session of the Regional Committee, Manila, Philippines 21–25 October 2013. WPR/RC64/9. WHO, Manila.

The action plan provides a strategic framework for strengthening maternal and newborn health programmes. Eight countries with the highest burden of maternal and newborn mortality (Cambodia, China, the Lao People's Democratic Republic, Mongolia, Papua New Guinea, the Philippines, Solomon Islands and Viet Nam) have been targeted for intensive support to implement the plan.

REALITY CHECK

8 PRIORITY COUNTRIES

account for

96% of neonatal deaths

IN THE WESTERN PACIFIC REGION



Using epidemiology to drive programming

Although countries in the Western Pacific Region reduced under-5 deaths by 74% between 1990 and 2015, neonatal deaths declined at a slower rate. Consequently, neonatal deaths account for half of all child deaths (Table 1), mostly from preventable causes: complications of preterm birth, asphyxia and infection (sepsis) (Fig. A 1.1, Annex 1). Two thirds of deaths occur in the first three days of life (Fig. A 1.2, Annex 1).

The action plan notes that the slower rate of decline in newborn mortality was largely the result of widespread, outdated and harmful health provider practices. For this reason it focuses strategically on delivering evidence-based interventions around childbirth and in the early newborn and postpartum periods, and on targeting the most important causes of death. Emphasis on improving the quality of skilled birth care is the foundation of the regional approach, while working towards ensuring that services reach all newborns.

BOX 1. Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014–2020)

The action plan was developed through intensive consultations with country programme staff and academics, technical experts, and development partners (nongovernmental organizations, WHO and UNICEF). The plan was finalized at technical and country consultations in early 2013.^{a,b}

VISION: A healthy start for every newborn infant

MISSION: To strengthen the health system and to cultivate an enabling environment in which skilled providers of newborn care value and practise EENC at every birth

GOAL: To eliminate preventable newborn mortality by providing universal access to high-quality EENC

By 2020 in all Member States

Target 1: At least 80% of facilities where births take place are implementing EENC.

Target 2: At least 90% of births in all subnational areas are attended by skilled birth attendants (SBA).

Target 3a*: National neonatal mortality rate (NMR) is 10 per 1000 live births or less.

Target 3b*: Subnational NMRs are 10 per 1000 live births or less.

* Countries that have already met the target should set the lowest possible target they can feasibly reach by 2020. Countries with higher baseline mortality should set a 2020 target that is two to three times the current annual rate of reduction.

Five strategic actions support full implementation of EENC:

1. Ensure consistent adoption and implementation of EENC.
2. Improve political and social support to ensure an enabling environment for EENC.
3. Ensure availability, access and use of SBAs and essential maternal and newborn commodities in a safe environment.
4. Engage and mobilize families and communities to increase demand.
5. Improve the quality and availability of perinatal information.

a. Technical Expert Review of the Draft Regional Action Plan for Healthy Newborns in the Western Pacific, Manila, Philippines, 14–15 March 2013.

b. Consultation on the Draft Regional Action Plan For Healthy Newborns in The Western Pacific 2014–2018, Manila, Philippines, 18–20 March 2013.

TABLE 1. Number of neonatal deaths and neonatal mortality rates in selected countries of the Western Pacific Region, 1990, 2015*

Country	Newborn mortality rate (deaths per 1000 live births)		Number of neonatal deaths (thousands)		Proportion of under-5 deaths occurring in the newborn period in 2015	Country target 2020
	1990	2015	1990	2015		
Cambodia	41	15	14	5	50%	14
China	30	6	928	93	51%	–
Lao People's Democratic Rep.	55	30	10	5	42%	20
Mongolia	32	11	2	1	50%	5
Papua New Guinea	32	25	4	5	42%	15
Philippines	20	13	40	30	45%	10
Solomon Islands	16	12			43%	12
Viet Nam	24	11	46	18	53%	7
Western Pacific Region	23	7	1056	163	50%	10 (regional target)

* A neonatal death is fatality within the first 28 days of life.

Source: Levels and trends in child mortality – Report 2015. New York: UNICEF; 2015 (modelled estimates and time trends calculated by the Inter-agency Group for Child Mortality Estimation). Modelled estimates use multiple sources and adjust for errors associated with measurement; they are useful for estimating long-term time trends between and within countries and enable data from different countries to be directly compared. These estimates differ slightly from those calculated from large-sample population-based surveys such as the Demographic and Health Survey (DHS) and the Multiple Indicator Cluster Survey (MICS), and are often used in countries for local planning.

Early Essential Newborn Care – a high-impact approach

Early Essential Newborn Care (EENC) is the central pillar of the regional approach. It is a package of evidence-based interventions demonstrated to reduce newborn mortality from the three most important causes: prematurity, birth asphyxia and sepsis (Fig. 1 and Table A 2.1, Annex 2).

Full implementation of EENC in the Region could prevent at least 50 000 deaths each year.⁴

SOLUTION

50 000 NEONATAL DEATHS

can be prevented each year through **EENC**
(EARLY ESSENTIAL NEWBORN CARE)

It improves
the quality
of care during
and after birth

It is a package
of simple and
cost-effective
interventions

It is for all
healthy, preterm,
low-birth-weight
and sick
newborns

The EENC approach:

- » **the First Embrace,**
- » **prevention and care of preterm⁵ and low-birth-weight babies⁶,**
- » **prevention and care of sick newborn infants.**

EENC focuses on eliminating harmful and outdated childbirth, newborn and postpartum practices, replacing them with evidence-based practices. Mothers will have less risk from fewer unnecessary inductions and augmentations of labour, episiotomies and caesarean sections. EENC is implemented through existing services and helps to identify health systems gaps that need to be strengthened. Because the largest risk of death and adverse outcomes comes during childbirth and in the first 24 hours, EENC emphasizes improving the quality of childbirth, newborn and postpartum care in the first 24 hours after birth.

4. Calculated using LiST [The Lives Saved Tool. A computer program for making child survival projections. <http://www.jhsph.edu/dept/ih/IIP/list/>] for Cambodia, China, the Lao People's Democratic Republic, Papua New Guinea, the Philippines and Viet Nam assuming full implementation of essential newborn care interventions contained therein for the period 2014–2020.

5. A preterm baby is born before 37 completed weeks of gestation.

6. A low-birth-weight baby is born with a weight lower than 2500 grams.

FIGURE 1. Core interventions of Early Essential Newborn Care

	INTRAPARTUM CARE		NEWBORN CARE
All mothers and newborn infants	The First Embrace	Labour monitoring (partograph)	<ul style="list-style-type: none"> • Immediate drying • Immediate skin-to-skin contact • Appropriately timed clamping and cutting of the cord • Exclusive breastfeeding • Routine care – eye care, vitamin K, immunizations, weighing and examination
At-risk mothers and newborn infants	Preterm and low-birth-weight infants	<ul style="list-style-type: none"> • Preterm labour <ul style="list-style-type: none"> – Elimination of unnecessary inductions and caesarean sections – Antenatal steroids – Antibiotics for preterm PROM* 	<ul style="list-style-type: none"> – Kangaroo Mother Care – Breastfeeding support – Immediate treatment of suspected infection
	Sick newborn infants	<ul style="list-style-type: none"> • Obstructed/prolonged labour • Fetal distress <ul style="list-style-type: none"> – Assisted delivery – Caesarean section 	<ul style="list-style-type: none"> • Not breathing at birth <ul style="list-style-type: none"> – Resuscitation • Suspected sepsis <ul style="list-style-type: none"> – Antibiotic treatment

* PROM: prelabour preterm rupture of membranes

Data for tracking progress: a framework for action

Countries recognized that a monitoring and evaluation (M&E) approach was needed to track progress, identify country needs and allow evidence-based decision-making. The **Early Essential Newborn Care Monitoring and Evaluation Framework (2015–2020)** was derived from the strategic actions in the action plan and aligned as much as possible with current data collection and reporting mechanisms (Box 2, Annex 3).

As improving health systems is central to improving the quality of early newborn care, several systems elements are tracked, including: policies, guidelines and plans; EENC coaching coverage; clinical practice during childbirth, immediate newborn and postpartum periods; supervision and use of quality improvement methods; and availability of essential medicines and commodities. For this reason, the framework

is an important component of the EENC programme planning, implementation and quality improvement cycle (Fig. 2, Table 2). This cycle includes a continuous quality improvement approach by hospitals (Box 2), annual implementation reviews of progress at the national level (Box 3) and periodic (five-year) strategic planning (Box 4). EENC hospital teams are at the core of the quality-improvement approach, functioning semi-autonomously and being a resource for expansion and support of activities within their own catchment areas.

In June–July 2015, the eight priority countries completed the M&E framework to report on progress in implementation of the action plan. In August 2015, these data were validated by an Independent Review Group (IRG) comprising technical experts from the fields of midwifery, neonatology, and obstetrics and gynaecology with experience in the Western Pacific Region (Annex 4). In September 2015, the eight priority countries convened in Tokyo, Japan, to review progress and develop country road maps with priority actions for EENC in the next two years. Following the September meeting and until July 2016, new country data that became available were validated by the IRG. This report summarizes progress in implementation of the action plan in the eight priority countries and the agreed priority actions by Member States for the next biennium.

This progress report is structured around the five main indicator areas of the M&E Framework (Table 2).

FIGURE 2. Programme planning, implementation and quality improvement cycle for EENC

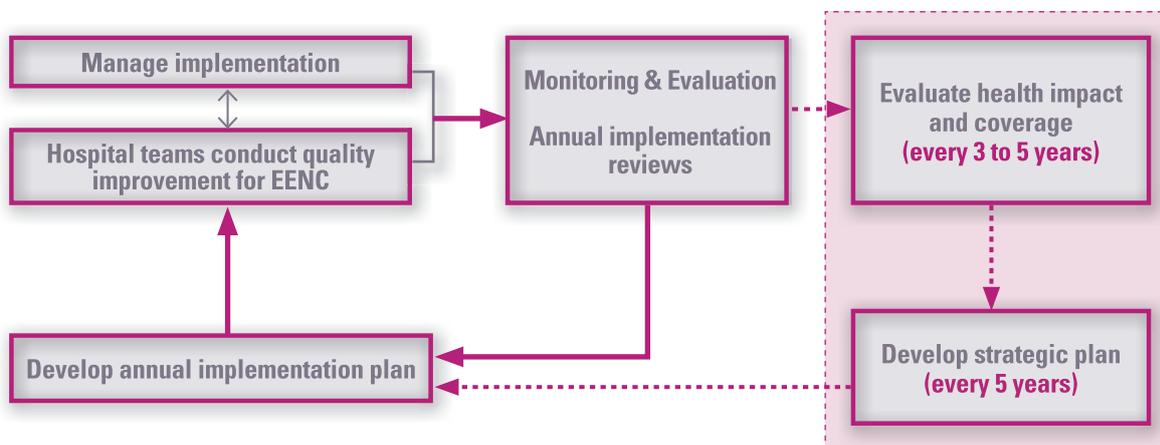


TABLE 2. Summary of the EENC Monitoring and Evaluation Framework

Indicator area	Indicators	Methods	Chapter number
1. Benchmarks of EENC scale-up readiness			
	<ul style="list-style-type: none"> • Policies • Guidelines • Plans • Coordination mechanisms • Pre-service curricula 	Programme records and reports	2
2. Health facility EENC standards			
	<ul style="list-style-type: none"> • EENC coaching coverage • EENC practices • Availability of EENC medicines and commodities • Hygiene standards • Facility policies 	Programme and hospital records Annual facility assessments	3
3. Hospital impact indicators			
	<ul style="list-style-type: none"> • Hospital newborn mortality • Rates of preterm and low-birth-weight babies • Case-fatality from sepsis, asphyxia and prematurity • Neonatal care unit (NCU) admission rates 	Hospital clinical registers	4
4. Coverage indicators for EENC Interventions			
	<ul style="list-style-type: none"> • Childbirth and postpartum care practices • Immediate newborn care practices • Breastfeeding practices • Postnatal care practices 	Population-based surveys	5
5. Impact indicators for newborn health			
	<ul style="list-style-type: none"> • Newborn mortality • Perinatal mortality • Cause of newborn deaths • Rate of low-birth weight • Rate of preterm 	Large-sample population-based surveys CRVS HMIS IGME CHERG	6

CRVS: civil registration and vital statistics – HMIS: Health Management Information System

IGME: Inter-agency Group for Child Mortality Estimation – CHERG: Child Health Epidemiology Reference Group

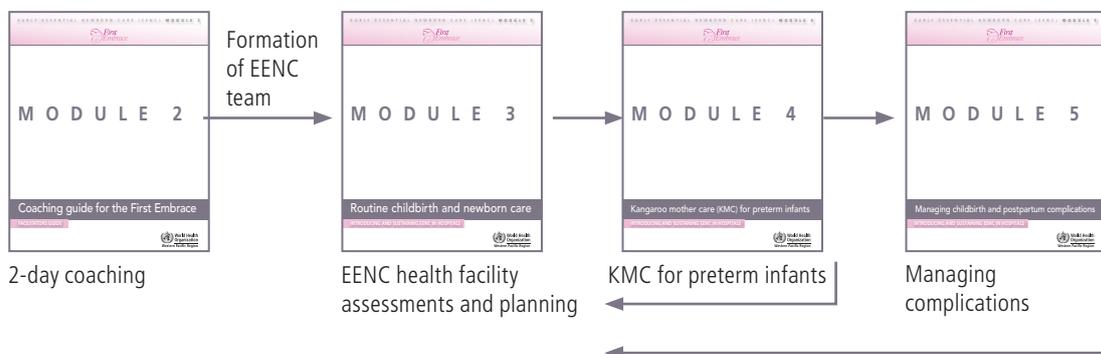
BOX 2. Establishing quality improvement for EENC in hospitals

Sustaining health-worker practice is a key objective of EENC. Hospital teams have been introduced in Cambodia, the Lao People's Democratic Republic, Mongolia, Papua New Guinea, the Philippines, Solomon Islands and Viet Nam. A module on EENC quality improvement in hospitals has been developed by the WHO Regional Office for the Western Pacific.^a

EENC TEAMS – Members include paediatricians, obstetricians, nurses, midwives, and infection-control, quality-improvement and hospital administration staff (maximum team size of 25). All team members are coached in EENC.

QUALITY-IMPROVEMENT APPROACH – Teams conduct periodic assessments of EENC clinical practices, medicines and commodities, environmental hygiene, and policies using checklists. Clinical practice is assessed using exit interviews with postpartum mothers, chart reviews of mothers interviewed and observations of deliveries using checklists. Data are summarized and used to identify priority areas for improvement. Actions for addressing areas for improvement are then discussed, and responsibilities allocated for addressing them. Teams meet monthly and conduct assessments (based on Module 3, 4 or 5) twice a year (see flow chart below).

BENEFITS – Teams identify their own areas for improvement and use local knowledge to solve them. In the long term, minimal external inputs are required. The multidisciplinary approach brings together stakeholders who are important for health of mothers and newborns – including obstetrics and paediatric medical staff, nurses and midwives and others important for infection control. Hospital and health leaders are encouraged to be involved



a. Introducing and sustaining EENC in hospitals: routine childbirth and newborn care. 2016. World Health Organization, Manila.

BOX 3. EENC Annual Implementation Review and Planning (AIR)

"We liked that the facility review only took a few days. To be honest the findings surprised us because we expected everything to be perfect after the coaching. It was not perfect and we saw this for ourselves. Then we knew what still had to be done."

– EENC team member, Mongolia.

The **AIR** is led by Ministry of Health programme staff from maternal, newborn and child health – in particular those from the newborn health technical working group, key hospital staff from paediatrics and obstetrics, WHO, UNICEF and other development partners involved in EENC. The EENC focal person or another newborn health working group member coordinates the AIR. A module on conducting the AIR has been developed by the WHO Regional Office for the Western Pacific.^a

AIR TEAMS CONDUCT THE REVIEW:

Day 1: Reviewing the current status of implementation using EENC M&E indicators (1 day).

Days 2–4: Visiting a random sample of 15 facilities that have introduced EENC – to collect data using checklists on clinical practice, medicines and commodities, environmental hygiene, policies and coaching coverage of health providers. Teams validate data previously collected by the hospital team and give feedback to issues identified from the data collected.

Days 5–6: Synthesizing and summarizing data, identifying strengths and gaps and planning for the next year using findings.

Data are a cross-sectional snapshot of current facility practices and allow the effectiveness of hospital teams to be assessed. Areas for improvement with hospital teams can be identified and addressed to improve effectiveness. Facility-based data are invaluable for planning activities for the next programme cycle.

a. Early Essential Newborn Care Annual Implementation Review and Planning Guide. Draft. June 2016. WHO, Manila.

Benchmarks of EENC scale-up readiness

REQUIREMENTS FOR ADOPTING EENC



POLITICAL
COMMITMENT



FINANCIAL
INVESTMENT



SUPPORT OF
KEY STAKEHOLDERS



STRENGTHENED
LEGISLATION &
REGULATIONS

Ten benchmarks are used to assess the status of policy and planning measures important for introducing and supporting EENC. All eight priority countries provided data for at least nine benchmarks, with data available for 95% of benchmarks overall. Seventy-nine per cent of benchmarks that were achieved or partially achieved were validated.

Overall, five of the eight countries have achieved six or more benchmarks. Benchmarks achieved by the most number of countries are having conducted a newborn health situation analysis and having funded 12-month implementation plans for EENC. Incorporation of EENC interventions into pre-service curricula, establishment of an EENC stakeholder group and mechanisms for systematically engaging professional associations are the least-achieved benchmarks (Fig. 3).

Three countries did not report any data on incorporation of EENC interventions in pre-service curricula. This is because assessing the curricula requires time and specialized staff. For the five reporting countries, the proportion of EENC interventions incorporated into pre-service curricula ranges from 62–92% for medical curricula, 39–62% for nursing and 39–96% for midwifery. EENC interventions commonly not

included in curricula included: creating supportive environments for mothers at the time of birth, prevention of mother-to-child transmission of HIV, avoiding exposure to nosocomial infections for mothers and newborns, use of oxygen or continuous positive airway pressure for respiratory distress, and providing at least two postnatal care contacts between days one and three. Some countries have multiple curricula for one or more category of staff (medical doctor, midwife, nurse), which creates conflict and confusion about the optimal way to practise clinical care.

FIGURE 3. Status of the EENC scale-up readiness benchmarks, July 2016

10 BENCHMARKS FOR EENC PREPAREDNESS IN THE 8 PRIORITY COUNTRIES

BENCHMARK	1	2	3	4	5	6	7	8
1. Newborn health situation analysis	●	●	●	●	●	●	○	●
2. Costed 5-year action plan	●	●	●	●	●	●	○	●
3. Funded 12-month implementation plan	●	●	●	●	●	●	●	●
4. National EENC working group meets regularly	●	●	●	●	●	●	●	●
5. Full-time EENC focal person	●	○	●	○	●	●	●	●
6. EENC stakeholder group	○	●	●	○	○	●	●	●
7. Clinical protocol adapted	●	●	●	●	●	●	○	●
8. Consensus-building workshop	●	○	●	●	○	●	○	●
9. Mechanisms for professional associations' support for EENC	●	○	●	●	●	●	○	○
10. EENC included in pre-service curricula	○	○	●	●	●	●	●	○

● achieved
● partially achieved
○ not achieved
○ no data

1. CAMBODIA – 2. CHINA – 3. LAO PEOPLE'S DEMOCRATIC REPUBLIC – 4. MONGOLIA – 5. PAPUA NEW GUINEA – 6. PHILIPPINES
7. SOLOMON ISLANDS – 8. VIET NAM

BOX 4. Developing Five-year EENC Action Plans

EENC planning was very useful for us because it was systematic. It brought people together who do not usually talk. We saw that in some areas we were already doing quite a lot, and in other areas we had not done anything. At the end we all agreed and we were confident that our plan had broad support. This is the first time we had this confidence. Also the partners were committed to it so it was easier to get funding for our plans. In fact, we had funded the first one-year plan within a day of the planning workshop.

— Maternal and child health (MCH) programme manager, Mongolia

Five countries in the Region conducted programme planning workshops to develop their Five-year EENC Action Plans (Cambodia, the Lao People's Democratic Republic, Mongolia, the Philippines and Viet Nam). WHO EENC planning guidelines were used to support the planning process which included three stages:^a

- 1. Preparing for planning, including identifying a planning coordinator, collecting background information and organizing a planning meeting with stakeholders (2 weeks–1 month).**

EENC planning was led by Ministry of Health staff from maternal, newborn and child health, but was a collaborative process that included staff from nutrition, human resources, essential medicines, health information and development partners. In addition, key obstetric and paediatric clinical staff attended. The multi-stakeholder approach was critical to getting input in all technical areas and ensuring that the plan linked with ongoing activities.

- 2. Reviewing and planning activities in three programme areas: (1) policies, standards and guidelines; (2) strategic actions for implementing EENC; and (3) monitoring and evaluation for EENC. Findings were used to review and develop a draft EENC action plan (three-day multi-stakeholder group workshop).**

Policies, standards and guidelines reviewed included: laws and regulations (maternity protection, breastfeeding); clinical guidelines; human resources deployment, roles and responsibilities; and essential medicines and supplies. In many countries key policies were in place, but were not implemented or enforced; in some cases development partners were using different guidelines. It was recognized that national policies and guidelines need to be adopted and used consistently.

- 3. Finalizing the action plan and budget (1–4 weeks).**

In most countries the draft plan was reviewed again by a small group to ensure consensus. Planning was found to be most useful if coordinated with other ongoing health sector planning activities. These could include strategic planning, annual reviews of country accountability frameworks, and annual or biennial planning exercises.

a. Early Essential Newborn Care Annual Implementation Review and Planning Guide. Draft. June 2016. WHO, Manila.

Health facility EENC standards

SCALE UP

In 2 years, **EENC** has been scaled up widely in the Region:

EENC introduced in
 **2258 HEALTH FACILITIES**

27 737 HEALTH FACILITY STAFF
 coached in **EENC**

Implementation of EENC requires widespread coaching of health providers responsible for childbirth and newborn and postpartum care, as well as health systems that provide sufficient human resources, medicines, commodities, financial protection, referral care and supportive policies. Countries have therefore adopted a health facility focus, wherein EENC hospital teams are established in national and subnational (up to first-level referral) hospitals and are responsible for quality improvement of care. The teams: (1) assess their own hospital practices, policies, supplies and environment to identify strengths and areas of improvement; (2) develop short-term action plans based on findings; and (3) monitor implementation of plans and conduct reassessments. These two approaches – coaching and the establishment of hospital teams that focus on quality care – are critical for the successful implementation of EENC.

Target 1 of the *Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014–2020)* is "At least 80% of facilities where births take place are implementing EENC by 2020". Implementing EENC is further defined by 11 health facility standards consisting of 21 indicators. Across the eight countries, 47% of indicators were available for all countries, 40% for some countries and 13% not available for any country. A total of 96% of the indicators were validated (Table A 4.2, Annex 4).

EENC coaching

In all countries, EENC coaching of health providers has been conducted for routine childbirth and newborn care using *Early Essential Newborn Care Module 2 – Coaching for the First Embrace*. Coaching has been found to vastly improve skills even where staff have been trained multiple times by other methods (Fig. 4).

Thirty-one national, 146 regional and provincial, 901 first-level referral and 1180 first-level facilities⁷ have conducted EENC coaching, yielding a total of 2258 facilities across the eight priority countries. The Lao People's Democratic Republic, Mongolia, Papua New Guinea, Solomon Islands and Viet Nam have conducted coaching at over 80% of national hospitals. More than 80% of regional and provincial hospitals were coached in Cambodia, the Lao People's Democratic Republic, Mongolia and Viet Nam. Viet Nam further expanded coaching to first-level referral hospitals, and Cambodia to first-level referral hospitals as well as first-level facilities (Fig. 5).

In these facilities, over 27 500 providers responsible for childbirth, newborn and postpartum care have been coached, including 1393 in national, 9694 in regional and provincial, 499 in first-level referral facilities, and 3140 providers in first-level facilities (data by facility level not available for all countries) (Table 3).⁸ Coaching coverage of target staff exceeds 90% in national hospitals in Cambodia and Mongolia.

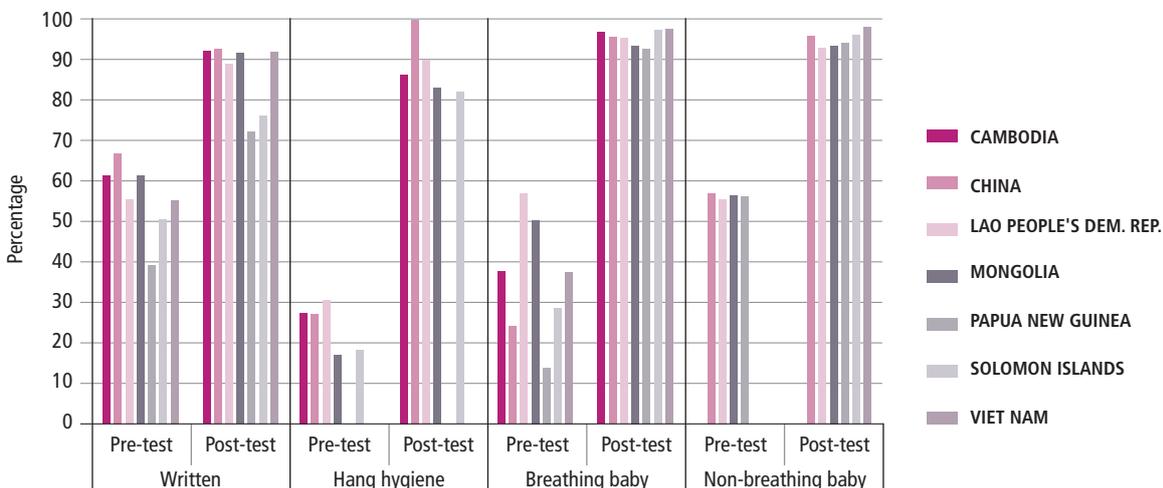
Scale up has occurred most rapidly in countries with a cadre of strong hospital facilitators who lead coaching roll-out. Due to the low facilitator-to-participant ratio in EENC coaching, investments in time and resources are necessary to build a sufficiently large cadre of high-quality facilitators. Often, hospital staff struggle to find time to coach their own staff, as well as those of other facilities. Moreover, rapid health provider turnover in some countries requires frequent re-coaching. Despite these challenges, 27 737 providers coming from 2258 hospitals have been coached. However, EENC still has to be introduced in an additional 28 000 health facilities in the Region.

Based on the successes of coaching for routine childbirth and newborn care, countries are adopting or have plans to adopt coaching for other components of maternal and newborn care. Coaching materials for complications during childbirth

7. First-level facilities where deliveries take place have the capacity to care for breathing and non-breathing babies. First-level referral facilities offer services of first-level facilities plus management of preterm labour and common complications of prematurity, advanced resuscitation, complications of delivery including assisted delivery and caesarean sections.

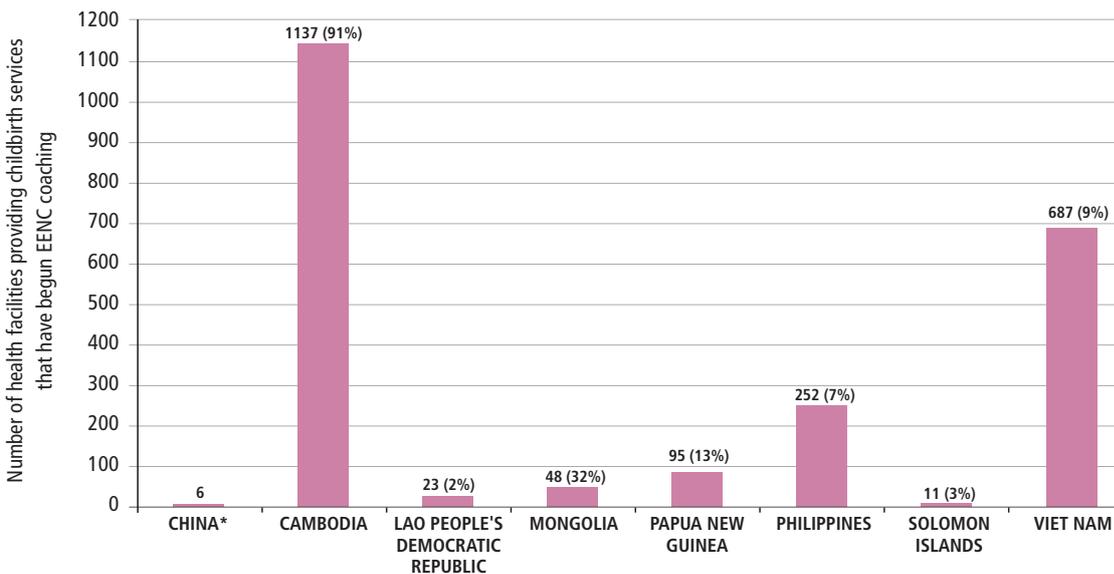
8. An additional 13 046 childbirth, newborn and postpartum care staff have been coached in the Philippines, but the number coached per facility level was not available.

FIGURE 4. Pre- and post-test results of EENC coaching in seven countries, 2014–2016*



* EENC was first introduced in the Philippines in 2012 using an early version of the coaching approach. Pre- and post-test assessments were conducted routinely but these data are not available for this report.

FIGURE 5. Total number of health facilities providing child birth services that have begun EENC coaching, by country, July 2016*



* The total number of health facilities in China is 25 860. Data are not available on the number of these facilities offering childbirth services. Six hospitals in China introduced EENC in 2016.

(emergency obstetric care) were developed and national roll-out commenced in Solomon Islands. Assessment tools on prevention and management of preterm and low-birth-weight babies have been developed and tested in Cambodia, the Philippines and Viet Nam. Coaching on management of preterm and low-birth-weight babies has been conducted in Viet Nam.

TABLE 3. Health facilities that have begun coaching and total number of staff coached by country, April 2016

COUNTRY	Proportion of health facilities providing delivery services that have begun EENC coaching				Proportion of staff coached in health facilities that have introduced EENC			
	System level				System level			
	National	Regional/Provincial	First-level referral	Primary health facilities	National	Regional/Provincial	First-level referral	First-level facilities
CAMBODIA	2/5	24/24	75/76	1035/1141	147/147	461/516	416/581	2908/4243
CHINA	3/1954 ^a	3/6850 ^a	0/ND ^a	0/7009 ^a	287/821	148/314	0	0
LAO PDR	4/5	15/17	4/137	0/986	197/244	329/454	ND	0
MONGOLIA	1/1	3/3	21/25	23/123	105/110	277/656	49/51	140/546
PAPUA NEW GUINEA	1/1	7/20	10/11	77/717	97/248	50/140	26/54	85/297 ^b
PHILIPPINES ^c	9/110	32/300	173/777	38/2617	ND	960/1289	ND	ND
SOLOMON ISLANDS	1/1	1/9	2/33	7/288	79/274	7/ND	8/ND	7/ND
VIET NAM	10/13 ^d	61/63	616/708	ND/7000	481/ND	7462/14 229 ^e	ND	ND
TOTAL	31	146	901	1180	1393	9694	499	3140

ND: no data

- There is a total of 25 860 health facilities China, all of which may not provide delivery services. Denominator for national facilities may include regional facilities, and denominator for regional facilities includes first-level referral facilities; 10 045 facilities in China do not have classification for level.
- Coaching denominators for first-level referral and first-level facilities are underestimated.
- Although 14 006 health workers have been coached in the Philippines, data are not available from all facilities. Data shown here for the Philippines are only for selected facilities.
- Data include regional hospitals.
- Data include first-level referral facilities.

Improving and sustaining quality of care

A quality improvement approach for EENC has been introduced by national and provincial hospitals in all countries. Of 153 national, regional, provincial and first-level referral facilities self-reporting data on quality improvement in the eight priority countries, 22% have formed an EENC hospital team and conducted at least one health facility assessment.

Assessments of childbirth, newborn and postpartum care clinical practices in a subset of hospitals (N=96) that have introduced EENC revealed important strengths in clinical practice (Fig. 6). Interviews with 935 mothers showed that immediate skin-to-skin contact was practised for 72% of newborns, and 48% sustained the practice until a complete breastfeed. Furthermore, 80% were exclusively breastfed in the postnatal period. Eighty-four per cent of newborns were bathed after 24 hours as per global recommendations.

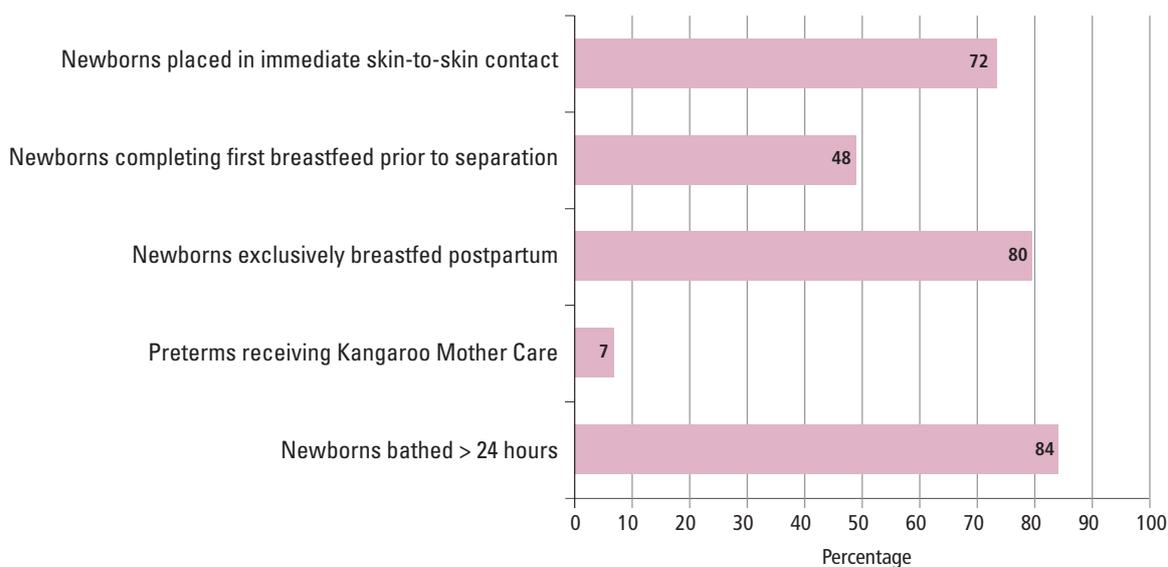
Strong hospital leadership on EENC, national and hospital policies on childbirth and newborn care, and use of data to inform decision-making have been critical factors in creating supportive environments and changing practice. Hospital EENC teams presenting findings from quality-improvement assessments to hospital management have also garnered support to free up senior staff for coaching and subsequent onsite activities.

Inappropriate clinical practices were also identified. Though most babies are placed in immediate skin-to-skin contact, 24% were separated prior to the first breastfeed (Fig. 6). Routine admission to a neonatal care unit (NCU) or observation areas, based on arbitrary weight or gestational age criteria rather than physiological criteria, remains a common practice that often deprives babies of skin-to-skin contact and breastfeeding. Unnecessary NCU admissions for babies after caesarean sections also persist. Eliminating such admissions will not only save resources, but also reduce clutter and hospital-acquired infections that often result in death. Lastly, though lifesaving, Kangaroo Mother Care (KMC) was used for management of only one of the 15 (7%) preterm babies sampled. Lack of provider knowledge and skills, as well as space and beds for KMC, are challenges to consistent adoption of KMC for preterm babies.

Changing practices requires clear staff roles and responsibilities, as well as organization of workspace and complete recordkeeping of those coached in EENC, but they are often missing.

FIGURE 6. EENC clinical practice in 96 hospitals from seven countries, December 2015

Observations of 935 live births in 96 hospitals: 14 national, 13 regional, 60 provincial/first-level referral hospitals, and 9 first-level facilities. Kangaroo Mother Care data based on observations of 15 preterm babies in 38 hospitals.



Medicines and commodities

Most medicines and commodities are available in countries. However, gaps remain for antenatal corticosteroids, functional newborn resuscitation equipment, and soap, single-use towels (or alcohol hand rubs), especially in subnational facilities.

Health communication and advocacy

The *Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014–2020)* includes strategic actions on: (1) ensuring an enabling environment for EENC; and (2) engaging communities and families to increase demand for EENC. To support the implementation of these actions, an integrated marketing communications campaign, entitled "The First Embrace", was conceptualized with the following

BOX 5. EENC coaching – an emphasis on changing practice

"I've done trainings for 20 years, but they were never successful like this."

– Ministry of Health, staff member, Viet Nam

EENC has been introduced using a coaching approach that emphasizes changing health-worker practice. Unlike traditional training, EENC coaching takes place on the job. This initial coaching focuses on managing breathing and non-breathing babies. Hand hygiene practice is always included. Principle features of the approach include:

- two-day coaching in a delivery room to create a realistic environment;
- no lectures or presentations; facilitators must phrase what they want to say as questions, akin to the Socratic method;
- health workers demonstrate their current practices unassisted to establish a baseline – and coaching begins from what they are currently doing;
- facilitators coach participants until newborn care steps are mastered; and
- pre- and post-coaching evaluations of clinical practice, knowledge and hand hygiene ensure participants meet minimum standards.

EENC coaching has been introduced in 12 countries including the 8 priority countries. Because the approach is practice-based, a facilitator-to-participant ratio of no more than 1:6 is recommended. For this reason, countries have placed a high priority on training a cadre of skilled facilitators. Mannequins are needed to support coaching (Neonatalies™ and Mamanatalies™ have been used), but otherwise all coaching supplies are usually available in hospitals (delivery beds, delivery sets, cloths and blankets). Pre- and post-test results show that health workers are generally able to master core knowledge and practice skills (at least 90% of tasks performed correctly). The response to EENC coaching has been overwhelmingly positive.

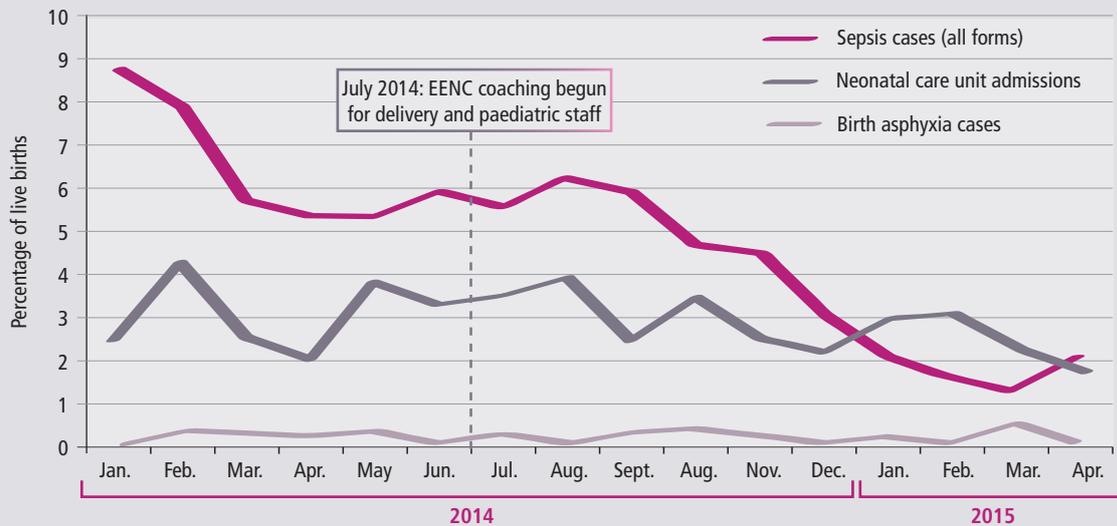
components: a distinct brand and visual identity, print materials (posters, primers and key visuals), a short film, and a website (www.thefirstembrace.org) that serves as a hub for information and dissemination of materials.

The First Embrace was launched in five countries following translation of campaign materials in local languages: Mongolia (May 2015), the Philippines (May 2015), Viet Nam (July 2015), China (October 2015) and Solomon Islands (December 2015). Launches were conducted online (for example through social media) and through organized events (for example press conferences, hospital tours and media interviews). Results have been encouraging with active engagement on social media and over US\$ 2 million in estimated earned media value. This is a 40 times return on investment. The campaign hashtag "#FirstEmbrace" was viewed 12.8 million times on the social media website Weibo in China. The First Embrace video was viewed over 150 000 times on YouTube and the WHO Facebook page.

Hospital impact indicators

TRACKING CHANGES IN HOSPITAL IMPACT

FIGURE 7. NCU admissions, sepsis and asphyxia cases, Da Nang Hospital for Women and Children, Viet Nam, January 2014 to April 2015*



* Country reports on the validation of EENC data: Workshop on the validation of early essential newborn care progress, Manila, Philippines, 11–12 August 2015. WHO, Manila, 12 September 2015.

Hospital impact data are essential for informed clinical decision-making, for identifying outbreaks or unusual increases in cases and for tracking long-term trends. Tracking impact data from Da Nang Hospital for Women and Children in Viet Nam over the 16 months following EENC coaching (in July 2014) revealed a downward trend in cases of sepsis (Fig. 7).

Twelve indicators are reported on hospital impact. As of December 2015, 10% of hospitals that introduced EENC reported impact data. Complete data were only available for 9% and partial data for 58% of indicators. Frequently, data were not disaggregated by gestational age or birthweight. Partial reporting also occurred because not all hospital levels reported, with lower-level hospitals less likely to report. Ninety-eight per cent of hospital impact indicators for which data were available, or partially available, were validated (Table A 4.3, Annex 4).

Most countries have begun collecting hospital impact data on a small scale. In Mongolia, hospital impact data will be integrated into the routine maternal and child health (MCH) surveillance system that collects data every two weeks from all facilities; an important landmark in making hospital impact data collection routine and sustainable. The Lao People's Democratic Republic is exploring incorporation of hospital impact data into the District Health Information Software (DHIS-2).

Hospital impact data collection remains a challenge for several reasons. Essential impact data are often partially or not recorded at all in hospital charts and registries. Also, most hospitals use paper-based recording. This requires a designated staff member to collect and input data, which adds another opportunity for data entry errors. Internationally standardized indicator definitions are often not used or strictly followed which leads to unreliable, inaccurate and non-comparable hospital impact data. Mother and baby charts sometimes have no linked identification codes which makes it difficult to obtain relevant maternal information that is often important for informed clinical decision-making.

Data management will be an important issue in the next phase of scale up. As a primary objective, hospitals need to collect, manage and use their own impact data for tracking progress. A secondary objective is receiving and managing impact data at the central level for national tracking.

Coverage indicators for EENC interventions

THE KEY INTERVENTIONS OF EENC



intrapartum care



immediate and thorough drying



immediate skin-to-skin contact



appropriately timed clamping and cutting of the cord



exclusive breastfeeding



kangaroo mother care



treatment of infections

ALL MOTHERS

ALL NEWBORNS: FIRST EMBRACE

PRE-TERM
LBW NEWBORNS

SICK
NEWBORNS

Improving population-based coverage of EENC interventions is the primary programme outcome and a result of effective policy and systems inputs.

Fourteen indicators are reported to track population-based coverage. All eight countries reported on the coverage indicators, with data available for 57% of indicators. Coverage data were least often available from countries that have not conducted large-sample population-based surveys regularly. Indicators most frequently reported were skilled birth attendance, mothers receiving postnatal care within two days of birth, facility delivery rates and caesarean section rates. Indicators least frequently reported were immediate and postnatal newborn care practices. Questions for most of these indicators have been developed and tested but are infrequently included in routine large-sample household surveys such as Demographic and Health Surveys; yet these are critical for tracking programme reach and progress, and for planning. Ninety-seven per cent of available data were validated (Table A 4.4, Annex 4).

Target 2 of the *Action Plan for Healthy Newborns in the Western Pacific Region (2014–2020)* is "At least 90% of births in all subnational areas are attended by skilled birth attendants". Delivery by a skilled attendant in a facility can drastically reduce maternal and newborn mortality. In most priority countries, rates of delivery by skilled attendants and at facilities have increased steadily in the last decade to reach high coverage levels (Fig. 8). Skilled birth attendance rates are above 90% in Viet Nam (94%), Mongolia (99%), and China (99.8%) and close to 90% in Solomon Islands (86%) and Cambodia (89%). This remarkable achievement, while making it possible to reach a high proportion of the population, makes quality of care paramount to further reductions in maternal and newborn deaths and illness.

Caesarean sections can save lives when used for medical indications, but increase adverse outcomes for mother and baby when used for non-medical indications. Globally, aside from increasing health-care costs, non-medically indicated caesarean sections are the most common cause of prematurity. At the population level, caesarean section rates higher than 10% are not associated with reductions in maternal and newborn mortality rates.

Population coverage data show very high caesarean section rates in three priority countries, particularly in urban areas (Fig. 8). China has exerted major effort to reduce its national caesarean section rate from a high of 41% in 2008 to 35% in 2015. While data are not available on the proportion of unnecessary caesarean sections in countries with high rates, future efforts will need to focus on eliminating procedures conducted for non-medical reasons and ensuring babies born by caesarean section also benefit from EENC.

Early initiation of exclusive breastfeeding is one of the most effective interventions to save newborn lives. Only in Mongolia (93%), Solomon Islands (75%) and Cambodia (63%) do more than half of newborns get breastfed within one hour of birth. In contrast, prelacteal feeding, that is feeding with various liquids prior to breastfeeding, increases the risk of infection and interferes with breastfeeding. Prelacteal feeding is low only in Solomon Islands (6%) (Fig. 9).

The growing influence of the formula industry on caregivers, families and medical staff remains a significant concern for infant-feeding practices. Due to this influence, many babies receive breast-milk substitutes with increased risk of illness and death. Furthermore, no country has strong enforcement of the International Code of Marketing of Breast-milk Substitutes. In many countries, more women are working and limited maternity leave hinders sustained exclusive breastfeeding. Breastfeeding counselling in the early newborn period remains crucial to improving rates of early and sustained breastfeeding, but has been slow to improve.

FIGURE 8. Population coverage for skilled birth attendance, facility delivery and caesarean section, eight countries, 2006–2015*

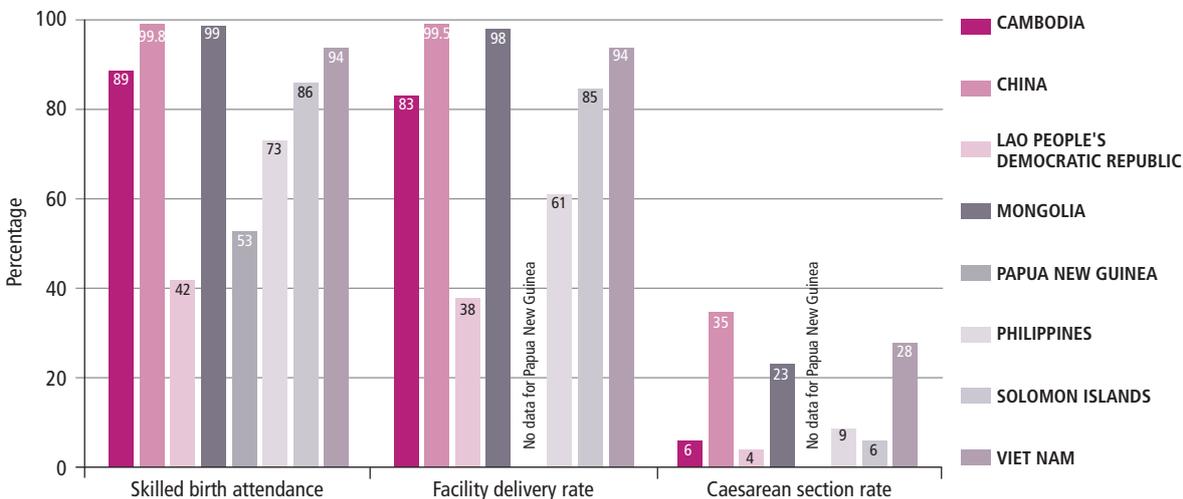
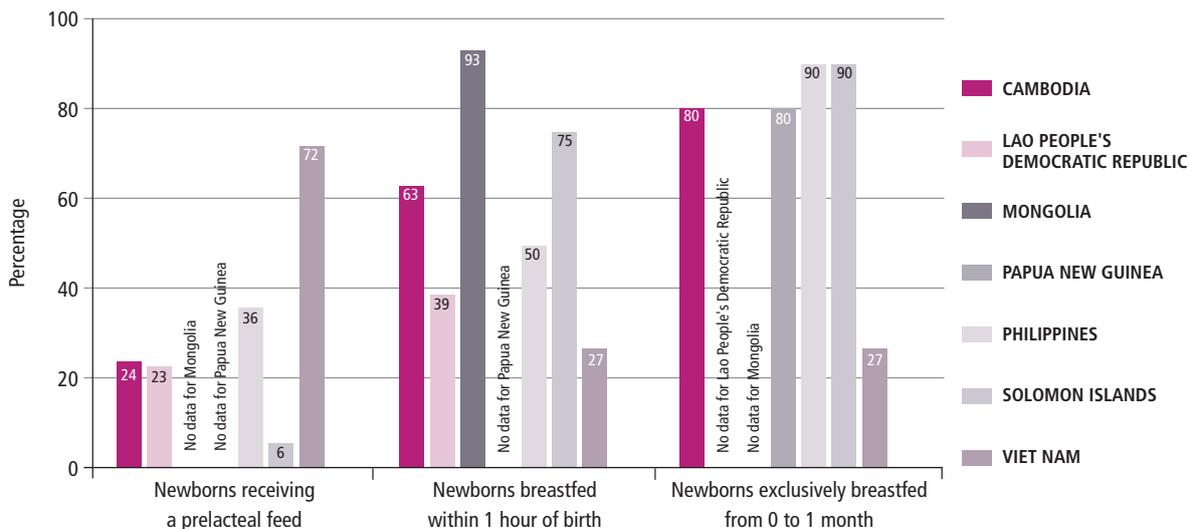


FIGURE 9. Population coverage for prelacteal feeding, early breastfeeding and exclusive breastfeeding 0–28 days, in seven countries, 2006–2014*



* Country Demographic and Health Surveys and Multiple Indicator Cluster Surveys, 2006–2014. Maternal and Child Mortality Surveillance Report of China, 2015. Mongolia Social Indicator Sample Survey, 2013.

Measuring and reporting birth weight is an essential component of EENC and required for determining postnatal care. Six countries reported data. The proportion of babies with a reported birth weight exceeded 70% in Cambodia, the Philippines and Solomon Islands and 90% in Mongolia and Viet Nam.

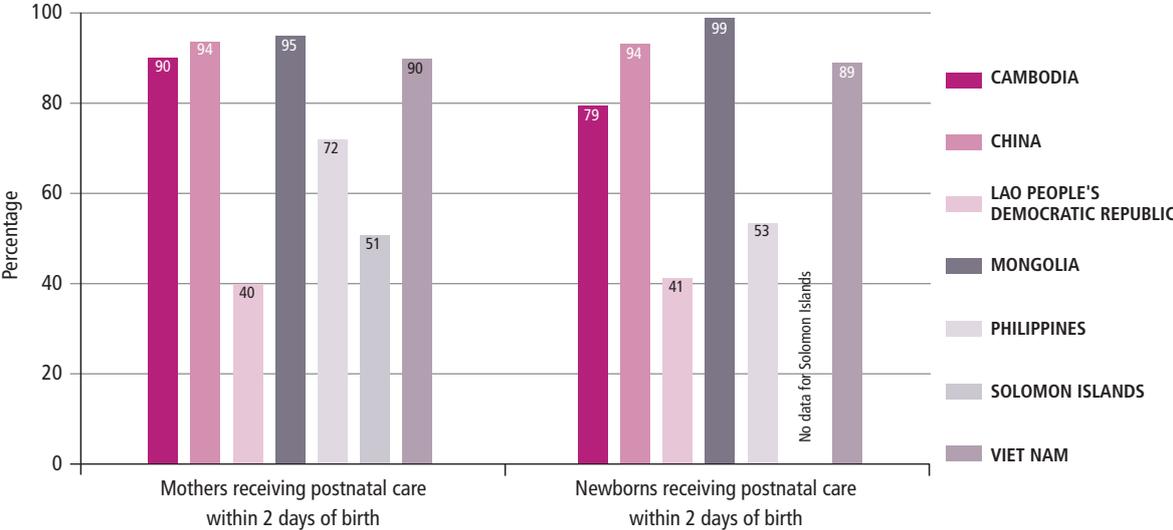
Seven countries reported data on postnatal care (PNC) contacts within 48 hours for the mother; six of these countries also reported PNC contacts for the newborn (86%). The vast majority of mothers received PNC within 48 hours in Mongolia (95%), China (94%), Cambodia (90%), Viet Nam (90%) and Philippines (72%). The vast majority of newborns received PNC within 48 hours in Mongolia (99%), China (94%), Viet Nam (89%) and Cambodia (79%). Two countries showed gaps between rates of maternal and newborn PNC, suggesting newborns often do not receive PNC at the same time as the mother (Fig. 10).

Early newborn care (for example drying, skin-to-skin contact, delayed bathing) and postnatal care indicators are often not included in population-based surveys, although tools to measure these indicators are available. Population-based data on skin-to-skin contact were available only from the Philippines, which reported that 64% of all newborns delivered in facilities were placed in skin-to-skin contact nationally, according to the 2013 National Demographic and Health Survey. This is a dramatic improvement from rate of 9.6% found in a hospital study in 2008.⁹

High population coverage rates mask important inequities by wealth and education status, urban/rural residence and other factors that remain common in most countries.^{10,11} Location of high-risk populations may influence which areas (and facilities) are targeted for early implementation and scale up, as well as strategies needed to introduce and support quality EENC. For example, facilities in remote areas may have difficulty recruiting and retaining staff, may lack electricity or water, and may have gaps in medicines and commodities that are different from facilities with easier access to infrastructure.

9. Sobel, HL, Silvestre MA, et al. 2011. Immediate newborn care practices delay thermoregulation and breastfeeding initiation. *Acta Paediatr.* 2011 Aug;100(8):1127-33. doi: 10.1111/j.1651-2227.2011.02215.x. Epub 2011 Mar 7.
10. Barros AJ, Ronsmans C, Axelson H, Loaiza E, Bertoldi AD, Franca GV et al. Equity in maternal, newborn, and child health interventions in Countdown to 2015: a retrospective review of survey data from 54 countries. *Lancet* 2012; 379(9822): 1225-33.
11. Country Demographic and Health Surveys and Multiple Indicator Surveys, 2005–2015.

FIGURE 10. Population coverage for maternal and newborn postnatal care, seven countries, 2006–2015*



* Country Demographic and Health Surveys and Multiple Indicator Cluster Surveys, 2006–2014. Maternal and Child Mortality Surveillance Report of China, 2015. Mongolia Social Indicator Sample Survey, 2013.

Impact indicators for newborn health

CHALLENGES TO TRACKING IMPACT ON NEWBORN HEALTH



UNDER-REGISTRATION & UNDER-REPORTING

of live births and neonatal deaths (number and causes)



HEALTH MANAGEMENT INFORMATION SYSTEMS

do not yet routinely collect and report data on newborn mortality



GLOBALLY RECOMMENDED

standard case definitions are not systematically used

Five indicators tracking newborn health impact were reported by all eight countries. Data were derived from the United Nations Inter-agency Group for Child Mortality Estimation (IGME) (for neonatal mortality estimates and causes of death), population-based surveys, and routine surveillance data in countries with relatively high system coverage and reporting (China and Mongolia). Sixty-eight per cent of impact indicators for newborn health were reported by countries. Data were most frequently unavailable for perinatal mortality and prevalence of preterm births (Table 4). Ninety-two per cent of available data were validated (Table A 4.5, Annex 4).

All countries collect mortality and birth weight data and use these data for tracking progress. Across the eight priority countries, important causes of neonatal deaths continue to be preterm birth, asphyxia and infection. These could be prevented through implementation of quality EENC.

While disaggregation of newborn deaths from under-5 child deaths is essential for tracking progress, some countries do not separate newborn deaths from under-5 child deaths. Therefore, modelled data from IGME have to be used for recent estimates. Neonatal mortality rates in five countries are now low enough to make survey-based estimates less valid and reliable. These include China (6/1000 live births), Mongolia (10), Viet Nam (12), Solomon Islands (12) and the Philippines (13).

Declining newborn mortality rates will make it increasingly difficult to collect mortality data using standard samples sizes used in population-based surveys. Thus, use of routine data systems will be important in the longer term as newborn mortality rates decline. Routine health information systems are used for tracking newborn health impact data in two countries (China and Mongolia), although the accuracy and precision of these data have not been validated. For routine health management information systems (HMIS) to be accepted as valid and reliable estimates of population mortality, these systems will need to be periodically evaluated.

Perinatal deaths audits are not routinely conducted in any country. They should be considered in selected facilities to better understand underlying systems barriers leading to death and inform action to address problem areas. A standard tested methodology is needed for regional use. International Classification of Diseases 10th edition (ICD-10) definitions also need to be used systematically for defining perinatal cases.

TABLE 4. Population impact indicators by country, March 2016*

	CAMBODIA	CHINA	LAO PEOPLE'S DEM. REP.	MONGOLIA	PAPUA NEW GUINEA	PHILIPPINES	SOLOMON ISLANDS	VIET NAM
Neonatal mortality rate (per 1000 live births)	18	6	30	10	25	13	12	12
Perinatal mortality rate (per 1000 live births)	No data	5.5	No data	14.5	No data	22	No data	No data
Proportional causes of neonatal death								
– sepsis	17%	2.3%	18%	3.8%	15%	13%	15%	8%
– tetanus	0.3%	0.1%	1.4%	0%	1.1%	0.4%	0.4%	0.6%
– birth asphyxia	24%	27%	29%	13%	27%	23%	25%	14%
– preterm birth	29%	34%	26%	34%	31%	33%	29%	41%
– congenital anomalies	17%	18%	10%	10%	11%	17%	19%	22%
Low-birth-weight rate (< 2500 g)	7.9%	6.2%	15%	4.4%	No data	21%	13%	5.7%
Preterm-birth rate (< 37 weeks)	No data	7.5%	No data	No data	No data	13%	No data	No data

* Data from country Demographic and Health Surveys and Multiple Indicator Cluster Surveys, 2006–2014. For China and Mongolia, data are from routine health information systems. Neonatal mortality estimates are from IGME for countries where surveys were not conducted in the past three years. Data on proportional causes of death are from 2015 WHO – Maternal Child Epidemiology Estimations. Estimate on preterm birth rate for the Philippines is from Born Too Soon: The global epidemiology of 15 million preterm births (Blencowe et al., 2013).

Financing: making resources available for long-term sustainability

SECURING PREDICTABLE AND SUSTAINABLE SOURCES OF FUNDING



Develop an investment case for EENC



Advocate with decision-makers and development partners to improve resource commitment



Seek sources for financial protection of childbirth and newborn care services such as insurance schemes

Predictable and sustainable sources of funding are required to further expand EENC. Currently all countries have developed rolling one-year implementation plans, financed by the Ministry of Health in collaboration with WHO, UNICEF and other partners. Full costing of EENC introduction and scale up, however, has not yet been completed in any country, which may limit the ability to advocate for resources.

The low priority given to newborn care within ministries of health and insufficient understanding of the potential impact of EENC are barriers to securing sufficient domestic funds. As many components of EENC implementation (human resources, essential infrastructure, medicines and commodities) are already funded in recurrent government budgets, the additional marginal cost of introducing EENC is likely to be low. Furthermore, cost savings result from reduced incidence of illness among

babies, decreased NCU admissions, and provision of only recommended care during childbirth and postpartum. These cost savings need to be used to convince decision-makers in ministries of health and finance that EENC needs to be prioritized, incorporated and protected in routine budgets.

Other challenges include misalignment between budget estimates of the ministry of health and ministry of finance as well as decreasing funding from central governments in certain settings. Delays in disbursement of funds, insufficient systems for tracking external funding flows, poor expenditure reporting systems, and weak governance make for a complex and unwieldy system.

Some countries have national health insurance schemes in place that provide free services for women, mothers and babies. Other countries do not yet have a comprehensive insurance scheme, but are providing free services for high-risk groups. All countries recognize that adequate financial protection for mothers and children, including newborns, is critical and are working towards this goal. This represents another source of financing for EENC services.

External funding from development partners, many of whom are interested in EENC, can also be sought. A formal investment case for EENC that outlines long-term impact and cost savings from implementation of EENC has not yet been developed in any country but could attract additional donor partners.

Priority actions to consolidate gains and further scale up EENC in the next biennium

PRIORITY ACTIONS



Plan and secure long-term financing for EENC



Develop communication materials and strategies



Further scale up the basic EENC coaching package



Strengthen monitoring and evaluation for EENC



Develop, test and introduce new methods with WHO and partners

"This was one of the most productive and well-organized meetings I have attended in over 35 years of working in international public health."

– IRG member commenting on the Meeting on Accelerating Progress in Early Essential Newborn Care

During the Meeting on Accelerating Progress in Early Essential Newborn Care in Tokyo, Japan, from 21 to 25 September 2015, representatives from the priority countries discussed the status of EENC implementation and identified challenges and priority actions for the next biennium (see country road maps in the full report of the meeting).¹² There was consensus across all countries on priority actions for the next biennium (Table 5).

12. Meeting on Accelerating Progress in Early Essential Newborn Care, Tokyo, Japan, 21-25 September 2015: report. World Health Organization. Regional office for the Western Pacific, 2016.

TABLE 5. Priority actions developed by eight countries: consolidating gains and further scaling up EENC in the next biennium

1. Plan and secure long-term financing	<ul style="list-style-type: none"> – Finalize and cost five-year EENC action plans. – Integrate EENC plans into existing MCH plans. – Integrate EENC budgets into routine MCH budgets. – Develop an investment case for EENC. – Advocate for funding with policy-makers, senior ministry of health and ministry of finance staff, and development partners. – Ensure financial protection for mothers and newborns so that all childbirth, newborn and postpartum care is affordable.
2. Build consensus and create demand	<ul style="list-style-type: none"> – Build consensus on EENC from decision-makers in government, namely ministries of health and finance. – Develop communication materials and strategies for better educating women, families and communities.
3. Further scale up coaching of the basic EENC package to 28 000 health facilities in the Region	<ul style="list-style-type: none"> – Complete adaptation of the EENC clinical pocket guide and harmonize EENC standards with other technical guidelines. – Adapt WHO guides for EENC coaching and for introducing and sustaining EENC in hospitals, including in pre-service curricula. – Identify and coach a pool of EENC facilitators to implement the coaching scale-up plan. – Form hospital quality-improvement EENC teams at hospitals that have introduced EENC and ensure these teams conduct quality-improvement assessments. – Ensure availability of medicines, commodities, equipment and other support for EENC at health facilities. – Integrate EENC medicines and commodities into essential medicine and equipment lists.
4. Strengthen monitoring and evaluation for EENC	<ul style="list-style-type: none"> – Integrate EENC monitoring and evaluation indicators in existing reporting forms, secure government approval for integration into routine systems. – Integrate population-based indicators for newborn health into large-sample population-based surveys. – Conduct annual implementation reviews and planning. – Continue and expand maternal death surveillance and response. – Strengthen monitoring, reporting and enforcement of the International Code of Marketing of Breast-milk Substitutes.
5. Develop, test and introduce new methods and guidelines in collaboration with WHO and other partners	<ul style="list-style-type: none"> – Neonatal death audit guidelines. – Coaching on prevention and management of preterm and low-birth-weight babies. – Coaching on complications during childbirth (emergency obstetric care). – Coaching on management of neonatal sepsis.

Annexes

Annex 1. Background data: causes and timing of newborn deaths

Figure A 1.1 Causes of under-5 deaths in the Western Pacific Region, 2015

Figure A 1.2 Newborn mortality: age at death (0–28 days) in 43 countries, 2012

Annex 2. EENC interventions

Table A 2.1 Detailed EENC interventions for all and high-risk mothers and newborn infants

Annex 3. EENC monitoring and evaluation framework

Table A 3.1 Benchmarks of EENC scale-up readiness, 2015–2020

Table A 3.2 Health facility EENC standards, 2015–2020

Table A 3.3 Hospital impact indicators, 2015–2020

Table A 3.4 Coverage indicators for EENC interventions, 2015–2020

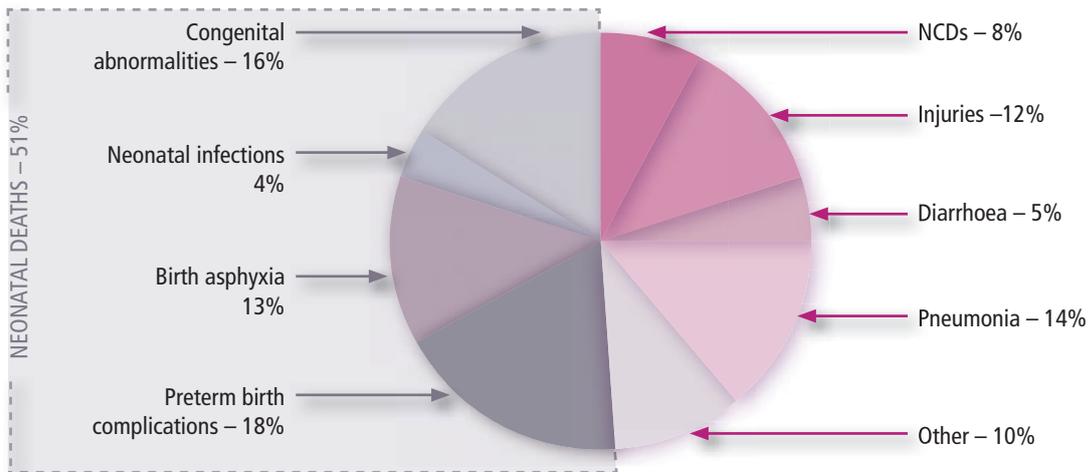
Table A 3.5 Impact indicators for newborn health, 2015–2020

Annex 4. Validation of EENC M&E data from eight priority countries

- EENC scale-up readiness benchmarks
- Health facility EENC standards
- EENC hospital impact indicators
- EENC population coverage indicators
- EENC impact indicators

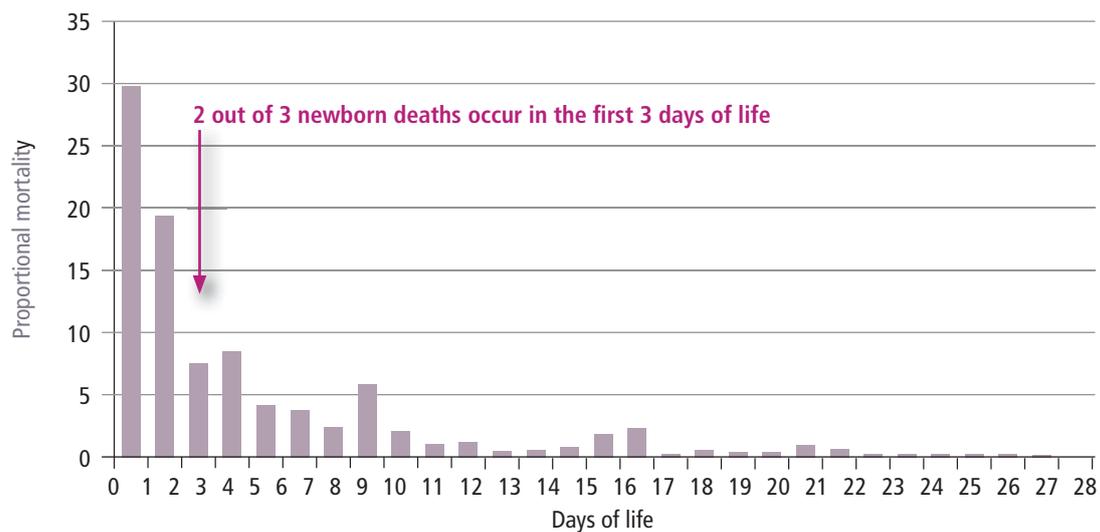
Background data: causes and timing of newborn deaths

FIGURE A 1.1 Causes of under-5 deaths in the Western Pacific Region, 2015



Source: Global Health Observatory. Geneva; WHO, 2015.

FIGURE A 1.2 Newborn mortality: age at death (0–28 days) in 43 countries, 2012



Source: WHO. Special Tabulation of Demographic and Health Survey in 43 countries (2005–2011), 2012.

EENC interventions

TABLE A 2.1 Detailed EENC interventions for all and high-risk mothers and newborn infants

A. All mothers and newborn infants
THE FIRST EMBRACE
All mothers
<ul style="list-style-type: none"> • Maintain a supportive environment (e.g. companion and position of choice, elimination of unnecessary/harmful procedures) • Avoid environmental exposure to cold, draughts and infection • Maternal and fetal monitoring during labour including use of the partograph • Improved recognition of labour signs, care and referral of woman with risk factors (e.g. hypertension, diabetes, preterm labour); management of obstetric complications • Set up newborn resuscitation area, including checking equipment for functionality • Organize delivery space • Postpartum care visits: counselling for routine newborn care and danger signs • HIV and syphilis point-of-care rapid testing
All newborn infants
<ul style="list-style-type: none"> • Immediate and thorough drying • Delayed bathing • Immediate skin-to-skin contact
All newborn infants, if breathing
<ul style="list-style-type: none"> • Appropriately-timed cord clamping; cut once • Exclusive breastfeeding when feeding cues occur • Rooming in/keeping warm • Routine care (e.g. eye care, vitamin K, immunizations and examinations) delayed until after the first full breastfeed • Elimination of harmful practices including routine suctioning, placing substances on the cord stump, and pre-lacteal feeds • Postnatal care visits
All mothers and newborn infants – Avoidance of exposure to nosocomial pathogens through:
<ul style="list-style-type: none"> • Hand hygiene and other infection prevention measures • Non-separation unless urgent care required

TABLE A 2.1 Detailed EENC interventions for all and high-risk mothers and newborn infants (*continued*)

B. High-risk mothers and newborn infants
1. PREVENTION AND CARE OF PRETERM AND LOW-BIRTH-WEIGHT NEWBORN INFANTS
High-risk mothers and newborn infants
<ul style="list-style-type: none"> • Elimination of unnecessary induction of labour and caesarean sections • Antenatal steroids and magnesium sulfate • Antibiotics* for preterm pre-labour rupture of membranes • Kangaroo Mother Care • Feeding with breast milk • Monitoring for complications
2. PREVENTION AND CARE OF SICK NEWBORN INFANTS
Newborn infants who are not breathing despite thorough drying (asphyxia)
<ul style="list-style-type: none"> • Bag and mask ventilation • Post-resuscitation care (including aseptic cord trimming), monitoring and referral of cases with incomplete recovery/severe conditions
Sick newborn infants and newborn infants with complications of birth
<ul style="list-style-type: none"> • Standard case management of newborn sepsis and other newborn problems (e.g. pneumonia, meningitis, other infections, jaundice, malformations) • Identification of at-risk newborn infants • Stabilization (including prevention of hypothermia, hypoglycaemia, hypoxaemia, apnoea and infection) prior to timely referral • Oxygen and/or continuous positive airway pressure (CPAP) for those with respiratory distress • Care of seriously-ill newborn infants • Antiretrovirals for infants exposed to HIV and penicillin for those exposed to syphilis • Referral between levels of care and wards

* Erythromycin is recommended as the antibiotic of choice, use of a combination of amoxicillin and clavulanic is not recommended (WHO 2015 recommendations on interventions to improve preterm birth outcomes).

EENC monitoring and evaluation framework

TABLE A 3.1 Benchmarks of EENC programme, 2015–2020

Review benchmarks annually to track progress with benchmarks scoring "No" or "Partial" and to ensure that benchmarks that previously scored "Yes" have not changed.

Benchmarks – Yes, No or Partial	Status						Country target
	2015	2016	2017	2018	2019	2020	
1. Newborn health situation analysis conducted in the previous 5 years was used for strategic planning ¹							YES
2. EENC 5-Year Action Plan developed based on Regional Action Plan for Healthy Newborns, ² costed and adopted by the Ministry of Health							YES
3. EENC Annual Implementation Review conducted annually to inform development of annual implementation plans ^{3,4}							YES
4. Detailed annual EENC Implementation Plan funded							YES
5. EENC technical working/coordination group meets regularly ⁵							YES
6. Full-time EENC/newborn health focal person appointed in Ministry of Health							YES
7. EENC stakeholder group meets regularly ⁶							YES
8. Clinical Intra-Partum and Newborn Care Protocol endorsed							YES
9. Mechanisms established to ensure that professional associations are supporting implementation of EENC							YES
10. Proportion of EENC interventions (normal and high-risk deliveries) included in pre-service training curricula: a) Medical; b) Nursing; c) Midwifery							100% for all

1. Situation analysis includes a review of trends in: newborn, child and maternal morbidity and mortality and intervention coverage along the continuum of care; an analysis of newborn health equity for different populations and groups; status of key systems inputs to support delivery of newborn health interventions.
2. WHO Regional Office for the Western Pacific, UNICEF. Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014–2020). Manila: WHO, 2014.
3. Early Essential Newborn Care Annual Implementation Review and Planning Guide. Draft. June 2016. Manila: WHO, June 2016.
4. Technical content consistent with international EENC standards – curricula include clinical EENC coaching as part of teaching method. EENC core interventions are described in Annex 2: EENC interventions for mothers and newborn infants.
5. Membership may include: Ministry of Health, public health divisions, obstetric and paediatric decision-makers, professional associations, civil society organizations and development partners. Meeting frequency is recommended at least quarterly.
6. Membership may include: policy-makers, legislators, health providers, hospital administrators, civil society leaders, development partners, media practitioners, academia and health professional associations. Meeting frequency is recommended at least quarterly.

TABLE A 3.2 Health facility EENC standards, 2015–2020

Use methods and tools from the EENC Annual Implementation Review¹ to collect data from health facilities and complete one table for each level of facility: a) national and regional hospitals²; b) first-level referral hospitals³; and c) first level where deliveries take place for national estimates.³

Level of facility: _____

Standards	Data per year						Country target
	2015	2016	2017	2018	2019	2020	
1. Proportion of breathing newborns that receive immediate skin-to-skin contact for at least 90 minutes							90%
2. Proportion of newborns exclusively breastfed in the immediate postnatal period							100%
3. Proportion of newborns with a birth weight \leq 2000 g that receive Kangaroo Mother Care*							85%
4. Proportion of staff providing childbirth, newborn or postpartum care services that are coached in EENC							100%
5. Proportion of facilities using a quality-improvement approach to support implementation of EENC							100%
6. Proportion of delivery room(s), recovery room(s), neonatal care units (NCUs), and postnatal care room(s) that have adequate handwashing resources*							100%
7. Proportion of health facilities with no stock-outs of key life-saving medicines required to provide EENC							100%
a. Magnesium sulfate for severe pre-eclampsia and eclampsia, and for fetal neuroprotection if <32 weeks of gestational age							100%
b. Oxytocin for the prevention of postpartum haemorrhage for all births							100%
c. Corticosteroids for women							100%
d. Injectable antibiotics for newborn sepsis							100%
8. Proportion of health facilities with functional key life-saving commodities required to provide EENC							100%
a. Functional ambu bag and masks (sizes 0 and 1) within 2 meters of all delivery beds							100%
b. Continuous supply of oxygen							100%
c. Continuous Positive Airway Pressure (CPAP) (national, regional and first-level referral hospitals)							100%

TABLE A 3.2 Health facility EENC standards, 2015–2020 (*continued*)

Standards	Data per year						Country target
	2015	2016	2017	2018	2019	2020	
9. Proportion of health facilities which have eliminated baby foods industry conflicts of interest*							100%
a. Proportion of health facilities where no mother has products or gifts from baby food companies*							100%
b. Proportion of health facilities with a written policy to prohibit use of infant formula and other baby food company activities*							100%
c. Proportion of health facilities with no promotional baby food materials including posters, brochures, pamphlets, or items with logos on their premises*							100%
10. Proportion of complications during childbirth which are properly managed and recorded*							100%
a. Women with severe pre-eclampsia or eclampsia receiving MgSO ₄ within 30 min of diagnosis*							100%
b. Women receiving induction of labour, augmentation of labour or caesarean section (CS) with appropriate indications documented in the mother's record*							100%
c. For facilities where conditions are met: pregnant women of gestational age 24–34 weeks at risk of imminent preterm birth and with no clinical evidence of infection administered the full course of intramuscular dexamethasone or betamethasone prior to childbirth*							100%
d. For facilities where conditions are not met: pregnant women between 24–34 weeks' gestation at risk of imminent preterm birth administered corticosteroids*							0%
11. Proportion of facilities meeting all EENC health facility standards (11–20)*							80%

* Standards added in 2016.

1. Early Essential Newborn Care Annual Implementation Review and Planning Guide. Draft. June 2016. WHO, Manila.
2. a) National- and regional-level facilities: offer services of first referral level plus advanced neonatal care including CPAP; serve as a teaching hospitals and provide support to lower-level facilities.
b) First-level referral facilities: offer services of first level plus management of preterm labour and common complications of prematurity (e.g. oxygen), advanced resuscitation, complications of delivery including assisted delivery and caesarean sections.
c) First-level facilities where deliveries take place should have capacity for care of breathing and non-breathing babies.

TABLE A 3.3 Health facility impact indicators, 2015–2020

Use routine Health Management Information system (HMIS) data or register review from hospitals that have begun implementing EENC to complete one table for each level of facility: a) national and regional hospitals; and b) first-level referral hospitals¹ for national estimates.

Health facility impact indicators	Data per year						Country target
	2015	2016	2017	2018	2019	2020	
1. Neonatal care unit/nursery admission rate							
2. Proportion of newborns by weight (g): < 1000 g; 1000–1499 g; 1500–1999 g 2000–2499 g; 2500–3500 g; > 3500 g							
3. Proportion of newborns born at the facility classified with newborn sepsis ²							
4. Proportion of newborns born at the facility classified with birth asphyxia ³							
5. Newborn mortality rate stratified by weight: < 1000 g; 1000–1499 g; 1500–1999 g 2000–2499 g; 2500–3500 g; > 3500 g							
6. Case-fatality rate (% registered cases dying):							
a. Preterm ⁴ newborns							
b. Low-birth-weight newborns ⁵							
c. Newborn sepsis							
d. Newborn asphyxia							

1. a) National and regional facilities offer services of first-level referral plus advanced neonatal care including CPAP; serve as a teaching hospitals and provide support to lower-level facilities.
b) First-level referral facilities offer services of first level plus management of preterm labour and common complications of prematurity (e.g. oxygen), advanced resuscitation, complications of delivery including assisted delivery and caesarean sections.
2. Bacterial sepsis of the newborn: ICD-10 P36 (codes P36.0 – P36.9, sepsis of known cause or unknown cause).
3. Birth asphyxia is defined as newborns who are gasping or not breathing at 1 minute of age.
4. Preterm newborns are live births less than 37 completed weeks gestation.
5. Low-birth weight is defined as a birth weight of < 2500 g.

TABLE A 3.4 Population's coverage indicators for EENC interventions, 2015–2020

Use representative population-based surveys – Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), or other population-based surveys – to measure coverage. Data are disaggregated by administrative or geographic divisions for subnational tracking and programme planning.¹

National or subnational area: _____

Population's coverage indicators	Data per year (specify source)						Country target
	2015	2016	2017	2018	2019	2020	
1. % of live births attended by skilled health personnel							90%
2. % of live births that take place at health facilities							90%
3. % of live births delivered by caesarean section							
4. % of live rural births delivered by caesarean section							
5. % of newborns dried after birth							100%
6. % of newborns with delayed bath at least 24 hours after birth							100%
7. % of newborns placed on the mother's bare abdomen or chest immediately after delivery (skin-to-skin)							100%
8. % of newborns breastfed within one hour of birth ²							100%
9. % of newborns receiving a prelacteal feed							0%
10. % of live births with a reported birth weight							100%
11. % of women receiving postnatal care within two days of birth ³							100%
12. % of newborns receiving postnatal care within two days of birth							100%
13. % of newborns 0–1 month who are exclusively breastfed							100%

1. For survey methods and standard definitions of coverage indicators see: <http://www.dhsprogram.com/data/Data-Tools-and-Manuals.cfm> and <http://mics.unicef.org>.

2. The standard population-based survey indicator currently measures breastfeeding within 1 hour of birth and not the wider 90-minute window during which breastfeeding can occur.

3. Postnatal care 0–72 hours or 0–2 days after birth.

TABLE A 3.5 Population impact indicators for newborn health, 2015–2020

Use large sample population-based surveys (DHS, MICS, or other large sample surveys) in most settings and civil registration and vital statistics (CRVS) data where available, valid and reliable. Modelled mortality data (IGME and CHERG) may be used to track trends. Data are disaggregated by country administrative or geographic divisions for subnational tracking and programme planning.¹

National or subnational area: _____

Population impact indicators	Data per year (specify source)						Country target
	2015	2016	2017	2018	2019	2020	
1. Neonatal mortality rate (per 1000 live births)							10
2. Perinatal mortality rate ² (per 1000 live births)							
3. Proportional causes of neonatal death:							
a. Sepsis							
b. Tetanus							
c. Birth asphyxia							
d. Preterm birth							
e. Congenital anomalies							
4. Low-birth-weight rate (< 2500 g)							
5. Preterm birth rate (< 37 weeks)							

1. For survey methods and standard definitions of impact indicators see: <http://www.dhsprogram.com/data/Data-Tools-and-Manuals.cfm> and <http://mics.unicef.org/>

2. Perinatal mortality rate: the sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1000.

Validation of EENC M&E data from eight priority countries

EENC scale-up readiness benchmarks

Ten benchmarks are used to track scale-up readiness for EENC. All eight priority countries provided data for at least nine benchmarks, with data available for 95% of benchmarks overall. All available data for benchmarks that were achieved or partially achieved (79%) were validated. Data were least often validated for the benchmarks "EENC stakeholder group formed" and "mechanisms established to ensure that professional associations are supporting implementation of EENC implementation".

TABLE A 4.1 Summary of the availability of data on EENC scale-up readiness benchmarks and validation status by country, July 2016

Benchmarks	CAMBODIA	CHINA	LAO PEOPLE'S DEM. REPUBLIC	MONGOLIA	PAPUA NEW GUINEA	PHILIPPINES	SOLOMON ISLANDS	VIET NAM	n/N (%)
	Scale-up readiness benchmarks* (N = 80)								
Data available	9	9	10	10	10	10	9	9	76/80 (95%)
Data partially available	0	0	0	0	0	0	1	0	1/80 (1%)
Data not available	1	1	0	0	0	0	0	1	3/80 (4%)
Validated**	8	4	9	7	7	7	0	7	49/62 (79%)
Not validated**	0	2	1	1	1	3	5	0	13/62 (21%)

* Number of benchmarks per country is 10; across eight countries data were collected for 10 x 8 = 80 benchmarks.

** Validation of data applies only to those benchmarks which were achieved or partially achieved.

Health-facility EENC standards

Fourteen indicators were reported to track achievement of EENC standards. Data were available for 47% of indicators across all countries, and partially available for 40%. A total of 96% of all indicators were validated. Data validation was not possible for a few indicators where supporting data were not provided, or were not adequate for validation.

TABLE A 4.2 Summary of the availability of data on health-facility EENC standards and validation status by country, July 2016

Standards	CAMBODIA	CHINA	LAO PEOPLE'S DEM. REPUBLIC	MONGOLIA	PAPUA NEW GUINEA	PHILIPPINES	SOLOMON ISLANDS	VIET NAM	n/N (%)
	Health-facility EENC standards (N = 112*)								
Data available	4	14	4	14	4	10	3	0	53/112 (47%)
Data partially available	10	0	2	0	10	4	5	14	45/112 (40%)
Data not available	0	0	8	0	0	0	6	0	14/112 (13%)
Validated**	14	14	5	14	14	13	6	14	94/98 (96%)
Not validated**	0	0	1	0	0	1	2	0	4/98 (4%)

* Number of standards per country is 14; across eight countries data were collected for 14 x 8 = 112 standards.

** Validation was conducted for standards with data available or partially available.

EENC health-facility impact indicators

Twelve indicators are reported on health facility impact. Of those health facilities reporting, 9% had all data available and 58% had partial data available. No data were reported for 32% of all health facility indicators and 99% of health facility indicators were validated.

TABLE A 4.3 Summary of the availability of data on EENC health-facility impact indicators and validation status by country, December 2015

Health-facility impact indicators	CAMBODIA	CHINA	LAO PEOPLE'S DEM. REPUBLIC	MONGOLIA	PAPUA NEW GUINEA	PHILIPPINES	SOLOMON ISLANDS	VIET NAM	n/N (%)
	Health facility impact indicators – Roll-out of EENC (N = 96*)								
Proportion of health facilities that introduced EENC reporting data for health facility impact indicators**	3/109	0	8/8	6/6	3/7	9/196	1/4	3/3	33/330 (10%)
Data available	0	0	0	9	0	0	0	0	9/96 (9%)
Data partially available	10	0	6	2	10	12	5	11	56/96 (58%)
Data not available	2	12	6	1	2	0	7	1	31/96 (32%)
Validated#	10	0	6	11	9	12	5	11	64/65 (98%)
Not validated#	0	0	0	0	1	0	0	0	1/65 (2%)

* Number of indicators per country is 12; across eight countries data were collected for 12 x 8 = 96 indicators.

** National, regional/provincial, and first-level referral hospitals that had introduced EENC at the time of data collection.

Validation was conducted for indicators with data available or partially available.

EENC population coverage indicators

Fourteen indicators are reported to track population-based coverage. Coverage indicators were reported by eight countries and were available for 57% of all country indicators, with 97% of indicators validated.

TABLE A 4.4 Summary of the availability of data on population coverage indicators and validation status by country, December 2015

Population coverage indicators	CAMBODIA	CHINA	LAO PEOPLE'S DEM. REPUBLIC	MONGOLIA	PAPUA NEW GUINEA	PHILIPPINES	SOLOMON ISLANDS	VIET NAM	n/N (%)
	Population coverage indicators for EENC (N = 112*)								
Data available	9	6	9	8	2	10	9	11	64/112 (57%)
Data not available	5	8	5	6	12	4	5	3	48/112 (43%)
Validated**	9	6	9	8	2	10	7	11	62/64 (97%)
Not validated**	0	0	0	0	0	0	2	0	2/64 (3%)

* Number of indicators per country is 14; across eight countries data were collected for 14 x 8= 112 indicators.

** Validation was conducted for indicators and benchmarks with data available or partially available.

EENC population impact indicators

Five indicators tracking newborn health impact were reported by all eight countries. Data were available for 68% of population impact indicators. Ninety-two per cent of indicators were validated.

TABLE A 4.5 Summary of the availability of data on population impact indicators and validation status by country, July 2016

EENC population impact indicators	CAMBODIA	CHINA	LAO PEOPLE'S DEM. REPUBLIC	MONGOLIA	PAPUA NEW GUINEA	PHILIPPINES	SOLOMON ISLANDS	VIET NAM	n/N (%)
	Population impact indicators for EENC (N = 40*)								
Data available	2	5	3	4	2	5	3	3	27/40 (68%)
Data not available	3	0	2	1	3	0	2	2	13/40 (32%)
Validated**	2	4	3	3	2	5	3	3	25/27 (93%)
Not validated**	0	1	0	1	0	0	0	0	2/27 (7%)

* Number of indicators per country is 5; across 8 countries data were collected for 5 x 8 = 40 indicators.

** Validation was conducted for indicators with data available or partially available.

Country profiles

CAMBODIA

CHINA

LAO PEOPLE'S DEMOCRATIC REPUBLIC

MONGOLIA

PAPUA NEW GUINEA

PHILIPPINES

SOLOMON ISLANDS

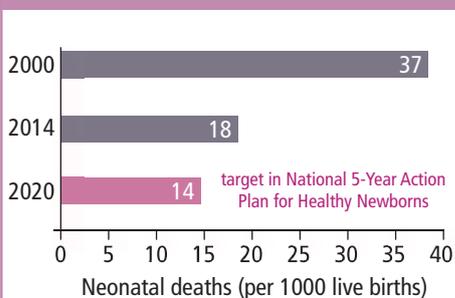
VIET NAM

For all the above countries, the country profiles break into:

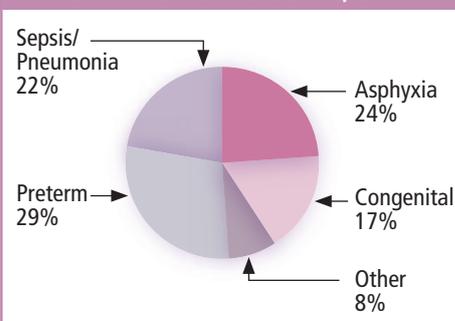
- Neonatal mortality rate
- Causes of neonatal death
- Benchmark of EENC programme readiness
- Coverage of key interventions
- EENC implementation
- Stock-outs of life-saving medicines and commodities for EENC in the past 12 months
- Hospital impact data – High-risk newborns
- EENC clinical practice – Facility data
- Key points

EARLY ESSENTIAL NEWBORN CARE CAMBODIA (1)

NEONATAL MORTALITY RATE¹



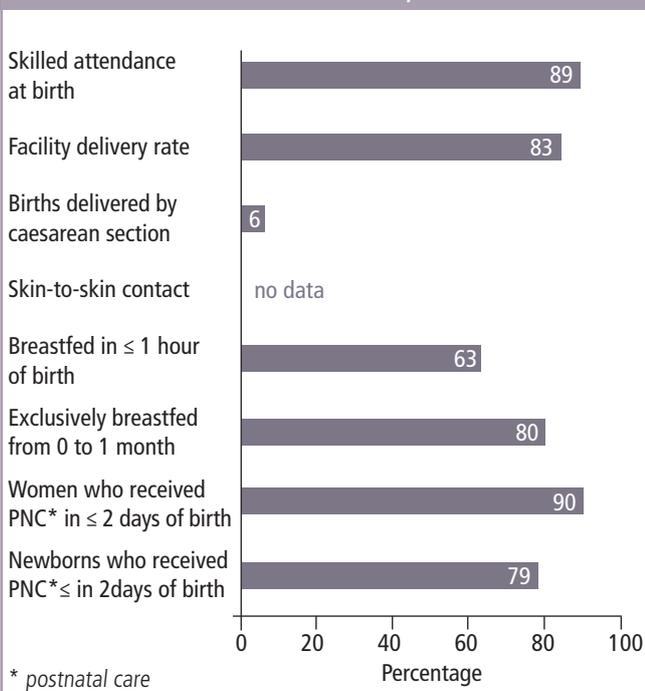
CAUSES OF NEONATAL DEATH, 2015²



BENCHMARK OF EENC PROGRAMME READINESS, 2016³

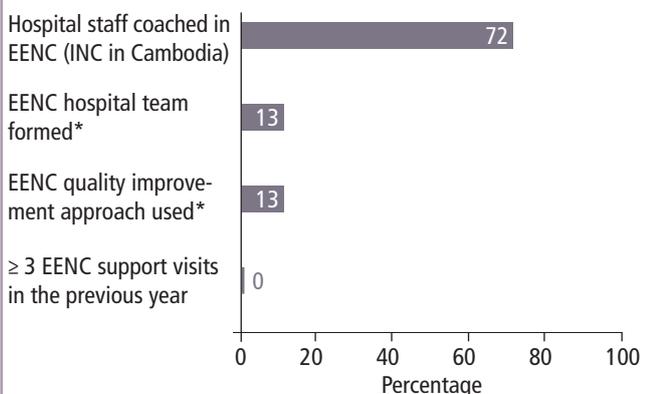
	YES	PARTIAL	NO
EENC 5-Year Action Plan developed, costed and adopted ⁴	█		
12-month EENC Implementation Plan developed and funded	█		
Clinical Intra-Partum and Newborn Care Protocol adapted, reviewed and endorsed	█		
EENC technical working group formed	█		
EENC included in pre-service curricula	no data		

COVERAGE OF KEY INTERVENTIONS, 2014¹



EENC IMPLEMENTATION, 2016³

Total number of delivery centres = 1246
 Total number of facilities that have introduced EENC = 1136 (91%)
 Data are presented for facilities that have introduced EENC: 2 national, 24 provincial and 75 operational district hospitals, and 1035 first-level facilities.



* Data are presented for 24 provincial hospitals.

1. Cambodia Demographic and Health Survey 2000, 2014.
 2. WHO Global Health Observatory, 2015.
 3. Ministry of Health of Cambodia, 2016.
 4. The National 5-Year Action Plan for Healthy Newborns

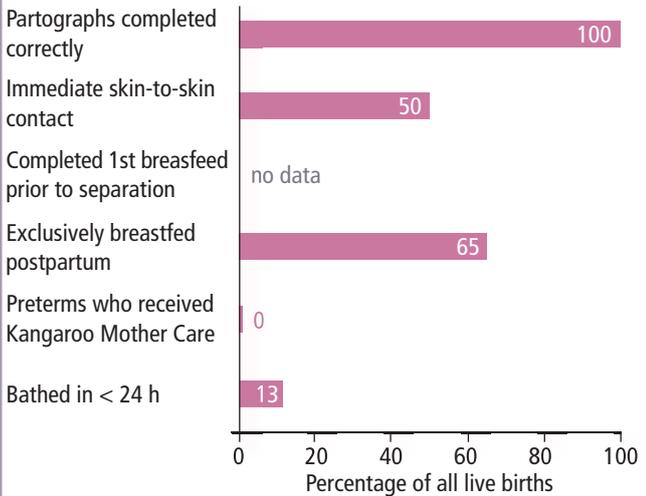
EARLY ESSENTIAL NEWBORN CARE CAMBODIA (2)

STOCK-OUTS OF LIFE-SAVING MEDICINES AND COMMODITIES FOR EENC IN THE PAST 12 MONTHS, 2015⁵

	# of stock-outs (N=2)				
	0	1	2-4	>4	no data
Antibiotics for sepsis	█				
Corticosteroids		█			
Functional bag and mask within 2 m of all delivery beds	█				
Magnesium sulfate		█			
Oxygen	█				
Oxytocin	█				
Soap and water or hand-gel available					█

EENC CLINICAL PRACTICE – FACILITY DATA, 2015⁵

Observations of 18 live births and reviews of 13 charts in 2 provincial hospitals.

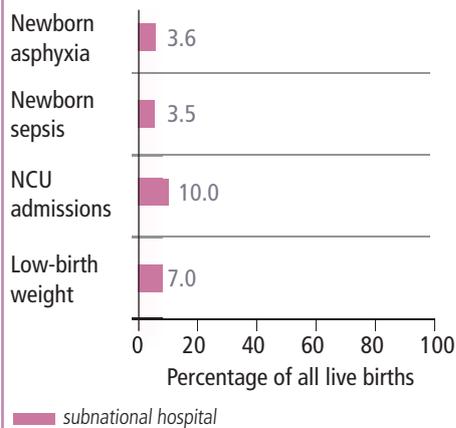


* Observations of 16 live births.

█ subnational hospital

HOSPITAL IMPACT DATA – HIGH-RISK NEWBORNS, 2015⁶

Hospital register data from 9832 live births in 3 provincial hospitals.



█ subnational hospital

KEY POINTS

50% of all under-5 deaths in Cambodia occur in the newborn period.⁷

Immediate newborn care (INC) is implemented in Cambodia.

INC coaching has begun in 40% of national hospitals, 100% of provincial hospitals and 99% of operational district hospitals.

A high proportion of delivery staff at all levels have been coached in INC, including 100% of staff in two national hospitals and over 70% of staff in provincial and operational district hospitals.

Data on EENC practices and availability of essential medicines and commodities for EENC are available from two hospitals.

Hospital impact data are available from three hospitals.

Population coverage is tracked for most key indicators.

Indicators of immediate newborn care practices are not routinely collected.

5. EENC Facility Assessments in 2 hospitals, 2015.

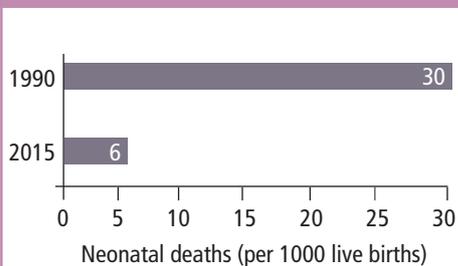
6. Hospital data, 2015.

7. Cambodia Demographic and Health Survey, 2014; Level and Trends in Child Mortality: Report 2015. UNICEF, 2015.

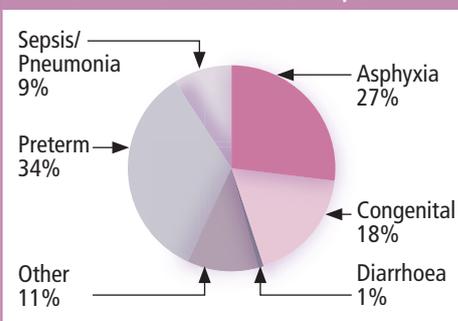
EARLY ESSENTIAL NEWBORN CARE

CHINA (1)

NEONATAL MORTALITY RATE¹



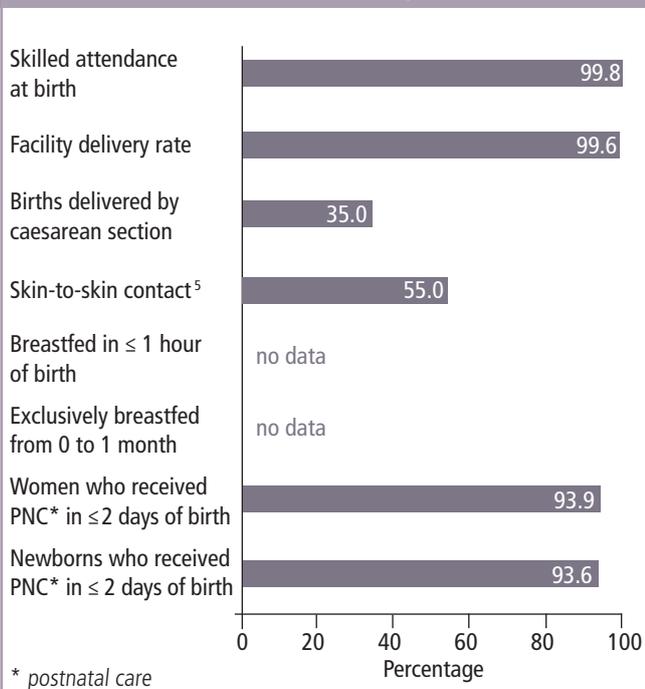
CAUSES OF NEONATAL DEATH, 2015²



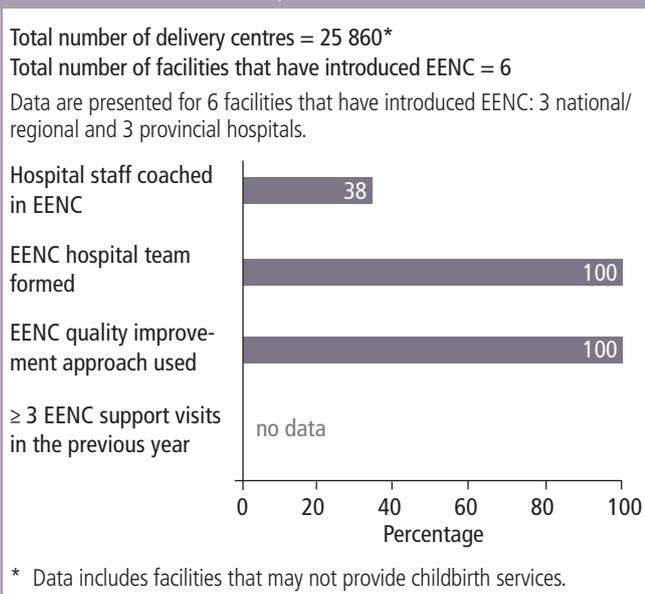
BENCHMARK OF EENC PROGRAMME READINESS, 2015³

	YES	PARTIAL	NO
EENC 5-Year Action Plan developed, costed and adopted	█		
12-month EENC Implementation Plan developed and funded		█	
Clinical Intra-Partum and Newborn Care Protocol adapted, reviewed and endorsed		█	
EENC technical working group formed	█	data not validated	
EENC included in pre-service curricula	no data		

COVERAGE OF KEY INTERVENTIONS, 2014⁴



EENC IMPLEMENTATION, 2016³



1. Level and Trends in Child Mortality: Report 2015. UNICEF, 2015.
 2. WHO Global Health Observatory, 2015.
 3. Ministry of Health, 2016.
 4. Maternal and Child Mortality Surveillance Report, 2015.
 5. EENC facility assessments in 6 hospitals, 2016.

EARLY ESSENTIAL NEWBORN CARE

CHINA (2)

STOCK-OUTS OF LIFE-SAVING MEDICINES AND COMMODITIES FOR EENC IN THE PAST 12 MONTHS, 2016⁵

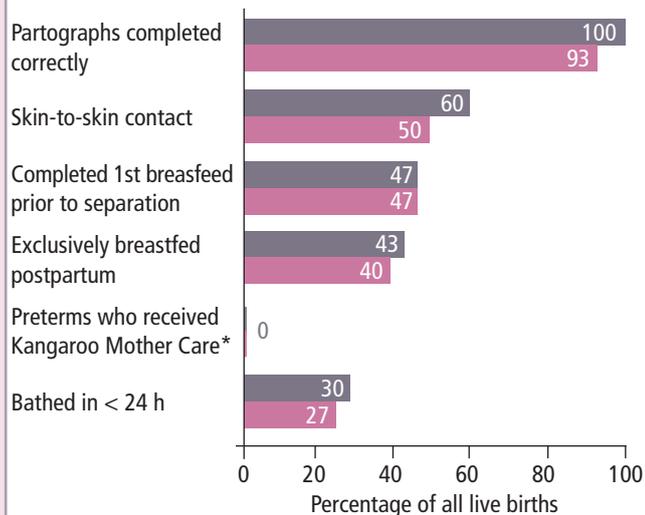
	# of stock-outs (N = 6)			
	0	1	2-4	>4
Antibiotics for sepsis*	4	0	0	0
Corticosteroids	4	0	0	0
Functional bag and mask within 2 m of all delivery beds	0	0	4	0
Magnesium sulfate	4	0	0	0
Oxygen**	4	0	0	0
Oxytocin	4	0	0	0

* Based on data from 5 hospitals

** Based on data from 4 hospitals

EENC CLINICAL PRACTICE – FACILITY DATA, 2016⁵

Observations of 60 live births and review of 60 charts in 3 national/regional hospitals and 3 provincial hospitals.

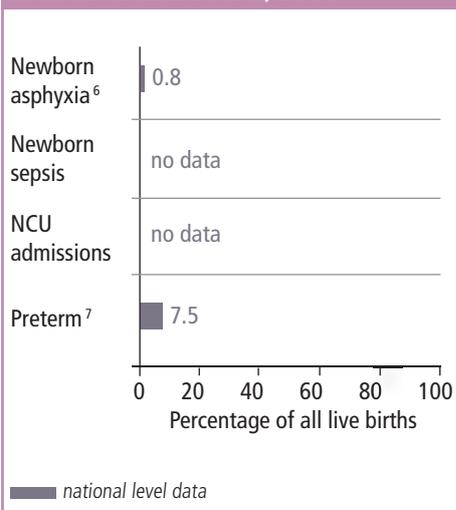


* Observations of 2 preterm births (1 national hospital).

■ national/regional hospital

■ subnational hospital

HOSPITAL IMPACT DATA – HIGH-RISK NEWBORNS, 2014



KEY POINTS

51% of all under-5 deaths in China now occur in the newborn period.

Some EENC scale-up readiness benchmarks have been completed, including development of a 5-year Action Plan and formation of a technical working group to plan and manage newborn health activities.

Six health facilities introduced EENC in early 2016, and 38% of staff providing childbirth and newborn care in these facilities have been coached.

Data on clinical practices and availability of essential medicines and commodities are available from six hospitals.

Hospital impact data are not yet available.

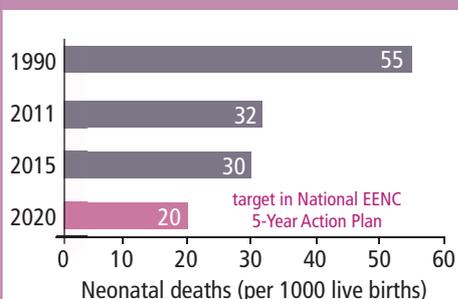
Population coverage of newborn indicators is tracked for several key indicators. However, indicators of early newborn care practices and exclusive breastfeeding in the newborn period are not routinely collected.

6. Data from a study conducted in 11 hospitals. Xu Tao et al, The impact of an intervention package promoting effective neonatal resuscitation training in rural China. Resuscitation. 2014. 85: 253–259.

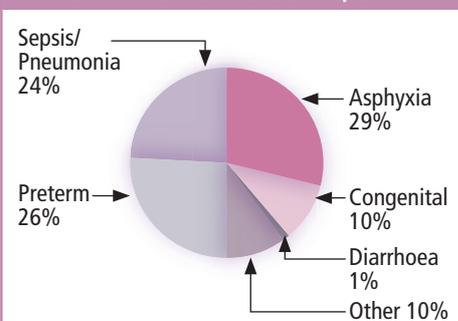
7. National Surveillance Data China, 2013.

EARLY ESSENTIAL NEWBORN CARE LAO PEOPLE'S DEMOCRATIC REPUBLIC (1)

NEONATAL MORTALITY RATE¹



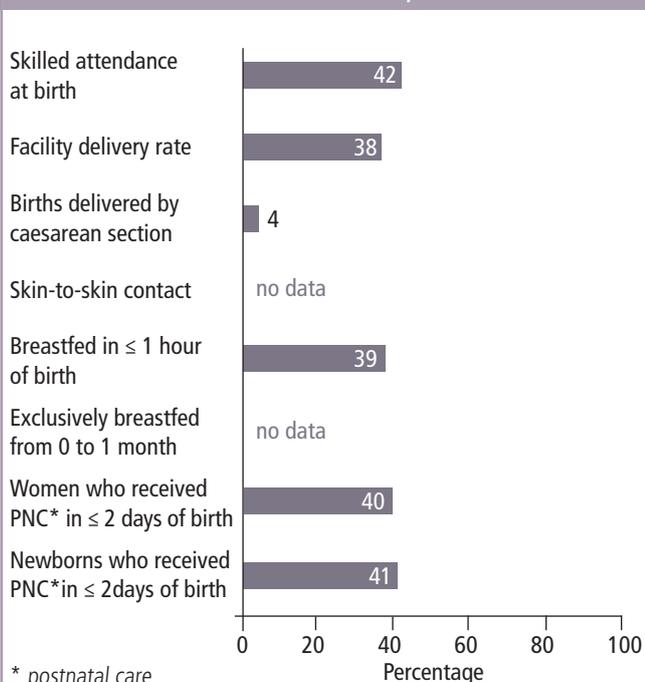
CAUSES OF NEONATAL DEATH, 2015²



BENCHMARK OF EENC PROGRAMME READINESS, 2015³

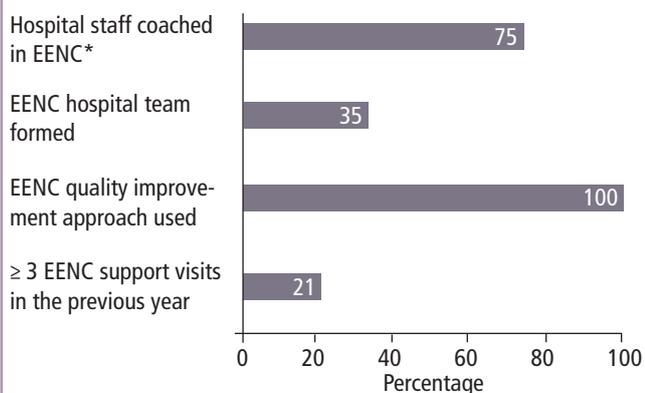
	YES	PARTIAL	NO
EENC 5-Year Action Plan developed, costed and adopted	█		
12-month EENC Implementation Plan developed and funded	█		
Clinical Intra-Partum and Newborn Care Protocol adapted, reviewed and endorsed	█		
EENC technical working group formed	█		
EENC included in pre-service curricula		█	

COVERAGE OF KEY INTERVENTIONS, 2012¹



EENC IMPLEMENTATION, 2015³

Total number of delivery centres = 1145
 Total number of facilities that have introduced EENC = 23 (2%)
 Data are presented for 19 facilities that have introduced EENC: 4 national and 15 provincial hospitals.



* Data from 18 facilities: 4 national and 14 provincial hospitals

1. Level and Trends in Child Mortality: Report 2015. UNICEF, 2015. Lao Social Indicator Survey (LSIS), 2011–2012.
 2. WHO Global Health Observatory Data, 2015.
 3. Ministry of Health Lao People's Democratic Republic, 2015.

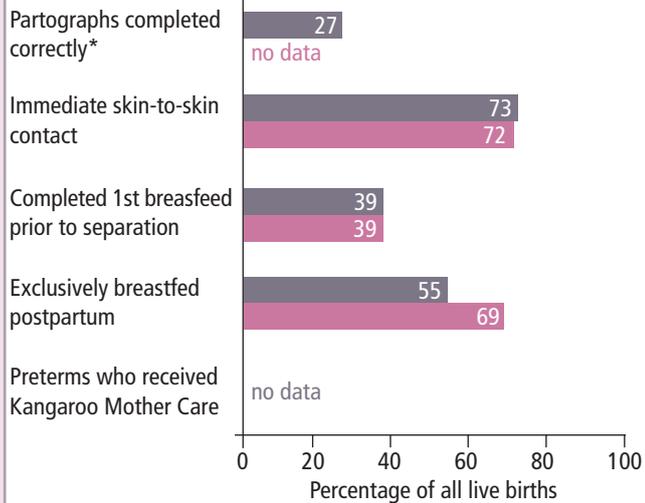
EARLY ESSENTIAL NEWBORN CARE LAO PEOPLE'S DEMOCRATIC REPUBLIC (2)

STOCK-OUTS OF LIFE-SAVING MEDICINES AND COMMODITIES FOR EENC IN THE PAST 12 MONTHS, 2015

	# of stock-outs				
	0	1	2-4	>4	no data
Antibiotics for sepsis					█
Corticosteroids					█
Functional bag and mask within 2 m of all delivery beds					█
Magnesium sulfate					█
Oxygen					█
Oxytocin					█
Soap and water or hand-gel available					█

EENC CLINICAL PRACTICE – FACILITY DATA, 2015⁵

Observations of 115 live births in 4 national hospitals and 72 live births in 4 provincial hospitals.

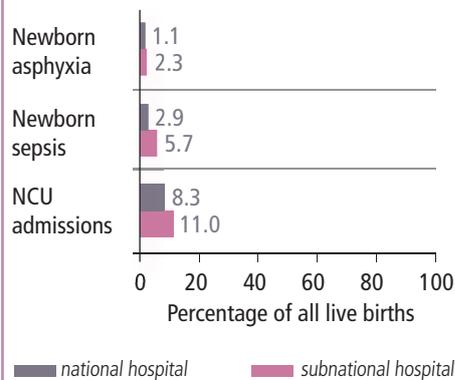


* Observations of 11 charts in 3 national hospitals

█ national hospital █ subnational hospital

HOSPITAL IMPACT DATA – HIGH-RISK NEWBORNS, 2015⁴

Hospital register data from 10 244 live births in 4 national hospitals and 6335 live births in 4 provincial hospitals.



KEY POINTS

42% of all under-5 deaths in Lao PDR now occur in the newborn period.

EENC coaching was done in 4/5 (80%) of national hospitals, and 15/17 (88%) of provincial hospitals.

A high proportion of delivery staff in hospitals that have introduced EENC have been coached in EENC, including 81% of national staff and 72% of provincial staff.

No data are available on availability of essential medicines and commodities in hospitals that have introduced EENC.

Hospital impact data are available from all national and provincial hospitals that have introduced EENC. Data are available for 5 of the 11 hospital indicators.

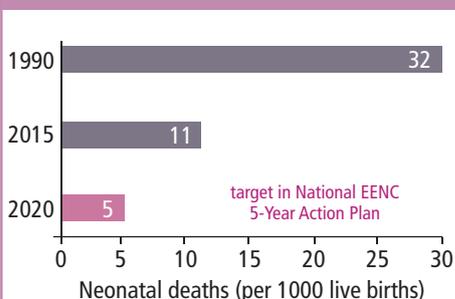
Population coverage of indicators on newborns dried after birth, skin-to-skin contact and bathing practices are not included in the Lao Social Indicator Survey (2011–2012).

4. Hospital Data, 2015.

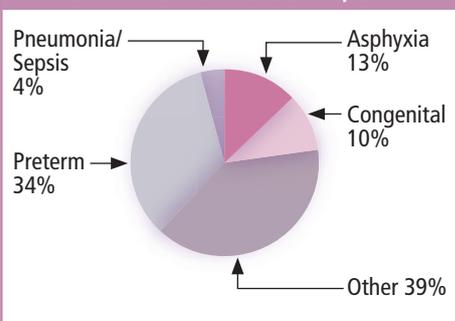
5. EENC Facility Assessments in 8 hospitals, 2015.

EARLY ESSENTIAL NEWBORN CARE MONGOLIA (1)

NEONATAL MORTALITY RATE¹



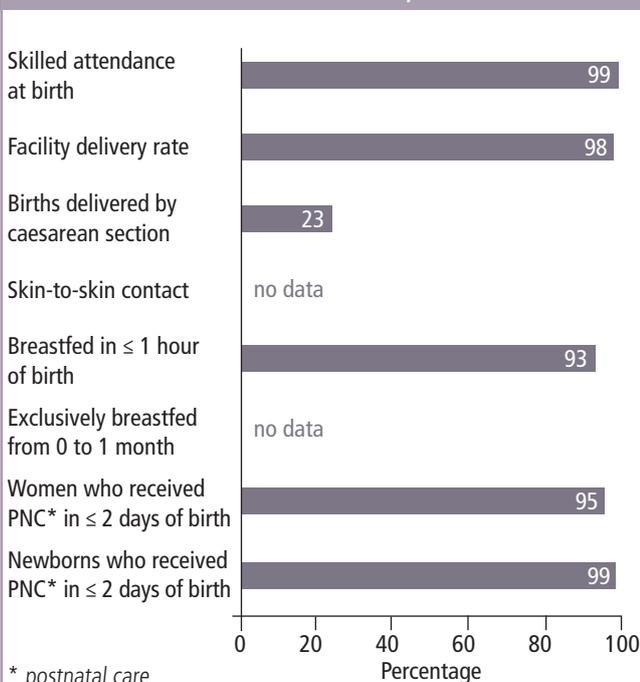
CAUSES OF NEONATAL DEATH, 2014²



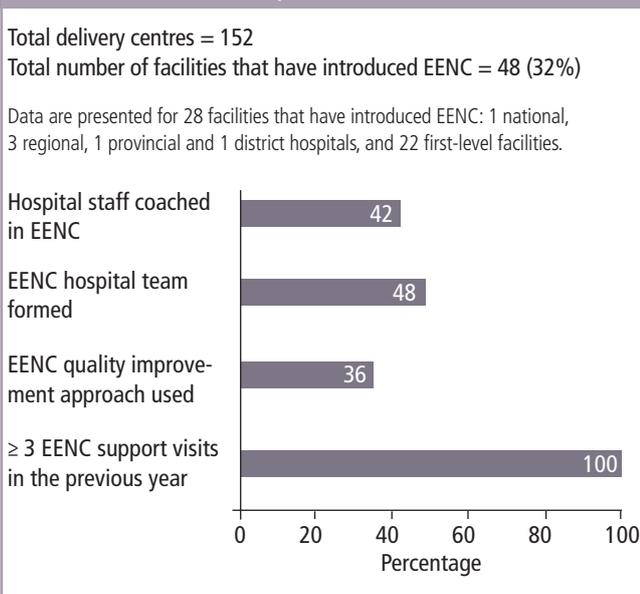
BENCHMARK OF EENC PROGRAMME READINESS, 2015³

	YES	PARTIAL	NO
EENC 5-Year Action Plan developed, costed and adopted	█		
12-month EENC Implementation Plan developed and funded	█		
Clinical Intra-Partum and Newborn Care Protocol adapted, reviewed and endorsed	█		
EENC technical working group formed	█		
EENC included in pre-service curricula		█	

COVERAGE OF KEY INTERVENTIONS, 2013⁴



EENC IMPLEMENTATION, 2015³



1. Level and Trends in Child Mortality: Report 2015. UNICEF, 2015.

2. Mongolia Surveillance Data, 2014.

3. Ministry of Health of Mongolia, 2015.

4. Social Indicator Sample Survey. National Statistics Office of Mongolia, UNFPA, UNICEF, 2013.

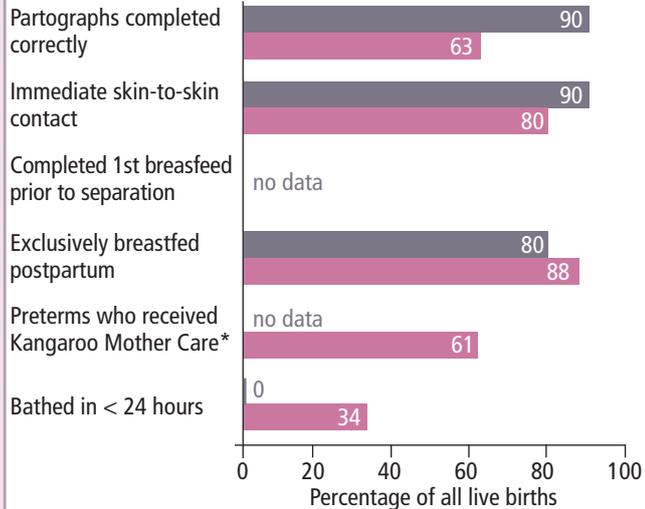
EARLY ESSENTIAL NEWBORN CARE MONGOLIA (2)

STOCK-OUTS OF LIFE-SAVING MEDICINES AND COMMODITIES FOR EENC IN THE PAST 12 MONTHS, 2015⁵

	# of stock-outs (N = 15)			
	0	1	2-4	>4
Antibiotics for sepsis		█		
Corticosteroids			█	
Functional bag and mask within 2 m of all delivery beds		█		
Magnesium sulfate	█			
Oxygen	█			
Oxytocin	█			
Soap and water or hand-gel available			█	

EENC CLINICAL PRACTICE – FACILITY DATA, 2015⁵

Observations of 10 live births in 1 national hospital and 96 live births in 14 regional, provincial, or district hospitals and primary facilities.

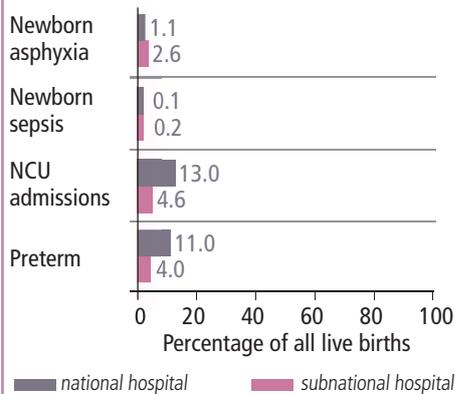


* 2015 hospital register data from 71 live births in two subnational (regional and first-level referral) hospitals.

█ national hospital █ subnational hospital

HOSPITAL IMPACT DATA – HIGH-RISK NEWBORNS, 2014⁶

Hospital register data from 11 323 live births in 1 national hospital and 30 481 live births in 5 regional, provincial and district hospitals.



KEY POINTS

50% of all under-5 deaths in Mongolia now occur in the newborn period.

EENC coaching has begun in 1/1 national, 3/3 regional, 21/25 first-level referral hospitals and 23/123 primary facilities.

A high proportion of delivery staff in EENC implementing hospitals have been coached, with coverage ranging from 95% at the national level to 26% at the primary level.

Facility data on EENC practices and availability of essential medicines and commodities are available from a national sample of facilities.

Hospital impact data were available from all six hospitals that had introduced EENC at the time of data collection (March 2015). Data were available for most newborn indicators.

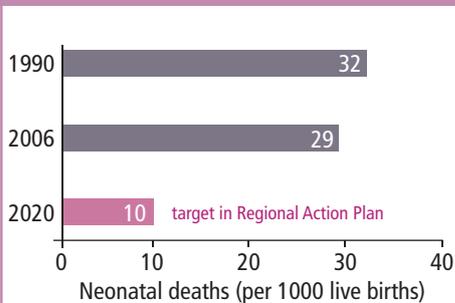
Population coverage of newborn indicators is tracked for key indicators. Indicators on drying after birth, skin-to-skin contact, bathing practices, pre-lactal feeding and exclusive breastfeeding from 0 to 1 month are not routinely collected.

5. EENC Facility Assessments in 15 hospitals, 2015.

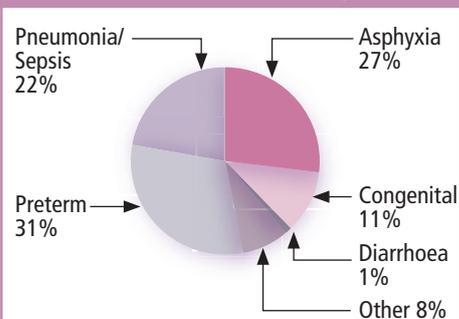
6. Hospital data, 2015.

EARLY ESSENTIAL NEWBORN CARE PAPUA NEW GUINEA (1)

NEONATAL MORTALITY RATE¹



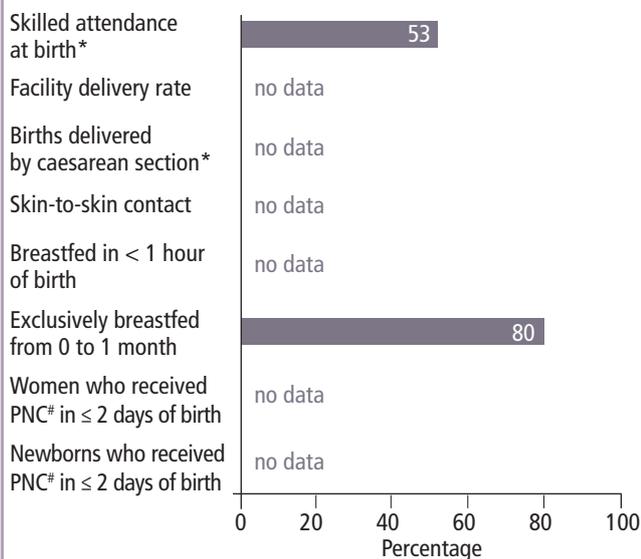
CAUSES OF NEONATAL DEATH, 2015²



BENCHMARK OF EENC PROGRAMME READINESS, 2015³

	YES	PARTIAL	NO
EENC 5-Year Action Plan developed, costed and adopted	█		
12-month EENC Implementation Plan developed and funded	█		
Clinical Intra-Partum and Newborn Care Protocol adapted, reviewed and endorsed		█ <i>data not validated</i>	
EENC technical working group formed	█		
EENC included in pre-service curricula		█	

COVERAGE OF KEY INTERVENTIONS, 2006⁴

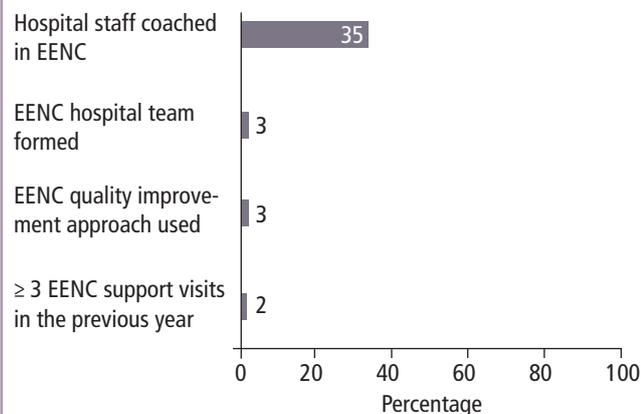


* According to the: 2015 Sector Performance Annual Review, skilled birth attendance = 37% in 2015; 2015 Report of the Society of Obstetrics & Gynaecology of Papua New Guinea, Caesarean section rate = 5%.

postnatal care

EENC IMPLEMENTATION, 2016³

Total delivery centres = 749
Total EENC implementing facilities = 95 (13%)
Data are presented for 95 facilities that have introduced EENC: 1 national, 7 provincial and 10 first-level referral hospitals, and 77 first-level facilities.



1. Level and Trends in Child Mortality: Report 2015. UNICEF, 2015. Papua New Guinea Demographic and Health Survey 2006.

2. WHO Global Health Observatory, 2015.

3. National Department of Health Papua New Guinea, 2015.

4. Papua New Guinea Demographic and Health Survey, 2006.

EARLY ESSENTIAL NEWBORN CARE

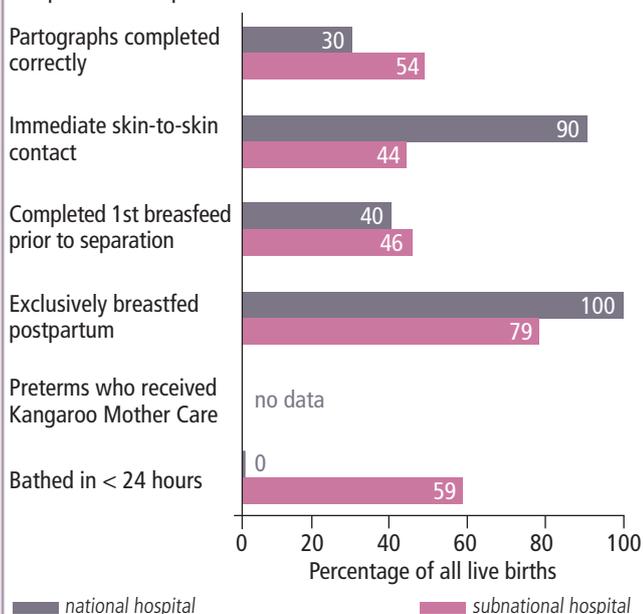
PAPUA NEW GUINEA (2)

STOCK-OUTS OF LIFE-SAVING MEDICINES AND COMMODITIES FOR EENC IN THE PAST 12 MONTHS, 2016⁵

	# of stock-outs (N = 5)			
	0	1	2-4	>4
Antibiotics for sepsis	1	0	0	0
Corticosteroids	0	0	0	1
Functional bag and mask within 2 m of all delivery beds	0	0	0	1
Magnesium sulfate	0	1	0	0
Oxygen	0	1	0	0
Oxytocin	1	0	0	0

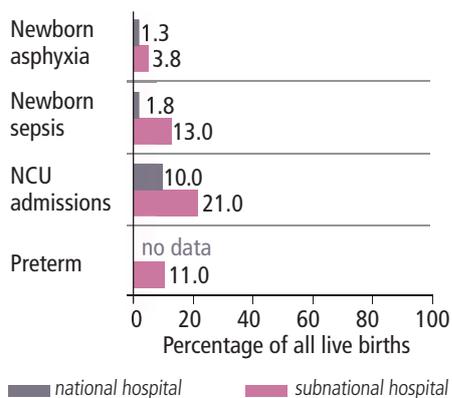
EENC CLINICAL PRACTICE – FACILITY DATA, 2016⁵

Observations of 10 live births in 1 national hospital and 39 live births in 5 provincial hospitals.



HOSPITAL IMPACT DATA – HIGH-RISK NEWBORNS, 2014⁶

Hospital register from 15 034 live births in 1 national hospital and 5804 live births in 2 provincial hospitals.



KEY POINTS

42% of all under-5 deaths in PNG now occur in the newborn period.

EENC coaching has begun in the national hospital, 7/20 (35%) provincial hospitals, 10/11 (91%) first-level referral hospitals and 77/717 (11%) primary facilities.

In facilities that have introduced EENC staff coaching coverage ranges from 5% to 100%.

Data from 2016 on EENC practices and availability of essential medicines and commodities are available from two hospitals.

Incomplete hospital impact data are available from one national hospital and two regional hospitals.

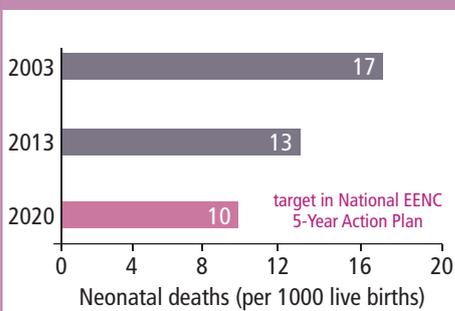
Population coverage data are available for very few newborn indicators (live births attended by skilled health personnel, and exclusive breastfeeding from 0 to 1 month). The last Demographic and Health Survey was in 2006.

5. EENC Facility Assessments in 6 hospitals, 2016. For stock-outs of life-saving medicines and commodities, data are available from 5 hospitals.

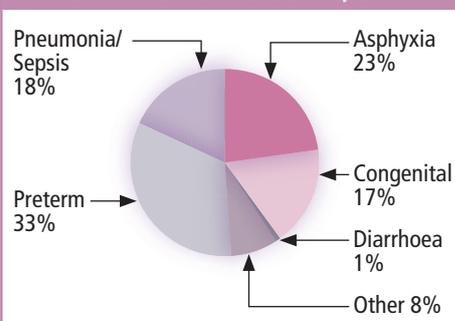
6. Hospital data, 2014.

EARLY ESSENTIAL NEWBORN CARE PHILIPPINES (1)

NEONATAL MORTALITY RATE¹



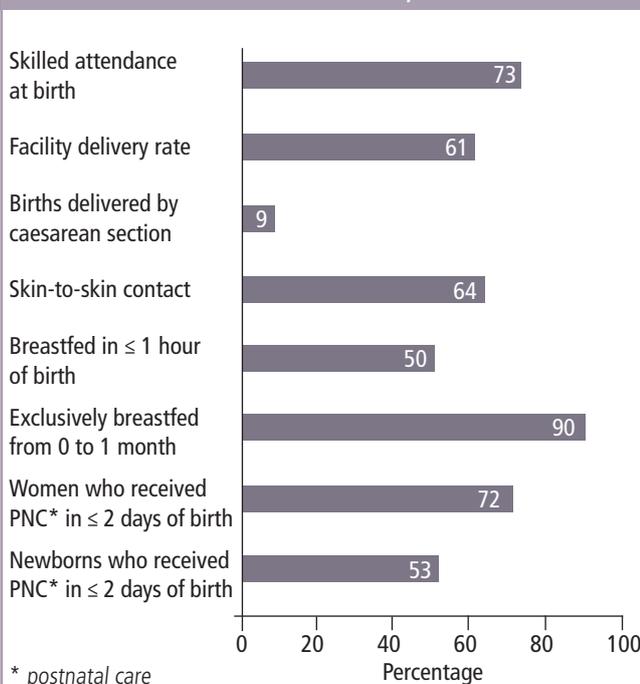
CAUSES OF NEONATAL DEATH, 2015²



BENCHMARK OF EENC PROGRAMME READINESS, 2015³

	YES	PARTIAL	NO
EENC 5-Year Action Plan developed, costed and adopted		█	
12-month EENC Implementation Plan developed and funded	█		
Clinical Intra-Partum and Newborn Care Protocol adapted, reviewed and endorsed	█		
EENC technical working group formed		█	
EENC included in pre-service curricula		█	

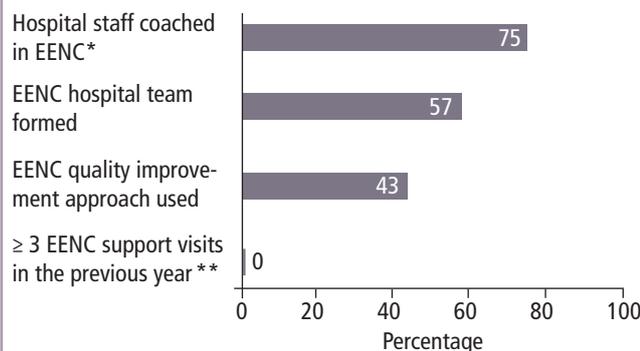
COVERAGE OF KEY INTERVENTIONS, 2013¹



EENC IMPLEMENTATION, 2015³

Total delivery centres = 3804

Data are presented for 7 facilities that have introduced EENC: 1 national and 6 regional hospitals.



* Over 14 000 staff have been trained on Essential Intrapartum and Newborn Care. However, detailed data is available from 6 regional hospitals only.

** Planned support visits have been replaced by other activities.

1. National Demographic and Health Survey Philippines, 2003 and 2013.

2. WHO Global Health Observatory, 2015.

3. Department of Health of the Philippines, 2015.

EARLY ESSENTIAL NEWBORN CARE

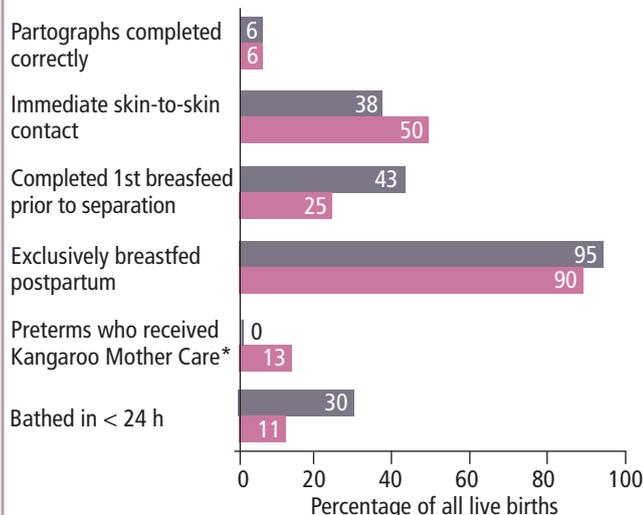
PHILIPPINES (2)

STOCK-OUTS OF LIFE-SAVING MEDICINES AND COMMODITIES FOR EENC IN THE PAST 12 MONTHS, 2015⁴

	# of stock-outs (N = 17)			
	0	1	2-4	>4
Antibiotics for sepsis			1	
Corticosteroids				1
Functional bag and mask within 2 m of all delivery beds			1	
Magnesium sulfate		1		
Oxygen	1			
Oxytocin		1		
Soap and water or hand-gel available			1	

EENC CLINICAL PRACTICE – FACILITY DATA, 2015⁴

Observations of 60 live births in 6 national hospitals and 119 live births in 11 regional and provincial hospitals.



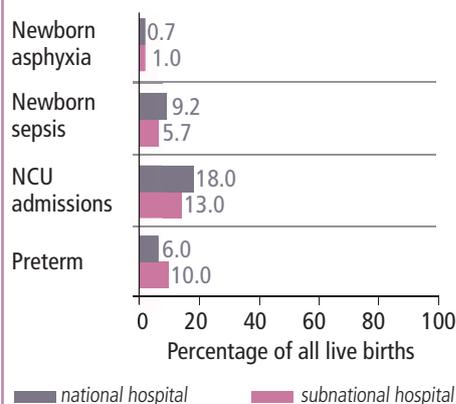
* Observations of 1 preterm birth (1 national hospital) and 8 preterm births (6 subnational hospitals)

■ national hospital

■ subnational hospital

HOSPITAL IMPACT DATA – HIGH-RISK NEWBORNS, 2014⁵

Hospital register data from 31 608 live births in 3 national hospitals and 39 145 live births in 11 regional and provincial hospitals.



■ national hospital

■ subnational hospital

KEY POINTS

45% of all under-5 deaths in Philippines now occur in the newborn period.

EENC coaching has been initiated in at least 9 national, 30 regional and 157 first-level referral hospitals.⁶

Only partial data are available on staff coaching coverage, use of an EENC quality improvement approach and EENC support visits.

Facility data on EENC practices, and EENC medicines and commodities, are available from a sample of national, regional and first-level referral hospitals.

Incomplete hospital impact data are available from three national hospitals and 11 regional hospitals.

Indicators on newborns dried after birth and bathing practices were not included in the last Demographic and Health Survey (2013).

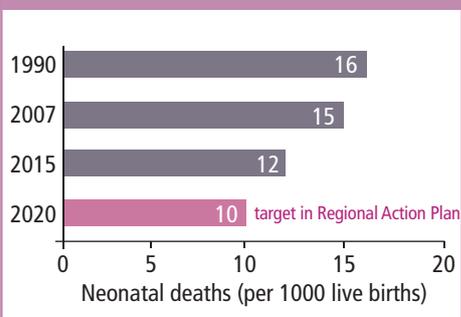
4. EENC Facility Assessments in 17 hospitals, 2015.

5. Hospital data, 2014.

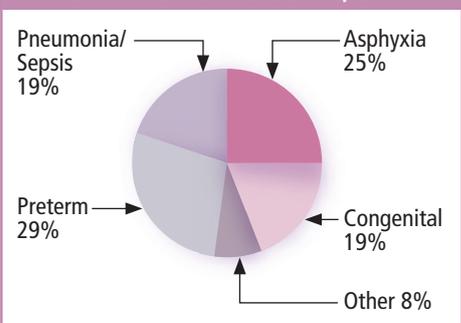
6. Over 14 000 staff have been trained on Essential Intrapartum and Newborn Care. However, detailed data is available from 6 regional hospitals only.

EARLY ESSENTIAL NEWBORN CARE SOLOMON ISLANDS (1)

NEONATAL MORTALITY RATE¹



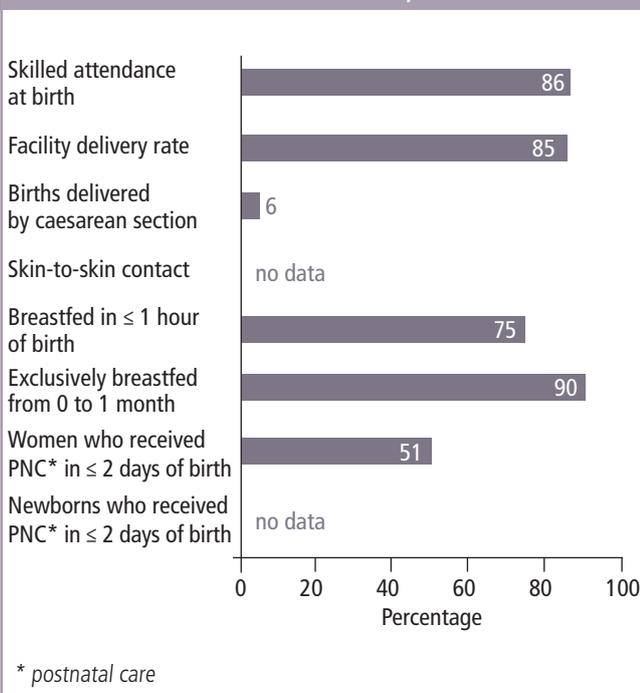
CAUSES OF NEONATAL DEATH, 2015²



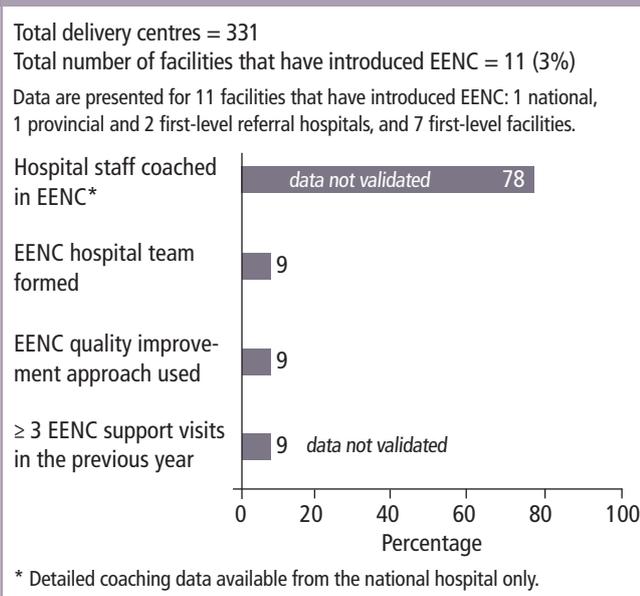
BENCHMARK OF EENC PROGRAMME READINESS, 2015³

	YES	PARTIAL	NO
EENC 5-Year Action Plan developed, costed and adopted			█
12-month EENC Implementation Plan developed and funded	█	<i>data not validated</i>	
Clinical Intra-Partum and Newborn Care Protocol adapted, reviewed and endorsed			█
EENC technical working group formed	█	<i>data not validated</i>	
EENC included in pre-service curricula		█	

COVERAGE OF KEY INTERVENTIONS, 2007⁴



EENC IMPLEMENTATION, 2015⁵



1. Level and Trends in Child Mortality: Report 2015. UNICEF, 2015. Solomon Islands Demographic and Health Survey, 2007.
 2. WHO Global Health Observatory, 2015.
 3. Ministry of Health and Medical Services, 2015.
 4. Solomon Islands Demographic and Health Survey, 2007.
 5. EENC Facility Assessments in 1 hospital, 2015.

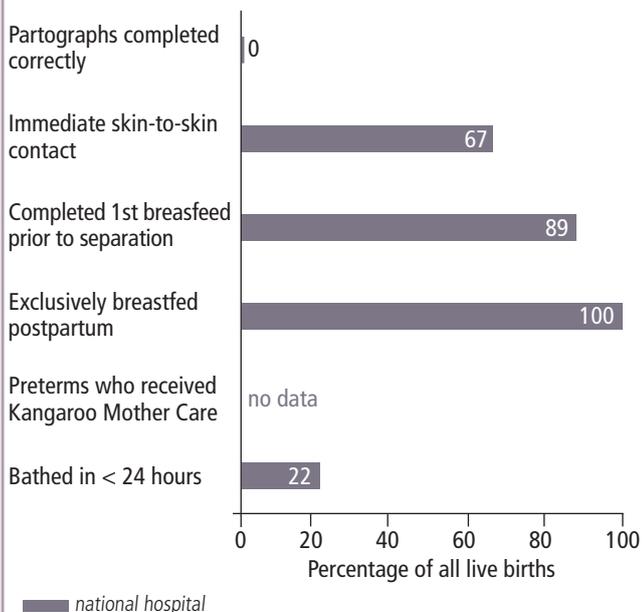
EARLY ESSENTIAL NEWBORN CARE SOLOMON ISLANDS (2)

STOCK-OUTS OF LIFE-SAVING MEDICINES AND COMMODITIES FOR EENC IN THE PAST 12 MONTHS

	# of stock-outs (N = 1)				
	0	1	2-4	>4	no data
Antibiotics for sepsis					█
Corticosteroids					█
Functional bag and mask within 2 m of all delivery beds					█
Magnesium sulfate					█
Oxygen					█
Oxytocin					█
Soap and water or hand-gel available					█

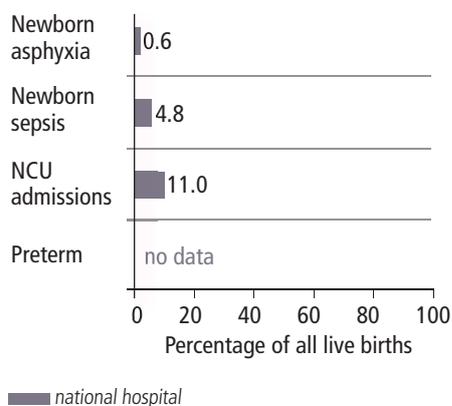
EENC CLINICAL PRACTICE – FACILITY DATA, 2015⁵

Observations of 9 live births in 1 national hospital.



HOSPITAL IMPACT DATA – HIGH-RISK NEWBORNS, 2014⁶

Hospital register data from 5412 live births in 1 national hospital.



KEY POINTS

43% of all under-5 deaths in Solomon Islands now occur in the newborn period.

In 2015, EENC coaching was done in the national hospital, in 11% (1/9) of regional hospitals, 6% (2/33) of first-level referral hospitals and 2% (7/288) of primary facilities.

Data on EENC staff coaching coverage are incomplete because denominators are not available.

Data on EENC practices are available from the national hospital only. No data are available on the availability of essential medicines and commodities for EENC.

Incomplete hospital impact data are available, and from only the national hospital.

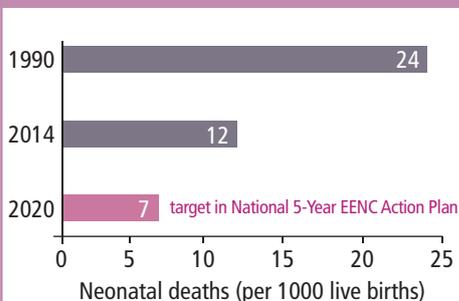
The last Demographic and Health Survey was in 2007, when many indicators in the areas of immediate newborn were not included.

6. Hospital data, 2014.

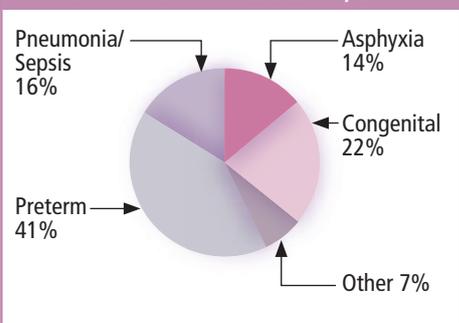
EARLY ESSENTIAL NEWBORN CARE

VIET NAM (1)

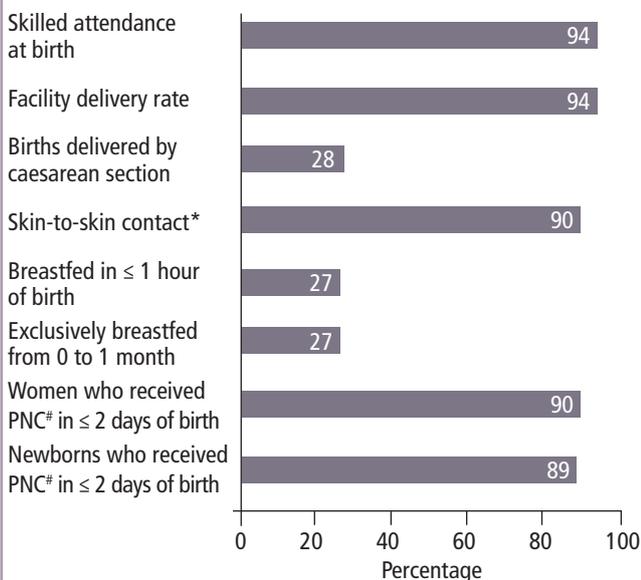
NEONATAL MORTALITY RATE¹



CAUSES OF NEONATAL DEATH, 2015²



COVERAGE OF KEY INTERVENTIONS, 2011⁴



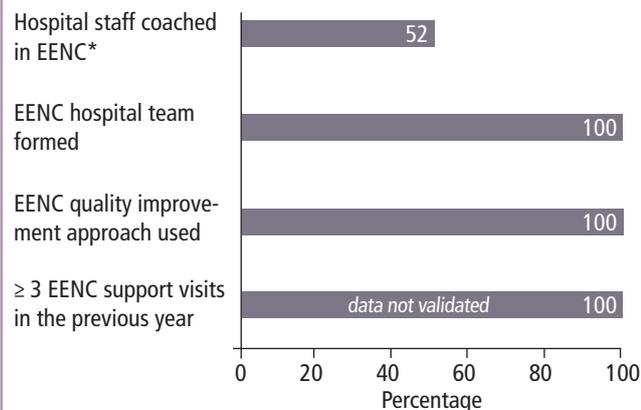
* Data from assessments of 45 health facilities in December 2015.
postnatal care

BENCHMARK OF EENC PROGRAMME READINESS, 2015³

	YES	PARTIAL	NO
EENC 5-Year Action Plan developed, costed and adopted		█	
12-month EENC Implementation Plan developed and funded	█		
EENC technical working group formed		█	
Clinical Intra-Partum and Newborn Care Protocol adapted, reviewed and endorsed	█		
EENC included in pre-service curricula	no data		

EENC IMPLEMENTATION, 2015³

Total delivery centres = 7784
Total number of facilities that have introduced EENC = 687
Data are presented for three national hospitals that have introduced EENC.



* Coaching data are presented for 61 provincial hospitals.

1. Level and Trends in Child Mortality: Report 2015. UNICEF, 2015. Multiple Indicator Cluster Survey Viet Nam, 2014.
2. WHO Global Health Observatory, 2015.
3. Ministry of Health Viet Nam, 2015.
4. Multiple Indicator Cluster Surveys Viet Nam, 2014 and 2011.

EARLY ESSENTIAL NEWBORN CARE

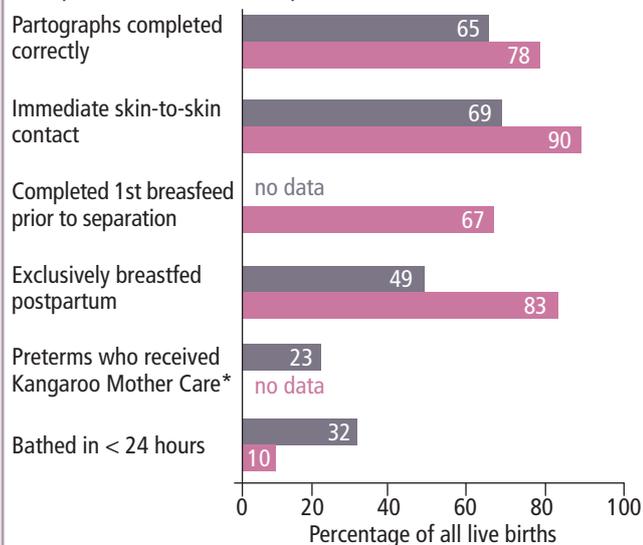
VIET NAM (2)

STOCK-OUTS OF LIFE-SAVING MEDICINES AND COMMODITIES FOR EENC IN THE PAST 12 MONTHS, 2015⁵

	# of stock-outs (N = 48)			
	0	1	2-4	>4
Antibiotics for sepsis	48	0	0	0
Corticosteroids	0	48	0	0
Functional bag and mask within 2 m of all delivery beds	0	48	0	0
Magnesium sulfate	48	0	0	0
Oxygen	48	0	0	0
Oxytocin	48	0	0	0
Soap and water or hand-gel available	48	0	0	0

EENC CLINICAL PRACTICE – FACILITY DATA, 2015⁵

Observations of 39 live births in 3 national hospitals and 351 live births in 45 provincial and district hospitals.



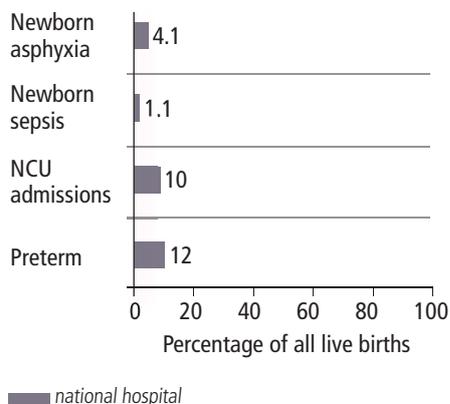
* Based on observations of 65 preterm babies in 3 national and 4 provincial hospitals in April 2016.

■ national hospital

■ subnational hospital

HOSPITAL IMPACT DATA – HIGH-RISK NEWBORNS, 2014⁶

Hospital register data from 98 600 live births in 3 national hospitals.



■ national hospital

KEY POINTS

53% of all under-5 deaths in Viet Nam now occur in the newborn period.

EENC coaching has begun in all 63 provinces and municipalities, and around 50% of staff have been coached in provincial hospitals.

Data on EENC practices and availability of essential medicines and commodities for EENC are available from national, provincial and district hospitals.

Hospital impact data are available from only three national hospitals.

Population coverage of newborn indicators is tracked for most key indicators. Indicators of newborns dried after birth, skin-to-skin contact and bathing practices were not included in the last Multiple Indicator Cluster Survey (2014).

5. EENC Facility Assessments in 49 hospitals, 2015. Data on clinical practice available from 48 hospitals.

6. Hospital data, 2014.

