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Makowiecka, K (2013) Research tool: Harmonised indicators across the continuum of care. London School of Hygiene & Tropical Medicine.

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Harmonised indicators across the continuum of care

A collaboration between IDEAS and Bill & Melinda Gates Foundation implementation projects

About IDEAS

IDEAS uses measurement and evaluation to understand which health innovations and programmes deliver the greatest impact on maternal and newborn survival at scale, as well as why and how they work. IDEAS is funded between 2010 and 2015 by a grant from the Bill & Melinda Gates Foundation to the London School of Hygiene & Tropical Medicine.

Many health innovations across projects and countries

IDEAS is collaborating with implementation projects funded by the Bill & Melinda Gates Foundation to improve maternal and newborn health in Ethiopia, North-Eastern Nigeria and Uttar Pradesh, India. These projects deliver innovations that support local health systems, particularly through improving the interactions between families and frontline workers. They aim to improve access, use and provision of care for women and their babies during pregnancy, childbirth and the month after birth.

Why harmonise indicators?

The Bill & Melinda Gates Foundation supports the use data collected by implementation projects to compare the effectiveness of similar health innovations across different projects and countries. To do this, the data must be based on results from the same survey questions and response categories. However, projects designed to enhance the same life-saving intervention, such as thermal newborn care, measure their achievements using slightly different survey instruments, so their data are not comparable.

IDEAS was asked by the foundation to identify common indicators which can be used for comparison of existing data across multiple projects. In addition, we proposed a set of questions and response categories to be used in future surveys, so the effectiveness of innovations can be compared.

How did we approach harmonising indicators?

Implementation projects shared their survey instruments with IDEAS and their maternal and newborn health-related questions were mapped onto an excel spreadsheet identifying commonality and differences between indicators. The timing of up-coming surveys was also mapped and each project was contacted in advance with the proposed set of questions and response categories.

Resource

IDEAS created a clear table of indicators that can be harmonised across all maternal and newborn health implementation projects funded by the Bill & Melinda Gates Foundation in Ethiopia, North-Eastern Nigeria and Uttar Pradesh, India.

Category	Definition	Numerator	Denominator
1. Antenatal Care			
1.1 ANC coverage: attendance at least once during pregnancy	Proportion of women who had a live birth in the last 12 months who received ANC at least once during the latest pregnancy	Number of women who had a live birth in the last 12 months who received ANC at least once during her latest pregnancy	Number of women who had a live birth in the last 12 months
1.2 ANC coverage: attendance four times during pregnancy	Proportion of women who had a live birth in the last 12 months who received ANC at least four times during the latest pregnancy	Number of women who had a live birth in the last 12 months who received ANC at least four times during the latest pregnancy	Number of women who had a live birth in the last 12 months
1.3 ANC coverage: gestational age at first ANC visit	Median weeks gestation at first ANC for most recent pregnancy of a woman who had a live birth in the last 12 months		
1.4 ANC completeness	Proportion of women who had a live birth in the last 12 months who received the following ANC checks during the latest pregnancy: weight measured; BP measured; urine sample taken; blood sample taken	Number of women who had a live birth in the last 12 months who received the following ANC checks during the latest pregnancy	Number of women who had a live birth in the last 12 months
1.5 Content of ANC:Tetanus	The proportion of women who had a live birth in the last 12 months whose newborns were protected from tetanus at the time of delivery.	The number of women who had a live birth in the last 12 months whose newborns were protected from tetanus at the time of delivery.	The number of women who had a live birth in the last 12 months
1.6 Iron supplements	The proportion of women with a live birth in the last 12 months who took iron supplements for at least XX days during their last pregnancy	# women with a live birth in the last 12 months who took iron supplements during their last pregnancy	# women with a live birth in the last 12 months
1.7 Intestinal Parasites	The proportion of women with a live birth in the last 12 months who took a drug for intestinal worms during their last pregnancy	# women with a live birth in the last 12 months who took a drug for intestinal worms during their last pregnancy	# women with a live birth in the last 12 months.
1.8 Malaria	The proportion of women with a live birth in the last 12 months who took a drug to prevent malaria during their last pregnancy	# women with a live birth in the last 12 months who took a drug to prevent malaria during their last pregnancy	# women with a live birth in the last 12 months

Category	Definition	Numerator	Denominator
1.9 Content of antenatal care: Told about pregnancy complications	Proportion of women who had a live birth in the last 12 months who were counselled on signs of pregnancy complications at ANC during the latest pregnancy	Number of women who had a live birth in the last 12 months who were counselled on signs of pregnancy complications during ANC during the latest pregnancy	Number of women who had a live birth in the last 12 months
1.10 Recall of pregnancy complications	Proportion of women with a live birth in the last 12 months who recall that specified danger signs during pregnancy need medical treatment	# women with a live birth in the last 12 months who recall that severe headache during pregnancy needs medical treatment	Number of women who had a live birth in the last 12 months
1.11 Counselling on signs of delivery complications	Proportion of women with a live birth in the last 12 months who were counselled on signs of delivery complications during the latest pregnancy	# women with a live birth in the last 12 months who were counselled on signs of delivery complications during the latest pregnancy	Number of women who had a live birth in the last 12 months
1.12 Recall of delivery complications	Proportion of women with a live birth in the last 12 months who recall that specified danger signs during delivery need medical treatment	# women with a live birth in the last 12 months who recall that severe headache during delivery needs medical treatment	Number of women who had a live birth in the last 12 months
1.13 Pregnancy care: Breastfeeding advice	Proportion of women who had a live birth in the last 12 months who were counselled on breastfeeding during the latest pregnancy	Number of women who had a live birth in the last 12 months who were counselled on breastfeeding during the latest pregnancy	Number of women who had a live birth in the last 12 months
1.14 Pregnancy Care: Counselling for PMTCT	The proportion of women with a live birth in the last 12 months who were counselled on PMTCT during their last pregnancy, by type of provider	# women with a live birth in the last 12 months who were counselled on PMTCT during their last pregnancy	# women with a live birth in the last 12 months
1.15 Pregnancy care: counselled on birth preparedness	The proportion of women who had a live birth in the last 12 months who were counselled on birth preparedness during their last pregnancy	The number of women who had a live birth in the last 12 months who were counselled on birth preparedness at ANC during their last pregnancy	The number of women who had a live birth in the last 12 months
1.16 Birth preparedness	The proportion of women who had a live birth in the last 12 months who made delivery preparations during their last pregnancy	The number of women who had a live birth in the last 12 months who were made delivery preparations during their last pregnancy	The number of women who had a live birth in the last 12 months

Category	Definition	Numerator	Denominator
1.17a Birth preparedness: financial preparation	The proportion of women who had a live birth in the last 12 months who made financial preparations for delivery during their last pregnancy	The number of women who had a live birth in the last 12 months who made financial preparations for delivery during their last pregnancy	The number of women who had a live birth in the last 12 months
1.17b Birth preparedness: transport	The proportion of women who had a live birth in the last 12 months who made arrangements for transport for delivery during their last pregnancy	The number of women who had a live birth in the last 12 months who made arrangements for transport for delivery during their last pregnancy	The number of women who had a live birth in the last 12 months
1.17c Birth preparedness: identify birth attendant	The proportion of women who had a live birth in the last 12 months who identified a birth attendant during their last pregnancy	The number of women who had a live birth in the last 12 months who identified a birth attendant during their last pregnancy	The number of women who had a live birth in the last 12 months
1.17d Birth preparedness: clean delivery	The proportion of women who had a live birth in the last 12 months who prepared materials for clean delivery during their last pregnancy	The number of women who had a live birth in the last 12 months who prepared materials for clean delivery during their last pregnancy	The number of women who had a live birth in the last 12 months
1.17e Birth preparedness: blood donor	The proportion of women who had a live birth in the last 12 months who identified a blood donor in case of need for delivery during their last pregnancy	The number of women who had a live birth in the last 12 months who identified a blood donor in case of need for delivery during their last pregnancy	The number of women who had a live birth in the last 12 months

Category	Definition	Numerator	Denominator
2. Intrapartum Care			
2.1 Delivery Care: Facility delivery	The proportion of women who had a live birth in the last 12 months who delivered in a health facility. [MICS 5.8]	The number of women who had a live birth in the last 12 months who delivered in a health facility. [MICS 5.8]	The number of women who had a live birth in the last 12 months
2.2 Delivery Care: professional attendant	The proportion of women who had a live birth in the last 12 months who were attended during childbirth by a trained professional	The number of women who had a live birth in the last 12 months preceding survey who were attended during childbirth by a trained provider	The number of women who had a live birth in the last 12 months
2.3 Delivery Care: Caesarean Section	The proportion of women who had a live birth in the last 12 months who were delivered by caesarean section. [MICS 5.9, Countdown]	The number of women who had a live birth in the last 12 months who were delivered by caesarean section.	The number of women who had a live birth in the last 12 months
2.4 Delivery Care: referral	The proportion of women who had a live birth in the last 12 months who experienced a specified danger sign during pregnancy (1) and who were successfully referred to higher care (2)	The number of women who had a live birth in the last 12 months who experienced a specified danger sign during pregnancy and who were successfully referred to higher care	The number of women who had a live birth in the last 12 months who experienced a specified danger sign during pregnancy
2.5 Reasons for not seeking care	Reasons for not seeking care at higher level		
2.6 Birth attendant washed hands	Proportion of women with a live birth at home in the 12 months preceding survey whose birth attendant washed her hands for the delivery	Number of women with a live birth at home in the 12 months preceding survey whose birth attendant washed her hands for the delivery	Number of women with a live birth at home in the 12 months preceding survey
2.7 Birth attendant wore gloves	Proportion of women with a live birth at home in the 12 months preceding survey whose birth attendant wore gloves for the delivery	Number of women with a live birth at home in the 12 months preceding survey whose birth attendant wore gloves for the delivery	Number of women with a live birth at home in the 12 months preceding survey
2.8 Delivered on clean surface	Proportion of women with a live birth at home in the 12 months preceding survey who delivered on a clean surface	Number of women with a live birth at home in the 12 months preceding survey who delivered on a clean surface	Number of women with a live birth at home in the 12 months preceding survey

Category	Definition	Numerator	Denominator
3. Immediate NB Care			
3.1 Use of clean instrument to tie cord	Proportion of live newborns delivered at home in the last 12 months for whom clean string was used to tie the cord	Number of live newborns delivered at home in the last 12 months for whom clean string was used to tie the cord	Number of live newborns delivered at home in the last 12 months
3.2 Use of clean instrument to cut cord	Proportion of live newborns delivered at home in the last 12 months for whom a clean instrument was used to cut the cord	Number of live newborns delivered at home in the last 12 months for whom a clean instrument was used to cut the cord	Number of live newborns delivered at home in the last 12 months
3.3 Safe cord care	Proportion of live newborns delivered at home in the last 12 months who had safe cord care	Number of live newborns delivered at home in the last 12 months who had safe cord care	Number of live newborns delivered at home in the last 12 months
3.4 Newborn dried immediately after birth	Proportion of live newborns born at home in last 12 months who was dried within XX minutes of birth	Number of live newborns born at home in last 12 months who was dried within XX minutes of birth	Number of live newborns born at home in last 12 months
3.5 Newborn wrapped imm after birth	Proportion of live newborns delivered at home in the last 12 months who were wrapped in a cloth within XX minutes of birth	Number of live newborns delivered at home in the last 12 months who were wrapped in a cloth within XX minutes of birth	Number of live newborns delivered at home in the last 12 months
3.6 Skin to Skin	EITHER Proportion of live newborns delivered in the last 12 months, who had frequent skin to skin contact with the mother in the first week of life OR Percentage of newborns placed on the Mother's bare chest after delivery	# of newborns placed on the Mother's bare chest after delivery	Number of live newborns born in the last 12 months
3.7 Newborn placed with mother	Proportion of live newborns delivered in the last 12 months, reported to have been placed with the mother within XX minutes of birth	Number of live newborns delivered in the last 12 months, reported to have been placed with the mother within XX minutes of birth	Number of live newborns delivered in the last 12 months
3.8 Newborn placed with a person other than the mother	Proportion of live newborns delivered in the last 12 months, reported to have been placed with a person other than the mother within XX minutes of birth	Number of live newborns delivered in the last 12 months, reported to have been placed with a person other than the mother within XX minutes of birth	Number of live newborns delivered in the last 12 months
3.9 Newborn left alone after birth	Proportion of live newborns delivered in the last 12 months, reported to have been left alone after birth	Number of live newborns delivered in the last 12 months, reported to have been left alone after birth	Number of live newborns delivered in the last 12 months

Category	Definition	Numerator	Denominator
3.10 Breastfeeding within 1 hour	Proportion of live newborns in last 12 months who were put to the breast within 1 hour of birth	Proportion of live newborns in last 12 months who were put to the breast within 1 hour of birth	Proportion of live newborns in last 12 months
3.11 Colostrum	Proportion of live newborns delivered in last 12 months, who were given colostrum	Number of live newborns delivered in last 12 months, who were given colostrum	Proportion of live newborns in last 12 months
3.12 Exclusive Breastfeeding - 3 days	Proportion of live newborns delivered in the last 12 months, who were exclusively breast-fed for the first three days of life	Number of live newborns delivered in the last 12 months, who were exclusively breast-fed for the first three days of life	# of live newborns in last 12 months
3.13 PN check before attendant left the home	Proportion of live newborns delivered at home in the last 12 months who had a post-natal check before the birth attendant left the home.	Number of live newborns delivered at home in the last 12 months who had a post-natal check before the birth attendant left the home.	# of live newborns born at home in last 12 months
3.14 PN Check before leaving facility (Fac deliveries)	Proportion of live newborns delivered in a facility in the last 12 months who had a post-natal check before leaving the facility.	Proportion of live newborns delivered in a facility in the last 12 months who had a post-natal check before leaving the facility.	# of live newborns born in a facility in last 12 months
3.15 Any PN Check	Proportion of newborns delivered in the 12 months preceding survey who had postnatal checks	Proportion of newborns delivered in the 12 months preceding survey who had postnatal checks	# newborns delivered the 12 months preceding survey
3.16 a Newborn check 2 days	Proportion of newborns delivered in the 12 months preceding survey who had their first postnatal checks in the first 2 days of life	Number of newborns delivered in the 12 months preceding survey who had their first postnatal check in the first 2 days of life	The number of live births born at home during the 12 months preceding survey
3.16b Newborn check 3-7 days	Proportion of newborns delivered in the 12 months preceding survey who had their first postnatal checks 3- 7 days of life	Number of newborns delivered in the 12 months preceding survey who had their first postnatal checks 3- 7 days of life	The number of live births born at home during the 12 months preceding survey
3.17 Provider of first PN check of NB	Proportion of live newborns delivered in the 12 months preceding survey who had a post-natal check from a trained provider, by type of provider	Number of live newborns delivered in the 12 months preceding survey who had a post-natal check, by type of provider	Number of live newborns delivered in the 12 months preceding survey

Category	Definition	Numerator	Denominator
3.18 Content of first PN Check of the NB	Proportion of live newborns delivered in the 12 months preceding survey who had specified content of the first postnatal check	Number of live newborns delivered in the 12 months preceding survey who had specified content of postnatal checks in the first month of life	Number of newborns delivered in the 12 months preceding survey
3.19 Second NB check	Proportion of newborns delivered in the 12 months preceding survey who had their second postnatal checks 3- 7 days of life	Number of newborns delivered in the 12 months preceding survey who had their second postnatal checks 3- 7 days of life	The number of live births born at home during the 12 months preceding survey
3.20 Provider of second PN check	Proportion of live newborns delivered in the 12 months preceding survey who had a second post-natal check from a trained provider, by type of provider	Number of live newborns delivered in the 12 months preceding survey who had a second post-natal check, by type of provider	Number of live newborns delivered in the 12 months preceding survey
3.21 Content of Second PN Check of the NB	Proportion of live newborns delivered in the 12 months preceding survey who had specified content of postnatal checks in the first 2 days of life	Number of live newborns delivered in the 12 months preceding survey who had specified content of postnatal checks in the first month of life	Number of newborns delivered in the 12 months preceding survey
3.23 Newborn weight at birth	Proportion of women with a live birth in the 12 months preceding the survey who reported that her newborn weighed under 2,500 grams at birth	Number of women with a live birth in the 12 months preceding the survey who reported that her newborn weighed under 2,500 grams at birth	Number of women with a live birth in the 12 months preceding the survey (amongst those whose baby was weighed)

Category	Definition	Numerator	Denominator
4. Postpartum care of the mother			
4.1 Postnatal check (home delivery)	Proportion of women with a live birth at home in the 12 months preceding survey who had a post-natal check before the birth attendant left the home.	Number of women with a live birth at home in the 12 months preceding survey who had a post-natal check before the birth attendant left the home.	Number of women with a live birth at home in the 12 months preceding survey
4.2 Postnatal Check (facility delivery)	Proportion of women with a live birth in a facility in the 12 months preceding survey who had a post-natal check before leaving the facility	Number of women with a live birth in a facility in the 12 months preceding survey who had a post-natal check before leaving the facility	Number of women with a live birth in a facility in the 12 months preceding survey
4.3a Postnatal check of the mother 2 days	The proportion of women who had a birth in the 12 months preceding survey who had a post-natal check within 2 days of birth. [Countdown; DHS reports this as 'time since delivery']	Number of women with a birth in the 12 months preceding survey who had a post-natal check within 2 days of birth	Number of women interviewed who had a birth in the 12 months preceding survey
4.3b Postnatal check of the mother 7 days	The proportion of women who had a birth in the 12 months preceding survey who had a post-natal check within 7 days of birth. [Countdown; DHS reports this as 'time since delivery']	Number of women who had a birth in the 12 months preceding survey who had a post-natal check within 7 days of birth.	Number of women who had a birth in the 12 months preceding survey
4.4 Provider of PN Check of the mother	The proportion of women who delivered in the 12 months preceding the survey who had a post-natal check up from a trained provider (doctor, nurse, midwife, auxiliary nurse)	Number of women who delivered in the 12 months preceding the survey who had a post-natal check from a trained provider	Number of women who delivered in the 12 months preceding the survey
4.5 Content of 1st PN check of Mother	Content of first PN check of the mother	4.5 Content of 1st PN check of Mother	Content of first PN check of the mother

Category	Definition	Numerator	Denominator
5. Care of sick newborns			
5.1 Formal medical care for sick neonates	The proportion of babies aged 0-60 days who were reported to have any illness during the first 28 days of life who were taken for formal medical care outside the home	Number of babies aged 0-60 days whose mothers report had any illness in the first 28 days of life and who were taken for formal medical care outside the home	Number of babies aged 0-60 days whose mothers report had any illness in the first 28 days of life
5.2 Barriers to seeking care for sick newborns	Barriers to seeking care outside the home for sick newborns		
5.3 Newborns with infection who received antibiotic regimen	The proportion of babies whose mothers report that they had an infection in the first 28 days of life and who were treated with antibiotics	Number of babies aged 0-60 days whose mothers report had an infection in the first 28 days of life and who were treated with antibiotics	Number of babies aged 0-60 days whose mothers report had an infection in the first 28 days of life
6. Stillbirth and newborn mortality			
6.1 Stillbirth	Proportion of women who delivered a still-born baby in the last year	Number of women who delivered a still-born baby in the last year	Estimate of number of pregnant women
6.2 Neonatal mortality	Proportion of women who had a live birth in the last 12 months, whose newborn died in the first 28 days of life.	Number of women who had a live birth in the last 12 months, whose newborn died in the first 28 days of life.	Number of women who had a live birth in the last 12 months