THE LANCET

Maternal Health Series

The **Burden** of Poor Maternal Health

Staggering numbers

- 210 million pregnancies
- 140 million births
- 303,000 maternal deaths
- 27 million morbidity episodes

  from five key obstetric causes

Graham WJ, Woodd S, Byass P, Filippi V, Gon G, Virgo S, Chou D, Hounton S, Lozano R, Pattinson R & Singh S. **Diversity & divergence: the dynamic burden of poor maternal health**. Lancet 2016

The **Burden** of Poor Maternal Health

- Progress has been made in reducing maternal deaths
- Between 1990 & 2015, maternal mortality decreased by 44 percent: from 385 per 100,000 live births to 216 per 100,000

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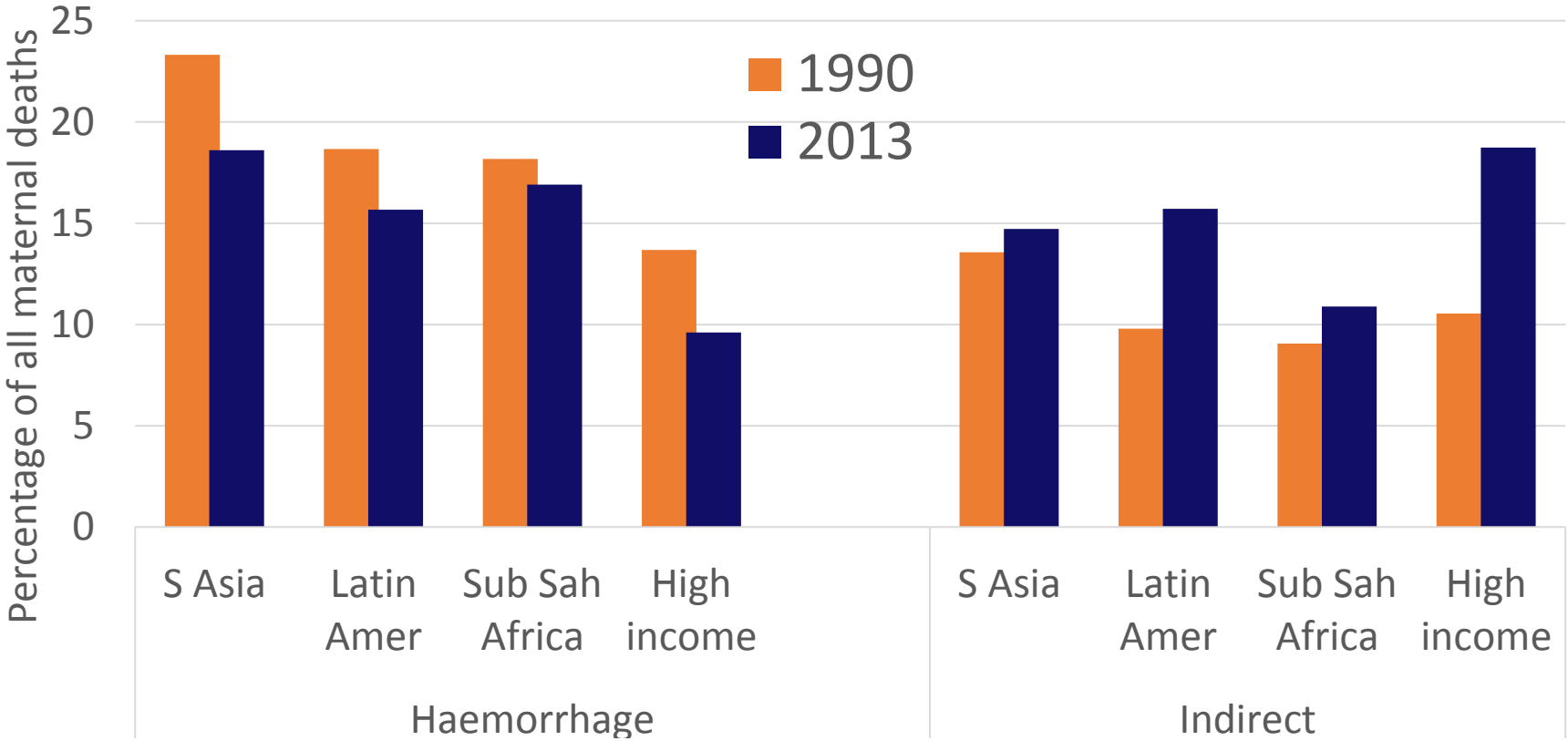
The **Burden** of Poor Maternal Health

Diversity



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The **Burden** of Poor Maternal Health

Divergence

In 1990, the pooled maternal mortality ratio for 10 countries with highest levels were 100 times greater than for the 10 with the lowest

By 2013, the gap had doubled to 200 times greater

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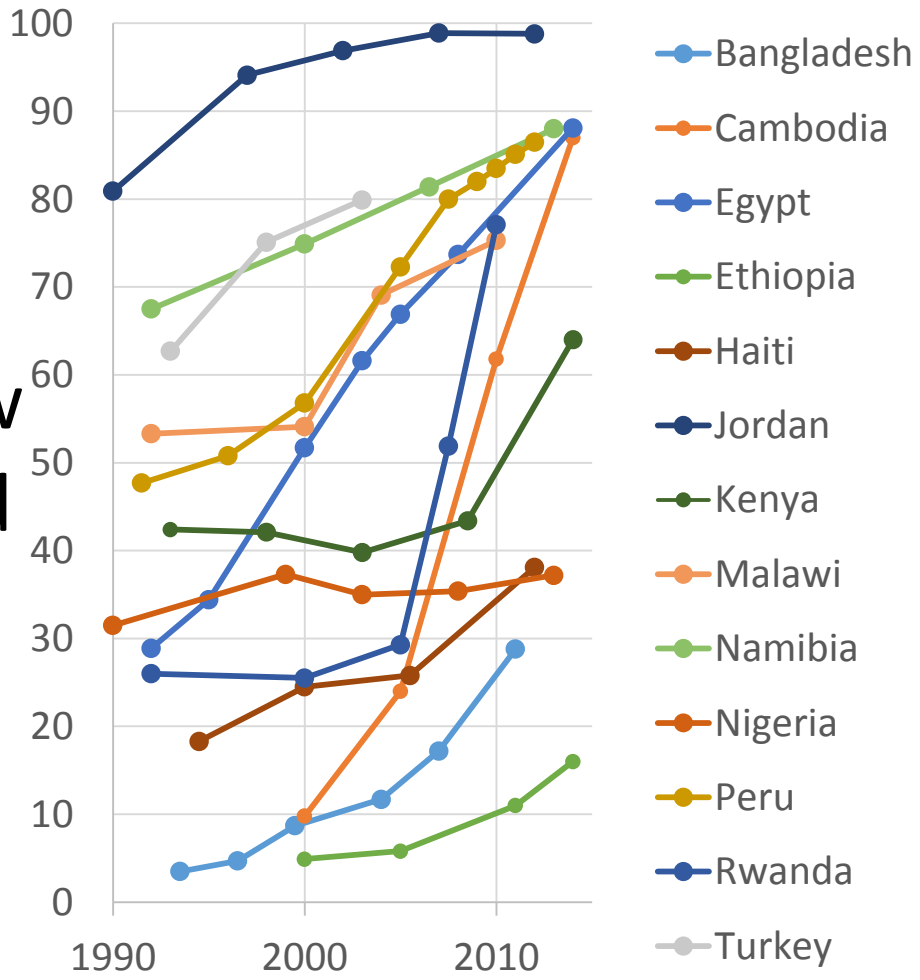
Coverage of services

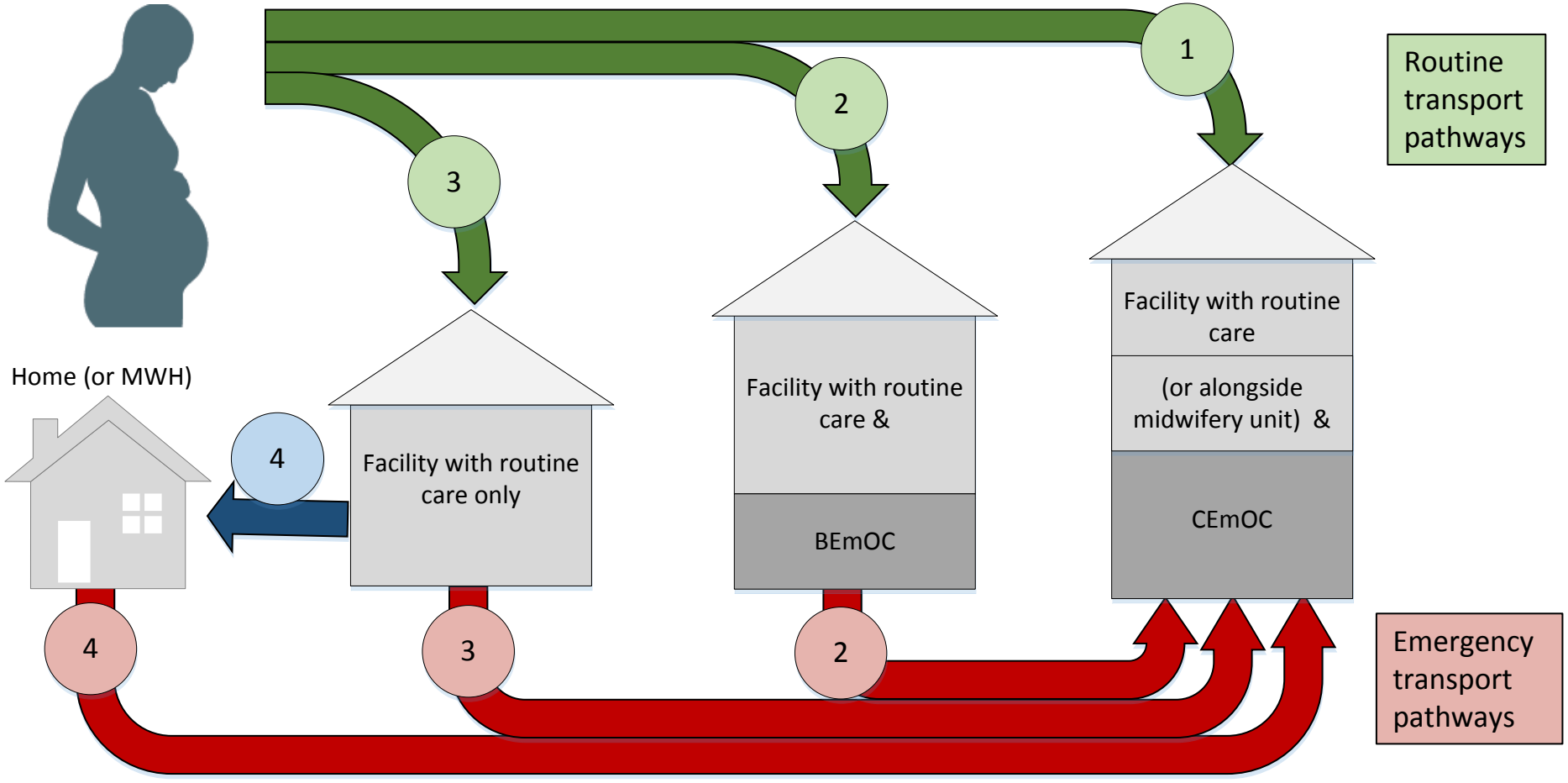
- Three-quarters of women globally now deliver with a skilled birth attendant
- This dramatic increase occurred mostly via facility deliveries



Facility deliveries by country (1990-2014)

Campbell OMR, Calvert C, Testa A, Strehlow M, Benova L, Keyes E, Donnay F, Macleod D, Gabrysch S, Rong L, Ronsmans C, Sadruddin S, Koblinsky M & Bailey P.
The scale, scope, coverage & capability of childbirth care. Lancet 2016

Conceptualizing pathways to care



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How do women get to childbirth care?

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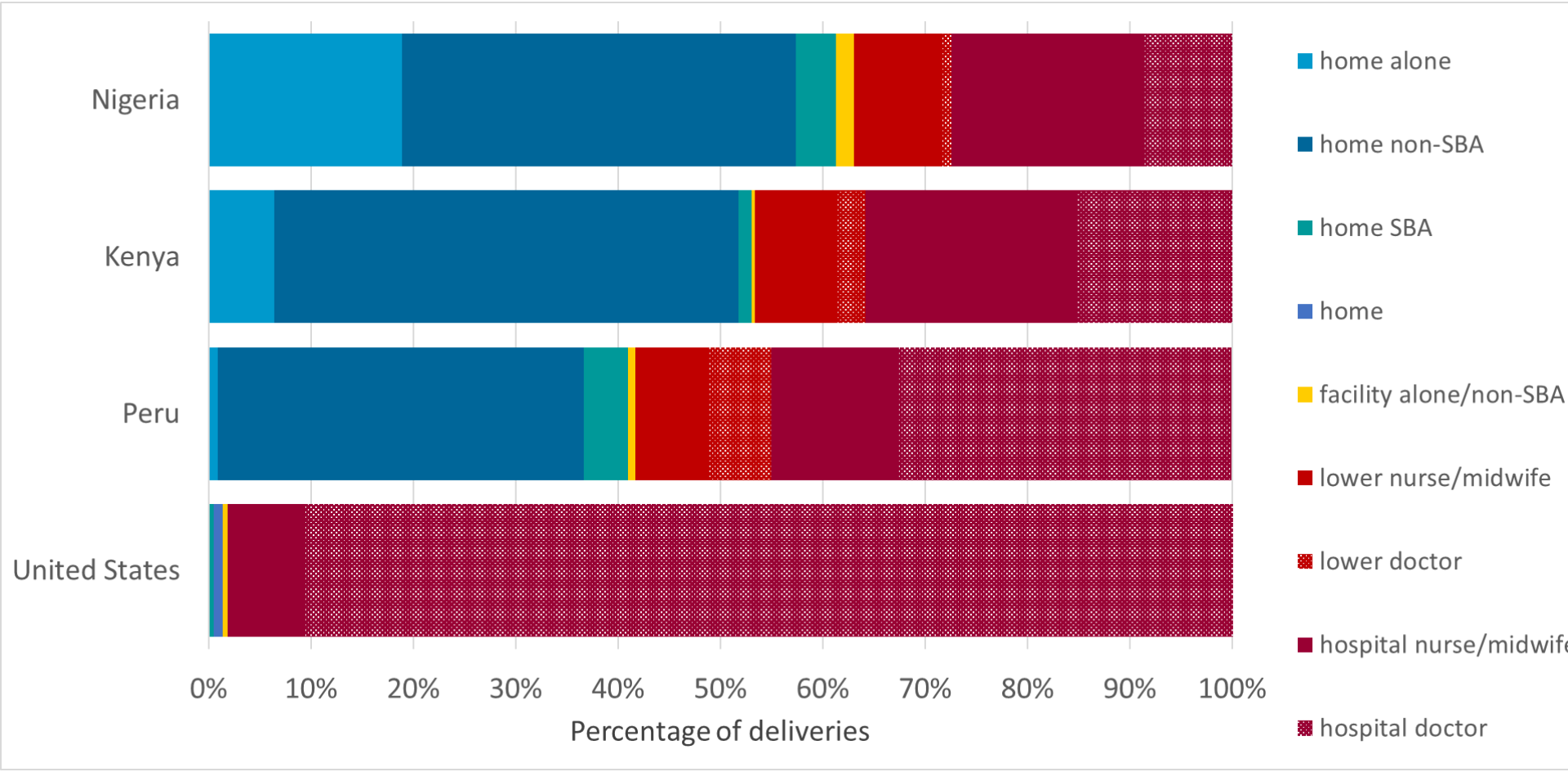
Who does deliveries? And where?



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Where do deliveries take place?

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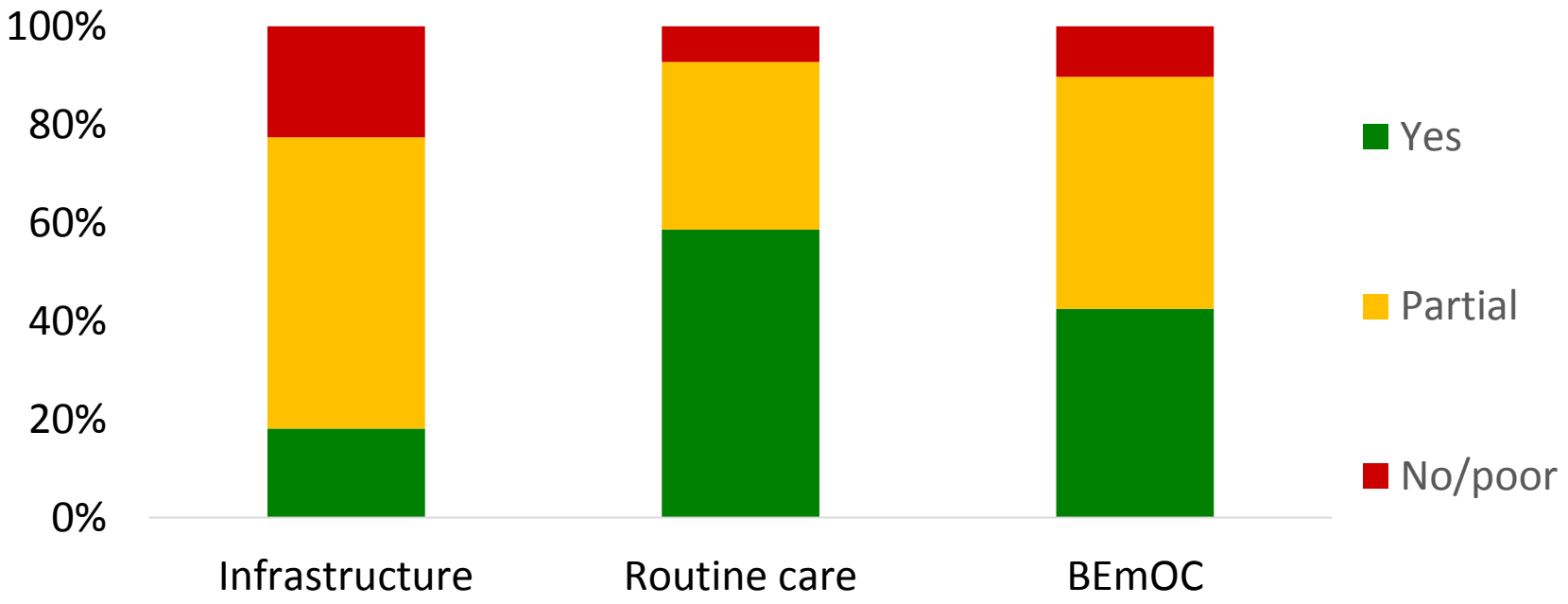
What are facilities capable of?

% of facility births in facilities in **Kenya** that can provide:



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Summary I

Burden of poor maternal health (Graham et al)
-> Progress but… diverse maternal health needs will require diverse maternal services

Landscape of maternal healthcare services in low- and middle income settings (Campbell et al)
-> We need to ensure skilled providers for routine and emergency childbirth care, along with timely access to such care

Too little too late

- Lack of evidence-based guidelines
- Women delivering alone

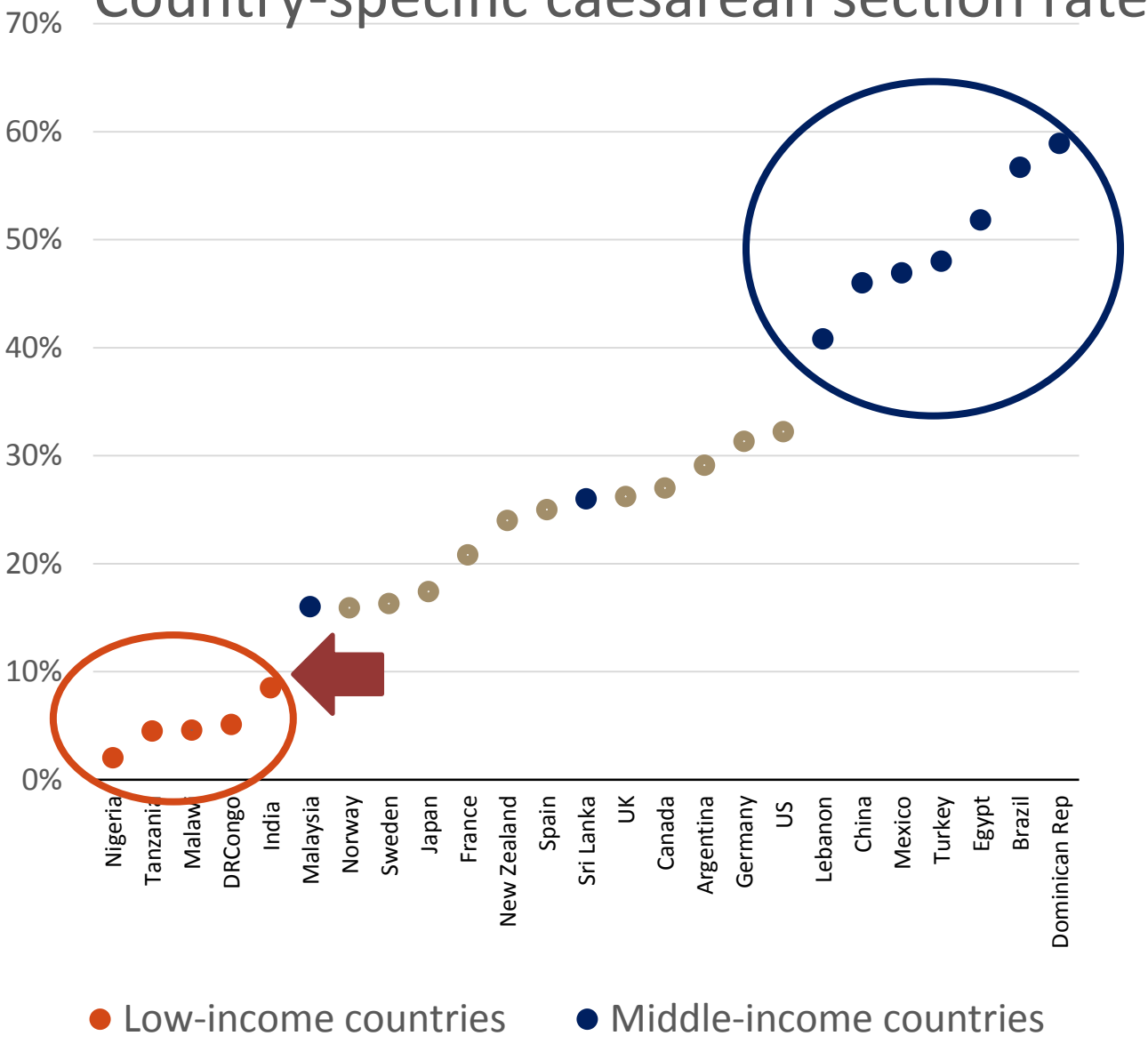
Appropriate, Timely, Evidence-Based, **Respectful** Care

Too much too soon

- Routine inductions/augmentations
- Routine PP antibiotics
- Unnecessary CS

Miller S, Abalos E, Chamillard M, Ciapponi A, Colaci A, Comandé D, Diaz V, Geller S, Hanson C, Langer A, Manuelli V, Millar K, Morhason-Bello I, Castro CP, et al. **Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide.** Lancet 2016

Country-specific caesarean section rates



Disparate rates between (and within) countries

Both “too little, too late” & “too much, too soon”

Miller S, Abalos E, Chamillard M, Ciapponi A, Colaci A, Comandé D, Diaz V, Geller S, Hanson C, Langer A, Manuelli V, Millar K, Morhason-Bello I, Castro CP, et al. **Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide.** Lancet 2016

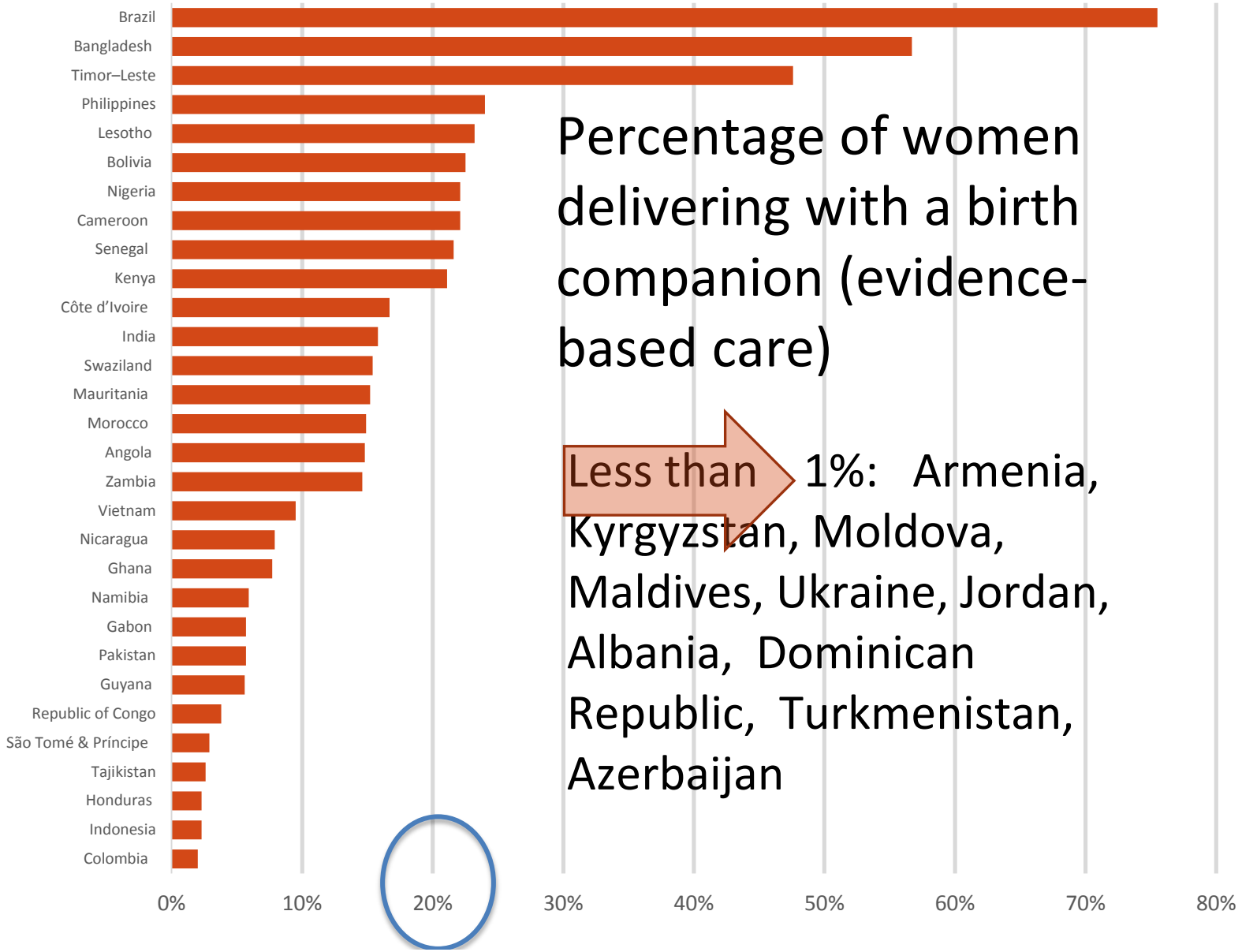
HICs: Key Findings

- Not enough facilities offer women-centered care
- Most countries lack surveillance systems for maternal deaths or identifying causes death.
- Protocols, drills, and simulations for team training are being used to address preventable mortality, such as hemorrhage
- HICs experience variations in practice that are not evidence-based nor attributable to size of facility
- Malpractice liability might pose a barrier to optimal maternity care in North America, especially USA,
  - reduces number of obstetricians willing to pay
  - contributes fear-based over interventionism

Evidence for change: MIC/HIC

- **Type of care provider**
  - **Integrated** midwifery-led care reduces interventions with no adverse effects
- **Remuneration**
  - Fee for service may increase financial incentives.
  - Eliminating payment for early elective induction of labour shows some success in decreasing rates
- **US: fear of litigation**
  - States with high malpractice insurance premiums had higher CS rates
  - No-fault systems (state-supported provision for infants with serious neurological birth injuries) to mitigate costs

Shaw D, Guise JM, Shah N, Gemzell-Danielsson K, Joseph KS, Levy B, Wong F, Woodd S & Main E.
Drivers of maternity care in high-income countries: can health systems support woman-centred care? Lancet 2016



Percentage of women delivering with a birth companion (evidence-based care)

Less than 1%: Armenia, Kyrgyzstan, Moldova, Maldives, Ukraine, Jordan, Albania, Dominican Republic, Turkmenistan, Azerbaijan

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Evidence-based Respectful Care: Lack of Equity for all Women

53 million women no childbirth care

The **Current State** of Maternal Health

Progress, but….

- Vulnerable groups are left behind
  - **53 million women no care**
- Variable quality of care between and within countries
  - Too much, too soon
  - To little, too late
- Challenge: Implement evidence-based, respectful care for **all** women

The **Future** of Maternal Health

Maternal health in the next 15 years will depend on social, political, environmental & demographic changes

- Shocks from outside the maternal health field will influence maternal survival: **governance, economic growth, urbanization & health crises**
- Health system innovations can be leveraged to improve maternal health: **universal health coverage, behavioral economics & mHealth**

Kruk ME, Kujawski S, Moyer CA, Adanu CA, Afsana K, Cohen J, Glassman A, Labrique A, Reddy KS & Yamey G
Next generation maternal health: external shocks & health systems innovations. Lancet 2016

External shock: change in governance

Millennium Development Goals

1990-2015

2016-2030

http://www.un.org/millennium/declaration/ares552e.htm

https://sustainabledevelopment.un.org/

Innovation: universal health coverage

"Means to ensure that people obtain essential health services without experiencing financial hardship"
WHO definition

- Evidence suggests UHC:
  - Increases service use
  - Provides financial protection
  - Improves health outcomes
- Expands access to care for chronic and acute illness

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Next generation maternal health: external shocks & health systems innovations. Lancet 2016

Call to action: 5 key priorities

to achieve SDG target (Global MMR <70 per 100,000)

1. Prioritise good **quality** maternal health services that respond to local needs and meet emerging challenges
2. Promote **equity** through universal coverage of quality maternal health services
3. Increase **resilience** and **strength** of health systems
4. Guarantee **sustainable financing** for maternal & perinatal health
5. Improve the availability and use of local **evidence** to inform quality improvement

Koblinsky M, Moyer C, Calvert C, Campbell J, Campbell O, Feigl A, Graham W, Hatt L, Hodgins S, Matthews Z, McDougall
Moran A, Nandakumar A & Langer A. **Quality maternity care for every woman, everywhere: a call to action.** Lancet 201

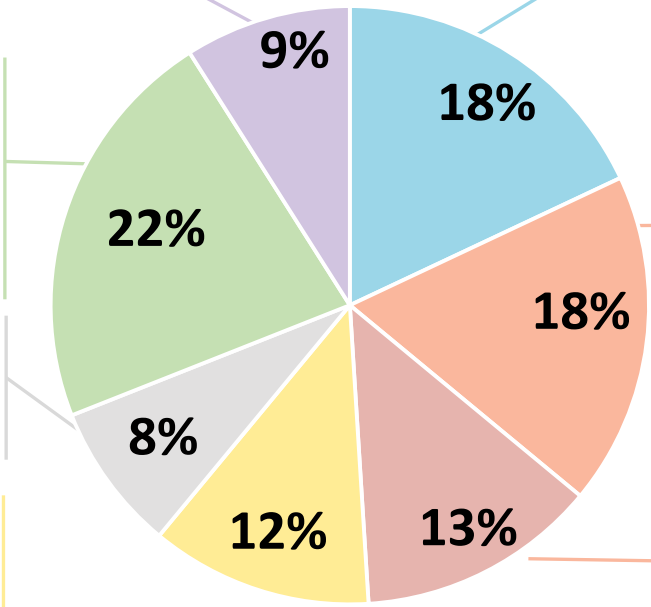
Priority 1: Quality maternity care for every woman, everywhere

Sepsis & other maternal infections
Tetanus toxoid; clean delivery; antibiotics; WASH

Other maternal disorders
Caesarean-section; other emergency obstetric care

Obstructed labour
Caesarean-section

Hypertensive disorders
Early identification & timely delivery; magnesium sulphate; calcium; aspirin; anti-hypertensive; caesarean-section



Complications of unsafe abortion
Family planning; safe abortion services; post abortion care

Haemorrhage
Uterotonics; blood transfusion; balloon tamponade; surgery; NASG

Indirect causes
Iron folate supplements; malaria intermittent treatment; insecticide-treated nets; anti-retrovirals

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Priority 2: Address inequity

Series highlights growing divergence in equitable use of services and in MMR

Call to action focuses specifically on inequities in access to good quality care:

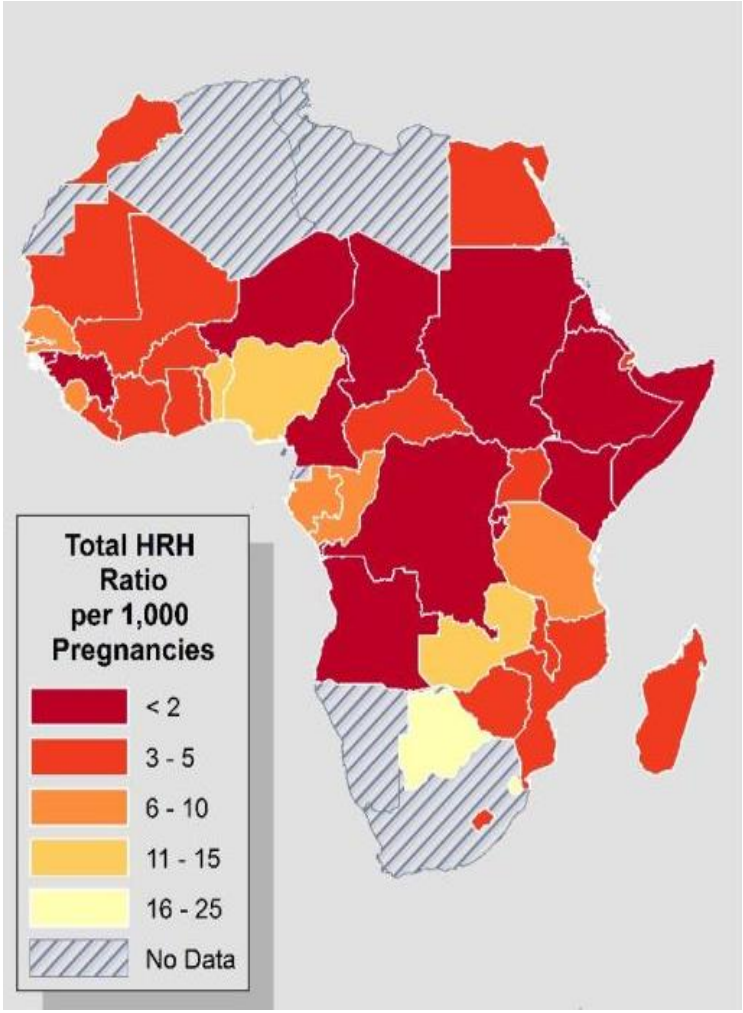
- Sociocultural factors, such as gender inequality
- Location, because of remoteness or conflict
- Financial constraints

Koblinsky M, Moyer C, Calvert C, Campbell J, Campbell O, Feigl A, Graham W, Hatt L, Hodgins S, Matthews Z, McDougall L, Moran A, Nandakumar A & Langer A. **Quality maternity care for every woman, everywhere: a call to action.** Lancet 2016

Priority 3: Strengthen health systems

Countries with largest numbers of births have some of lowest densities of midwives & obstetricians (<2 per1000 pregnancies)--Democratic Republic of the Congo, Tanzania, Kenya, Ethiopia

We need more maternal and newborn health workers, more capable facilities



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Priority 4: Sustainable financing

- Capture expanded domestic fiscal space for maternal health
- Deploy coordinated and targeted donor assistance for vulnerable populations
- Effectively employ strategic purchasing and performance based incentives
  - identify models of care & interventions to invest in
  - determine how to purchase; for whom (subsidies)
  - select health-care providers to purchase services from—ideally those who can provide highest quality of care most efficiently

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Priority 5: Better evidence

Evidence → **Action** → **Accountability**

Metrics research priorities	Implementation research priorities
• **Standardize definitions & methods** for causes of death • **Improve Civil Registration Vital Statistics** for births, stillbirths & deaths	**Invest in national capacity** for locally driven research on: • **Health systems** • **Epidemiology** • **Policy & practice**

Koblinsky M, Moyer C, Calvert C, Campbell J, Campbell O, Feigl A, Graham W, Hatt L, Hodgins S, Matthews Z, McDougall L, Moran A, Nandakumar A & Langer A. **Quality maternity care for every woman, everywhere: a call to action.** Lancet 2016

Key messages: indicators and measurement

Future measurement …

"The current indicator of skilled birth attendant coverage is a unidimensional and limited metric with which to characterise complex services; a more diverse range of indicators is needed to capture the nature and content of care being provided; these data are readily available" **Campbell** et al.

In conclusion…

This series…suggests two fundamental issues:

- ensure the **quality** of maternal health care for all women
- guarantee access to care for those left behind or those most vulnerable

Countries, and the global community, must take action to reach every woman, every newborn, everywhere with good quality health care