



Burnet Institute

Medical Research. Practical Action.

Paths Toward Solution of Healthcare Issues through International Joint Research

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In all health systems in the world

- We all face similar challenges
 - Increased demand for quality services
 - Limited resources to fund services
 - Challenges in the use of evidence to drive practice
 - Shortages in health workforces especially midwives and nurses
 - Overuse and underuse of services

Underuse and overuse of services

- Overuse is difficult to measure and has not been well characterised
- Overuse is likely to cause physical, psychological and financial harm to patients
- Overuse deflects resources from public health and other social spending in both low-income and high-income countries
- Overuse occurs across a wide range of health specialties

Brownlee et al. *The Lancet: Right Care Series* (2017). [http://dx.doi.org/10.1016/S0140-6736\(16\)32585-5](http://dx.doi.org/10.1016/S0140-6736(16)32585-5)

Types of overuse

- Overuse of medication
- Antibiotics – antimicrobial resistance
- Overuse of screening tests
- Inappropriate use of cancer screening
- Overuse of diagnostic tests
- Often endoscopes and colonoscopies are cited
- Site of care delivery
- Unnecessary hospital admissions

Too little too late – too much too soon

- What do we do too much of?
- What do we not do enough of?

Too much too soon in maternity care

Too little, too late

- Lack of evidence-based guidelines
- Lack of equipment, supplies, and medicines
- Inadequate numbers of skilled providers
- Women delivering alone
- Lack of emergency medical services and delayed inter-facility referrals

Too much, too soon

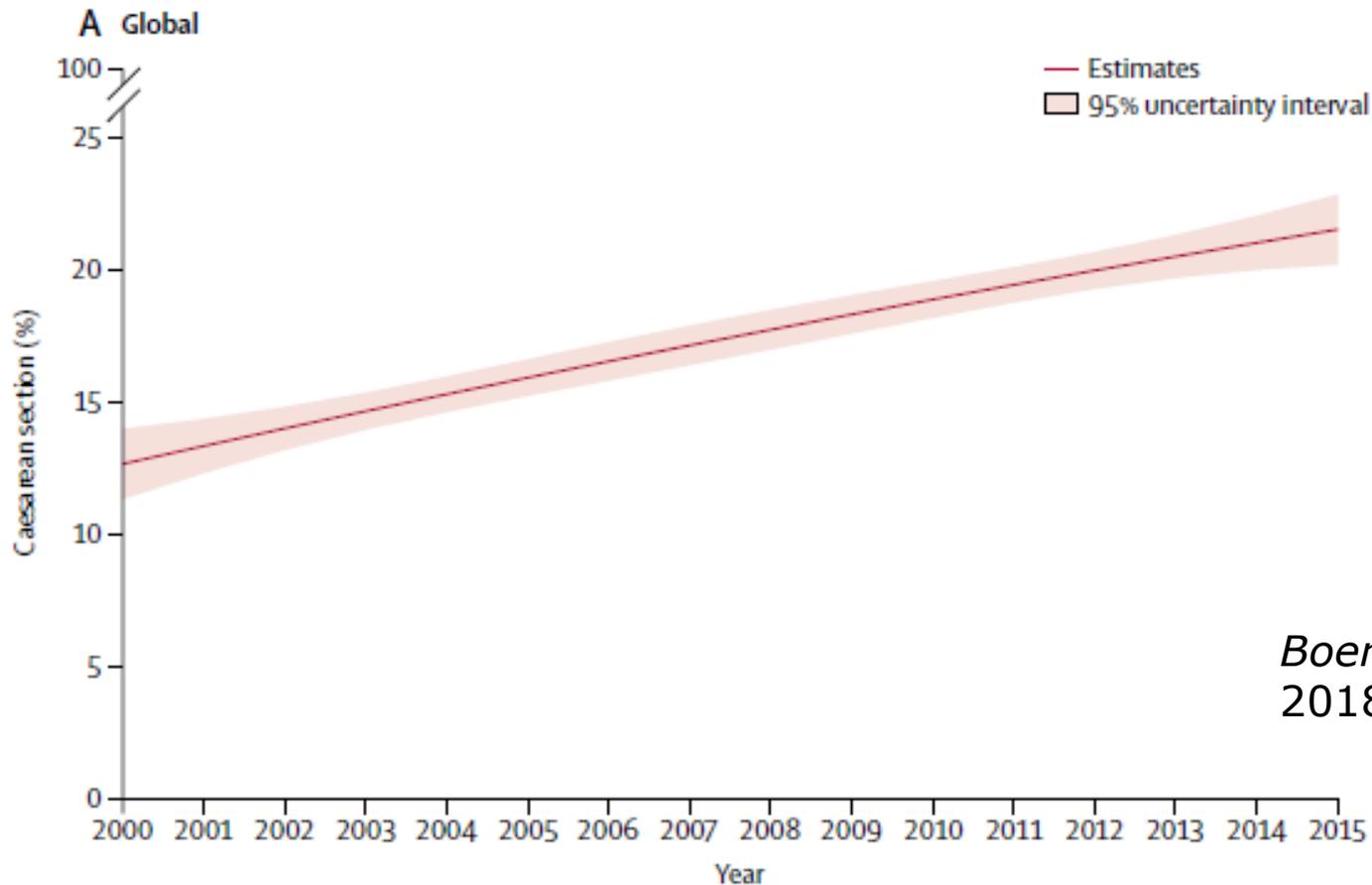
- Unnecessary caesarean section
- Routine induced or augmented labour
- Routine continuous electronic fetal monitoring
- Routine episiotomy
- Routine antibiotics postpartum

The Lancet's
Maternal
Health
Series
(2016)

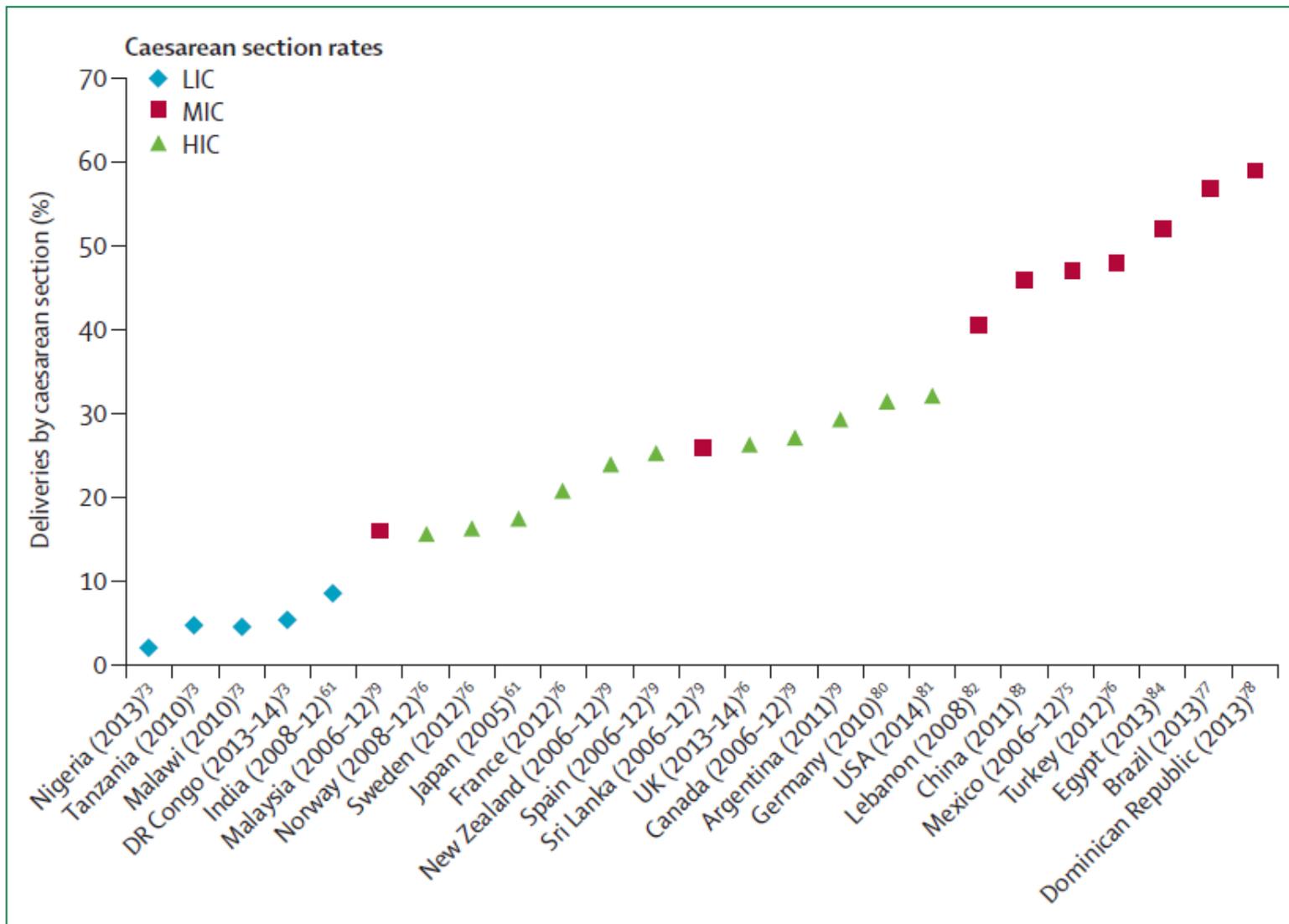
Caesarean section as an example

- Caesarean section (CS) can save women's and infants' lives and should be universally accessible
- The large increase in CS use, often for non-medical indications, is of concern given the risks for both women and children

Estimated frequency of and trends in caesarean section use, as a proportion of livebirths between 2000 and 2015



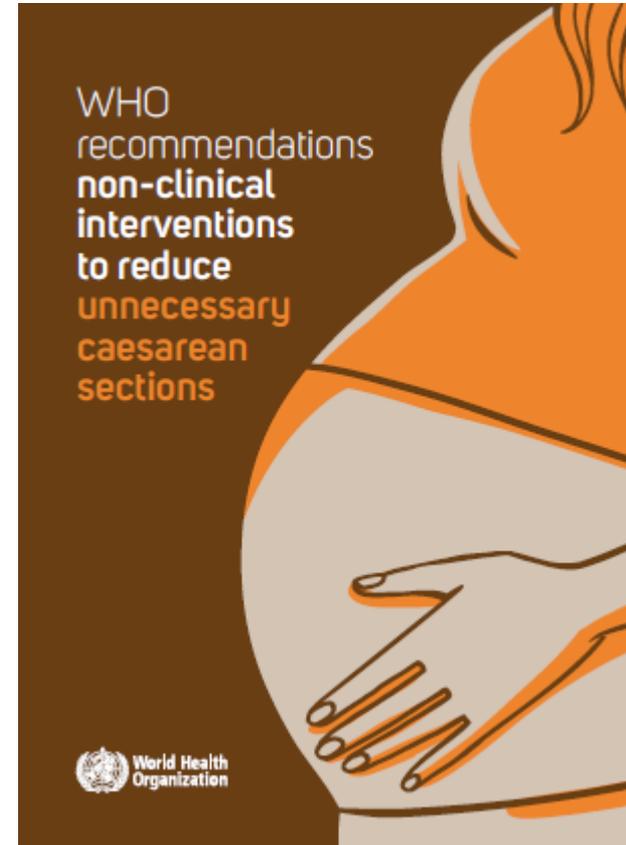
Boerma, et al Lancet
2018; 392: 1341-48



Miller et al. *The Lancet*. [http://dx.doi.org/10.1016/S0140-6736\(16\)31472-6](http://dx.doi.org/10.1016/S0140-6736(16)31472-6)

Optimising caesarean section

- Interventions targeted at women
- Interventions targeted at health professionals
- Interventions at organisations and systems



What can health systems do?

- What can you do?
 - Implement evidence-based clinical practice guidelines
 - Undertake audits and provide feedback
 - Implement collaborative models of care

- Maybe this is relevant to other interventions?

Can we use research to make change?

- Audit what is happening
- Work with consumers to identify problems
 - Ask consumers what is important to them
 - Co-design changes
- Look at the international literature and global movements

Lancet Series on Midwifery - 2014

- Developed in the wider global context
 - Post-Millennium Development Goals agenda
 - Sustainable Development Goals
 - Universal Health Coverage
 - Saving Newborn Lives
 - Health workforce development
 - Addressed the global realities of maternal and newborn health
 - Beyond saving lives - improving the **quality of care**
- Available for free:
<https://www.thelancet.com/series/midwifery>

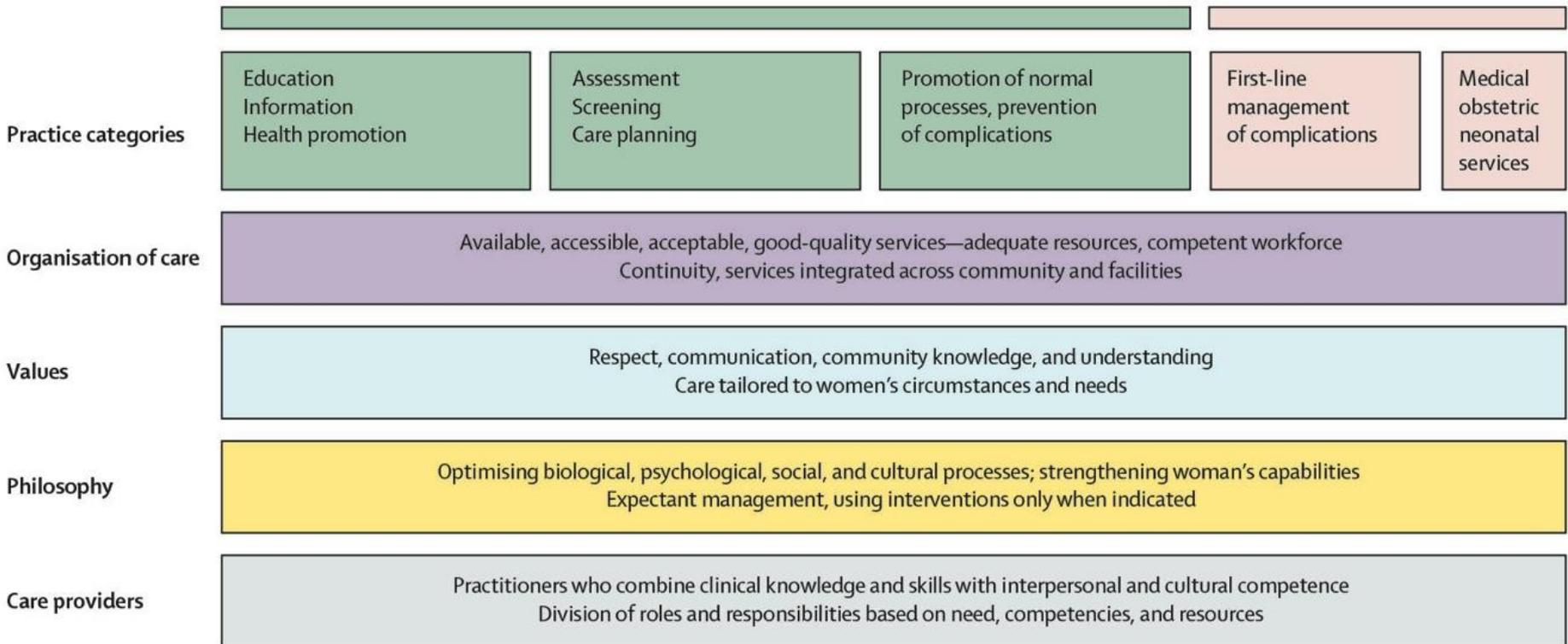
Quality Maternal and Newborn Health Framework

- Developed a framework for care needed by childbearing women and infants
 - identifying **what, how, and who**
- Used framework to analyse practices in the scope of midwifery services and identify outcomes improved by midwifery care

What is quality maternal and newborn care?

For all childbearing women and infants

For childbearing women and infants with complications



Renfrew et al. (2014) The Lancet 384: 1129–45.

Quality Maternal and Newborn Care Framework

Education
Information
Health promotion

Assessment
Screening
Care planning

Promotion of normal
processes, prevention
of complications

Organisation of care

Available, accessible, acceptable, good-quality services—adequate resources, competent workforce
Continuity, services integrated across community and facilities

Values

Respect, communication, community knowledge, and understanding
Care tailored to women's circumstances and needs

Philosophy

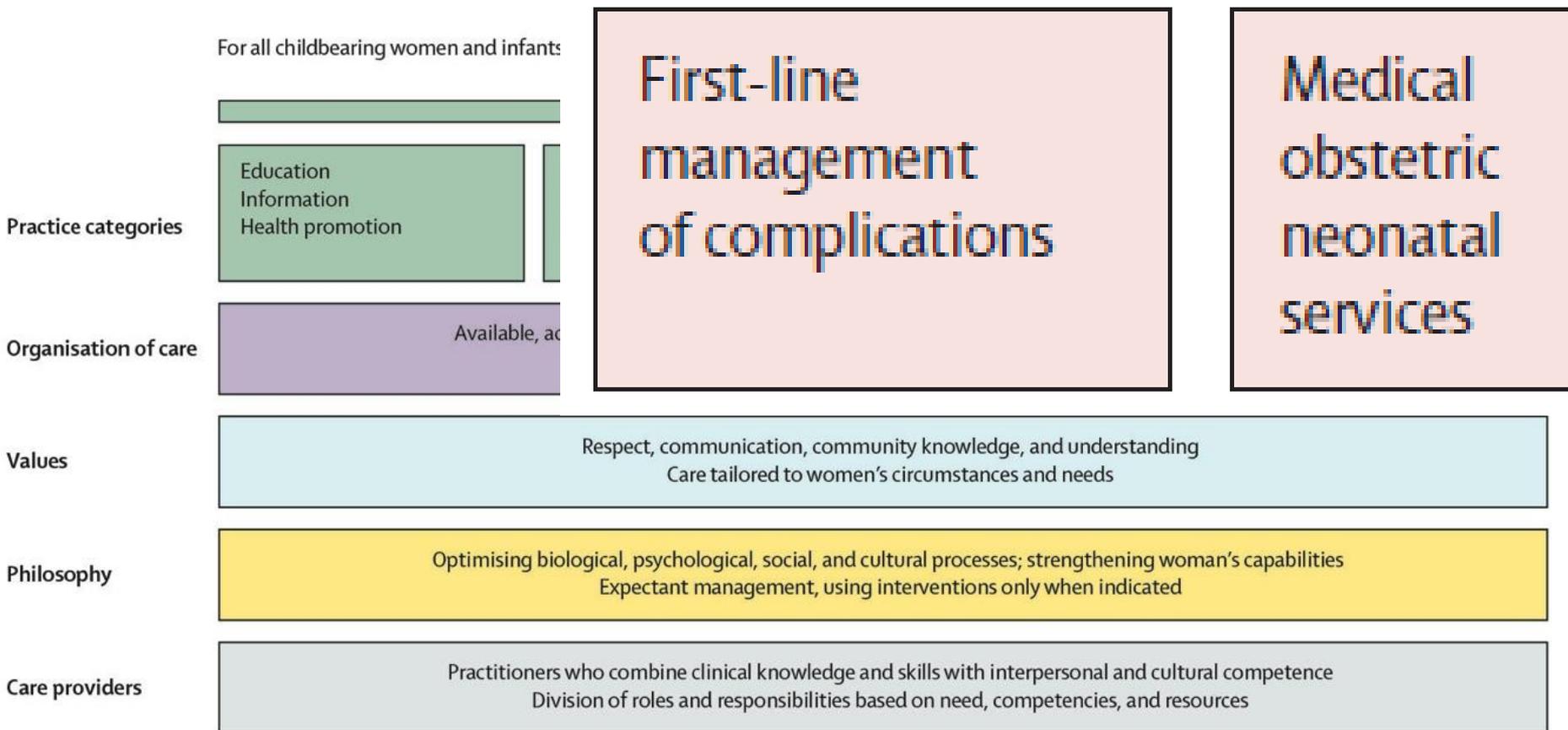
Optimising biological, psychological, social, and cultural processes; strengthening woman's capabilities
Expectant management, using interventions only when indicated

Care providers

Practitioners who combine clinical knowledge and skills with interpersonal and cultural competence
Division of roles and responsibilities based on need, competencies, and resources

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Quality Maternal and Newborn Care Framework

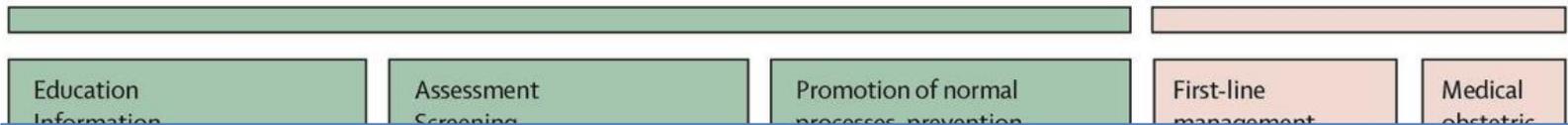


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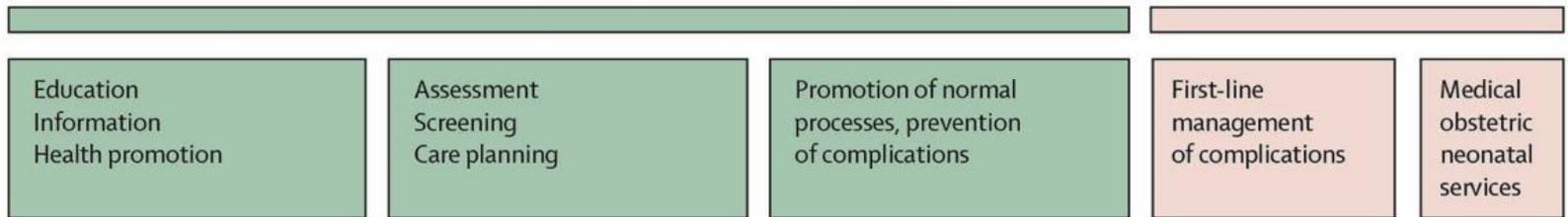
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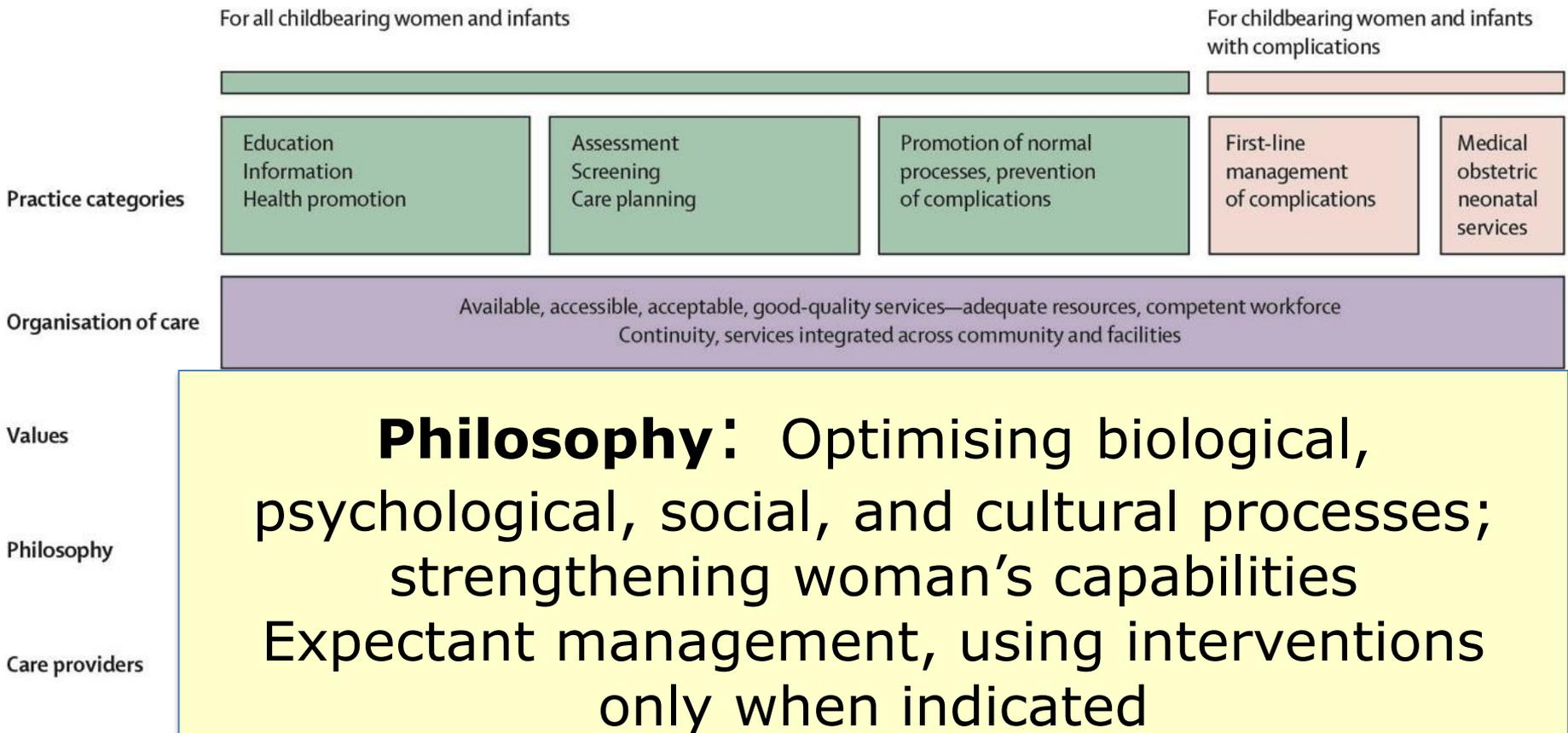


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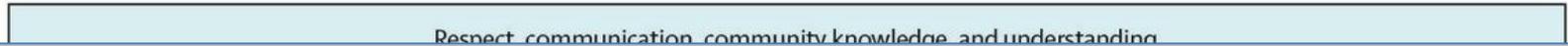
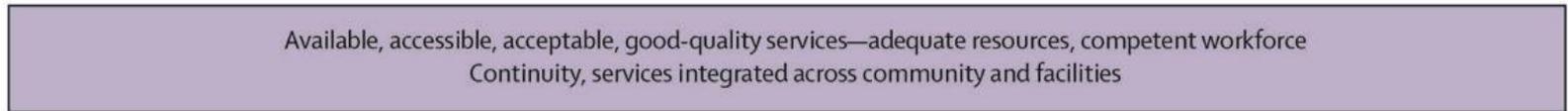
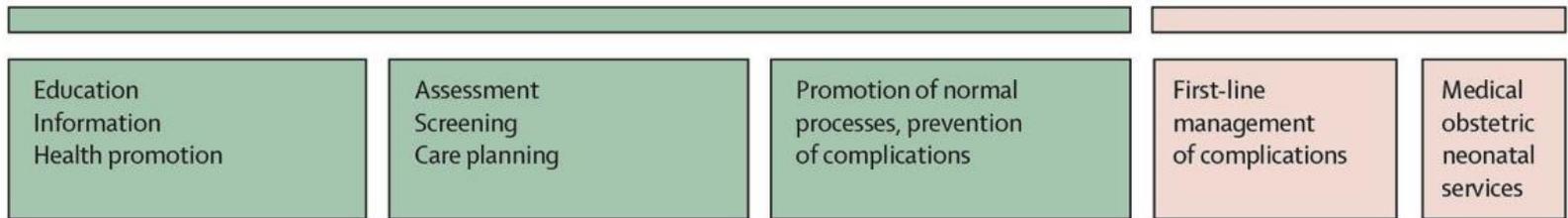


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Quality Maternal and Newborn Care Framework

For all childbearing women and infants

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Care providers: Practitioners who combine clinical knowledge and skills with interpersonal and cultural competence

Division of roles and responsibilities based on need, competencies, and resources

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Next paper in the Midwifery Series

Asking different questions: research priorities to improve the quality of care for every woman, every child

Lancet Glob Health 2016

Published Online

September 20, 2016

[http://dx.doi.org/10.1016/S2214-109X\(16\)30183-8](http://dx.doi.org/10.1016/S2214-109X(16)30183-8)

**Holly Powell Kennedy, Sashiyo Yoshida, Anthony Costello, Eugene Declercq, Marcos A Dias, Elizabeth Duff, Atf Gherissi, Karyn Kaufman, Frances McConville, Alison McFadden, Michaela Michel-Schuldt, Nester T Moyo, Kerri Schuiling, Anna M Speciale, MaryJ Renfrew*

Ranking of research topics by overall priority score

Research priorities	Research priority score
1 Evaluate the effectiveness of midwifery care across the continuum in increasing access to and acceptability of family planning services for women	90.4
2 Evaluate the effectiveness of midwife-led care when compared to other models of care across various settings, particularly on rates of fetal and infant death, preterm birth, and low birthweight	89.8
3 Determine which indicators are most valuable in assessing quality maternal and newborn care	89.7
4 Identify and describe aspects of care that optimise, and those that disturb, the biological/physiological processes for healthy childbearing women and fetus/newborn infants and those who experience complications	89.3
5 Evaluate the effectiveness of midwifery care in providing culturally appropriate information, education, and health promotion (eg, nutrition, substance use, domestic violence, and mental health)	89.1
6 Identify and describe enabling factors from examples of successful implementation of evidence-based maternal and newborn care across a variety of settings	89
7 Describe and evaluate the effectiveness of midwives working with others (such as health professionals, community health workers, and traditional birth attendants) in achieving quality maternal and newborn care including, but not limited to: Timely transfer of women to appropriate level/site of care Management of emergency situations Maximal use of skills and competencies Shared decision-making and accountability	89
8 Assess the views and preferences of women and families across a variety of settings about their experiences of maternal and newborn care including, but not limited to, care providers and sites of care (eg, place of birth, antenatal care)	88.8
9 Develop setting-specific benchmarks to assess measurable progress on implementation of quality maternal and newborn care	88.3
10 Identify and describe aspects of maternal and newborn care that strengthen or weaken women's psychosocial wellbeing and mental health	88.0
11 Assess whether new measures of morbidity are needed to more effectively evaluate outcomes of maternal and newborn care	88.0

Table: Ranking of research topics by overall research priority score

Asking different questions: A call to action for research to improve the quality of care for every woman, every child

Holly P. Kennedy PhD, CNM¹  | Melissa Cheyney PhD, CPM, LDM²  |
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Michaela Michel-Schuldt MSc, RM⁵  | Jane Sandall PhD, CBE^{5,8}  | Hora Soltani PhD, RM⁹  |
Anna M. Speciale PhD, MS, MSc, CNM¹⁰ | Jennifer Stevens CNM, MS¹¹ |
Saraswathi Vedam RM, FACNM, MSN, Sci D(hc)¹²  | Mary J. Renfrew BSc, RN, RM, PhD, FRSE⁷ 

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⁶Southern Cross University, Lismore, NSW

Abstract

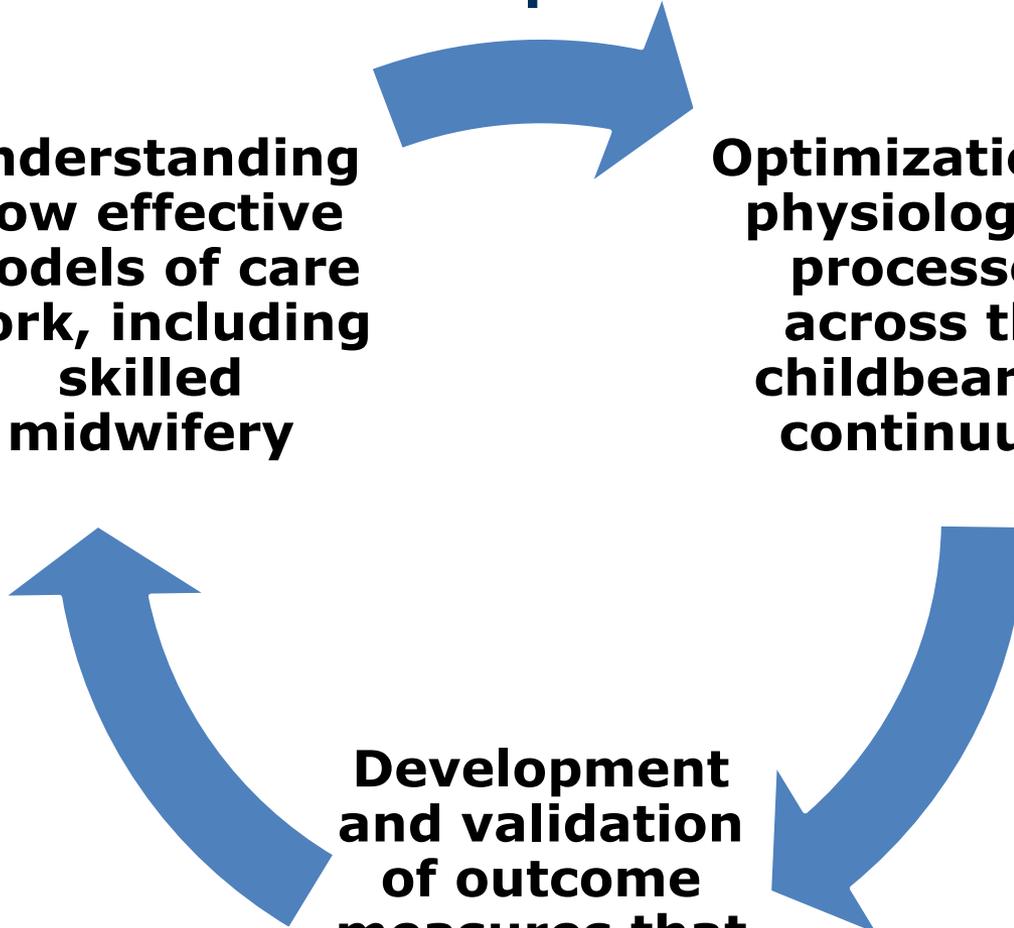
Despite decades of considerable economic investment in improving the health of families and newborns world-wide, aspirations for maternal and newborn health have yet to be attained in many regions. The global turn toward recognizing the importance of positive experiences of pregnancy, intrapartum and postnatal care, and care in the first weeks of life, while continuing to work to minimize adverse outcomes, signals a critical change in the maternal and newborn health care conversation and research prioritization. This paper presents “different research questions”

Interconnection of research priorities

**Understanding
how effective
models of care
work, including
skilled
midwifery**

**Optimization of
physiological
processes
across the
childbearing
continuum**

**Development
and validation
of outcome
measures that
capture short
and longer
term well-
being**



Why are we trying to address these issues?

- Improve health
- Improve global health
- Contribute to the Sustainable Development Goals



A global opportunity

THE GLOBAL GOALS For Sustainable Development



SDG 3 – Improve Health



Goal 3: Ensure healthy lives and promote well-being for all at all ages

Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development. Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality. Major progress has been made on increasing access to clean water and sanitation, reducing malaria, tuberculosis, polio and the spread of HIV/AIDS. However, many more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues.

SDG 5 – Address gender equity



Goal 5: Achieve gender equality and empower all women and girls

While the world has achieved progress towards gender equality and women's empowerment under the Millennium Development Goals (including equal access to primary education between girls and boys), women and girls continue to suffer discrimination and violence in every part of the world.

Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.

Providing women and girls with equal access to education, health care, decent work, and representation in political and economic decision-making processes will fuel sustainable economies and benefit societies and humanity at large.



How can our research address the SDGs

- Ask new and relevant questions
 - Focus on questions from the perspective of patients and communities
 - Remember to address overuse and underuse
- Recognise the health system is a complex eco-system
 - understand organisational change, human behaviour, pattern recognition
- Focus on the way care is delivered in innovative models of care that best use the health workforce
- Incorporate consumers of health care in co-design of services
- Focus on quality for all

What can you do?

- Ask new questions – ones that will have impact
- Collaborate nationally and internationally
- Think big – interventions rather than descriptions
- Be committed to improvements in your health systems
- Evaluate and publish
- Disseminate success and failures
- Support and mentor others
- Work together with professional associations, government and policy makers

Thank you