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Quality improvement in maternal and reproductive health services



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Abstract

As maternal mortality and morbidity rates stagnate or increase worldwide, there is an urgent need to address health system issues that impede access to high-quality care. Learning from efforts to address the value, safety, and effectiveness of reproductive and maternal health care is essential to advancing quality improvement efforts.

Main text

Quality health care is key to ensuring human rights in health services and promoting positive health for all [1]. The quality of health services can have direct effects on the effectiveness of interventions or treatments, and indirect effects on health outcomes by influencing healthseeking behavior, patient engagement, self-efficacy, and psychosocial health. As access to health services has grown in many parts of the world, a greater focus on understanding and improving quality can reduce gaps in progress between utilization of health services and health outcomes [2, 3].

Quality health care is safe, effective, and people-centered with services that are safe, timely, equitable, integrated, efficient, and patient- or family-centered [4]. A clinical and structural lens has historically been used to evaluate the quality of health services. Donabedian's

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seminal 1966 quality of care framework, outlining a focus on "structure, process, and outcome," has grounded research and practice centered on quality improvement [5]. Efforts to promote quality in health services center on enhancing the structures in which services are delivered, including the physical, facility environment; availability of essential medicine, supplies, and equipment; and the presence of trained medical staff to deliver lifesaving care. Interpersonal aspects of quality, which fall within the "process" domain of Donabedian's framework and capture interactions between health providers and patients, have received growing attention in recent decades with a shift toward person-centeredness in health services [6–8].

Quality improvement (QI) is a systematic approach, guided by data, to improve health care delivery. QI initiatives can be led by a team in a single clinic or unit, or by quality improvement professionals working across health care systems – although ideally, every single person in a health care setting should be an advocate for quality care. Developing a culture of quality, identifying QI champions, and establishing QI teams that include patients or families are ways to start [9]. As part of their charge, teams can review data, undertake small tests of change, and monitor progress. Such focus, which requires time and a coordinated mindset and effort, can create significant transformations.

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Rationale for this Collection

A focus on ensuring high-quality health services is particularly salient for reproductive and maternal health services. Progress in reducing maternal mortality has stalled. While Africa and Asia shoulder the greatest mortality burden, the most recent UN estimates show stagnation or increases in maternal mortality in nearly all regions of the world – including in Europe, North America, Latin America and the Caribbean [10]. This stagnation has been attributed to reproductive and maternal health slipping down the global political agenda, along with increases in inequities, shortfalls in resources, and efforts of political and religious entities to limit the socioeconomic rights of women.

In all countries, as women¹ and couples navigate their unique life circumstances, make complex decisions, and engage in behaviors and practices related to sex, pregnancy, and childbearing, the delivery of high-quality, person-centered care is central to supporting them in achieving their reproductive goals. Person-centered care is paramount for sensitive and preference-specific healthcare, including reproductive and maternal care, as it ensures that services are tailored to individuals' needs and preferences. In the case of reproductive and maternal health, preferences related to contraceptive method attributes (e.g., efficacy, duration, side effects) and childbirth conditions (e.g., location, position, support personnel) play a critical role in shaping individuals' experiences of care and may impact subsequent care-seeking [11, 12].

The UN report on trends in maternal mortality from 2000 to 2020 urges collective action to address health system issues that impede access to safe, quality, respectful and affordable pregnancy care and sexual and reproductive health and rights for all women and girls [10]. Improving quality of care in maternal and reproductive health requires support by and for providers at the community, facility, district, and broader system and societal levels. Learning from efforts to analyze and address the value, safety, and effectiveness of reproductive and maternal health care in public and private health care systems around the globe is essential to advancing quality improvement efforts.

This Collection was launched in *BMC Pregnancy* and Childbirth and *BMC Women's Health* to highlight research that investigates ways in which the delivery of high-quality women's health services can be strengthened to align with clinical standards, evidence-based practices, and individuals' preferences for care. Facilitators and barriers to quality health service delivery will be explored and learning from recent and ongoing initiatives showcased as a call for collective action to continue investing in reproductive and maternal health care quality improvement.

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Author contributions

All authors contributed equally

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Declarations

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Consent for publication

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Competing interests

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References

- 1. Ghebreyesus TA. How could health care be anything other than high quality? Lancet Glob Health. 2018;6(11):e1140–1.
- Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, Adeyi O, Barker P, Daelmans B, Doubova SV, et al. High-quality health systems in the Sustainable Development goals era: time for a revolution. Lancet Glob Health. 2018;6(11):e1196–252.
- Al-Janabi A, Al-Wahdani B, Ammar W, Arsenault C, Asiedu EK, Etiebet M-A, Forde I, Gage AD, García-Saisó S, Guanais F, et al. Bellagio Declaration on highquality health systems: from a quality moment to a quality movement. The Lancet Global Health. 2018;6(11):e1144–5.
- Institute of Medicine Committee on Quality of Health Care in A. In. Crossing the Quality Chasm: a New Health System for the 21st Century. edn. Washington (DC): National Academies Press (US); 2001.
- Donabedian A. Evaluating the quality of medical care. 1966. Milbank Q 1966, 83(4):691–729.
- Afulani PA, Nakphong MK, Sudhinaraset M. Person-centred sexual and reproductive health: a call for standardized measurement. Health Expect. 2023;26(4):1384–90.
- Kim JH, Bell GA, Ratcliffe HL, Moncada L, Lipsitz S, Hirschhorn LR, Bitton A, Schwarz D. Predictors of patient-reported quality of care in low- and middleincome countries: a four-country survey of person-centered care. Int J Qual Health Care 2021, 33(3).
- Lim SA, Khorrami A, Wassersug RJ, Agapoff JA. Gender differences among Healthcare Providers in the Promotion of Patient-, person- and family-centered care-and its implications for providing Quality Healthcare. Healthcare (Basel) 2023, 11(4).
- Raven J, Hofman J, Adegoke A, van den Broek N. Methodology and tools for quality improvement in maternal and newborn health care. Int J Gynecol Obstet. 2011;114(1):4–9.
- Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA., World Bank Group and UNDESA/Population Division. In. Geneva: World Health Organization; 2023.
- Schneider PD, Sabol BA, Lee King PA, Caughey AB, Borders AEB. The hard work of improving outcomes for mothers and babies: Obstetric and Perinatal Quality improvement initiatives make a difference at the Hospital, State, and national levels. Clin Perinatol. 2017;44(3):511–28.

¹ We use the term women throughout this editorial but recognize that people who do not identify as women can become pregnant and require the same considerations in terms of understanding their preferences for care.

12. Suchman L, Vallin J, Quintero Veloz X, Kanchan L, Gebrehanna E, Uttekar B, Reed R, Santos L, Holt K. Balancing client preferences and population-level goals: a qualitative study of the ways in which public health providers and facility administrators interpret and incentivise quality of care in contraceptive counselling in Ethiopia, Mexico and India. Sex Reprod Health Matters. 2023;31(1):2229220.

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