



RESOURCE GUIDE FOR USAID MISSIONS ON MEASUREMENT OF SELF-REPORTED EXPERIENCE OF CARE (EOC) ACROSS SRMNCAH


MOMENTUM KNOWLEDGE ACCELERATOR




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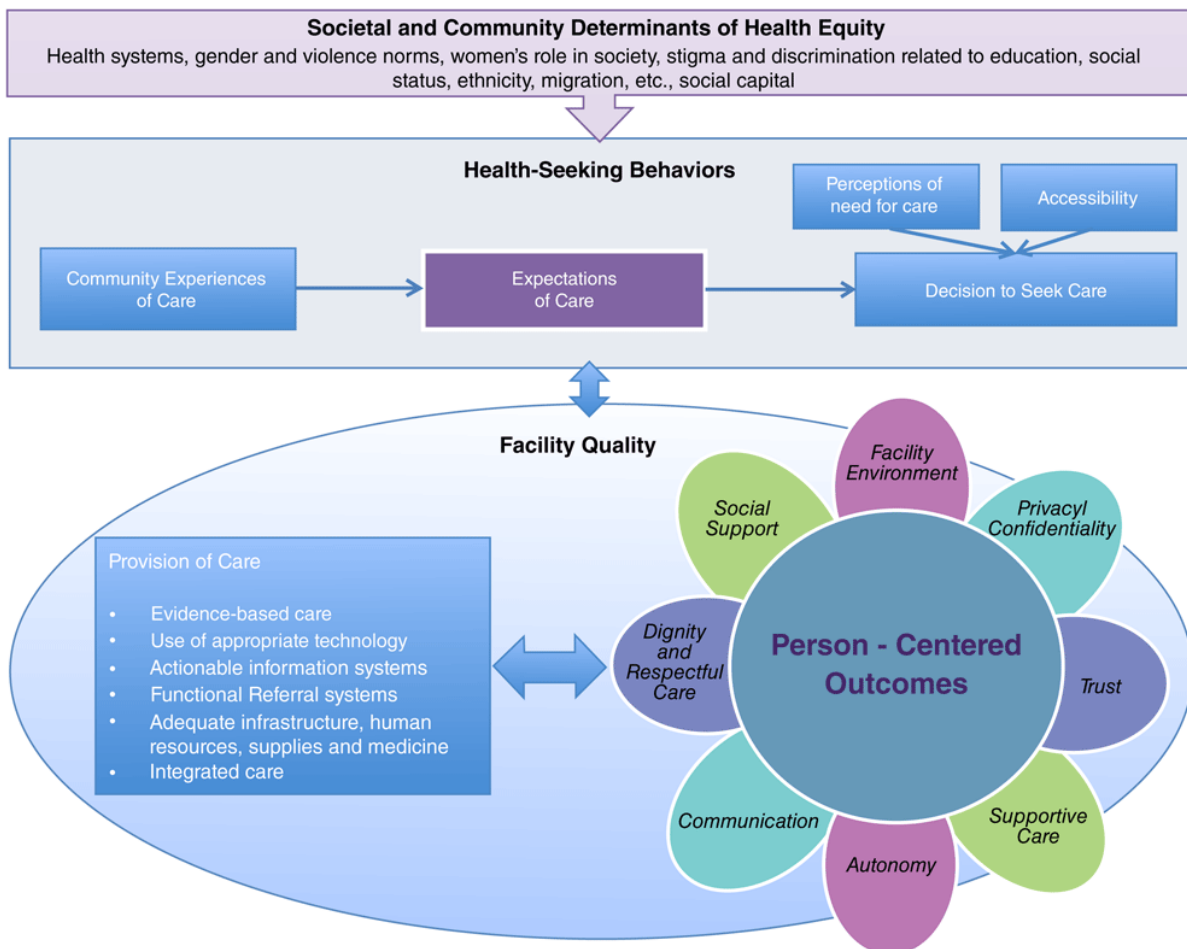
ABBREVIATIONS

AMELP	Activity Monitoring, Evaluation, and Learning Plan
EOC	Experience of Care
CDCS	Country Development Cooperation Strategies
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HMIS	Health Management Information System
LMIC	Low- and Middle-Income Countries
M&E	Monitoring and Evaluation
PCC	Person-Centered Care
PCMC	Person-Centered Maternity Care
PREM	patient-reported experience measure
QCC	Quality of Contraceptive Counseling scale
QFPC	Quality of Family Planning scale
QoC	Quality of Care
QRMCQI	Quality of Respectful Maternity Care Questionnaire in Iran
RHIS	Routine Health Information System
RMC	Respectful Maternity Care
SRMNCAH	Sexual, Reproductive, Maternal, Newborn, Child, Adolescent Health
STI	Sexually Transmitted Infection
USAID	US Agency for International Development
WHO	World Health Organization
WPRMC	Women’s Perspectives on Respectful Maternity Care scale

OVERVIEW

The **purpose** of this measurement guide is to provide USAID Missions and their partners with a monitoring and evaluation (M&E) resource to support programming to improve person-centered care across the sexual, reproductive, maternal, newborn, child, and adolescent health (SRMNCAH) continuum in low-and middle-income country (LMIC) settings, ensuring that client and caretaker perspectives are captured as part of those efforts. This guide compiles measures that can be used to track client-reported experience of care (EOC) in facility- and community-based health service delivery settings across the spectrum of SRMNCAH, including family planning, HIV, sexually transmitted infections (STIs), and care of the sick child. It compiles measures of client and, for newborns and children, caretaker self-reported data on EOC. These data are sometimes referred to as patient-reported experience measures (PREMs). The guide contextualizes EOC as a critical component of quality of care and centers it within a conceptual framework of person-centered care (PCC), in accordance with the World Health Organization’s Quality of Care Monitoring Logic Model (World Health Organization, 2019)(see Figure 1). Eight domains of PCC proposed by Sudhinaraset et al. (2017) serve as the organizing framework for compiling measures of self-reported patient EOC.

Figure 1. Person-Centered Care Framework for Reproductive Health Equity



Source: Sudhinaraset, M., Afulani, P., Diamond-Smith, N., Bhattacharyya, S., Donnay, F., & Montagu, D. (2017). Advancing a conceptual model to improve maternal health quality: The person-centered care framework for reproductive health equity. *Gates Open Research*, 1, 1. <https://doi.org/10.12688/gatesopenres.12756.1>

The guide presents a short list of USAID-recommended core PREMs that meet predetermined criteria described in the body of the document (see **Table 2**). A link to a more extensive vetted inventory of additional EOC measures and their characteristics is included in **Annex A**. The guide also provides information on the quality of the included measures, reporting on whether they have been formally assessed and research tested, where they have been implemented in LMICs, and other data on their reliability, validity, and generalizability. As feasibility and usability are context specific, rather than measure specific qualities, this resource guide does not assess these aspects of the PREMs, although it does outline feasibility considerations that may be useful for selecting individual measures for a specific country context. Further, it is important to note that the guide **excludes** tools that measure a lack of PCC (disrespect, abuse, mistreatment, etc.).

Key **audiences** for this resource guide are USAID Mission staff and Mission partners, including ministries of health, health program staff, and other implementing partners. The guide is designed to support the selection of appropriate client-reported EOC measures, tools, and methodologies to monitor and promote the effectiveness of interventions to improve the quality of SRMNCAH services. These measures can be incorporated into cross-sectional surveys and special program evaluations addressing EOC across the SRMNCAH spectrum, including respectful maternal and newborn care. We anticipate the guide can further support key USAID Agency and Bureau for Global Health priorities, including [the Primary Impact Initiative](#) and [localization](#). Ministries of health may decide to include measures of interest in national quality of care/quality improvement monitoring, evaluation, and learning plans and monitoring systems to inform decisions across health systems.

The guide includes:

- A working definition of EOC, based on eight domains of PCC, to support overall clinical quality of care.
- A vetted list of qualitative and quantitative PREMs and associated data collection tools organized by eight domains of PCC that have been tested in LMIC settings. The list includes:
 - A searchable inventory of vetted EOC measures with information on their characteristics, quality, and associated measurement resources (see **Annex A**).
 - A subset of core, USAID-recommended EOC measures selected based on predetermined criteria that can be used as programmatic indicators.
- A quality assessment score indicating whether EOC measures have been formally research validated and information about the LMICs in which they have been used to help users decide whether they are suitable to use as is or with minor adaptations specific to the particular context.
- A discussion of the most common methodologies for EOC data collection and analysis and their strengths and weaknesses.
- A set of considerations for selecting measures for use in a specific country context.
- A summary of gaps in available validated measures identified during the scoping review of EOC measures conducted to develop this guide.
- A slide deck as a companion resource to orient missions to the resource guide (see **Annex C**).

BACKGROUND AND RATIONALE FOR AN EOC MEASUREMENT GUIDE

EOC has been conceptualized as a critical component of overall health care quality and integrated into health care quality improvement frameworks in recent decades. A landmark report published by the Institute of Medicine in 2001 defined six aims for quality health care, dictating that high-quality care should be “safe, timely, effective, efficient, equitable, and patient-centered” ([Institute of Medicine, 2001](#))¹. More recently, the term “person-centered” has superseded “patient-centered” in recognition that while there is overlap between these concepts and the context in which they are evoked, the well-being of persons transcends their medical circumstances (Håkansson Eklund et al., 2019; Kumar & Chattu, 2018).ke

The World Health Organization (WHO) issued a framework for quality of care in maternal and newborn health in 2016 that put EOC on par with provision of care. The definitional framework further stipulated that EOC should be person centered and defined four determinants of person-centered EOC: effective communication with patients, respect and dignity, emotional support, and continuity of care. It further proposed standards and quality statements for appraising EOC in the context of facility-based maternal and newborn care ([WHO, 2016](#)).

Contextualizing a Definition of EOC

RELATED THEMATIC AREAS

In addition to person-centered care, EOC is also intertwined with the concepts of respectful care, compassionate care, nurturing and responsive care, and service experience (Jolivet et al., 2021; Black et al., 2017). Further, EOC extends to the **full spectrum of SRMNCAH services, including services for family planning, HIV, STIs, and care of the sick child**. While no consensus exists on the definitions and relationships between these concepts, there is recognition that how a person perceives their experience when receiving care affects their perceptions of the quality of care, their trust in the health system, and their motivation to continue seeking care. Principles such as dignity, autonomy, privacy, and confidentiality also reflect fundamental human rights [WHO, 2017]. These and other entitlements were widely promulgated in the Respectful Maternity Care Charter, a rights-based framework developed by the White Ribbon Alliance (2011, 2019), while the acceptability of health services is a basic tenet of the Availability, Accessibility, Acceptability and Quality (AAAQ) rights-based framework for health care promulgated by the United Nations Committee on Economic, Social, and Cultural Rights (UN Economic and Social Council, 2000). Further, WHO (2016) published its Standards for Improving Quality of Maternal and Newborn Care in Health Facilities, including effective communication, respect and preservation of dignity, and emotional support. Figure 2 outlines a people-centered care framework displaying its intersections with respectful maternity care, rights-based care, and nurturing care examined from the perspective of the provision of care as well as the experience of care.

¹ Since 2003, the Institute of Medicine is known as the National Academy of Medicine.

Figure 2. People-Centered Care Framework and Intersections with Respectful Maternity Care, Rights-based Care and Nurturing Care



Source: MOMENTUM Country and Global Leadership. (2022). <https://usaidmomentum.org/resource/people-centered-care-framework-and-intersections-with-respectful-maternity-care-rights-based-care-and-nurturing-care/>

EIGHT DOMAINS OF PCC AS A MEASUREMENT FRAMEWORK

This guide adopts the eight domains of PCC proposed by Sudhinaraset and colleagues as the measurement framework for compiling and evaluating available measures of self-reported EOC. Sudhinaraset et al. (2017) adapted the Institute of Medicine (2001) definition of person-centered care—“providing care that is respectful of and responsive to individual patients’ preferences, needs, and values, and ensuring that their values guide all clinical decisions”—to underpin their framework for person-centered reproductive health care. Their proposed framework demonstrates how the eight domains of PCC link with clinical quality of care; see Table 1.

Table 1. Person-Centered Care Domains and Definitions

DOMAINS	DESCRIPTION
Dignity	Clients receive care in a respectful and caring setting. This domain captures the typologies of physical and verbal abuse from the literature on mistreatment of women and birthing people during labor and delivery, as well as more subtle acts during client-provider encounters that make people feel disrespected.
Autonomy	Health service providers respect clients’ views of what is appropriate and support them, their family, and their companion of choice to make informed choices, including by providing consented care. Example measures of this domain are whether clients feel involved in decision-making about their care and whether their permission is sought before treatments.
Privacy/ confidentiality	The client’s privacy is protected in the environment in which care is provided, including through privileged communication and the confidentiality of medical records. An example measure is whether clients feel that others who are not involved in their care can hear information about their care or can see them during physical examinations or during labor and delivery without physical examinations.
Communication	Providers clearly explain to clients and their families the nature of the client’s condition, details of treatment, and available treatment options. An example measure is whether providers clearly explain to clients their conditions, the purpose of treatments, and any potential side effects and whether clients and family members understand those explanations.
Social support	Clients have access to their companion of choice when receiving care and are able to receive food and other items from family where deemed appropriate. An example measure is whether family and friends are allowed to stay with clients during care.
Supportive care	Providers deliver care in a timely, compassionate, and caring manner and integrate care in a way that is responsive to client needs. This domain also captures client abandonment or denial of care, protection from harm and unnecessary procedures, and patient safety. Measures include clients’ perceptions of how providers respond to them when they need more help.
Trust	How clients assess their care with providers. Measures include whether clients feel providers tell them the truth about their care, their health, their child, their and situation and whether clients have confidence in the competence of their providers.
Health facility environment	The facility is high quality and provides a fully enabling environment, including necessary commodities and equipment as well as referral systems, communication and transportation, maternal and neonatal health teams that can cover the full continuum of care, and staff that feel respected and valued. In addition, the facility is clean and sanitary and offers a welcoming and pleasant environment. Example measures include clean surroundings and enough space in waiting rooms and wards.

Source: Adapted from Sudhinaraset et al. (2017) for more gender-inclusive, power-balanced language.

Measuring EOC: Background and Rationale

A 2008 *Health Affairs* article defined a triple aim for health service delivery consisting of better health outcomes, better client experiences, and better value (the ratio of cost to quality) and specified that a comprehensive set of health system performance measures should include methods to track EOC at all points of service (Berwick, 2008). Nevertheless, measurement of EOC is complex and has been evolving. The recent WHO evaluation of the Quality of Care Network found that introduction of quality of care measures, including EOC, into national health management information systems is “slow” and that routine monitoring of EOC measures is particularly challenging; therefore, EOC is only “sporadically monitored” in some networks, and data are mostly collected in client exit interviews.

Recent studies have tested and validated new person-centered EOC composite measures or scales (Afulani et al., 2017; Afulani et al., 2019; Mehrtash et al., 2023). Data collection tools, such as client exit interviews conducted during facility assessments like the Service Provision Assessment (Mchenga et al., 2023), have been developed or updated to incorporate new measures consistent with emerging best practices in measurement. Mapping the available measures to the domains of PCC proposed by Sudhinaraset et al. (2017) will allow USAID Missions to select measures that align with the objectives of their activities.

Since 2022, the USAID Respectful Care Working Group (now the Person-Centered Care Working Group) has conducted Mission surveys and hosted Mission convenings to promote learning and identify gaps in country-level EOC programming. Missions have expressed a need for a curated repository of tested EOC measures and collection methodologies to help them select programmatic indicators to track change over time.

In response to this need, this guide presents a vetted set of measures and resources to assist USAID and partner M&E and program staff to improve the quality of SRMNCAH services that include interventions to address client EOC, including respectful, person-centered maternal, newborn, and child health care and services. This guide is designed to facilitate the development and operationalization of robust M&E plans to track such EOC interventions to ensure they are achieving the expected results. It is also intended to help Missions apply standardized measures in their bilateral programs, providing opportunities for further feasibility and validity testing of the indicators and adding to the measurement evidence base.

DATA AND METHODS

This guide builds upon WHO’s *Quality of Care for Maternal and Newborn Health: A Monitoring Framework for Network Countries* (WHO, 2019), also drawing from the *Compassion Measures Toolbox* (Rao et al., 2023), Sudhinaraset et al. (2017), the WHO’s *Respectful Maternity Care (RMC) Toolkit* (under development), work by the WHO MoNITOR group on measure validity (Benova et al. 2020) and other resources.

A **systematic scoping review** of the literature was conducted in February 2024. The aim of the review was to search for studies describing validated tools for measuring self-reported EOC within the domains of SRMNCAH in LMICs. A description of the methods, the search string, and the flow diagram used in this review, along with the scoring rubric for identified measures and tools, can be found in the Appendix .

Data Sources for EOC Measurement

The source of data for all identified measures, including those on our core list and in the comprehensive database, was either client or caregiver (in the case of children and newborns). These self-reported data were captured through client surveys or questionnaires, in-depth interviews, and focus group discussions.

The context for data collection varied across the identified measures, including within a facility (hospital or outpatient clinic), upon exit from a health facility (but still nearby or on the grounds), at the client's home (following recruitment in a facility- or population-based sampling), or in another location in the client's community.

Furthermore, the modality of data collection varied. All focus group discussions and in-depth interviews and most surveys were administered by a trained interviewer. Some surveys were self-administered, and some were conducted via telephone, mail, mobile phone technology, or computer.

Each of these data collection approaches is associated with certain strengths and limitations. A brief description of factors to consider when selecting among available measures is provided below (Campbell et al., 2013; Giancola, 2014; Institute of Education Sciences, n.d.; State of Michigan, n.d.). The subject of validity is not addressed in this section, as it was the basis for the quality evaluation of included measures in the inventory and is reported in the resulting resources provided.

Data Collection Approaches: Strengths, Limitations, and Factors to Consider

SURVEYS AND QUESTIONNAIRES

Most measures identified in this review are survey questionnaires. This data collection method has several advantages. Relative to other methods, surveys are easy to administer and relatively inexpensive. Surveys can be administered in person, by mail, over the phone, or electronically, and in some cases clients can self-administer them. Questions and response options can be standardized, and the results can be easily tabulated, quantified, and statistically analyzed. Surveys can also collect qualitative data. If demographic data are included, subgroup analysis is possible; if sampling methods are used, inferences may be made about the population from which the responses are drawn.

Surveys also have some disadvantages. Self-administered surveys are prone to error; literacy may be a barrier; and response rates may be low. Interviewer-administered surveys are expensive and time-consuming. Questions may be subject to misinterpretation and context-specific cognitive testing may be required. During administration, it is often not possible to ask additional probing questions or to request clarification. Data collected via survey questionnaire must undergo data entry before analysis, a separate step that entails cost and introduces risk of measurement error.

IN-DEPTH INTERVIEWS

Some of the measures identified were in-depth interview guides. Compared to surveys, in-depth interviews yield more qualitative data. Interviewers can elicit further detail or ask clarifying questions through prompts and probes. Because they must be individually scheduled, in-depth interviews may also have a higher response rate than surveys or reach respondents who may otherwise be difficult to access. Interview questions can be tailored or personalized to the individual respondent.

Among the disadvantages of in-depth interviews is that implementation and data analysis can be expensive and time-consuming. Interviewers must also have special interviewing skills. For these reasons, attaining large sample sizes or using this method for routine data monitoring is challenging. Anonymity is not possible in face-to-face interviews because of the increasing risk of courtesy bias.

FOCUS GROUP DISCUSSIONS

Some of the measures included in the comprehensive database are focus group discussion guides. Focus group discussions provide qualitative data. One advantage of these discussions is they facilitate the emergence of new ideas and brainstorming. Group participants share and stimulate each other, and information can be clarified, interpreted and synthesized on the spot. They are an efficient method to collect data from multiple people at one time.

Among the downsides, focus group discussions, like in-depth interviews, require special skills to conduct, are time-consuming to implement, and require time and effort to compile and analyze results. The qualitative data they generate may not be generalizable to the entire patient population, and each group is unique and not replicable. Group dynamics can also complicate matters; groups may steer the conversation in a specific direction and fail to cover the whole subject of interest, or a few group members may dominate and skew the discussion. While respondents are free to share or withhold information as they wish, anonymity and confidentiality are not possible in the focus group setting.

Special mention of bias is warranted as all methods for collecting client-reported data may be subject to certain types of bias.

Addressing Bias

Health care data that is self reported by clients may be subject to various forms of bias. Interviews conducted within or near the health facility may be subject to courtesy bias, wherein clients modify or temper their responses for fear of offending someone associated with the institution on which they depend for their care. Interviews conducted distal to the healthcare encounter in time and space, for example, at a later time in the home or community, may be subject to recall bias, in which the respondent's memory has faded or perception has changed. Interviewer bias may occur if the person administering the questions asks or records biased information based on their own assumptions about the respondent or the subject matter. Focus group discussions may be subject to conformity bias, in which respondents adjust their responses to fit in with the rest of the group, or to domination by one or more vocal participants. Finally, normalization of poor care experiences has been documented in studies that attempt to measure the prevalence of disrespect and abuse, for example (Sando et al., 2017; Biemer et al., 2013).

Generalizability

It is important to note that **generalizability** should be interpreted with caution for any measure that has not undergone cognitive testing within the specific context where it will be used. In a study in which RMC surveys validated in other LMIC settings underwent cognitive testing in rural India, Scott et al. (2020) found significant discrepancies between respondent interpretations and the original intent of the questions. Thus, even tools developed or research validated in LMIC settings may not be generalizable to other countries without adaptation for context.

FINDINGS

Short List of Promising EOC Measures for Use as Programmatic Indicators

Ten tools that achieved a rating of “good” quality, reflecting the highest scoring tools for each type of care, are listed below, along with the full reference and a direct link to the studies. Table 2 provides additional data on each tool, including the measure description, data collection setting, method and analytical approach, domains of PCC addressed, and total quality score.

It should be noted that for maternal and newborn health care, the type of care for which the greatest number of tools were identified, only the highest scoring tools are included in the short list. Additional “good” quality tools with a score in the top tercile can be found in Annex A. Furthermore, none of the tools identified to measure maternal EOC or newborn EOC separately from each other scored within the “good” quality range. Existing fair- and poor-quality tools and the details behind their quality assessment score are included in Annex A.

ADOLESCENT HEALTH

Adolescence is a life stage (like newborn and child) rather than a type of care. Adolescents may receive care in adult or pediatric settings, depending on the health system context or health service needed. However, adolescents have unique needs related to their life stage and, thus, this review searched for specific measures of adolescent EOC.

The systematic scoping review found no high-quality (“good” rating), research-validated tools specifically designed to measure EOC for adolescent health in LMIC settings. Existing low-quality tools and the details behind their quality assessment score are included in Annex A of this guide. Please note that adolescents may be included in the samples of respondents who participated in data collection for other types of care (maternal, maternal and newborn, family planning and reproductive health, or sexual health and STIs). Validation studies that disaggregated study data by age in the analysis can provide additional measures for consideration for measuring EOC for adolescents seeking care for sexual, reproductive, and maternal health services.

CHILD HEALTH

Two high-quality (“good” rating), research-validated tools to measure child health EOC in LMIC settings were identified. Only one is freely available online.

FAMILY PLANNING/REPRODUCTIVE HEALTH

Five high-quality (“good” rating), research-validated tools to measure EOC in the context of family planning or reproductive health in LMIC settings were identified. Four are freely available online.

MATERNAL AND NEWBORN HEALTH

Twenty-five studies describing high-quality (“good” rating), research-validated tools to measure maternal and newborn health care in LMIC settings were identified. Of these, 20 describe tools that represent or are adapted from the Person-Centered Maternity Care scale by Afulani et al. (2017). Five other studies describing four additional high-quality (“good” rating) tools were identified and are included.

MATERNAL HEALTH ONLY

None of the tools identified to measure maternal EOC separately from newborn EOC in LMIC settings scored within the high-quality (“good” rating) range. Existing fair- and poor-quality tools and the details behind their quality assessment score are included in Annex A of this guide.

NEWBORN HEALTH ONLY

This systematic scoping review found no high-quality (“good” rating), research-validated tools to measure newborn EOC separately from maternal EOC in LMIC settings. Existing low-quality tools and the details behind their quality assessment score are included in Annex A of this guide.

SEXUAL HEALTH/STIs

This systematic scoping review found no high-quality (“good” rating), research-validated tools to measure EOC in the context of sexual health and STIs in LMIC settings. Existing low-quality tools and the details behind their quality assessment score are included in Annex A of this guide.

Table 2. Short List of Vetted Core EOC Measures for LMIC Settings

CHILD HEALTH							
<i>Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS), as reported in Hu et al. (2021)</i>							
Data Collection Method	Measure Description	Data Analysis Method	LMICs Included	Total Quality Score			
Facility-based online exit survey, administered on day of discharge before leaving inpatient facility	62-item survey with various response options (binary, scales, open-ended questions)	Quantitative	China	11			
PCC Domains Measured							
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment
FAMILY PLANNING/REPRODUCTIVE HEALTH							
<i>Quality of Contraceptive Counseling (QCC) scale, as reported in Holt et al. (2019)</i>							
Data Collection Method	Measure Description	Data Analysis Method	LMICs Included	Total Quality Score			
Facility-based survey, administered in outpatient clinics	22-item survey; responses captured on a 4-point Likert scale	Quantitative	Mexico	9			
PCC Domains Measured							
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment
<i>QCC-10 (short version of Quality of Contraceptive Counseling scale), as reported in Holt et al. (2023)</i>							
Data Collection Method	Measure Description	Data Analysis Method	LMICs Included	Total Quality Score			
Facility-based survey, administered in outpatient clinics	10-item survey; responses captured on a 4-point scale	Quantitative	Ethiopia, India, Mexico	10			
PCC Domains Measured							

Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment
<i>Quality of Family Planning Counselling (QFPC) measure, as reported in Dey et al. (2021)</i>							
Data Collection Method	Measure Description			Data Analysis Method	LMICs Included		Total Quality Score
Facility-based survey, administered in outpatient clinics	13-item survey with binary response options (yes/no)			Quantitative	India		9
PCC Domains Measured							
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment
MATERNAL AND NEWBORN HEALTH							
<i>Person-Centered Maternity Care (PCMC) scale, as reported in Afulani et al. (2017)</i>							
See also: Afulani, Aborigo, et al. (2019) ; Afulani, Diamond-Smith, et al. (2018) ; Afulani, Phillips, et al. (2019) ; Afulani, Sayi, et al. (2018) ; Getahun et al. (2022) ; Hameed et al. (2023) ; Hughes et al. (2022) ; Kapula et al. (2023) ; Montagu et al. (2020) ; Montagu et al. (2019) ; Ogbuabor & Nwankwor (2021) ; Oluoch-Aridi et al. (2021) ; Özşahin et al. (2021) ; Rishard et al. (2021) ; Sudhinaraset et al. (2019) ; Sudhinaraset et al. (2020) ; Sudhinaraset et al. (2023) ; Zhong et al. (2023)							
Data Collection Method	Measure Description			Data Analysis Method	LMICs Included		Total Quality Score
Client survey, administered in private spaces in health facilities or in homes of respondents	30-item scale; responses captured on a 4-point (0–3) scale with an additional "not-applicable" response option			Quantitative	Ethiopia, Ghana, India, Kenya, Malawi, Nigeria, Pakistan, Sri Lanka, Turkey		10
PCC Domains Measured							
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment
<i>Short Person-Centered Maternity Care (Short PCMC) scale, as reported in Afulani, Feaser, et al. (2019)</i>							
Se also: Kiti et al. (2022)							
Data Collection Method	Measure Description			Data Analysis Method	LMIC Countries Used		Total Quality Score

Facility-based survey, conducted in health facilities	30-item scale; responses captured on a 4-point (0–3) scale with an additional "not-applicable" response option			Quantitative	Ethiopia, Ghana, India, Kenya, Malawi, Nigeria, Pakistan, Sri Lanka, Turkey	10
PCC Domains Measured						
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust Health Facility Environment
<i>Quality of Respectful Maternity Care Questionnaire in Iran (QRMCI), as reported in Taavoni et al. (2018)</i>						
Data Collection Method	Measure Description			Data Analysis Method	LMICs Included	Total Quality Score
Facility-based survey, administered in postpartum care clinics in health centers	59-item survey; responses captured on a 4-point scale			Quantitative	Iran	10
PCC Domains Measured						
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust Health Facility Environment
<i>Respectful Maternity Care questionnaire, as reported in Abebe & Mmusi-Phetoe (2022)</i>						
Data Collection Method	Measure Description			Data Analysis Method	LMICs Included	Total Quality Score
Facility-based survey, administered at postpartum health clinics at health centers	Composite index with 6 items to measure effective communication, 6 items to measure supportive care, and 6 items to measure dignified care; coded Y=1, N=0; additive score with 75% cut-off point for respectful maternity care			Quantitative and qualitative	Ethiopia	9
PCC Domains Measured						
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust Health Facility Environment
<i>Respectful Maternity Care scale and Childbirth Experience questionnaire, as reported in Hajizadeh et al. (2020)</i>						
Data Collection Method	Measure Description			Data Analysis Method	LMICs Included	Total Quality Score

Facility-based survey, conducted in the postpartum unit of maternity hospital and in the community (households)	Respectful Maternity Care scale: 15-item survey; responses captured on a 5-point Likert scale Childbirth Experience questionnaire: 22-item questionnaire; responses for 19 items captured on a 4-point scale; 3 items use visual assessment	Quantitative	Iran	9			
PCC Domains Measured							
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment
<i>Women's Perceptions of RMC (WP-RMC) Questionnaire and Qualitative Interview Guide, as reported in Patabendige et al. (2021)</i>							
See also: Ayoubi et al. (2020)							
Data Collection Method	Measure Description	Data Analysis Method	LMICs Included	Total Quality Score			
Facility-based survey, self-administered to patients in hospital postpartum unit, and in-depth interview conducted in a quiet place in the hospital postpartum unit	Questionnaire: 18-item survey; responses for 15 items captured on a 5-point Likert scale; 3 items assessed on an 11-point (0–10) scale Qualitative interview guide: 12 open-ended questions with additional probes	Quantitative and qualitative	Sri Lanka	9			
PCC Domains Measured							
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment
GENERAL MEDICINE							
<i>Communication Assessment Tool (CAT), as reported in Goba et al. (2019)</i>							
Data Collection Method	Measure Description	Data Analysis Method	LMICs Included	Total Quality Score			

Facility based survey, administered in various in-patient facility settings	15-item survey, responses captured on a 5-point Likert scale; via hospital-based survey			Quantitative	Ethiopia	9	
PCC Domains Measured							
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment
<i>Schwartz Center Compassionate Care Scale, as reported in Zeray et al. (2021)</i>							
Data Collection Method	Measure Description			Data Analysis Method	LMICs Included	Total Quality Score	
Facility based survey, administered in in-patient oncology units	12-item survey, responses captured on a ten-point scale; via hospital-based survey			Quantitative	Ethiopia	10	
PCC Domains Measured							
Dignity	Autonomy	Privacy/ Confidentiality	Communication	Social Support	Supportive Care	Trust	Health Facility Environment

Notes: For the purposes of this guide, “facility-based survey” refers to a survey conducted within a health facility. Additional details about the timing and setting of data collection are provided as available.

As noted earlier in this guide, this table does not include measures on adolescent health, maternal health only, newborn health only, or sexual health/STIs.

A score equal to or greater than 9 with no individual quality criterion receiving a 0 score receives a designation of “good,” reflecting high quality in the assessment of validity, reliability, and generalizability. All tools in the recommended list of measures are by definition ranked as “good.”

Gaps Identified

Our systematic scoping review and quality assessment uncovered significant gaps in the landscape of measures that can be used for routine M&E of client EOC across the spectrum of SRMNCAH care.

First, certain types of care lack EOC measures that have been formally research validated in LMIC settings. The scoping review identified far fewer tools to measure EOC in the context of adolescent health care, newborn care, and sexual health/STI care than for maternal and newborn health and family planning. It is reasonable to attribute this imbalance to the upswing in attention to disrespect and abuse or mistreatment of women during facility childbirth and the respectful maternity care movement that have developed over the past 15 years, which have most certainly contributed to raising the salience of EOC and the need to monitor it in the context of maternal health (O'Connor et al., 2019). For family planning, the type of care with the next largest number of validated measures, an emphasis on client experiences has arisen following decades of reports of coercion, stigma, mistreatment, and poor client-provider interactions in this context (Hardee et al., 2014; Harris et al., 2016).

However, adolescents and newborns are vulnerable populations for whom monitoring and ensuring positive EOC should be a high priority. Evaluation of the tools identified by the scoping review for these groups, along with people seeking care for sexual health and STIs, demonstrate little evidence of formal assessment of their validity, reliability, or generalizability. However, absence of such evidence does not constitute evidence of a lack of these characteristics of quality. Rather, it reinforces the fact that many measures in current use do not undergo rigorous research validation. As a first step, program partners who wish to use these tools should pilot test them and submit the resulting data to psychometric testing, thereby contributing to the body of validated tools available for adolescents and newborns.

Second, our search identified several high-quality (“good” rating) client-reported EOC measures that were only implemented or validated in the context of general medicine, rather than SRMNCAH. While it is conceivable that these measures might be generalizable to SRMNCAH, our review did not uncover evidence of their application to these types of care.

Third, some PCC domains were represented less frequently in the measures identified during this review. The four domains with the highest coverage across measures were autonomy, dignity, communication, and supportive care. The four domains with the lowest coverage were privacy/confidentiality, social support, trust, and health facility environment. While this review uncovers this gap, it does not provide any data to explain it.

Finally, while it was hoped that our scoping review would uncover indicators for routine facility-level monitoring—ideally, monitoring that could be integrated into routine health information systems (RHIS)—none of the measures identified were formulated as facility-level or programmatic indicators. All were quantitative survey questionnaires, qualitative in-depth interview or focus group guides, or a combination of both. Most were implemented within health facilities (as opposed to, for example, via household surveys) and within the context of special research studies. For these reasons, any data collected using these measures can be aggregated into average scores or proportions of all encounters and measured over time to detect changes; however, doing so requires special considerations, as described below.

Considerations for Selecting and Using EOC Data Within a Health System

In integrating EOC measures into M&E plans and data collection platforms, there are several things to consider when determining which EOC measures to use in a specific country context.

USE FOR PERIODIC DATA COLLECTION EFFORTS

As previously discussed, none of the identified measures lend themselves easily to introduction into RHIS (e.g., national health management information systems). Therefore, to use them without alteration, these measures must be integrated into periodic data collection efforts, such as program evaluations, special cross-sectional health facility evaluations (e.g., client exit interviews), or community-based surveys (e.g., household surveys). The number of items/questions in the identified measurement tools range from 3 to 59. The average number of items per measure is about 30, with some instruments categorizing items into shorter subscales, while so-called “short” scales average 10 total items. The DHS Program’s Service Provision Assessment includes the recommended Person-Centered Maternity Care Scale in its postnatal care client exit interview, and the DHS Program’s supplemental module on maternal health care household survey module also includes this measure (The DHS Program, 2020; The DHS Program 2022).

USE FOR ROUTINE FACILITY- AND SUBNATIONAL-LEVEL MONITORING

The number of items/questions in available “good” quality measures poses a challenge for routine monitoring. Subscale or single-item validation could be undertaken to allow short client surveys (e.g., exit interviews or self-administered satisfaction surveys) to be routinely implemented, with data entered into RHIS and then reported in the aggregate as facility-level indicators. To use the recommended EOC measures for facility- and subnational level monitoring (e.g., by district health management teams), the data collected need to be reformulated into programmatic indicators; one way to do this would be to assign threshold or cut-off values and monitor the proportion of client encounters in a given facility that meet those targets within a specified time period. The indicators could then be analyzed with different levels of disaggregation to assess health program performance.

GENERALIZABILITY

The ability to generalize measures for a specific context should be interpreted with caution for any measure that has not undergone cognitive testing within that same context. By cognitive testing RMC surveys validated in other LMIC settings in rural India, Scott et al. (2020) found significant discrepancies between respondent interpretations and the original intent of questions. Thus, even tools developed or research validated in LMIC settings may not be generalizable to other countries without adaptation for context.

FEASIBILITY

The selection of measures should be reviewed by local experts in regard to context-specific factors. While this guide provides detailed information to assess and understand the content validity, criterion validity, reliability, and generalizability of available measures, assessing the feasibility, utility, and adaptability of these measures in specific contexts was beyond the scope of this review. We recognize that these are important aspects to consider when selecting measures for use as programmatic indicators. Because these characteristics are context dependent, local expertise and experience should be the basis for their consideration. Ministries of health and their partners will be able to provide insights into which measures are most suitable in their context in terms of feasibility and utility. Important partners to consult include implementing partners in USAID’s Global Health projects working on SRMNCAN service delivery, especially quality of care initiatives. Factors that affect feasibility in the choice of measures and measurement approaches vary by context; however, at minimum such factors include the associated financial, time, and personnel burden and need for the relevant expertise for data collection. Specific costs will be determined by local circumstances, including existing available data collection platforms and survey programs.

UTILITY

The usefulness of individual EOC measures should be determined by local program planners, policymakers, and experts. It would be helpful to develop use cases that identify exactly who plans to use the EOC data, at which levels of the health system, and with what frequency to inform any related decisions, products, or processes.

In sum, given the importance of client EOC as a key definitional aspect of care quality, trustworthy measures to evaluate and help assure positive EOC across the SRMNCAH spectrum are important for USAID Mission monitoring and evaluation staff and their programmatic partners. This guide, its accompanying inventory of measures (Annex A), the Mendeley data file of references for the inventory of measures included in Annex A, and a [companion slide deck](#) (Annex C) are intended to support such efforts.

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APPENDIX: METHODOLOGY

A systematic scoping review of EOC measures was conducted in February 2024. Results were entered into the Covidence program (Veritas Health Innovation, Melbourne, Australia) for systematic review. Studies were included if they were human subjects research, published after February 1, 2014, available in English, conducted in an LMIC per World Bank (2024) criteria, described measures of PCC or its component domains, and provided the EOC measurement tool and response options. Only open access publications are included in the core set of measures and tools listed in the body of this guide, though otherwise eligible studies that are not freely available (n = 7) are listed in Annex A.

The included studies underwent in-depth review by three reviewers (co-authors RRJ, KM, MH), who are all public health experts). All studies were double screened at each stage. During the extraction stage, two reviewers screened each extracted study, and consensus was reached by discussion with the third reviewer to resolve discrepancies. Information was extracted into a database that catalogs each study, providing a detailed description of its measurement tool or tools, the data collection method, the setting, the approach to data analysis, and the reported periodicity (e.g., routine monitoring or special study). A **detailed quality assessment and scoring process** was conducted for each study to document whether the tool it describes has undergone formal research to test for **construct/content validity, criterion validity, reliability, and generalizability**. Information about piloting and cognitive testing in an LMIC setting was captured.

The table below presents the predetermined quality definitions used to evaluate the included measures and through which each included study received an overall measure quality score. The total possible score was 14 across the different parameters of the four scoring criteria. The highest score assigned to any of the identified measures was 11. Scores were categorized by tercile as good, fair, or poor quality and are color-coded in the inventory of measures (Annex A) to facilitate visualization. Poor quality reflects scores between 0–4; fair reflects scores between 5–8; good reflects a score of at least 9, and those with no individual quality criterion receiving a 0 score.

Quality Assessment Criteria and Scoring Rubric

CONSTRUCT VALIDITY	CRITERION VALIDITY	RELIABILITY	GENERALIZABILITY
Systematic or scoping literature review conducted	Convergent and discriminant validity assessed by triangulation or correlational analysis	Internal consistency reliability assessed through Cronbach’s alpha/average inter-item correlation/average item-to-total correlation	The measure is generic and can be adapted for varying health care sectors without significant revision.
Expert consensus sought	Concurrent or predictive validity assessed through regression analysis or structural equation modeling	Interrater reliability assessed through ICC/kappa/rwg	The measure has been adapted and validated in one or more LMIC settings.

Pilot tested with relevant sample	Factor analysis performed, e.g., exploratory/confirmatory/principal factor analysis	Reliability of results assessed through test-retest or split-half test	Measure generalizability has been assessed using generalizability theory approaches or confirmatory factor analysis.	
Q-sort analysis or cognitive testing conducted	Synthesis of existing validated measures			
No evidence of assessment	No evidence of assessment	No evidence of assessment	No evidence of assessment	
SCORE: 0–4	SCORE: 0–4	SCORE: 0–3	SCORE: 0–3	TOTAL POSSIBLE SCORE: 0–14

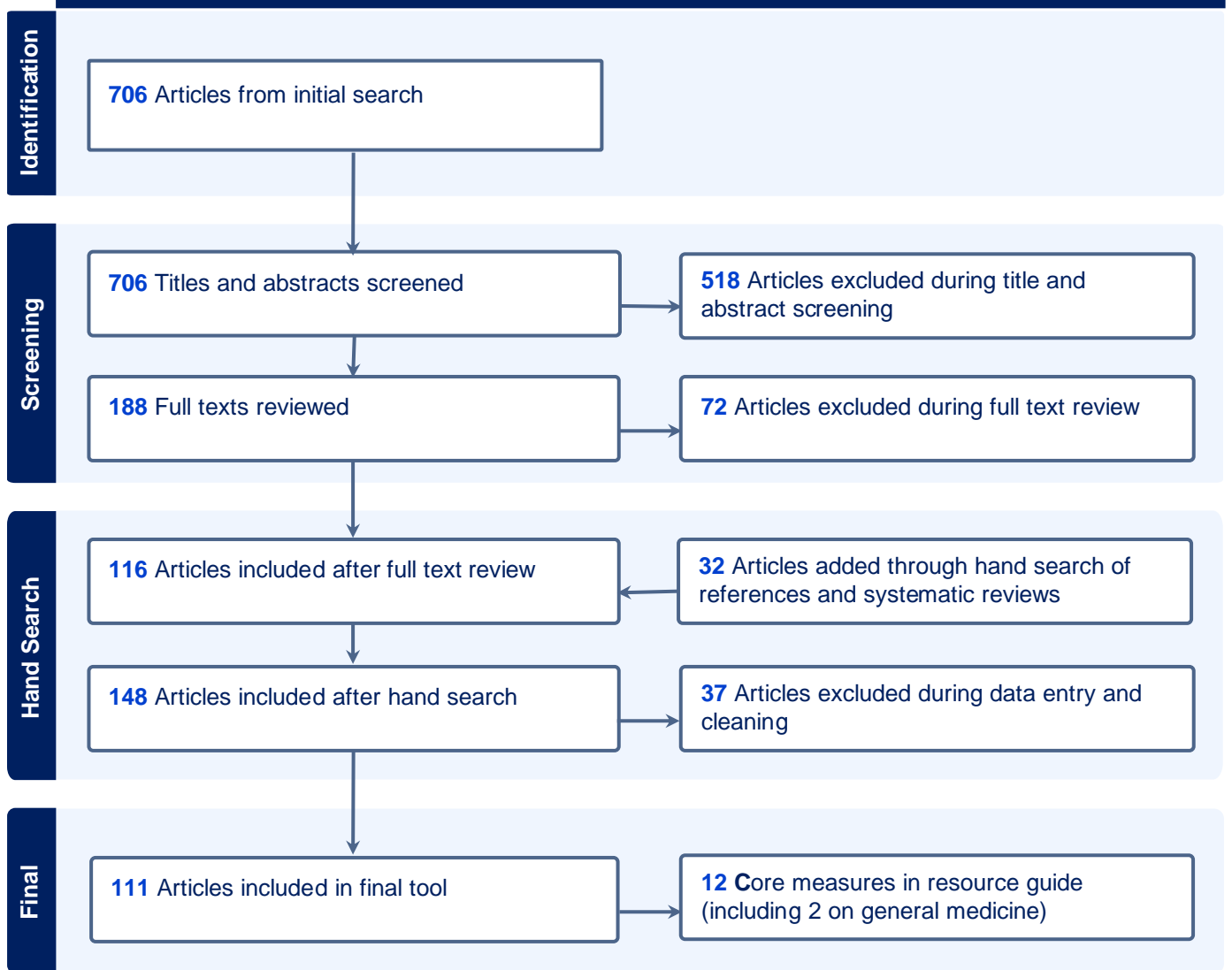
It is important to note that the absence of evidence of validity should not be interpreted to mean that the instrument is not valid, but rather that its validity has not been formally explored and therefore is unknown. Likewise, while the demonstration of validity through multiple assessments strengthens evidence of validity, one should not conclude that measures that demonstrate validity, reliability, and generalizability by only one means per each of the parameters scored are necessarily of poorer quality. For example, measures that received a score in the “fair” range and did not receive a 0 score in any single quality parameter should not be excluded from consideration.

The search string used for the scoping review is listed below followed by the flow diagram to show the process of identifying the 12 core measures.

<p>Search String for Scoping Review</p> <p>((reproductive [tiab]) OR (sexual [tiab]) OR (obstetr*[tiab]) OR (matern*[tiab]) OR ("Maternal Health Services"[Mesh]) OR ("Child Health Services"[Mesh]) OR ("Reproductive Health Services"[Mesh]) OR ("Delivery, Obstetric"[Mesh]) OR (child*[tiab]) OR ("Child"[Mesh]) OR ("Mothers"[Mesh]) OR (adolescent [tiab]) OR ("Adolescent"[Mesh]) OR ("family planning" [tiab]) OR (contraceptive [tiab]) OR (newborn [tiab]) OR (neonatal [tiab])) AND ((Quality [tiab]) OR ("Quality of Health Care"[Mesh]) OR (Dignity [tiab]) OR (respect [tiab]) OR ("Respect"[Mesh]) OR (autonomy [tiab]) OR ("Personal Autonomy"[Mesh]) OR ("Patient Satisfaction"[Mesh]) OR ("satisfaction" [tiab]) OR (privacy [tiab]) OR ("Privacy"[Mesh]) OR (confidentiality [tiab]) OR ("Confidentiality"[Mesh]) OR (trust [tiab]) OR ("Trust"[Mesh]) OR (communication [tiab]) OR (support* [tiab]) OR ("social support" [Mesh]) AND ((measure* [tiab]) OR (metric* [tiab]) OR (indicator [tiab]) OR (scale [tiab]) OR (survey [tiab]) OR (questionnaire [tiab]) OR ("self report*" [tiab]) OR</p>
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("Psychometrics"[Mesh]) OR ("Surveys and Questionnaires"[Mesh]) OR ("Data Collection"[Mesh])) AND
 (("experience of care" [tiab]) OR ("Respectful care" [tiab]) OR ("Respectful Maternity Care" [tiab]) OR
 ("patient-centered care" [tiab]) OR ("client-centered care" [tiab]) OR ("person-centered care" [tiab]) OR
 ("nurturing care" [tiab]) OR ("compassionate care" [tiab]) OR ("Patient-Centered Care"[Mesh]) AND (("Asia,
 Central"[Mesh]) OR kazakhstan[tiab] OR kyrgyzstan[tiab] OR tajikistan[tiab] OR turkmenistan[tiab] OR
 uzbekistan[tiab] OR ("Asia, Southeastern"[Mesh]) OR borneo[tiab] OR cambodia[tiab] OR indonesia[tiab] OR
 laos[tiab] OR malaysia[tiab] OR myanmar[tiab] OR philippines[tiab] OR thailand[tiab] OR vietnam[tiab] OR
 bangladesh[tiab] OR bhutan[tiab] OR india[tiab] OR nepal[tiab] OR afghanistan[tiab] OR pakistan[tiab] OR sri
 lanka[tiab] OR bolivia[tiab] OR peru[tiab] OR ecuador[tiab] OR honduras[tiab] OR guatemala[tiab] OR
 haiti[tiab] OR ("developing countries"[mesh]) OR "developing countries"[tiab] OR "resource limited"[tiab]
 OR ("Africa South of the Sahara"[Mesh]) OR (Africa [mesh]) OR cameroon[tiab] OR chad[tiab] OR
 congo[tiab] OR guinea[tiab] OR gabon[tiab] OR "central african republic"[tiab] OR burundi[tiab] OR
 djibouti[tiab] OR eritrea[tiab] OR ethiopia[tiab] OR kenya[tiab] OR rwanda[tiab] OR somalia[tiab] OR
 sudan[tiab] OR tanzania[tiab] OR uganda[tiab] OR angola[tiab] OR botswana[tiab] OR lesotho[tiab] OR
 madagascar[tiab] OR malawi[tiab] OR mozambique[tiab] OR mauritania[tiab] OR namibia[tiab] OR "south
 africa"[tiab] OR swaziland[tiab] OR eswatini[tiab] OR zambia[tiab] OR zimbabwe[tiab] OR benin[tiab] OR
 "burkina faso"[tiab] OR "cape verde"[tiab] OR "ivory coast"[tiab] OR "cote d'ivoire"[tiab] OR gambia[tiab]
 OR ghana[tiab] OR guinea[tiab] OR liberia[tiab] OR mali[tiab] OR mauritania[tiab] OR niger[tiab] OR
 nigeria[tiab] OR senegal[tiab] OR togo[tiab] OR "sierra leone"[tiab] OR brazil[tiab] OR ("south
 america"[mesh]) OR Belize[tiab] OR "Costa Rica"[tiab] OR "el salvador"[tiab] OR guatemala[tiab] OR
 honduras[tiab] OR nicaragua[tiab] OR panama[tiab] OR mexico[tiab] OR ("latin america"[mesh]) OR
 ("central america"[mesh]) OR ("south america"[mesh]) OR "south america"[tiab] OR "central america"[tiab]
 OR ("caribbean region"[mesh]) OR caribbean[tiab] OR ("west indies"[mesh]) OR "west indies"[tiab] OR
 haiti[tiab] OR trinidad[tiab] OR tobago[tiab] OR "dominican republic"[tiab] OR jamaica[tiab] OR "puerto
 rico"[tiab] OR brazil[tiab] OR argentina[tiab] OR bolivia[tiab] OR chile[tiab] OR colombia[tiab] OR
 ecuador[tiab] OR "French Guiana"[tiab] OR Guyana[tiab] OR Paraguay[tiab] OR peru[tiab] OR suriname[tiab]
 OR uruguay[tiab] OR venezuela[tiab] OR "sub-saharan"[tiab] OR subsaharan[tiab] OR "Democratic People's
 Republic of Korea"[tiab] OR "north korea"[tiab] OR "south sudan"[tiab] OR Syria[tiab] OR yemen[tiab] OR
 "guinea-bissau"[tiab] OR Jordan[tiab] OR algeria[tiab] OR samoa[tiab] OR iran[tiab] OR "sao tome and
 principe"[tiab] OR "São Tomé and Príncipe"[tiab] OR Kiribati[tiab] OR "Solomon islands"[tiab] OR "cabo
 verde"[tiab] OR Lebanon[tiab] OR "timor-leste"[tiab] OR comoros[tiab] OR Tunisia[tiab] OR Micronesia[tiab]
 OR Ukraine[tiab] OR Mongolia[tiab] OR Uzbekistan[tiab] OR Morocco[tiab] OR Vanuatu[tiab] OR Egypt[tiab]
 OR "papua new guinea"[tiab] OR Albania[tiab] OR fiji[tiab] OR Macedonia[tiab] OR "north Macedonia"[tiab]
 OR palau[tiab] OR Armenia[tiab] OR Georgia[tiab] OR Paraguay[tiab] OR Azerbaijan[tiab] OR grenada[tiab]
 OR peru[tiab] OR Belarus[tiab] OR Russia[tiab] OR Serbia[tiab] OR "bosnia and herzegovina"[tiab] OR
 bosnia[tiab] OR Iraq[tiab] OR "saint lucia"[tiab] OR "st Vincent and the grenadines"[tiab] OR Bulgaria[tiab]
 OR Kosovo[tiab] OR china[tiab] OR Libya[tiab] OR tonga[tiab] OR turkey[tiab] OR Maldives[tiab] OR
 cuba[tiab] OR "marshall islands"[tiab] OR dominica[tiab] OR Mauritius[tiab] OR Tuvalu[tiab] OR "west
 bank"[tiab] OR gaza[tiab] OR moldova[tiab] OR "equatorial guinea"[tiab] OR Montenegro[tiab] OR LMIC
 [tiab] OR "low and middle income" [tiab])) NOT ("cancer" [tiab]) NOT ("cardiovascular" [tiab]) NOT
 ("dementia" [tiab])

Scoping Review Flow Diagram



ANNEX A: INVENTORY OF MEASURES

**ANNEX B: MENDELEY DATA FILE OF REFERENCES FOR
ANNEX A**

**ANNEX C: SLIDE DECK TO ORIENT MISSIONS TO RESOURCE
GUIDE**