Measuring Women's Experience of Care: Interim Results

ABSTRACT

Background: Women's experiences of care are central to health service quality, yet existing measures are narrow and fragmented. This study tests a rapid approach to developing a cross-cutting measure. **Methods:** An expert workshop produced a new conceptual framework and 68 items for testing. The study is being carried out across four phases and four countries. In Phase 1: surveys were administered by phone in Kenya, Nigeria, and Pakistan. Planned missingness was addressed with multiple imputation, and exploratory factor analysis guided item refinement. **Results:** Data from Kenya and Nigeria (n=1,145) support an eight-factor solution, reducing items to 42. **Conclusion:** The refined item set will undergo further refinement and validation to produce a practical, cross-cutting, generalizable measure of women's care experiences.

BACKGROUND

- Universal coverage requires attention to both outcomes and experiences of care.[1–3]
- Experiences of care influence clinical safety and effectiveness.[4–7]
- Women have unique needs across their life course.[8,9]
- Existing measures are narrow, focused mainly on sexual and reproductive health.
- A broader, cross-cutting measure is needed across diverse health areas.
- Traditional approaches to health service quality measurement development are slow and resource intensive. This study tests a rapid, cost-effective alternative.
- This work is built on formative work from Metrics for Management (M4M) and Population Services International (PSI).

GOAL: TO CREATE A GENERALIZABLE TOOL FOR WOMEN'S EXPERIENCE OF CARE DELIVERING ACTIONABLE INSIGHTS FOR PROGRAMS, DONORS, AND POLICYMAKERS.

METHODS

EXPERT CONVENING

- Two-day workshop with 10 international experts on quality of care
- Produced: 1) A new conceptual framework for women's experience of care; 2) an initial list of proxy indicator items; and 3) recommendations to enhance end-user utility.

KEY STUDY ELIGIBILITY

- Women aged 18+
- Sought care in past 2 weeks from any formal or informal provider

MEASURE DEVELOPMENT AND VALIDATION

The four sequential phases test (table 1) successively more refined versions of an item list, to find a short list that reflects the conceptual framework and is valid across countries. Phase 1 uses a split design to test all items, with a single shorter item list in Phase 2. In Phase 3, findings will be correlated against the PCAT-10,[10] and in Phase 4, cognitive interviewing explores interpretation.

Table 1: Design of Four Phases of Measurement Development

Phase	Phase 1	Phase 2	Phase 3	Phase 4
Data Collection Method	Telephone interviews	Telephone interviews	Online survey	In-depth interviews
Sample	1,746	504	450	45
Countries	Kenya Nigeria Pakistan	Kenya Nigeria Pakistan	Kenya Pakistan Guatemala	Kenya Pakistan Guatemala
Goal	Test questions	Confirm question list	Validate questions	Adjust wording

PHASE I DATA & ANALYSIS

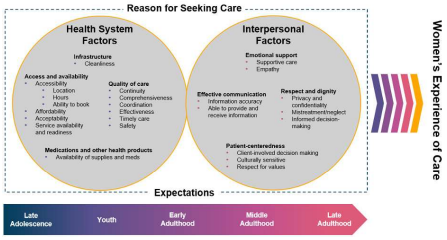
- Combined datasets from Kenya + Nigeria
- Addressed planned missingness (33–67% per item) with multiple imputation (100 datasets)
- Exploratory factor analysis (EFA) of pooled covariance matrix, applying Rubin's rules[11]
- Results aligned with conceptual framework, refining item selection
- Ethical approval obtained in U.S., Kenya, and Nigeria

RESULTS TO DATE

CONCEPTUAL FRAMEWORK DEVELOPMENT

- Expert committee created Women's Experience of Care framework (figure 1)
- Informed by WHO's AAAQ and other quality frameworks
- Designed for life course relevance
- Two main domains:
  - Health Systems Factors: infrastructure, access, quality, supply readiness
  - Interpersonal Factors: emotional support, communication, respect/dignity, patient-centeredness
- Domains shaped by women's reasons for seeking care and expectations (context- and stage-specific)

Figure 1: Women's Experience of Care Framework



PHASE I PARTICIPANT DEMOGRAPHICS (KENYA & NIGERIA)

Presented here are participant demographics for Kenyan and Nigerian respondents in Phase 1, including age, reason for seeking care (Table 2), relative household wealth (Figures 2 & 3), and self-rated health (Figure 4).

Table 2: Median Age & Reason for Seeking Care

		Kenya (N=589)		Nigeria (N=597)	
Age					
	Median (IQR)	34 (28-45)		30 (26-36)	
		N	%	N	%
Reason for visit					
	Chronic [ongoing] condition	140	23.8	90	15.1
	New condition	357	60.6	304	50.9
	Chronic new condition	12	2	25	4.2
	Routine check-up	79	13.4	177	29.6

Figure 2: Kenya Respondent Relative Wealth Distribution

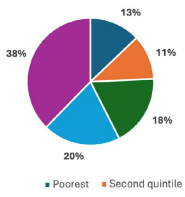


Figure 3: Nigeria Respondent Relative Wealth Distribution

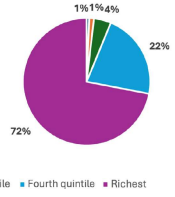
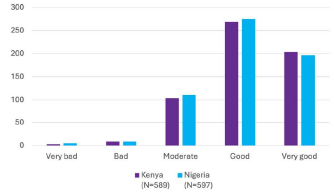


Figure 4: Respondent Self Rated Health



PHASE I INITIAL ITEM TESTING (KENYA & NIGERIA)

- Data collected in Kenya & Nigeria (n=1,145), Pakistan data ongoing
- Exploratory Factor Analysis (EFA) applied to 68 items
- 8-factor solution retained 42 items for further testing
- Factors explained ~39.8% of total variance
- Factors labeled by conceptual themes of highest-loading items (Table 2)

Table 3: Retained Factors from Initial Item Testing

Factor	Name	Top Item Themes	No. of Items
Factor 1	Compassionate & Effective Communication	Items on empathetic, compassionate, and effective communication	8
Factor 2	Quality of Care	Items on technical skill	8
Factor 3	Access & Availability	Items on service hours, waiting times, and counseling	6
Factor 4	Administrative & Clinical Competence	Items on organization, record-keeping, and clinical processes	7
Factor 5	Patient Centeredness	Items on communication, shared decision-making, and personalization	6
Factor 6	Facility Milieu	Items on utilities, supplies, and approachability of the facility	3
Factor 7	Infrastructure	Items on cleanliness, comfort, and atmosphere of the facility	2
Factor 8	Safety	Items on physical security	2

NEXT STEPS

- Incorporate Phase 1 data from Pakistan and develop a single questionnaire.
- Complete remaining 3 phases by March 2026.

STUDY IMPACT

- Test a rapid approach to measure development, which can be expanded to other challenging areas of measurement.
- Develop a generalizable tool for measuring women's experience of care
- Share easy to use tool to examine, and ultimately improve, women's experiences of care.

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METRICS FOR MANAGEMENT

Gates Foundation