



WHITE PAPER: A NARRATIVE REVIEW

Assessing the Generalizability of Client Experience Measurement Tools in Low- and Middle-Income Countries

Authors: Andrew Corley^{1*}; Susannah Gibbs²; Nirali Chakraborty¹;
Lara Fields¹; Giannina Chávez Ackermann³; Jasmine Coulson³;
Yixin Zhang³; Paul Bouanchaud²

¹Metrics for Management

²Population Services International

³London School of Economics

*Corresponding Author (andrew@m4mgmt.org)

Abstract:

Introduction. The experiences of people who interact with a health system form a key component of overall quality of care in that system. Yet, client experience is rarely reflected in how health systems are designed and assessed. To make meaningful progress on delivering high quality patient-centered care, health systems actors need valid measures of client experience of care. However, no cross-cutting measure of client experience of care exists at present that could facilitate measurement and benchmarking across multiple health service areas. **Methods.** We conducted a phased literature search using multiple scholarly databases to identify peer-reviewed articles detailing the development, validation, or adaptation of measures of person-centered health care quality, responsiveness, and client experience of care in sexual and reproductive health care, HIV, primary care, noncommunicable disease management, and health services management and marketing. Measure domains were thematically analyzed and mapped against domains of an existing client experience of care framework—effective communication, respect and dignity, and emotional support. **Results.** We identified 73 articles that met inclusion criteria and that recounted the development, validation, or adaptation of 61 different measures of health care quality and responsiveness. Numerous measures exhibited significant overlap with an existing conceptual framework for client experience, but few measures were used across health areas. **Discussion.** Content of many of the measures identified in this review mapped closely to domains that appear in an existing framework for client experience of care, including effective communication, respect and dignity, and emotional support. These findings support the notion that the development of a common measure of client experience of care could be useful and feasible.

Teaser key message:

Existing measures of person-centered health care quality and responsiveness, across multiple health areas, share many conceptual similarities with the concept of client experience of care, suggesting a need for a new, cross-cutting, common measure of client experience of care.

Key messages:

- Despite its importance for understanding the person-centeredness of health care delivery, no single widely used measure of client experience of care appears to exist.
- In this review, the authors identified numerous measures of person-centered health care quality and responsiveness developed and validated for use across an array of health areas. However, because of their health area specificity, few of these measures appear appropriate for adoption across the diverse array of service delivery channels of a typical health system.
- Despite their health area specificity, many existing measures of person-centered health care quality and responsiveness across different health areas have significant conceptual overlap with an existing framework for client experience of care.
- This evidence suggests that the development of a common measure of client experience of care would be feasible and would facilitate health service evaluation and benchmarking across the many health care delivery channels of a typical health system.

Key Findings:

- Numerous measures of client experience of care have sought to assess the quality of health services from clients' perspective, frequently using related, overlapping theoretical domains.

- No measures identified through this review possessed the attributes necessary to be adopted for use as a generalizable measure of client experience of care across multiple health areas.
- The overlapping nature of many of the measures' constituent domains across different health areas suggests that it would be feasible to develop a cross-cutting measure of client experience of care.

Key Implications:

There is an opportunity to develop a new measure of client experience of care that would permit health system actors, including policy officials, program managers, and funders, to comparable service quality across specific health areas, geographies, and cultural boundaries.

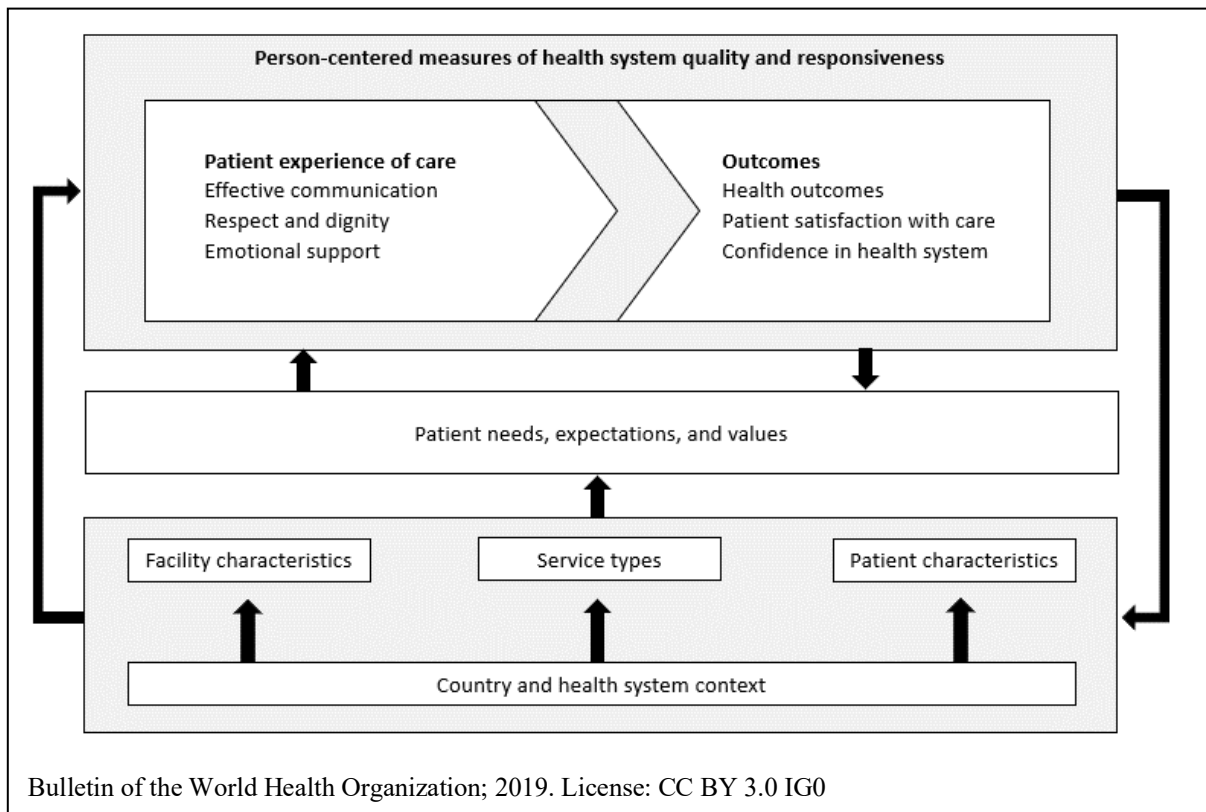
Introduction

The Sustainable Development Goals (SDGs) prioritize the development of systems of universal coverage of high-quality essential health services.^{1,2} This is especially true in low- and middle-income countries (LMICs) in which greater emphasis has been placed on the quality of services and patient-centeredness of these services.²⁻⁴ People's experiences of the care they receive has become widely recognized as being a foundational element to the provision of high-quality health services for the value it places on delivering humane, respectful care and for its direct and indirect effects on clinical effectiveness and patient safety.⁵⁻⁸ Despite the experiences of people who interact with a health system forming a key component of overall quality of care in that system, client experience is rarely reflected in how health systems are designed and assessed. To make meaningful progress on delivering high quality patient-centered care, health systems actors need valid measures of client experience of care.

In this paper, we choose to employ the term “client” instead of “patient” when discussing experience of care. This choice reflects the term’s wider suitability across diverse states of health, person-provider relationships, and health delivery channels. While various organizations and researchers have conceptualized client experience of care in different ways,⁹⁻¹¹ the common thread woven through all of these definitions is that client experience encompasses the spectrum of interactions that a person may have with a health care system across the continuum of care that influence their perceptions of the quality of that care.

A widely accepted conceptual model for client experience of care has yet to be developed, leaving open the need for further research into the constituent dimensions and interactions that shape an individual’s perception of their care journey. However, Larson and colleagues have proposed that client experience of care is broadly composed of three domains: effective communication; respect and dignity; and emotional support (figure 1).¹² Within their model, patient needs, expectations, and values, along with interpersonal and facility-level factors such as the ease of seeking care or obtaining appointments, the availability of pertinent information, and the quality of communication with healthcare providers and administrative staff can all affect a client’s experience of care. Larson and colleagues’ framework offers a helpful guide for the development of a more refined measurement approach to client experience of care.

Figure 1: Larson and colleague’s conceptual framework for person-centered measures of health system quality and responsiveness



Client experience of care is conceptually related to patient-centered care, yet the two differ in important ways. Patient-centered care, a frequently measured health care attribute, is a construct that captures a system’s responsiveness to clients’ individual needs, preferences, and values.⁵ Measures of patient-centered care capture attributes of a clinical encounter through the lens of responsiveness, whereas measures of client experience characterize the care seeking journey from the perspective of the consumer, potentially along domains beyond those encompassed by patient-centeredness. Furthermore, client experience considers a broader range of possible experiences than simply those during the clinical encounter, including deciding whether to seek care, reaching care once the decision has been made, and subsequent care decisions that occur after a clinical encounter.

Another related construct, patient satisfaction, is the reaction to or outcome of a patient's interactions with their healthcare providers and, in part, is a function of a patient's expectations about and experiences with a health care encounter.¹³⁻¹⁵ Patient satisfaction is often viewed as an outcome whereas client experience of care is more process-oriented and concerned with whether the actions and behaviors that should occur as part of a healthcare encounter did occur.¹² Although distinct concepts, patient satisfaction and patient centeredness overlap with client experience of care and offer complementary perspectives on health service quality.

Considered from a rights-based perspective alone, all people deserve to receive care characterized by autonomy, dignity, respect, and emotional support. However, the concept of client experience takes on even greater saliency for its association with improved health outcomes¹⁶⁻¹⁸; greater satisfaction and confidence in one's health system^{3,19}; and improved clinical effectiveness and increased patient safety.⁶ Despite the importance of patient-reported measures of healthcare quality and their relevance to essentially all areas of health service delivery, to our best knowledge there exists no common or standard approach to measuring client experience of care that is widely used in multiple health areas across LMICs. Furthermore, existing measures that assess experiences receiving individual health services, such as contraception or antiretroviral therapy, may not holistically reflect the way people actually experience care as they move through the health system and access various types of services across multiple locations.

The world of global health remains typified by vertical disease-focused programs with narrow and sometimes competing priorities.²⁰ These vertical structures frequently provide fragmented services and are limited in their ability to coordinate or share learnings across siloes. Such structures are antithetical to how individuals Alternatively, well integrated, high

performing health systems are able to coordinate and share information across their various functional areas. Another key feature of high performing health systems is their responsiveness to clients' experiences and changing needs.²¹ The degree to which systems can assess their ability to respond to clients' experiences, though, is dependent on quality measurement and monitoring.²² While different health areas possess unique characteristics that may influence clients' experiences, there are common features of client experience that transcend these domain-specific distinctions. Leveraging these commonalities and facilitating knowledge and best-practice sharing across health areas is more likely to occur when a common benchmark for client experience is available.

A generalizable approach to measuring client experience of care could offer substantial advantages to national health systems and global health organizations for several reasons. First, it would provide standardized and comparable assessment tools that could transcend specific health area, geographic, and cultural boundaries. By utilizing a set of common measures, one could obtain consistent data across a diverse array of health areas and geographies, enabling meaningful comparisons and identification of patterns and trends. Doing so would facilitate the identification of best practices and areas for improvement. This evidence could similarly inform the development and implementation of more effective and contextually appropriate quality improvement interventions. Finally, a generalizable approach to measuring client experience of care in LMICs would allow for the evaluation of healthcare systems and interventions from a patient-centered perspective, as well as facilitate accountability and transparency.

This review aims to identify measures and domains that possess broad geographic and health area relevance, thereby enhancing our understanding of the essential features necessary for a more comprehensive and detailed, yet still broadly applicable, approach to measuring client

experience of care. By analyzing existing measures related to client experience of care, we can identify common themes and domains that resonate across diverse populations and healthcare settings. The objectives of this narrative review are to examine the domains encompassed in existing measures health care service experience, person centeredness, and satisfaction with care used across six areas of health services and to describe how these measures have been tested and used across multiple health areas and geographic contexts. This process will inform the development of a new measure that encompasses crucial aspects of client experience while remaining adaptable to various geographic contexts and health areas. Ultimately, this research will inform efforts to develop robust and inclusive measures that capture the multifaceted nature of client experience of care on a global scale.

Methods

A narrative review methodology was employed to synthesize and summarize evidence on existing measures related to client experience of care in six health areas: malaria, sexual and reproductive health (SRH), HIV, primary care, noncommunicable diseases (NCDs), and health service marketing and management. A narrative review approach to our objectives was chosen because the method allows authors a means to conduct a scholarly summary, interpretation, and critique of the available literature with the overall goal of crafting an authoritative and convincing argument to fellow experts.²³ Given the heterogeneity of topic areas, a phased approach was taken to our database searches. An initial rapid review was conducted in 2021 on malaria, SRH, HIV, and primary care health areas.²⁴ Databases searched during this phase included PubMed, Web of Science, and Global Index Medicus. An expanded follow-on review of the same health areas – malaria, SRH, HIV, and primary care – was conducted in 2023 in the same databases as well as Ovid MEDLINE. Literature exploring the development and validation

of person-centered measures in NCD care was conducted in 2023 in PubMed and Web of Science. Lastly, owing to their business and marketing focus, ABI/INFORM and Business Source Ultimate, two of the most comprehensive databases on marketing and management research, were searched in 2023 to identify literature related to measures developed for use in health services marketing and management.

The client experience search terms used included ‘experience of care,’ ‘care experience,’ ‘patient experience,’ ‘user experience,’ ‘client experience, and ‘consumer experience.’ In the second review conducted into the malaria, SRH, HIV, and primary care health areas, the term ‘patient centered care’ was also included. To these were added search terms specific to each health area. Given the depth of literature known to emanate from low- and middle-income countries (LMICs) in the health areas of malaria, SRH, HIV, and primary care, an LMIC filter was added to these searches. This same filter was not applied to searches for measures related to NCD care and health services marketing and management because of concerns that much of the research in these two areas continues to be conducted primarily in upper income countries. Search terms were adapted as appropriate to the five databases. Articles were included in the review if they were published in a peer-reviewed journal between 2000 and 2023, were written in English, and reported on the validation of a new measure of client experience or on the adaptation and validation of an existing measure in a new population or cultural context.

Measures were included if they were interpreted as reflecting client experiences by the publications’ authors. Additionally, to supplement our initial literature search, we employed a snowball approach by examining the reference lists of the identified articles to identify additional relevant literature.

One reviewer screened the titles and abstracts of identified articles to determine their relevance. Full-text articles meeting the inclusion criteria were retrieved and assessed for eligibility. The reviewers critically appraised the selected articles to evaluate their relevance and contribution to the topic. Data extraction was conducted using standardized data capture forms designed to collect relevant information from the selected articles. This included study characteristics (e.g., study design, sample size, setting), measure attributes, and domains. The extracted data were analyzed thematically and synthesized to identify gaps in the literature.

To compare measures' overlapping and complementary domains to those theorized to make up the construct of client experience of care, existing measures' domains were mapped to three client experience of care sub-domains—effective communication, respect and dignity, and emotional support—as defined in Larson and colleagues' "Framework for person-centered measures of health system quality and responsiveness."¹² This exercise allowed the authors to examine how existing measures of client experience relate to and contrast with a prevailing conceptualization of client experience of care and to observe how measures of these domains have been adopted for use across health areas.

Results

In this narrative review, we identified a total of 73 articles that met our inclusion criteria. These articles collectively covered 61 different measures of client experience. Table 1 describes the number of measures by health area as well as the number of citations describing these measures. Table 2 summarizes the domains extracted from the measures and illustrates how, among those that were found to be conceptually similar to Larson and colleagues' (2018) client experience of care domains, these domains were categorized. Table 3 provides measure names; the countries in which available literature describes their development, validation, or adaptation;

and how each measure's domains overlap with those of our conceptual framework for client experience of care's domains.

Table 1: Measures by Health Area and Number of Citations

Health Area	No. of Measures	No. of Citations
Sexual and Reproductive Health	12	14
HIV	3	4
Primary Care	2	6
Noncommunicable Diseases	21	26
LMICs	2	4
HICs	19	22
Health Service Marketing and Management	23	23
LMICs	6	6
HICs	17	17

Table 2: Included Articles’ Measurement Tools’ Identified Domains Overlap with the Review’s Client Experience of Care Conceptual Framework Domains

Client Experience of Care Domains		
Effective Communication	Respect and Dignity	Emotional Support
Access to Information	Abuse	Activities to Address Biopsychosocial Needs
Care Teams Across Settings	Abuse-Free Care	Comfort
Clarity of Information	Accessibility of Care	Disclosure Support
Communication	Accessing Support	Family-Centeredness
Communication and Autonomy	Attitude and Commitment of Service Providers	Feelings of Abandonment
Communication with Nurses and Doctors	Autonomy	Provide Social Support
Continuity of Care	Care Goals for Patients	Psychosocial Care and Aftercare
Coordinated and Comprehensive Care	Conduct of Healthcare Professionals	Psychosocial Needs
Coordination	Confidentiality	Sharing Feelings with Others
Coordination of Care	Cultural Competence	Social Support
Decision Support	Decision-Making About Treatment	Supportive Care
Diagnosis	Dignity	Sustaining Normality
Education and Shared Knowledge	Discrimination	Trustful Relationship with Health Care Staff
Effective Use of Method	Discriminatory Behavior	Value for Non-Provider Social Support
Eliciting Client’s Preferences	Friendliness	Worries and Anxieties
Financial Advice	Interpersonal Connection	
Follow-up/Coordination	Interpersonal Relationship	
Free Flow and Accessibility of Information	Making Treatment Decisions	
General Practitioner Involvement	Non-Discrimination	
Goal Setting/Tailoring	Patient-Centered Approach by Doctors	
Health Information and Decision-Making Support	Patient-Centeredness	
Information and Questions	Physical Abuse	
Information Exchange	Privacy	
Information for Treatment Decision-Making	Quality of Life	
Information of Care Pathway	Respect	
Information on Changes Related to Illness	Respectful and Engaging Interaction	
Information Services	Respectful and Supportive Care	
Managing Appointments	Respectful Care	
Method Selection	Respectful Coordinated Care	
Patient Activation	Stigma	
Person-Focused Care Over Time	Stigma and Discrimination	
Problem Solving	Verbal Abuse	
Providing General Information		
Providing Specific Information		
Provision of Information		
Rapport		
Receiving Adequate Information		

Suspicion of Diagnosis Symptom Non-reporting		
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Table 3: Measures by Health Area and Measure Domains

Sexual and Reproductive Health							
Measure Name or Study Description	Countries Validated	Population(s)	Client Experience of Care Domains			Other Domains Addressed	References
			Effective Communication	Respect and Dignity	Emotional Support		
Person-Centered Maternity Care (PCMC)	India Kenya	Women who recently gave birth in a health facility	Communication and Autonomy	Dignity and Respect	Supportive Care		25,26
PCMC short	Kenya Ghana India	Women who recently gave birth in a health facility	Communication and Autonomy	Dignity and Respect	Supportive Care		27
Bohren et al. (2018)	Nigeria Ghana Guinea Myanmar	Women who gave birth in the past eight weeks	Communication	Physical Abuse; Verbal Abuse; Stigma; Discrimination	Supportive Care	Failure to Meet Professional Standards; Neglect and Abandonment; Pain Relief	28,29
Gurung et al. (2021)	Nepal	Women giving birth at a public hospital providing comprehensive emergency obstetric and neonatal care	Rapport	Abuse; Stigma and Discrimination		Standard of Care; Care Not Refused Due To Finances	30
QCC (Quality Contraceptive Counselling) Scale	Mexico	Health facility clients interested learning about contraception during their visit	Information Exchange	Disrespect and Abuse; Interpersonal Relationship			31
Jain et al. (2019)	India	Married women adopting a long-acting reversible contraceptive method	Method Selection; Effective Use of Method	Respectful Care		Continuity of Contraceptive Care Use	32

IQFP (Interpersonal Quality of Family Planning) scale	India	Young married couples	Receiving Adequate Information; Decision Support	Interpersonal Connection			33
Net Promoter Score (NPS)	India Kenya Nigeria El Salvador	Family planning clinic clients				General (e.g., likelihood of recommending this clinic to someone)	34
Respectful Maternity Care (RMC) Scale	Ethiopia	Women who gave birth in the past seven weeks		Non-Discrimination; Abuse-Free Care; Friendliness		Timeliness of Care	35
Person Centered Family Planning (PCFP) Scale	India Kenya	Women seeking family planning services at public health facilities	Communication	Autonomy; Respectful Care		Health Facility Environment	36
Person-Centered Abortion Care (PCAC) Scale	Kenya	Women who received an abortion-related service	Communication and Autonomy	Respectful and Supportive Care			37
Quality of Family Planning Counselling (QFPC) Measure	India	Family planning clients	Provision of Information; Eliciting Client's Preferences	Respectful and Engaging Interaction			38
HIV							
			Client Experience of Care Domains				
Measure Name or Study Description	Countries Validated	Population(s)	Effective Communication	Respect and Dignity	Emotional Support	Other Domains Addressed	References
Health System Responsiveness Survey	Tanzania	Adults living with HIV currently on ART	Communication	Respect; Confidentiality	Comfort	Access; Perceived Quality	39
CARE's Community Score Card (c)	Malawi	Pregnant and lactating people living with HIV		Attitude and Commitment of Service Providers; Discriminatory Behavior; Confidentiality	Disclosure Support		40

Quality of Care Through the Patient's Eyes - HIV (QUOTE-HIV)	Brazil The Netherlands	Clients living with HIV receiving outpatient care	Communication; Access to Information	Respect; Dignity; Privacy; Autonomy	Social Support	Facilities; Time	41,42
Primary Care							
			Client Experience of Care Domains				
Measure Name or Study Description	Countries Validated	Population(s)	Effective Communication	Respect and Dignity	Emotional Support	Other Domains Addressed	References
Primary Care Assessment Tool (PCAT)	United States Canada Brazil Spain South Korea China Taiwan Tibet, Vietnam South Africa Malawi	Primary care clients	Person-Focused Care Over Time; Coordination	Cultural Competence	Family-Centeredness	First Contact Care; Comprehensiveness; Community Orientation	43-48
Patient Assessment of Healthcare for Outpatient Care (O-PAHC)	Ethiopia	Adults receiving outpatient care at hospitals or health centers	Communication with Nurses and Doctors			Physical Environment	49
Non-Communicable Diseases							
			Client Experience of Care Domains				
Measure Name or Study Description	Countries Validated	Population(s)	Effective Communication	Respect and Dignity	Emotional Support	Other Domains Addressed	References
Chronic Cancer Experiences Questionnaire (CCEQ)	United Kingdom	Breast, gynecological, colorectal, renal, and prostate cancer patients	Information and Questions; General Practitioner Involvement; Financial Advice; Managing Appointments; Coordination of Care; Symptom Non-reporting	Making Treatment Decisions; Accessing Support	Sharing Feelings with Others; Worries and Anxieties; Sustaining Normality	Clinical Trials	50

Consumer Quality Index Breast Cancer (CQI-BC)	The Netherlands	Breast, lung, colorectal, prostate, hematological, gynecological, and skin cancer patients	Information Services; Continuity of Care	Conduct of Healthcare Professionals; Accessibility of Care; Autonomy	Psychosocial Care and Aftercare	Expertise of Healthcare Professionals; Hospital Facilities; Time Schedule	51
Consumer Quality Index Cancer Care (CQI-CC)	The Netherlands	Cancer: breast, lung, colorectal, prostate, hematological, gynecological, and skin cancer patients	Education and Shared Knowledge; Free Flow and Accessibility of Information	Patient-Centered Approach by Doctors		Skills & Cooperation of Healthcare Professionals; Collaboration & Team Management;	52
LifeCourse Experience Tool	United States	Heart failure, cancer, and dementia patients	Care Teams Across Settings; Communication	Care Goals for Patients			53
Measure of Processes of Care for Adults (MPOC-A)	Canada	Joint and hip replacement patients	Providing General Information; Providing Specific Information; Coordinated and Comprehensive Care	Respectful and Supportive Care			54
Opportunity for Treatment In Oncology (OPTION) Questionnaire	Italy	Breast and colorectal cancer patients	Information of Care Pathway; Information on Changes Related to Illness		Feelings of Abandonment; Trustful Relationship with Health Care Staff	Collaboration Among Health Care Professionals	55
Pulmonary Arterial Hypertension Clinic - Patient Reported Experience Measurement (PAH-PREM)	Sweden	Pulmonary arterial hypertension patients	Communication	Patient-Centeredness		Effectiveness; Timeliness	56
Patient Assessment of Cancer Communication Experiences (PACE)	Portugal	Oncology patients	Suspicion of Diagnosis; Diagnosis	Decision-Making About Treatment		Surgery; Chemotherapy; Radiation Therapy	57

Patient Assessment of Chronic Illness Care (PACIC)	Denmark The Netherlands United States France	Cardiovascular disease and diabetes mellitus patients	Patient Activation; Goal Setting/Tailoring; Problem Solving; Follow-up/Coordination			Delivery-System/Practice Design	58-61
Short version of the Patient Assessment of Chronic Illness Care (PACIC-M11)	Malaysia	People with type 2 diabetes or hypertension in primary care settings	Patient Activation; Goal Getting/Tailoring			Delivery System Design/Practice Design	62-64
Older Patient Assessment of Chronic Illness Care (O-PACIC) Sale	The Netherlands	Recently discharged hospitalized patients	Patient Activation; Goal Setting/Tailoring; Problem Solving/Contextual ; Follow-Up Coordination			Delivery-System/Practice Design	65
Patient Satisfaction with Cancer-Related Care (PSCC)	United States	Breast, cervical, colorectal, and prostate cancer patients	Communicational/Informational; Coordination of Care	Interpersonal/Relational		Access/Logistical	66
Patient-Centered Quality of Cancer Care Questionnaire (PCQCCQ-S)	Mexico	Oncology patients	Clarity of Information; Information for Treatment Decision-Making	Respectful Coordinated Care	Activities to Address Biopsychosocial Needs	Timely Care	67
Patients and the Cancer Care Experience (PCCE)	United States	Oncology patients	Health Information and Decision-Making Support	Quality of Life	Provide Social Support; Psychosocial Needs; Value for Non-Provider Social Support		68

Quality of Care Through the Patient's Eyes (QUOTE)	The Netherlands	Oncology patients	Treatment-related Information; Prognosis Information; Rehabilitation Information; Interpersonal communication; Tailored Communication; Affective Communication		Coping Information		69
Quality of Patient-Centered Cancer Care (QPCCC)	Australia	Hematology cancer patients	Provision of Information, Communication and Education; Coordinated and Integrated Care	Patient Centeredness; Safety; Equity	Emotional Support; Involvement of Family and Friends	Physical Comfort; Effectiveness; Timeliness; Efficiency	70
CONTACT-Patient-Centered Care Questionnaire (CONACT-PCCQ)	Belgium	Oncology patients	Information, Communication and Education; Coordination of Care	Respect for the Patient's Values, Preferences and Expressed Needs	Emotional Support; Involvement of Family and Friends	Physical Comfort	71
Patient Experience Survey (PES)	Canada	Radiation therapy patients	Appointment Scheduling	Interprofessional Staff/Patient Encounters		Same Day Waits; Hospital/Waiting Room Environment; Patient Care; Weekly Oncologist Review; Parking	72
Patient Centered Communication in Cancer Care (PCCCC)	United States	Colon and rectal cancer patients	Exchanging Information; Fostering Health Relationships; Making Decisions; Managing Uncertainty	Enabling Patient Self-Management	Responding to Emotions	Cross-Cutting Items	73
Patient-Centered Measures of End-of-Life Care Quality for Children with Cancer	United States	Pediatric oncology and palliative care patients	Communication	Meeting Patient Preferences; Symptom Management		Healthcare Use; Interdisciplinary Care	74

Patient-Centered Primary Care	The Netherlands	Patients with multiple chronic conditions	Information and Education; Continuity and Secure Transition between Healthcare Settings; Coordination of Care	Respect for Patients' Preferences	Emotional Support; Involvement of Family and Friends	Access to Care; Physical Comfort	75
Health Service Marketing & Management							
			Client Experience of Care Domains				
Measure Name or Study Description	Countries Validated	Population(s)	Effective Communication	Respect and Dignity	Emotional Support	Other Domains Addressed	References
Health Service Quality Scale	Australia	Outpatient oncology clinic and primary care clinic clients	Interpersonal Quality			Technical Quality; Environment Quality; Administrative Quality	76
Emergency Room Service Quality	Israel	Individuals accompanying emergency department patients			Staff Caring	Staff Professionalism; Tangibles	77
Health Service Quality Scale	Colombia	Outpatient health clinic clients	Patient-Centered Communication			Process Quality	78
Continuity Quality of Care Indicator	Poland	Outpatient health clinic clients	Informational Continuity; Cross-Boundary and Team Continuity	Patient Empowerment	Relational Continuity	Managerial Continuity; Flexible Continuity; Longitudinal Continuity	79
Alberta Continuity of Services Scale-Mental Health (ACSS-MH)	Canada	In- and out-patient mental health service clients	Responsive System	Individualized Care		Responsive Caregiver	80
The Humanistic Relationship Importance Scale	Canada	Chronic care facility patients		Recognizing and Supporting Choice; Supporting Human Uniqueness	Relational Availability; Forming Connections	Promoting Quality of Daily Life	81
Parent Satisfaction Scale (PSS)	United States	Pediatric mental health treatment clients		Met Expectations		Met Desires; Met Needs	82

Responsiveness of Physician (ROP) Scale	Bangladesh	Rural health service clients	Informing and Guiding	Respecting	Friendliness	Financial Sensitivity; Gaining Trust	83
mHealth Service Quality Scale	Bangladesh	mHealth consumers	Information Quality		Interaction Quality	System Quality	84
Multidimensional Scale for Healthcare Service Quality (HCSQ)	India	Medicine, surgery, pediatric, and gynecology inpatients	Interaction Quality			Physical Environment Quality; Outcome Quality	85
Evaluation of Client Services (ECS)	United States	Outpatient mental health treatment services clients	Communication and Information Exchange		Treatment Relationship	Treatment Management and Outcome; Reachability of Treatment Facilities	86
The Health Service Quality (HEALTHQUAL) Measure	South Korea	Hospital in- and outpatients			Empathy	Tangible; Safety; Efficiency; Care Service Improvements	87
Medical Tourism Experience (MTEX) Scale	India	Medical Tourism Clients		Medical Service Quality		Treatment Quality; Medical Tourism Expenses; Medical Tourism Infrastructure; Destination Appeal; Destination Culture; Ease of Access	88
Cultural Differences in Healthcare	South Korea	Medical Tourism Clients	Communication	Cultural Values; Religion		Hospital Care and Services; Food; Healthcare System; Facility	89
Scale for e-Health Service Quality	Switzerland	mHealth consumers	Information		Empathy; Individualization; Ethical Conduct	Accessibility; Competence; Usability; Security; System Integration; Trust; Performance; Reliability; Ability to Respond	90

Navigation Satisfaction Tool (NAVSAT)	Canada	Parent and guardians of youth receiving mental health and addiction services	Ability to Listen; Communication Frequency; Frequency of Contact	Confidentiality		Likelihood of Recommending Service; Overall Satisfaction; Navigator Helpfulness; Ability to Understand Mental Health System; Intake Procedures; Treatment Options Information; Appropriate Treatment Found; Impact on Family	91
The Acute Care Hospital Foodservice Patient Satisfaction Questionnaire (ACHFPSQ)	Australia	Acute care inpatients				Food Quality; Meal Service Quality; Staff Service Issues; Physical Environment	92
The Birth Satisfaction Scale (BSS)	United Kingdom	Postpartum women		Quality of Care Provision	Quality of Care Provision	Personal Attributes; Stress Experienced During Labor	93
The Cataract Service Satisfaction Tool	United Kingdom	Outpatient cataract surgery clients	Collaboration With Doctors and Nurses; Quantity and Quality of Information	Autonomy; Empathy		Knowledge; Facilities; Waiting Times; Overall Satisfaction; Ability to Manage at Home; Access to Post-Operative Support	94
Clinical Decision-making Involvement and Satisfaction (CDIS) Scale	Germany; England; Italy; Hungary; Switzerland	Community-based mental health service clients	Satisfaction	Involvement			95
Key Quality Characteristics Assessment for Hospital (KQCAH) Scale	United States	Recently discharged hospitalized patients	Information	Respect & Caring		Effectiveness & Continuity; Appropriateness; Efficiency; Effectiveness-Meals; First Impression; Staff Diversity	96
Chinese Patients' Satisfaction Scale (C-PSS)	Taiwan	Hospital outpatient clients		Respect	Warm Interactions	Efficiency; Fairness; Professionalism; Responsibility	97

Responsiveness of Physicians Scale (ROP-Scale)	Bangladesh	COVID hospitalized patients	Informativeness	Courteousness		Trustworthiness	⁹⁸
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Sexual and Reproductive Health

The review identified 12 measures developed, validated, or adapted to measure the person-centeredness of many SRH services in various country contexts. Measures assessing the person-centeredness of maternal care services were identified with the greatest frequency,^{25-27,29,30,35} followed by those assessing contraceptive care quality.^{31-34,36,38} One measure included in the review was designed to evaluate the person-centeredness of abortion care services.³⁷ Many of the domains of these measures mapped onto the client experience of care framework. In all but two cases, measures contained domains aligning with effective communication. All but one measure included domains that aligned closely with respect and dignity. Despite these areas of overlap, only three measures contained domains related to emotional support. The three measures that did include domains related to the concept of emotional support were all designed to evaluate the quality of maternal care.²⁵⁻²⁹

In regard to domains not classifiable within the three domains of our conceptual framework for client experience of care, two measures included domains devoted to assessing whether providers met professional standards or recognized standards of care.²⁸⁻³⁰ Other domains that did not map directly onto the client experience of care included domains devoted to neglect, pain management,^{28,29} continuity of care,³² affordability,³⁰ and overall satisfaction³⁴, timeliness of care,³⁵ and health facility environment.³⁶

HIV

We identified three measures in development, validation, or adaptation studies for use in HIV/AIDS care. A 2014 study reported on the development of a health system responsiveness survey in Tanzania for use with adults living with HIV who were on antiretroviral therapy.³⁹ The

survey includes domains that address effective communication, respect and dignity, and emotional support. Other domains included access and perceived quality.

The second measure was developed using CARE's Community Score Card (CSC), a widely used approach for participatory community assessment and empowerment, with pregnant and breastfeeding women living with HIV in Malawi.^{40,99} Domains included in this measure align with the client experience of care framework's domains of respect and dignity and emotional support.¹⁰⁰ Finally, QUOTE-HIV,^{41,42} a measure of care quality reported from a patient's perspective, contains measurement domains aligning with the client experience of care domains of effective communication, respect and dignity, and emotional support. The QUOTE-HIV also includes domains related to facility quality and waiting times.

Primary Care

We identified validation studies for two measures in primary care. Originally developed in the United States,^{101,102} The Primary Care Assessment Tool (PCAT) has since been adopted in at least ten other countries, including Brazil, Spain, South Korea, China, Taiwan, Tibet, Vietnam, South Africa, and Malawi.^{44-48,103} The PCAT is designed for use in primary care settings, particularly community health centers. Its domains overlap with the client experience of care framework domains, and it also includes domains related to first contact care, comprehensiveness, and community orientation. The Patient Assessment of Healthcare for Outpatient Care (O-PAHC), which was adapted for use in Ethiopia among adults receiving outpatient care at hospitals or health centers, contains domains that map onto the effective communication domain as well as additional domains of quality that evaluate facilities' physical environments.⁴⁹

Non-Communicable Diseases

We identified 21 patient-reported measures of service quality for use in NCD care and management. Only two of the 20 instruments were validated in patient populations in LMICs;^{64,67} the remainder were validated for use in European or North American countries. The specific NCD area of most intense inquiry was cancer, with two-thirds of referenced studies devoted to measuring care quality for breast, colorectal, blood, prostate, lung and skin cancers.^{50–53,55,57,66–74} However, we also identified measures devoted to patients managing other chronic conditions such as type 2 Diabetes Mellitus (DM II), cardiovascular disease (CVD), pulmonary disease, dementia, and orthopedic conditions.^{54,58–61,64,75}

The majority of measures were developed and validated within a single setting and against localized treatment populations. Only one tool, the Patient Assessment of Chronic Illness Care (PACIC) questionnaire, was validated and adapted to measure outpatient chronic care experiences in more than one country context. PACIC was developed to measure quality of care for in patients with DM II or CVD and was tested in Danish, Dutch, American, and French patient populations.^{58–61,65} The measure has also been adapted for use among Malaysian patient populations.^{62–64} Measurement domains of the PACIC overlap with the client experience of care framework domain of effective communication. The measures also include domains devoted to the design of delivery systems or practices.

Despite the variability of instruments present across the literature, the Institute of Medicine (IOM) Patient-Centeredness framework influenced a high proportion of the measures identified. Six measures – Quality of Patient-Centered Cancer Care (QPCCC); CONTACT-Patient-Centered Care Questionnaire (CONTACT-PCCQ); Patient Centered Communication in

Cancer Care (PCCCC); Patient-Centered Measures of End-of-Life Care Quality for Children with Cancer; and Patient-Centered Primary Care – directly applied the IOM’s Patient-Centeredness framework to their design, leading to domains that showed a high degree of alignment across the domains of effective communication, respect and dignity, and emotional support.^{67,70,71,73–75} Other domains that appeared frequently in the instruments included timeliness of care, skills of medical professionals overseeing care, as well as the effectiveness of treatment.^{51,52,56,72}

Health Services Marketing and Management

We identified 23 articles describing the development and validation of 23 measures devoted to measuring both clinical and non-clinical components of health services marketing and management. Measures emanated from countries of varying levels of economic development. Six measures were developed in LMICs,^{78,83–85,88,98} while the remaining eighteen were developed and validated in high income countries.^{76,77,79–82,86,87,89–97} Measures devoted to evaluating the quality of acute inpatient and outpatient health services made up a majority of the articles identified.^{76,76–83,85–89,91–95,97,98} Among these, a handful of articles reported on the validation of measures meant to assess the quality of medical services from the perspective of foreign patients for purposes of evaluating medical tourism services^{88,89,97} and one sought to assess specifically inpatient satisfaction with food service.⁹² Lastly, two measures of the informational quality and responsiveness of mHealth resources were also found.^{84,90}

Most of the measures described in the articles overlapped conceptually with the client experience of care conceptual model. Fifteen measures reported measuring attributes of effective communication; 17 included concepts related to respect and dignity; and eight considered

emotional support in their service quality frameworks. One article describing the development of a scale designed to measure the quality of continuity of care among ambulatory patients in Poland had constituent domains that overlapped all of the domains of the client experience of care framework. Additionally, a number of measures included domains related to the cleanliness of the physical care environment.^{76,77,85,87,94} Along with domains aligning with the core experience of care domains, the measures also included domains devoted to technical and outcome quality.^{76,78,82,86,90} The inclusion of these domains support the observation that such measures of client satisfaction are frequently concerned with the end product of the client care journey.

Discussion

The findings of this literature review describe the current state of client experience of care measures and their relationship to the theoretical domains of this construct. It is evident that existing measures demonstrate varying levels of overlap with our conceptual understanding of client experience, but that their development, validation, and use have been predominantly limited to specific health areas. As a result, few measures have achieved widespread adoption across multiple health areas. Exceptions do exist. One such exception is the Net Promoter Score, which has been used in acute care, primary care, surgical center, and dental settings.¹⁰⁴ Though, for the purposes of measuring client experience of care this measure may fall short given its limited conceptual overlap with our framework for client experience of care. As such, no single validated measure stands out as being suitable to encapsulate the full set of client experience domains for health care users in LMICs.

Another significant challenge in adopting existing measures for use across health areas is the length of many of these measures. For instance, the PCAT, which aligns well with our

conceptual framework for client experience of care, often consists of over 40 to 70 questions.¹⁰² Further, not all measures were designed for routine monitoring and evaluation. For example, Bohren's quality of maternal care scale encompasses labor observation and community survey modules, necessitating the involvement of diverse respondents.^{28,29} Although rigorous approaches may produce valid results, they may be more feasible for smaller-scale research than for routine and pragmatic monitoring activities.

Additionally, we identified a clear gap in measurement of client experience that is suitable during the entire course of the client's health journey. In large part, measures were designed for use at a single point in time, oftentimes in the context of a clinical encounter. To capture client experience of the healthcare seeking journey more fully, measurement approaches need to better address experiences that occur before and after a clinical encounter, experiences of multiple encounters throughout the health system, and potentially also the experiences of people who decide not to seek care.

The limited generalizability of existing measures poses a challenge for comprehensively capturing the client experience of care across diverse healthcare settings. However, the emergence of similar domains across various health areas suggests there is the potential for developing a cross-cutting, generalizable approach to measuring client experience of care. The Larson framework proved useful in analyzing the measures examined in this review, offering a structured approach to measure appraisal. However, the broad categories within the framework do not completely account for the numerous features that hold significance for individuals during their healthcare journeys, as evidenced by the measures' many quality domains that could not be easily categorized into the framework's domains but may still be relevant to the construct of client experience of care. To facilitate the development of a generalizable measure, it is crucial to

further explore and define the construct of client experience of care and elucidate the constituent domains and sub-domains that are most important to people seeking care and actionable for health systems actors. These factors, importantly, should be strongly informed by the perspectives of clients themselves, in order to accurately capture the complexities and nuances of client experience of care.

There is growing acknowledgement of the utility and need for generalizable measures of person-centered health service quality and responsiveness.^{105–107} As opposed to the current fragmented state of health area-specific measures, a generalized measurement approach that establishes a common framework and language can facilitate evaluation and discussion of health service quality across different programs. Widespread use of such measures to improve service delivery have the potential to contribute to the construction of more trustworthy, transparent, and responsive health systems. Both ministry of health and local health officials could utilize a common measure of client experience to assess the quality of a single facility or across an entire system in order to identify areas for improvement and to inform the design of new policies meant to enhance patient-centeredness. International non-governmental organizations could assess the effectiveness and quality of all their health service areas across numerous geographies, thereby helping them to improve services and address gaps in quality. Multilateral organizations and donor agencies could use a generalized measure of client experience of care to evaluate health system performance and to inform their policies, guidelines, and funding decisions. Finally, researchers would find a new measure invaluable in investigating the effectiveness and acceptability of new interventions, thereby contributing to the bodies of knowledge necessary to advance evidence-based care.

In the development of a novel measure for client experience of care, it is imperative to leverage routine health information systems (RHIS) and mHealth service modalities to comprehensively capture the entire care seeking journey. Routine health information systems have become essential tools for health systems strengthening in LMICs. However, using RHIS data for decision making remains a challenge in many countries, in part, because of fragmented data collection tools and definitions.¹⁰⁸ The introduction of a novel measure for client experience of care could enhance data-driven decision-making by bolstering the quality of information gathered through RHIS. Additionally, the popularity and use of digital and mobile health technologies continues to increase in LMICs, many of which involve direct client interaction, making it possible to now widely deploy a generalized measure of client experience of care.¹⁰⁹ The ability to measure clients' experiences and preferences across both time and a variety of health service modalities can provide a more nuanced understanding of the client experience from start to finish.

While the goal might be a single health area-agnostic measure of client experience of care, it is important to not let this ambition obscure the important differences in the delivery of different health services. Finding a balance between measuring a universal set of domains important for client experience and ensuring that those domains are relevant to the cultural and real-world needs of the particular context in which they are being deployed should remain the priority.

Limitations

It is important to acknowledge certain limitations of this review. The studies included in this review were limited to those published within a specified timeframe and retrieved from

databases accessible to the authors, which may introduce potential selection bias. Additionally, the heterogeneity of the identified studies in regard to their design and settings may limit the generalizability of these findings. We did not conduct a full systematic review, and the pragmatic phased nature of the review may mean that some relevant studies were excluded. The phased approach, however, allowed us to refine our understanding of the evidence map – and gaps – for a topic whose definition and scope resisted clear delineation at the outset.

Conclusion

Patient-centered measures of health service quality have been developed and used in specific health areas and contexts; yet a comprehensive, cross-cutting measurement approach for client experience of care is needed if we are to advance our understanding of health service quality from the client's perspective, conduct meaningful comparisons across different health care settings, and equip health systems with the data needed to drive person-centered improvements. The development of such a measure requires further conceptual refinement, including of the constituent domains and sub-domains, and eventual pilot testing of a measurement tool. We propose a collaborative process in which key actors in the global health community, alongside the voices of clients in health systems, are heard and feed in to usable, actionable, and valid measures of client experience of care. We see a more robust and cohesive approach to conceptualizing and measuring client experience as a necessary precursor to advancing toward person-centered health systems. We hope that advancing measurement approaches will unlock opportunities for a range of actors, from donors to national governments to community-based organizations, to integrate client experience measurement into their work, supporting more person-centered and responsive health systems.

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