

## EMPROVING PATIENT CENTERED CARE MODEL IN HEALTH MANGMENT FOR IMPROVED OUTCOME

**Fahad Saleh Almutairi**

Health Services and Hospitals Management

**Jamal Shehan Alsuwait**

Operation Room Technician

**Waleed Majed Almutiri**

Nurse

**Nawaf Riyadh Mufadhi Aldhafeeri**

Nurse

**Maha Daham Al-Shammari**

Nurse

**Ahmed Mutlaqt Almutalri**

Ambulance and Emergency

**Jamila Aidan Al-Dhafiri**

Nurse

### **Abstract**

In recent years, the concept of patient-centered care has garnered increasing attention and is now regarded as a fundamental goal of high-quality healthcare systems. Technological advancements, alongside shifts in the organization and financing of care delivery, have led to significant evolution in contemporary healthcare since the concept of patient-centeredness emerged in the late 1980s. While historically, proponents of patient-centered care primarily emphasized the patient-physician or care team relationship, changes within the healthcare system suggest a broader array of factors may impact the patient-centeredness of healthcare experiences. Our healthcare system provides examples illustrating how clinical, structural, and interpersonal attributes collectively shape the patient's experience, offering a multidimensional conceptualization of patient-centered care. This framework is designed to empower any healthcare system to identify opportunities for enhancing patient-centeredness and progress towards establishing it as an inherent feature of the system.

### **Introduction**

Patient-centeredness has long been recognized as a desirable attribute of health care (1). Proponents have described patient-centered care as that which honors patients' preferences, needs, and values; applies a biopsychosocial perspective rather than a purely biomedical perspective; and

forges a strong partnership between patient and clinician (2). Until recently, most studies of patient-centered care and its impact on care processes and outcomes were largely focused on the patient's relationship to his or her clinician or care team (3,4). However, much of what a patient experiences occurs outside of the encounter in the physician's office. Interactions between patients and care clinicians have expanded beyond the in-office visit to include virtual medicine, peer support groups, and a range of information and communication technologies to support care. Moreover, the clinician's or team's ability to provide patient-centered care is affected by the context in which they operate; for example, a large hospital, small private practice, freestanding urgent care facility, or integrated multispecialty group practice.

As a result of changes to the notion of a care visit and the proliferation of care delivery arrangements, much of medical care and coverage in the US is fragmented; patients may visit a number of clinicians in different clinics or systems, especially for complex and chronic conditions, and continuity and coordination across clinicians and settings is often lacking (5). Moreover, the electronic medical records held in one health care setting are often not shareable or interoperable (6), further contributing to fragmentation. Hence, the absence of a true health care system has been detrimental to patient centeredness and continues to present obstacles to making care more patient centered.

Nevertheless, we believe that efforts to make the health care environment more responsive to patients' needs, preferences, and values will be most likely to succeed if they are based on a clear understanding of the full range of factors that promote or impede patient-centered care—that is, making patient-centeredness a “systems property” (7). Thus, given the changes in contemporary medical care over the past two decades, it is worthwhile to revisit the opportunities for increasing patient-centered care.

In this article, we offer a multidimensional characterization of patient-centered care that could be applied to a variety of care delivery systems and settings. We describe attributes within each of three dimensions of health care that can affect patients' experiences, for better or for worse. Our goal is to provide a framework and real-world examples to readers interested in improving the patient-centeredness of their health care organizations. We use insights from the literature and illustrative examples collected from Group Health Cooperative (Group Health), an integrated health care delivery system in Seattle, WA, to show how the attributes of patient-centered care can be embraced at a systems level.

### **What Is Patient-Centered Care, and Why Is It Important?**

The Institute of Medicine (8) has defined patient-centered care as “care that is respectful of and responsive to individual patient preferences, needs, and values.” Following a series of focus groups with patients, iterative feedback from research colleagues, and consultation with national advisers, we modified this definition slightly to describe patient-centered care as care that “honors and responds to individual patient preferences, needs, values, and goals.” It is through this lens that we describe why and how patient-centered care should be an imperative for all health care systems,

whether that “system” is a solo practitioner, a large multispecialty group practice, or a federally qualified health center providing care to underserved populations.

Several important arguments for making care more patient centered have been offered. Patient-centered care results in improved care processes (9) and health outcomes, including survival (10). Two systematic reviews identified promising patient-centered interventions directed at patients, clinicians, or both, which resulted in improved communication and health outcomes (3,7). Patient-centered care is the right thing to do (11). In fact, it is hard to imagine how care that has not been patient centered could ever have been justified. There is a business case for patient-centered care, on the basis of evidence that patients who report stronger relationships with their clinicians undergo fewer tests and are less inclined to pursue legal action if a medical error is handled in a sensitive, patient-centered fashion (12). Finally, it has been argued that clinicians and their teams may benefit from a patient-centered orientation by knowing that they have more effectively addressed the needs of their patients (13,14). Collectively, these studies demonstrate that patient-centered approaches can lead to improved healing relationships.

### **Our Approach to Studying and Improving Patient-Centered Care**

Group Health coordinates health care and coverage for more than 660,000 individuals in Washington state and operates as a consumer-governed nonprofit system. Nearly two-thirds of members receive care in Group Health-owned and operated medical centers, and promoting patient-centered care is an organizational guiding principle. Nevertheless, the complexity of patient-centered care in a large system—where every patient, clinician, team, and encounter varies across time and place—means that embedding patient-centeredness into all daily work remains challenging.

In 2009, Group Health Research Institute, the research arm of Group Health, initiated the Patient-Centered Care Interest Group to serve as a venue for stakeholders from across the organization to discuss timely topics, articles, projects, and related initiatives. The diversity of departments that are represented—including research, clinical care (primary, specialty, and nursing), health plan product development, organizational communication, quality improvement, measurement and analysis, and patient safety—shows that this is indeed a topic of interest across our system. The group provides a forum for formal and informal interactions with internal colleagues as well as outside colleagues who are regularly invited to share their expertise, and it fosters improvements to internal care delivery initiatives as well as research projects. Topics have included measuring patient experience in real-time, best practices for patient advisory boards, and user-centered design methodology, among many others. Medical Directors are among the regular interest group participants. As a marker of widespread leadership support for this work, patient-centered care was a featured topic of Group Health's annual internal conference targeted to all personnel in our integrated group practice (approximately 500 participants) in 2010 and 2011. The conference is a unique opportunity to describe high-profile organizational initiatives and to disseminate key

messages to medical leaders and frontline staff simultaneously. Showcasing patient-centered care has spurred greater participation in the interest group.

The Group Health Cooperative Human Subjects Research Committee reviewed and approved this manuscript. However, no information on human subjects is included in this commentary.

### **What Are the Dimensions and Attributes of a Patient-Centered Health System?**

The literature on patient-centered care encompasses various subtopics, such as physician communication training, patient-centered health information technology, the built environment (the spaces and products in health care facilities), and strategies for measuring patient-centeredness. For this reason, Bensing (15) describes patient-centered care as a “container concept” that envelops several different attributes and behaviors. It is useful to acknowledge and differentiate patient-centeredness from the patient-centered medical home model, which has gained traction in primary care as a practice model and is predicated on how a practice is organized to better support the patient's experience. With or without adoption of the patient-centered medical home model, care can be very patient centric, or not. For example, a clinic or practice may incorporate features in the evidence-based care plans and same-day appointments, or other operational improvements, but one unpleasant interaction with a team member can leave its imprint—a perception that the patient was not put at the center. Thus, patient-centeredness is a quality that must be earned time after time, encounter by encounter, and it is fragile, even in a medical home setting.

Within Group Health, we sought to make the overarching concept of patient-centered care more concrete and operational by identifying attributes of patient-centered care that recur in the literature, and organizing them into the three dimensions that we believe must be present and integrated to make patient-centered care part of the culture of care. Table 1 shows the attributes in these three dimensions: interpersonal, clinical, and structural. We have organized these dimensions to be applicable, and the attributes to be actionable, in any health care setting. These attributes build on and extend previous conceptualizations of patient-centered care (1,2,16) by explicitly acknowledging the role of the entire health care team, emphasizing new modes of patient-clinician interactions, and characterizing aspects of the health care system beyond the built environment. Indeed, many of these attributes are part of the medical home model, but a practice model and a mindset are not synonymous. Group Health has adopted the medical home model systemwide and is endeavoring to fully embed patient-centeredness into the culture and fabric of the organization. Table 1

Dimensions and attributions of a patient-centered health care system

<b>Interpersonal dimension (relationship)</b>	<b>Clinical dimension (provision of care)</b>	<b>Structural dimension (system features)</b>
<b>Communication</b> Begins with listening Creates a fabric of trust Promotes clear, empathic communication, tailored to patients' needs and abilities Welcomes participation of family, friends, and caregivers	<b>Clinical decision support</b> Ensures shared decision making on the basis of best-available evidence coupled with patient preferences Supports self-management	<b>Built environment</b> Provides calm, welcoming space Accommodates patient, clinician, and family needs Emphasizes easy "way-finding" and navigation through the system
<b>Knowing the patient</b> Uses knowledge of patient as a whole and unique person for effective interactions Finds common ground on the basis of patient preferences Facilitates healing relationships	<b>Coordination and continuity</b> Manages care transitions and seamless flow of information—whether for a broken arm or life-altering illness Coordinates with community resources	<b>Access to care</b> Eases appointment-making process Minimizes clinic wait times Payment system accommodates patients' circumstances Coordinated, consistent, efficient
<b>Importance of teams</b> Ensures responsiveness by entire care team to patient and family needs Recognizes that actions of both clinicians and staff can influence perceptions of care	<b>Types of encounters</b> Accommodates virtual visits (phone, e-mail) as well as in-office visits Reimbursement structure supports range of encounters that meet patients' varied needs	<b>Information technology</b> Supports patient and clinician before, during, and after encounters Tracks patients' preferences, values, and needs dynamically Provides self-management tools and information

Table 2 presents examples of specific changes we have made and how these changes tie to the attributes in Table 1. Leadership support is imperative, and Group Health leaders have endorsed specific tactical changes and embraced the philosophy of patient-centered care. Still, culture change is a dynamic and living process, especially in a large organization, and ours is a journey in progress.

Table 2

Patient-centered changes made at Group Health Cooperative by related dimensions

Patient-centered feature	Related dimension
Online self-management program introduced to accommodate growing demand for peer-support workshop for individuals who could not attend in-person version of workshop	Clinical
Previsit outreach to patients by medical assistants to ensure that encounter focuses on most important problem, and that patients bring relevant history and medications to visits	Clinical
Direct access to specialty care clinicians	Clinical
Secure e-mail access to clinician for virtual visit	Clinical
Smartphone "app" to give patients mobile access to their medical record, ability to reach their clinician or 24/7 nurse service, find locations, check symptoms, and view wait times for laboratory and pharmacy services	Clinical
Regular surveys of patient experience, with feedback to individual clinicians and comparative data across facilities	Interpersonal
Communication training for new clinicians, and retraining as needed on the basis of patient ratings of clinician communication	Interpersonal
Patient-centeredness training for nurses caring for complex, chronically ill patients	Interpersonal
Electronic medical record tracks patient preference for "what I'd like to be called"	Structural
Integrated electronic medical record and participation in regional "Care Everywhere" program to promote continuity and coordination within and outside of Group Health system	Structural
Way-finding signs and maps improved following ethnographic study of how patients see and interpret signage in facilities	Structural
New clinic designed with input from patients to improve flow, decrease wait times, and colocate frequent services	Structural
Billing statements modified following input from patients about unclear elements	Structural
Design of new clinics included patients as part of the team with clinicians, nurses, technicians, and architects to collaboratively address "the ideal patient experience"	Structural

During our literature review to identify key attributes, we uncovered two fundamental principles underlying patient-centered care that resonated across all identified attributes. Firstly, consistency emerged as paramount. Regardless of whether the patient interacts with a physician, a radiology technician, or a claims adjuster, regardless of whether the encounter pertains to a chronic condition or an acute illness, whether it occurs in a clinic or via electronic communication, and whether the patient's preferences remain stable or fluctuate with their health status, the patient should consistently receive a patient-centered experience from the healthcare system.

The second fundamental principle is trust. Does the patient have confidence that the clinician is fully engaged and attentive to their needs? Moreover, both patient and clinician must trust the healthcare system to uphold standards of high-quality, patient-centered care. Can the patient trust the safety and commitment to error-free care within the care environment? Is there assurance that someone is advocating for the patient's interests during transitions between healthcare settings? Can the patient rely on the proficiency of the medical assistant performing procedures such as inserting an intravenous catheter? Addressing these questions necessitates a dual commitment: at the system level, to organize care processes aligning with patients' needs, preferences, and goals, and philosophically, from all participants within the healthcare setting.

In the subsequent section, we delve into these dimensions and attributes in detail, offering examples of their application within Group Health. Some examples may intersect multiple dimensions, underscoring the permeable nature of patient-centeredness and its encompassment of various facets.

## Interpersonal Dimension

This dimension consolidates several well-examined facets of patient-centered care: communication, patient familiarity, and recognition of how all team members influence the patient-team relationship. Effective communication necessitates active listening—attuning empathetically to both the patient's medical and nonmedical needs (e.g., values, fears, life events)—which significantly influences both the process and outcomes of the interaction. This communication fosters the ability for patient and clinician to establish common ground (4,18). It is often crucial to involve the patient's friends, family, and/or caregivers, particularly in stressful situations (e.g., acute events or serious illness) or when family support is vital for achieving clinical goals (e.g., management of chronic disease). Expanding the team to encompass both clinical and service providers can further enhance the patient-centeredness of care. Sevin and colleagues emphasize the deliberate effort required to define roles and responsibilities within a patient-centered, highly functional care team, ensuring everyone possesses the necessary information to meet patient needs (14). Moreover, instilling responsibility in every individual who interacts with a patient helps establish and reinforce a culture of care. It's imperative for all team members to recognize that one negative encounter can have enduring repercussions for the patient and can complicate the lives of coworkers who must manage an upset patient.

Several initiatives have been undertaken by Group Health in recent years to enhance this interpersonal dimension:

- Enriching physician and nurse training programs to emphasize interpersonal communication with both patients and among clinicians.
- Facilitating engagement among all employees through frontline improvement workshops, where entire teams collaborate to devise strategies for enhancing care.
- Regularly surveying patients about their care experience and utilizing the feedback to pinpoint opportunities for improving communication at the individual clinician level.
- Actively piloting patient advisory boards to identify specific ways to enhance ancillary clinical departments within the system, such as pharmacy services.

## Clinical Dimension

Many attributes within the clinical dimension—particularly decision support, coordination, care management, and continuity—are prominent in healthcare improvement literature (19–21). Given today's diverse and increasingly fragmented healthcare delivery landscape, these attributes have become more crucial than ever. Recent innovations in delivery system design, notably virtual medicine and the medical home model, are well-suited to ensuring a patient-centered experience. The patient-centered medical home model, by its nature, aims to fully support clinicians in delivering coordinated care across settings and encounters. To be truly patient-centered, care should allow patients the option of interacting with their clinician or care team without visiting a

facility. Additionally, the system should equip patients with the skills needed to prevent or manage illness outside of the clinician's office and should facilitate connections with community-based agencies offering social, instrumental, or emotional support.

### **Structural Dimension**

The built environment in healthcare often lacks modernization. Existing facilities were typically designed to accommodate clinician convenience and navigation, with signage and paperwork often laden with medical jargon. In hospitals, the nurses' station is often physically distant from patient rooms, contributing to patient isolation. Patients are frequently relocated for procedures or services, rather than having them performed onsite. System-level investments can significantly enhance the care experience, with the Planetree Model outlining principles for improving healthcare environments toward patient-centeredness. Group Health's newest clinical facilities were designed with extensive consumer and care delivery personnel input to streamline clinic visits by colocating patient services (laboratory, pharmacy, imaging) and developing more comfortable examination rooms.

Efficient access to care—minimizing clinic wait times, streamlining appointment scheduling, and accommodating patients' financial circumstances—can greatly enhance patient experiences. Prolonged wait times before being seen, especially while feeling unwell or surrounded by other sick individuals, can negatively impact subsequent encounters for both patients and clinical teams. Moreover, appropriately developed and utilized health information technology innovations hold significant potential to enhance patient-centered care, particularly with the implementation of electronic health records. Such provisions, under the "meaningful use" provisions, aim to better acquaint clinicians with their patients and utilize this knowledge to inform and improve care. For example, increased use of electronic health records can dynamically capture and store a range of patient information regarding needs, goals, values, and preferences. Group Health regularly integrates such features into its electronic medical record system. Another information technology-enabled enhancement at Group Health is the inclusion of laboratory and pharmacy wait times by clinic, integrated into the smartphone application.

### **Conclusion**

Bergeson and Dean emphasized that “well-designed support and delivery systems are essential if care is going to center reliably and consistently on patients' needs and priorities” (23). Our conceptualization of patient-centered care introduces relevant attributes across the interpersonal, clinical, and structural dimensions of healthcare, offering practical examples for those seeking to enhance the patient-centeredness of their care using this actionable framework. Since these attributes often intersect, each has the potential to influence a patient's care experience. Therefore, a comprehensive, integrated, and consistent approach is crucial for establishing patient-centered care as a systemic property, ensuring its success.



While the aspiration to deliver an optimal patient-centered care experience may seem ambitious, the increasing pressures on healthcare settings present a timely opportunity to explore how patient-centered innovations can enhance care processes and health outcomes. Drawing parallels from the literature on improving reliability in healthcare, just as every patient should reasonably expect error-free care, there is a compelling argument to set similarly ambitious expectations for consistently providing patient-centered care—regardless of the healthcare setting, every time. With the tools, business case, and evidence base at our disposal, what remains is the collective will to prioritize patient-centered care in healthcare delivery.

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