

## Delving Into the Patient-Centric Strategies in Healthcare Settings Using Design Thinking

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### Abstract:

In the evolving landscape of healthcare, there's a remarkable shift towards patient-centric care, acknowledging patients as active contributors with unique needs and expectations. This commitment lies in the delivery of high-quality, compassionate healthcare that prioritizes the overall patient experience, moving beyond traditional disease-centric models to focus on holistic patient needs, empowerment, and engagement. This article explores innovative methodologies, cultural shifts, and the application of Design thinking in healthcare. Design thinking, a creative problem-solving approach, crafts solutions effective and considerate of patient needs. These articles collectively illuminate patient-centric strategies, addressing challenges, proposing solutions, and showcasing the potential of design thinking.

Embarking on a survey involving 50 participants, we delve into patient satisfaction with communication, involvement in decision-making, and understanding of recommended tests. Findings reveal issues of communication clarity, financial concerns driving unnecessary tests, and a power dynamic favoring healthcare providers. Patient suggestions underscore the need for transparent communication, integrating design thinking in hospital operations, and implementing patient portals for enhanced information access. The results unearth a troubling pattern of miscommunication and profit-driven practices in healthcare, signaling the need for a patient-centric shift through design thinking. Recommendations advocate for augmenting communication protocols, transparency, empathy, and leveraging technology to reduce unnecessary testing. Proposals also call for cultural competency training and continuous quality improvement, envisioning a healthcare system attuned to patient needs and expectations. Studies highlight the impact of strategic methodologies on healthcare efficiency and underscore the critical role of Patient Safety. Human-Centered Design, especially in chronic conditions like heart failure, stands out as pivotal. This study contributes valuable insights to patient-centric care, design thinking, and healthcare innovation, playing a role in the ongoing evolution towards a more compassionate and responsive system.

*keywords: patient-centric, design thinking, health care*

### 1. Introduction

Healthcare is changing, and at the heart of this transformation is a shift towards putting patients at the center of their care. Instead of just focusing on treating illnesses, healthcare providers are now looking at ways to enhance the entire experience for patients. This research article explores the different ways healthcare is becoming more patient-centered, especially by using a creative approach called design thinking. In the past, healthcare often focused mainly on treating diseases, sometimes forgetting that patients have their own needs, feelings, and expectations. Patient-centric care is changing this by making sure patients are active partners in their own healthcare. This approach not only improves the quality of care but also leads to better health outcomes and happier patients.

This research dives into various articles that explore new methods, cultural shifts, and the use of design thinking in healthcare. These articles provide a detailed look into how patient-centric strategies are being applied, addressing challenges and offering solutions. Together, they paint a clear picture of how healthcare is evolving to prioritize the well-being and preferences of each person it serves.

In the evolving landscape of healthcare, a paradigm shift towards patient-centric care is reshaping the way we approach medical treatment and overall well-being. This transformation recognizes that patients are not merely recipients of clinical

interventions but active participants with unique needs, preferences, and expectations. At the core of this change is a commitment to deliver high-quality, effective, and compassionate healthcare, prioritizing the entire patient experience.

**Patient-Centric Care** involves an approach that goes beyond traditional disease-centric models, aiming to address the holistic needs of patients. It emphasizes patient empowerment, engagement, and satisfaction, recognizing individuals as active stakeholders in their health. The goal is not only to treat medical conditions but to provide care that is responsive to the diverse and evolving needs of each patient.

This research paper navigates through various articles, exploring innovative methodologies, transformative cultural shifts, and the application of **Design Thinking** in healthcare settings. Design thinking is a creative problem-solving approach that ensures solutions are not only effective but also considerate of user needs, in this case, the patients. The articles collectively illuminate the multifaceted nature of patient-centric strategies, offering insights into challenges, proposing practical solutions, and highlighting the potential of design thinking in healthcare innovation.

As we delve into the articles, key findings emerge. For instance, a study on patient prioritization in emergency departments, utilizing a data-driven approach and queueing models, resulted in significant improvements in waiting times, showcasing the impact of strategic methodologies in optimizing healthcare efficiency.

Furthermore, insights from real-life cases, such as the wrong-patient invasive procedure, underscore the critical importance of **Patient Safety**. These cases reveal vulnerabilities in the healthcare system and emphasize the need for proactive measures to prevent errors, contributing to a safer and more reliable healthcare environment.

In addition, This exploration includes articles discussing the implementation of **Patient-Centered Care (PCC)**, examining cultural transformations within healthcare organizations to ensure strong leadership commitment, staff empowerment, and an environment that supports PCC principles. This holistic approach to care considers not only the clinical aspects but also the patient's psychological, social, and personal circumstances.

The integration of **Human-Centered Design (HCD)** surfaces as a key theme, particularly in the context of improving the experiences of patients with chronic conditions like heart failure. HCD involves understanding the specific needs and challenges of patients through interviews, observations, and creative problem-solving, ultimately leading to tailored solutions that enhance patient engagement and satisfaction.

As we embark on this comprehensive exploration, we aim to contribute valuable insights to the ongoing discourse surrounding patient-centric care, design thinking, and healthcare innovation. By analyzing and synthesizing these diverse perspectives, we seek to inform the ongoing evolution of healthcare towards a more compassionate, responsive, and effective system.

## 2. Literature Review

The review delves into the potential of design thinking as a formidable tool for implementing patient-centric strategies within healthcare settings, drawing insights from a variety of sources such as research articles, case studies, and reports. It aims to pinpoint key challenges in healthcare and elucidate how design thinking can effectively address them.

In healthcare settings, several pressing problems persist despite technological advancements. Misdiagnosis remains a significant issue, posing risks of harm and mortality despite technological advancements. Furthermore, inefficient patient flow, characterized by long wait times and disorganized queuing, continues to plague healthcare systems, impacting patient satisfaction and resource allocation. Fragmented care due to poor coordination among different departments and specialties often results in communication breakdowns and gaps in patient care. Passive patient engagement, where individuals feel excluded from decision-making, undermines treatment success and trust in healthcare providers. Moreover, systemic vulnerabilities, such as wrong-patient procedures, underscore the necessity for proactive safety measures.

Design thinking, with its core principles of user-centeredness, empathy, and iterative prototyping, emerges as a promising solution to these challenges. By prioritizing empathy and deeply understanding patient needs and perspectives, design thinking informs the development of solutions that genuinely address their challenges. It adopts a holistic approach,

considering the entire patient along with organizational culture and workflows out-of-the-box thinking, design thinking fosters innovation, leading to novel solutions for complex healthcare problems (e.g., improved patient prioritization tools). Additionally, it promotes collaboration between patients, professionals, and stakeholders, resulting in shared ownership and better implementation of patient-centric initiatives. Through rapid prototyping and iterative testing, design thinking ensures that solutions are refined to meet real-world needs before widespread implementation.

Evidence of success in implementing design thinking in healthcare settings is compelling. For instance, the VA healthcare system witnessed significant improvements in patient engagement and staff satisfaction with patient-centered care (PCC) initiatives following the integration of design thinking. Similarly, a design thinking intervention targeting heart failure patients led to enhanced medication adherence and patient education through tailored digital solutions. Even simple interventions, such as bedside whiteboards in an Ethiopian hospital, were shown to improve patient communication and satisfaction.

However, challenges persist in integrating design thinking within existing healthcare structures and workflows. Measuring the impact of design thinking interventions on patient outcomes necessitates further research and standardized evaluation methods. Moreover, educating healthcare professionals in design thinking methodologies and fostering a culture of innovation are imperative for sustained success.

In summary, the literature review provides a nuanced understanding of the problems within healthcare settings, ranging from communication challenges to organizational structures hindering patient-centric care. The proposed solutions encompass diverse approaches, including technology integration, cultural transformations, systematic reviews, and innovative methodologies such as design thinking. Collectively, these findings offer a comprehensive understanding of the current landscape and avenues for improvement in patient-centered care.

### **3. Methodology**

In the pursuit of understanding patient-centric strategies in healthcare through the lens of design thinking, this research employed a multi-faceted methodology aimed at capturing nuanced insights. This primary tool was a thoughtfully designed online survey, strategically reaching out to a diverse cohort of approximately 50 participants spanning different age groups. The survey meticulously probed into various dimensions, including patient satisfaction with communication from healthcare providers, involvement in decision-making processes, comprehension of test purposes and associated risks/benefits, perceptions of test necessity, transparency in justifying routine tests, and the experience of respectful treatment during declined tests.

To ensure the richness and diversity of perspectives, participant selection was a key consideration. By recruiting individuals across various age demographics, we aimed for a comprehensive representation. The survey, distributed through accessible online platforms, prioritized ease of participation while maintaining the integrity of the data collection process.

A crucial aspect of This methodology was the assurance of participant anonymity and confidentiality. This commitment was integral to fostering candid and honest feedback, crucial for the authenticity of This findings. The subsequent data analysis phase combined quantitative and qualitative techniques, allowing us to derive meaningful and actionable insights from the survey responses.

Ethical considerations played a paramount role throughout this research. Adhering to ethical guidelines, we prioritized participant well-being and privacy at every stage. The culmination of this efforts resulted in a comprehensive analysis, offering valuable perspectives on opportunities for enhancing patient-centered approaches in healthcare. The feedback received, rooted in the experiences and needs of the patients, provided a foundation for actionable recommendations, encompassing improved communication, immediate responsiveness, reassurance, the implementation of a user-friendly digital system, and increased transparency.

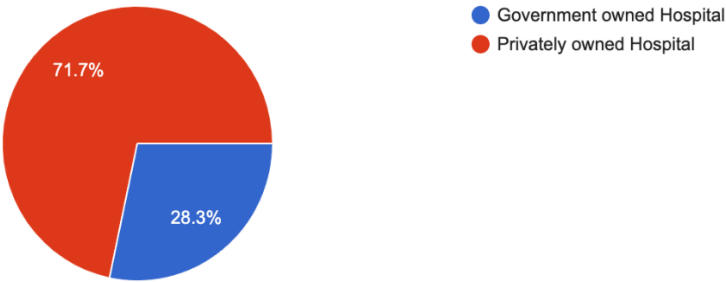
4. Questionnaire

- 1. What type of hospital you usually visit?
- 2. How satisfied were you with the communication from the healthcare providers regarding recommended tests?
- 3. Did you feel you had a clear understanding of the purpose and risks/benefits of each test recommended?
- 4. Were you involved in the decision-making process regarding undergoing the tests?
- 5. If you received multiple tests, did you feel all were necessary to diagnose your condition?
- 6. Were any tests explained as "routine" or "standard" without clear justification?
- 7. Did you feel pressured to undergo any tests you were hesitant about?
- 8. If you declined any tests, were you treated respectfully and was your decision acknowledged?
- 9. If no,
- 10. what are all the circumstances you faced?
- 11. Do you have any suggestions for improving how hospitals communicate and involve patients in decisions regarding tests?
- 12. What would make you feel more confident and informed about undergoing tests in the future?

5.1 Results

What type of hospital you usually visit?

53 responses

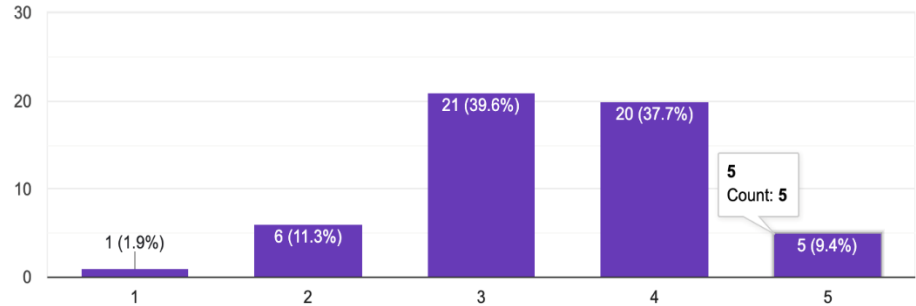


The survey indicates a strong preference for privately owned hospitals (71.7%) over government-owned ones (28.3%), highlighting perceived service quality and personalized care as key factors. These findings offer insights into healthcare preferences, vital for stakeholders aiming to enhance accessibility and delivery.

How satisfied were you with the communication from your healthcare providers regarding recommended tests? (Give ratings on the basis 1 being least satisfied and 5 being highly satisfied)



53 responses

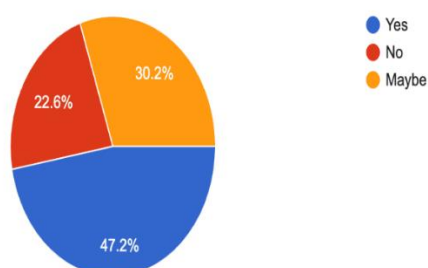


The survey revealed varied satisfaction levels with healthcare providers' communication on recommended tests. A notable 39.6% of respondents rated their satisfaction at 3, reflecting a moderate level of contentment. Another 37.7%

expressed higher satisfaction with a rating of 4, signifying a substantial positive response. The lowest satisfaction level (rating 1) was reported by 1.9% of participants, while 11.3% chose a rating of 2. Furthermore, 9.4% of respondents reported the highest satisfaction level (rating 5), indicating a notable proportion of highly contented individuals. These diverse responses emphasize the importance of tailored communication strategies in healthcare settings.

Did you feel you had a clear understanding of the purpose and risks/benefits of each test recommended?

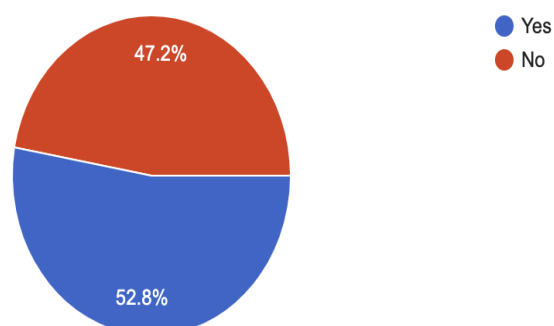
53 responses



The survey findings regarding patients' understanding of recommended tests revealed that 47.2% responded affirmatively, indicating a clear understanding. However, 22.6% expressed uncertainty, stating that they did not feel clear about the purpose and risks/benefits. Additionally, 30.2% provided a neutral response, expressing ambiguity with a "maybe." These results underscore the need for improved communication to ensure patients are well-informed and confident in their understanding of recommended medical tests.

Were you involved in the decision-making process regarding undergoing the tests?

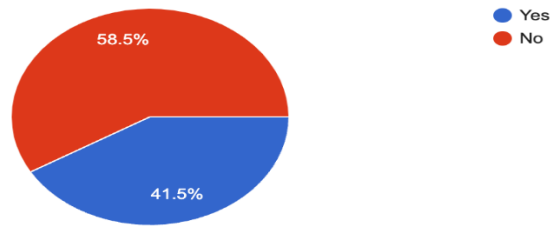
53 responses



When asked about their involvement in the decision-making process regarding undergoing tests, 52.8% of respondents affirmed that they were part of the decision-making, while 47.2% indicated that they were not involved. This indicates a significant portion of patients being excluded from decision-making, emphasizing the importance of fostering patient engagement in healthcare choices.

If you received multiple tests, did you feel all were necessary to diagnose your condition?

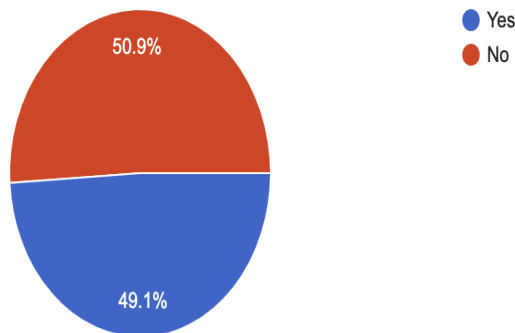
53 responses



When asked if they received multiple tests, 41.5% of respondents believed all tests were necessary for diagnosing their condition, while 58.5% expressed the opinion that not all tests were essential. This highlights a considerable proportion of patients questioning the necessity of the tests they underwent, suggesting a potential area for improvement in test prescription practices.

Were any tests explained as "routine" or "standard" without clear justification?

53 responses



When queried about whether any tests were labeled as "routine" or "standard" without clear justification, 49.1% of respondents affirmed that such instances occurred, while 50.9% did not report encountering this practice. The findings indicate a significant portion of patients perceiving a lack of clear rationale behind certain tests labeled as routine or standard, signaling a potential communication gap between healthcare providers and patients.

10. Do you have any suggestions for improving how hospitals communicate and involve patients in decisions regarding tests?

Improving communication and involving patients in decisions regarding tests are essential steps towards enhancing the patient experience in hospitals. One approach is to implement user-friendly digital platforms, such as patient portals, to provide transparent access to test results and medical information. These platforms can empower patients by offering clear and accessible explanations about the purpose and significance of various tests, enabling them to make informed decisions about their healthcare. Additionally, healthcare providers should prioritize open communication channels, allowing patients to ask questions without hesitation and ensuring that all details are properly communicated and explained. This includes explaining why certain tests are necessary, as well as providing opportunities for patients to decline or accept tests based on their preferences and understanding of the situation. Furthermore, hospitals can consider providing educational resources, such as handbooks or videos, that explain medical terms and the relevance of each test, helping patients feel more confident and informed about their healthcare journey. Additionally, measures to address financial concerns, such as transparent billing practices and reduced charges for treatment, can alleviate the burden on patients and promote trust and satisfaction in healthcare services. Overall, by

prioritizing clear communication, patient education, and transparency, hospitals can foster a collaborative approach to healthcare decision-making that prioritizes patient needs and preferences.

#### 11. What would make you feel more confident and informed about undergoing tests in the future?

Feeling confident and informed about undergoing tests in the future is crucial for patients' peace of mind and trust in the healthcare system. One key factor that would contribute to this confidence is receiving clear and concise explanations from healthcare professionals about the purpose, process, and potential outcomes of the tests. Patients value transparency throughout the entire testing process, including understanding why a particular test is necessary and how it contributes to their diagnosis and treatment plan. Furthermore, accessible information through patient-friendly resources and opportunities for two-way discussions with healthcare providers can address any concerns or questions patients may have,

empowering them to make informed decisions about their healthcare. Empathy and reassurance from doctors and hospital staff play a significant role in calming patients and preventing unnecessary anxiety or confusion, ensuring that patients feel supported and understood throughout their medical journey. Additionally, reliability and transparency in the details surrounding the tests, including their relevance, risks, benefits, and alternatives, are essential for building trust and confidence in the healthcare system. Overall, effective communication, clear information, empathy, and transparency are key elements that would enhance patients' confidence and understanding before undergoing tests in the future.

## 5. Findings

This study delves into the critical issues of misdiagnosis and miscommunication in healthcare settings, focusing on patient perspectives and experiences. Utilizing a survey with targeted questions, we investigated patient perceptions of test recommendations, communication clarity, and decision-making involvement. This findings uncover a concerning pattern of hospital practices that often prioritize profit over patient well-being, highlighting the need for a patient-centric shift through design thinking.

A comprehensive survey was distributed to a diverse audience seeking healthcare services. The questionnaire explored areas such as communication regarding test recommendations, understanding of test purposes and risks/benefits, involvement in decision-making, perceived necessity of tests, and patient satisfaction with hospital interactions.

The survey responses painted a concerning picture of healthcare experiences marred by miscommunication and questionable practices. Key findings include:

- **Lack of Clarity and Consent:** Over 50% of respondents expressed dissatisfaction with communication surrounding recommended tests, feeling pressured into unnecessary procedures and lacking clear justifications for their purpose.
- **Misleading Justifications:** Many patients reported encountering "routine" or "standard" explanations for tests without a proper understanding of their relevance to their specific condition.
- **Passive Patients, Dominant Providers:** A significant portion of respondents felt excluded from the decision-making process, facing pressure to undergo tests despite personal anxieties.
- **Financial Concerns and Power Dynamics:** Several responses pointed towards financial anxieties fueling unnecessary test recommendations, highlighting a possible profit-driven motive in some hospital practices.
- **Patient Suggestions for Improvement:** The survey also captured valuable insights for enhancing patient engagement and communication. These included transparent information sharing, educational resThisces, accessible explanations, and active listening, emphasizing a patient-centered approach.
- **Pressure Crescendos:** Patients reported feeling pressured into unnecessary tests, their anxieties silenced by the dominant chorus of medical authority. Passive participation and uninformed consent became recurring themes.
- **Financial Bass Lines:** An unsettling melody of financial anxieties emerged, with some attributing unnecessary tests to profit-driven motives. The system seemed to exploit vulnerabilities, turning healthcare into a discordant marketplace.
- **Muted Voices:** The survey revealed a systematic silencing of patient voices. Decision-making became a unilateral performance, leaving patients feeling excluded and disempowered.

The findings of this study underscore the urgent need for a paradigm shift in healthcare practices. To combat misdiagnosis, miscommunication, and unethical practices, design thinking offers a transformative approach. By prioritizing empathy, user-centered solutions, and iterative prototyping, design thinking can guide healthcare systems towards:

Developing patient-centric communication tools: Implementing clear, accessible, and personalized information channels to empower patients with knowledge about their healthcare journey.

Designing collaborative decision-making platforms: Facilitating shared responsibility for diagnostic procedures through interactive tools and open communication channels.

Emphasizing transparency and ethical practices: Prioritizing informed consent and clear justifications for tests, eliminating profit-driven practices that exploit patient vulnerabilities.

Building empathy through role-playing: Implementing workshops and training programs for healthcare professionals to foster a deeper understanding of patient anxieties and perspectives.

## 6. Conclusions

This research has unveiled a healthcare system where misdiagnosis and miscommunication create a discordant symphony of patient discontent. The melody of profit drowns out the needs of individuals, leaving them adrift in a sea of confusion and mistrust. Yet, within this dissonance lies a powerful counterpoint: the transformative crescendo of design thinking.

By prioritizing empathy, user-centered solutions, and iterative prototyping, design thinking can rewrite the score of healthcare. Instead of opaque justifications and passive participation, let us compose transparent symphonies of information, empowering patients to become active conductors of their health journeys. Let us replace the pressure crescendos with collaborative harmonies, where shared responsibility for diagnoses fosters trust and understanding. Let us unmute the muted voices of patients, amplifying their perspectives through interactive tools and open communication channels.

This is not merely a redesign; it is an overture to a new healthcare movement. Through design thinking, we can dismantle the power imbalances and financial undertones that warp the system. We can rewrite the script, replacing fear with confidence, confusion with clarity, and passivity with empowerment. The potential is vast, echoing across the diverse needs of patients - from children facing unnecessary tests to elderly individuals navigating complex diagnoses.

This research is not a mere diagnosis; it is a prescription for change. By embracing design thinking and prioritizing patient-centricity, we can orchestrate a healthcare system that resonates with the needs of all. Let the final note be clear, resounding, and unwavering: in the new healthcare symphony, patients are not just the audience; they are the composers, conductors, and soloists - the masters of their own well-being.

"While the challenges we have exposed may seem daunting, the solutions are attainable. By embracing design thinking and prioritizing patient voices, we can rewrite the score of healthcare, transforming it from a dissonant symphony into a harmonious chorus of well-being for all."

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