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Patient Engagement in Evidence-Based Practice Frameworks

Jarrod Dusin, PhD, RD, CPHQ[1] and Jill Peltzer, PhD, RN[2]

Abstract

Evidence-based practice (EBP) is the cornerstone of contemporary healthcare, promoting the integration of scientific evidence, clinical expertise, and patient values to inform clinical decision-making and enhance patient outcomes. While patient engagement is recognized as a critical component of EBP, the extent to which it is incorporated in various EBP frameworks is unclear. This study is a secondary analysis of a scoping review which evaluated EBP frameworks used in healthcare settings. In the current study, our objective was to assess the level of patient engagement within those frameworks. To achieve this, we employed a patient engagement framework which characterizes engagement as a continuum, spanning consultation to involvement to shared leadership/partnership, across 3 healthcare domains: direct care, organizational design and governance, and policymaking. Our analysis revealed a gap in integrating patient values and preferences within EBP frameworks. Only 3 of the assessed frameworks showed a high degree of engagement across all domains. Future research should focus on developing strategies for implementing and evaluating meaningful engagement in EBP.

Keywords

patient and family engagement, patient values and preferences, clinical pathways, evidence-based practice

Key Points

- Patient values and preferences are a fundamental principle of evidence-based practice (EBP), but most EBP frameworks don't integrate them well.
- A good EBP framework should include patient engagement throughout the entire process, from asking the initial question to implementing the solution.
- The authors evaluated 13 EBP frameworks and found that only 3 included patient engagement across all 3 domains (direct care, organizational design and governance, and policymaking).
- The authors recommend that future research focus on developing strategies for implementing and evaluating meaningful patient engagement in EBP.

Introduction

Evidence-based practice (EBP) has emerged as a cornerstone of modern healthcare, promoting the integration of the best available scientific evidence, clinical expertise, and patient values and preferences to guide clinical decision-making and improve patient outcomes.[3] EBP frameworks provide a foundation for rigor and consistency in EBP implementation to evaluate processes and outcomes; they also address the complexity of EBP in healthcare by establishing strategies to determine resource needs and identify barriers and facilitators.[4] EBP frameworks provide insight into the complexity of transforming evidence into clinical practice and allow organizations to determine readiness, willingness, and potential outcomes for a hospital system, which ultimately results in the improvement of patient outcomes.[5]

The benefits of EBP—improved quality of care, better patient outcomes, and improved efficiency in care delivery—are well recognized and emphasize the importance of involving patients and their families as active partners in

[1] Department of Evidence Based Practice, Children's Mercy Kansas City, Kansas City, MO, USA
[2] School of Nursing, The University of Kansas Medical Center, Kansas City, KS, USA

Corresponding Author:
Jarrod Dusin, Department of Evidence Based Practice, Children's Mercy Kansas City, 2401 Gillham Rd, Kansas City, MO 64150, USA.
Email: jddusin@cmh.edu

the decision-making process.[5,6] However, while patient values and preferences have always been an important pillar of EBP, the specific approach for engaging patients in EBP implementation has not been well defined.[3] Incorporating values, preferences, and engagement enhances patient-centered care, contributing to better treatment outcomes, improved patient satisfaction, and more responsive healthcare systems.[7]

Dusin et al[1] conducted a scoping review of 19 EBP frameworks used in healthcare. This comprehensive review highlighted the diverse landscape of EBP models, showcasing varying degrees of development, tools, and instructions. However, the review also highlighted a significant gap. Only a few of the assessed models effectively integrated patient values and preferences. This finding underscores the critical need to engage patients and families in the application of EBP frameworks. The primary objective of the present study was to address this gap by conducting a secondary analysis of the previously published scoping review.[1] Specifically, this study focused on assessing the extent of patient engagement within 13 EBP frameworks evaluated in the Dusin et al[1] article.

Methods

Original Study

In the previously published scoping review by Dusin et al,[1] the authors evaluated 19 EBP frameworks used in healthcare settings, aligning them with the 5-step EBP process. Results indicated diverse models with varying degrees of development, tools, and instructions. However, only a few integrated patient values and preferences, highlighting the need to be a better integration of patient values and preferences when using an EBP framework.

Procedures

To guide our evaluation, we used the patient engagement framework developed by Carman et al[2] which provides a structured approach for implementing and evaluating patient and family engagement within healthcare systems. Patient and family engagement is a continuum from consultation to involvement to shared leadership/partnership in 3 domains within the healthcare system: direct care, organizational design and governance, and policy making. While the goal is not necessarily engagement as shared decision making and partnership, there is increasing support for engaging stakeholders at some level along the continuum to enhance quality and safe person-centered care.

We evaluated 13 of the 19 EBP frameworks. Frameworks were excluded if they were developed for public health, management, and were designed for a single health system. We reviewed the original literature, books, and institution websites to gain a deeper understanding of the selected EBP frameworks' characteristics that we describe in Table 1. We evaluated engagement within each framework by comparing the framework's workflow/process, and ideal scenarios against the patient engagement principles described by Carman et al[2] Because the focus of this study was patient engagement within health systems, we evaluated stakeholder policy engagement at the level of the health system.

Frameworks were evaluated for integration of patients and families as stakeholders in EBP processes within each of the 3 domains: direct patient care, organizational design and governance, and policymaking. We rated models using 4 categories: no engagement, consultation, involvement, or shared leadership/partnership in each of the domains, meaning that each EBP model was evaluated in the 3 domains (Table 2). We rated frameworks at the shared leadership level (highest category) if they described shared processes and resources that facilitated engagement from question generation to dissemination of findings. Frameworks that lacked any description of patient preferences and values or consideration of patient perspectives were rated as no engagement (lowest category). Frameworks with minimal written procedures or listed resources were rated at the level of consultation level (low-middle category) and models with minimal description of how patients and families were engaged were rated at the level of involvement (middle category).

To ensure the consistency and accuracy of the ratings, an initial set of 4 frameworks was independently reviewed by each author. We met to compare our ratings and where there were discrepancies, we examined the EBP frameworks against the Carmen patient engagement principles together to establish 100% consensus. We independently reviewed the remaining frameworks and used an iterative process to come to 100% agreement. If an original article did not provide sufficient information to evaluate the framework, we would review secondary literature, if available, to assess patient engagement in the application of the framework to clinical practice.

Results

Of the 13 frameworks examined, we identified only 3 that exhibited a high degree of patient and family engagement across all 3 domains (see Tables 1 and 2). These models are the Iowa Model, the Johns Hopkins Model, and the Monash Partners Learning Health System Framework.[11,13,16] Additionally, 8 had no engagement of patients and family in the domains of organizational design and policy making and 2 of the frameworks had no engagement of patients and families across any of the domains.[5,8–10,12,14,15,17–19]

Discussion

Since the inception of EBP, incorporating patient values and preferences has been regarded as a fundamental principle,[3] underscoring the pivotal role patient and family engagement plays in clinical management. However, across various EBP frameworks, the integration of patient values and preferences primarily occurs during the individual patient-provider interaction phase,[5] which occurs after health systems have used

Table 1. Patient Engagement Processes in EBP Models and Frameworks.

Evidence-based practice frameworks	Components of engagement extracted from the literature
ACE Star Model[8]	• Measures patient outcomes • Does not mention processes for engaging patients.
Advancing Research and Clinical Practice[5]	• Focuses on supporting a culture for EBP. • Recommends the EBP paradigm (best evidence, clinical expertise, and patient values and preferences) for the implementation phase. • Does not include any structure or processes for engagement of patients.
Clinical Excellence Through Evidence-Based Practice[9]	• Recommends the integration of qualitative research on patient preference (if available) before the evidence can be determined to be applicable. • Identifies patient factors as critical appraisal components prior to piloting and implementing a change in clinical practice. • There is no description of how these data are obtained and the degree of engagement beyond consultation for direct care.
The Clinical Scholar Model[10]	• Focuses on patient values and preferences in the evidence and the patient experience during implementation.
The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care[11]	• Advocates for inclusion of diverse populations and diverse perspectives that reflect variation in priorities. • Promotes engagement by providing synthesis of literature if qualitative research is not available to gain additional insights from population of interest. • Uses co-design principles in implementation of pilot project with patient advisory boards and considers patient-led/patient-focused evaluation. • Reviews patient-specific data and learns patients' experiences and preferences; identifies patient outcomes; adjusts implementation plan. • Engages patients at policy level through advocacy for change in policy or practice; patient stakeholders may be part of the shared governance team.
Joanna Briggs Institute Model of Evidence-Based Healthcare[12]	• Does not specifically include patient involvement in EBP processes in the EBP manual. • Includes stakeholder engagement in the implementation manual. • Does not fully integrate patients as stakeholders in planning and implementation.
Johns Hopkins Evidence-Based Practice Model[13]	• Uses organizational data (eg, quality improvement or financial data, local clinical expertise, patient/family preferences) • Engages stakeholders which includes patients and/or families, patient and family advisory committee. • Includes evaluation of patient's perspectives in the levels of evidence. • Recommends the EBP team discuss potential harm associated with the best-evidence recommendations with patients, staff, or the community.
Knowledge to Action Framework[14]	• Engages stakeholders including patients and families. • Applies knowledge to local context. • Supports shared decision-making.
Model for Change to Evidence-Based Practice[15]	• Includes stakeholders in the first step of the process—stakeholders may or may not include patients and family. • Stakeholders are not represented in the remaining steps unless they participate in pilot testing. • Engagement limited to a consultation role.
Monash Partners Learning Health System[16]	• Engages stakeholders who include patients with lived experience of health conditions. • Supports stakeholder collaboration on priorities and outcomes. • Uses patient-reported experience and outcomes measures in the fifth step. • Includes education modules on how to engage stakeholders, such as planning for early involvement or codesign process.
The Practice Guidelines Development Cycle[17]	• Guides development of clinical guidelines. • Discusses the need for shared decision making on treatment and disease management.
Stetler Model of Evidence-Based Practice[18]	• Does not include patient preference and engagement in the EBP process.
Tyler Collaborative Model for Evidence-Based Practice[19]	• Aims to improve collaboration between academia and practice to support EBP. • Lacks description or discussion of patient engagement, assessment of patient values or preferences in the model.

Table 2. EBP Model/Framework Alignment with Patient Engagement Continuum.

	Direct care				Organizational design and structure				Policy making			
	None	Consult	Involve	Partner	None	Consult	Involve	Partner	None	Consult	Involve	Partner
ACE Star Model[8]					X				X			
Advancing Research and Clinical Practice Model[5]			X		X				X			
Clinical Excellence Through Evidence-Based Practice Model[9]		X			X				X			
The Clinical Scholar Model[10]		X				X			X			
Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care[11]				X				X			X	
Joanna Briggs Institute Model of Evidence-Based Healthcare[12]		X			X				X			
Johns Hopkins Evidence-Based Practice Model[13]				X			X			X		
Knowledge to Action Framework[14]			X			X			X			
Model for Change to Evidence-Based Practice[15]		X			X				X			
Monash Partners Learning Health System Framework[16]				X				X			X	
The Practice Guidelines Development Cycle Framework[17]		X			X				X			
Stetler Model of Evidence-Based Practice[18]	X				X				X			
Tyler Collaborative Model for EBP[19]	X				X				X			

evidence to implement changes in clinical practice. Engagement of patients and families as *principal stakeholders* should happen at the beginning of the EBP process when clinicians identify a clinical issue and generate the clinical question. In our evaluation of the 13 frameworks, only 3 frameworks described processes for patient and family engagement that encompassed both "asking the clinical question" and "implementation."[11,13,16]

The justification for initiating engagement from the outset, rather than exclusively focusing on shared decision-making, stems from the understanding that patients possess the requisite expertise and legitimate function to contribute to the design and implementation of their own care.[20] Patient engagement yields increased quality research as it aligns priorities set by both patients and researchers, heightens relevance to patient needs, and expands the potential for practical applicatio.[20] The exclusion of patients until the end of their care shortens their influence and autonomy in decision-making. While complete engagement across all scenarios and all tiers may not be optimal or feasible, opportunities exist to move beyond the lowest levels of engagement.[2]

Patient engagement is the cornerstone of quality clinical care. The question should shift from "What is the matter with you?" to "What matters to you?" Patient engagement across the entire EBP process, with patients assuming pivotal roles as key stakeholders throughout each phase shifts the question from "What is the matter with you?" to "What matters to you?" For most frameworks, patient engagement was not present or limited to consultation in the direct care domain.

The Iowa Model was an exemplary model for meaningful patient engagement. To facilitate engagement, the Iowa model provides recommendations and resources for each phase of implementation.[11] Recommendations include collaborative engagement to identify problems or issues in the initial phases. Patients are enlisted to provide input during the design of new processes. For example, patients are invited to co-design pilot projects in the implementation phase. Engagement continues through the dissemination and evaluation phases where patient evaluation is sought.

Carman's model can guide reconfiguring processes and streamlining patient stakeholder engagement across all phases of EBP frameworks.[2] Patient perspectives and experiences should be more formally evaluated as evidence that informs clinical practice. EBP frameworks can lay the groundwork for achieving the level of partnership and shared leadership. Future research should focus on strategies for implementing and evaluating meaningful patient engagement, including the effectiveness of processes and tools.

Our evaluation of 13 frameworks reveals a critical need for a more profound integration of patient and family engagement across various dimensions of healthcare, from direct care to organizational design and policy-making processes. The existing frameworks promote varying degrees of patient engagement, with few demonstrating comprehensive involvement, especially in the organizational policymaking domain. Patient engagement is challenging and even tokenistic.[21] Barriers include institutional policies and procedure; time and resources for training clinicians, patients, and families; and incorporating feedback.[21] In a systematic review on patient engagement, the authors identified one of the most significant barriers to integrating patient involvement into health services, policy, and research as the lack of clarity in how engagement is communicated, understood, and implemented.[20] This "conceptual muddle" leads to inconsistencies in interpreting and applying patient engagement practices, hindering the effective integration of healthcare systems.[22] Despite this, there is a greater need for healthcare tools to provide a path forward that fosters inclusive partnerships between patients, clinicians, and healthcare systems.

Conclusion

From the inception of EBP, patient values and preferences have been a core tenant. To achieve this fundamental principle, patient and family engagement should be clearly integrated into EBP models and processes. Our study highlights the inconsistent approach to engagement in EBP frameworks foundational to clinical practice.

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ORCID iD

Jarrod Dusin https://orcid.org/0000-0003-4394-9235

Statement of Human and Animal Rights

This article does not contain any studies with human or animal subjects.

Statement of Informed Consent

There are no human subjects in this article and informed consent is not applicable.

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