

BMJ Open Integrating patient values and preferences in healthcare: a systematic review of qualitative evidence

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ABSTRACT

Objectives To identify and thematically analyse how healthcare professionals (HCPs) integrate patient values and preferences ('values integration') in primary care for adults with non-communicable diseases (NCDs).

Design Systematic review and meta-aggregation methods were used for extraction, synthesis and analysis of qualitative evidence.

Data sources Relevant records were sourced using keywords to search 12 databases (ASSIA, CINAHL, DARE, EMBASE, ERIC, Google Scholar, GreyLit, Ovid-MEDLINE, PsycINFO, PubMed-MEDLINE, Scopus and Web of Science).

Eligibility criteria Records needed to be published between 2000 and 2020 and report qualitative methods and findings in English involving HCP participants regarding primary care for adult patients.

Data extraction and synthesis Relevant data including participant quotations, authors' observations, interpretations and conclusions were extracted, synthesised and analysed in a phased approach using a modified version of the Joanna Briggs Institute (JBI) Data Extraction Tool, as well as EPPI Reviewer and NVivo software. The JBI Critical Appraisal Checklist for Qualitative Research was used to assess methodological quality of included records.

Results Thirty-one records involving >1032 HCP participants and 1823 HCP-patient encounters were reviewed. Findings included 143 approaches to values integration in clinical care, thematically analysed and synthesised into four themes: (1) *approaches of concern*; (2) *approaches of competence*; (3) *approaches of communication* and (4) *approaches of congruence*. Confidence in the quality of included records was deemed high.

Conclusions HCPs incorporate patient values and preferences in healthcare through a variety of approaches including showing concern for the patient as a person, demonstrating competence at managing diseases, communicating with patients as partners and tailoring, adjusting and balancing overall care. Themes in this review provide a novel framework for understanding and addressing values integration in clinical care and provide useful insights for policymakers, educators and practitioners.

PROSPERO registration number CRD42020166002.

INTRODUCTION

The practice of evidence-based medicine (EBM) calls for patient values and preferences

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This is the first systematic review to identify and thematically analyse approaches to values integration in clinical care.
- ⇒ An extensive search strategy and well-defined study selection criteria were employed to find qualitative evidence related to this topic.
- ⇒ Systematic, transparent methods were used to appraise the quality of included records, extract and analyse data.
- ⇒ Thematic analysis can present limitations as it involves subjective interpretation of previously reported evidence.

to be considered and integrated by clinicians alongside the best available research and clinical expertise.¹ These three forces comprise the EBM 'triad' (figure 1) and, when conscientiously and judiciously applied² by healthcare professionals (HCPs), it is believed that optimal patient-centred care can be achieved.³

Delivering patient-centred care relies on understanding the patient's values and preferences at every stage,⁴ but acquiring this knowledge is challenging. Patients and their needs are heterogenous, difficult to predict, subject to change and dependent on many factors.⁵

Patient values and preferences are the unique understandings, preferences, concerns, expectations and life circumstances of each patient.⁶ *Values* are defined as a patient's attitudes and perceptions about certain healthcare options, and *preferences* are their preferred choices after accounting for their values.⁷

A recent systematic review of qualitative studies identified a taxonomy of what patients say they value in healthcare including uniqueness, autonomy, compassion, professionalism, responsiveness, partnership and empowerment.⁸ While this is useful for understanding what patients value and prefer, the question remains: How do HCPs *integrate* values and

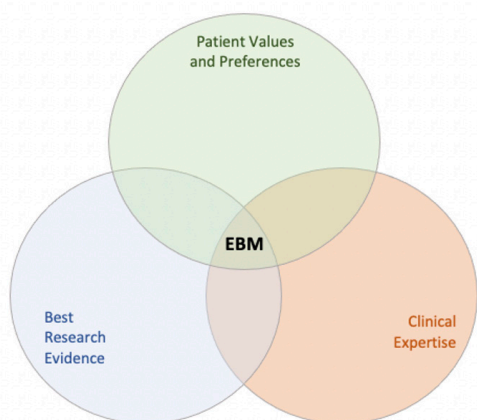


Figure 1 The evidence-based medicine (EBM) triad.

preferences into clinical care for individual patients? Very little research has been done on this critical component of EBM.

Research evidence (especially quantitative research, randomised controlled trials in particular)⁹ has received most of the attention in EBM, with less systematic consideration given to values integration which has been ‘almost completely ignored’,¹⁰ resulting in a paucity of data on values integration in clinical decision-making.¹¹

Research on patient values and preferences—and how HCPs approach values integration—tends to be reliant on qualitative evidence,⁸ a level of evidence that does not appear in the standard EBM hierarchy of evidence.^{12–14} Considerations for patient values and preferences are seldom encoded into clinical practice guidelines¹⁵ and there are no established methods for addressing values integration when developing guidelines.¹⁶

Non-communicable diseases (NCDs), also known as chronic diseases, are defined by WHO as conditions of long duration resulting from a number of physical, behavioural or environmental factors and account for 7-out-of-10 deaths worldwide.¹⁷ The four most common categories of NCDs include cancers, diabetes, cardiovascular (CV) diseases and chronic respiratory diseases. These are often managed in primary and secondary care settings¹⁸ and require ongoing therapeutic relationships involving more frequent HCP-patient interaction which makes values integration even more important.

Improvements in patient-centred care can lead to improved outcomes including lowering readmission rates, decreasing hospital length of stay, reducing mortality and better management of chronic diseases overall.¹⁷ Therefore, understanding how to better incorporate patient values and preferences in healthcare is an essential skill that can improve clinical outcomes¹⁹ and patient satisfaction²⁰ to help reduce the burden of NCDs.

The primary objective of this review is to identify and thematically analyse how HCPs integrate patient values and preferences in primary care for adults with NCDs.

METHODS

Methodology

This review used a meta-aggregation methodology.²¹ A protocol was prospectively published on the PROSPERO international register of systematic reviews, <https://www.crd.york.ac.uk/prospero/> registration no. CRD42020166002 (online supplemental appendix A).

Participants and phenomena of interest

Participants included practising HCPs in primary and secondary care: professionals with experience in direct patient care in non-inpatient and non-emergency settings, including doctors, nurses and other clinicians.²² Phenomena of interest included HCP approaches, behaviours, attitudes, perceptions, experiences, perspectives, opinions and observations regarding values integration in clinical care.

Information sources and search strategy

Authors were interested in current relevant practice so this review’s preplanned search considered studies and other evidence published between January 2000 and August 2020 with full text available in English reporting data derived from HCP participants. Only studies using qualitative methods including, but not limited to, interviews, focus groups, direct observations, surveys, narrative reviews or content analysis were included.

Search terms were identified and adapted from an initial scoping of databases and an analysis of text from titles, abstracts and index terms, followed by a systematic literature search of 12 databases (ASSIA, CINAHL, DARE, EMBASE, ERIC, Google Scholar, GreyLit, Ovid-MEDLINE, PsycINFO, PubMed-MEDLINE, Scopus and Web of Science). The search was tailored to the unique formats, operators and conventions of each database using a variety of search terms related to participants, phenomena of interest, context, setting and qualitative methodologies and methods (online supplemental appendix B).

Study eligibility and selection

Two reviewers (MT and GS) participated in a four-stage screening and selection process using the EPPI Reviewer software²³ including independent double-screening²⁴ of 10% of initial abstracts and titles, single screening of remaining titles and abstracts, full-text screening of all records not yet excluded and forward-backward search and screening of additional citations. Conflicts among screeners were resolved by conference and mutual agreement or by a third reviewer. Inclusion/Exclusion criteria were predetermined by reviewers including:

- ▶ Evidence type (excluded records that did not use any qualitative methods and did not report qualitative findings).
- ▶ Date (excluded records published before the year 2000).
- ▶ Language (excluded records for which full text was not available in the English language).

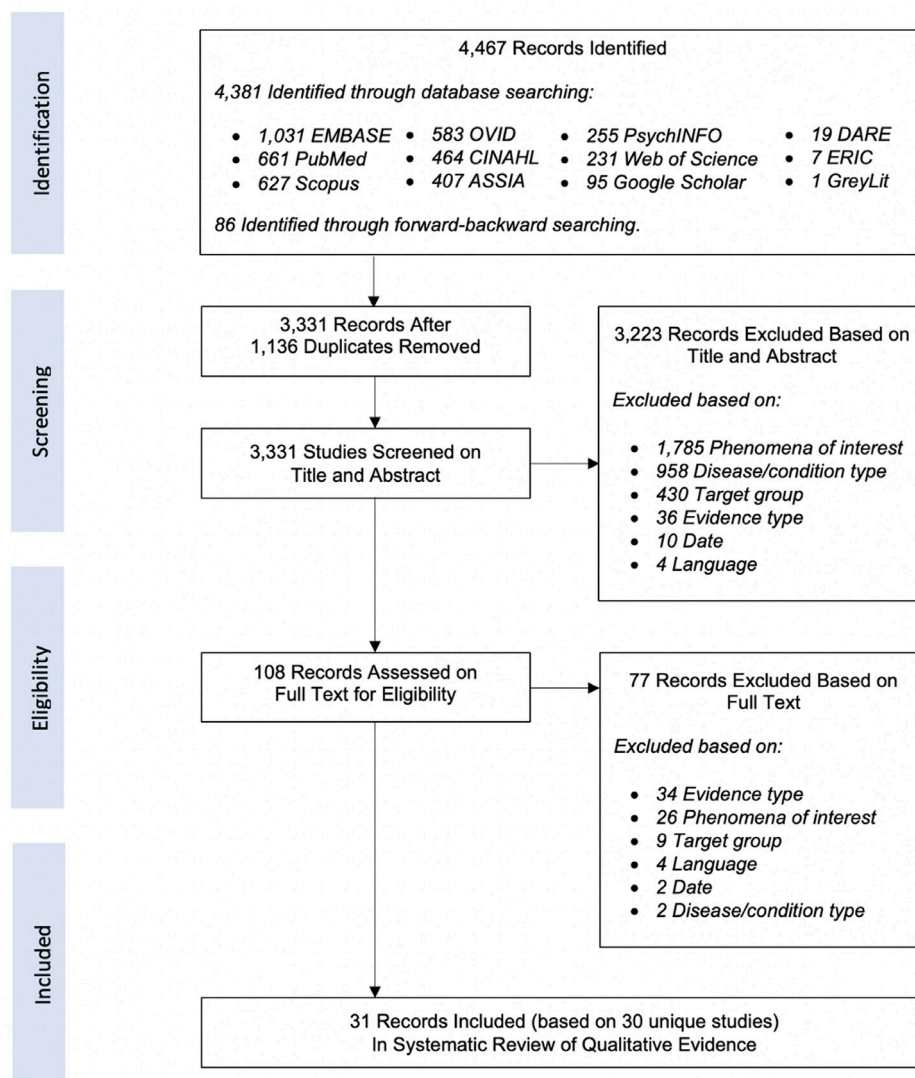


Figure 2 Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram.

- ▶ Phenomena of interest (excluded records that did not report findings related to incorporating patient values and preferences).
- ▶ Target group (excluded records that did not involve HCP participants, or were not concerned with HCP interactions with adult patients).
- ▶ Disease/Condition type (excluded records that did not refer to primary or secondary care or one of the top four most common NCD categories (oncology (cancers), CV, endocrine related (diabetes) and respiratory)).

Appraisal of quality

The objectivity of qualitative research can be strengthened through the use of quality methods.²⁵ This review used the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Qualitative Research,^{21 26 27} a validated tool to help determine the methodological quality of included records in systematic reviews (online supplemental appendix C).

Extraction, synthesis and analysis

This review employed meta-aggregative methods for extraction, synthesis and analysis.²¹ Data including participant quotations, authors' observations, interpretations and conclusions were extracted in a phased approach using a modified version of the JBI Data Extraction Tool²⁷ (online supplemental appendix D). One author (MT) with experience in qualitative methods and coding conducted line-by-line coding using NVivo²⁸ computer software allowing for simultaneous coding and an initial synthesis of the information.²⁹

Using an inductive approach, extraction began with reading and re-reading records to become familiar with the content followed by hand-coding of all records. This enabled the development of a preliminary coding scheme for organising and managing data in NVivo, wherein the author continued to inductively and iteratively code the data. Codes were collated, analysed, grouped and categorised into a number of increasingly narrow sets of codes based on statements and ideas across data. Themes,

developed from the codes, were further synthesised based on patterns and similarities in their meaning to arrive at a final set of primary themes that could be used as a basis for a meaningful summary and interpretation. Themes were only considered if there were two or more codes underlying the theme.

Excluded data

Some records reported mixed methods, but quantitative data and/or data not derived from HCP participants were excluded from this review.

Patient and public involvement

It was not appropriate or possible to involve patients or the public in the design, conduct, reporting or dissemination plans of this systematic review. However, a minority of the included records reported patient and public involvement in their methods.

RESULTS

Included records

The initial search identified 3331 records and after full-text screening 31 records were included (figure 2).³⁰ No systematic review regarding values integration was published between 2000 and 2020.

Characteristics of included records

Most records were peer-reviewed published reports of original research, two are separate reports from the same study,^{31 32} and one was an unpublished dissertation³³ (table 1). The most common methods of data collection were interviews (in-depth, semi-structured (in-person and telephone)) in 17 studies,^{31 32 34–48} observations (real-time, in-person or audio/video recordings) in 9 studies^{33 34 39 48–53} and focus groups in 6 studies.^{40 41 54–57} Other methods included surveys,^{45 55 58} Delphi technique,^{45 48} narrative description,³⁴ narrative review,⁵⁹ document analysis,³⁶ evidence review,⁶⁰ research work groups,¹¹ chart audits,³⁴ note taking³⁴ and video reflexive ethnography (VRE).⁶¹ Nine studies employed more than one method.^{33 34 36 39–41 45 48 55}

At least 1032 HCP participants are represented in the included records, including 477 nurses/nurse practitioners, 417 physicians and 138 other HCP types including allied health professionals, pharmacists, clinical administrators, nutritionists, social workers and patient decision coaches. At least 1823 HCP-patient consultations, encounters or interactions (either observed or described) in various clinical settings are represented in the records.

Nearly half of the studies included were conducted in North America with 15 in the USA and 2 in Canada, followed by 5 in the UK, 3 in Australia, 3 in the Netherlands, 2 in Norway and 1 each in Belgium, Italy, Malaysia and Portugal.

Methodological quality of included records

Confidence in the quality of included records was deemed high. Most used appropriate qualitative methodologies,

methods and analytical approaches, resulting in meaningful findings and conclusions. However, most records failed to provide adequate reflexive statements locating researchers theoretically or culturally, and also failed to address the researchers' influence on the research and vice versa (online supplemental appendix C).

FINDINGS

This review identified 143 approaches—specific behaviours, actions, practices or experiences of HCPs—to integrating patient values and preferences in clinical care. These were thematically analysed and synthesised into four primary themes—approaches of concern, competence, communication and congruence—and several subthemes (table 2). See online supplemental appendix E for a complete list of approaches.

Approaches of concern

HCPs incorporate patient values and preferences when they demonstrate concern for the patient as a unique individual and as a partner in their own care, and show concern for diseases and their effects on the patient.

This includes *advocating* on a patient's behalf,¹¹ such as talking to HCP colleagues to get additional insights, making referrals to other specialist or advocating for second opinions on conditions and treatments.⁴⁴

'Advocates for the patient (includes willingness to circumvent or adapt the system) and Physicians' advocacy within (or around) the health-care system helps patients implement jointly negotiated decisions.'¹¹

HCPs use *caring and connecting* behaviours like acting in a sincere,⁴⁵ relational¹¹ and empathetic manner, making the patient feel comfortable and creating a safe space to talk, question and/or disagree,³³ and using expressive touch.⁴⁸ Treating the patient as unique⁴⁵ and seeing the patient's perspective⁴⁸ are also approaches that demonstrate concern which can include HCPs sharing their own personal experiences, interests or feelings.¹¹ HCPs also show compassion, empathy and basic human concern⁴⁷ without being judgmental.⁴⁵ Other such approaches include remaining present, mindful and 'in the moment'⁴⁸ while providing care for immediate concerns, and incorporating preventative care to demonstrate concern for the patient's overall well-being.³⁴

'A physician participant highlighted the importance of the physician's effort to act in a relational way by saying, "...Express caring in that interaction—this is what the physician can do. And the quality of that caring is what enhances the intrinsic motivation of the patient to take the responsibility".'¹¹

HCPs also show concern by *empowering* the patient through approaches that value the individual, enable self-management and promote patient agency by recognising, confirming and validating patient autonomy¹¹ and

Table 1 Characteristics of included records

Study	Method(s)	Analytical approach	HCPs (n)	Practice setting(s)	HCP experience	Encounters observed	Location	Number of findings (online supplemental appendix E)
Alta V <i>et al.</i> ³⁴ (2005)	Chart audits, interviews, narrative descriptions, note taking, participatory observations	Coding, group analysis, themes	Physicians (44)	18 Family practice clinics	Unspecified	1500	USA	25
Chhabra KR <i>et al.</i> ⁴⁹ (2013)	Observations of audio-recorded consultations	Theme-oriented discourse analysis	Oncologists (15)	2 Cancer centres	Unspecified	20	USA	27
Davis K <i>et al.</i> ³⁵ (2017)	Semi-structured interviews	Coding, themes	Physicians (33)	Multiple clinics in 2 HMO territories	Mean 13–20 years	N/A	USA	20
Elwyn G <i>et al.</i> ⁵⁴ (2000)	Focus groups	Codes, themes	GPs (6)	6 Service settings	Mean 12 years	N/A	UK	40
Feiring E <i>et al.</i> ³⁶ (2020)	Document analysis, in-depth interviews	Thematic analysis	Various (8)	4 Specialist institutions	Unspecified	N/A	Norway	16
Ford S <i>et al.</i> ³² (2002)	Semi-structured interviews	Constant comparative analysis	Various (37)	Hospitals and clinics	Unspecified	N/A	UK	17
Ford S <i>et al.</i> ³¹ (2003)	Semi-structured interviews	Constant comparative analysis	Various (37)	Hospitals and clinics	Unspecified	N/A	UK	54
Ford S <i>et al.</i> ⁵⁰ (2006)	Observation of video-taped consultations	Thematic coding	GPs (13)	12 GP surgeries	Unspecified	149	UK	16
Friedberg MW <i>et al.</i> ³⁷ (2013)	Semi-structured interviews	Codes, themes	Various (23)	8 Primary care	Unspecified	N/A	USA	23
Golden SE <i>et al.</i> ³⁸ (2017)	Interviews	Directed content analysis	Various (20)	7 Medical centres	Mean 12 years	N/A	USA	30
Gruß I <i>et al.</i> ³⁹ (2019)	Observations, semi-structured interviews	Codes, template analysis	Physicians (8)	1 Cancer clinic	Unspecified	8	USA	24
Hall J <i>et al.</i> ⁵⁹ (2011)	Narrative review	Narrative review	Various (unspecified)	N/A	N/A	N/A	USA	18
Hart PL <i>et al.</i> ⁵⁸ (2014)	Mail survey	Thematic analysis	Nurses (374)	Hospital (43%) Non-hospital (57%)	Mean 22.4 years	N/A	USA	10
Hisham R <i>et al.</i> ⁴⁰ (2016)	Focus groups, in-depth interviews	Thematic analysis	Physicians (18)	2 Rural clinics	Mean 6.2 years	N/A	Malaysia	7
Jefford M <i>et al.</i> ⁶⁰ (2002)	Review	Review	Doctors (unspecified)	Unspecified	Unspecified	N/A	Australia	27
Kennedy BM <i>et al.</i> ⁵⁵ (2017)	Focus groups, survey	Thematic categorisation	Various (7)	1 Rural clinic	Median 12 years	N/A	USA	18
Landmark AM <i>et al.</i> ⁵¹ (2016)	Observations of video-recorded encounters	Conversation analysis	Physicians (17)	1 University hospital	Unspecified	17	Norway	34
Lown B <i>et al.</i> ¹¹ (2009)	Research work groups	Constant comparative analysis and grounded theory	PCPs (41)	Hospital-based practices	'At least >3 years postresidency'	N/A	USA	49
McLeod H ³³ (2017)	Observations of video-recorded encounters, VRE	Grounded theory	PCPs (17)	1 Hospital-based clinic	Unspecified	15	USA	89
Murdoch J <i>et al.</i> ⁵² (2020)	Observations of video-recorded consultations	Conversation analysis	GPs (5)	3 General practices	Range <10 to >20 years	22	UK	37

Continued

Table 1 Continued

Study	Method(s)	Analytical approach	HCPs (n)	Practice setting(s)	HCP experience	Encounters observed	Location	Number of findings (online supplemental appendix E)
Paiva D <i>et al.</i> ⁵⁶ (2019)	Focus groups	Grounded theory	Various (12)	1 Institution	Range 1 to >10 years	N/A	Portugal	36
Pieterse AH <i>et al.</i> ⁵³ (2011)	Observations of video-recorded consultations	Coded and categorised observations	Radiation oncologists (10)	1 Hospital	Median 7 years	25	The Netherlands	35
Salter C <i>et al.</i> ⁴¹ (2019)	Focus group, interview, observations of video-recorded consultations	Thematic analysis	GPs (5)	3 General practices	Range <10 to >20 years	40	UK	40
Schulman-Green DJ <i>et al.</i> ⁵⁷ (2006)	Focus groups	Content analysis	Various (11)	Hospital-affiliated practices	Unspecified	N/A	USA	14
Shepherd HL <i>et al.</i> ⁴² (2011)	Telephone interviews	Framework analysis	Physicians (22)	Unspecified	Mean 24 years	N/A	Australia	19
Shortus T <i>et al.</i> ⁴³ (2011)	In-depth interviews	Grounded theory, constant comparison	Various (29)	'...a range of clinical settings...'	'...a range of clinical experience...'	N/A	Australia	29
Tracy CS <i>et al.</i> ⁴⁴ (2003)	Semi-structured interviews	Constant comparative method	FPs (15)	15 Practices	Range 2–32 years	N/A	Canada	18
Van Humbeeck L <i>et al.</i> ⁴⁵ (2020)	Delphi, cognitive interviewing, survey	Thematic analysis	Various (174)	2 Hospitals	Range <1 to >21 years	N/A	Belgium	26
Vermunt N <i>et al.</i> ⁴⁶ (2019)	Semi-structured interviews	Framework analysis	Physicians (33)	Hospitals and community clinics	Range 3–34 years	N/A	The Netherlands	29
Visser LNC <i>et al.</i> ⁴⁷ (2018)	Semi-structured interviews	Content analysis	Oncologists (13)	Academic and general hospitals	Range 4–41 years	N/A	The Netherlands	31
Zulman DM <i>et al.</i> ⁴⁸ (2020)	Delphi, interviews, observations	Evidence review	Physicians (18)	Primary care clinics at 1 academic medical centre, 1 VA hospital, 1 federally qualified health centre	Unspecified	27	USA	47

HCP experience early career <11 years, mid-career 11–20 years, late career ≥21 years.⁸⁸

*Ford 2002 and Ford 2003 are two reports from the same study.

CV, cardiovascular; DAS-O, decision analysis system for oncology; GP, general practitioner; HCP, healthcare professional; HMO, health maintenance organisation; N/A, not applicable; PCP, primary care physician; VA, veteran's administration; VRE, video reflexive ethnography.

Table 2 Taxonomy of themes: approaches to values integration

Concern	Competence	Communication	Congruence
<ul style="list-style-type: none"> ▶ Advocating ▶ Caring and connecting ▶ Empowering ▶ Inviting ▶ Partnering ▶ Sensing 	<ul style="list-style-type: none"> ▶ Decision making ▶ Managing ▶ Professionalism 	<ul style="list-style-type: none"> ▶ Acknowledging ▶ Clarifying ▶ Encouraging ▶ Exchanging information ▶ Exploring ▶ Language ▶ Listening ▶ Summarising 	<ul style="list-style-type: none"> ▶ Adjusting and tailoring ▶ Balancing and flexibility

respecting privacy.⁴⁵ Empowering also includes creating an environment of equality,⁵⁴ establishing trust by sharing control,¹¹ inviting the patient to lead⁴¹ or to set the pace³¹ in clinical encounters, letting the patient have the final say in decisions⁴⁵ or providing opportunities to reconsider previous decisions.⁵⁴

‘The patient is enabled to keep control of his or her own situation. The patient has authority in the decision-making process.’⁴⁵

HCPs also show concern by *inviting* the involvement of others³⁸ in clinical decision-making, such as asking loved ones, family or caregivers⁴⁵ to help the patient make choices, or seeking input from colleagues, specialists and other HCPs for advice or second opinions.¹¹

‘You have to have the team. You have to have the physician buy-in. And often I ask them to bring somebody with them so that there’s somebody else there who can hear the conversation....’³⁸

HCPs show concern by *partnering* with the patient⁴⁸ by investing time with them,⁴¹ cultivating mutual respect to form a ‘therapeutic alliance’³³ and treating the patient as an equal partner.³¹ Understanding the patient is a key element of partnering⁵² as well as taking a long-term view of the patient’s care.

‘Partnership process—strategies to establish and maintain a partnership with the patient.’⁴⁸

HCPs also show concern by *sensing*, that is, perceiving and acting in a sensitive manner, including interpersonal sensitivity,⁵⁹ cultural sensitivity⁵⁸ or showing respect and deference for religious beliefs.³³ HCPs also may use intuition in the clinical encounter⁵⁹ to sense patient moods and feelings.

‘There are two basic types of interpersonal sensitivity. The first type is simply to notice (and, relatedly, remember) the other person’s appearance, words, or nonverbal behavior. And The second, and most commonly investigated, kind of interpersonal sensitivity involves accuracy in interpreting cues.’⁵⁹

Approaches of competence

HCPs incorporate patient values and preferences when they competently address diseases, share decision-making, understand and use research evidence and professionally manage patient care.

Competence includes many behaviours including *decision making*, when HCPs competently engage with the patient to support, direct and share decision-making. Shared decision-making (SDM) was one of the most frequently mentioned approaches to incorporating patient values and preferences in the records. It is its own discipline in the patient-centred care paradigm with many adherents and a large body of evidence regarding its use and effectiveness with several SDM methods and techniques. However, as its name implies, SDM addresses values integration when making treatment decisions and does not account for the predecision-making and postdecision-making values and preferences that are important to patients and HCPs in their overall long-term relationships.

‘The physician sharing decision making acknowledges that power is shared and integrates the patient’s preferences into a mutual decision.’¹¹

SDM also involves HCP competence with research evidence⁵⁴ as well as skills to help formulate the patient’s stance on issues and options,⁵¹ or to negotiate decisions.¹¹ HCPs may also use decision aids or tools to assist the patient in making treatment decisions³⁹ or use vivid descriptions,⁵¹ a technique to aid the patient in arriving at their own conclusions. SDM also includes directing behaviours that involve the HCP giving their own opinion or recommendation to the patient⁴⁶ when asked or when the patient is unable to make a decision.³³ It also involves listing, an action by HCPs to suggest or ‘draw out patients’ views about possible choices’.⁵⁴

‘[If] you ask [patients] what they think is wrong with them, then they won’t tell you. But if you give them a list of things that are in your mind, then they will usually identify some of their concerns.’⁵⁴

HCP competence also includes *managing* the patient care process to help achieve mutual goals without controlling the patient, including working on mutually setting an agenda⁴¹ and priorities.⁴⁸ This also includes negotiating

with patients to help them understand, assess, weigh and prioritise options,⁵² gaining clarity on agreements and disagreements¹¹ and openly discussing the pros and cons of options.⁴⁶ All of this is with the intent of eventually gaining agreement on issues, mutual roles, possible solutions and next steps.⁴³ Managing also refers to managing patient emotions which includes efforts to reduce patient anxiety and distress,³¹ exploring and responding to emotions, allowing time for patients to process emotions as well as HCPs displaying their own emotions.⁴⁷ Managing also involves planning and preparing behaviours such as action plans for treatment,³⁷ agreeing on priorities,⁴⁸ arranging follow-ups⁴⁶ and collaborative goal setting.⁵² It also includes preparing for the clinical encounter to maximise the efficiency of time with the patient and readiness to elicit and incorporate values and preferences.⁵²

Another competency is to manage the administrative processes that are needed to support values integration, such as having clear systematic processes for patient encounters and consultations,⁴⁶ using electronic health records and other methods of record keeping to capture and encode patient values and preferences for future access,⁴⁸ leaving time for questions in the encounter,³⁸ having smooth continuity of care including a system for follow-up⁵⁶ and collaborative action planning.⁴¹

‘This process involved a significant investment of time, negotiation, deliberation, and shared decision making about the steps towards goal attainment, as well as setting a nominal target.’⁴¹

Competent management also includes *professionalism*, that is, approaching the patient in a professional and honest manner. Honesty, transparency,³⁸ responsiveness⁴⁵ and a reality-based approach⁴³ to the patient play an important role in patient-centred care and values integration, as well as being consistent with information, care and decisions.⁵⁶

‘Professional responsiveness, Professionalism—Healthcare providers explain what is possible and what is not...Healthcare providers are honest with patients...Healthcare providers do not judge the patient’s situation...Healthcare providers respect the patient’s privacy.’⁴⁵

Approaches of communication

HCPs incorporate patient values and preferences when they successfully communicate with the patient as a partner, share information and evidence and manage patient engagement.

This includes approaches like *acknowledging* the patient’s efforts to get and stay healthy or to adhere to treatment plans,⁴⁸ as well as expressing support or reassurance for the patient’s preferences and validating their choices.⁵³

‘The second component of the practice involves acknowledging specific patient efforts in a genuine and positive manner.’⁴⁸

Values integration through communication also includes *clarifying* the patient’s stances by checking on the status of their choices, feelings, values and preferences,⁴¹ framing and reframing⁵² to help clarify their positions and repeating to reinforce patient preferences.⁵⁶ It also includes revisiting patient decisions over time⁴³ as patients may change their minds. Values clarification methods⁴⁵ are also described in which HCPs actively engage with the patient to discuss positive and negative characteristics of options to clarify which are most important to the patient.

‘The mutual clarification of values can be a rewarding exercise, as it not only ensures the best possible decision but also demonstrates to patients a genuine interest in incorporating their views.’⁴⁵

Another communication approach is *encouraging* the patient to be active in the process, to participate in the clinical encounter/conversation,⁴⁹ encouraging patient questions³¹ and patient storytelling.³³ One technique, motivational interviewing, ‘uses an empathic non-confrontational style to increase the motivation for behaviour change, engage patients with treatment and build therapeutic relationships’.⁵⁶

‘By comparison, providers preferring “personalized care” described their approach as encouraging rather than persuasive, and they were more accepting of different priorities and preferences.’⁴³

Values integration via communication also includes *exchanging information* including explaining or defining the clinical problem⁴⁶ or sharing necessary biomedical information with the patient and informing them of the facts of the condition or diagnosis.³⁹

‘Clinicians emphasized sharing medical information with patients. We observed a few instances during which clinicians also prompted discussion of patients’ goals and values. Clinicians reported a clear rationale in interviews as to why sharing biomedical information was central for them.’³⁹

Information exchange also includes sharing and presenting research evidence,³⁹ as well as a willingness to see more information and encouraging patients to seek more information.¹¹

‘There was a general view that evidence-based information regarding diagnosis and treatment options must be shared with patients during a consultation.’³¹

Information exchange also includes patient education,⁶⁰ coaching,⁴⁸ tailoring information for the patient as well as using teaching aids, written materials⁶⁰ or other educational interventions.⁵⁵ Interviewing and eliciting approaches are other forms of information exchange and they were the most frequent behaviours described in the records. HCPs use various approaches to gain information from the patient, including directly eliciting patient values,⁴⁹ preferences,³⁵ goals⁵⁷ and circumstances,³¹ sometimes referred to as patient-centred clinical interviewing.³⁴

It also involves getting patients to appraise various preferences openly and to identify their favoured choices.⁵³

‘...this meant providing current information, risks and benefits, eliciting questions and adjusting information to patients’ needs, being honest about the limits of the physician’s and scientific knowledge, and presenting an opinion.’¹¹

Communication also includes *exploring*, asking open-ended questions to better assess patient values, preferences and expectations.³⁴ Studies noted the importance of openly exploring alternatives with the patient and exploring the clues and cues—verbal and non-verbal—that patients often provide.³¹

‘Explore ideas, fears, and expectations of the problem and possible treatments. And, Informants stated that experienced practitioners are continually alert to signals that patients accept the level of involvement being required of them and adapt accordingly.’⁵⁴

Values integration also occurs through *language* when HCPs use tones and techniques such as deferential, directive or inviting language,⁴⁹ emotion-oriented speech⁴⁷ or common language, terms or phrases with patients,³⁸ all of which can support the patient’s values, preferences and autonomy.

“Deferential” language...physicians did not evaluate each treatment on behalf of the patient. Instead, they used language that minimized their role in the patient’s decision and deferred to the patient’s autonomy.⁴⁹

HCPs also integrate values by *listening*, including active listening without interruption⁵⁹ or simple silence as a response to certain patient emotions.⁴⁷

‘The most frequently mentioned skill was the ability to listen. Listening to patients was seen as a basic skill to enable “assessment of the language that patients use in order to pitch information level” and to

“encourage discussion by listening to patients’ views without interruption”.’³¹

When HCPs *summarise* information, choices or next steps for patients, they are also integrating values. This can be done as written or audio summaries of clinical discussions⁶⁰ or summaries of the encounter³¹ at the end of clinical visits to ensure that the HCP and patient depart with a mutual understanding of the decisions and next steps. This also allows patients to more easily share information with caregivers or other HCPs.

Approaches of congruence

HCPs incorporate patient values and preferences when they customise and harmonise care for each patient and balance their overall approach to care considering the patient’s values and preferences, the best available research evidence and their own clinical expertise.

Specifically, HCPs seek congruence by *adjusting and tailoring* care for each unique patient. HCPs adjust information based on a patient’s needs, values and preferences,¹¹ as well as tailor options for the patient³⁶ according to the many factors that must be considered within the realm of the research evidence, the patient’s values and the HCP’s own expertise.

‘Identify preferred format and provide tailor-made information...This competence consists of making the correct range of options available and listing them in a logical sequence and in sufficient clarity so that patients perceive the opportunity to take part in the decision.’⁵⁴

HCPs also seek congruence by maintaining *balance and flexibility* regarding patient needs, values, information, communication style, decision-making, clinical/treatment approaches and roles.⁵⁰ This also refers to HCP efforts to balance multiple factors such as evidence, information, issues, mutual needs, shared power and responsibilities for and with the patient.⁵⁶

‘The informants stressed the importance of maintaining flexibility: adherence to the “informed choice” approach was considered “another form of paternalism”.’⁵⁴

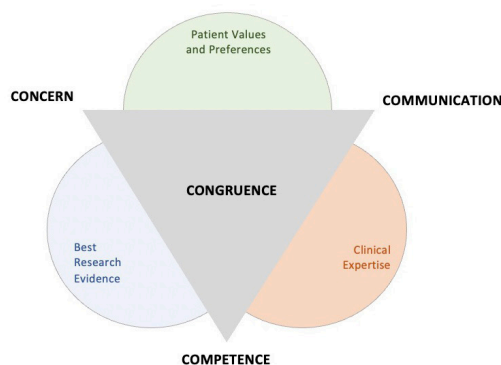


Figure 3 The EBM triad and primary themes of approaches to values integration.

DISCUSSION

Incorporating patient values and preferences in health-care is critical for patient-centred care, but it is complex and requires medical knowledge as well as ‘soft skills’ such as social, psychological and communication proficiencies.⁶² The themes developed in this review provide a useful model for better understanding, exploring and teaching this topic. When plotted on the EBM triad (figure 3), these themes also provide a useful framework for operationalising values integration into evidence-based clinical practice.



Our findings fit well into the existing EBM discussion and contribute new evidence to this discussion by identifying and thematically analysing, for the first time, the specific behaviours and approaches that practising HCPs use to integrate patient values and preferences into everyday clinical care.

Previous studies have described the importance of approaches that show concern for patient autonomy,^{32 60} taking feelings seriously,³³ seeing the patient as a person and showing concern about their problems, diseases, effects, treatments and research evidence,^{32 63–67} as well as advising HCPs to make ‘statements of concern, empathy and reassurance’.⁶⁷

Previous studies have also described ‘the competences of involving patients in healthcare choices’.⁵⁴ the competencies required for SDM,³² technical competencies for involving patients,⁵⁰ ‘culturally competent care’.⁵⁸ ‘competencies they (HCPs) can execute to involve patients in decision making’¹¹ and the importance of medical competency for HCPs.⁸

Previous research has also emphasised ‘provider-patient communication as key to achieving patient-centred care’.⁶⁵ patient-centred⁵⁴ and physician-patient communication³² and the importance of skills to ‘communicate with patients about their treatment options’.³⁷

Finally, other EBM literature encourages HCPs to ensure that ‘clinical goals are congruent’ with patient goals,³⁴ to ‘achieve congruence in the consultation’.⁵⁰ to strive for ‘congruency between (the patient’s) preferred and actual involvement in decision making’.⁶⁴ to seek ‘congruence between (patient’s) options and their values’⁶⁸ and to find ‘more balance between science, clinical expertise and patient values’.⁸

Strengths and limitations

This review used accepted, thorough and systematic methodologies and methods for qualitative synthesis, and included a wide range of databases in the search for records. Authors’ interpretations and participant quotes were included extensively throughout the review. There remains a possibility that evidence has been missed searching only records published from 2000 in English, however adherence to robust systematic review methods helped to minimise this limitation.

Although there is a paucity of qualitative studies explicitly on the topic of ‘integrating’ or ‘incorporating’ patient values and preferences, this review identified records on related topics such as ‘patient-centred care’, ‘implementing SDM’, ‘HCP-patient communications’, ‘eliciting goals’ or ‘managing patient involvement’ and similar. There were 17 previous reviews on related topics,^{8 63–78} which did not qualify for inclusion in this review. However, a forward-backward search of references in those reviews identified four records already selected for inclusion in this review^{44 49 54 57} strengthening confidence in the robustness of this review and saturation of the topic. The original record search period between January 2000 and August 2020 is now 2 years old and, while no

other qualitative systematic review has been published on this topic between August 2020 and October 2022, it is possible that additional qualitative evidence has been published which is not included in this review.

Double screening is considered best practice for systematic reviews, with single screening recommended primarily as an ‘appropriate methodological short cut’⁷⁹ for experienced researchers.²⁴ We double-screened 10% of titles/abstracts and included reviewer discussions and debates to arrive at mutually agreed screening criteria, before single screening was conducted for the remaining records. One author conducted the initial coding and further developed themes in discussion with other authors. All authors contributed to the review, analysis and interpretation of findings.

Rigorous thematic analysis methods were used to synthesise the findings and identify key themes and ideas across all records. Thematic analysis involves interpretation of other researchers’ previous interpretations which can present limitations. To minimise this limitation, we extensively reported direct verbatims and transcripts from HCP participants and authors when describing concepts, themes and subthemes to prevent misinterpretation of the original evidence.

Implications for policy and practice

Integrating patient values and preferences in modern clinical practice is important and impacts health outcomes.⁸⁰ Findings from this review could help improve health policy, HCP clinical performance or patient satisfaction and outcomes by describing specific and practical patient-centred approaches to values integration.

These findings can aid the inclusion of values integration in clinical guidelines which so far has been limited¹⁵ and for which there are few systematic standards.¹⁶ However, encoding values and preferences into a single guideline has challenges, so individual HCP skills to elicit and incorporate patient values and preferences will always be necessary.⁸¹

Medical education and training emphasises patient-centred care and values integration in theory, but HCPs receive inadequate instruction on the skills needed to deliver it.⁸² This review’s primary themes and descriptions of specific approaches provide a theoretical and practical framework for education and training on this topic.

Scope of practice varies for physicians, nurses, allied health professionals and others, but this review shows they each have a role in—and something important to contribute to—values integration. These findings can influence policymakers who should consider the entire continuum of care and provide training, tools, funding and support and encourage values integration at every level of care delivery. These findings also offer a structure to educate and assess HCPs and organisations as a whole on values integration beyond the consultation and ‘throughout the care delivery at every point’.⁸³ HCPs and health systems need to consider patient values and preferences beyond just treatment decisions⁵ and this study

underscores the need to be aware of, and skilled at, a number of approaches.

This review can inform clinical practice to improve HCP-patient encounters, develop patient-centred tools and improve patient outcomes¹⁹ and satisfaction.²⁰ Advanced practice providers could benefit from better clinical communications skills⁸⁴ and the approaches described in this review could provide a guide for improvement. Despite evidence that patient decision aids improve specific outcomes,⁸⁵ many HCPs do not use them⁸⁶ due to lack of awareness, availability, difficulty of use or inappropriate context. Findings from this review could be useful in guiding tool developers to make and disseminate more effective decision aids.

Future research

The broad themes described in this review provide multiple areas for future study. The primary themes of concern, competence, communication and congruence should be explored further. While shared decision-making and HCP-patient communication are already well-represented in the literature, more study is needed on other approaches such as caring and connecting, planning and preparing or goals setting, to name a few. Future research could consider whether the themes described in this review vary, or are more common, among specific NCD groups, HCP types or care settings.

There is significant research in the area of SDM between HCPs and patients, but very little in the area of values integration outside of the decision-making process. Future research should explore this gap. Future studies could also seek to quantify many of the qualitative findings from this review to collect evidence on what contributes to better outcomes. Many of the approaches described from the data and the resulting themes may be applicable to clinical care for other chronic diseases, but separate independent studies are encouraged.

Finally, the theme of congruence described in this review—how HCPs tailor, adjust, balance and harmonise approaches for each patient—needs more scientific consideration. It is under-represented in the published literature, yet it represents the essence of EBM: the ‘conscientious, explicit and judicious’⁸⁷ integration of patient values and preferences with the best research evidence and clinical expertise.

Reflexivity statement

The principal investigator for this review was a part-time graduate student (MT) at the University of Oxford while residing and working full-time in the USA in the pharmaceutical industry. MT has experience in designing, executing and analysing qualitative methods involving focus groups, interviews, Delphi methods, surveys and literature/content analysis for health-related research. MT has authored or coauthored peer-reviewed and published articles, however, had not previously conducted a systematic review. MT is not a clinician but has worked with clinicians for >25 years in hospital administration,

health education and communications, research, policy and advocacy.

Author GS, living in Canada, has a clinical background, and was also enrolled in the same Oxford graduate programme. Authors A-MB and CH live in the UK, are both faculty members from the University of Oxford’s MSc in evidence-based healthcare programme. Both have academic and/or clinical backgrounds that include researching, writing and teaching extensively on EBM and the role of patient values and preferences. They provided supervision throughout the review.

CONCLUSION

HCPs incorporate patient values and preferences in healthcare through a variety of approaches including: *concern* for the patient as a person as well as diseases and their effects; *competence* at skillfully addressing diseases, research evidence and managing patient care; *communication* with the patient as a partner, sharing information and evidence and productively managing patient encounters; and *congruence* to tailor, adjust and balance their approaches to overall care for each patient. Themes in this review provide a novel framework for understanding and addressing values integration in clinical care and provide useful insights for policymakers, educators and practitioners.

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Contributors As principal investigator, MT led the planning, conduct and reporting of the study, submitted the manuscript and is responsible for the overall content as guarantor. As research assistant, GS contributed to the conduct of the literature screening and review as well as provided review and editing of the manuscript. As research supervisors, A-MB and CH contributed to the planning, oversight and reporting, as well as provided review and editing of the manuscript.

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