ORIGINAL RESEARCH

Primary Care Physician Perspectives on the Influence of Patient Values, Health Priorities, and Preferences on Clinical Decision-Making for Complex Patients with Multimorbidity: A Qualitative Study

Linnaea Schuttner ^{1,2}, Jenney R Lee^{1,3}, Stacey Hockett Sherlock^{4,5}, James D Ralston^{6,7}, Ann-Marie Rosland^{8,9}, Karin Nelson^{1,2}, Carol Simons¹, George G Sayre^{1,7}

¹Health Services Research & Development, VA Puget Sound Health Care System, Seattle, WA, USA; ²Department of Medicine, University of Washington, Seattle, WA, USA; ³Department of Urology, University of Washington, Seattle, WA, USA; ⁴Comprehensive Access & Delivery Research and Evaluation (CADRE) Center, VA Iowa City Health Care System, Iowa City, IA, USA; ⁵Carver College of Medicine, University of Iowa, Iowa City, IA, USA; ⁶Kaiser Permanente Washington Health Research Institute, Seattle, WA, USA; ⁷Department of Health Systems and Population Health, University of Washington School of Public Health, Seattle, WA, USA; ⁸VA Center for Health Equity Research and Promotion, VA Pittsburgh Healthcare System, Pittsburgh, PA, USA; ⁹Department of Medicine, University of Pittsburgh, PA, USA;

Correspondence: Linnaea Schuttner, Email linnaea.schuttner@va.gov

Introduction: The prevalence of patients with multimorbidity (ie, multiple chronic conditions) is increasing. Clinical decisionmaking guided by patients' values, health priorities and goals, and treatment preferences is particularly important in the context of interacting diseases and psychosocial needs. Physicians face challenges incorporating patient perspectives into care plans. We examined primary care physician (PCP) views on the influence of patients' values, health priorities and goals, and preferences on clinical decisions for patients with multimorbidity and increased psychosocial complexity.

Methods: We conducted semi-structured telephone interviews with 23 PCPs within patient-centered medical home teams in a nationally integrated health system in the United States between May and July 2020. Data were analyzed via thematic analysis with deductive and inductive coding.

Results: Three major themes emerged: 1. Patient personal values were rarely explicitly discussed in routine clinical encounters but informed more commonly discussed concepts of patient priorities, goals, and preferences; 2. Patient values, health priorities and goals, and preferences were sources of divergent views about care plans between healthcare teams, patients, and families; 3. Physicians used explicit strategies to communicate and negotiate about patient values, health priorities and goals, and preferences when developing care plans, including trust-building; devoting extra effort to individualizing care; connecting patient values to healthcare recommendations; deliberate elicitation and acknowledgement of patient concerns; providing "space" for patient perspectives; incorporating family into care planning; pairing physician to patient priorities; and collaborative teamwork.

Conclusion: Primary care physicians perceive patient values, health priorities and goals, and preferences as influential during clinical decision-making for complex patients with multimorbidity. Participants used concrete strategies to negotiate alignment of these aspects when physician-patient divergence occurred. While rarely discussed directly in clinical encounters, personal values affected patient health priorities, goals, and preferences during care planning, suggesting a clinical role for more deliberate elicitation and discussion of patient values for this population.

Keywords: multimorbidity, clinical decision-making, patient-centered care, primary care, qualitative study, patient values and preferences

Plain Language Summary

While clinical practice guidelines and organizations support incorporating what is meaningful and important to patients into care plans and treatment decisions, little research has described the experience of primary care clinicians on how they incorporate the patient perspective into their decisions. We interviewed frontline primary care physicians to understand how physicians factor in the goals, preferences, and values of patients living with multiple chronic diseases (ie, multimorbidity) when making clinical decisions.

In this study, 23 primary care physicians working in the United States Veterans Health Administration in spring 2020 described their decision-making process for patients with multimorbidity with additional psychosocial (non-medical) needs, specifically how they incorporate patient values, preferences, and goals. We analyzed results using qualitative methods and describe themes. We found that physicians did not often talk to patients about what was meaningful in life, but these aspects of patient perspectives affected healthcare preferences and treatment goals – which were often discussed in clinic visits. When disagreements occurred between patients, families, and/or care teams, disagreements were often rooted in differences in what patients felt were meaningful in life or for their health. Physicians described a range of strategies to help incorporate and talk about patient values and preferences in clinic visits.

Results suggest purposeful conversations within clinical settings about what patients find meaningful in life may ease development of care plans reflecting patient preferences and goals that align with values for patients with multimorbidity.

Introduction

Clinical decision-making for patients with multimorbidity (two or more chronic conditions) requires balancing potential overlapping, even conflicting treatment plans,^{1–3} minimizing patient self-management burden, and weighing higher-thanaverage treatment risks.^{4,5} Chronic diseases accumulate with age, including mental and physical diagnoses such as hypertension, depression, or chronic pain, leading to an increasing prevalence of patients with multimorbidity as populations grow older worldwide.⁶ These factors have spurred calls for care plans that reflect what patients find most meaningful in life (ie, personal values), their health priorities and goals (ie, desired health outcomes), and their care preferences for those with multimorbidity.^{7,8} Innovative, patient-centered care models have arisen that operationalize incorporation of patient values, health priorities and goals, and preferences for older adults with multimorbidity.^{9–12} Despite these efforts, clinicians still describe challenges with incorporating these concepts when making care planning decisions for these patients, including difficulty aligning their own priorities with those of patients, experiencing faulty communication with patients, and ambiguous clinical applications of patient values.^{11,13,14}

In 2010, the largest integrated health system in the United States (US), the Veterans Health Administration (VHA), implemented a patient-centered medical home (PCMH) model nationwide with an enhanced focus on whole personcentered care, including training in patient-centeredness, expanded provider continuity, and comprehensive services for disease management.¹⁵ In this model, the PCMH team consists of a primary care provider, nurse care manager, clinical associate (eg, licensed vocational nurse), and administrative assistant, with as-needed support from embedded interdisciplinary services including mental health, pharmacy, and social work. Older veterans in the VHA are more psychosocially complex than non-VHA counterparts; VHA patients are more likely to have increased social risk factors, worse self-rated health behaviors, and poorer self-rated mental health than comparable patients receiving care outside of the VHA.¹⁶ Additional psychosocial complexity exacerbates the risks of adverse outcomes and adds to clinician challenges in caring for patients with multimorbidity.¹⁷ With overall more concerns to be managed by patients and healthcare teams alike, patients with multimorbidity and complexity have even greater need for care aligned with patient values, health priorities and goals, and preferences. While studies have examined clinician perspectives on incorporating these aspects into decision-making within the context of interventions,^{10,12,13,18} little is known about how frontline primary care providers approach these aspects during routine clinical care, particularly within a patientcentered medical home environment. We sought to address this knowledge gap through qualitative interviews with frontline primary care physicians (PCPs) caring for patients with multimorbidity and increased complexity within the VHA. This manuscript describes one of the two independent research objectives that were pursued related to understanding clinical decision-making. The first research objective was to understand the specific role of patient values and preferences in decision-making for these patients. Our second research objective examined the perspectives of clinicians about their decision-making and delivery of patient-centered care more globally. Emergent and deductive findings related to this second, broader research objective were separately analyzed and have been previously described.19,20

Participants, Setting, and Recruitment

The project team conducted interviews with VHA physician PCPs (medical doctor (MD), doctor of osteopathy (DO), or other equivalent degree) working at least 40% clinical time in a PCMH team-based setting. PCP demographics and email addresses were identified using VHA administrative databases.²¹ Recruitment was stratified equally between VHA medical center (ie, hospital affiliated) and community-based outpatient sites due to differences in the care environment between these sites.²² Participants were recruited via weekly emails between April and July 2020 for a total of 475 individuals contacted; 30 individuals responded to the initial recruitment email with interest in participating. Of these, 25 followed-up with scheduling emails and were interviewed (5 did not respond to further scheduling contacts). Recruitment emails invited PCPs to participate in semi-structured interviews about how they approach care decisions for complex patients with multimorbidity. This work was reviewed and designated non-research quality improvement by the VHA Office of Primary Care, in accordance with the national VHA Office of Research and Development policy of the US Department of Veterans Affairs, and was therefore exempt from Institutional Review Board (IRB) review. However, consistent with institutional policies and standards, we obtained informed consent of all participants. Verbal informed consent was obtained after describing the study to participants, including permission for audio recording, prior to interview. Explicit written informed consent was also obtained for the publication of anonymized responses.

Data Collection

A trained qualitative researcher with experience working with clinicians conducted semi-structured telephone interviews lasting 25–35 minutes each. The 12-question interview guide was iteratively developed (interview guide in <u>Supplementary Document 1</u>) and asked PCPs to think about a single high-risk or complex patient with multimorbidity when responding. Interviews were audio recorded and transcribed verbatim by project staff. Interviewer-project lead debriefing sessions and audio recording reviews were conducted every 2–3 interviews to clarify probes and paraphrasing statements used for within-interview accuracy and to update the interview guide to maintain fidelity to the research objective. Transcripts were reviewed for accuracy by the project lead, with comparisons to the audio recordings. ATLAS. ti software was employed for coding and data analysis (ATLAS.ti 8.4 for Windows, Scientific Software Development GmbH). An *a priori* estimate was used of 20–25 interviews needed to reach content saturation;²³ after 20 interviews, weekly team meetings to review content were held until content saturation was apparent.²⁴ A total of 25 interviews were completed between May and July 2020. Two recordings could not be transcribed due to poor audio quality; the remainder were transcribed, and 23 interviews were included in data analysis.

Data Analysis

Two team members conducted data analysis utilizing a mixed deductive and inductive thematic approach based on a pragmatic framework with phenomenological influence, given this study's intent to understand clinician perspectives and clarify decision-making affected by patient values and priorities.^{25–27} A short initial deductive codebook was first developed, distinguishing between patient personal values, health priorities and goals, and preferences based on definitions adapted from relevant literature.^{10,12,28–30} For this study, personal values included what patients find meaningful in life, for example, activities, relationships, or possessions.²⁹ In comparison, health priorities, goals, and preferences are directly related to health care and may change depending on the health context. Priorities, goals, and preferences, respectively, refer to the desired global outcomes resulting from the healthcare patients are willing to receive, the desired result of specific interventions, and the context-specific preferred treatment or care choices (Table 1).^{10,30} The team then iteratively expanded the codebook to include inductive codes following transcript review, with regular meetings for consensus of coding and theme development between team members.

Data trustworthiness during data collection and analysis was considered across four components: credibility, transferability, dependability, and confirmability.^{31,32} Credibility was increased through use of a national sample of clinicians across VHA primary care environs, within-interview accuracy checks, interviewer debriefing, iterative codebook development, and regular use of participant quotations. Transferability was through contextual, participant, and setting details

| Term | Definition (with Citation of References) |
|----------------------|---|
| Personal value | What is most meaningful to a patient in their lives, includes: principles (standards or virtues lived by); relationships (connection with others); emotions (feelings, moods); activities (things done for work or leisure); abilities (physical or mental capacities or skills); or possessions (tangible things kept, owned, or cherished). ²⁹ Example: Spending time with family, experiencing joy, gardening. |
| Health priority | Global health outcome goal(s) that a patient most desires, given the health care they are willing and able to receive (ie health preferences). ¹⁰ Example: Better physical functioning, improved quality of life. |
| Health goal | Desired specific health outcome(s) or aim(s) for a healthcare service, therapy, or procedure, that are limited to a context- or circumstance. ³⁰ Example: Lower blood sugar after starting a new diabetes medicine. |
| Health preference | Choice(s) about testing, procedure, or treatment options, that are context- or circumstance-specific. ³⁰ Example: Avoiding injectable medications for diabetes. |

Table I Definitions of Personal Values, Health Priorities, Goals, and Preferences

in the manuscript for readers to evaluate applicability. Dependability and confirmability were through study protocol development, selection of analytic methods, and methodological adherence, as well as manuscript reporting in accordance with the standard for qualitative research guidelines.³³

Results

Twenty-five PCPs participated in interviews. Most participants practiced in VHA medical centers (n = 15) versus community-based clinics (n = 10). Of the participating PCPs, most were MDs (n = 21) and all regions of the US were represented. Characteristics of participants are reported in Table 2. For context, self-reported physician gender and years of experience as an independent (post-training) practitioner are listed with respondent quotes. Three primary themes emerged from analysis and are described below.

| Variable | N = 25 Interviewed | N = 23 Included in Analysis | |
|---|--------------------|-----------------------------|--|
| Female sex | 14 (56%) | 14 (61%) | |
| Non-MD degree | 2 (8%) | 2 (9%) | |
| Practice location | | | |
| VHA medical center | 15 (60%) | 14 (61%) | |
| Community-based outpatient clinic | 10 (40%) | 9 (39%) | |
| Practice type ^a | | | |
| General primary care team | 19 (76%) | 17 (74%) | |
| Specialty primary care team | 6 (24%) | 6 (26%) | |
| Geographic region | | | |
| West | 5 (20%) | 5 (22%) | |
| Northeast | 2 (8%) | 2 (9%) | |
| Midwest | 8 (32%) | 7 (30%) | |
| Southwest | 3 (12%) | 2 (9%) | |
| Southeast | 7 (28%) | 7 (30%) | |
| Time in direct patient care – mean (SD) | 83% (22) | 77% (21) | |
| Years after residency – mean (SD) | 23 (12) | 21 (11) | |

| Table 2 Demographics and | Characteristics | of Participants |
|--------------------------|-----------------|-----------------|
|--------------------------|-----------------|-----------------|

Notes: ^aSpecialty primary care includes physicians caring for patients in a tailored team-based format, and includes women's health, homeless, and home-based primary care teams. General primary care services are otherwise available to all patients.

Abbreviations: MD, medical doctor; SD, standard deviation; VHA, Veterans Health Administration.

Theme I: Patient Values Inform Health Priorities, Goals, and Preferences, but are Rarely Explicitly Addressed During Clinical Encounters for Complex Patients with Multimorbidity

While rarely discussing personal values during encounters, physicians more commonly described how they referenced or accommodated patient health priorities, goals, or preferences during decision-making about care planning for complex patients with multimorbidity. However, whether explicitly discussing personal values or not, patient goals, priorities, and preferences were often described by physicians in a manner that related to underlying patient personal values. For example, one physician pointed out how patient health preferences about cancer screenings stemmed from foundational personal values, but these values themselves were not described.

People who disagree with some sort of cancer screening, [...] it's hard to change those values. You can have a discussion from a scientific point of view, but some of the choices are already preset. (P017, female, 5 years experience)

Another physician, however, made the connection more expressly between a patient's personal values of spending time with his grandchildren, and his health preference of avoiding hospitalization.

[The patient] loved being around his grandkids, loved going to their sporting events, their baseball games, and all that stuff. And that was the stuff that he wanted to be there for them, trying to avoid being in the hospital as much as possible and all that stuff, [these] were things that were important to him. (P06, male, 7 years experience)

More commonly than personal values, physicians readily described patient priorities, goals, and preferences. These were commonly functional in nature and often related to patients' desire to reduce bothersome symptoms or more easily do their daily activities.

Also his back, he was wanting a walker and little more stability for his gait and, you know, shortness of breath. So, you know, gave him a rollator and things like that. (P04, female, 30 years experience)

Many physicians in our sample recalled purposefully eliciting their patients' priorities, goals, and preferences routinely as part of care. Patient priorities, goals, and preferences were often described as medical in nature, but also might intersect with other needs in life, such as housing, transportation, or access to food.

Usually when I start my appointment [...] my conversation would be, 'looks like you are here for this, is there something we need to discuss before that? Or is there something you wish for me to address in this visit that is absolutely important for you?' (P01, female, 27 years experience)

Occasionally, physicians explicitly described how patient personal values directly impacted their clinical decisionmaking during care planning. These PCPs in particular articulated how they emphasized eliciting and understanding patient values as an important part of delivering care responsive to patient needs. In contrast, some physicians were unable to articulate or identify how patient values could relate to clinical care, in any instance or context, even when prompted ("I cannot think of any such patient example", P23, female, 18 years experience).

Theme 2: Patient Personal Values, Priorities, Goals, and Preferences Were a Common Source of Divergence in Viewpoints During Care Planning for Complex Patients with Multimorbidity

Physicians in our sample often discussed their perception of concepts of alignment and divergence between their own viewpoints, those of their patients, and sometimes, those of patients' family or caregivers. As discussed in later sections, many physicians expressed the importance of well-aligned health priorities and goals to facilitate effective care delivery and decision-making around health preferences. Conversely, when these domains diverged, this was seen as negatively impacting care – physicians reported being very aware of the ramifications of misalignment in health priorities and goals between themselves and their patients. They stressed the importance of working towards repairing or correcting this misalignment when it occurred.

Physicians described differences in the nature of the health priorities they felt were most important for their patients, and what their patients prioritized. They commonly described how chronically ill patients focused on health priorities related to experiencing symptoms, while the physicians wanted to focus on conditions with more impact on long-term prognosis – irrespective of symptoms.

A lot of times with a Type II diabetic, you can't get them to understand, 'You're not going to feel bad until you feel bad,' and feeling bad is a heart attack, a stroke, an amputation, blindness, dialysis. [...] A lot of them are more worried about their back pain or their knee pain, or how many times they get up at night to urinate, than they are about their diabetes and their blood pressure. (P23, female, 18 years experience)

No physicians referenced their own personal values when describing how their viewpoints diverged from those of their patients, but they described differences in health priorities and goals that were implicitly rooted in conflicting personal values. For example, one physician described a disagreement related to health preferences and priorities that was established in the conflict between a patient's religious values and the physician's own value to minimize harm.

[The patient] had these beliefs that [they] should continue to fight, because if they didn't continue to fight, that was like giving up, and that's not what God wants; God wants you to fight. They wanted to go for tests, and they wanted to see specialists, and they wanted more medication – and so every time they asked for something like that, or it seemed like it was going that direction, I kind of had to draw back; I felt like I was almost like a lawyer, defending my position on why I wasn't going to send them to see a cardiologist for an echocardiogram – because why am I going to do that? [...] I felt like everything that I was doing was for the good of the patient, to try and keep them out of scenarios that are going to do more harm than good. (P03, female, 9 years experience)

Several physicians described how their complex patients with multimorbidity were not always able to remember their health issues, report their medical histories, or communicate their priorities. Some described this as an "inattention" to some health issues or concerns, while others described this as a communication barrier. They perceived this phenomenon occurring for a diversity of reasons, including more pressing needs crowding out other needs, comorbid substance use, denial, limited knowledge of disease importance, or lapses in memory. Faulty understanding or communication of patient needs and/or medical histories was felt to exacerbate divergence between patients and physicians in health priorities, goals, or preferences. One PCP described difficulty moving forward in care planning when a patient was seemingly unwilling to communicate his needs and priorities.

He doesn't feel the priority to actually [do the] self assessment and even something simple, like bringing in medications, he's completely unwilling to do. (P14, female, 7 years experience)

Physicians had different reactions to misalignment when it occurred between their priorities and goals for the patient, and those of their patients with multimorbidity. One physician said they felt like "the bad guy" (P03) when acting against what the patient wanted for care but was willing to do so when providing care they deemed in the patient's best interest. In contrast, another physician described they felt their role was a conveyor of advice and information, but patients were ultimately able to make autonomous choices.

My job is to explain it clearly and completely. If I am not in agreement [...] I'm not going to force them to do something they don't want to do. [...]They should know it, but I'm not going to force anything, it's their choice, their body. (P18, female, 35 years experience)

Diverging views can also arise between family members of patients with multimorbidity and the care team or between family members and patients themselves. Physicians frequently described the importance of family member priorities and preferences for patients, even when the family member was not directly involved. They also described how the family perspective directly impacted the physician's clinical decision-making when family members were more involved in care, such as surrogate decision-making in end-of-life-care, or when otherwise contributing to decisions for complex patients with multimorbidity.

I am amazed at how misunderstandings come about. The whole family thinks she needs to be in palliative care, but she does not. (P01, female, 27 years experience)

Theme 3: Physicians Employed Strategies for Negotiation and Communication About Personal Values, Priorities, Goals, and Preferences for Complex Patients with Multimorbidity

Many physicians discussed how they negotiated the terrain around the domains of patient values, priorities, goals, and preferences. As previously described, many discussed the importance of alignment of these domains for care progress for complex patients with multimorbidity. They described alignment between one or more of these domains as an achievement produced by deliberate negotiation and intentional effort.

Once we are aligned, it's a lot easier to actually make headway on that thing, but there's a lot of effort, and work, and thought, that goes into figuring out what the next agenda is. (P07, male, 21 years experience)

Physicians described how establishing expectations with their patients was an important foundation for attaining desired health priorities and goals. If alignment in health priorities and goals was not apparent at the onset, physicians had thoughtful, deliberate approaches to bridge divides between their viewpoints and those of their patients with multimorbidity. Physicians used explicit language when discussing these strategies, or "tools", as one PCP described. The physicians in our sample discussed concrete strategies they used in navigating the terrain around these domains (summarized in Table 3). These included deliberate engagement in relationship- and trust-building with their patients with multimorbidity and expending additional effort to provide more individualized care during these encounters. Many also emphasized communication-focused strategies, such as clarifying connections between healthcare and patient values or priorities within the care plan, explicitly acknowledging patient concerns through the elicitation of patient priorities, goals, and preferences, and creating the logistic and psychologic space for understanding patient perspectives in the encounter. Others described collaborative efforts, including incorporating family and caregivers into care planning, setting shared priorities by pairing their own priorities to those of the patient, and reliance on their healthcare teams to help them to navigate care planning for complex patients.

Discussion

This qualitative study examined how physicians incorporated and responded to patient values, desired health outcomes (priorities and goals), and health preferences during clinical decision-making for complex patients with multimorbidity. We included the perspectives of physicians delivering primary care within the VHA, a large national integrated health system in the US employing a patient-centered medical home model for primary care patients. Our physicians described three central themes related to the domains of patient values, health priorities and goals, and preferences when care planning for this population: the influence of patient values on health priorities, goals, and preferences; these domains as the origin of conflict among viewpoints; and physician strategies for navigating these domains.

This manuscript describes how patient values and priorities influence clinical decision-making. Our group conducted previous analyses of this dataset, under a separate primary research objective, to more generally understand clinical decision-making in patients with multimorbidity. Our prior publications describe the perceived ability of physicians to deliver patient-centered care,²⁰ and the internal (eg, intrapersonal) and external (eg, environmental) factors that affect physician decision-making.¹⁹ Our prior work supports that delivery of patient-centered care and decision-making also relates to the values, priorities, and perspectives of patients. However, distinguishing these earlier findings from the current analysis and manuscript, patient-centeredness and decision-making factors have distinct aspects which we felt necessitated separate analyses. For example, dimensions of patient-centeredness that supersede the values and priorities of patients include care coordination or patient ability to access care. Similarly, factors contributing to clinical decision-making feg, patient vital signs or health record documentation) or environmental level (eg, time constraints). The current work provides an in-depth examination of how the role of patient values, health priorities and goals, and preferences routinely influence daily clinical care decisions.

Table 3 Physician Strategies for Negotiating Physician-Patient Divergence in Personal Values, Health Priorities, Goals, or Preferences

| Strategy | Illustrative Quote | Source (Gender, Years of Experience) |
|--|---|--|
| Build relationships and trust | You have to build a relationship to get them to begin to trust as well as educate, and hopefully you can reach a conclusion as opposed to just walking in a room and saying, "OK, you have diabetes; here, take this medicine", and walking out you leave and they just keep doing whatever it is they want, and so you have accomplished nothing. | P02, F, 25y experience |
| Devote additional effort for individualized care with complex patients | By talking to their educational level, and coming up with the examples on why we need to do a certain thing, and once they understand, they follow the directions. | P02, F, 25y experience |
| | I tried to address everything at that visit. [] Patients of mine know that, you know, I am behind, but they also do add a comment. I hate to say it. They always say I am thorough and they are fine with waiting. They'd rather have the person take the time to address the issues so that they do not have to keep coming back. | P04, F, 30y experience |
| Draw connections between care plan and patient values or priorities | They will say, "I don't need that" and I will say, "Have you thought that you are a single parent and if something happens to you?" [] That usually gets them thinking about a plan. | P01, F, 27y experience |
| | We did talk about "How would he like to live?" which is more how I phrase those types of conversations instead of "Hey, do you want CPR or not?" | P03, F, 9y experience |
| Deliberately elicit patient priorities, goals, and preferences | I have always instructed them to write down everything that they want to talk to me [about], so that when we are questioning we can see which ones are more important or things that we should not miss. | P02, F, 25y experience |
| | When you are dealing with complexity, it's too easy to get absorbed in the what's the right next move or test to order, but you have got to understand the expectations and goals and anxieties of the patients that you are treating, otherwise making all the right decisions with regard to workup, it can be all for naught. | P20, M, 19 years experience |
| Provide space for patient perspectives | Give the patients the opportunity to express themselves, tell their story, what's of concern to them, before you start to ask direct questions. | P20, M, 19y experience |
| Involve family members or caregivers as appropriate | If they are accompanied by a spouse, or significant other, or an adult child, making sure that we address anything that they have before we wrap up [], make sure that you address the patient's issues, whoever the loved one is with them and then trying to make sure you hit on the big items on your list as well, which can be challenging. | P06, M, 7y experience |
| | It was a matter of talking to him and talking to his sister who came in with him, probably using several angles of approach, to eventually convince him that it would not be safe for him to go back home. | P24, M, 35y experience |
| Pair patient priorities to physician priorities | Whatever's bothering him, I take care of first. And I try to take care of what's in my domain next []. That's how I do it, whatever their thing is, and then whatever I take care of, and then the specialty stuff. | PI4, F, 7y experience |
| Work collaboratively with care teams to align care plans | I learn a lot from my pharmacist who talks to them every week, especially for the couple of patients who I know are diabetic. She will say, "This works for this person." Then she and I would talk the same language. "We think you should do this, think about it. Increase it in this way, if you think that is the right thing to do." A week goes by and they actually increase it to what you want them to do, but they were not willing to do it the day you asked them to do it. | P01, F, 27y experience |

To our knowledge, this is one of the first qualitative studies presenting perspectives of frontline physicians on how patient values and preferences influence decision-making for patients with multimorbidity. This study compliments a growing body of literature on clinician perspectives on these concepts, specific to participating in interventions that emphasize these patient-centered aspects in routine clinical care.^{12,13,18} While broadly achieving patient-centered care requires physician understanding and accommodation of patient values, health priorities and goals, and preferences.^{8,34} studies have described barriers to alignment,^{13,35} and entrenched differences between patient and provider health priorities have also been well described.^{36–38} As a take-away from our study, physicians suggested concrete strategies to support alignment when disagreement occurs between one or more of these aspects. The strategies proposed by our physicians are diverse and differ from those proposed in other literature for how to accomplish greater patient-centered decision-making.¹³ Additionally, our study is novel in describing the clinical role that patient values have in care planning, intersecting with more commonly articulated health priorities, goals, and preferences. Physicians in our study drew these connects explicitly and also implicitly – for example, a physician might outline a patient's goal of pain reduction and relate this to a patient's desire to do activities, implicitly describing the value of independence. Other studies from the patient perspective found that patients may not initially connect their values to health priorities, goals, and preferences, but support these as interdependent concepts.^{29,39} As a clinical take-away, our study supports that enhanced conversation and creating a space for patient values in clinical settings may help to streamline and align care planning that better reflects patient health priorities, goals, and preferences. Strengthening effective patient-physician communication skills may prime clinical scenarios for creating individualized, values-aligned patient care plans.^{40,41} Potential interventions that move values-based communication or elicitation into clinical settings are in development.10,18,42,43

Care plans aligned with patient values, health priorities and goals, and preferences help minimize self-management effort, treatment burden, and risks of unwanted treatments.^{8,44} Well-aligned care plans are more important for an older population with multimorbidity,^{45,46} as self-management may be negatively affected by salient factors including cognitive impairment, mental health comorbidities, declining social support, polypharmacy, and low health literacy.^{2–} ^{5,47} Prior studies have attempted to examine the challenges with delivering aligned, patient-centered care for this population. Aspects of our findings have been replicated in non-veteran populations; discrepancies between patient and physician health priorities have been described, including patient emphasis on symptoms and physician prioritization of long-term risks.³⁶ Other studies have also similarly described how physicians reconcile divergences in care priorities through compromise with their patients,² and have felt more encounter time and effort is critical to caring for complex patients.⁴⁷

Patients with multimorbidity and/or increased psychosocial complexity are a prevalent and high priority population both for clinicians and health organizations.^{6,48,49} As the population ages, determining how to effectively deliver patient-centered care for this group will be increasingly important, particularly care that reflects patient values, health priorities and goals, and preferences. While our study focused on physicians caring for veteran populations, these perspectives encompassed physicians from across the US within a variety of clinical environments. Themes emerged that reflect findings in non-veteran populations,^{13,14,29,35} although we note that there are less-generalizable aspects related to US military veterans and the VHA inherent to our data. We note other limitations to our study, including perspectives gathered from experienced physicians (in practice on average >20 years), incorporation of viewpoints from physicians only, and the timing of our interviews during the onset of the COVID-19 pandemic, which may have affected our findings.

Conclusions

In conclusion, our study offers unique perspectives from frontline physicians caring for populations with multimorbidity and psychosocial complexity. Key take-aways of our study include the influence of patient values on patient health priorities, goals, and preferences, suggesting there may be a role in clinical encounters for explicitly discussing what patients find most meaningful. Achieving alignment between viewpoints was also seen as highly important by physicians in our sample, who provided useful strategies for other clinicians in negotiating and achieving patient-centered care plans that reflect and honor what patients value and desire for health.

Abbreviations

IRB, Institutional Review Board; DO, Doctor of osteopathy; MD, Medical doctor; PCMH, Patient-centered medical home; PCP, Primary care physician; SD, Standard deviation; US, United States; VHA, Veterans Health Administration.

Data Sharing Statement

Data for this study was collected for national quality improvement efforts. Consistent with operational, non-research activities conducted by the United States Veterans Health Administration, a deidentified limited dataset that supports the findings of this study is available from the corresponding author upon reasonable request.

Ethics Approval and Informed Consent

This project was conducted as quality improvement under the national evaluation efforts for the United States (US) Veterans Health Administration (VHA) Office of Primary Care. In accordance with this policy, the national VHA Office of Research and Development allows a designation of work to be formally considered quality improvement, non-research designation, and exempts the work from further Institutional Review Board (IRB) review or waiver. As such, no specific requirements governing the informed consent process are required for quality improvement projects under this designation. In deference to the obligation to protect the safety, rights, and welfare of affected participants according to these policies and consistent with institutional standards of ethical conduct, verbal informed consent was obtained from all involved physicians to participate, use data, and be recorded, as well as explicit written informed consent extending to the publication of anonymized quotes.

Consent for Publication

All co-authors provide consent for the publication of this manuscript.

Acknowledgments

The authors thank Elsa Sweek (AHRQ), Emily Ashmore (PCAT), and Rachel Orlando (PCAT) for data transcription, comments, and assistance with the background literature.

Funding

This work was undertaken as part of the Veterans Health Administration's (VHA) Primary Care Analytics Team (PCAT), with funding provided by the VHA Office of Primary Care. Additional funding for the primary author was from grant K12HS026369 from the Agency for Healthcare Research and Quality (AHRQ).

Disclosure

The authors declare no competing conflicts of interest, financial or otherwise.

References

- 1. Tinetti ME, Bogardus ST, Agostini JV. Potential pitfalls of disease-specific guidelines for patients with multiple conditions. *N Engl J Med.* 2004;351 (27):2870–2874. doi:10.1056/NEJMsb042458
- Sinnott C, Hugh SM, Boyce MB, Bradley CP. What to give the patient who has everything? A qualitative study of prescribing for multimorbidity in primary care. Br J Gen Pract. 2015;65(632):e184–e191. doi:10.3399/bjgp15X684001
- 3. Xu X, Mishra GD, Jones M. Evidence on multimorbidity from definition to intervention: an overview of systematic reviews. *Ageing Res Rev.* 2017;37:53-68. doi:10.1016/j.arr.2017.05.003
- 4. Harris MF, Dennis S, Pillay M. Multimorbidity: negotiating priorities and making progress. Aust Fam Physician. 2013;42(12):850-854.
- Cohen-Stavi CJ, Key C, Molcho T, Yacobi M, Balicer RD, Shadmi E. Mixed methods evaluation of reasons why care deviates from clinical guidelines among patients with multimorbidity. *Med Care Res Rev.* 2020;107755872097554. doi:10.1177/1077558720975543
- 6. Cassell A, Edwards D, Harshfield A, et al. The epidemiology of multimorbidity in primary care: a retrospective cohort study. Br J Gen Pract. 2018;68(669):e245–e251. doi:10.3399/bjgp18X695465
- 7. Wilson M, Lavis J, Gauvin FP. Designing integrated approaches to support people with multimorbidity: key messages from systematic reviews, health system leaders and citizens. *Healthc Policy*. 2016;12(2):91–104.
- 8. Boyd C, Smith CD, Masoudi FA, et al. Decision making for older adults with multiple chronic conditions: executive summary for the American Geriatrics Society guiding principles on the care of older adults with multimorbidity. J Am Geriatr Soc. 2019;67(4):665-673. doi:10.1111/jgs.15809

- 9. Hsu KY, Slightam C, Shaw JG, et al. High-need patients' goals and goal progress in a Veterans Affairs intensive outpatient care program. J Gen Intern Med. 2019;34(8):1564–1570. doi:10.1007/s11606-019-05010-w
- Tinetti ME, Naik AD, Dindo L, et al. Association of patient priorities-aligned decision-making with patient outcomes and ambulatory health care burden among older adults with multiple chronic conditions: a nonrandomized clinical trial. JAMA Intern Med. 2019;179(12):1688. doi:10.1001/ jamainternmed.2019.4235
- 11. Freytag J, Dindo L, Catic A, et al. Feasibility of clinicians aligning health care with patient priorities in geriatrics ambulatory care. J Am Geriatr Soc. 2020;68(9):2112–2116. doi:10.1111/jgs.16662
- 12. Naik AD, Dindo LN, Van Liew JR, et al. Development of a clinically feasible process for identifying individual health priorities. *J Am Geriatr Soc.* 2018;66(10):1872–1879. doi:10.1111/jgs.15437
- 13. Tinetti M, Dindo L, Smith CD, et al. Challenges and strategies in patients' health priorities-aligned decision-making for older adults with multiple chronic conditions. *PLoS One*. 2019;14(6):e0218249. doi:10.1371/journal.pone.0218249
- 14. Légaré F, Ratté S, Gravel K, Graham ID. Barriers and facilitators to implementing shared decision-making in clinical practice: update of a systematic review of health professionals' perceptions. *Patient Educ Couns*. 2008;73(3):526-535. doi:10.1016/j.pec.2008.07.018
- 15. Rosland AM, Nelson K, Sun H, et al. The patient-centered medical home in the Veterans Health Administration. *Am J Manag Care*. 2013;19(7): e263–e272.
- 16. Hebert PL, Batten AS, Gunnink E, et al. Reliance on Medicare providers by veterans after becoming age-eligible for Medicare is associated with the use of more outpatient services. *Health Serv Res.* 2018;53(S3):5159–5180. doi:10.1111/1475-6773.13033
- 17. Zullig LL, Whitson HE, Hastings SN, et al. A systematic review of conceptual frameworks of medical complexity and new model development. *J Gen Intern Med.* 2016;31(3):329–337. doi:10.1007/s11606-015-3512-2
- 18. Salisbury C, Man MS, Bower P, et al. Management of multimorbidity using a patient-centred care model: a pragmatic cluster-randomised trial of the 3D approach. *Lancet*. 2018;392(10141):41–50.
- 19. Schuttner L, Hockett Sherlock S, Simons C, et al. Factors affecting primary care physician decision-making for patients with complex multimorbidity: a qualitative interview study. *BMC Prim Care*. 2022;23(1):25. doi:10.1186/s12875-022-01633-x
- Schuttner L, Hockett Sherlock S, Simons CE, et al. My goals are not their goals: barriers and facilitators to delivery of patient-centered care for patients with multimorbidity. J Gen Intern Med. 2022. doi:10.1007/s11606-022-07533-1
- 21. Price LE, Shea K, Gephart S. The Veterans Affairs' Corporate Data Warehouse: uses and implications for nursing research and practice. *Nurs Adm* Q. 2015;39(4):311–318. doi:10.1097/NAQ.00000000000118
- 22. Liu CF, Chapko M, Bryson CL, et al. Use of outpatient care in Veterans Health Administration and Medicare among veterans receiving primary care in community-based and hospital outpatient clinics: outpatient care in VA and Medicare. *Health Serv Res.* 2010;45(5p1):1268–1286. doi:10.1111/j.1475-6773.2010.01123.x
- 23. Morse JM. Determining sample size. Qual Health Res. 2000;10(1):3-5. doi:10.1177/104973200129118183
- 24. Francis JJ, Johnston M, Robertson C, et al. What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychol Health*. 2010;25(10):1229–1245. doi:10.1080/08870440903194015
- 25. Creswell JW. Qualitative Inquiry and Research Design: Choosing Among Five Approaches. 3rd ed. Sage; 2013.
- 26. Williamson K, Given LM, Scifleet P. Qualitative data analysis. In: *Research Methods*. 2nd edn. Chandos Publishing; 2018:453–476. doi:10.1016/ B978-0-08-102220-7.00019-4
- 27. Patton MQ. Qualitative Research & Evaluation Methods. 4th ed. Sage; 2015.
- 28. Schwartz SH. An overview of the Schwartz theory of basic values. Online Read Psychol Cult. 2012;2(1):11. doi:10.9707/2307-0919.1116
- 29. Lim CY, Berry ABL, Hirsch T, et al. Understanding what is most important to individuals with multiple chronic conditions: a qualitative study of patients' perspectives. J Gen Intern Med. 2017;32(12):1278–1284. doi:10.1007/s11606-017-4154-3
- 30. Naik AD, Martin LA, Moye J, Karel MJ. Health values and treatment goals of older, multimorbid adults facing life-threatening illness. J Am Geriatr Soc. 2016;64(3):625–631. doi:10.1111/jgs.14027
- 31. Lincoln YS, Guba EG. Naturalistic Inquiry. Nachdr. Sage; 2020.
- 32. Shenton AK. Strategies for ensuring trustworthiness in qualitative research projects. Educ Inf. 2004;22(2):63-75. doi:10.3233/EFI-2004-22201
- 33. O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89(9):1245–1251. doi:10.1097/ACM.00000000000388
- Scholl I, Zill JM, Härter M, Dirmaier J. An integrative model of patient-centeredness: a systematic review and concept analysis. *PLoS One*. 2014;9 (9):e107828. doi:10.1371/journal.pone.0107828
- 35. Luxford K, Safran DG, Delbanco T. Promoting patient-centered care: a qualitative study of facilitators and barriers in healthcare organizations with a reputation for improving the patient experience. *Int J Qual Health Care*. 2011;23(5):510–515. doi:10.1093/intqhc/mzr024
- 36. Sathanapally H, Sidhu M, Fahami R, et al. Priorities of patients with multimorbidity and of clinicians regarding treatment and health outcomes: a systematic mixed studies review. *BMJ Open*. 2020;10(2):e033445. doi:10.1136/bmjopen-2019-033445
- 37. Hansen H, Pohontsch N, van den Bussche H, Scherer M, Schäfer I. Reasons for disagreement regarding illnesses between older patients with multimorbidity and their GPs a qualitative study. *BMC Fam Pract.* 2015;16(1):68. doi:10.1186/s12875-015-0286-x
- 38. Zulman DM, Kerr EA, Hofer TP, Heisler M, Zikmund-Fisher BJ. Patient-provider concordance in the prioritization of health conditions among hypertensive diabetes patients. J Gen Intern Med. 2010;25(5):408–414. doi:10.1007/s11606-009-1232-1
- Berry ABL, Lim CY, Hirsch T, et al. Supporting communication about values between people with multiple chronic conditions and their providers. In: Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems - CHI 19. ACM Press; 2019:1–14.
- 40. Levinson W, Lesser CS, Epstein RM. Developing physician communication skills for patient-centered care. *Health Aff.* 2010;29(7):1310–1318. doi:10.1377/hlthaff.2009.0450
- 41. Beck RS, Daughtridge R, Sloane PD. Physician-patient communication in the primary care office: a systematic review. J Am Board Fam Pract. 2002;15(1):25–38.
- 42. Freytag J, Dindo L, Catic A, Naik A, Tinetti M. Implementation of Patient Priorities Care within a VA geriatrics clinic. *Innov Aging*. 2019;3(Suppl 1):S774. doi:10.1093/geroni/igz038.2844
- 43. Berry ABL, Lim C, Hartzler AL, et al. Creating conditions for patients' values to emerge in clinical conversations: perspectives of health care team members. In: Proceedings of the 2017 Conference on Designing Interactive Systems - DIS 17. ACM Press; 2017:1165–1174.

- 44. Hu X, Wang HHX, Li Y, et al. Healthcare needs, experiences and treatment burden in primary care patients with multimorbidity: an evaluation of process of care from patients' perspectives. *Health Expect*. 2022;25(1):203–213. doi:10.1111/hex.13363
- 45. Lupari M, Coates V, Adamson G, Crealey GE. 'We're just not getting it right'- how should we provide care to the older person with multi-morbid chronic conditions? *J Clin Nurs*. 2011;20(9–10):1225–1235. doi:10.1111/j.1365-2702.2010.03620.x
- 46. Northwood M, Ploeg J, Markle-Reid M, Sherifali D. Integrative review of the social determinants of health in older adults with multimorbidity. J Adv Nurs. 2018;74(1):45-60. doi:10.1111/jan.13408
- 47. Sinnott C, Mc Hugh S, Browne J, Bradley C. GPs' perspectives on the management of patients with multimorbidity: systematic review and synthesis of qualitative research. *BMJ Open*. 2013;3(9):e003610. doi:10.1136/bmjopen-2013-003610
- Zulman DM, Chee CP, Wagner TH, et al. Multimorbidity and healthcare utilisation among high-cost patients in the US Veterans Affairs Health Care System. BMJ Open. 2015;5(4):e007771. doi:10.1136/bmjopen-2015-007771
- 49. Yoon J, Zulman D, Scott JY, Maciejewski ML. Costs associated with multimorbidity among VA patients. *Med Care*. 2014;52(3):S31–S36. doi:10.1097/MLR.000000000000061

Risk Management and Healthcare Policy



Publish your work in this journal

Risk Management and Healthcare Policy is an international, peer-reviewed, open access journal focusing on all aspects of public health, policy, and preventative measures to promote good health and improve morbidity and mortality in the population. The journal welcomes submitted papers covering original research, basic science, clinical & epidemiological studies, reviews and evaluations, guidelines, expert opinion and commentary, case reports and extended reports. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: https://www.dovepress.com/risk-management-and-healthcare-policy-journal