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Clinician views on patient priorities care

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CLINICIAN VIEWS ON PATIENT PRIORITIES CARE

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ABSTRACT

Objective: To understand the current use, views, and suggestions for implementing a patient-centered conversation tool, Patient Priorities Care (PPC), by interviewing clinicians at a VA medical center from multiple clinical settings.

Methods: Physicians and advance practice clinicians working at the VA Boston Healthcare System (VABHS) were interviewed using a semi-structured approach between December and February 2023. The interview consisted of ten guided questions to gain the perspective of participating clinicians on current practices and views on implementing the tool into their practice at the VA. The qualitative data was collected, transcribed, and coded into themes based on a generated codebook using the software NVivo.

Results: Nine clinicians from VABHS were interviewed. The results indicated that the Patient Priorities Care tool is a beneficial tool with many advantages but will face challenges in implementation. Furthermore, the study set up as a video conference could have been more successful as only nine clinicians agreed to participate after numerous recruitment attempts.

Conclusion: Our study highlights clinicians' perspectives on Patient Priorities Care in piloting at the VABHS. Based on the qualitative data obtained,

recommendations provided by clinicians identified Patient Priorities Care as a valuable tool for practicing goal-concordant care. Future studies should investigate the quantitative metrics of the amount of time It takes to conduct the conversation and its effects on improving the quality of care. Another study that could be of interest is obtaining patients' perspectives on the flow and implementation of the tool.

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LIST OF ABBREVIATIONS

AFHS	Age-Friendly Health System
GRECC	Geriatrics Research, Education and Clinical Center
PACT	Patient Aligned Care Team
PPC	Patient Priorities Care
TMS	Talent Management System
VABHS	Veterans Affairs Boston Healthcare System

INTRODUCTION

Older adults with multiple complex disease processes require an approach to care that balances the competing care plans of comorbidities and keeps the patient at the center of that care. Our current healthcare system tends to focus on the individual diseases on a patient problem list rather than considering the interaction of these problems and focusing on what matters to the person receiving that care, which can be challenging. Patient Priorities Care is a tool that can help clinicians align care with an individual's goals and values. This tool falls under one of the 4Ms (What Matters, Medication, Mentation, and Mobility), What Matters, in the patient-centered approach initiative for elderly patients, known as the Age-Friendly Health System. As a result, the tool aids in providing goal-concordant care, allowing the clinical team to understand what matters most to people receiving care.

There needs to be more research into clinicians' perspectives on this care approach and tool. Under the research and education consortium, VA Boston Healthcare System (VABHS) Geriatrics Research, Education and Clinical Center (GRECC) was provided a grant to pilot Patient Priorities Care in multiple clinical sites at VABHS. We plan to explore clinicians' views on the tool and use the knowledge gained to provide insight into finding the best practice for the customization of implementation in adapting workflows at the VABHS.

Age-Friendly Health System – 4Ms

The Age-Friendly Health Systems (AFHS) brings effective action of the patient-centered care approach to preserve the health of older adult patients with multiple health concerns to improve health outcomes and prevent continued or avoidable harm. The 4Ms framework shapes AFHS based on the foundations of what matters, medication, mobility, and mentation (Figure 1).

What matters focuses on identifying and prioritizing patients' healthcare goals and preferences. The Patient Priorities Care tool falls under the What Matters theme in the Age-Friendly Health System. Areas commonly discussed as “what matters” are pain management, hospitalization, life-sustaining treatment, level of activity, and connection with social life. What matters allows healthcare personnel to identify patients’ values and health priorities, develop goals, and shape a care plan around said goals. In Coulter et al., the interactions between patient and provider, goal concordant collaborative care compared to standardized care results in health outcome improvements in physical and psychological health (2015).

The next of the 4Ms, medication, consists of reviewing necessary prescribed medications and identifying high-risk medicines with adverse effects and drug-drug interactions. Reviewing prescribed medications will reduce the interference with what matters to the patient, mentation, mobility, and adherence to a medication regimen.

The third ‘M” is mentation. Mentation is the assessment of cognitive function in identifying, treating, managing, and preventing dementia, depression, and delirium. Caregivers and family members can do these actions when educated on the presentation of cognitive decline. As stated by Marques et al., mobility and physical activity are linked to the prevention of depression, highlighting the connection between mentation and mobility (2020). This aspect of the 4Ms framework focuses on assessing and addressing any cognitive or mental health issues the patient may have. Providers should screen for depression, anxiety, and other cognitive impairments.

The final of the 4Ms, mobility, establishes the need to ensure that patients can move safely to maintain the goals they deem significant to them and maintain functionality. This is done, as stated by Mate et al., by the requirement of screening elderly patients for safe mobility when receiving Age-Friendly care (2021).

The 4Ms initiative of the Age-Friendly Health System is meant to be practiced as a set as they have many interactions, resulting in better outcomes (Mate et al., 2021). A guide that ensures the patient’s goals and wants are aligned with their care plan and way of life. By implementing the 4Ms framework, healthcare providers can ensure they provide comprehensive, evidence-based, and age-appropriate care to older adults. The Age-Friendly Health System and the 4Ms framework represent an essential step forward in improving care for older adults. As the population ages, it will be increasingly important for

healthcare providers to adopt strategies like these to ensure they provide the best possible care.

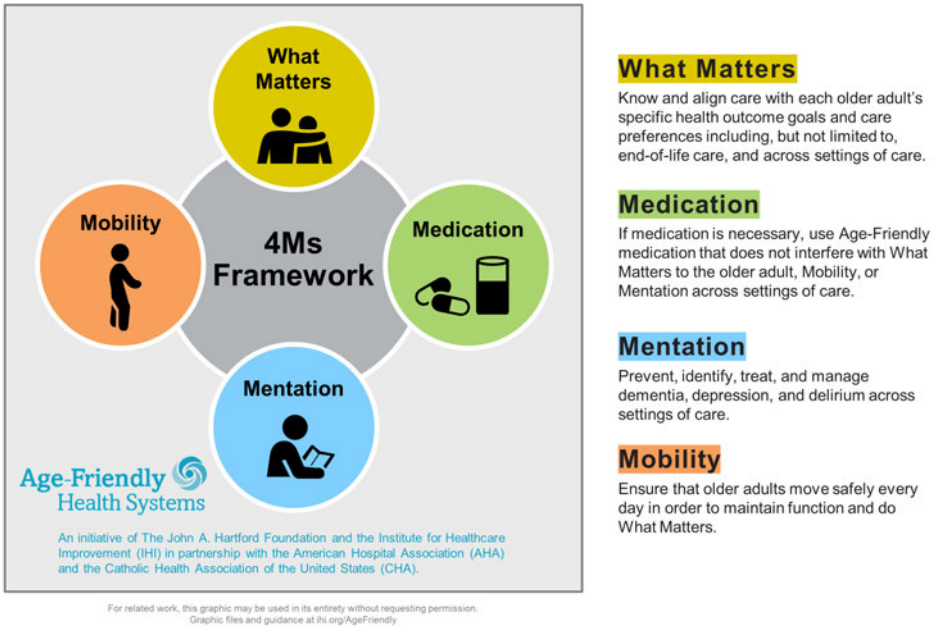

Figure 1: 4Ms Framework of the Age Friendly Health Systems. The graphic is entirely reproduced without the need to request permission (Institute for Healthcare Improvement, 2020).

Disease-Centered Care vs Patient-Centered Care

In the traditional approach to healthcare, the focus has been on treating a patient's illness or disease. This is known as disease-centered care. Disease-centered care should be applied for patients with a single leading disease where the healthcare outcome aligns with the patient and healthcare team (Naik et., 2009). However, in recent years, there has been a shift towards a more patient-centered approach.

Patient-centered care is the basis of Patient Priorities Care and the “What Matters” in the 4Ms of the Age-Friendly Health System. Patient-centered care should be the new approach model when communicating with patients of multiple comorbidities for the older population compared to the disease-centered care approach.

Disease centered care is not ideal for patients with multiple comorbidities because disease centered care results in burdensome treatment plan when patients follow various methods of care from numerous healthcare personnel that conflicts with the goal outcomes that the patient has identified. The healthcare provider aims to treat the illness or disease quickly and efficiently. The patient’s preferences and values may not be considered, and the patient may feel rushed or unheard. Therefore, disease-centered care does not recognize “What Matters” to the patient; because of this, there is a need for an alternative decision-making approach, patient-centered care.

Patient-centered care aligns the care plan with what the patient identifies as important. This approach reduces any burdensome resulting from conflicting decisions that do not align with “What Matters” to the patient. The Institute of Medicine defines patient centered care as:

> ‘respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions’ (Institute of Medicine, 2001).’

When the treatment plan aligns with patient goals and outcomes, adherence to the plan will increase because the treatment plan is designed to the individual's stated preferences and not to the disease (Naik et al., 2009). Identifying and communicating allows for goal concordant decision making, allowing patients and clinicians to work together to achieve desired goals and monitor progress.

Overall, patient-centered care is seen as a more effective and compassionate approach to healthcare. Healthcare providers can help patients achieve better health outcomes and improve their quality of life by focusing on the whole person rather than just their disease or illness.

Patient Priorities Care

Patient Priorities Care, also known as PPC, is an initiative that focuses on a patient population of older adults with multiple comorbidities and health concerns. A platform that focuses on the older population is essential because, according to the US Census Bureau, the elderly population aged sixty-five and older will increase between 2012 and 2050, and by 2050 it is estimated that the elderly population will be approximately eighty-three million (Ortman et al., 2014).

Individuals dealing with comorbidities often interact with various specialized clinicians and healthcare teams. It is commonly associated with a medical approach of treating the condition or disease as the priority rather than the patient's wants. For this reason, Patient Priorities Care provides a new and

alternative approach to treating a patient with copious medical conditions, refining current care planning.

Patient Priorities Care is a tool designed to focus on patients with multiple health concerns and prioritize their goals and values when treating their health-related issues (Figure 2). As a promising approach to implementing the patients' concerns and perspectives when creating a decision in their care plan. The tool identifies patients based on a combination of multiple factors, such as numerous chronic illnesses, an increase in the number of medications, hospitalization, frequent visits to the emergency departments, and various specialists.

Aligning healthcare treatment provided by clinicians to the patient's own goals, focusing on what matters most to the patient is what defines patient-centered care, which is the basis of Patient Priorities Care (PPC) by establishing:

> ‘Clear priorities that are understood by patients, their family members or caregiver, and their clinicians can drive care that is less burdensome, better integrated, and most importantly, consistent with what matters most to patients (Overview of Patient Priorities Care, 2021).’

As a platform targeting the elderly population with multiple health concerns, Patient Priorities Care incorporates the 4Ms in the Age-Friendly Health System. The AFHS approach was established in 2017 by The John A. Hartford Foundation and the Institute for Healthcare Improvement in partnership with the American Hospital Association and the Catholic Health Association of the United States (Institute for Healthcare Improvement, 2019).

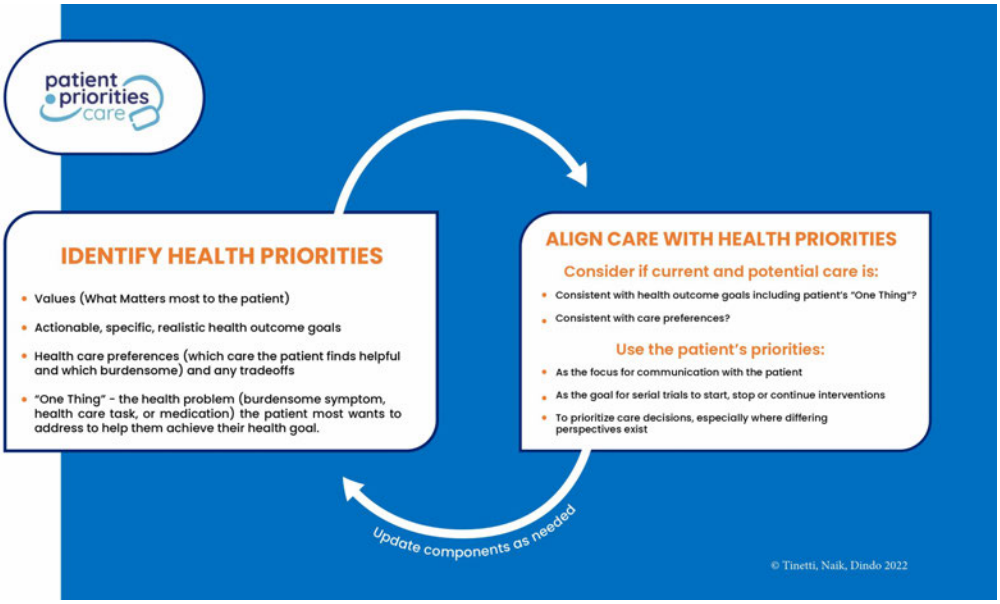

Figure 2: Process of Patient Priorities Care. From Patient Priorities Care "The Process," by Tinetti, Naik, Dindo, 2022 (https://patientprioritiescare.org/how-it-works/the-process/). Copyright [2019] by Patient Priorities Care. Reprinted with permission.

Patient Priorities Care Conversation

Patient Priorities Care (PPC) practices patient centered care, as previously mentioned, by aligning a care plan with the health outcomes and goals that a patient with multiple comorbidities identified as necessary. This approach consists of using guided questions with patients and helping them figure out what matters most to them and what they find burdensome in their healthcare plan.

Such an approach allows for a conversation of identifying "What Matters," from the Age-Friendly Health System to the patient in helping a clinician find the best care plan. Patient Priorities Care focuses on understanding an individual's values and goals: connecting, enjoying life, managing health, and functioning.

The first talking point, connecting, refers to the patient's relationship with family and friends, community, and spirituality. Clinicians can depict patients' relationships by having them identify who has significance in their lives, the activities they enjoy with those they view as vital, and the frequency they interact with the individual. In terms of community and spirituality, connecting focuses on engagement, involvement, and support.

The value of enjoying life addresses productivity, personal growth, and leisure. Understanding this value allows clinicians to help patients identify what they want to do that they cannot forgo. Providing clinicians with a perspective on the values their patients place as a priority. This perspective emphasizes that the patient recognizes activities that they enjoy and would like to continue to fulfill their enjoyment.

Patient Priorities Care has identified the last two values: functioning and managing health. Functioning focuses on the themes of dignity and independence, providing a baseline of what patients can do and what activities they need help with, along with understanding how they might feel if they must ask for help or be in a situation where their independence is at risk. Having a sense of independence is a crucial aspect that many patients consider essential; understanding their views of independence allows caregivers to provide a healthcare plan that aligns with their needs and standards. Lastly, managing health focuses on health, symptoms, and quality of life. Clinicians can discuss managing health by asking patients what they value more: quality of life or

quantity. Considering if their health conditions or treatment confine their ability to do what they love and establish health care goals.

Independent of the four values PPC has identified as points to discuss when clinicians are having conversations with their patients in the approach of patient-centered care, other components that are important to mention are burdensome and ‘one thing’ that healthcare personnel would want to keep in mind when trying to figure out a healthcare plan to achieve the outcome health goals. Burdensome is essential because it allows patients to identify symptoms, medication, and tasks that interfere with their goals and outcome.

During a PPC conversation, healthcare providers take the time to understand the patient's priorities, values, and goals. The conversation may include questions about the patient's daily life, their support system, and what is important to them. This information is then used to develop a personalized care plan that reflects the patient's priorities.

One of the key benefits of the Patient Priorities Care system is that it helps patients feel more involved in their care. Patients can make more informed decisions about their treatment options by understanding their priorities and goals. This can lead to better outcomes and higher satisfaction with their care.

Patient Priorities Care Clinical Documentation

The main themes and values the patient identifies in their conversation as what matters the most to them can be clearly defined and outlined in a clinician’s

notes (Appendix I). A clinician’s Patient Priorities Care note develops from the conversation with the patient regarding healthcare interventions in terms of the patient’s health priority, goals, and aims to achieve the patient’s desired outcome and healthcare preferences. The note comprises important health goals, helpful and burdensome care, helpful and burdensome medication, burdensome symptoms, and the “one thing.” The one thing is what the patient would like to focus on primarily, providing clinicians with the patient's mindset when dealing with decision-making, tradeoffs, and treatment options.

Known Barriers to Implementing Patient Priorities Care

Due to limited research on clinicians' perspectives on the Patient Priorities Care tool. Possible barriers that could result in the implementation of Patient Priorities Care, based on the Quellet et al. clinician perspective, are the lack of understanding patients have about the severity or difficulty of their health, increased patient acuity, and conflicting decision making from multiple clinicians and family members (2021). Implementing patient-centered care can be challenging. Healthcare providers often face time constraints and competing demands, making it difficult to focus on patient priorities. Additionally, some healthcare providers may need more training or resources to engage in patient-centered care effectively.

A common barrier that can pose a conflict for clinicians when implementing patient centered care in PPC is the unrealistic expectations

patients and their families have on achieving or maintaining their health goals. This is also reflected in clinicians' difficulty finding an approach to balancing the benefits and harms patients propose as burdensome and beneficial goals and values (Tinetti et al., 2019). A clinician stated in Fried et al., regarding the role patients play in decision making and understanding the balance between benefit and harm:

> ‘So I try to balance what the patient wants and what the patient feels is important with what I want and what I feel is important, which are sometimes very much in line. And then sometimes not really related at all to each other (Fried et al., 2011).’

To address the challenges, healthcare organizations need to take a step in promoting patient-centered care. This can be done by implementing Patient Priorities Care, a quality improvement tool that supports patient-centered care. While Patient Priorities Care focuses on patient centered care, there are possible barriers that clinicians have proposed in implementing the approach. There are still benefits to Patient Priorities Care, such as patient centered care, prevention, identifying burdensome care, and improving patient provider relationships and communication (Quellet et al., 2021). Implementing patient-centered care can be challenging, but the benefits of doing so will outweigh it, and clinical setting that prioritizes patient care are likely to see positive results in the long term.

Objective of the Study

The proposed IRB-exempt study aims to understand the current use, views, and suggestions for implementing a patient-centered conversation tool, Patient Priorities Care (PPC), by interviewing clinicians at a VA medical center from multiple clinical settings. As previously mentioned, Patient Priorities Care is an initiative of utilizing patient-centered care to determine the best approach a clinician can use to create a care plan that achieves the patient's goals and healthcare outcomes, not the disease. As a result of limited research and data regarding clinician experiences and perspectives on their approach of using goal concordant care to treat patients with multiple health conditions. The results of this IRB exempt study will contribute to the need and awareness of using patient centered care for patients with multiple comorbidities and inform the current practice and spread of PPC at VABHS. Along with the effectiveness of implementing a platform that allows the care team to identify and recognize what matters most to the patient.

METHODS

Study Sample

The study sample consisted of clinicians practicing at VA Boston Healthcare System clinicians. The sample group comprised the following medical degrees and licenses: Doctor of Medicine (MD), Doctor of Osteopathic Medicine (DO), Nurse Practitioner (NP), and Physician Assistant (PA). With the vast array of clinicians that participated in the study, their work environment also varied. The clinicians that participated worked in the following environments at the VABHS: primary care (PACT), geriatric subspecialty consult clinic, medicine subspecialty including cardiology, acute care home hospital program, and inpatient medicine.

Clinician Recruitment

Clinicians from the various sites mentioned were recruited individually by email to participate in a twenty-minute interview between December 2022 and February 2023. Participants were chosen to participate based on their clinical sites and interactions with patients who have multiple health concerns. The study did not incentivize participants to join; participants were greatly appreciated for providing their personal experience and perspective on Patient Priorities Care effectiveness and usefulness in caring for older veterans with multiple chronic illnesses.

When participants chose to partake voluntarily in the recruitment email, they could self-schedule with one to two members of the project team on the

scheduling software, Calendly, which conjoined with the platform used to conduct the interviews (see Appendix II).

Semi-Structured Interview

The study's design consisted of conducting semi-structured interviews to collect qualitative data. Qualitative data analysis provides the perspective and understanding of a group or one's attitude, motives, behaviors, and beliefs. Qualitative data analysis is defined as:

'.. process of systematically searching and arranging the interview transcripts, observation notes, or other non-textual materials that the researcher accumulates to increase the understanding of the phenomenon (Wong, 2008).'

Semi-structured interviews are used only for the data of qualitative research projects. A semi-structured interview is a type of interview where the interviewer has a set of questions but is also free to ask additional questions or follow-up questions based on the interviewee's responses. As stated by Dicicco-Bloom et al., semi-structured interviews are:

'organised around a set of predetermined open-ended questions, with other questions emerging from the dialogue between interviewer and interviewee/s. (Dicicco-Bloom et al., 2006)'

The study is a qualitative research project focusing on quality improvement in the effective communication and interaction between patient and

provider, focusing on what matters most to the patient based on the perspective of clinicians.

The semi-structured interviews consisted of eight primary questions, as seen in the question guide of Appendix III. The semi-structured interview guide asked clinicians to describe their point of view on the patient centered tool, Patient Priorities Care, the barriers, and the feasibility of the tool at the VABHS. The question guide allowed the interviewee to respond directly to the question but provided the flexibility to expand on their response and create a conversation with the interviewer. Participants were also provided a Patient Priorities Care clinical documentation template as an example of how a note would be presented on the electronic medical records.

The interview was conducted once for approximately twenty minutes through a video conference program, Microsoft Teams. Clinician interviews were audio-recorded and transcribed once consent was obtained. The brief statement provided to the participant, informing their involvement in the project, and inquiring about consent, was as stated:

> "Participation is voluntary, anonymous, and confidential. Participation and expressed views on this survey do not affect any performance reviews. This project has been deemed 'not research' by the VA Boston IRB and is not subject to full review. Do I have permission to record and transcribe this interview? (Appendix III)."

Recording the interview allowed the interviewer to focus on the content and responses of the participant. In addition, recording enabled the platform to

create a transcription of the interview, creating a transcript that would be useful for analyzing the data.

Data Analysis Protocol

The interview was transcribed verbatim and revised to remove any filler words to improve the transcript. With the provided data, the identification of the participants was removed, de-identified, and transcription was cleaned. Once the transcript of the interviews was reviewed and edited. The project team members were then able to begin the phase of coding and creating a codebook (Appendix IV).

Creating a codebook was done based on themes using the thematic analysis approach. The thematic analysis approach is a technique that identifies, analyzes, and records themes in the data. The Braun and Clarke method of thematic analysis defines a theme as:

> ‘a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set (Braun V et al., 2006).’

The process of thematic analysis consists of the following stages, which were used as a guideline for analyzing the data: familiarizing with the data, creating initial codes, finding themes, defining themes, and producing the report (Braun V et al., 2006). The software used to code the qualitative data was NVivo, developed by QSR International. NVivo is a qualitative data analysis software

that allows you to organize, analyze, and visualize your data. It is a powerful tool for researchers with large amounts of unstructured data, such as interviews, transcripts, surveys, and social media content. While creating the codebook, members of the research group compiled a list of themes. They discussed their meaning of them to reach a consensus on formalizing the codebook. Direct quotes from the interview transcript provided examples of the themes identified.

Coding in NVivo involves assigning descriptive labels or themes to the data to help categorize and analyze. Completion of data coding allows for patterns and relationships to be identified. Several queries can be used in NVivo, such as word frequency, text search, and matrix coding.

Alongside thematic analysis, grounded theory is another approach used in the study. Grounded theory is a qualitative research method for when an existing theory needs to be completed because the data used to derive the theory was collected from a different group of participants being researched. In this case, the patient centered tool, Patient Priorities Care, has been researched to understand the patient's perspective. However, not much data has incorporated the perspective of clinicians. Using the grounded theory methodology, a new theory can be derived based on collecting and analyzing data in an iterative manner of actual world data. Data collection is theoretical, recruiting in small groups of participants to start with, and then as the research progress, more recruitment will occur. Collecting and analyzing data to generate theory commences with an

inductive inquiry that is comparative, iterative, and interactive (Espriella et al., 2020).

The analysis will open coding using the transcripts, breaking them down based on thematic analysis into codes. The data can be constantly compared and find relationships using axial coding and grouping codes. Selective coding can then begin, using the connections of the codes and building the basis of the final theory.

RESULTS

Participant Population

After contacting various healthcare providers working in the VA Boston Healthcare System, nine advanced practice clinicians responded and participated in the study. The clinicians represented 11% of nurse practitioners, 11% of physician associates, and 78% of physicians. In addition, the work environment consisted of 11% working in primary care, 11% in medicine subspecialty clinic, 22% in acute care home hospital program, 22% working in inpatient, and 33% in a geriatric subspecialty clinic. Of all the participants, 22% had no prior knowledge or exposure to Patient Priorities Care, and approximately 78% had previous knowledge or exposure to Patient Priorities Care. Regarding training, 11% of the participants had formal training, 44% had informal training, and 44% had not.

Coding Themes

Based on the nine interviews with clinicians, seven significant themes were identified, along with twenty-one subcodes. The identified seven major themes regarding Patient Priorities Care are awareness of the tool, impact on veteran care, patient factors, note structure and documentation, one thing from the note, factors of implementation and use, and recommendations. As seen in Table 1, the seven major themes are listed, along with quotes from interviews with clinicians highlighting the identified themes.

Table 1: Clinician Themes regarding Patient Priorities Care. The table highlights the seven main themes from the generated codebook and corresponding quotes from clinicians interviewed in the study.

Clinician Themes	Example Quotes
Awareness of the Tool/Clinic	
Familiar with PPC/Clinic	Yes. So the matters most clinic cause I understand it is a specific clinic designed to have these patient priorities, care conversations. I think that's what like it was XXXX and and one of the other nurse practitioners who, did that? and then I have some experience with patient priorities. Care because we did an initiative in the hospital and home program where we would have these conversations with some of our patients. (interview #5)
Impact on Veteran Care/Value	
Value in Principle	
Veteran-centered/VA Mission aligned	I think this is this is a very patient centered model of care. VA has made like tremendous efforts to make the care more patient driven, which I think is is really important. I think this is a very powerful tool. It needs like once its utility is can be appreciated by all (interview #4)
Patient Factors	
Patient Factors that Most Benefit	
Number of problems on the problem list/multiple complex co-morbidities	So I do feel like patients who will have a lot of comorbidities and multi complexity who have been either or transitioning from a home setting to a more assisted setting or higher levels of care or patients who are dealing with a lot of end stage disease. I think they feel that burden more and are more like sort of in that mind space of 30,000 foot view of what's going on in their lives for them, this is very clearly useful (interview #4).

Table 1 (Contd.)

Patient Factors the would Not Benefit	
Cognitive impairment – without support	I've seen like some trouble with folks with cognitive impairment. I mean that's like who I see a lot of geriatrics, clinic. Just like getting to the kind of the answers in this case, it requires a very high level I think of Like being able to weigh the burdens and like think about the future and all of that so. People come need to have like a high level of ability to manipulate information and understand and manipulate the information and think into the future as well (interview #7)
Note Structure/Documentation	
Visibility of the note in EMR	
Flagging of the Note	This is probably a note that, like probably should be flagged too (interview #1)
One Thing from the Note	
Goals, beneficial care and tradeoffs	And, you know, we're wondering what is their goal, focus is gonna be what? What are their goals of care? And they're all kinds of things that kind of get activated at that point. Like, do they have a MOLST? Do they have an LST thing posted? What's their code status? Can we get social work involved? Like, there's this flurry of things that happen or should happen (interview #6)
Factors of Implementation and Use	
Facilitating Factors	
Discipline/role of providing conducting PPC conversation (i.e., social work, nursing, MD/DO)	be one or you know have an RN assessment at the beginning when the nurses or MAs call to do the intake. This could be part of that and they could enter a note, but it has to be simpler, it has to be a little bit more user-friendly because this is this is built for a for a very detailed provider visit, that's how it this form is built (Interview #4)

Table 1 (Contd.)

Limiting Factors/Barriers	
Time – for interview and write up	Probably the main one would just be seeing as it's sad, but with burnout and everything just being seen as another note to review and more work for us to do, which is sad because this is really what matters to patients. I guess I also would hope that they would have discussed these things with me already, but I could totally understand how in the midst of a quick visit, things might be messed, or they may not bring them up so. I think just time and burnout and overload would be the biggest, biggest reasons that it would not be implemented. (interview #9)
Recommendations	
Not referring if clinician feels that they are already providing this service	Because I myself am a geriatrician, I sort of like have the hubris to think that I'm kind of already wrapping this into my care. Which is not necessarily true. I am not going through in a structured way like this at all. I haven't done this training. But I feel like I haven't needed like additional support to identify the information (interview #2)
Not another task for PCP (burnout)	Like it's a valuable resource to have. It just cannot be a required part of our daily interactions with patients. I think that would make it extra burdensome and people would become, like resentful and angry about it. (interview #6)

The first theme generated was awareness of the tool and clinic. The clinic being referred to is the Matters Most Clinic, a site at the VABHS where Patient Priorities Care has been piloted. This theme assessed the foundational basis of whether clinicians had any prior experience using the patient centered tool.

Having this information is vital in understanding how receptive a clinician would be to a tool if they had any familiarity with it. Of all the participants that participated in this study, the majority of clinicians were familiar with Patient Priorities Care or the Matters Most Clinic.

The following theme created was the impact on veteran care. This helped assess if clinicians believe implementing this patient-centered tool will affect patient care. Impact on veteran care comprised two subcodes: value in principle and value in practice. The value in principle themes commonly identified throughout the interviews was Patient Priorities Care associated with veteran-centered care and is in alignment with the VA mission. The VA mission is as stated:

> "VA Boston Healthcare System exists to serve the Veteran through the delivery of accessible and exceptional care by staff who demonstrate outstanding customer service, the advancement of health care through research, and the education of tomorrow's health care providers (U.S. Department of Veterans Affairs, 2022)."

Based on the perspective of clinicians identifying the Patient Priorities Care tool as veteran centered signifies the tool's objective, using the patient centered care approach to help clinicians align care with what matters to the individual receiving care. It is stated as veteran centered because the study occurred at the VABHS clinical setting, where individuals receiving care are also identified as veterans.

As one of the nine significant themes identified, patient factors comprise three subcodes: patient factors that most benefit, would not benefit, and challenging to say who would benefit. Patient factors are essential because they represent identification criteria that healthcare providers use to distinguish which patients would gain the most advantage from using the Patient Priorities Care tool. As for patient factors that would not benefit, a variety of codes were identified. The two recurrent subcodes identified were cognitive impairment without support and low health literacy, as seen in Table 1.

Furthermore, when clinicians were asked to provide their opinion on Patient Priorities Care notes and documentation. Many stated that documentation should be flagged, and the location and title should be familiarized and standardized. This perspective is crucial given that the electronic medical record platform used at the VABHS is CPRS; documentation tends to be done differently depending on where providers place or label them. Many clinicians referred to documentation as:

> “if I have to spend more than like 3 or 4 minutes trying to find this note then, it's not a good situation. (Interview #3).”

Following the tool's documentation, many providers identified one thing from the note they found helpful when reading. Many identified the goals, beneficial care, and tradeoffs as imperative information they would need to provide exceptional patient care.

Factors of implementation and use, were a major theme frequently coded during the analysis phase of qualitative data. Factors of implementation and use are composed of two subcodes: facilitating factors and limiting factors. Limiting factors and barriers assessed the potential or already established hindrances in healthcare that delay patient centered care. A common barrier clinicians proposed was the amount of time it would take to conduct the interview or write the notes, along with doubt about the notes changing care, and not knowing where the information is going. Many participants expressed this, as seen in the quote:

"I'm highly skeptical of patient priorities care as being like useful, at least in the Boston VA system. And the reason is you can have this interview with the patient, but where is this information going? Nobody. I don't think anybody is reading these notes…. I'm very skeptical that these notes are changing people's care because who is reading them? (interview #2)."

The quote highlights the value in practice regarding the impact on veteran care. Not knowing where the information is going can be detrimental to improving veteran care because it will decrease the likelihood of clinicians using the tool. This provides the perspective of why clinicians would use a tool if they were not sure the information will be used or read. Another quote that highlights the value in practice regarding the impact on veteran care is clinicians not using the information:

"Most patients are not the barrier here. I think the barrier is really the providers understanding how to use this information (Interview #4)."

The quote emphasizes that sometimes we view the patient as possessing various barriers in improving veteran care when using this tool. However, sometimes it can also be the clinicians that create the barrier. This barrier is created by clinicians not knowing how to use this information effectively, the barrier can be overcome with training on how to use and implement the tool into their care plan.

The last central theme identified when coding the interviews was recommendations for implementation. The recommendations consisted of suggestions to increase referrals, proposed training, and how to integrate Patient Priorities Care at VABHS. Participants commonly identified that a way to increase referrals was to standardize the assessment across specialties, conduct training by using the format of Talent Management System (TMS)/online or in-person and integrate PPC at the VABHS by spreading it across the clinical team, where everyone will play a small part.

DISCUSSION

With minimal literature available regarding the approach to understanding the current use, view, and suggestion from clinicians about the patient-centered tool, Patient Priories Care, this study is important because it is the beginning of trying to understand how the tool is being used. The study on the clinician's view on Patient Priorities Care is the first novel pilot study at the VA Boston Healthcare System, is a patient-centered tool designed to help clinicians identify and align what matters to their patients to the care plan. The perceived benefits of the tool are to improve patient-centeredness, prevent burdensome care and enhance clinician-patient relationships (Quellet et al., 2021). Although the study provided informative feedback on implementing the tool at the VABHS, the study possessed many strengths, challenges, and limitations.

The strengths highlighted throughout the study was that very few studies focus on the clinician's views regarding implementing Patient Priorities Care. Another strength the study provided was the qualitative data collected. Using qualitative data produced rich data that identified themes that will be useful in helping with implementation. In a similar study, Quellet et al. identified Patient Priorities Care as essential to patients and healthcare providers along with challenges to implementation (2021).

The challenges identified by Quellet et al. are that future studies need to incorporate possible tradeoffs where patients need better health literacy. Poor

health literacy was a subcode identified in this study as a patient factor, identifying patients who would not benefit from Patient Priorities Care (2021).

While the study provided great feedback based on the perspectives received from clinicians on implementing Patient Priorities Care at the VABHS, there were some limitations in the study. With the study being a pilot, there is a need for further research based on the participation sample size, location, and the data received. The participation size was small, hand-selected, and limited to selected roles in healthcare, requiring a need to expand the study with a more significant participation size focusing on various clinicians in additional specialties. Furthermore, the study was limited to a single Veterans Affairs Healthcare System location. The subsequent study and further research should consider multiple centers and non-Veterans Affairs locations.

The last limitation found was the data received, although the qualitative data provided valuable information. Further research could include quantitative data measuring the time it would take to conduct the conversation and compare and analyze the correlation between time and improvement in quality of care. Measuring time would be useful information because, as stated in this study, time was a significant limiting barrier in implementing Patient Priorities Care. Clinicians stated that this tool would require additional time to conduct and document.

Another interesting perspective that would be beneficial in studying would be to receive qualitative data on patients' views on the flow of implementing

Patient Priorities Care into their health care rather than the already researched perspective on patient-centered care. Overall, the clinicians' perspectives on Patient Priorities Care in the pilot study at VABHS were favorable based on the recommendations, identifying Patient Priorities Care as a valuable tool to practice goal-concordant care but challenging to implement. This study is the initial step to understanding clinicians' perspective on PPC, further research is needed to aid in the feasibility of implementation and some of the identified recommendations are places for pilot interventions.

APPENDIX

Appendix I: Examples of Patient Priorities Care Notes

Example #1: Patient with recent CABG, Diabetes, HTN, Depression, PTSD, Stroke

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PATIENT PRIORITIES CARE ASSESSMENT:

What Matters Most (Values):

1. Connecting (Family, friends, spirituality/religion, community): Seeing more of his children and brother. Spend time with family and friends,
Have good relationships with family or friends

2. Enjoying life (Recreation, hobbies, play, personal growth, learning, being productive): Enjoyed youth hockey and baseball until 2 years ago. Would like to resume some form of participation Participate in favorite hobbies (like reading)

3. Function (Taking care of yourself, being independent, not having to depend on others):
Think clearly, Walk or move around by myself, Drive or be able to get around outside my home

Most Important Health Goals:
1. Improve walking
2. Relieve neck pain

Most Bothersome Symptoms or Problems interfering with your health goals:
1. Managing DM
2. Finding travel to appointments

Helpful medications:
1. Oxycontin
2. Gabapentin1.

Burdensome care:
1. Monitoring glucose
2. Finding travel to appointments
3. Finding information on his most recent hospitalizations

He is open to all life sustaining treatments, but would not want them continues indefinitely if there is no realistic hope of recovery/improvement.
"If I'm going to be a vegetable, I don't want to be around."
He worked as an EMT, so has a good understanding of LSTs

PATIENT PRIORITIES CARE RECOMMENDATIONS

#. Referrals
Endocrine clinic for possible continuous glucose monitor
SW for travel options and updating HCP
LLWS
Provided with contact information for patient advocate for information issues

#. Shower chair and grab bars ordered, Has Life Alert and cane

Example #2: Patient with MCI, MDD, hx remote renal neoplasm s/p ablation, urinary incontinence
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PATIENT PRIORITIES CARE ASSESSMENT:

#. WHAT MATTERS MOST - VALUES:

> What does enjoying life mean to you?

1. Connecting (Important people in the patient's life): The most important person is her son.
2. Enjoying life (Productivity and areas of personal growth): She partakes in Yoga and Tai-chi
3. Function and independence (What makes the patient have dignity): She prides herself on her cognitive and physical independence

> Managing health (Quality vs quantity of life) - In managing your health and making medical decisions, how important are:

1. Religious/spiritual beliefs: Very important
2. Cultural/racial/ethnic background: Very important

3. Controlling pain: Somewhat important. Her right knee pain is being managed with physical therapy and does not greatly limit her day to day life
4. Financial considerations: Important, though currently not an active concern.

#. HEALTH GOALS: Based on the veteran's values, these are the activities that the veteran identifies as important to do more of or keep on doing to maintain their quality of life:

1. Maintaining independence in ADLs and iADLs by improving/maintaining her current mobility and cognition
2. Increasing physical activity
3. Increasing social interactions

--- BARRIERS & OPPORTUNITIES ---

Most Bothersome Symptoms or Problems interfering with achieving health goals include:

1. Urinary incontinence and frequency, 2. Right knee pain

#. HEALTH CARE PREFERENCES - TRADEOFF'S

> Helpful care/medications: 1. Geriatrics clinic 2. HSV suppressive therapy

> Burdensome care/medications: N/A

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THE ONE ASK: Patient would like to improve her discipline in keeping up with her physical
therapy exercises at home, and Yoga and Tai-chi programs at her independent living facility. She is interested in exploring other avenues to increase physical activity.
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PATIENT PRIORITIES CARE ASSESMENT & RECOMMENDATIONS

We established in today's visit that she values her independence, her mobility and her cognition. She finds enjoyment in frequent/daily social interactions and community engagement. Her religious, cultural and ethnic identities play an important role in healthcare decision making.

The one area she would like to focus on is increasing her physical activity in an effort to maintain her independence.

#. RECOMMENDATIONS:

> Referrals: referred to GeroFit

Appendix II: Invitation to Healthcare Clinicians to Participate

Dear Dr. [last name],

I am writing to invite you to participate in a brief interview as a clinician at VA Boston, to help with implementation of Patient Priorities Care (PPC), a conversation tool to elicit values and goals in older adults with multiple chronic illnesses. The goal of this tool is to help clinical teams learn what matters most to patients and align care with this in mind.

Participation is voluntary, anonymous and confidential. Participation and expressed views on this survey do not affect any performance reviews. This project has been deemed 'not research' by the VA Boston IRB and not subject to full review.

We have been piloting this tool in various clinical settings (hospital in home, referral based clinic from geriatrics consult and heart failure clinics as a 'Matters Most Clinic'.) We are interested in your perspectives on how Patient Priorities Care could be useful in the care of older veterans with multiple chronic illnesses.

We would be grateful if you could participate in a 15-20 min conversation over Teams in the upcoming weeks to provide our team with your insight. We are interested in any input you could provide as we consider an expansion of Patient Priorities Care at VA Boston. Below is a link to schedule a day and time that works for you. Please feel free to reach out to Dr. [last name] at xxxxxxxx@va.gov, if you have any questions or concerns.

Link to Schedule Interview:
https://calendly.com/xxxx

Thank you for your time and consideration.

Best,
The VA Boston PPC Team

Appendix III: Patient Priorities Care Question Guide

VA Boston PCP views of PPC Project
Adapted from Dr. XXXX PPC Staff Interview Guide

Thank you for participating. I will start recording once I provide a brief consent statement.

participation is voluntary, anonymous and confidential. Participation and expressed views on this survey do not affect any performance reviews. this project has been deemed “not research’ by the VA Boston IRB and not subject to full review.

This interview will be recorded and transcribed and thank you for giving me your consent to interview and record you.

1. Are you familiar with Patient Priorities Care (PPC) or the Matters Most clinic? (Share examples, website regardless of answer)
    a. Small PPC blurb: PPC is a conversation tool/guide that helps clinicians elicit patient values, understanding of tradeoffs/burdensome care and helps to identify goals with patients. The care team then works to align care with these goals. This tool is geared towards older adults with multiple chronic illnesses and focuses on ‘current care’ planning.
    b. If yes, how did you hear about it and please describe your experience? As a person conducting the conversations, reading the notes, care alignment? Have you done the training?
    c. If no – team can share the tool, website and explain the tool during the interview. We will also have a couple of PPC note examples to share.

2. How could or did the information from PPC conversations impact your ability to provide veteran centered care?
    a. What types of patients would be best served by this approach?
    b. What type of identification criteria do you think would be useful?

3. How would you like information from the PPC interview to be put into the chart? What is your ideal documentation to read?
    a. What is the one thing you need to know from this note?
    b. Currently the documentation is done a couple of different ways – with various note titles. Do you have a preference or ideal state for documentation? Example postings v. regular note

4. What barriers to implementation and use of the tool exists in your clinical setting?
    a. Can probe further – staff buy-in, patient level barriers, care alignment, time in clinic?

5. How likely would you refer to the Matters Most clinic? (not likely, somewhat and very) (for non-PCP interviewees)
    a. Why are you unlikely to refer? → not likely then can probe more. What might make you more likely to refer?
    b. If you are likely to refer → Why are you likely to refer and Who would you refer?
    c. How can we increase referrals? (may not need this question based on responses for above)

6. Do you think that the PPC model aligns well with the overall mission of the VA? Why or why not?

7. How do you envision the integration of PPC/Matters Most at VA Boston?
    a. What would be the ideal way/workflow for this tool to be deployed effectively? What professions should be included?
    b. Are there any specific resources that you think we need to implement this tool effectively?
    c. What type of training do you envision – format, length, practice?

8. Is there anything else that you would like to add that we haven't talked about?

Appendix IV: Patient Priorities Care and Clinician views Codebook

PPC and Clinician Views Code Book

Demographics:

1. Role, clinical setting (outpatient vs. in home care)
2. Previous awareness of PPC (yes/no) – how?
3. PPC Training completed (yes/no); formal?

Theme and individual codes:

1. Awareness of the Tool/Clinic
    a. No awareness
    b. Familiar with PPC/Clinic
    c. Regularly/Not Regularly reading the notes

2. Impact on Veteran Care/Value
    a. Value in Principle
        i. Using this information (Ideal framework)
        ii. Veteran-centered/VA Mission aligned
        iii. Aligns with Whole Health

    b. Value in Practice
        i. Important information for the clinical team to know
        ii. Increase patient motivation to do what the clinical team recommends
        iii. Not using this information/Information not going anywhere
        iv. Limited impact on veteran care

3. Patient Factors
    a. Patient Factors that Most Benefit
        i. Number of specialists
        ii. Number of problems on the problem list/multiple complex co-morbidities
        iii. Pain Clinic Veterans
        iv. Number of Medications
        v. Have compliance or multiple readmissions
        vi. Have cognitive impairment with caregiver present
        vii. Patients that are interested/motivated/High Health Literacy
        viii. Everyone

    b. Patient Factors that would Not Benefit

i. Cognitive impairment – w/o support
ii. Low Health Literacy
iii. Minimal Social Supports
iv. Identifies with the more 'traditional patient role' – 'I do what the Doctor tells me'

c. Challenging to say who would benefit the most

4. Note Structure/Documentation
    a. The current structure is good
    b. Visibility of the note in EMR
        i. Flagging of the Note
        ii. Knowledge of the title and where to find

    c. Would prefer shorter/bulleted note
    d. Mechanism to alert clinician to the presence of the note
    e. Which team is responsible for PPC follow through

5. One Thing from the Note
    a. Veteran's hard stops in care
    b. Goals, beneficial care and trade offs
    c. What the veteran is willing to do and not do

6. Factors of Implementations and Use
    a. Facilitating Factors
        i. Discipline/role of providing conducting PPC conversation (i.e., social work, nursing, MD/DO)
        ii. Closed medical system (i.e., home based primary care)
        iii. Referring providers personal knowledge of the person completing assessments (same campus, warm handoffs)

    b. Limiting Factors/ Barriers
        i. Time – for interview and write up
        ii. Amount of needed resources – staffing, money
        iii. Medical – no real alternatives to burdensome care
        iv. Lack of coordination among providers
        v. Skepticism of these notes changing care/Where is the information going
        vi. EMR would need to be updated to reflect this conversation well
        vii. Improved care coordination needed i.e., case manager

viii. Lack of clarity about how outcome can be practically used
ix. Need to differentiate from other similar services (Whole Health)
x. Note Titles not intuitive – difficulty finding this information
xi. Overwhelming information

7. Recommendations
   a. Referral – how to increase
      i. Standardize this assessment across specialties
      ii. Currently unaware of clinic pathways to refer
      iii. Not referring if clinician feels that they are already providing this service
      iv. Part of routine veteran intake

   b. Training
      i. Shorter is better
      ii. Should offer CME
      iii. Should focus on both conducting conversations and aligning care
      iv. Format: TMS/Video/In-person

   c. How to Integrate PPC at VA Boston
      i. Consult based Clinic
      ii. Not another task for PCPs (burnout)
      iii. Spread across the clinical team: everyone would have a small part – i.e., social work

BIBLIOGRAPHY

1. Blaum, C. S., Rosen, J., Naik, A. D., Smith, C. D., Dindo, L., Vo, L., Hernandez-Bigos, K., Esterson, J., Geda, M., Ferris, R., Costello, D., Acampora, D., Meehan, T., & Tinetti, M. E. (2018). Feasibility of Implementing Patient Priorities Care for Older Adults with Multiple Chronic Conditions. *Journal of the American Geriatrics Society*, 66(10), 2009–2016. https://doi.org/10.1111/jgs.15465

2. Coulter, A., Entwistle, V. A., Eccles, A., Ryan, S., Shepperd, S., & Perera, R. (2015). Personalised care planning for adults with chronic or long-term health conditions. *Cochrane Database of Systematic Reviews*, 2015(3), CD010523.

3. Dicicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education*, 40(4), 314–321. https://doi.org/10.1111/j.1365-2929.2006.02418.x

4. Espriella, R. de la, & Restrepo, C. G. (2020). Teoría fundamentada. *Revista Colombiana de Psiquiatría*, *49*(2), 127–133. https://doi.org/10.1016/j.rcp.2018.08.002

5. Fried, T. R., Tinetti, M. E., & Iannone, L. (2011). Primary care clinicians' experiences with treatment decision making for older persons with multiple conditions. *Archives of Internal Medicine*, 171(1), 75–80. https://doi.org/10.1001/archinternmed.2010.318

6. Institute for Healthcare Improvement. (2019). "What matters" to older adults? A toolkit for health systems to design better care with older adults. Age-Friendly Health System

7. Institute for Healthcare Improvement. (2020). Age-friendly health systems: Guide to using the 4Ms in the care of older adults. Age Friendly Health Systems.

8. Institute of Medicine (US) Committee on Quality of Health Care in America. (2001). Crossing the Quality Chasm: A New Health System for the 21st Century*. National Academies Press (*US). http://www.ncbi.nlm.nih.gov/books/NBK222274/

9. Marques, A., Bordado, J., Peralta, M., Gouveia, E. R., Tesler, R., Demetriou, Y., & Gomez Baya, D. (2020). Cross-sectional and prospective

relationship between physical activity and depression symptoms. *Scientific Reports*, *10*(1), 16114. https://doi-org.ezproxy.bu.edu/10.1038/s41598- 020- 72987-4.

10. Mate, K., Fulmer, T., Pelton, L., Berman, A., Bonner, A., Huang, W., & Zhang, J. (2021). Evidence for the 4Ms: Interactions and Outcomes across the Care Continuum. *Journal of Aging and Health*, *33*(7-8), 469–481. https://doi-org.ezproxy.bu.edu/10.1177/0898264321991658

11. Naik, A. D., Dyer, C. B., Kunik, M. E., & McCullough, L. B. (2009). Patient Autonomy for the Management of Chronic Conditions: A Two-Component Re-conceptualization. *The American Journal of Bioethics:* AJOB, 9(2), 23–30. https://doi.org/10.1080/15265160802654111

12. Ortman, J. M., Velkoff, V. A., & Hogan, H. (2014). An aging nation: The older population in the United States (pp. 25-1140). US Census Bureau.

13. Ouellet, G. M., Kiwak, E., Costello, D. M., Green, A. R., Geda, M., Naik, A. D., & Tinetti, M. E. (2021). Clinician Perspectives on Incorporating Patients' Values-Based Health Priorities in Decision-Making. *Journal of the American Geriatrics Society*, 69(1), 267–269. https://doi.org/10.1111/jgs.16914

14. Overview of Patient Priorities Care. Patient Priorities Care. (2021, April 16). Retrieved December 6, 2022, from https://patientprioritiescare.org/about/overview/

15. Tinetti, M., Dindo, L., Smith, C. D., Blaum, C., Costello, D., Ouellet, G., Rosen, J., Hernandez-Bigos, K., Geda, M., & Naik, A. (2019). Challenges and strategies in patients' health priorities-aligned decision-making for older adults with multiple chronic conditions. *PLOS ONE*, 14(6), e0218249. https://doi.org/10.1371/journal.pone.0218249

16. Tinetti, M., Naik, A., & Dindo , L. (2022). The Process. Patient Priorities Care. Retrieved 2023, from https://patientprioritiescare.org/how-it-works/the-process/.

17. U.S. Department of Veterans Affairs. (2022, October 13). *Mission and vision*. Veterans Affairs . Retrieved from https://www.va.gov/boston-health-care/about-us/mission-and-vision/

18. Wong, L. (2008). Data Analysis in Qualitative Research: A Brief Guide to Using Nvivo. Malaysian Family Physician : *The Official Journal of the Academy of Family Physicians of Malaysia*, 3(1), 14–20.

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