

Peer Review File

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Reviewer A

Comment 1: Please define and explain the importance of palliative care in the introduction. List any and all palliative care components for solid tumor cases.

Reply 1: Thank you for this recommendation. We have added a sentence that outlines palliative care components to the introduction. We believe that all components of palliative care are important for patients facing serious illness, and that they are similar across patient populations with serious illness, including those with advanced solid organ malignancy. Given this, we have left this statement broad.

Changes in the text: “Components of palliative care include formal assessment of physical symptoms and psychosocial health and associated management, education related to prognosis and treatment options, and goals of care and advance care planning discussions, delivered by an interdisciplinary team.(1)” (Page 5, Lines 150 to 153)

Comment 2: Please also state in the intro that CHWs at times also may be navigating cancer clinical trial patients.

Reply 2: Thank you for your recommendation to include the role that CHWs play in research participation and clinical trials. We have added a sentence to the introduction, which outlines that CHWs have been incorporated into research settings to bolster participation in clinical trials.

Changes in the text: “Moreover, CHWs have been incorporated into research settings to facilitate participation and navigation in clinical trials.(2)” (Page 6, Lines 183 to 184)

Comment 3: Please describe the limitations of having 3 hospitals that are located in 1 geographic region. For example, is this data generalizable to the northeast or west coast?

Reply 3: Thank you for highlighting the importance of discussing the generalizability of our findings. We acknowledge that our selection of hospitals within one geographic region may limit the generalizability of our findings to other regions. Of note, our primary objective was to capture African American patients and caregivers from various socioeconomic backgrounds and lived experiences, rather than focusing on geographic diversity. Though the findings may not be directly generalizable nationally, we believe they offer valuable insights into the experiences and perspectives of African American patients across different settings. We have incorporated this acknowledgment into the limitations section.

Changes to the text: “The enrollment sites represent three different settings, including an urban setting in Baltimore, Maryland, a rural setting in Salisbury, Maryland, and an urban area with surrounding suburban and rural communities in Birmingham, Alabama.” (Page 8, Lines 269-272)

“Data were collected in three distinct settings, with the goal of including African American patients and caregivers with differing socioeconomic backgrounds and lived experiences. This included an urban setting in Baltimore, Maryland, a rural setting in Salisbury, Maryland, and an urban area with surrounding suburban and rural communities in Birmingham, Alabama. While this study's findings may not be directly generalizable nationally, they do offer valuable insights into the experiences and perspectives of African American patients across different settings.” (Page 24, Lines 705 to 711)

Comment 4: One of the participants indicated that CHWs are required to have knowledge of the type of work they do. Can you include any literature in your introduction that indicates that CHWs are trained in palliative care, research, oncology? Recent article on CHW research training: <https://www.frontiersin.org/articles/10.3389/fphar.2023.1295281/full>

Reply 4: This is a great suggestion, thank you. We have included a sentence about the training that the CHWs underwent as part of their onboarding for the intervention, with reference to a protocol paper that outlines the curriculum and training plan.(3)

Changes in the text: “As part of the preparatory phase of the clinical trial, CHWs were onboarded at each enrollment site and underwent comprehensive training on palliative care,

oncology, patient navigation, and health disparities.(3) This training aimed to equip CHWs with the necessary knowledge and skills to effectively support African American patients with advanced cancer and caregivers, by addressing individual barriers to healthcare, SDOH, and palliative care needs.(3)” (Page 6, Lines 186 to 190)

Comment 5: In the discussion, please also list why African Americans are not offered palliative care. Please list any reasons to why and how CHWs can mitigate those disparities in care.

Reply 5: Thank you so much for this recommendation. We have added a paragraph to the discussion section, which outlines barriers to palliative care among African American patients. Further discussion of barriers and the role of the CHW intervention in addressing those barriers is beyond the scope of this article and is currently being explored in another study.

Changes in the text: “Moreover, participants highlighted the perceived cost of palliative care services as a potential barrier, particularly among African American patients. Research suggests that racial disparities further contribute to barriers in accessing palliative care.(4) Minority older adults, especially African Americans, often lack knowledge about palliative care, while spiritual and religious beliefs within these communities may conflict with the principles of palliative care.(5–9) Additionally, historical injustices and ongoing healthcare disparities can engender mistrust, leading to concerns about the perception of forgoing curative treatments when initiating palliative care.(10,11) These complex factors pose significant challenges in promoting the utilization of palliative care services among African American patients.” (Page 21, Lines 614 to 623)

Reviewer B

Generally, I found your description clear and concise and your problem compelling. However, the description of the method was limited, and it would be helpful to clearly connect the theory and methods to the CHW intervention itself. It would also be helpful to more clearly map

findings from this research to the proposed CHW intervention. Below please find more specific notes.

Comment 1: It would be helpful to provide specific numbers on the recruitment response rate to understand recruitment methods and potential bias. You could consider presenting this as a consort map if helpful.

Reply 1: Thank you for this recommendation to add rigor to our results. We have added a sentence to the results section, which clearly outlines how many participants we approached and how many of those agreed to participate.

Changes in the text: “We approached a total of 38 potential participants (28 patients and 10 caregivers) who met our eligibility criteria, of whom 16 participants (11 patients and 5 caregivers) agreed to participate and were enrolled in the study.” (Page 12, Lines 376 to 378)

Comment 2: It would be helpful to more clearly describe the research questions.

Reply 2: Thank you for your suggestion. The focus of this study was to report the attitudes and perceptions of the intervention and the intervention components (palliative care and patient navigation). We have refined our research questions to make this clearer.

Changes in the text: “The objective of this analysis was to explore patient and caregiver attitudes and perceptions of the CHW palliative care intervention to support African American patients with advanced cancer in accessing palliative care. More specifically, we aimed to characterize perceptions related to the intervention and intervention components, palliative care and patient navigation.” (Page 7, Lines 223 to 226)

Comment 3: I was curious to understand why the specific CIFIR domains were chosen and others were excluded. Please consider including a project-specific theoretical framework (that maps to research questions and methods) to more clearly describe your analysis.

Reply 3: Thank you for this suggestion. Damschroder et al. (2009) advocate for the selection and use of CFIR domains and constructs that best align with the research

objectives.(12) We have revised our explanation regarding the selection of CFIR domains and constructs. We appreciate your feedback and have incorporated these clarifications into the manuscript.

Changes to the text: “Damschroder et al. (2009) advocate for the selection and use of CFIR domains and constructs that best align with the research objectives.(12) Therefore, for this project, we focused on the *Innovation* and *Inner Setting* domains, as we believed these would provide the most insight into participants’ attitudes and perceptions regarding the intervention and its components. Within the *Innovation* domain, we utilized the *innovation design* construct to explore perceptions of the intervention and its components (palliative care and patient navigation). Additionally, we used the *relative advantage* construct to understand how the intervention might address gaps in current practices. Furthermore, the *culture* construct within the *Inner Setting* domain was used to understand how participants’ values and beliefs shaped their perceptions of the intervention.” (Pages 9-10, Lines 301 to 314)

Comment 4: I had a difficult time understanding how the a priori codes were generated. Please provide a more detailed description of these codes and whether any modifications were made during the analysis. It may be helpful to provide the code book in an appendix.

Reply 4: Thank you for this suggestion. We have added a significant amount of detail on how the a priori codes were generated and added a sample codebook with select codes and definitions by content area to the **Supplemental Material**.

Changes in the text: “Two authors (OM and SF) engaged in a process of familiarization with the data. They subsequently coded the data using a targeted approach to coding, based on a priori codes that were developed as part of an analysis of 25 key informant interviews with professional stakeholders from the three enrollment sites, which similarly sought to establish the attitudes and perceptions of the intervention and intervention components, reported separately. Original codebook development was abductive, balancing deductive codes generated from the interview guide, with inductive codes that emerged from the data.(13) For this analysis, two authors (OM and SF) used this a priori codebook, and added inductive codes to capture additional nuances that came up in the interviews with patients and caregivers. The codebook was then refined following comparison among two

analysts (OM and SF). Discrepancies identified throughout the process were reviewed and resolved by the same two analysts. Each transcript was then independently coded by the two analysts. One author (OM) then created an analysis table to summarize the coded segments and generate preliminary domains and themes across all three enrollment sites. All codes related to awareness, understanding, attitudes, and perceptions of palliative care, patient navigation, and the CHW palliative care intervention were included. A sample codebook with select codes and definitions by content area is available in the **Supplementary Material.**” (Pages 11-12, Lines 353 to 370)

Supplemental Material

Table 1. Sample codebook including select codes and code definitions by content area.

Code	Definition
Palliative care	
How they define palliative care	This code is used when participants provide their own understanding or interpretation of what palliative care means.
Attitudes towards palliative care	This code pertains to the attitudes individuals hold about palliative care. This could encompass positive, negative, or neutral attitudes.
Experiences with palliative and hospice care	This code applies when participants share their firsthand encounters or interactions with palliative care or hospice services.
Patient navigation	
How they define patient navigation	This code is used when participants offer their own interpretations or descriptions of what patient navigation entails.
Perceptions of patient navigation	This code pertains to participants' perceptions of patient navigation services.
Experiences with patient navigation	This code applies when participants share their personal encounters or interactions with patient navigation services.
CHW palliative care intervention	

Attitudes about the intervention	This code is used to capture participants' attitudes towards the CHW palliative care intervention.
Perceived benefit of the intervention	This code pertains to participants' perceived benefits or advantages of the intervention.
Implementation recommendations	This code applies when participants offer suggestions or recommendations related to the implementation of the intervention.
Intervention delivery recommendations	This code pertains to participants' suggestions or recommendations related to how the intervention should be delivered.
CHW recommendations	This code is used when participants provide recommendations related to CHWs involved in the intervention.

CHW: Community health worker

Comment 5: The coding methods were not clear. Please clarify if the interviews were double-coded. If so, what methods were followed, and how were discrepancies resolved?

Reply 5: Thank you for the clarifying question. The interviews were independently coded by two analysts. Discrepancies identified throughout the process were reviewed and resolved by the same two analysts. We have added this information to the analysis section.

Changes in the text: “Discrepancies identified throughout the process were reviewed and resolved by the same two analysts. Each transcript was then independently coded by the two analysts.” (Page 12, Lines 363 to 365)

Comment 6: It sounded like some interviews were conducted individually, and some were facilitated using a focus-group format. Please describe the methods that were followed for adapting to group vs individual interviews including navigating confidentiality and discussion.

Reply 6: Thank you for your suggestion. Our interview guide was created for the focus group setting, however, was adapted by our team of qualitative experts who served as lead

moderators for the individual setting. In terms of confidentiality, we explained that participation was voluntary and reinforced that the contents of the interviews would be kept confidential. For interviews conducted in the group setting, we asked that all responses made by study participants be kept confidential. This information was added to the methods section.

Due to the challenges that we experienced with recruitment, conducting focus groups was not feasible, leading us to conduct six individual and group semi-structured interviews. Consequently, we did not have the benefit of interactive dialogue between participants typically fostered in a focus group setting, however, these interviews still provided valuable information and insight related to the intervention and its components. We have added this as a limitation.

Changes to the text: “The interview guide was developed for the focus group setting and was adapted by the lead moderators for individual interviews.” (Page 10, Lines 319 to 321)

“We explained that participation was voluntary and reinforced that the contents of each interview would be kept confidential. Further, for interviews conducted in the group setting, we asked that all responses made by study participants be kept confidential.” (Page 10-11, Lines 329 to 341)

“Given these challenges, conducting focus groups was not feasible, leading us to conduct six individual and group semi-structured interviews. Consequently, we did not have the benefit of interactive dialogue between participants typically fostered in a focus group setting, however, these interviews still provided valuable information and insight related to the intervention and its components.” (Page 24, Lines 701 to 705)

Comment 7: In the results section, the findings related to "understanding" seemed to go well beyond the concept of understanding palliative care to a discussion about general barriers to palliative care (e.g. cost). Please consider whether the discussion of concerns about financial barriers belongs in this domain or it is a separate concept.

Reply 7: Thank you for this comment. We agree that the concerns about financial barriers belongs in a separate concept. We have changed the “understanding palliative care” section

header to “perceived barriers to palliative care,” and have added “lack of understanding” and “perceived cost” as subsections headers.

Changes to the text: We have changed the “understanding palliative care” section header to “perceived barriers to palliative care,” and have added “lack of understanding” and “perceived cost” as subsections headers.

Comment 8: At times, the term CHW is used, and at other points, the term patient navigator is used. Please explain your choice of terms and rationale for using both terms in different contexts.

Reply 8: Thank you for pointing this out. We have changed all occurrences of “patient navigator” to “CHW.” However, we have kept patient navigation in the manuscript as a component of the CHW intervention. To make this clearer, we have added significant detail to the introduction on the CHW roles that are included in the CHW palliative care intervention, of which patient navigation is a central role. We have also added a statement which outlines how patient navigation should be interpreted for the purposes of the manuscript.

Changes in text: “The intervention begins with a baseline assessment of barriers to healthcare and SDOH using an adapted version of the Protocol for Responding to & Assessing Patients’ Assets, Risks & Experiences (PRAPARE) screening tool.(14) The CHW then provides tailored and individualized support to patients and their families, with periodic assessments throughout the intervention, on an as needed basis. The intervention is multifaceted and is centered around The Community Health Worker Core Consensus Project's CHW Roles, adapted to address the palliative care needs of African American patients with advanced cancer and their caregivers.(15–17) Components of the Core CHW Roles included in the intervention are: (1) cultural mediation among individuals; (2) providing culturally appropriate health education and information; (3) care coordination and system navigation; (4) providing coaching and social support; (5) advocating for individuals; (6) building individual capacity; (7) implementing individual assessments; and (8) participating in evaluation and research. Intervention-specific role descriptions are outlined in Table 1.(17) This intervention is geared towards individuals (patients and their caregivers), and as such, does not directly target communities broadly. One central

component of the intervention is patient navigation, a patient-centric healthcare service delivery model that promotes the timely movement of a patient through a healthcare system, with the goal of eliminating barriers to care across the care continuum.(18) Patient navigation programs differ in terms of staffing and services provided, and may be delivered by health care professionals or lay workers.(19) In the context of cancer care, this can include helping patients navigate the healthcare system from the time of cancer diagnosis, through testing, chemotherapy, radiation therapy, surgery, survivorship, or end-of-life care. It is important to note that CHWs are referred to by more than 30 terms, including patient navigators and lay navigators.(20,21) For the purposes of this study, patient navigation should be understood as a core component of the CHW palliative care intervention.” (Pages 6-7, Lines 190 to 221)

Comment 9: It would also be helpful to understand whether this study is being used to validate the feasibility of the proposed CHW intervention or to modify/refine said intervention. It was unclear to me to what extent the CHW intervention is being modified in response to the findings of this study. If modifications were made, it may be helpful to more clearly map the findings from this research to intervention changes.

Reply 9: Thank you for this very thoughtful comment. This study was not used to validate the feasibility of the proposed CHW intervention. The objective of this study was to report the attitudes and perceptions of the intervention and intervention components. We have changed the objectives to reflect this. We made minor refinements to the intervention based on the study findings, which are now outlined in the discussion section.

Changes in the text: “The objective of this analysis was to explore patient and caregiver attitudes and perceptions of the CHW palliative care intervention to support African American patients with advanced cancer in accessing palliative care. More specifically, we aimed to characterize perceptions related to the intervention and intervention components, palliative care and patient navigation.” (Page 7, Lines 223 to 226)

Comment 10: It would be helpful if you more clearly described the CHW intervention, including its scope, boundaries, and purpose. As currently described, the CHW intervention seems to focus primarily on the education of patients on the benefits of palliative care to facilitate enrollment in care. It is unclear whether other elements of patient navigation or CHW

services are also included. I note that many of the potential benefits listed in the findings (insurance navigation, close long-term relationship, connector between patient and care team) may or may not be present in this specific CHW intervention. It would be helpful to understand which of these benefits will be offered by the intervention and which will not be and the rationale for that decision-making process.

Reply 10: Thank you for this recommendation. We have provided more information on the scope, boundaries, and purpose of the intervention. More specifically, we have included a paragraph in the introduction which clearly outlines the CHW intervention and the roles of the CHW that are included in the intervention. We have also added a table that outlines the core CHW roles included in the intervention, as well as intervention-specific role descriptions (**Table 1**). The intervention is also outlined in our protocol paper.(15)

Changes in text: “The intervention begins with a baseline assessment of barriers to healthcare and SDOH using an adapted version of the Protocol for Responding to & Assessing Patients’ Assets, Risks & Experiences (PRAPARE) screening tool.(14) The CHW then provides tailored and individualized support to patients and their families, with periodic assessments throughout the intervention, on an as needed basis. The intervention is multifaceted and is centered around The Community Health Worker Core Consensus Project's CHW Roles, adapted to address the palliative care needs of African American patients with advanced cancer and their caregivers.(15–17) Components of the Core CHW Roles included in the intervention are: (1) cultural mediation among individuals; (2) providing culturally appropriate health education and information; (3) care coordination and system navigation; (4) providing coaching and social support; (5) advocating for individuals; (6) building individual capacity; (7) implementing individual assessments; and (8) participating in evaluation and research. Intervention-specific role descriptions are outlined in Table 1.(17) This intervention is geared towards individuals (patients and their caregivers), and as such, does not directly target communities broadly. One central component of the intervention is patient navigation, a patient-centric healthcare service delivery model that promotes the timely movement of a patient through a healthcare system, with the goal of eliminating barriers to care across the care continuum.(18) Patient navigation programs differ in terms of staffing and services provided, and may be delivered by health care professionals or lay workers.(19) In the context of cancer care, this can include helping patients navigate the healthcare system from the time of cancer

diagnosis, through testing, chemotherapy, radiation therapy, surgery, survivorship, or end-of-life care. It is important to note that CHWs are referred to by more than 30 terms, including patient navigators and lay navigators.(20,21) For the purposes of this study, patient navigation should be understood as a core component of the CHW palliative care intervention.” (Pages 6-7, Lines 190 to 221)

Table 1. Core CHW roles included in the CHW palliative care intervention. Adapted from The Community Health Worker Core Consensus Project.(17)

Core CHW roles¹	Intervention-specific role description
Cultural mediation among individuals and health and social service systems	CHWs will provide cultural mediation, bridging any cultural gaps between patients and the institutions providing them with health and social services.
Providing culturally appropriate health education and information	CHWs will deliver health education tailored to the cultural background of each patient and caregiver. This will include educating them about the role and benefits of palliative care in a culturally sensitive manner.
Care coordination and system navigation	CHWs will assist patients in navigating the healthcare system to ensure they have timely access to palliative care resources and support. This will involve coordinating care between different healthcare providers and services.
Providing coaching and social support	CHWs will coach patients and caregivers on establishing goals of care and initiating advance care planning (ACP) discussions. Additionally, they will offer social support and encouragement throughout the care journey.
Advocating for individuals	CHWs will advocate for patients within the healthcare system, ensuring their needs and preferences are met. They will also advocate for the provision of palliative care services that align with the cultural and individual needs of patients and caregivers.

Building individual capacity	CHWs will empower patients and caregivers to build their capacity for self-care, make complex treatment decisions, and engage in advance care planning.
Implementing individual and community assessments	CHWs will conduct comprehensive assessments of patients and their caregivers periodically using the Protocol for Responding to & Assessing Patients' Assets, Risks & Experiences (PRAPARE) screening tool to identify their needs and establish personalized care plans.(14)
Participating in evaluation and research	CHWs will participate in evaluation and research by delivering the intervention and serving as a member of the research team.

ACP: Advance care planning

CHW: Community health worker

Comment 10: In your discussion section, you note that one finding is the importance of integration with the healthcare team, but this is discussed from the perspective of CHW burnout. CHW integration is less about burnout and more about team, organizational, and systems-level factors that enable a CHW to be effective. You may want to acknowledge or expand on this.

Reply 11: Thank you for this comment. This was meant to reflect the link between the patient and the healthcare team, more so than integration broadly. We have changed the language to better reflect this.

Changes in the text: “Through discussions with patients and their caregivers, it became apparent that patients may have high expectations of their CHWs in terms of personal characteristics, knowledge and training, availability, and serving as a link between the patient and the healthcare team.” (Page 21, Lines 625 to 627)

Comment 12: Please consider how the discussion section can be focused more on the "so what" and "now what"... how will you intend to use these research findings, and what are the critical implications for the field? Some parts of the discussion may be more appropriate for the background.

Reply 12: Thank you for your valuable feedback. We've streamlined the discussion by removing a paragraph deemed more suitable for the introduction and relocated references to our previous work accordingly. Additionally, we've incorporated a summary paragraph highlighting the recommendations made by the research team, which have been incorporated into the study intervention as refinements, with a statement about broader implications beyond this project.

Changes to the text: “Based on these findings, we have ensured that all CHWs that will be implementing the intervention are well-educated on all aspects of palliative care services, including the services provided, the potential benefits to patients and their families, how the services differ from other services (such as hospice care), and insurance coverage. CHWs have also been instructed to discuss these concepts with patients frequently throughout the care continuum, to facilitate understanding and encourage engagement and utilization of palliative care services at multiple time points. Further, we have implemented strategies as part of the intervention to promote the health and well-being of study CHWs throughout the entirety of the study period and prevent burnout. These strategies include appropriate compensation, ongoing peer-support with an experienced CHW at our central study site, and access to psychosocial resources. These lessons learned can serve as valuable guidance for other CHW programs focused on addressing healthcare disparities among patients with serious illness.” (Pages 22-23, Lines 661 to 679)

Reviewer C

Comment 1: Line 139- Reference to "professional stakeholders" as a population group: Proposal: Consider referring to professional stakeholder interviews as part of the study discussion in line 486.

Reply 1: Thank you for this suggestion. We have removed this sentence from the introduction.

Changes in the text: [deleted] “As part of the preparatory phase for the DeCIDE PC study, we conducted qualitative interviews with professional stakeholders and African American patients with advanced cancer and their caregivers, with the goal of refining the study intervention prior to implementation.”

Reviewer D

Comment 1:

Thank you for conducting this needed and important research. Overall, your writing was clear and I was easily able to follow your logic. I have some clarifying questions and suggest the addition of a table on how you applied what you learned.

Introduction

Paragraph 2: CHWs can do so much more than care coordination (see 10 CHW core roles: <https://www.c3project.org/roles-competencies>) and I’m guessing they are providing your patients with more than just patient navigation (e.g., lines 306-7 you describe how the person in this role could provide social support, line 320: advocacy). Consider expanding your definition of their role to better describe all the important work they are doing and involving them in all phases of your project.

See: Coulter K, Ingram M, McClelland DJ, Lohr A. Positionality of Community Health Workers on Health Intervention Research Teams: A Scoping Review. *Front Public Health*. 2020 Jun 16;8:208. doi: 10.3389/fpubh.2020.00208. PMID: 32612967; PMCID: PMC7308474.

Reply 1: We really appreciated this feedback. We have added significant detail to the introduction to outline the CHW palliative care intervention in more detail using the 10 Core CHW Roles outlined in the C3 Project. We have also added a table, which outlines the intervention-specific role descriptions (**Table 1**).

Changes in text: “The intervention begins with a baseline assessment of barriers to healthcare and SDOH using an adapted version of the Protocol for Responding to & Assessing Patients’ Assets, Risks & Experiences (PRAPARE) screening tool.(14) The CHW then provides tailored and individualized support to patients and their families, with periodic assessments throughout the intervention, on an as needed basis. The intervention is multifaceted and is centered around The Community Health Worker Core Consensus Project's CHW Roles, adapted to address the palliative care needs of African American patients with advanced cancer and their caregivers.(15–17) Components of the Core CHW Roles included in the intervention are: (1) cultural mediation among individuals; (2) providing culturally appropriate health education and information; (3) care coordination and system navigation; (4) providing coaching and social support; (5) advocating for individuals; (6) building individual capacity; (7) implementing individual assessments; and (8) participating in evaluation and research. Intervention-specific role descriptions are outlined in Table 1.(17) This intervention is geared towards individuals (patients and their caregivers), and as such, does not directly target communities broadly. One central component of the intervention is patient navigation, a patient-centric healthcare service delivery model that promotes the timely movement of a patient through a healthcare system, with the goal of eliminating barriers to care across the care continuum.(18) Patient navigation programs differ in terms of staffing and services provided, and may be delivered by health care professionals or lay workers.(19) In the context of cancer care, this can include helping patients navigate the healthcare system from the time of cancer diagnosis, through testing, chemotherapy, radiation therapy, surgery, survivorship, or end-of-life care. It is important to note that CHWs are referred to by more than 30 terms, including patient navigators and lay navigators.(20,21) For the purposes of this study, patient navigation should be understood as a core component of the CHW palliative care intervention.” (Pages 6-7, Lines 190 to 221)

Table 1. Core CHW roles included in the CHW palliative care intervention. Adapted from The Community Health Worker Core Consensus Project.(17)

Core CHW roles ¹	Intervention-specific role description
Cultural mediation among individuals and health and social service systems	CHWs will provide cultural mediation, bridging any cultural gaps between patients and the institutions providing them with health and social services.

Providing culturally appropriate health education and information	CHWs will deliver health education tailored to the cultural background of each patient and caregiver. This will include educating them about the role and benefits of palliative care in a culturally sensitive manner.
Care coordination and system navigation	CHWs will assist patients in navigating the healthcare system to ensure they have timely access to palliative care resources and support. This will involve coordinating care between different healthcare providers and services.
Providing coaching and social support	CHWs will coach patients and caregivers on establishing goals of care and initiating advance care planning (ACP) discussions. Additionally, they will offer social support and encouragement throughout the care journey.
Advocating for individuals	CHWs will advocate for patients within the healthcare system, ensuring their needs and preferences are met. They will also advocate for the provision of palliative care services that align with the cultural and individual needs of patients and caregivers.
Building individual capacity	CHWs will empower patients and caregivers to build their capacity for self-care, make complex treatment decisions, and engage in advance care planning.
Implementing individual and community assessments	CHWs will conduct comprehensive assessments of patients and their caregivers periodically using the Protocol for Responding to & Assessing Patients' Assets, Risks & Experiences (PRAPARE) screening tool to identify their needs and establish personalized care plans.(14)
Participating in evaluation and research	CHWs will participate in evaluation and research by delivering the intervention and serving as a member of the research team.

ACP: Advance care planning

CHW: Community health worker

Methods

Comment 2:

Line 159 – what do you mean by ‘differing socioeconomic, cultural, and demographic features’?

Reply 2: Thank you for this clarifying question. We were referring to three different settings represented by the three enrollment sites, including an urban setting in Baltimore, Maryland, a rural setting in Salisbury, Maryland, and an urban area with surrounding suburban and rural communities in Birmingham, Alabama. We have changed this language to what is outlined below.

Changes to the text: “The enrollment sites represent three different settings, including an urban setting in Baltimore, Maryland, a rural setting in Salisbury, Maryland, and an urban area with surrounding suburban and rural communities in Birmingham, Alabama.” (Page 8, Lines 269 to 272)

Comment 3: Line 164 – what's informal care?

Reply 3: We have added a definition of informal care.

Changes in the text: “An informal caregiver is someone who provides unpaid care to an individual with whom they have a personal relationship, for example, a family member or friend.” (Page 8, Lines 276 to 278)

Comment 4: Consider adding a positionality statement to help the reader better understand the biases and lenses through which your analysis team looked at your data.

Reply 4: Thank you for your suggestion regarding the inclusion of a positionality statement in our analysis. After careful consideration, we have decided against incorporating one. We believe that our analysis team's approach to the data was primarily

guided by a commitment to impartiality and rigor, with the goal of interpreting the findings objectively.

Changes to the text: None

Comment 5: Were the patients and caregivers interviewed together or separately?

Reply 5: Thank you for the clarifying question. When caregivers were included, they were interviewed with patients. The composition of study interviews is outlined in **Table 2**.

Changes to the text: None

Results

Comment 6: Line 273- you say focus group but in the Methods you say interviews – clarify.

Reply 6: Thank you for pointing this out. These were individual and group interviews. We have changed the sentence outlined in your comment to reflect this.

Changes in the text: “Another patient participant in this interview reiterated that worry about paying for healthcare services was, “a very big thing in the African American community.” (JHH, Patient)” (Page 14, Line 430)

Comment 7: Recommendations: In line 338, you write that all participants thought the CHW should be from the same community – consider moving this down into recommendations.

Reply 7: Thank you for this suggestion. This is an integral part of the CHW role, coming from the community they serve and having a deep and nuanced understanding of the community. Given that this is intertwined with the CHW role, we have decided to keep it as an anticipated benefit.

Changes in the text: None

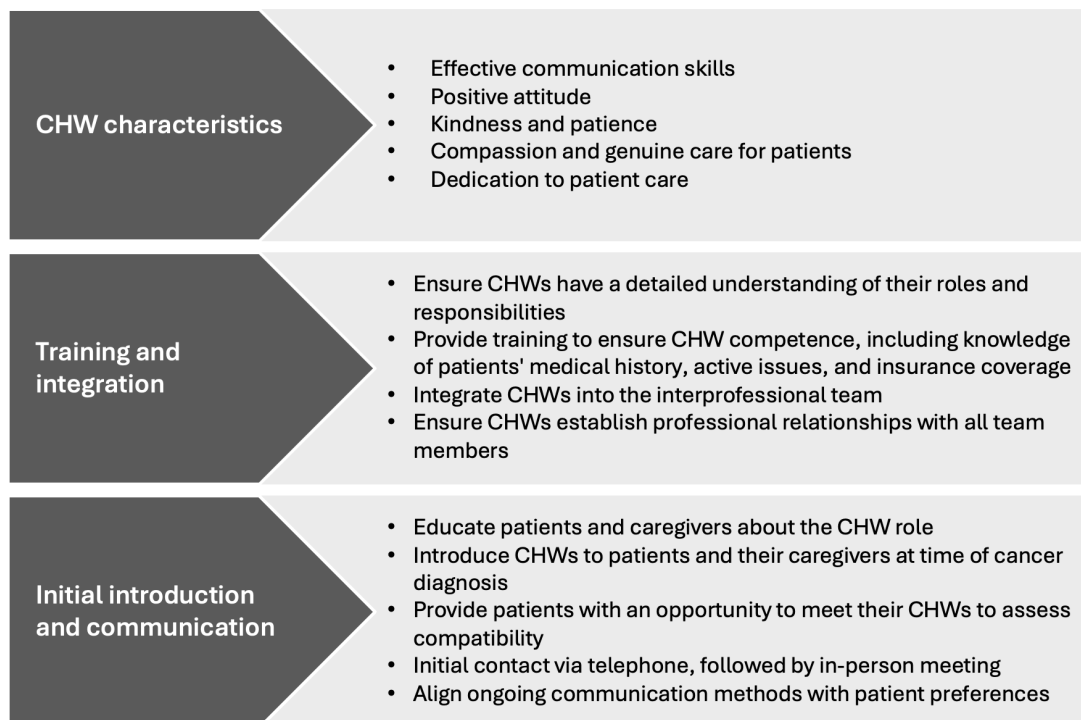
Comment 8: Consider adding a table that specially spells out the recommendations generated from your data with how your research team responded.

Reply 8: Thank you for this suggestion. There were participant recommendations, which reinforced elements that are already included in the planned intervention, and recommendations that were made by the research team, which have been incorporated into the intervention as refinements. We have summarized the participant recommendations in a new figure (**Figure 1**). Additionally, we have incorporated a summary paragraph highlighting the recommendations made by the research team, which have been incorporated into our intervention as refinements, with a statement about broader implications.

Changes to the text: “These recommendations reinforce elements that are already included in the planned intervention (Figure 1).” (Page 20, Lines 569 to 570)

“Based on these findings, we have ensured that all CHWs that will be implementing the intervention are well-educated on all aspects of palliative care services, including the services provided, the potential benefits to patients and their families, how the services differ from other services (such as hospice care), and insurance coverage. CHWs have also been instructed to discuss these concepts with patients frequently throughout the care continuum, to facilitate understanding and encourage engagement and utilization of palliative care services at multiple time points. Further, we have implemented strategies as part of the intervention to promote the health and well-being of study CHWs throughout the entirety of the study period and prevent burnout. These strategies include appropriate compensation, ongoing peer-support with an experienced CHW at our central study site, and access to psychosocial resources. These lessons learned can serve as valuable guidance for other CHW programs focused on addressing healthcare disparities among patients with serious illness.” (Page 22-23, Lines 661 to 679)

Figure 1. Participant recommendations.



Comment 9: e.g. in Line 366: you discuss CHWs may need to go above and beyond, working outside normal working hours and then you have a nice paragraph on burnout. Tie those together for the reader.

Reply 9: This is a great suggestion, thank you. We have tied these together by referring to the participant's comment on CHW dedication and availability to the burnout paragraph.

Changes to the text: "Through discussions with patients and their caregivers, it became apparent that patients may have high expectations of their CHWs in terms of personal characteristics, knowledge and training, availability, and serving as a link between the patient and the healthcare team. For example, one patient emphasized that CHWs should be dedicated and available to help patients in times of need. These heightened expectations suggest that the role may exert considerable strain on CHWs and potentially expose them to the risk of burnout." (Page 21, Lines 625 to 630)

Discussion

Comment 10: In your first sentence or two, specify that your priority population was African Americans for those readers who jump to the discussion section.

Reply 10: Great suggestion, thank you. We have added African American to the first sentence.

Changes in the text: “This study highlights African American patient and caregiver attitudes and perceptions of the CHW palliative care intervention, in addition to intervention components, palliative care and patient navigation.” (Page 19, Lines 554 to 556)

Comment 11: Often times in healthcare/health equity research, we highlight individual or interpersonal level barriers to health rather than naming the systemic level driver of disparities: racism. There are two places in your discussion where I see missed opportunities to highlight racism as a determinant of health:

1) Line 349: You describe how participants don’t think African American folks receive the same level of care as White patients. Dive into that more in the discussion: in the paragraph that starts on line 431 or a new paragraph. This is an important finding.

2) Line 501: You listed individual level factors as the reasons behind why African American folks are hesitant to participate in research. This makes it seem like it’s the individual’s fault for not participating. Consider reframing this list to include more information about the historical, structural violence African Americans have experienced from the research community in the US.

Reply 11: Thank you very much for these suggestions. We have incorporated both of your suggestions into our discussion section.

Changes to the text: “Moreover, participants highlighted the perceived cost of palliative care services as a potential barrier, particularly among African American patients. Research suggests that racial disparities further contribute to barriers in accessing palliative care.(43) Minority older adults, especially African Americans, often lack knowledge about palliative care, while spiritual and religious beliefs within these communities may conflict with the principles of palliative care.(44–48) Additionally, historical injustices and ongoing healthcare disparities can engender mistrust, leading to

concerns about the perception of forgoing curative treatments when initiating palliative care.(49,50) These complex factors pose significant challenges in promoting the utilization of palliative care services among African American patients.” (Page 21, Lines 614 to 623)

“Additionally, historical discrimination and mistreatment of African American patients within research have perpetuated disparities in research participation, creating barriers for African American patients to engage in research studies. These barriers include distrust, concerns about compensation, educational disadvantages, and a lack of interest, among others. This underscores the importance of cultural competence when recruiting and retaining African American patients in research studies.(56) Given these challenges, conducting focus groups was not feasible, leading us to conduct six individual and group semi-structured interviews.” (Pages 23-24, Lines 693 to 702)

Comment 12: It’s important that you discuss how you applied what you learned from the data but it gets lost in the discussion. Consider moving this up to the results section as a table (see previous comment).

Reply 12: Thank you for this suggestion. We have incorporated a summary paragraph highlighting the recommendations made by the research team, which have been incorporated into our intervention as refinements, with a statement about broader implications.

Changes to the text: “Based on these findings, we have ensured that all CHWs that will be implementing the intervention are well-educated on all aspects of palliative care services, including the services provided, the potential benefits to patients and their families, how the services differ from other services (such as hospice care), and insurance coverage. CHWs have also been instructed to discuss these concepts with patients frequently throughout the care continuum, to facilitate understanding and encourage engagement and utilization of palliative care services at multiple time points. Further, we have implemented strategies as part of the intervention to promote the health and well-being of study CHWs throughout the entirety of the study period and prevent burnout. These strategies include appropriate compensation, ongoing peer-support with an experienced CHW at our central study site, and access to psychosocial resources. These lessons learned can serve as valuable guidance for other CHW programs focused on

addressing healthcare disparities among patients with serious illness.” (Page 22-23, Lines 661 to 679)

Overall

Comment 13: You switched back and forth from calling the interventionist a CHW to a patient navigator – they have different definitions – use one for consistency.

Reply 13: Thank you for pointing this out. We have changed all occurrences of “patient navigator” to “CHW.” However, we have kept patient navigation in the manuscript as a component of the CHW intervention. To make this clearer, we have added significant detail to the introduction on the CHW roles that are included in the CHW palliative care intervention, of which patient navigation is a central role.

Changes in text: “The intervention begins with a baseline assessment of barriers to healthcare and SDOH using an adapted version of the Protocol for Responding to & Assessing Patients’ Assets, Risks & Experiences (PRAPARE) screening tool.(14) The CHW then provides tailored and individualized support to patients and their families, with periodic assessments throughout the intervention, on an as needed basis. The intervention is multifaceted and is centered around The Community Health Worker Core Consensus Project's CHW Roles, adapted to address the palliative care needs of African American patients with advanced cancer and their caregivers.(15–17) Components of the Core CHW Roles included in the intervention are: (1) cultural mediation among individuals; (2) providing culturally appropriate health education and information; (3) care coordination and system navigation; (4) providing coaching and social support; (5) advocating for individuals; (6) building individual capacity; (7) implementing individual assessments; and (8) participating in evaluation and research. Intervention-specific role descriptions are outlined in Table 1.(17) This intervention is geared towards individuals (patients and their caregivers), and as such, does not directly target communities broadly. One central component of the intervention is patient navigation, a patient-centric healthcare service delivery model that promotes the timely movement of a patient through a healthcare system, with the goal of eliminating barriers to care across the care continuum.(18) Patient navigation programs differ in terms of staffing and services provided, and may be delivered by health care professionals or lay workers.(19) In the context of cancer care,

this can include helping patients navigate the healthcare system from the time of cancer diagnosis, through testing, chemotherapy, radiation therapy, surgery, survivorship, or end-of-life care. It is important to note that CHWs are referred to by more than 30 terms, including patient navigators and lay navigators.(20,21) For the purposes of this study, patient navigation should be understood as a core component of the CHW palliative care intervention.” (Pages 6-7, Lines 190 to 221)

Comment 14: CHW Training and Integration – Are there existing state CHW certification programs in your research sites and are you going to require your study CHWs to go through them or have them prior to employment? Including this information will help you plug into the larger, national conversation about CHW certification.

Reply 14: Thank you for this suggestion. We have added 1-2 sentences outlining the CHW training program at our enrollment sites. Our curriculum and training in has been published as part of another study.(3)

Changes to the text: “As part of the preparatory phase of the clinical trial, CHWs were onboarded at each enrollment site and underwent comprehensive training on palliative care, oncology, patient navigation, and health disparities.(3) This training aimed to equip CHWs with the necessary knowledge and skills to effectively support African American patients with advanced cancer and caregivers, by addressing individual barriers to healthcare, SDOH, and palliative care needs.(3)”

A couple other articles to consider:

Rocque, G. B., Partridge, E. E., Pisu, M., Martin, M. Y., Demark-Wahnefried, W., Acemgil, A., Kenzik, K., Kvale, E. A., Meneses, K., & Li, X. (2016). The patient care connect program: transforming health care through lay navigation. *Journal of Oncology Practice*, 12(6), e633-e642.

Rocque, G. B., Pisu, M., Jackson, B. E., Kvale, E. A., Demark-Wahnefried, W., Martin, M. Y., Meneses, K., Li, Y., Taylor, R. A., & Acemgil, A. (2017). Resource use and Medicare costs during lay navigation for geriatric patients with cancer. *JAMA oncology*, 3(6), 817-825.

Patel, M. I., Khateeb, S., & Coker, T. (2021). Lay health workers' perspectives on delivery of advance care planning and symptom screening among adults with cancer: A qualitative study. *American Journal of Hospice and Palliative Medicine*, 38(10), 1202-1211.

Patel, M. I., Murillo, A., Agrawal, M., & Coker, T. (2023). Health Care Professionals' Perspectives on Implementation, Adoption, and Maintenance of a Community Health Worker–Led Advance Care Planning and Cancer Symptom Screening Intervention: A Qualitative Study. *JCO Oncology*