PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	The Geriatric Emergency care Applied Research (GEAR) Network Approach: A Protocol To Advance Stakeholder Consensus and Research Priorities in Geriatrics and Dementia Care in the Emergency Department
AUTHORS	Hwang, Ula; Carpenter, Chris; Dresden, Scott; Dussetschleger, Jeffrey; Gifford, Angela; Hoang, Ly; Leggett, Jesseca; Nowroozpoor, Armin; Taylor, Zachary; Shah, Manish; Networks, The GEAR and GEAR 2.0

VERSION 1 – REVIEW

REVIEWER	Wang, Nianyang University of Maryland at College Park, Health Policy and Management
REVIEW RETURNED	10-Feb-2022

GENERAL COMMENTS	The manuscript presents a framework of research priorities for geriatric emergency care. The authors express a strong desire to develop the next stage of research goals to understand the concerns of patients with ADRD who receive care in the emergency department. Comments: Can you provide a more precise citation for references 18 & 19? Are you referring to the following websites: https://www.nia.nih.gov/research/osp/framework, https://impactcollaboratory.org? If instead these citations are from publications, then please provide the precise citation for readers to be able to locate these valuable sources. For Figure 2, can you list the total number of stakeholders in the title? Adding the number of stakeholders in each category on the legend can also be useful for chart interpretation.

REVIEWER	PAGES, Arnaud CHU Toulouse, Pharmacy
REVIEW RETURNED	18-Feb-2022

GENERAL COMMENTS	Thank you for the opportunity to review this protocol on identification of research priorities in geriatrics and dementia care in the emergency department. General comment: Throughout the article, it is unclear whether you are presenting a scoping review protocol or a broader initiative to improve the care pathway for older patients in the emergency department.

	Methods:
	1. Page 10, lines 25-50: You have incorporated a Health Equity Advisory Board, which is an important element. Could you detail in the method section the list of determinants that will be monitored by this board?
	2. Page 12, lines 15-30: Would it also be useful to conduct a literature review on the best outcomes to evaluate the interventions conducted in the future pilot studies (Phase 2)?
	3. Page 15, lines 23-42: In addition to the PICO questions, do you plan to collect other types of variables in the different selected articles?
	4. Page 20, lines 20-40: Some eligibility criteria of the articles selected are not specified in the method (years considered, language, patients characteristics,…)? Could you add them?
	5. Page 22, lines 3-26: According to what guidelines will you assess the quality of the selected studies?
	6. Page 22, lines 30-33: Do you plan to summarize the results collected? If so, according to what methods?
	7. Page 22, lines 40-55: Could you detail the designs (randomized control trials, cluster randomized trials,...) and the endpoints (length of hospitalization, quality of life, cost, cost-effectiveness ratio,...) that you would consider for the pilot studies?

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1
Dr. Nianyang Wang, University of Maryland at College Park Comments to the Author:
The manuscript presents a framework of research priorities for geriatric emergency care. The authors express a strong desire to develop the next stage of research goals to understand the concerns of patients with ADRD who receive care in the emergency department.

Comments:
Can you provide a more precise citation for references 18 & 19? Are you referring to the following
websites: https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.nia.nih.gov%2Fresearch%2Fosp%2Fframework&data=04%7C01%7Cula.hwang%40yale.edu%7C4e14518aa25c4b7b107008d9f61aacc0%7Cdd8cbebb21394df8b4114e3e87abeb5c%7C0%7C0%7C637811416702925471%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=8MDhSV5noBetKqziLE4MMyVbpVUgYe42HkuD9CjvsPo%3D&reserved=0,
https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fimpactcollaboratory.org%2F&data=04%7C01%7Cula.hwang%40yale.edu%7C4e14518aa25c4b7b107008d9f61aacc0%7Cdd8cbebb21394df8b4114e3e87abeb5c%7C0%7C0%7C637811416702925471%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWWwiLCJXVCI6Mn0%3D%7C3000&sdata=YsUjyVf%2FrMR0qXjWnthBPGYdN%2B0GsVXogKSuQF%2Fox4M%3D&reserved=0? If instead these citations are from publications, then please provide the precise citation for readers to be able to locate these valuable sources.

***We have update reference 18 to : https://www.nia.nih.gov/research/osp/framework
and reference 19 to: https://impactcollaboratory.org/
Additionally, we have updated citations 6, 12, and 35 so they are properly formatted.

For Figure 2, can you list the total number of stakeholders in the title? Adding the number of stakeholders in each category on the legend can also be useful for chart interpretation.

***We have updated Figure 2 GEAR 2.0 Taskforce Composition to include (n=47) to indicate the total number of stakeholders in the title. Additionally we have add the number of each type of stakeholder in the labels for the pie chart.

Reviewer: 2
Dr. Arnaud PAGES, CHU Toulouse
Comments to the Author:
Thank you for the opportunity to review this protocol on identification of research priorities in geriatrics and dementia care in the emergency department.

General comment:
Throughout the article, it is unclear whether you are presenting a scoping review protocol or a broader initiative to improve the care pathway for older patients in the emergency department.

***Thank you for this comment. We have attempted to clarify this paper is an approach to establish a research infrastructure program, scoping review, and consensus-driven research priorities with stakeholders centered around the topic of advancing geriatric and dementia emergency care. We have clarified this by stating in the abstract, "In this paper we describe our approach to developing the GEAR Network infrastructure, the scoping reviews to identify research and clinical gaps, and its use of consensus-driven research priorities with a transdisciplinary taskforce of stakeholders that includes patients and care partners." (See middle page 4.) This is also stated in the introduction, "In this paper we describe the Phase 1 methods used by GEAR 2.0 ADC to identify consensus-driven research priorities, which were based on methods used for GEAR. We describe how we identified the priority topic areas, conducted scoping reviews in each topic area while integrating input from a transdisciplinary stakeholder taskforce, integrated academic librarians in the review process to perform standardized searches and provide quality control, and conducted a large-scale consensus conference to prioritize future research." (See bottom page 7, top page 8.)

Methods:
1. Page 10, lines 25-50: You have incorporated a Health Equity Advisory Board, which is an important element. Could you detail in the method section the list of determinants that will be monitored by this board?

***Thank you for this comment. We now include a description of the priorities from the NIA Health Disparities Research Framework, "This includes addressing the four key levels of analyses related to the NIA health disparities priorities of environmental, sociocultural, behavioral, and biological disparities in health for older minority populations. We will incorporate the lifecourse perspective, which is a 'multidisciplinary approach to understanding the mental, physical, and social health of individuals, which incorporates both life span and life stage concepts that determine health trajectory and influence population-level health disparities.'" [18] (See top page 10)

2. Page 12, lines 15-30: Would it also be useful to conduct a literature review on the best outcomes to evaluate the interventions conducted in the future pilot studies (Phase 2)?

***Thank you for this suggestion. Scoping reviews as part of our literature review are part of the Phase 1 of GEAR. We state this in the Approach section in operational

overview, "During the first phase, GEAR 2.0 ADC identified and prioritized research by completing scoping reviews in each of the priority topics and then held a two-day consensus conference of key stakeholders who discussed and voted on research priorities to optimize emergency care for PLWD." (See middle page 12) We also describe the Scoping Review process in the "Phase 1: Scoping Review Process." (See bottom page 14)

3. Page 15, lines 23-42: In addition to the PICO questions, do you plan to collect other types of variables in the different selected articles?

***Each scoping review targeted different information to abstract from selected articles. This information will be detailed in those scoping reviews that are currently being or will be prepared as separate manuscripts which are pending.

4. Page 20, lines 20-40: Some eligibility criteria of the articles selected are not specified in the method (years considered, language, patients characteristics,…)? Could you add them?

***The scoping reviews conducted for each workgroup varied depending on the purpose of the review. These will be detailed in the subsequent manuscripts from each workgroup, along with their search and eligibility criteria, and information abstracted from selected articles. The manuscript written here provides the overall approach for each of these workgroups.

5. Page 22, lines 3-26: According to what guidelines will you assess the quality of the selected studies?

***The scoping reviews will all follow the PRISMA Extension for Scoping Reviews (PRISMA-ScR) guidance. This is described in the Phase 1: Scoping Review process and Reference 22 (Tricco AC, Lillie E, Zarin W, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. Ann Intern Med. 2018;169:467-473.) . (See bottom page 14)

6. Page 22, lines 30-33: Do you plan to summarize the results collected? If so, according to what methods?

***This paper is a description of the GEAR methods and approach to collecting and presenting Phase 1 scoping review results and consensus conference. The consensus conference summary is available on the GEAR website as a report (See bottom page 22). The scoping reviews from each workgroup will be prepared as individual manuscripts and are pending.

7. Page 22, lines 40-55: Could you detail the designs (randomized control trials, cluster randomized trials,...) and the endpoints (length of hospitalization, quality of life, cost, cost-effectiveness ratio,...) that you would consider for the pilot studies?

***We are not able to describe the designs and endpoints of the pilot studies, as the request for applications was just closed this past February 2022. The proposals and applications will be reviewed in April 2022. The pilots selected to be awarded will be based on scientific merit and also how well they address the research priorities recommended by the GEAR 2.0 ADC Taskforce and HEAB members. (See bottom page 22, top page 23).

VERSION 2 – REVIEW

REVIEWER	PAGES, Arnaud CHU Toulouse, Pharmacy
REVIEW RETURNED	24-Mar-2022

GENERAL COMMENTS	OK