STUDY PROTOCOL

REVISED What is the level of nutrition care provided to older adults attending emergency departments? A scoping review protocol. [version 2; peer review: 2 approved]

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Abstract

Introduction: Nutrition status among older adults is an important factor in health and clinical outcomes but malnutrition goes unrecognised in routine health care. Older adults often present to emergency departments (ED) and are subsequently discharged without hospital admission. Discharge is a transitionary time of care when nutritional vulnerability could be mitigated with the instigation of targeted nutrition care pathways. This protocol outlines a scoping review to identify the level of nutrition care provided to older adults attending emergency departments.

Methods: This scoping review will be conducted using the framework proposed by the Joanna Briggs Institute. The Preferred Reporting Items for Systematic Reviews and Meta-analysis extension for scoping reviews (PRISMA-ScR) will be used to guide the reporting. Two researchers will search electronic databases (Medline, CINAHL Complete, EMBASE, Cochrane Library and Scopus), grey literature sources (DART-Europe E-theses portal, Open Grey, and Trip Medical database) and website searches (Google, Google Scholar, Pubmed, NICE and LENUS) to identify appropriate data for inclusion within the last 10 years. Key information will be categorised and classified to generate a table charting the level of nutrition and dietetic care initiated for older adults in the ED according to the Nutrition Care Process Model. A narrative synthesis will be conducted.

Conclusions: This scoping review will be used to inform a foundational concept of nutrition care in an ED setting and allow the future examination of nutrition care pathways, practice, policy, and research within models of integrated care for older persons.

Open Peer Review

Approval Status ✓ ✓

	1	2
version 2 (revision) 31 Aug 2022	✓ view	✓ view
version 1 18 Jan 2022	? view	✓ view

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Any reports and responses or comments on the article can be found at the end of the article.

Keywords
Emergency medicine; integrated care pathways; malnutrition; nutrition and dietetics; older adults; nutrition care process

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REVISED **Amendments from Version 1**

Protocol V2 includes clarifications which were suggested by the reviewers. These include being specific about the age of the target population to ensure that only older adults > 65years of age are included, that nutrition care initiated within 72 hours of discharge from the ED to a hospital ward is an exclusion factor, a description of the Google searches and including the multidisciplinary team involved in providing care to older adults in the dissemination of the results from this study. Typos are corrected and amendments to sentences for readability have also been applied. The author list has been updated to include and recognise the work of Ms Cerenay Sarier who joined the study team on an Erasmus + research internship at the point of database searching.

Any further responses from the reviewers can be found at the end of the article

Introduction

The process of ageing has an impact on the nutritional status of an individual. This can occur due to physiological factors (e.g. taste changes, poor dentition, loss of appetite, mobility and functional limitations), psychosocial factors (e.g. life course, food ideals and preferences, grief and bereavement), and personal resources (e.g. transport, disposable income, social supports) that influence food choice and intake (Host *et al.*, 2016; Stanga, 2009) among older adults. In addition to ageing, older adults are more likely to be living with one or more non-communicable chronic diseases (Shlisky *et al.*, 2017). These diseases can independently influence or be influenced by nutritional status (Shlisky *et al.*, 2017; Slawson *et al.*, 2013; Stanga, 2009; Tittikpina *et al.*, 2019).

A nutritional vulnerability can be described as a reduced physical reserve of energy and protein that limits an individual's ability to recover sufficiently from an acute health threat (Starr *et al.*, 2015). The term malnutrition describes a state of under or over nutrition of energy, protein and/or micronutrients (Cederholm *et al.*, 2017). This state may be caused by reduced food and nutrient intake and/or assimilation of nutrients from the digestive system and/or inflammatory mechanisms associated with acute and chronic disease (Cederholm *et al.*, 2019).

A failure to identify malnutrition in the continuum of older adult care, particularly transitions from hospital to community settings, has been described to increase the risk of nutrition vulnerability (Starr *et al.*, 2015). The Nutrition Care Process Model (NCPM) has been adapted by national dietetic associations and implemented within healthcare organisations to provide a standardised process, terminology and dietetic outcome frameworks toward person-centered nutrition care and outcomes management (Swan *et al.*, 2017; Swan *et al.*, 2019). Screening is described as the first step to identify "at risk" of malnutrition status with the use of a validated malnutrition screening tool. This process serves to identify those who require targeted assessment and nutrition interventions (Cederholm *et al.*, 2019; Swan *et al.*, 2017; Swan *et al.*, 2019)

Malnutrition is linked with aging-related disease and is a significant cause for hospitalisation among older adults (Hong *et al.*, 2019; Tittikpina *et al.*, 2019). In particular, malnutrition plays a role in the development and progression of frailty and sarcopenia (Cruz-Jentoft *et al.*, 2017). Research demonstrates that older adults are frequent users of emergency departments (ED), accounting for up to one quarter of all ED attendees (Morley *et al.*, 2018; Roe *et al.*, 2018; van Tiel *et al.*, 2015). We have previously reported finding over a third of non-acute older adults admitted and subsequently discharged from ED to be at risk of malnutrition or malnourished when screened with the Mini Nutritional Assessment – Short Form (MNA-SF) tool (Griffin *et al.*, 2020). However, nutrition screening is not routinely performed in ED even when mandated by clinical guidelines due to perceived demands on nursing time to perform the screening, different priorities relating to patient flow, and individual barriers relating to practitioners' competency (Dent *et al.*, 2019; Kirk & Nilsen, 2016; Vivanti *et al.*, 2015). Therefore, there are missed opportunities to initiate integrated care pathways to ameliorate nutrition vulnerability (Starr *et al.*, 2015; Umegaki *et al.*, 2017; Vivanti *et al.*, 2015).

The purpose of this proposed scoping review is to identify the extent of nutrition care provided to older adults attending and subsequently discharged from ED. This information will be used to inform a foundational concept of nutrition care according to the NCPM in an ED setting and allow the future examination of nutrition care pathways, practice, policy, and research within models of integrated care for older adults. The research question for this scoping review is:

What is the level of nutrition care provided to older adults attending emergency departments?

An initial search of MEDLINE, the Cochrane Database of Systematic Reviews and *JBI Evidence Synthesis* was conducted and there were no current or underway systematic reviews or scoping reviews and few empirical research articles on the topic identified. A preliminary Google search found articles reported in healthcare professional journals, reports, and websites. Therefore, a scoping review has been chosen to explore the breadth of grey and published literature to provide a holistic synthesis of evidence and identify research gaps and focus for future studies.

Methods

This scoping review will be conducted in accordance with the Joanna Briggs Institute (JBI) methodology for scoping reviews (Peters *et al.*, 2020). The preferred reporting items for systematic reviews and meta-analysis extension for scoping reviews (PRISMA-ScR) will be used to guide the report (Tricco *et al.*, 2018). As this is a scoping review it will be designed to explore the breadth and depth of the literature represented as a tabular map that summarises the evidence and activity related to nutrition care in the ED among older adults (Cooper, 2016; Tricco *et al.*, 2016).

The research question was identified and the stated objectives refined from the preliminary searches and consultation with academic colleagues (RG, MCC) engaged in the exploration of the roles of dedicated health and social care professionals in the care of older adults in the ED (Cassarino *et al.*, 2019; Conneely *et al.*, 2021; O'Shaughnessy *et al.*, 2019) and

registered dietitians (SB, LR) engaged in the service provision of nutrition care for older adults in acute and frailty intervention teams. The following objectives were developed to guide the scoping review:

1. To explore current screening practices and tools used to identify malnutrition risk among older adults who present to ED and up to 72-hours upon discharge to home.

2. To map the current levels of nutrition and dietetic care provided to older adults who present to ED and up to 72-hours upon discharge to home.

3. To describe the pathways of nutrition care initiated on identification of (risk of) malnutrition for older adults discharged from the ED.

Eligibility criteria

The mnemonic PCC (population, concept, and context) was adopted to guide the development of the inclusion criteria, search terms and strategy for scoping reviews (Peters *et al.*, 2020).

Population

Older male and female adults (those aged ≥65 years) who present to the ED and are subsequently discharged from emergency departments.

Concept

The phenomena of interest are nutrition focused screening and subsequent level of nutrition care provided to manage malnutrition initiated from an ED setting. The nutrition screening may be conducted independently or as part of a comprehensive geriatric assessment. The nutrition screening can be carried out by any member of the ED multidisciplinary team (MDT). Subsequent nutrition care must be initiated at presentation to the ED, during the stay in the ED index visit or up to 72 hours post ED discharge.

Context

The search will be limited to publications describing nutrition screening, assessment, diagnosis, nutrition interventions, monitoring and/or evaluation in ED settings within the last 10 years to ensure currency to present day. Studies will be confined to those from developed countries. Studies that evaluate any nutrition intervention will be included. Medication studies will be excluded.

Inclusion criteria

- Literature published in last 10 years (2011–2021).
- Grey literature including studies, reports and published articles that focus on nutrition assessment tools to measure nutrition status and intervention among older adults (65+ years) in the ED.
- Articles published in any language.
- Studies that report on nutrition screening and subsequent nutrition care by any MDT member or a qualified registered dietitian/clinical nutritionist.
- Review articles including systematic reviews, scoping reviews, and rapid reviews; quantitative studies (observational and experimental), qualitative and mixed method studies, and clinical care guidelines.
- Grey literature defined as "that which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers" (Frederiksen, 2008).

Exclusion criteria:

- Articles published before January 2011.
- Articles focusing on ages less than 65 years admitted in the ED.
- Articles in which nutrition care is initiated on a hospital ward and not in the ED.

Search strategy

The search strategy for this scoping review was developed in collaboration with a specialist librarian (LD) who carried out an initial search (Table 1). The search strategy will aim to locate

Table 1. Search terms of inclusion criteria according to PCC (population, concept, and context) mnemonic (Peters *et al.*, 2020).

Database search terms
Participants:
older adults or elderly or geriatric or geriatrics or aging or senior or seniors or older people or aged 65 or 65+ or retired
Concept:
nutrition screen* or malnutrition or nutritional status or nutrition assess*
Context:
emergency department or emergency room or accident and emergency or accident & emergency or a&e or a & e or Casualty department or triage in the emergency department or triage or triage system or trauma cent* or emergency services or A & E or A&E

both published and unpublished studies and will be iterative through three steps:

1. An initial limited search of CINAHL was undertaken to identify articles on the topic (see *Extended data* (Griffin, 2021)). The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles will be used to develop a full search strategy with the input of a specialist health sciences librarian (LD).

2. The search strategy, including all identified keywords and index terms, will be adapted for each included database and/or information source. Two researchers (AG, LD) will search electronic databases (Medline (Ovid), Pubmed, CINAHL Complete, EMBASE, Cochrane Library and Scopus), grey literature sources (DART-Europe E-theses portal, Open Grey, and Trip Medical database) and website searches (Google, Google Scholar, NICE and LENUS) for relevant professional and organisational developed policy, practice and guidelines.

3. The reference list of all included sources of evidence will be screened for additional studies. As internet searching using Google.com displays results listed by relevance for the given search terms (Adams *et al.,* 2016; Piasecki *et al.,* 2018), the first 20 results yielded by the search string will be reviewed. A custom range on the last ten years (2011 to 2021) will be the only limiter set. As the search for scoping reviews is an iterative process as researchers become more familiar with the evidence and identify additional keywords, sources, and search terms the entire search strategy and results will be reported in detail with the published review.

Evidence selection

Following the search, all identified citations will be collated and uploaded into EndNote X8 and duplicates removed. The screening process will be carried out using Rayyan open access screening software (Ouzzani *et al.*, 2016). Study selection will begin with screening of titles and abstracts by two reviewers (AG, CS and RG), independently, using the pre-specified inclusion and exclusion criteria. The screening process will be pilot tested on a random sample of 25 titles and abstracts. Subsequently, the full text of selected citations will be assessed in detail against the inclusion criteria by two independent reviewers (AG and CS). Reasons for exclusion of sources of evidence at full text that do not meet the inclusion criteria will be recorded and reported in the scoping review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion, or with an additional reviewer (RG or MC). The results of the search and the study inclusion process will be reported in full in the final scoping review and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses extension for scoping review (PRISMA-ScR) flow diagram (Tricco *et al.*, 2018).

Data extraction

An adapted data extraction tool from the template provided by the JBI methodology guidance for scoping reviews (Peters *et al.*, 2020a) will be used for collation. The data extracted will include specific details about the participants, concept, context, article type, country, and study methods as relevant. A draft extraction form is provided (Table 2). The draft data extraction form will be modified and revised as necessary during the process of extracting data from each included evidence source. As part of this process one reviewer will independently chart the data from the retrieved articles (CS). The second reviewer (AG) will check a sample of 20% of the charted data. Any disagreements that arise between the reviewers will be resolved through discussion, or with additional reviewers (RG or MC). If appropriate, authors of papers will be contacted to request missing or additional data, where required. Subsequent modifications will be detailed in the scoping review. Data charting will be conducted using Microsoft Excel Version 2111.

Key findings relevant to the review question and objectives will describe data according to the steps of the NCPM and subsequent referral for nutrition care follow-up (Table 2).

A critical appraisal of methodological quality or risk of bias of included studies is not applicable as the purpose of this scoping review is to describe current practices in malnutrition screening among older adults attending and subsequently discharged from an ED and to map the levels of nutrition care from data that spans the evidence hierarchy (Peters *et al.*, 2020).

Data analysis and presentation

Data analysis will be conducted using SPSS Version 24. The data will be presented in tabular form and will include basic descriptive analysis (i.e. frequency counts of concepts, population, etc.). Qualitative data gathered will also be presented as a descriptive narrative and it is beyond the remit of a scoping review to perform a thematic analysis (Peters *et al.*, 2020). However, basic coding of data will be performed to identify and map the steps (Screening, Assessment, Diagnosis, Monitoring and Evaluation) of the Nutrition Care Process (Harfield *et al.*, 2018; Swan *et al.*, 2017; Swan *et al.*, 2019). A narrative summary will accompany the tabulated results and will describe how the results relate to the research question and objectives.

Dissemination

We intend to disseminate the results through publication in a peer-reviewed journal and conference presentations. We will present our findings to healthcare professionals engaged in the service provision of care for older adults in acute and frailty intervention teams to engage stakeholders to establish a process for malnutrition screening, assessment, and first-line intervention in the emergency department setting. We will also present our findings to a stakeholder panel of older adults for health services research to gain their insight and input to follow on research in this area including but not limited to prospective study to explore the development of integrated nutrition care pathways from the ED.

Study status

This protocol has been finalised by the research team and was registered prospectively with the Open Science Framework on 07/01/2022 (see *Extended data* (Griffin, 2021). At the time of publication, initial searches of databases have commenced.

Table 2. Adapted data charting form from Joanna Briggs Institute (JBI) methodology for scoping reviews (Peters *et al.*, 2020a).

Scoping review details
Scoping review title
Scoping review objectives
Scoping review questions
Inclusion/Exclusion criteria
Participants
Concept
Context
Type of evidence source
Evidence Source Details and Characteristics
Citation details (author(s), date, title, journal, volume, issue)
Country
Context (admitted to ED or discharged home from ED (up to 72 hours), length of ED stay, etc.)
Participants (details of age/sex and number)
Details/Results extracted from source of evidence (in relation to the concept of the scoping review)
Nutrition screening (completed (Y/N), tool used, independent/part of CGA, role of healthcare professional completing screening)
Nutrition assessment (completed (Y/N), detail of assessment (assessment tool/clinical exam/etc.), independent/part of CGA, MDT member completing assessment)
Nutrition diagnosis (description, use of standardised language (Y/N), documentation in health care record)
Nutrition intervention (description including prescription of oral nutritional supplements, etc.)
Nutrition monitoring and evaluation (frequency, responsibility, etc.)
Referral to/from care pathways supporting transitionary nutrition care for older adults

Abbreviations Legend. ED, emergency department; Y/N, yes/no; CGA, comprehensive geriatric assessment; MDT, multidisciplinary team.

Discussion

The purpose of this proposed scoping review is to identify and map the level of nutrition care provided to non-urgent older adults attending emergency departments. ED discharge is a transitionary time of care when nutritional vulnerability could be mitigated with the instigation of targeted nutrition care pathways. This information will be used to inform a foundational concept of nutrition care according to the Nutrition Care Process in an ED setting and allow the future examination of nutrition care pathways, practice, policy, and research within models of integrated care for older persons.

Data availability

Underlying data

No data are associated with this article.

Extended data

Open Science Framework: https://doi.org/10.17605/OSF.IO/CXARF (Griffin, 2021).

This project contains the following extended data:

- Search Strategy Scoping review Nutrition Care in ED.pdf
- PRISMA-ScR-Fillable-Checklist_10Sept2019 ED Nutrition Care Protocol.docx
- ED Plus Nutrition Care Scoping Review protocol - HRB Open.pdf

Acknowledgements

We wish to acknowledge Ciara Pender, Clinical Specialist Dietitian for Frailty Intervention Team Mater Misericordiae University Hospital and member of the Irish Nutrition & Dietetic Institute, Older Person Nutrition Interest Group (OPNIG) Chair, Ireland for her professional opinion and consultation in developing the research question and objectives.

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Open Peer Review

Current Peer Review Status: ✔ ✔

Version 2

Reviewer Report 08 September 2022

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✔ **Adrienne M. Young**

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The authors have adequately addressed the previous feedback provided.

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Malnutrition, hospital nutrition care, health services research

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Reviewer Report 01 September 2022

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✔ **Clare A. Corish**

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No further comments.

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: I have a long-standing commitment to nutrition research activities, particularly in disease-related malnutrition/malnutrition in the older adult with research funding in this area from the Irish Health Service Executive, the Food Safety Promotion Board, safefood, the Department of Agriculture, Food and the Marine, and the Health Research Board. I have been workpackage co-lead on a large EU project investigating malnutrition in older adults (the Malnutrition in the Elderly Knowledge Hub). I am currently the national principal investigator on a large EU grant developing a dietary intervention to improve appetite in older adults at risk of malnutrition and have recently completed an Irish Health Research Board-funded project on the management of malnutrition in primary care. I was a member of the Irish Department of Health Guideline Development Group for the National Clinical Guideline 22, Nutrition screening and use of oral nutrition support for adults in the acute care setting in 2020, and the Food Safety Authority of Ireland Public Health Nutrition sub-committee that developed the Scientific Recommendations for Food-based Dietary Guidelines for Older Adults in Ireland in 2021.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Version 1

Reviewer Report 25 July 2022

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Clare A. Corish
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The proposed scoping review aims to identify the extent of nutrition care provided to older adults attending and subsequently discharged from emergency departments i.e., those not admitted directly from the emergency department into hospital. Nutrition is a modifiable factor for healthy ageing. Those who are malnourished have a lower quality of life, a greater need for healthcare, and are at the highest risk for frailty. Given the number of older adults who present, the emergency department provides an opportunistic setting to provide multidisciplinary malnutrition screening, assessment, and first-line interventions to manage malnutrition. This scoping review is timely, the methods used are clearly described and the results will be useful to inform healthcare practice both nationally and internationally. The review is broad, intended to capture grey as well as published literature, given the results of initial literature searches.

I have one query relating to the inclusion criteria. In some places, an age of ≥65 years is specified and in other places, a mean age of ≥65 years. To my mind, these are quite different age

categories. If the age is specified as ≥65 years, all in the population being investigated are aged 65 years and over. In contrast, a population with a mean age of ≥65 years could include people aged in their 50s if a proportion of the population is aged from 90-100+ years. It would be helpful if the authors could clarify precisely how they are categorising the study population and that consistent categorisation is used.

I would also like to see dissemination/presentation of the research findings to the wider multidisciplinary team and not solely to dietitians, particularly if the anticipated follow on from the scoping review is to establish a process for malnutrition screening, assessment, and first-line intervention in the emergency department setting.

In summary, this is a well-considered and written protocol for a valuable scoping review that is intended to inform nutrition care pathways into the integrated care of older adults. I look forward to its publication.

Is the rationale for, and objectives of, the study clearly described?

Yes

Is the study design appropriate for the research question?

Yes

Are sufficient details of the methods provided to allow replication by others?

Yes

Are the datasets clearly presented in a useable and accessible format?

Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: I have a long-standing commitment to nutrition research activities, particularly in disease-related malnutrition/malnutrition in the older adult with research funding in this area from the Irish Health Service Executive, the Food Safety Promotion Board, safefood, the Department of Agriculture, Food and the Marine, and the Health Research Board. I have been workpackage co-lead on a large EU project investigating malnutrition in older adults (the Malnutrition in the Elderly Knowledge Hub). I am currently the national principal investigator on a large EU grant developing a dietary intervention to improve appetite in older adults at risk of malnutrition and have recently completed an Irish Health Research Board-funded project on the management of malnutrition in primary care. I was a member of the Irish Department of Health Guideline Development Group for the National Clinical Guideline 22, Nutrition screening and use of oral nutrition support for adults in the acute care setting in 2020, and the Food Safety Authority of Ireland Public Health Nutrition sub-committee that developed the Scientific Recommendations for Food-based Dietary Guidelines for Older Adults in Ireland in 2021.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Author Response 11 Aug 2022

Anne Griffin, University of Limerick, Limerick, Ireland

Thank you, Professor Corish for your time in reviewing our paper. We appreciate all of your comments and suggested changes.

We have addressed each of the points you have raised and amended the paper accordingly as described below:

Point 1: Query relating to the inclusion criteria. In some places, an age of ≥65 years is specified and in other places, a mean age of ≥65 years. It would be helpful if the authors could clarify precisely how they are categorising the study population and that consistent categorisation is used.

***Our Response*:** Thank you for your observation. We have amended the protocol to specify an age of ≥ 65 years as our population of interest.

***Action*:** Pg. 6 & 7 - Two instances (section Eligibility Criteria describing "Population" and "Exclusion Criteria") of text referring to "mean age" have been amended to clarify "age ≥65 years".

Point 2: I would also like to see dissemination/presentation of the research findings to the wider multidisciplinary team and not solely to dietitians, particularly if the anticipated follow on from the scoping review is to establish a process for malnutrition screening, assessment, and first-line intervention in the emergency department setting.

***Our Response*:** Thank you for spotting this oversight on our behalf. We agree that the multidisciplinary team is essential to empower optimal nutrition care to older adults.

***Action*:** Pg. 10 - The text has been amended to state: "We will present our findings to healthcare professionals engaged in the service provision of care for older adults in acute and frailty intervention teams to engage stakeholders to establish a process for malnutrition screening, assessment, and first-line intervention in the emergency department setting."

Kind regards,
Anne Griffin,
Corresponding author.

Competing Interests: No competing interests were disclosed.

Reviewer Report 26 April 2022

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Adrienne M. Young

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Thank you for this review which will be helpful for health professionals and researchers alike.

The scoping review method is appropriate and well justified. The authors mention extracting the patient outcomes on p4 as a secondary finding, which is not typical for a scoping review and is not justified or described further. I would encourage the authors to consider if this fits within the scope of a scoping review, and if to be included this should be explained more fully and included in the data extraction form (i.e. Table 2).

The eligibility criteria are well described, however, the nutrition care at 72 hours is probably not relevant under the population as it is well covered under the concept. I would write the population as "*Older male and female adults (those with a mean age* ≥65 years) who present to the ED and are subsequently discharged from emergency departments." To this point, I wonder if "*admitted to hospital from ED*" should be included as part of the exclusion criteria. This is stated in the population, but I imagine that there are many studies that look at nutrition care across the continuum of care from ED to the hospital ward.

The inclusion of grey literature is justified, however, a description of how Google searches will be managed should be included, e.g. how many pages/hits will be screened? Will you use any limiters (e.g. .gov.uk, etc).

The protocol is well written. I noted only 2 typos/errors: "*MNA-SF*" is written as "*MNS-SF*"; and the second sentence in the introduction is a little hard to read (maybe better written as "*This can occur due to physiological factors (e.g. ...), psychosocial factors (e.g. ...), and personal resources (e.g. ...)*".

All the best for completing your review.

Is the rationale for, and objectives of, the study clearly described?

Yes

Is the study design appropriate for the research question?

Yes

Are sufficient details of the methods provided to allow replication by others?

Partly

Are the datasets clearly presented in a useable and accessible format?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Malnutrition, hospital nutrition care, health services research

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Author Response 11 Aug 2022

Anne Griffin, University of Limerick, Limerick, Ireland

Thank you, Professor Young for your time in reviewing our paper.

We appreciate all of your comments and suggested changes. We have addressed each of the points you have raised and amended the paper accordingly. This is now described below.

Point 1: The scoping review method is appropriate and well justified. The authors mention extracting the patient outcomes on p4 as a secondary finding, which is not typical for a scoping review and is not justified or described further. I would encourage the authors to consider if this fits within the scope of a scoping review, and if to be included this should be explained more fully and included in the data extraction form (i.e. Table 2).

***Our Response*:** Thank you, we have considered this observation and agree that extracting patient outcomes is not required of a scoping review. Additionally, the stated objectives of the current study are to explore, map and describe nutrition care pathways initiated in the ED setting. Follow-up of patient outcomes is beyond the remit of these objectives and, indeed, is not carried out in reality from ED settings.

Action: Pg. 6 - We have deleted the line: “We are not primarily interested in patient outcomes for this review but will chart these as a secondary finding.” From the section describing the development of inclusion criteria.

Point 2: The eligibility criteria are well described, however, the nutrition care at 72 hours is probably not relevant under the population as it is well covered under the concept. I would write the population as "*Older male and female adults (those with a mean age* ≥65 years) who present to the ED and are subsequently discharged from emergency departments."

***Our Response*:** Thank you, we have amended the sentence as you kindly suggested.

Action: Pg. 6 - We have deleted the words “up to 72 hours post discharge to include early discharge planning phase” from the section titled ‘Population’.

Point 3: I wonder if "*admitted to hospital from ED*" should be included as part of the exclusion criteria. This is stated in the population, but I imagine that there are many studies that look at nutrition care across the continuum of care from ED to the hospital ward.

***Our Response*:** Thank you, having subsequently screened a number of articles, we concur that nutrition screening is often not initiated until hospital ward admission.

***Action*:** Pg. 7 - "Articles in which nutrition care is initiated on a hospital ward and not in the ED." Has been added to the exclusion criteria.

Point 4: The inclusion of grey literature is justified, however, a description of how Google searches will be managed should be included, e.g. how many pages/hits will be screened? Will you use any limiters (e.g. .gov.uk, etc).

***Our Response*:** Thank you for the comment. We found a lack of clear guidance on the management of Google searches in literature reviews. Based on the available information, our interpretation, taking a pragmatic approach to ensure the inclusion of health service policies and guidelines that are often not peer-reviewed we now describe our chosen method in more detail.

***Action*:** Pg. 8 - The following text with supporting references has been inserted to point 3 of the section 'Search Strategy': "As internet searching using Google.com displays results listed by relevance for the given search terms (Adams *et al.* 2016; Piasecki *et al.* 2018), the first 20 results yielded by the search string will be reviewed. A custom range on the last ten years (2011 to 2021) will be the only limiter set."

References to add to list - Adams, J., Hillier-Brown, F.C., Moore, H.J. *et al.* Searching and synthesising 'grey literature' and 'grey information' in public health: critical reflections on three case studies. *Syst Rev* **5,** 164 (2016). https://doi.org/10.1186/s13643-016-0337-y
Piasecki J, Waligora M, Dranseika V. Google Search as an Additional Source in Systematic Reviews. Sci Eng Ethics. 2018 Apr;24(2):809-810. doi: 10.1007/s11948-017-0010-4. Epub 2017 Dec 16. PMID: 29249022; PMCID: PMC5876410.

Point 5: 2 typos/errors: "*MNA-SF*" is written as "*MNS-SF*"; and the second sentence in the introduction is a little hard to read (maybe better written as "*This can occur due to physiological factors (e.g. ...), psychosocial factors (e.g. ...), and personal resources (e.g. ...)*".

***Our Response*:** Thank you for spotting these typos and errors.

***Action*:** Pg. 5 - We have corrected MNS-SF to read MNA-SF. We have amended the second sentence in the introduction as suggested.

Pg. 4 - It now reads "This can occur due to physiological factors (e.g. taste changes, poor dentition, loss of appetite, mobility and functional limitations), psychosocial factors (e.g. life course, food ideals and preferences, grief and bereavement), and personal resources (e.g. transport, disposable income, social supports) that influence food choice and intake (Stanga 2009; Host *et al.* 2016) among older adults. "

Kind regards,
Dr Anne Griffin,
Corresponding author

Competing Interests: No competing interests were disclosed.