

Supplementary Table 1: Characteristics of the selected articles

Authors	Publication year	Country of origin	Original language	Study design	Population or sample description	Intervention Studied or Suggested
Adelman, R.D. et al.	1994	USA	English	Review	Geriatric patients in critical care setting	CGA
Bellamoli, C. et al.	2010	Italy	Italian	Retrospective cohort studies (pre-post intervention)	Setting: intermediate care unit in a geriatric department Pre-intervention group: n=150, mean age 83 Post-intervention group: n=150, mean age 82	6 dedicated ICU beds in a geriatric department
Boltz, M.	2011	USA	English	Editorial	Older adults in critical care setting	Geriatric education for nurses:
Brummel, N.E. et al.	2015	USA	English	Expert opinion	Older adults in critical care setting 65 years or older	Holistic approach to geriatric patients
Brummel, N.E. and Ferrante, L.E.	2018	USA	English	Expert opinion	Geriatric patients in critical care setting	Different approaches suggested
Bryant, E. A. et al.	2019	USA	English	Retrospective cohort studies (pre-post intervention)	Trauma patient older than 65 years old determined to be pre-frail or frail by a geriatrician's assessment. Surgical critical care and step-down unit patients Pre-intervention group (control): n=150, mean age 84 Post-intervention group: n=150, mean age 83	Geriatric assessment with geriatrician and multidisciplinary team
Charron, C. et al.	2013	France	French	Descriptive cohort study without a comparator group	Patient over 80 years old hospitalized in critical care	CGA by geriatrician

Davies, E.	2013	United Kingdom	English	Editorial	Geriatric patients in critical care setting	Dedicated geriatric beds
Devore, S. et al.	2016	USA	English	Descriptive cohort study without a comparator group + feasibility study	Trauma patient from trauma ward and surgical ICU 65 years or older with positive screening test for frailty n= 65, mean age 77	CGA by non-geriatrician
Greco, A. et al.	2013	Italy	English	Descriptive cohort study without a comparator group	Step down care unit for patients admitted from emergency department or transferred from intensive care unit n= 91, mean age 77	4 beds of sub-intensive care in a 38-bed ward of acute geriatric care
Ip, S.P.S. et al.	1999	China	English	Descriptive cohort study without a comparator group	Medical ICU for patients over 70 years old n= 150	Dedicated geriatric beds
Karamanuk, T. et al.	2017	USA	English	Descriptive cohort study without a comparator group	Trauma patient from trauma ward and surgical ICU 65 years or older n= 98, mean age 75	Application of geriatric protocols
Lopez-Soto, A. et al.	2008	Spain	Spanish	Editorial	Critical care patients 65 years or older	Geriatric assessment without a geriatrician in ICU
Lopez-Soto, A. et al.	2009	Spain	Spanish	Review	Older critical care patient	Geriatric assessment without a geriatrician in ICU
Olufajo, O.A. et al.	2016	USA	English	Retrospective cohort studies (pre-post intervention)	Trauma patients hospitalised in acute care surgery 70 years and older. Pre-intervention group: n=215 Post-intervention group: n=191 Global mean age 83	CGA by geriatrician
Ranhoff, A.H. et al.	2006	Italy	English	Retrospective cohort studies	Step down care unit for adults of	4 beds dedicated to

				(pre-post intervention)	60 years and older Acute care for the elderly (control): n=125, mean age 82 Step down care unit for the elderly: n= 401, mean age 78	step down elderly care in a 24-bed unit
Sinvani, L. et al.	2018	USA	English	Descriptive cohort study without a comparator group	Adults aged 65 years and older admitted to general ICU and subsequently transferred to medical ward n= 179, mean age 81	Application of geriatric protocols
Swartz, K et al.	2019	USA	English	Descriptive cohort study without a comparator group	Trauma patient aged 65 years and older	Mandatory geriatric consultation
Weiss, L. et al.	2012	Switzerland	French	Descriptive cohort study without a comparator group	Intermediate unit for medical patient with no indication of critical care unit intervention group: n=1690, mean age 85.3	2-4 dedicated beds

CGA: Comprehensive Geriatric Assessment

ICU: Intensive Care Unit

Supplementary Table 2: Detailed description of articles (Model of care, population, resources, outcomes)

	Study design	Model of Care Description	Measured Outcomes
<u>Geriatric unit or dedicated beds</u>	3 pre-post intervention retrospective cohort study 2 descriptive retrospective cohort study 1 editorial		
Bellamoli, C. et al. (2010)	Pre-post intervention retrospective cohort study Aim: Evaluate the impact of the introduction of an intermediate medical care unit (ICU) in an ordinary acute ward for the elderly	Population Older adults admitted in an intermediate care unit in a geriatric department Mean age 82-83 Human resources and interventions <ul style="list-style-type: none"> • Three doctors specializing in internal medicine and / or geriatrics • Nursing coordinator • Professional nurse responsible for day shift of the 6 beds • Technical operators in charge of assistance. • Referring cardiologist for the area of inter-care medical averages. • Geriatrician and resuscitator operating in the adjacent intensive care unit neurosurgical sleeves available 24 hours a day • Social worker • Psychiatrist and physiotherapists r • All other consultant specialists who on request they see patients usually without waiting, and mainly during the day Material and environmental resources <ul style="list-style-type: none"> • Six specific beds • Recording of vital signs: monitoring non-invasive • Non-invasive ventilation available • Cart with the necessary for intubation • For the night hours adequate lighting is ensured to facilitate care orientation and prevent falls, without disturb sleep 	<ul style="list-style-type: none"> • Length of stay (LOS) reduction for patients sent home or in a nursing home (of which they were already guests). Longer LOS for those who were transferred to the traditional geriatric ward or long-term rehabilitation. • Mortality was higher (11.4% vs. 10.20%) than in ordinary hospital stay: the data was not found significant to statistical analysis
Ranhoff et al. (2006)	Pre-post intervention retrospective cohort study Aim: Describe the characteristics of the	Population Step down care unit or adults of 60 years and older admitted from the emergency department (95%), from the geriatric ward or other wards in the hospital (4%); only 4 patients are admitted from the ICU Mean age 78-82 pre-post group Human resources <ul style="list-style-type: none"> • Nurse-to-patient ratio of 1:4 	<ul style="list-style-type: none"> • Length of stay for Acute Care for Elderly (ACE) vs STEP DOWN UNIT patients: 7.7 ± 5.2 days vs 6.0 ± 4.9 days (NS)

	<p>setting of step down unit and to discuss its usefulness</p>	<ul style="list-style-type: none"> • Physiotherapist • Counselling of the nurses and direct patient care • Assistance for early mobilization and respiratory physiotherapy • Unrestricted visits by relatives • Physicians <p>Material and environmental resources</p> <ul style="list-style-type: none"> • Twenty four beds of the Department of Internal Medicine and Geriatrics • 4 beds of the unit were dedicated to the step down unit. The step down unit is an integrated part of the ACE unit located in the middle of the ward, just in front of the nursing station • All beds are equipped for non-invasive monitoring of cardiac and respiratory function • A small nursing station with a monitor for all beds and a computer is also located in the STEP DOWN UNIT. • Non-invasive ventilation available • Each bed area can be separated from the others by curtains, but also has the view of a green area through large windows. • Adequate lightening is provided in dark hours to visualize the room enough to ensure orientation and prevent falls, but not to disturb sleep • Cart with the necessary for intubation <p>Interventions</p> <ul style="list-style-type: none"> • Prepared environment • Review of medical care to prevent iatrogenic events • Early discharge planning • Physiotherapist is available for assessment of patients • Counselling of the nurses and direct patient care • The most common tasks are assistance for early mobilization and respiratory physiotherapy. 	<ul style="list-style-type: none"> • In-hospital mortality ACE vs step down unit patients: 19.2% vs 12.5% (p<0.05)
<p>Weiss, L. et al. (2012)</p>	<p>Pre-post intervention retrospective cohort study and matched cohort study</p>	<p>Population Mean age 85.3</p> <p>Human resources</p> <ul style="list-style-type: none"> • General internal medicine and cardiologists • Physiotherapist • Orthophonist/speech therapist • Occupational therapist 	<p>Not enough results to conclude on Hospital length of stay in-hospital mortality</p>

	Aim: Description of group's experience and impact on population	<ul style="list-style-type: none"> Ratio of nursing 2 :1 during dayshift and 4 :1 during nightshift <p>Material and environmental resources</p> <ul style="list-style-type: none"> 2-4 beds <p>Interventions</p> <ul style="list-style-type: none"> Geriatric assessment on top of acute care Social assessment 	
Greco, A. et al. (2013)	<p>Descriptive retrospective cohort study</p> <p>Aim : Description one year of activity in step down unit.</p>	<p>Population</p> <p>Patients were admitted from</p> <ul style="list-style-type: none"> Emergency department Standard ICU <p>Mechanical ventilation was used in the 69% of cases (14% invasively). 21% of patients had a spontaneous ventilation.</p> <p>Material and environmental resources</p> <ul style="list-style-type: none"> 4 beds in a 38-bed acute geriatric unit were dedicated to a step down unit <p>Interventions</p> <ul style="list-style-type: none"> Addition to clinical standards, a comprehensive geriatric assessment (CGA) with the multidimensional prognostic index (MPI) computation was performed 	<p>Descriptive data</p> <ul style="list-style-type: none"> Mean length of stay: 16.3(9.6) days Overall mortality rate: 22% <p>step down unit has reduced the admissions to standard ICU for the elderly patients with an improvement in the perceived care and a reduction of costs.</p>
Ip, S.P.S. et al. (1999)	<p>Descriptive retrospective cohort study</p> <p>Aim: Study the outcomes of elderly patients in a high-dependency care unit and to evaluate the costs and benefits of a geriatric high-dependency unit (GHDU).</p>	<p>Population</p> <p>Medical ICU</p> <p>Average age 81.4 +/-6.7</p> <p>From acute hospital wards or from the Accident and Emergency Department</p> <p>Human resources</p> <ul style="list-style-type: none"> In-unit physician coverage 24 hrs per day. The nursing staff/patient ratio at the GHDU is 1:3.2. The GHDU is under the direction of a 0.5 full-time-equivalent physician. <p>Material and environmental resources</p> <p>Geriatric high-dependency unit (GHDU)</p> <p>Interventions</p> <ul style="list-style-type: none"> Intensive nursing care Invasive monitoring (e.g., arterial catheter, central venous catheter, and pulmonary artery catheter). Major formal organ support (e.g., mechanical ventilation and renal dialysis) were performed. More complex forms of life support (e.g., extracorporeal membrane oxygenation) were not usually provided. Active physiotherapy 	<p>Descriptive data</p> <p>For functional outcomes,</p> <p>At 1 month after discharge, a proportion of the survivors did have some functional deterioration.</p> <ul style="list-style-type: none"> 66.7% of the survivors returned to their pre-morbid ADL, 79.5% maintained their mobility status, and 91.7% remained at the same social conditions. <p>The cost of 1 GHDU bed-day was equivalent to 24% of 1 ICU bed-day.</p>

		<ul style="list-style-type: none"> • Comprehensive social and functional rehabilitation program, • Financial assistance • Post discharge day hospital care, rehabilitation advice, long-term care placement, and referral to community services were readily available when required 	
Davies, E. (2013)	Editorial/position paper	The future of intensive care needs a solution: the geriatric ICU. Interested intensivists may spend part of their training broadening their understanding of geriatric medicine	none
<u>Geriatric consultation or assessment by geriatrician (+/- multidisciplinary team)</u>	2 pre-post intervention retrospective cohort study 2 Descriptive retrospective cohort study		
Olufajo, O.A. et al. (2016)	<p>Pre-post intervention retrospective cohort study</p> <p>Aim : Describe impact of instituting mandatory geriatric consults on our trauma service + association with significant improvement in patient outcomes and changes in processes of care.</p>	<p>Population >70 mean age 83 Level I trauma center: acute care surgery model + surgical critical care</p> <p>Human resources</p> <ul style="list-style-type: none"> • One full-time board-certified geriatrician was assigned to the trauma service and was available for consults Monday through Friday. 0.50 full-time equivalent of a geriatrician <p>Patients were assessed by the geriatrician within 24 hours of admission, except when they were admitted during weekend hours, in which case, they would be seen at the beginning of the next week</p> <p>Intervention The typical consultation consisted of a comprehensive geriatric assessment, which included assessment of:</p> <ul style="list-style-type: none"> • function • cognition • polypharmacy • social circumstances • pain • nutritional status <p>The functional domain was assessed using the Barthel and Lawton and Brody Indexes</p>	<ul style="list-style-type: none"> - Pre vs post 30-day mortality: 11.63% vs 6.81% (p= 0.10). - Pre vs post ICU readmissions: 8.26% vs 1.96% (p=0.06). - Pre vs post in-hospital mortality: 9.30% vs 5.24% (p=0.12) - Pre vs post 30-day readmission: 16.92% vs 14.92% (p=0.60) - Pre vs post Hospital LOS: 6.41 days vs 5.95 days (p=0.90)

		Cognitive domain was assessed using the Confusion Assessment Method and either the Mini-Cog or the Montreal Cognitive Assessment Polypharmacy and appropriateness of medications were assessed using the Beers criteria	
Bryant, E.A. et al. (2019)	Pre-post intervention retrospective cohort study Aim: Determine if an interdisciplinary care pathway for frail trauma patients improved in-hospital mortality, complications, and 30-day readmissions.	Population Trauma service including the 2 surgical ICUs and 2 step-down units 65 years and older are screened for frailty using the 5-item FRAIL Scale Human resources <ul style="list-style-type: none"> • Geriatrics • Physical therapy • Nutrition • Social work Interventions <ul style="list-style-type: none"> • Standardized, evidence-based interdisciplinary pathway of care/geriatric-focused care processes to promote early mobilization and nutrition, prevent delirium, and identify a health care proxy and existing advance directives • An interdisciplinary family meeting is offered to patients on the pathway with a LOS of 5 days to address medical and social issues around non-home discharge, prognosis, and goals of care 	<ul style="list-style-type: none"> - Pre vs post delirium: 21.6% vs 12.5% (p=0.05) - Pre vs post in-hospital mortality: 7.2% vs 4.1% (p=0.28) - Pre vs post complications: 28.0% vs 28.5% (p=0.93) - Pre vs post 30-day readmissions: 9.6% vs 2.78% (p=0.01) <p>After adjusting for patient characteristics, patients on the pathway had</p> <ul style="list-style-type: none"> - lower delirium (odds ratio [OR] 0.44, 95% CI 0.22 to 0.88, p=0.02) - lower 30-day readmission rates (OR 0.25, 95% CI 0.07 to 0.84, p=0.02) <p>than pre-pathway patient</p>
Charron, C. et al. (2013)	Descriptive retrospective cohort study Aim: describe author's experience of geriatric consultation in critical	Population Patient over 80 years old hospitalized in critical care Human resources <ul style="list-style-type: none"> • Physician • Nurses • Geriatrician Interventions <ul style="list-style-type: none"> • ADL and iADL collected by nursing • Subsequent geriatrician consultation 	None
Swartz, K et al. (2019)	Descriptive retrospective cohort study	Population Trauma patients over 65 years old (ward/step-down/ICU non specified) Human resources	from 2012 to 2017 - LOS decreased: 8.08 days to 7.3 days

	Aim: feasibility of geriatric trauma collaboration	<p>Multidisciplinary team including geriatrics, nutrition, PT, OT and pharmacist (if >5 chronic medications)</p> <p>Interventions</p> <p>Mandatory geriatric consults and geriatric consult orders order for no benzodiazepines four-hour period of continuous sleep</p>	<p>- Less complications per hospitalisation</p> <ul style="list-style-type: none"> - incidents of deep venous thrombosis decreased from 7 in 2012 to 2 in 2017 - pneumonia from 28 to 6 - unplanned intubation from 27 to 11 - Urinary tract infection from 14 to 4
Adelman et al. (1994)	Review	<p>Population</p> <p>Standard ICU 65 years and older</p> <p>Human resources</p> <p>Elderly patients in critical care (and their families) are likely to benefit from having</p> <ul style="list-style-type: none"> • Physician • Social work • Physical therapy • Pharmacy • Pther disciplines involved from Day One of their admission to the ICU <p>Interventions</p> <p>«Fix-it» model usually applied to acute illness, is generally not applicable to elderly patients who have chronic unfixable diseases</p> <ul style="list-style-type: none"> • Comprehensive geriatric assessment • Physicians must establish goals of care • Regular team meetings • Unified approach • Patient-friendly ICU environment (reduce sensory deprivation, reinstating prosthetic devices, orientation cues, ...) • Liberal visitation by significant others • Promoting the patient's participation in self-care <p>Emphasizing early rehabilitation. Attention must be paid to maintaining skin integrity and the prevention of pressure sores</p>	None
Geriatric assessment	1 descriptive retrospective cohort study 3 editorials		

<p><u>/comprehensive geriatric assessment by multidisciplinary team without geriatrician</u></p>			
<p>Devore, S. et al. (2016)</p>	<p>Descriptive retrospective cohort study</p> <p>Aim: Analyze the feasibility of a twice-weekly CGA in a level 1 trauma center that has no geriatricians.</p>	<p>Population Trauma patient 65 years or older with positive screening test for frailty 65 years and older + ≥ 1 ISAR items (ward and ICU service) Mean age was 76.9</p> <p>Human resources</p> <ul style="list-style-type: none"> • No geriatrician • Nurses and doctors at the ward/ICU • The team is multidisciplinary, including the trauma coordinator and staffed by the trauma advanced practice providers (APPs) • Nurse case manager (CM), social worker (SW), pharmacist (PharmD), elder care navigator, dietician, physical therapist (PT), and occupational therapist (OT) <p>Interventions Mobility, activities of daily living impairment, frailty, and depression were screened and documented, and along with summative recommendations, were entered into the medical record, communicated to the patient's primary care provider and discussed with family. Collect recommendations from APPs, PharmDt, dietician, PT/OT, case management, social work, and other stakeholders</p>	<p>Comprehensive geriatric assessment (CGA) is feasible in facilities without a geriatric service</p>
<p>Lopez-Soto, A. et al. (2008)</p>	<p>Editorial</p>	<p>Population ICU</p> <p>Recommendations</p> <ul style="list-style-type: none"> • Geriatric assessment at admission and discharge • Communication with patient and family • Establishing level of care • Optimizing palliative care 	<p>None</p>
<p>Lopez-Soto, A. et al (2009)</p>	<p>Review</p>	<p>Population ICU</p> <p>Recommendations</p> <ul style="list-style-type: none"> • Considering functional independence and quality of life outcomes 	<p>None</p>

		<ul style="list-style-type: none"> • Geriatric assessment • Using scales and scores to assess ADL, IADL and quality of life • All physicians, internal medicine physician, geriatrician, intensivists, should be implicated in geriatric assessment and older adults' admission in ICU 	
<u>Other approaches (checklists, bundles of care, and incremental educational strategies)</u>	2 descriptive retrospective cohort study 3 editorials/review opinion		
Karamanukyan, T. et al. (2017)	<p>Descriptive retrospective cohort study</p> <p>Aim we sought to test the hypothesis that revision and close monitoring of compliance with our Geriatric injury protocol (GIP) has resulted in lower mortality in high-risk elderly patients with high acuity injury.</p>	<p>Population Trauma patients in ward and surgical ICU Mean age 75 ± 7.7</p> <p>Interventions Protocol includes</p> <ul style="list-style-type: none"> • Rapid reversal of anticoagulants • Aggressive multimodality pain management • Delirium prevention with early mobilization and nutritional support • Patient/family centered care with early disposition planning focused on the quality of life and advance directives <p>Kern medical geriatric injury protocol</p> <ul style="list-style-type: none"> • Medication screening. (on anticoagulation -> refer to anticoagulation reversal protocol) • Admission to trauma step down unit service • Management of pre-existing disease (consults as needed, resume home meds after resuscitation) • Special considerations of pain/sedation (avoid benzodiazepines-refer to ICU sedation protocol- consider early use of NSAIDS/non-narcotic analgesia); <p>Adjunct to care:</p> <ul style="list-style-type: none"> • Mobility: PT consult upon admission; identify functional status, early mobility per protocol. • Pulmonary: Aspiration precautions, swallow eval when appropriate, • Rib fractures: refer to protocol • Skin/wound care: Routine daily nursing screening for pressure ulcers wound care nurse weekly evaluation 	None

		<ul style="list-style-type: none"> • Nutrition: Bower regimen, early enteral nutrition, dietary consults, metabolic cart as needed in step down unit • Disposition planning: case management, palliative care, social work, family meetings 	
Sinvani, L. et al. (2018)	<p>Descriptive retrospective cohort study</p> <p>Aim: To explore geriatric-focused practices and associated outcomes in older intensive care survivors.</p>	<p>Population Older ICU survivors: Admitted to the medical ICU and subsequently transferred to the medicine service</p> <p>Interventions Geriatric-focused practices:</p> <ul style="list-style-type: none"> • Delirium screening • Early mobilization • Early nutrition • Avoidance of restraints • Avoidance of indwelling bladder catheters • Avoidance of potentially inappropriate medications (PIM) <p>Geriatric-focused practices were defined based on a combination of the</p> <ul style="list-style-type: none"> • Guidelines for management of pain, agitation, and delirium • ABCDEF bundle; • General geriatric best practices for the care of hospitalized older adults, including <ul style="list-style-type: none"> ○ Geriatric models of care (dedicated units for acute care for elders, the Hospital Elder Life Program), ○ Quality indicators of the Assessing Care of Vulnerable Elders (ACOVE) project, ○ Beers list of PIM ○ Joint Commission mandates for indicators such as restraint use 	None
Boltz (2011)	<p>Review</p> <p>Aim: The purpose of this article is to present an overview and analysis of issues related to care of the critically ill older adult, describe select interventional research and initiatives to infuse evidence-based geriatric practice, and</p>	<p>Population Standard ICU</p> <p>Interventions</p> <ul style="list-style-type: none"> • Geriatric education for nurses by incorporating an educational nursing program called Nurses Improving Care for Health system Elders • Review of the Evidence-Based Geriatric Nursing Protocols for Best Practice used by NICHE sites to identify needed clinical interventions • Identification and interventional model development by an interdisciplinary committee using a Framework for a Geriatric Acute Care Model developed by Hartford Institute faculty 	None

	describe the role of the NICHE program in supporting these initiatives	<ol style="list-style-type: none"> 1. Organizational structures. 2. Interdisciplinary protocols and processes. 3. Geriatric staff competence 4. Physical environment 5. Patient- and family-centered approaches 6. Aging-sensitive practices 	
Brummel, N.E. et al. (2015)	<p>Expert opinion and review</p> <p>aim : To review how disability can develop in older adults with critical illness and to explore ways to reduce long-term disability following critical illness.</p>	<p>Population Critically ill patients aged 65 years and older Standard ICU</p> <p>Social resources Physicians, pharmacists, and bedside nurses Collaborative interdisciplinary patient care</p> <p>Interventions</p> <ul style="list-style-type: none"> • Identifying high-risk older patients with pragmatic functional and cognitive assessment for older adults with critical illness • Addressing modifiable risk factors for disability (immobility and delirium), including social isolation, enforced dependence in ADLs, restraints, poor nutrition, polypharmacy, and unnecessary medical tests and procedures • Preventing inappropriate medication use • ABCDE bundle includes daily spontaneous Awakening and spontaneous Breathing trial Coordination (“ABC”), <ul style="list-style-type: none"> ○ Choosing to sedate patients only when necessary and to “lighter” levels (“C”) ○ Screening for Delirium (“D”) ○ Early mobilization/physical and occupational therapy (“E”) 	
Brummel, N.E, Ferrante, L.E (2018)	Opinion	<p>Population Critically ill patients aged 65 years and older Standard ICU</p> <p>Social resources Intensivist + interdisciplinary team</p> <p>Interventions</p> <ul style="list-style-type: none"> • Perform critical care procedures • Manage acute complex medical and surgical disorders in the ICU • Resuscitate, stabilize, and care for critically ill patients <p>+/-</p> <ul style="list-style-type: none"> • Facilitate family meeting including discussion of advanced directives and end-of-life decisions 	

		<ul style="list-style-type: none"> • Lead multidisciplinary healthcare teams • Provide palliative and end-of-life care • Teach patients, families, and multidisciplinary team • Improve quality and safety at the individual and system levels <p>+ the entrustable professional activities for geriatrics. These activities are not traditional components of critical care clinical training, they represent the skills that critical care clinicians should develop to provide optimal care for older adults with critical illness</p> <ul style="list-style-type: none"> • Provide patient-centered care to optimize function and/or well-being • Integrate patient’s goals, values, comorbidities, and prognosis into the practice of evidence based medicine • Prevent, diagnose, manage geriatric syndromes • Coordinate healthcare and healthcare transitions for patients with multiple chronic conditions & multiple providers • Review medications to maximize benefit and minimize number/adverse events <p>A first step toward integration can be achieved by adapting well-established models from non-ICU settings, such as the Acute Care for Elders (ACE) program</p>	
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ACE: Acute Care for Elderly; ADL: Activity of daily living; GHDU: Geriatric high-dependency unit; ICU : Intensive Care Unit
LOS: Length of stay; PIM: Potentially inappropriate medications

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	4
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	4
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	4
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	5
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	4-5
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Supplemental Material
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	5
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	5-6
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	6
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	-
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	6

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	6-7
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	7-12
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	-
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	7-12
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	7
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	12
Limitations	20	Discuss the limitations of the scoping review process.	15
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	15
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	-

JB1 = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med*. 2018;169:467–473. doi: 10.7326/M18-0850.