

## Appendix 1: Search strategy

### Indicative search terms

*Population:* Health Services for the Aged/ or Geriatric Assessment/ or Frail Elderly/ or Frailty/ or Aging/ or (geriatric\* or old\* age\* or older or elder\* or frail\*).tw.

*Setting:* Emergency Service, Hospital/ or (emergency department\* or emergency care or emergency medic\* or emergency room\* or emergency ward\* or urgent care or casualty).tw.

*Outcome:* Quality Of Health Care/ or Quality Indicators, Health Care/ or Attitude To Health/ or Patient Satisfaction/ or (qualit\* or goal\* or wish\* or experience\* or priorit\* or expect\* or perception\* or satisfaction or opinion\* or preference or patient reported outcome measure\* or attitude\* or belief\* or acceptability or feeling\* or view\* or perspective\*).tw.

### Adjusted search terms (MEDLINE via OVID SP)

1. Health Services for the Aged/ or Geriatric Assessment/ or FRAIL ELDERLY/ or Frailty/ or Aging/
2. (geriatric\* or old\* age\* or older or elder\* or frail\*).tw.
3. Emergency Service, Hospital/
4. (emergency department\* or emergency care or emergency medic\* or emergency room\* or emergency ward\* or urgent care or casualty).tw.
5. "QUALITY OF HEALTH CARE"/ or QUALITY INDICATORS, HEALTH CARE/ or ATTITUDE TO HEALTH/ or PATIENT SATISFACTION/
6. (qualit\* or goal\* or wish\* or experience\* or priorit\* or expect\* or perception\* or satisfaction or opinion\* or preference\* or patient reported outcome measure\* or attitude\* or belief\* or acceptability or feeling\* or view\* or perspective\*).tw.
7. 1 or 2
8. 3 or 4
9. 5 or 6
10. 7 and 8 and 9
11. limit 10 to english language

### Adjusted search terms (EMBASE via HDAS)

"(((GERIATRICS/ OR "ELDERLY CARE"/ OR "FRAIL ELDERLY"/ OR "GERIATRIC ASSESSMENT"/ OR (geriatric\* OR old\* age\* OR older OR elder\* OR frail\*).ti,ab) AND ("EMERGENCY MEDICAL SERVICE"/ OR "EMERGENCY MEDICAL CARE"/ OR "EMERGENCY HEALTH SERVICE"/ OR (emergency department\* OR emergency care OR emergency medic\* OR emergency room\* OR emergency ward\* OR urgent care OR casualty).ti,ab)) AND ("HEALTH CARE QUALITY"/ OR "ATTITUDE TO HEALTH"/ OR "PATIENT ATTITUDE"/ OR "PATIENT SATISFACTION"/ OR (goal\* OR wish\* OR experience\* OR priorit\* OR expect\* OR perception\* OR satisfaction OR opinion\* OR preference\* OR "patient reported outcome measure\*" OR attitude\* OR belief\* OR acceptability OR feeling\* OR view\* OR perspective\*).ti,ab)) [English language]"

### Database ranges

Medline (Ovid) 1946 to 20 Sept 2018

Embase (Ovid via HDAS) 1974 to 20 Sept 2018

CINAHL (EbscoHost via HDAS) 1937 to 20 Sept 2018  
PsycInfo (ProQuest via HDAS) 1806 to 20 Sept 2018  
BNI (ProQuest via HDAS) 1992 to 20 Sept 2018  
AgeInfo to 20 Sept 2018  
Cochrane Library to 20 Sept 2018

## Appendix 2: Ineligible full-text articles and reasons for exclusion

Citation
<p><b>Ineligible population</b></p> <ol style="list-style-type: none"> <li>1. Acharya P, Laeeq A, Carmody M, Lown BA. Through the patient's eyes: Identifying risk factors for hospital readmissions. <i>Journal of General Internal Medicine</i>. 2016;31(2).</li> <li>2. Acosta AM, Lima MA. Frequent users of emergency services: associated factors and reasons for seeking care. <i>Revista latino-americana de enfermagem</i>. 2015;23(2):337-44.</li> <li>3. Benjamin M, Holger J, Carr M. Personal preferences regarding family member presence during resuscitation. <i>Academic Emergency Medicine</i>. 2004;11(7):750-3.</li> <li>4. Bos N, Seccombe IJ, Sturms LM, Stellato R, Schrijvers AJP, Stel HF. A comparison of the quality of care in accident and emergency departments in England and the Netherlands as experienced by patients. <i>Health Expectations</i>. 2016;19(3):773-84.</li> <li>5. Capp R, Camp-Binford M, Sobolewski S, Bulmer S, Kelley L. Do Adult Medicaid Enrollees Prefer Going to Their Primary Care Provider's Clinic Rather Than Emergency Department (ED) for Low Acuity Conditions? <i>Medical Care</i>. 2015;53(6):530-3.</li> <li>6. Cooke T, Watt D, Wertzler W, Quan H. Patient expectations of emergency department care: phase II -- a cross-sectional survey. <i>CJEM: Canadian Journal of Emergency Medicine</i>. 2006;8(3):148-57.</li> <li>7. Davis MA, Hoffman JR, Hsu J. Impact of patient acuity on preference for information and autonomy in decision making. <i>Academic Emergency Medicine</i>. 1999;6(8):781-5.</li> <li>8. Ekwall A, Gerdtz M, Manias E. The influence of patient acuity on satisfaction with emergency care: perspectives of family, friends and carers. <i>Journal of Clinical Nursing</i>. 2008;17(6):800-9.</li> <li>9. Karro J, Dent AW, Farish S. Patient perceptions of privacy infringements in an emergency department. <i>Emergency Medicine Australasia</i>. 2005;17(2):117-23.</li> <li>10. Kit Delgado M, Ginde AA, Pallin DJ, Camargo Jr CA. Multicenter study of preferences for health education in the emergency department population. <i>Academic Emergency Medicine</i>. 2010;17(6):652-8.</li> <li>11. Krebs L, Chetram R, Kirkland SW, Nikel T, Voaklander B, Davidson A, et al. Non-urgent presentations to the emergency department: Patients' reasons for presentation. <i>Canadian Journal of Emergency Medicine</i>. 2016;18.</li> <li>12. Lin Y-K, Lin C-J. Factors predicting patients' perception of privacy and satisfaction for emergency care. <i>Emergency Medicine Journal</i>. 2011;28(7):604-8.</li> <li>13. Minnick N, Nouhan PP. Name calling in the emergency department: How do patients want to be addressed?: 373. <i>Academic Emergency Medicine</i>. 2013;20(5):S153.</li> <li>14. Pearson C, Kim DS, Mika VH, Imran Ayaz S, Millis SR, Dunne R, et al. Emergency department visits in patients with low acuity conditions: Factors associated with resource utilization. <i>American Journal of Emergency Medicine</i>. 2018;36(8):1327-31.</li> <li>15. Son H, Yom YH. Factors influencing satisfaction with emergency department medical service: Patients' and their companions' perspectives. <i>Japan Journal of Nursing Science: JJNS</i>. 2017;14(1):27-37.</li> <li>16. Turris SA, Finamore S. Reducing delay for women seeking treatment in the emergency department for symptoms of potential cardiac illness. <i>Journal of Emergency Nursing</i>. 2008;34(6):509-15.</li> </ol>
<p><b>Ineligible setting</b></p> <ol style="list-style-type: none"> <li>17. Ae R, Kojo T, Okayama M, Tsuboi S, Makino N, Kotani K, et al. Caregiver daily impression could reflect illness latency and severity in frail elderly residents in long-term care facilities: A pilot study. <i>Geriatrics &amp; Gerontology International</i>. 2016;16(5):612-7.</li> <li>18. Bluemel M, Traweger C, Kinzl J. Expectations of patients, nurses and physicians in geriatric nursing home emergencies. <i>Emergency Medicine Journal</i>. 2011;28(4):283-6.</li> <li>19. Canvin K, MacLeod CA, Windle G, Sacker A. Seeking assistance in later life - how do older people evaluate their need for assistance? <i>Age and Ageing</i>, vol 47, no 3, May 2018. 2018:pp 466-73.</li> <li>20. Coppola KM, Ditto PH, Danks JH, Smucker WD. Accuracy of primary care and hospital-based physicians' predictions of elderly outpatients' treatment preferences with and without advance directives. <i>Archives of Internal Medicine</i>. 2001;161(3):431-40.</li> <li>21. Jacelon CS. The dignity of elders in an acute care hospital. <i>Qualitative Health Research</i>. 2003;13(4):543-56.</li> </ol>

22. Rule A, Bridges J, Adams J. Discharge decision making for older people leaving hospital: a literature review...39th annual conference and exhibition of the College of Occupational Therapists, Brighton and Sussex, England. June 30-July 2, 2015. *British Journal of Occupational Therapy*. 2015;78:44-.

**Patients' expectations not established**

23. Afilalo M, Boivin JF, Grad R, Monette J, Xue X, Colacone A, et al. Factors associated with non-urgent visits to the emergency department for the discharged elderly population. *Academic Emergency Medicine*. 2015;22(S1):S130-S1.
24. Albert SM, Lunney JR, Ye L, Boudreau R, Ives D, Satterfield S, et al. Are Preferences for Aggressive Medical Treatment Associated with Healthcare Utilization in the Very Old? *Journal of Palliative Medicine*. 2017;23:23.
25. Arendts G, Popescu A, Howting D, Quine S, Howard K. 'They never talked to me about...': Perspectives on aged care resident transfer to emergency departments. *Australasian Journal on Ageing*. 2015;34(2):95-102.
26. Arendts G, Quine S, Howard K. Decision to transfer to an emergency department from residential aged care: A systematic review of qualitative research. *Geriatrics and Gerontology International*. 2013;13(4):825-33.
27. Burkett E, Gray LC, Martin-Khan MG. Quality indicators in the care of older persons in the emergency department: A systematic review of the literature. *Australasian journal on ageing*. 2017;36(4):286-98.
28. Cheek J, Ballantyne A, Roder-Allen G. Factors influencing the decision of older people living in independent units to enter the acute care system. *Journal of Clinical Nursing*. 2005;14 Suppl 1:24-33.
29. Claver ML. Deciding to use the emergency room: a qualitative survey of older veterans. *Journal of Gerontological Social Work*. 2011;54(3):292-308.
30. de Souza Scolari GA, Rissardo LK, Antoniassi Baldissera VD, Carreira L. Emergency care units and dimensions of accessibility to health care for the elderly. *Revista Brasileira de Enfermagem*. 2018;71:811-7.
31. Dermody G, Sawyer P, Kennedy R, Williams C, Brown CJ. ED Utilization and Self-Reported Symptoms in Community-Dwelling Older Adults. *Journal of Emergency Nursing*. 2017;43(1):57-69.
32. Eastwood A, Jaye C. After hours healthcare for older patients in New Zealand - Barriers to accessing care. *New Zealand Medical Journal*. 2006;119(1239).
33. Finta MK, Shah MN, Borkenhagen A, Werner NE, Duckles J, Lampo D, et al. Patient perspectives on accessing acute illness care. *Western Journal of Emergency Medicine*. 2017;18(4):569-76.
34. FitzGerald G, Toloo GS, Aitken P, Keijzers G, Scuffham P. Public use and perceptions of emergency departments: A population survey. *Emergency Medicine Australasia*. 2015;27(4):336-42.
35. Grief CL. Patterns of ED use and perceptions of the elderly regarding their emergency care: a synthesis of recent research. *Journal of Emergency Nursing*. 2003;29(2):122-6.
36. Hall AG, Schumacher JR, Brumback B, Harman JS, Lutz BJ, Hendry P, et al. Health-related quality of life among older patients following an emergency department visit and emergency department-to-home coaching intervention: A randomized controlled trial. *International Journal of Care Coordination*. 2017;20(4):162-70.
37. Hastings S, Stechuchak K, Oddone E, Weinberger M, Tucker D, Knaack W, et al. Older veterans and emergency department discharge information. *BMJ Quality & Safety*. 2012;21(10):835-42.
38. Hedges JR, Singal BM, Rousseau EW, Sanders AB, Bernstein E, McNamara RM, et al. Geriatric patient emergency visits part II: Perceptions of visits by geriatric and younger patients. *Annals of Emergency Medicine*. 1992;21(7):808-13.
39. Ho B, Dresden S, Aldeen A, Courtney DM, Adams JG. Comparison of geriatric and non-geriatric patient perspectives on seeking care in the emergency department. *Annals of Emergency Medicine*. 2014;64(4).
40. Kraaijvanger N, Rijpsma D, van Leeuwen H, Edwards M. Self-referrals in the emergency department: reasons why patients attend the emergency department without consulting a general practitioner first-a questionnaire study. *International Journal of Emergency Medicine*. 2015;8(1):46.
41. Littlechild R, Glasby J. Emergency hospital admissions - older patients' perceptions. *Education and Ageing*. 2001;16(1):pp 77-90.
42. Lutz BJ, Hall AG, Vanhille SB, Jones AL, Schumacher JR, Hendry P, et al. A Framework Illustrating Care-Seeking Among Older Adults in a Hospital Emergency Department. *Gerontologist*. 2018;58(5):942-52.
43. Miller PA, Sinding C, Griffiths LE. Seniors' narratives of asking (and not asking) for help after a fall - implications for identity. *Ageing and Society*. 2016;36(2):240-58.
44. Nguyen B-L, Tremblay D, Mathieu L, Groleau D. Mixed method exploration of the medical, service-related, and emotional reasons for emergency room visits of older cancer patients. *Supportive Care in Cancer*. 2016;24(6):2549-56.
45. Parboosingh EJ, Larsen DE. Factors influencing frequency and appropriateness of utilization of the emergency room by the elderly. *Medical Care*. 1987;25(12):1139-47.
46. Steinmiller J, Routasalo P, Suominen T. Older people in the emergency department: a literature review. *International Journal of Older People Nursing*. 2015;10(4):284-305.
47. Taylor D, Liu B, Liversidge X, Ling S, MacGibbon P. The specific psychological needs of older emergency department patients. *Emergency Medicine Australasia*. 2015;27:49-50.

48. Uscatescu V, Turner A, Ezer H. Return visits to the emergency department: what can we learn from older adults' experiences? *Journal of Gerontological Nursing*. 2014;40(7):32-40; quiz 2-3.

49. Wu T, Gang M, Shin J. Emergency department advance directives: Heightening the responsibility: 751. *Academic Emergency Medicine*. 2015;22(5):S327.

#### **Insufficient data to infer patients' expectations from context**

50. Aghajani M, Naiierre N. The patient's privacy in the care of elderly people and its correlation with satisfaction in emergency department. *European Psychiatry*. 2010;25.

51. Atchinson PRA, Roginski MA, Taenzer AH, MacMartin MA. Goals of care determination prior to transfer: A missed opportunity. *Annals of Emergency Medicine*. 2017;70(4).

52. Bradley M, Browne G. Assessment of the patient pathway for elderly patients in the acute medical setting. *Irish Journal of Medical Science*. 2016;185(Supplement 5).

53. Considine J, Wellington P, Hill K, Smith R, Gannon J, Graco M, et al. Analysis of the emergency care experience of older people and their carers...2009 CENA International Conference for Emergency Nursing. *Australasian Emergency Nursing Journal*. 2009;12(4):174-5.

#### **Conference abstracts with insufficient data to establish patients' expectations or appraise quality**

54. Berahman T, Karounos M, Hochman S, Schultz R, Christensen M, Sadi M, et al. Effects of patient liaison in a geriatric emergency department. *Journal of the American Geriatrics Society*. 2014;62.

55. Chan EKH, Sawatzky R, Gadermann AM, Cohen SR. (208.2) PROMs and PREMs for elderly patients in acute care and their families: An EMPRO evaluation. *Quality of Life Research*. 2015;24(S1):55.

56. Dallaire CD, Aubin KA, Poitras J. ELDERLY perceptions as to why they come to the emergency department by ambulance while emergency physicians judge it unnecessary. *Canadian Journal of Emergency Medicine*. 2010;12(3):275-6.

57. D'Amore DT, Mintzer MJ, Beaulaurier RL, Torres M. Social factors in non-urgent use of an emergency department by the elderly. *Journal of the American Geriatrics Society*. 2016;64.

58. Dickson VV, Caceres B, Martelly MT, Sadarangani T, Blecker S, Grudzen C, et al. "I regret not coming in sooner": A qualitative descriptive study of the reasons for emergency department visits and care preferences of older adults with heart failure. *Journal of Cardiac Failure*. 2016;22:S83.

59. Grudzen C, Torres J, Ortiz J, Stone S, Mohanty S, Lorenz KA, et al. "I want to be taking my own last breath": Patients' reflections on illness when presenting to an emergency department at the end of life (723). *Journal of Pain and Symptom Management*. 2011;41(1):285-6.

60. Hirschman KB, Abbott KM, Naylor MD. Hospitalizations among elderly long-term care recipients: Improving transitions. *Journal of the American Geriatrics Society*. 2011;59.

61. Narayan K, Karlawish J. Impact of a caregiver on satisfaction, disposition, and outpatient followup in the emergency department. *Academic Emergency Medicine*. 2012;19.

62. Phongtankuel V, Adelman R, Reid MC, Finley A, Martin A, Dennis J. Reasons for emergency room visits or hospitalization among home hospice patients through the eyes of the primary caregiver: a155. *Journal of the American Geriatrics Society*. 2015;63.

63. Way R. The experiences of older people using the emergency care system. *Accident & Emergency Nursing*. 2006;14(2):121-.

#### **Ineligible publication type**

64. Adams J. [Not Available]. *Nursing Older People*. 2003;15(4):8.

65. Anonymous. Communicating a patient's wishes in A&E. *End of Life Care*. 2008;2(3):80-1.

66. Duffin C. Older patients daunted by urgent care. *Nursing Older People*. 2008;20(8):5-.

67. Grief CL. Perceptions of quality of care received for emergency health conditions by the elderly. 2004:102 p.

68. Hoon LS, Mackey S, Hong-Gu H. Elderly patients' experiences of care received in the emergency department: a systematic review. *JBI Libr Syst Rev*. 2012;10(23):1363-409.

69. Jablonski RA. Making the decision to transfer an elder from the nursing home to the emergency department: the experience of key decision makers. 2003:243 p.

70. Newbern VB, Burnside I. Needs of older persons in the emergency department. *Journal of Gerontological Nursing*. 1994;20(7):53-6.

71. Malone ML, Biese K. Improving the Emergency Department Care of Older Adults in North America. *Clinics in Geriatric Medicine*. 2018;34(3).

72. Shankar KN, Bhatia BK, Schuur JD. Toward patient-centered care: a systematic review of older adults' views of quality emergency care. *Annals of Emergency Medicine*. 2014;63(5):529-50.e1.

**Appendix 3: Data extraction form**

Citation	Ref ID Author Country Year	
Methods	Research Question Qualitative / Quantitative / Mixed Quantitative design type Intervention(s) <i>A priori</i> outcomes Qualitative methods Population inclusion criteria Population exclusion criteria Recruitment point (in ED 'journey') Data analysis methods	
Results	Number of subjects Outcomes measured Outcome effect sizes and confidence intervals Qualitative outcomes Any other information	
Quality	MMAT tool used Researcher profession (& specialty) Funding source	
Overview	Headline message	

