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**Literature search results**

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**Search details**

Acute medical admissions with frailty by GPs in the emergency department.

**Resources searched**

NICE Evidence; TRIP Database; Cochrane Library; AMED; BNI; CINAHL; EMBASE; HMIC; MEDLINE; PsychINFO; Google Scholar; Google Advanced Search

**Database search terms:** frail*; FRAIL ELDERLY; admission*; admitted; acute; PATIENT ADMISSION; EMERGENCY SERVICE, HOSPITAL; A&E, “accident and emergency”; ER; “emergency department”; ED; GP*; “general practitioner”; GENERAL PRACTITIONERS; casualty; “acute geriatric unit*”; “admissions unit*”; “comprehensive geriatric assessment”

**Evidence / Google Scholar search string(s):** (frail OR frailty) admission (emergency OR A&E OR casualty OR “ER” OR “emergency department” OR “ED”) (GP OR “general practitioner”)

**Summary**

There is not a lot of research in this area; some on utilising GPs at discharge, or in nursing homes, but very little on acute medical admissions by GPs. There are some studies which incorporate GPs into the admissions process, but the GP may not necessarily be present in the emergency department – see study 5, 8 and the first result in Google Scholar. I have also included some research covering frailty units specifically. See the end of the Published Research section and also the Additional Research section.

**Guidelines and Policy**

Royal College of Emergency Medicine

‘The Silver Book’: Quality Care for Older People with Urgent and Emergency Care Needs
Monitoring & Diagnosis in Oxford

Screening instruments for frailty in primary care 2012

Because there is no gold standard to measure frailty, and because different instruments have been tested in different settings and with different outcome measures, it was not possible to select one screening tool for the identification of frail older people.

In 2008, the European, Canadian and American Geriatric Advisory Panel (GAP), through a complete review of the literature on frailty, sketched out the “ideal” screening tool for frailty (1). According to their recommendations, it should include the five components listed in Table 3 (see attached pdf). None of the tools covers all 5 domains; two cover 4 domains (SHARE-FI and TFI); one covers 3 domains (GFI); three cover 2 domains (7-item Rowland, G-8 and VES-13). All the others cover only 1 domain and seem less appropriate. However, the ISAR (which appears to have reached the highest level of evidence in hospital setting) and the aCGA (frequently used in cancer patients) may have potential in primary care.

Overall eight of the identified tools may be good screening instruments: SHARE-FI, TFI, GFI, 7-item Rowland, G8, VES-13, ISAR, aCGA.

NHS Economic Evaluation Database

A pragmatic triage system to reduce length of stay in medical emergency admission: feasibility study and health economic analysis 2014

Triage-driven care was compared with usual care. With usual care, patients who were admitted to the AMU by general practitioners or emergency physicians, were assessed by a junior doctor, who reviewed the patient notes, initiated investigations, and classified the patient using the Simple Clinical Score (SCS) and Clinical Frailty Scale (CFS), before referring them to the senior doctor.

With triage care, the junior doctor was replaced with an advanced practitioner, called a Navigator. The Navigator assessed whether patients who were at very low risk of death, with no frailty issues, could be treated as out-patients on day one, and discharged that day after consultation with a senior doctor. The Navigator could request a specialist opinion without consulting the senior doctor. The Navigator only worked four days a week, for funding reasons, so some patients receiving triage care were triaged by junior doctors, who followed a similar process to the Navigator, but could only refer the patient to a specialist after review by the senior doctor.

OHRI Knowledge to Action

Models of community care for the elderly involving collaboration between specialized geriatric services and primary care practitioners 2011

As expected, there is a paucity of literature document models of collaboration between
specialized geriatric services (SGS) and primary care physicians (PCPs). Where models/programs do exist, the focus of the model tends to be on the SGS itself, and collaboration with PCP is an adjunct, and accordingly, its processes, barriers/facilitators, etc. are under-evaluated and reported. Some models however did appear to meet this collaborative goal, and hopefully will be considered useful.

An exception to this are a few excellent models, two of which (PRISMA, SIPA) involved extensive PCP collaboration and were Canadian-based.

**Veterans Affairs Evidence-based Synthesis Program Reports**

*Effect of Geriatricians on Outcomes of Inpatient and Outpatient Care 2012*

The impact of geriatrician involvement on patient function and health care utilization varies across the different models of care that include geriatricians in different roles.

### Published Research – Databases

1. **Comprehensive geriatric assessment (CGA) in the Emergency Department by OPAL (Older People Assessment and Liaison): Does it prevent admissions?**

   **Author(s)** Scott S., Bertram Ralph E., Andrew A., Ray R.
   
   **Citation:** European Geriatric Medicine, September 2014, vol./is. 5/(S249), 1878-7649 (September 2014)
   
   **Publication Date:** September 2014
   
   **Abstract:** Introduction: The University Hospital of South Manchester (UHSM) covers a large catchment area of around 570,000 patients. Over the last financial year there has been a 4.8% increase in A&E attendances and 6% increase in emergency admissions. National data suggests these trends are to continue. Older patients who attend A&E are more likely to be admitted to hospital and also have a longer length of stay. This may reflect the difficulties A&E staff face when assessing the complex elderly patient. Methods: The OPAL team consisting of a Consultant Geriatrician, Occupational Therapist, Physiotherapist and discharge facilitator was introduced to A&E at UHSM. Older patients who presented with geriatric syndromes such as frailty or falls were reviewed by the OPAL team. Patients underwent a CGA in order to instigate appropriate investigations, management and, if able, discharge. Results: Overall 148 patients were reviewed by the OPAL team during the trial period. Only 26% of the patients assessed by the OPAL team were admitted to hospital. This compared to 73% when reviewed by A&E staff alone. Those patients admitted by the OPAL team had a reduced length of stay. Discussion: Older patients have different patterns of disease presentation compared to younger adults. They respond to treatments and therapies in different ways and they frequently have complex social needs that are related to their chronic medical conditions. This data suggests Geriatricians are best skilled to decipher these complex patients and being present in A&E can reduce admissions and length of stay. (Figure Presented).
   
   **Source:** EMBASE

2. **Frail Elderly Short Stay Unit; A model of emergency care for older people**

   **Author(s)** Michael A.B., Ijaola F.
   
   **Citation:** European Geriatric Medicine, September 2014, vol./is. 5/(S209), 1878-7649 (September 2014)
   
   **Publication Date:** September 2014
   
   **Abstract:** Introduction: Older people in the Acute Medical Unit are frail and many will need comprehensive geriatric assessment, which is difficult to provide in the Acute Medical Unit environment. A model of service was introduced to provide early geriatric input to elderly people attending hospital with acute illness. The aim has been to provide comprehensive assessment, ensure high quality care and reduce the length of stay. Methods: A Frail
Elderly Short Stay Unit was piloted. 16 out of the 94 Elderly Care bed base were allocated to the unit. Patients were admitted from the Acute Medical Unit according to inclusion and exclusion criteria. There were 2 daily consultant rounds. The unit has a junior doctor, senior nurse, physiotherapist, occupational therapists and a discharge facilitator. Care of the Elderly specialist nurse liaise with Acute Medical Unit to identify suitable patients. The aim was to provide comprehensive geriatric assessment and multiagency management and to safely discharge within 72 hours. Patients who needed longer stay were transferred to Care of the Elderly wards. Results: During the 12 weeks pilot; the average length of stay (LOS) in the unit was 4.7 days and total LOS including subsequent inpatient care was 6.5 days. This had a positive impact on the Care of the Elderly wards (total of 94 beds). There has been 20% reduction in the overall average length of stay (11.78 vs. 14.77 days) compared to the 12 weeks prior to the trial and a 33% increase in discharges across Care of the Elderly wards (685 vs. 516). Sixty-seven percent of patients were ultimately discharged to their usual place of residence; 59% without extra support and 8% with extra support. 29% were transferred to an interim placement. There was 2% inpatient mortality. Conclusion: Early involvement of Care of the Elderly team can improve care, reduce the length of stay and create capacity for the hospital. Frail Elderly Short Stay Unit model is a valuable effective way to provide timely specialised care for older people with acute illness.

Source: EMBASE

3. A controlled evaluation of comprehensive geriatric assessment in the emergency department: the 'Emergency Frailty Unit'.

Author(s) Conroy, Simon Paul, Ansari, Kharwar, Williams, Mark, Laithwaite, Emily, Teasdale, Ben, Dawson, Jeremy, Mason, Suzanne, Banerjee, Jay

Citation: Age and ageing, Jan 2014, vol. 43, no. 1, p. 109-114 (January 2014)

Publication Date: January 2014

Abstract: the ageing demographic means that increasing numbers of older people will be attending emergency departments (EDs). Little previous research has focused on the needs of older people in ED and there have been no evaluations of comprehensive geriatric assessment (CGA) embedded within the ED setting. A pre-post cohort study of the impact of embedding CGA within a large ED in the East Midlands, UK. The primary outcome was admission avoidance from the ED, with readmissions, length of stay and bed-day use as secondary outcomes. Attendances to ED increased in older people over the study period, whereas the ED conversion rate fell from 69.6 to 61.2% in people aged 85+, and readmission rates in this group fell from 26.0% at 90 days to 19.9%. In-patient bed-day use increased slightly, as did the mean length of stay. It is possible to embed CGA within EDs, which is associated with improvements in operational outcomes.

Source: Medline

Available in fulltext from Age and Ageing at Free Access Content

Available in fulltext from Age and Ageing at Highwire Press

Available in fulltext from Age & Ageing at EBSCOhost

4. Effectiveness of a geriatrician in the emergency department in facilitating safe admission prevention of older patients

Author(s) Jones S., Wallis P.

Citation: Clinical Medicine, Journal of the Royal College of Physicians of London, December 2013, vol./is. 13/6(561-564), 1470-2118;1473-4893 (December 2013)

Publication Date: December 2013

Abstract: The decision to admit a frail older patient is rarely made by a geriatrician and often falls to staff in the emergency department (ED), who may not have the training to balance the risks, benefits and alternatives. We based a consultant geriatrician in the ED with the primary aim of facilitating admission prevention for older patients and this was achieved for 64% (543/848) of patients. A secondary aim was to facilitate direct admission to elderly care wards when admission was necessary, and this was achieved for 57% of
admitted patients (174/305). The geriatrician was able to facilitate discharge from the ED for over half of potential 30-day readmissions seen. The overall 7-day ED re-attendance rate was 10.1%, but only 3.4% of patients were admitted with the same problem, indicating true admission prevention rather than admission delay. In conclusion, the placement of a consultant geriatrician in the ED is effective in facilitating admission prevention for older patients. © Royal College of Physicians, 2013. All rights reserved.

Source: EMBASE

Available in fulltext from Clinical Medicine at EBSCOhost
Available in fulltext from Clinical Medicine at Highwire Press

5. Does a hotline for general practitioners improve the care of older frail patients? A pilot study

Author(s) Salles N., Diallo I., Videau M., Floccia M., Rainfray M.

Citation: European Geriatric Medicine, September 2013, vol./is. 4/(S171-S172), 1878-7649 (September 2013)

Publication Date: September 2013

Abstract: Introduction.- Difficulties in managing complex situations for elderly people living in the community and lack of communication between primary care physicians and geriatric specialists may predict avoidable Emergency Department (ED) admissions for older patients. The aim of this study was to evaluate the impact of a hotline on reducing avoidable ED admissions for older patients. Methods.- This experiment was set up by representatives of the Regional Union of General Practitioners (GP), and both the Pole of Gerontology and the Direction of the University Hospital of Bordeaux. The missions of the hotline were: (1) to meet the expectations of GPs by allowing a direct call with a geriatrician every day, Monday to Friday (9 a.m. to 7 p.m.) and (2) to give medical advices and alternatives to ED admissions, i.e., geriatric consultation, day hospital, and programmed geriatric medicine hospitalizations. Results.- A total of 714 calls were recorded (Nov. 2010-Feb. 2012) for the management of 230 older persons (mean age 86.2+/−6.2 years). The reasons for call were most of the time management of behavioral disorders (29.5%), unexplained asthenia (17%), repeated falls (13%) and complex social problems (10.3%). Only 4.3% of the patients were directly admitted to the ED and the hotline permitted to avoid ED admissions in 81.4% of cases. The hotline permitted to give advices to GPs (38.3%), and to organize geriatric consultations (5.3%), day hospital (9.2%) or hospitalization in geriatric medicine (42.9%). In conclusion, this hotline permitted to avoid ED admissions and to improve continuity of care for older patients.

Source: EMBASE

6. [Acute hospital admissions among nursing home residents--benefits and potential harms].

Author(s) Bally, Klaus W, Nickel, Christian

Citation: Praxis, Aug 2013, vol. 102, no. 16, p. 987-991, 1661-18157 (August 7, 2013)

Publication Date: August 2013

Abstract: Nursing home residents are often referred by their general practitioners to the emergency department or to a geriatric hospital. Hospitalization is mainly perceived as a burden by elderly people; it may also contribute to a reduction of their mental abilities and functional decline. Reasons for admitting patients from nursing homes include infections, exacerbation of pre-existing cardiovascular disease and falls. GP presence in the nursing home, qualified nursing staff, early diagnosis of infections or acute on chronic episodes of e. g. heart failure and appropriate management of chronic diseases are essential to avoid unnecessary hospitalizations. Furthermore, physicians should identify palliative situations in a timely manner and should be familiar with the patients’ preferences regarding hospitalization and place of death.

Source: Medline
7. The Rapid Assessment Interface and Discharge service and its implications for patients with dementia.

**Author(s)** Singh, Inderpal, Ramakrishna, Sharan, Williamson, Kathryn

**Citation:** Clinical interventions in aging, Jan 2013, vol. 8, p. 1101-1108 (2013)

**Publication Date:** January 2013

**Abstract:** The rising prevalence of dementia will have an effect on acute care hospitals around the world. At present, around 40% of patients older than 70 years with acute medical admissions have dementia, but only half of these patients have been diagnosed. Patients with dementia have poorer health outcomes, longer hospital stays, and higher rates of readmissions and institutionalization. Worldwide, health care budgets are severely constrained. National Institute for Health and Care Excellence (NICE) has listed ten quality standards for supporting people in living well with dementia. NICE resource implications and commissioning support to implement these guidelines and improve dementia services have been recently published. Although most of the frail elderly patients with dementia are cared for by geriatricians, obstacles to making a diagnosis and to the management of dementia have been recognized. To provide a timely diagnosis of dementia, better care in acute hospital settings, and continuity of care in the community, services integrating all these elements are warranted. Extra resources also will be required for intermediate, palliative care, and mental health liaison services for people with dementia. The Birmingham Rapid Assessment Interface and Discharge service model uses a multiskilled team that provides comprehensive assessment of a person's physical and psychological well-being in a general hospital setting. It has been shown to be an effective model in terms of reducing both length of stay and avoiding readmission. The aim of this review is to discuss the implications of the Rapid Assessment Interface and Discharge model in people with dementia and to critically compare this model with similar published service provisions.

**Source:** Medline

Available in fulltext from Clinical Interventions in Aging at Directory of Open Access Journals

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Available in fulltext from Clinical Interventions in Aging at National Library of Medicine

8. Hospital admissions from nursing homes: a qualitative study of GP decision making.

**Author(s)** McDermott, Clare, Coppin, Richard, Little, Paul, Leydon, Geraldine

**Citation:** The British journal of general practice : the journal of the Royal College of General Practitioners, Aug 2012, vol. 62, no. 601, p. e538. (August 2012)

**Publication Date:** August 2012

**Abstract:** Decisions regarding the hospitalisation of nursing home residents may present a difficult dilemma for GPs. There are pressures to admit very frail patients with exacerbations of illness even though such frailty may limit the possible health gains. As 'gatekeepers' to NHS, GPs are expected to make best use of resources and may be criticised for 'inappropriate' admissions. Little is understood about the influences on GPs as they make such decisions. To explore GPs views on factors influencing decisions on admitting frail nursing home residents to hospital. A purposive sample of 21 GPs from two counties in the South of England. Data from semi-structured, one-to-one interviews with GPs were analysed using thematic analysis following principles of the constant comparative method. This study suggests that while clinical assessment, perceived benefits and risks of admission, and patients' and relatives' preferences are key factors in
determining admissions, other important factors influencing decision making include medico-legal concerns, communications, capability of nursing homes and GP workload. These factors were also perceived by GPs as influencing the feasibility of keeping patients in the nursing home when this was clinically appropriate. Key areas suggested by GPs to improve practice were improving communication (particularly informational continuity), training and support for nursing staff, and peer support for GPs. Local initiatives to address these issues were very variable. Developing a systematic palliative care approach to address poor documentation and communication, the capability of nursing homes, and medico-legal concerns has the potential to improve decision-making regarding hospital admissions.

Source: Medline

9. Admission prevention of the frail elderly by a geriatrician in the emergency department

Author(s) Jones S., Ahsan M., Wallis P.J., Fergusson N., Macnamara A.

Citation: Age and Ageing, July 2012, vol./is. 41/(ii29), 0002-0729 (July 2012)

Publication Date: July 2012

Abstract: Background Frail elderly patients who are admitted to hospital are at risk of complications such as delirium, deconditioning and hospital-acquired infections. Involvement of a geriatrician in the decision to admit may reduce unnecessary admissions and their associated risks. Innovation A consultant geriatrician was based in the Emergency Department (ED) during normal working hours, initially for a pilot period, in order to assess frail elderly patients for whom the ED staff judged that acute hospital admission was either necessary or possible. The decision to admit was made by the geriatrician with the aim that medical, social and therapy interventions could take place outside of the acute hospital setting where safe to do so. evaluation Outcomes were evaluated for 441 frail older patients assessed by a geriatrician in the ED. The geriatrician was able to discharge 260/441 (59%) of these. In order to allow safe admission prevention, 46% required outpatient follow-up and 38% required therapist assessment. Re-admissions were reduced by this intervention: 30/441 patients had already had an acute hospital admission with the same problem within the last 30 days, and the geriatrician was able to discharge 16/30 (53%) of these. The 7 day ED re-attendance rate was 10.2% (42/441) in this frail group of patients, higher than the overall hospital average of 7.4%. Of those admitted, 139/181 (77%) achieved direct admission to elderly care wards in keeping with NSF recommendations. Average length of stay (LOS) for those admitted was 14.2 days, compared with 15.7 days in non-rehabilitation elderly care wards. However, admission prevention measures in more stable patients will result in a higher proportion of unwell and complex patients reaching the wards, making significant overall LOS reduction difficult. Conclusions Based on these results, consultant geriatrician input supported by therapists within the ED is effective in admission avoidance of the frail elderly.

Source: EMBASE

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Available in fulltext from Age & Ageing at EBSCOhost

10. Preventing unnecessary admissions using radar (Rapid Access DME assessment/review)

Author(s) Diver J.M., Biram R.W.S.

Citation: Age and Ageing, July 2012, vol./is. 41/(ii28), 0002-0729 (July 2012)

Publication Date: July 2012

Abstract: Background Emergency admissions account for approximately 65% of hospital bed days in England. Whilst an emergency admission may be necessary, the risks associated with hospitalisation of an elderly patient are not inconsiderable and in-patient stays may be protracted. Although much work has focussed on finding ways of reducing
non-elective admissions, few interventions have evidence of efficacy and cost-benefit. Innovation In an unfunded pilot project, a Department of Medicine for the Elderly (DME) consultant held a mobile telephone, 0900-1700, Monday to Friday for one year (September 2010-11). The telephone number was distributed to local GPs, community matrons and the Emergency Department (ED) offering advice about frail older adults at risk of admission but not requiring emergency admission that day. Daily urgent out-patient slots were created within existing resources, enabling next-day assessment. The consultant provided real-time telephone advice regarding management and coordinated either admission, out-patient assessment or day case review as appropriate. In-patient referrals were seen by the consultant. During the first year, 218 telephone calls were received. The majority were from GPs (117), an assessment and rehabilitation team based in the ED (45) and ED doctors (40). A few calls (<5) were received from non-DME teams within the hospital, or community geriatric services. Of patients discussed or reviewed, 71 were admitted, 37 discharged, 55 reviewed in the urgent clinic and 15 admitted electively. Advice was sufficient in 40 cases. Clinical case review suggested that 113 non-elective admissions may have been averted over the year of the pilot (52%). The 28 day readmission rate for all patients discussed with the RADAR consultant was 15.3% and the 3-month mortality 13.7%, comparable to baseline figures. Conclusions Implementation of the RADAR pilot was a safe and cost-effective way of reducing emergency admissions to the Medicine for the Elderly department.

Source: EMBASE
Available in fulltext from Age and Ageing at Free Access Content
Available in fulltext from Age and Ageing at Highwire Press
Available in fulltext from Age & Ageing at EBSCOhost

11. Specialist care for frail older people
Author(s) Blakemore S.
Citation: Emergency nurse : the journal of the RCN Accident and Emergency Nursing Association, February 2012, vol./is. 19/9(12-16), 1354-5752 (Feb 2012)
Publication Date: February 2012
Abstract: At Leicester Royal Infirmary, the care of frail older people occupies a disproportionate amount of emergency department (ED) staff's time and resources. Too few ED staff are trained to deal with the complex comorbidities associated with older patients, 90 per cent of whom are therefore admitted to hospital. To take the pressure off the ED and reduce the number of avoidable admissions, the hospital has set up an emergency frailty unit to treat patients over the age of 70 who need not be admitted to hospital and to ensure they can receive community care as soon as possible. This article describes how the unit operates.
Source: EMBASE
Available in fulltext from Emergency Nurse at EBSCOhost

12. The future is frail: An innovative approach to managing patients in care homes
Author(s) Shaw L., Cowie D., Dornan M., Bainbridge L., Crabtree L.
Citation: Age and Ageing, January 2012, vol./is. 41/(i22), 0002-0729 (January 2012)
Publication Date: January 2012
Abstract: Background An increasing frail population in care homes is coupled with increasing acute hospital admissions. Although attempts have been made to improve this, little collaborative working exists due to fragmented, poorly coordinated services with immense communication difficulties. The NHS fails to provide a proactive, coordinated, cost-effective service for a cohort of patients that are due to expand in numbers significantly over the next 20 years. Innovation An innovative nursing role was introduced to provide clinical care and education/training for care home staff targeting 5 care homes in Gateshead with the highest hospital admission rates. A joint working arrangement with care home staff, a GP with an interest in Geriatrics and a Community Geriatrician was quickly
established. Patients were case managed ensuring they all received a Comprehensive Geriatric Assessment and subsequently a personalised care plan and action plan. Weekly multidisciplinary team discussions coupled with family forum meetings helped implement care plans, provide treatment and allow an opportunity for learning. Evaluation Clinical audit was undertaken to capture the impact of the role and demonstrated a reduction in hospital admissions of 45.5%, saving 440 bed days with an estimated cost saving of 243,146 compared to admission data in the previous 12 months. Qualitatively, overwhelming support was demonstrated from staff, patients and families who had all worked collaboratively over the course of the pilot. Conclusions This innovative role to provide proactive care in care homes resulted in fewer hospital admissions producing associated savings. Our pilot suggests a cost saving approach to a new integrated care pathway for care home patients, which could be expanded upon to develop a comprehensive frailty service with an ethos of patient centeredness at its core. Further studies are needed to confirm our findings and assess the full impact on other outcomes such as quality of life and mortality.

Source: EMBASE
Available in fulltext from Age and Ageing at Free Access Content
Available in fulltext from Age and Ageing at Highwire Press
Available in fulltext from Age & Ageing at EBSCOhost

13. Factors influencing emergency hospital admissions from nursing and residential homes: positive results from a practice-based audit.

Author(s) Evans, Gillie
Citation: Journal of evaluation in clinical practice, Dec 2011, vol. 17, no. 6, p. 1045-1049 (December 2011)
Publication Date: December 2011
Abstract: Emergency admissions of frail older people in care homes, many of whom have dementia, are critical events which should be avoided if possible. To identify and influence factors related to emergency admissions and place of death. Completed audit cycle. Jenner Health Centre patients in six local care homes. Data collection over 12 months in 05/6, repeated in 08/9. Emergency admissions, admitting health professional, assessment prior to admission, length of hospital stay, annual visit workload and place of death. Admission numbers fell from 91 (194 patients) in 05/6 to 52 (183 patients) in 08/9, related to a fall in admissions by general practitioners (GPs) and out of hours (OOH). The proportion of admissions by care home staff doubled. There was a highly significant difference (P < 0.001), between GPs and OOH in patients visited prior to admission in 05/6 which persisted in 08/9 (P < 0.01). A hospital stay >72 hours was significantly more likely if patients were visited prior to admission. In 05/6, 55% of deaths occurred in the care home rising to 75.5% in 08/9 (total numbers deaths unchanged). There was a highly significant difference (P < 0.001 05/6 and 08/9), between deaths in nursing compared with residential homes. GP visits to nursing home patients rose by 10.3% but visits to residential home patients fell by 5.4%. The aims of the audit were achieved with a 43% reduction in emergency admissions and a 45% reduction in deaths in hospital but at the expense of a 12% increase in visits. Improved anticipatory planning and increased medical and nursing support for patients and staff in residential homes may help to further reduce emergency admissions and deaths in hospital in future. © 2010 Blackwell Publishing Ltd.
Source: Medline
Available in fulltext from Journal of Evaluation in Clinical Practice at EBSCOhost
Available in fulltext from Journal of Evaluation in Clinical Practice at EBSCOhost

14. Development of geriatric specialist expertise in the emergency department

Author(s) Carey T., O'Keeffe J., Lawlor G., Carlin T., Tan K.M., O'Shea D., Hughes G.
Citation: Irish Journal of Medical Science, September 2011, vol./is. 180/(S348), 0021-1265 (September 2011)
Abstract: Background: Older people attending Emergency Department (ED) are often frail and have complex medical and social needs. Current disease orientated care models may not adequately respond to these needs. A community medicine for the elderly (MEDEL) team was established in our urban hospital in autumn 2010 part of whose role is to develop the delivery of medical care to Older People using ED. Aims: Initial priority was given to (a) accurately describe ED attendances (age profiles, admission/discharge rates, re-attendance rates, (b) develop a care model for delivering comprehensive geriatric assessment (CGA) in ED, specifically targeting at risk attenders >72 years deemed fit for discharge with the goal of reducing ED re-attendance. Methods: An IT reporting system which interfaces with the ED patient database was developed to facilitate real time patient identification and to support service reviews. The validated screening tool, ISAR (identifying seniors at risk) was incorporated into ED nurses assessments of all ED attenders >72 years to stratify patient risk of representation or poor outcomes after ED discharge. Same day CNS led interdisciplinary CGA is offered weekdays within the ED environment to at risk patients. Results: Community-based interventions are tailored to meet vulnerabilities identified by CGA and include (1) rapid access MDT day hospital and medical clinic review (2) primary care team referral (3) consultant delivered outreach review in care facilities (4) education/ support to patients and carers on management of chronic illness. Other interventions include recommendation for medical admission, formation of new diagnoses e.g. delirium and addressing inappropriate prescribing. Conclusions: The service has integrated into ED. Concerns include ability to undertake CGA in ED and identification of relevant patient and service outcomes to assist evaluate service effectiveness. Future plans include IT reporting of ED re-attendances, local ISAR tool validation and intervention evaluations.

Source: EMBASE
Available in fulltext from Irish Journal of Medical Science at EBSCOhost

15. Comprehensive geriatric assessment for older adults admitted to hospital

Author(s) Ellis G., Whitehead M.A., O'Neill D., Langhorne P., Robinson D.

Citation: Cochrane database of systematic reviews (Online), 2011, vol./is. /7(CD006211), 1469-493X (2011)

Publication Date: 2011

Abstract: Comprehensive geriatric assessment (CGA) is a multidimensional, interdisciplinary diagnostic process to determine the medical, psychological and functional capabilities of a frail elderly person in order to develop a co-ordinated and integrated plan for treatment and long-term follow up. We sought to evaluate the effectiveness of CGA in hospital for older adults admitted as an emergency. We searched the Cochrane Effective Practice and Organisation of Care (EPOC) Group Register, the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library), the Database of Abstracts of Reviews of Effects (DARE), MEDLINE, EMBASE, CINAHL and AARP Ageline, and handsearched high-yield journals. We searched for randomised controlled trials comparing CGA (whether by mobile teams or in designated wards) to usual care. Two review authors initially assessed eligibility and trial quality and extracted published data. Twenty-two trials evaluating 10,315 participants in six countries were identified. Patients in receipt of CGA were more likely to be alive and in their own homes at up to six months (OR 1.25, 95% CI 1.11 to 1.42, P = 0.0002) and at the end of scheduled follow up (median 12 months) (OR 1.16, 95% CI 1.05 to 1.28, P = 0.003) when compared to general medical care. In addition, patients were less likely to be institutionalised (OR 0.79, 95% CI 0.69 to 0.88, P < 0.0001). They were less likely to suffer death or deterioration (OR 0.76, 95% CI 0.64 to 0.90, P = 0.001), and were more likely to experience improved cognition in the CGA group (OR 1.11, 95% CI 0.20 to 2.01, P = 0.02). Subgroup interaction in the primary outcomes suggests that the effects of CGA are primarily the result of CGA wards. Comprehensive geriatric assessment increases a patient's likelihood of being alive and in their own home at up to 12 months.

Source: EMBASE
Available in fulltext from Cochrane Library, The at Wiley

Author(s) Ellis, Graham, Whitehead, Martin A., Robinson, David

Citation: BMJ, 2011, vol./is. 343/7832(1034), 0959-8254

Publication Date: 2011

Abstract: OBJECTIVE: To evaluate the effectiveness of comprehensive geriatric assessment in hospital for older adults admitted as an emergency. SEARCH STRATEGY: We searched the EPOC Register, Cochrane's Controlled Trials Register, the Database of Abstracts of Reviews of Effects (DARE), Medline, Embase, CINAHL, AARP Ageline, and handsearched high yield journals. SELECTION CRITERIA: Randomised controlled trials of comprehensive geriatric assessment (whether by mobile teams or in designated wards) compared with usual care. Comprehensive geriatric assessment is a multidimensional interdisciplinary diagnostic process used to determine the medical, psychological, and functional capabilities of a frail elderly person to develop a coordinated and integrated plan for treatment and long term follow-up. DATA COLLECTION AND ANALYSIS: Three independent reviewers assessed eligibility and trial quality and extracted published data. Two additional reviewers moderated. RESULTS: Twenty two trials evaluating 10,315 participants in six countries were identified. For the primary outcome 'living at home,' patients who underwent comprehensive geriatric assessment were more likely to be alive and in their own homes at the end of scheduled follow-up (odds ratio 1.16 (95 per cent confidence interval 1.05 to 1.28; P=0.003; number needed to treat 33) at a median follow-up of 12 months versus 1.25 (1.11 to 1.42; P<0.001; number needed to treat 17) at a median follow-up of six months) compared with patients who received general medical care. In addition, patients were less likely to be living in residential care (0.78, 0.69 to 0.88; P<0.001). Subgroup interaction suggested differences between the subgroups 'wards' and 'teams' in favour of wards. Patients were also less likely to die or experience deterioration (0.76, 0.64 to 0.90; P=0.001) and were more likely to experience improved cognition (standardised mean difference 0.08, 0.01 to 0.15; P=0.02) in the comprehensive geriatric assessment group. CONCLUSIONS: Comprehensive geriatric assessment increases patients' likelihood of being alive and in their own homes after an emergency admission to hospital. This seems to be especially true for trials of wards designated for comprehensive geriatric assessment and is associated with a potential cost reduction compared with general medical care. [Abstract]

Source: HMIC

17. The role of the specialist nurse in an acute assessment and liaison service

Author(s) Harvey P., Wilson D.

Citation: Nursing older people, December 2009, vol./is. 21/10(24-28), 1472-0795 (Dec 2009)

Publication Date: December 2009

Abstract: This article explores the work of an acute assessment and liaison service for older people, including the role of the older people's specialist nurse in the service. The service screens all patients admitted who are over the age of 75 for problems specific to a frail population and to identify where ongoing specialist support, referral or advice is indicated. Patients with complex problems undergo a comprehensive geriatric assessment. The service has reduced length of stay and resulted in better care for older people.

Source: EMBASE

Available in fulltext from Nursing Older People at EBSCOhost

The following results cover the term ‘Frailty Unit’:

1. Falls presenting to the emergency department: The need for interface geriatrics and an emergency frailty unit
1. Falls and falls-related injuries are becoming an increasingly common presentation to the Emergency Department (ED) and lead to a significant number of admissions. Due to our ageing population, frail older adults and particularly those with falls, will continue to utilise a significant portion of ED activity. Aims: To collect data on patients presenting with falls and fractures to the ED in St. Vincent's University Hospital with a fall/collapse. Methods: Data was collected on all patients >50 years presenting to the ED over a 23 week period (January 2014 to June 2014) with a history of fall/collapse at triage. Data was analysed to assess length of stay, presence of fracture, type of fracture and outcomes. Results: 1,412 patients presented to the ED with falls over a 23 week period, with 36.2 % (N=511) requiring admission. Of these, 33.9 % had sustained a fracture. Hip fractures represented the most common fracture type (49.5 %). Fractures were more prevalent in female patients across all fracture types, with the percentage of fractures increasing with age. Average length of stay in the fracture group was 18 days compared with 15.2 days in the nonfracture group, representing 10.2 % of total hospital bed days utilised. Conclusion: Falls makes up a substantial proportion of overall emergency department presentations and total hospital bed days. Over 10 % of hospital beds are occupied by patients following a fall, or sustained fragility fractures. Planning an efficient falls pathway or targeted service for this patient cohort may improve patient outcomes as well as improving cost-effectiveness [1].

Source: EMBASE

2. A controlled evaluation of comprehensive geriatric assessment in the emergency department: The 'Emergency Frailty Unit'

Author(s) Conroy S.P., Ansari K., Williams M., Laithwaite E., Teasdale B., Dawson J., Mason S., Banerjee J.

Citation: Age and Ageing, January 2014, vol./is. 43/1(109-114), 0002-0729;1468-2834 (January 2014)

Publication Date: January 2014

Abstract: Background: the ageing demographic means that increasing numbers of older people will be attending emergency departments (EDs). Little previous research has focused on the needs of older people in ED and there have been no evaluations of comprehensive geriatric assessment (CGA) embedded within the ED setting. Methods: a pre-post cohort study of the impact of embedding CGA within a large ED in the East Midlands, UK. The primary outcome was admission avoidance from the ED, with readmissions, length of stay and bed-day use as secondary outcomes. Results: attendances to ED increased in older people over the study period, whereas the ED conversion rate fell from 69.6 to 61.2% in people aged 85+, and readmission rates in this group fell from 26.0% at 90 days to 19.9%. In-patient bed-day use increased slightly, as did the mean length of stay. Discussion: it is possible to embed CGA within EDs, which is associated with improvements in operational outcomes. © The Author 2013. Published by Oxford University Press on behalf of the British Geriatrics Society. All rights reserved.

Source: EMBASE

Available in fulltext from Age and Ageing at Free Access Content
Available in fulltext from Age and Ageing at Highwire Press
Available in fulltext from Age & Ageing at EBSCOhost

3. Timely care for frail older people referred to hospital improves efficiency and reduces mortality without the need for extra resources.

Author(s) Silvester, Kate M.
Abstract: Hospitals are under pressure to reduce waiting times and costs. One strategy that may be effective focuses on optimising the flow of emergency patients. The authors undertook a patient flow analysis of older emergency patients to identify and address delays in ensuring timely care, without additional resources. The design was a prospective systems redesign study over two years. The setting was the Geriatric Medicine Directorate in an acute hospital (Sheffield Teaching Hospitals NHS Foundation Trust) with 1,920 beds. Subjects were older patients admitted as emergencies. The methods were diagnostic patient flow analysis followed by a series of Plan Do Study Act cycles to test and implement changes by a multidisciplinary team using time series run charts. Sixty per cent of patients aged 75+ years arrived in the Emergency Department during office hours, but two-thirds of the admissions to GM wards were outside office hours highlighting a major delay. Three changes were undertaken to address this, Discharge to Assess, Seven Day Working and the establishment of a Frailty Unit. Average bed occupancy fell by 20.4 beds (95% confidence interval (CI) -39.6 to -1.2, P = 0.037) for similar demand. The risk of hospital mortality also fell by 2.25% (before 11.4% (95% CI 10.4-12.4%), after 9.15% (95% CI 7.6-10.7%) which equates to a number needed to treat of 45 and a 19.7% reduction in relative risk of mortality. The risk of re-admission remained unchanged. The conclusion was, redesigning the system of care for older emergency patients led to reductions in bed occupancy and mortality without affecting re-admission rates or requiring additional resources. Cites 21 references. [Journal abstract]

Source: HMIC
Available in fulltext from Age and Ageing at Free Access Content
Available in fulltext from Age and Ageing at Highwire Press
Available in fulltext from Age & Ageing at EBSCOhost

4. Is there a difference of assessment of polypharmacy by geriatricians and non-geriatricians in patients presenting with fall?

Author(s) Musarrat K., Bhutta T., Kumar M., Bridge D., Patel A., Lakhani D.

Citation: Age and Ageing, August 2013, vol./is. 42/(iii16-iii17), 0002-0729 (August 2013)

Abstract: Introduction: Polypharmacy is a major problem in patients presenting with falls. Assessment of polypharmacy is of vital importance in these patients. It is an important part of NICE guidelines on falls. We assess the difference of assessments of polypharmacy in falls patients presenting to medical admission unit run by non-geriatrician and emergency frailty unit run by geriatrician in University Hospitals of Leicester. Method: It is a retrospective study. Case notes were reviewed. We included patients who were on four or more drugs. A total of 80 patients are included in the study. Forty were reviewed by non-geriatric consultants (acute physicians, gastroenterologist, endocrinologist and infectious disease consultants) in medical admission unit and 40 were reviewed by geriatrician in emergency frailty unit. We reviewed the case notes to see if there is documented evidence of drug review. Results: Average age of the patients was 83 in the medical admission group and 85 in the emergency frailty unit group. Forty-five percent of patients were on psychotropic medication and 87% were on antihypertensives. Sixty-five percent of patients have documented evidence of drug review by geriatrician. On the other hand 40% of patients have documented evidence of drugs review by non-geriatrician consultant grade. This was a statistically significant difference (P-value 0.043 calculated by Fisher’s exact test). Conclusion: Geriatricians are more likely to address polypharmacy issue as part of comprehensive geriatric assessment in patients presenting with falls. However, there is still room for improvement. There is a need for increasing awareness to review medications in patients presenting with fall to minimise the risk of future falls and to avoid repeated hospital admissions. A vast number of patients are on potentially harmful medications which contribute enormously in fall especially in frail elderly patients.

Source: EMBASE
5. "Frailty units" would help take pressure off emergency departments, say specialists
Author(s) Limb M.
Citation: BMJ (Clinical research ed.), 2013, vol./is. 346/, 1756-1833 (2013)
Publication Date: 2013
Source: EMBASE
Available in print at Pilgrim Hospital Staff Library
Available in fulltext from BMJ: British Medical Journal at EBSCOhost
Available in print at Louth County Hospital Medical Library
Available in fulltext from BMJ at Free Access Content
Available in print at Grantham Hospital Staff Library
Available in print at Lincoln County Hospital Professional Library
Available in fulltext from The BMJ at Highwire Press

6. Specialist care for frail older people
Author(s) Blakemore S.
Citation: Emergency nurse : the journal of the RCN Accident and Emergency Nursing Association, February 2012, vol./is. 19/9(12-16), 1354-5752 (Feb 2012)
Publication Date: February 2012
Abstract: At Leicester Royal Infirmary, the care of frail older people occupies a disproportionate amount of emergency department (ED) staff's time and resources. Too few ED staff are trained to deal with the complex comorbidities associated with older patients, 90 per cent of whom are therefore admitted to hospital. To take the pressure off the ED and reduce the number of avoidable admissions, the hospital has set up an emergency frailty unit to treat patients over the age of 70 who need not be admitted to hospital and to ensure they can receive community care as soon as possible. This article describes how the unit operates.
Source: EMBASE
Available in fulltext from Emergency Nurse at EBSCOhost
R Lisk, K Yeong, A Nasim, M Baxter, B Mandal… - Archives of Gerontology …, 2012 - Elsevier
... Nursing home (NH) residents tend to be very frail older people with complex pathology who are very dependent. ... Among the residents with multiple admissions, we looked at diagnosis made at each admission, whether referred by a GP and length of stay. ...
Cited by 6 Related articles All 5 versions Cite Save

[HTML] The impact of a new emergency admission avoidance system for older people on length of stay and same-day discharges
PN Wright, G Tan, S Iliffe, D Lee - Age and ageing, 2013 - Br Geriatrics Soc
... Purdy S. Avoiding hospital admission. ... Interface geriatrics: evidence-based care for frail older people with medical crises. ... and Jay Banerjee. A controlled evaluation of comprehensive geriatric assessment in the emergency department: the 'Emergency Frailty Unit' Age Ageing ...
Cited by 7 Related articles All 6 versions Cite Save

Additional Research

NIHR Journals Library - Programme Grants for Applied Research
Medical Crises in Older People: cohort study of older people attending acute medical units, developmental work and randomised controlled trial of a specialist geriatric medical intervention for high-risk older people; cohort study of older people with mental health problems admitted to hospital, developmental work and randomised controlled trial of a specialist medical and mental health unit for general hospital patients with delirium and dementia; and cohort study of residents of care homes and interview study of health-care provision to residents of care homes 2015

For hospitalised patients with dementia and delirium we developed a specialist unit to care for them and evaluated the impact of the unit in a RCT. We found that the unit had no significant benefits over usual care in terms of mortality, institutionalisation, mental or functional outcomes or length of hospital stay but there were benefits in terms of patient experience and quality of care and carer satisfaction with care. The unit was cost-effective.

Frailty Units - British Geriatrics Society

Age and Ageing
A controlled evaluation of comprehensive geriatric assessment in the emergency department: the 'Emergency Frailty Unit' 2012

Attendances to ED increased in older people over the study period, whereas the ED conversion rate fell from 69.6 to 61.2% in people aged 85+, and readmission rates in this group fell from 26.0% at 90 days to 19.9%. In-patient bed-day use increased slightly, as did the mean length of stay.

Acute hospital care for frail older people 2006

Key features of these acute care processes for frail older people include a defined physical environment, admission processes which identify the problem and target the appropriate assessment processes, assessments which incorporate the principles of CGA, management to avoid unnecessary environmental or physiological stresses which may precipitate delirium and discharge arrangements which function across the hospital/community interface

Published Research – Database Search Strategy

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