

Moving from evidence to decisions

Sasha Shepperd
Sasha.shepperd@ndph.ox.ac.uk

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Service delivery: why is the evidence important?

- ➤ Is it effective?
- ➤ Is it safe?
- ➤ Is it high quality?
- ➤ Is it person-centred?
- ➤ Is it equitable?
- ➤ Is it cost-effective?

➤ Recommendations based on enthusiasm and assumptions about benefits may not be valid

The evidence cycle



Large multi-site randomized trial of CGAHAH

Hospital at home and virtual ward policy

- High quality
- Equitable
- Person-centred
- Affordable

Development of the CGAHAH intervention: evidence from two Cochrane EPOC reviews



Cochrane Database of Systematic Reviews

Comprehensive geriatric assessment for older adults admitted to hospital (Review)

Ellis G, Gardner M, Tsiachristas A, Langhorne P, Burke O, Harwood RH, Conroy SP, Kircher T, Somme D, Saltvedt I, Wald H, O'Neill D, Robinson D, Shepperd S





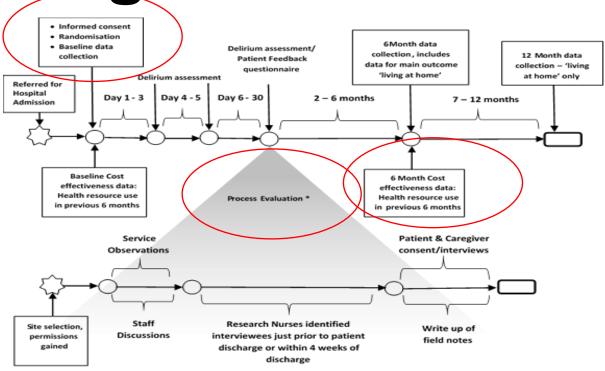
Cochrane Database of Systematic Reviews

Admission avoidance hospital at home (Review)

Shepperd S, Iliffe S, Doll HA, Clarke MJ, Kalra L, Wilson AD, Gonçalves-Bradley DC

➤ Slightly more likely to be living at home risk ratio 1.06, 95% CI 1.01 to 1.10 at up to 12 months follow-up; 16 trials, 6799 participants

➤ Might be less likely to be living in residential care at six months RR 0.35, 95% CI 0.22 to 0.57; P < 0.0001; I² = 78%; 727 participants; low-certainty evidence) – <u>update of the review in progress</u> Study design

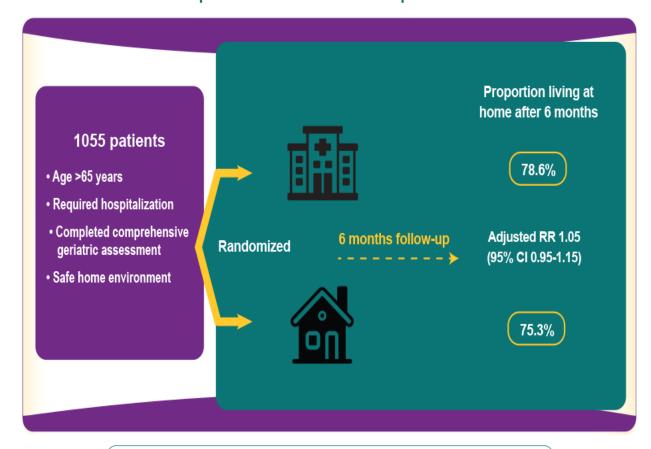


^{*}Exact timelines varied with availability of staff and interviewees

Shepperd S, Cradduck-Bamford A, Butler C, Ellis G, Godfrey M, Gray A, et al. Hospital at Home admission avoidance with comprehensive geriatric assessment to maintain living at home for people aged 65 years and over: a RCT. NIHR Journals Library; 2022 Jan. PMID: 35129936.

Primary outcome: living at home

For older patients requiring hospital-level care, how do outcomes compare following hospital care at home versus hospitalization?





New long-term residential care and cost:

Long-term	37 (5.7%)	27 (8.7%)	0.58 (95% CI 0.45 to 0.76)
residential care at			
6 months			

Reproduced with permission from Shepperd S, Butler C, Cradduck-Bamford A, Ellis G, Gray A, Hemsley A, Khanna P, Langhorne P, Mort S, Ramsay S, Schiff R, Stott DJ, Wilkinson A, Yu LM, Young J. Is Comprehensive Geriatric Assessment Admission Avoidance Hospital at Home an Alternative to Hospital Admission for Older Persons?: A Randomized Trial. Ann Intern Med. 2021 Jul;174(7):889-898. doi: 10.7326/M20-5688. Epub 2021 Apr 20. PMID: 33872045. © 2021 American College of Physicians.

Hospital care at home: less costly than admission to hospital from a health and social care perspective (mean −£2,265, 95% CI: −4,279 to −252), and remained less costly with the addition of informal care costs (mean difference −£2,840, 95% CI: −5,495 to −18

Singh, Gray, Shepperd et al Is comprehensive geriatric assessment hospital at home a cost-effective alternative to hospital admission for older people?, *Age and Ageing*, Volume 51, Issue 1, January 2022, afab220, https://doi.org/10.1093/ageing/afab220

Factors influencing/limiting the implementation of early discharge hospital at home and admission avoidance hospital at home: a qualitative evidence synthesis

- >Staff work across different services
- ➤ Staff training
- >Training support to family members, self-management
- Champion that worked across hospitals and in the home/community
- ➤ Workforce shortages
- >Impact on carers and families

Implementation



7 findings that could save the NHS money and improve care (nihr.ac.uk)

Hospital at Home Programme

The Deputy Presiding Officer (Liam McArthur)

The next item of business is a debate on motion S6M-09191, in the name of Michael Matheson, on the hospital at home programme in Scotland. I invite members who wish to participate in the debate to press their request-to-speak buttons now or as soon as possible. Hospital at Home Programme The Deputy Presiding Officer (Liam McArthur)

https://www.scottishparliament.tv/meeting/meeting-of-the-parliament-may-30-2023



Virtual wards



Virtual wards (also known as hospital at home) allow patients to get the care they need at home safely and conveniently, rather than being in hospital.

The NHS is increasingly introducing virtual wards to support people at the place they call home, including care homes.







Source: Sasha Shepperd (Nuffield Department of Population Health, University of Oxford) et al. 2022 (based on 2017-18 costs)

Implementation

The hospital-at-home presents novel liabilities for physicians, hospitals, caregivers, and patients

Healthcare is increasingly provided in a patient's home, with potential cost savings and clinical improvements. But the hospital-at-home also raises unique liability issues not only for physicians and hospitals but also for caregivers and patients.

David A. Simon, I. Glenn Cohen, Celynne Balatbat and Anaeze C. Offodile II

NATURE MEDICINE | VOL 28 | MARCH 2022 | 436-444 | www.nature.com/naturemedicine

Saved bed days: the ultimate currency

The NHS's single minded pursuit of admission avoidance risks ignoring other important outcome writes Alison Leary

Alison Leary professor of healthcare and workforce modelling

'Cost-cutting by stealth?'

106 SAGA.CO.UK/NOV-MAG | 2021



The New Hospital at Home Movement:
Opportunity or Threat for Patient Care?

By Eileen Appelbaum and Rosemary Batt *
January 2023



Subsequent on-going research:

- Analysis of the impact of socio-economic status on access to formal care and the provision of unpaid care (lead Dr Matt Quinn, Specialty Registrar in Public Health Medicine and Academic Clinical Fellow)
- ➤ Generalizing the CGAHAH randomized trial findings to a hospital cohort of older people (lead Kate Edgar, PhD studentship funded by the Health Foundation THIS programe)

Research questions

Impact of out of hospital care policy on carers?

• Inequalities in access to hospital at home?

Impact of hospital at home on the workforce?

Virtual wards: do virtual wards manage the demand for healthcare?

The evidence cycle



Systematic reviews of Comprehensive Geriatric Assessment: older people with a medical diagnosis



- High quality
- Equitable
- Person-centred
- Affordable

Guidelines



Comprehensive geriatric assessment for older adults admitted to hospital (Review)

Ellis G, Gardner M, Tsiachristas A, Langhorne P, Burke O, Harwood RH, Conroy SP, Kircher T,

- The Silver Book II: Quality care for older people with urgent and emergency care needs in UK emergency departments Age, National Ambulance Service Medical Directors, Association of Directors of Adult Social Services, British Geriatrics Society, Chartered Society of Physiotherapy, College of Emergency Medicine, College of Occupational Therapists, Society for Acute Medicine, Royal College of General Practitioners, Royal College of Nursing, Royal College of Physicians, Royal College of Psychiatrists, Emergency Nurse Consultants Association and the Community Hospitals Association Publication date: February 2021
- [Practice guideline: Multimedication: Recommendations for handling multimedication in adults and geriatric patients] Braun, Fessler, Grenz, Graafen, Hüttner, Meissl, Reincke, Seffrin, Vetter, Harder, Muth, Beyer, Corsten, Viniol, Schubert Deutsche Gesellschaft für Allgemeinmedizin und Familienmedizin (DEGAM) Publication date: May 2021
- Guideline for Perioperative Care for People Living with Frailty Undergoing Elective and Emergency Surgery Proffitt, Pearce, Romano, Partridge, Vardy, Humphry, Eardley, Dhesi, Bates, McNally, Cowley, Kilvington, Bryden, Hopper, Meilak, McDonald, Mudford, Curtis, Rose, Hare, Bailey, Barker, McGarrity, Syddall, Shackles, Price, Diedo, Nolan, Lees, Youde, Conroy, Kanga, Carter, Tinsley, Taylor, Clegg, BellCentre for Perioperative Care, British Geriatrics Society Publication date: September 2021

- [National Clinical Guideline: Chronic heart failure (3rd edition)] Bundesärztekammer, Kassenärztliche Bundesvereinigung, Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften Publication date: 2019
- Older Adults in the Cardiac Intensive Care Unit: Factoring Geriatric
 Syndromes in the Management, Prognosis, and Process of Care: A Scientific
 Statement From the American Heart Association
 Diepen, Alexander, Page RL 2nd, Hummel, Menon, Katz, Albert, Afilalo, Cohen
- American Heart Association Council on Clinical Cardiology and Council on Cardiovascular and Stroke Nursing Publication date: January 2020 DOI: 10.1161/CIR.0000000000000741
- Physical Frailty: ICFSR International Clinical Practice Guidelines for Identification and Management Dent, Morley, Cruz-Jentoft, Woodhouse, Rodríguez-Mañas, Fried, Woo, Aprahamian, Sanford, Lundy, Landi, Beilby, Martin, Bauer, Ferrucci, Merchant, Dong, Arai, Hoogendijk, Won, Abbatecola, Cederholm, Strandberg, Gutiérrez Robledo, Flicker, Bhasin, Aubertin-Leheudre, Bischoff-Ferrari, Guralnik, Muscedere, Pahor, Ruiz, Negm, Reginster, Waters, Vellas Publication date: 2019 DOI: 10.1007/s12603-019-1273-z
- S3 Guideline: Diagnosis, treatment and aftercare for patients with follicular lymphoma] Leitlinienprogramm Onkologie. (Deutsche Krebsgesellschaft; Deutsche Krebshilfe; AWMF) Publication date: June 2020 Perioperative Management of Elderly patients (PriME): recommendations from an Italian intersociety consensus. Aceto, Antonelli Incalzi, Bettelli, Carron, Chiumiento, Corcione, Crucitti, Maggi, Montorsi, Pace, Petrini, Tommasino, Trabucchi, Volpato Società Italiana di Anestesia Analgesia Rianimazione e Terapia Intensiva (SIAARTI), Società Italiana di Gerontologia e Geriatria (SIGG), Società Italiana di Chirurgia (SIC), Società Italiana di Chirurgia Geriatrica (SICG), Associazione Italiana di Psicogeriatria (AIP) Publication date: September 2020 DOI: 10.1007/s40520-020-01624-x

Evidence: digital technologies



- ➤ Eleven SRs of mobile digital technology to organise health services, low or very low certainty evidence
- ➤ Most evidence relates to health workers using mobile phone technology to improve service delivery, e.g., tracking supplies, notifying births and deaths, health worker to health worker advice, training
- ➤ Evidence on patient outcomes, cost and impact of diverting resources is limited and suggests little or no difference on patient outcomes
- Qualitative evidence: problems with the feasibility, particularly in settings with weak health systems, concerns with data protection, acceptability and equity issues

