

Frailty Hospital at Home (H@H): Numbers needed to treat to avoid an unplanned admission to an acute hospital

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1 Introduction

East Kent Frailty H@H provides an alternative to admission to an acute hospital for frail people who are acutely unwell. Treatment at home is often the preferred option for people living with frailty and prevents some of the complications associated with hospitalisation, such as environmental delirium, loss of function, isolation from usual contacts and infection.¹ However, it was not known whether H@H also reduced the workload of the acute hospital.



2 Method

Frail people who are acutely unwell are offered treatment in H@H instead of admission to an acute hospital. Referrals were made by a community clinician, for example, primary care, community nurse, single point of access or a paramedic.

Interventions include, comprehensive geriatric assessments (CGAs), point-of-care blood tests, ultrasound, urgent outpatient x-ray, CT and MRI scans, and intravenous therapies. Data was collected using electronic patient records for the community and hospital services. The data collection period was April 2022 to December 2023. Patients aged 69 and over were included. Stastical Process Control (SPC) charts were generated for results.

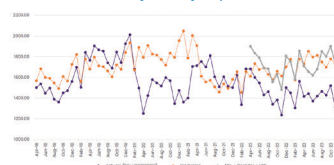
3 Results

Before the introduction of H@H, the number of non-elective admissions, plus the corridor activity, closely matched the predicted number of admissions. Since the introduction of the H@H there has been a significant drop in the number of non-elective admissions, plus the corridor activity compared to predicted admissions. This number, around 400 per month, is similar to the number admitted to H@H.

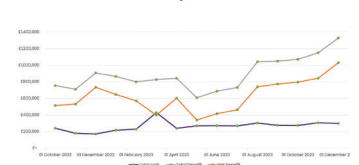
Outputs – East Kent Frailty

Key information			
PCIN Geography	East Kent Grouping	Pathway type	Frailty
		Cohort	Over 75s
		Average age of contacts	83.4
Analysis period		Impact analysis	Financial analysis
Date of first admission	Apr 22	Do admissions fall further below predicted admissions after the VW is live?	Below
Analysis start date ('live' date)	Apr 22	VW admissions associated with one avoided NEL	1.03
Analysis end date	Dec 23	Estimated avoided hospital admissions associated with this ward in analysis period	4181
Word admission volume during analysis period	6115		
Equity of access analysis			
Ethnicity		Deprivation	
Ethnicity coding completeness	70%	IMD coding completeness	100%
% non-white population over/under-represented	5%	% core20 population over/under-represented	6%
Data quality issues:		% referral source/reason complete	100%
		% discharge destination complete	98%
		% ward name complete (if multiple wards in PLDS)	100%
		Background financial data for this virtual ward	
		Financial reporting period	Oct 22 to Dec 23
		Total spend in reporting period	£3,974,758
		Total 'set-up cost' (all costs before ward went live)	£0
		Costs and benefits	
		Cost/benefit period	Oct 22 to Dec 23
		Total spend in cost/benefit period	£3,974,758
		Ward admissions in cost/benefit period	4720
		Average cost per virtual ward patient	£842
		Annualised gross spend	£3,179,806
		Annualised avoided hospital admissions associated with this ward	3345
		Value of one avoided hospital admission (long stay)	£4,974
		Value of one avoided hospital admission (short stay)	£772
		Annualised gross benefit	£10,703,122
		Annualised net benefit	£7,523,316

East Kent Frailty - Frailty - Apr 18 to Dec 23



East Kent Frailty – Cost/ Benefit



4 Conclusion

H@H data validated by NHS England has demonstrated that for every 1.03 patients treated, one non-elective admission to the acute hospital was avoided.²

1. Shepperd S, Butler C, Craddock-Barnford A et al, Is Comprehensive Geriatric Assessment Admission Avoidance Hospital at Home an Alternative to Hospital Admission for Older Persons? : A Randomized Trial. *Ann Intern Med.* 2021 Jul174(7):889-898

2. NHS England. Summary of South East region virtual wards evaluation. 16 May 2024. Available online <https://www.england.nhs.uk/long-read/summary-of-south-east-region-virtual-wards-evaluation/#virtual-wards-in-the-south-east> (accessed 11 November 2024)