Hospital admission avoidance by Multidisciplinary team working alongside paramedics in a West Kent Clinical Navigation Hub

South East Coast Ambulance Service NHS Foundation Trust

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Introduction

Home Treatment Service (HTS) is a Frailty Hospital at Home team that provides comprehensive geriatric assessment, diagnostics and treatments for people in their own home. Our patient cohort are those with frailty or with advance care planning specifying community care. HTS comprises Speciality and Specialist SAS Doctors, Resident doctors, Advanced clinical practitioners, Pharmacists, Therapists and Healthcare assistants.

Historically referrals were taken by direct clinician to clinician discussion via a triage line. Recent innovation has increased links with the acute and ambulance trusts. This has been done by providing a multi-disciplinary team (MDT) that interacts with visiting paramedics via a clinical navigation hub (CHUB).

HTS now has two main referral routes as illustrated figure 1. The CHUB has increased the interaction with paramedics when patients have an acute medical problem, which can vary from clinically minor to catastrophic crisis. This new referral interface allows rapid access to senior clinical decision makers, facilitating holistic and patient-centred decision making in complex patients with multi-morbidity and frailty including in those without previously established advanced care plans (ACPs).

Background

We work in a healthcare system designed in another century to serve a different population. Three million people in the UK are older than 80. This is projected to double in the next ten years (fig. 2). Two thirds of patients admitted to hospital are over 65 years old.

Supporting patient autonomy and allowing individuals to receive preferred care in their chosen setting is increasingly recognized as beneficial, particularly for older patients with frailty. Evidence now suggests that managing these patients within the community can yield outcomes comparable to, or even better than, hospital-based care. In crisis situations, however, the absence of well-coordinated crisis management can lead to patients being admitted to hospitals.
Such admissions expose them to heightened risks, including delirium, infections, falls, and physical deconditioning.

Methodology

61 direct clinician referrals were compared with 61 referrals from the CHUB from December 2023 to February 2024. We reviewed the patients' national early warning score (NEWS) and ACP documentation at time of referral, and their subsequent length of stay under the HTS.

N.B. 'Do not attempt CPR' documentation was not counted as ACP, as this does not give community options or recommendations for specific clinical situations.

In order to determine if patient's relative standard of living influenced their access to community health resources we compared the patients' index of deprivation codes for the two groups. This is a proxy measure of socioeconomic standing based on measurements of seven different domains.

Graphics

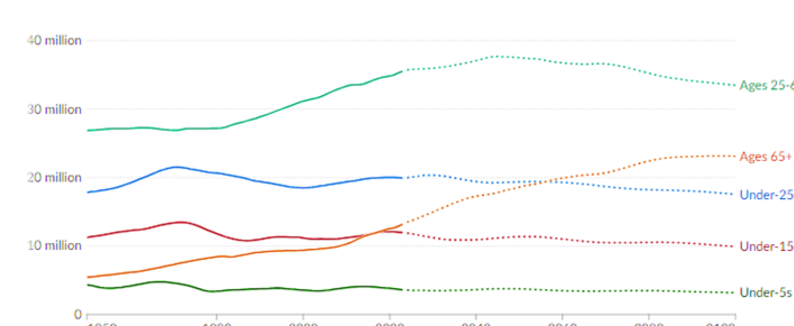
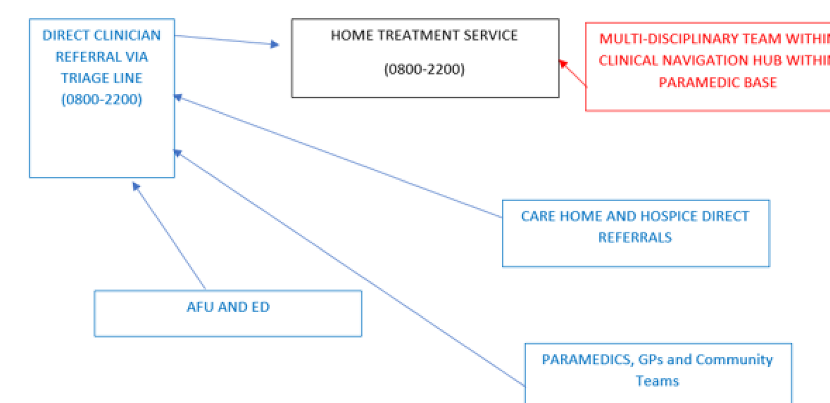


Figure 1. Projected UK population numbers by age group



NEWS	CHUB Referral	Direct Referral
Low and Medium	45	51
High	17	9

Figure 3. NEWS of referrals

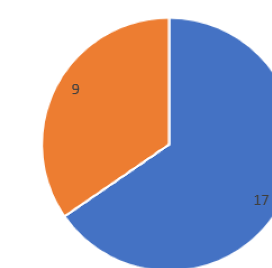


Figure 4. Referrals where patients had high NEWS

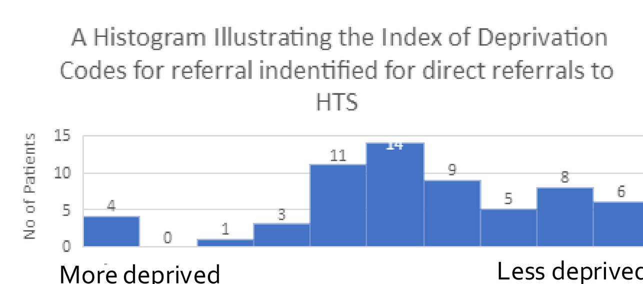


Figure 5. Deprivation index scores for direct referral group

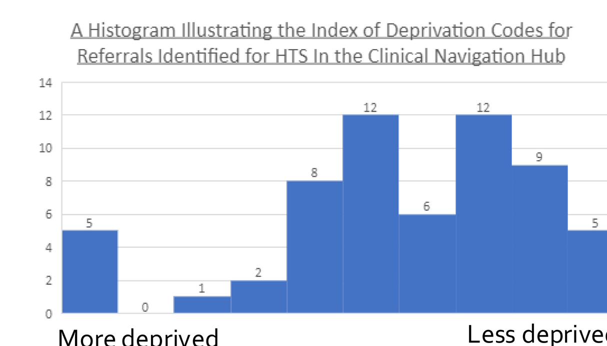


Figure 6. Deprivation index scores for CHUB referral group

Results

The average length of stay under the HTS for both groups was fairly similar - for referrals from the CHUB it was 2.61 days and 3.65 days for direct referrals.

The patients referred from CHUB had a higher NEWS. With 27% of referrals from the CHUB having a high score compared to 14% from direct referrals.
(fig. 3 and 4)

Patients were more likely to have advanced care planning (ACP) documents if they were referred directly to HTS - 48 out of the 61 patients referred to HTS by the CHUB had none (78.6%), compared to 37 out of 61 referred directly (60.6%).

Both groups of patients had similar spread of index of deprivation scores. As indicated in figures 5 and 6.

Conclusion

The direct referral route allows more patients to be seen in the community who would normally be taken to hospital by paramedics, including those who did not previously have advanced care planning in place. Patients with a higher acuity of illness are able to be seen in the community (indicated by higher NEWS patients via this route).

Patients were of similar socioeconomic standing in both groups.

Both referral routes have fewer patients from lower socioeconomic groups and the factors surrounding this would merit investigation.
Overall increased access to community medicine facilitates patient autonomy and reduces hospital admission with its associated risks to patients with frailty syndromes.

Contact

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