

One year outcomes of heart failure multispecialty multidisciplinary team virtual meetings

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Heart Failure is frequently associated with several comorbidities such as ischaemic heart disease, diabetes mellitus, chronic obstructive pulmonary disease, chronic kidney disease and frailty. This level of complexity is best dealt with by a multispecialty multidisciplinary team (MDT) model.

This was a single centre observational study (January 2020-December 2020) that was undertaken in a British university hospital looking at effect of HF multispecialty virtual MDT meetings on HF outcomes. Patients acted as their own controls outcomes compared for equal period pre versus post MDT meeting. The multi-specialty meeting was conducted once monthly via video-conferencing. It consisted of heart failure cardiologists (from primary secondary and tertiary care), heart failure specialist nurses (hospital and community), nephrologist, endocrinologist, palliative care specialists, chest physician, pharmacist, pharmacologist and geriatrician. Recommendations were made as consensus from the multispecialty meeting. The main outcome measures were 1) number of hospitalisations and 2) outpatient clinic attendances 3) cost savings.

A total of 189 patients were discussed from January-December 2020. This was uninterrupted during the COVID-19 pandemic. The mean age was

70.3±18.1 years and median follow-up 6 months (range 1–13 months). The mean Charlson Co-morbidity score was 5.3±1.2 and Rockwood Frailty Score was 4.9±1. The mean number of outpatient clinic attendances avoided was 1.7±0.4. This reduced inconvenience to patients, saved patients money (transport and parking costs) and led to carbon footprint reduction. The MDT meeting total costs were £15,400 and the 31 clinic appointments they generated cost an estimated £3720. However, the MDT meetings prevented 277 clinic appointments (cost saving £33,352). Finally, the mean number of hospitalisations pre-MDT was 0.7 Vs 0.2 post MDT ($p<0.01$) with a saving of around 730 bed days (estimated cost-saving £260,000).

The HF multispecialty virtual MDT approach provides seamless integration of primary care community services with secondary and tertiary care. Consensus decision from MDT meetings provides holistic approach for HF patients with comorbidities and frailty, and reduces inconvenience to patients by preventing the need to attend multiple specialty clinics. This approach can also lead to significant cost-savings to the healthcare system.