Future Hospital Journal 2016 Vol 3, No 2: 106–8

Ambulatory care for older people living with frailty: an innovative use of the medical day hospital

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ABSTRACT

Medical day hospitals (MDH) provide multidisciplinary care to older people living with frailty in an outpatient or day-case setting. Given the pressures on UK emergency departments (ED) combined with the rising numbers of frail older adults presenting as emergencies, we hypothesised that it would be possible for our MDH to be used to provide multidisciplinary ambulatory care for a subset of older patients presenting to ED. With adequate resources, this could potentially provide comprehensive geriatric assessment in an older-friendly environment with the additional benefit of improved flow within the ED. This paper discusses outcomes for the first 100 patients transferred from the ED to be assessed and managed within the MDH instead. Clinical judgement was used to select older patients who were likely to be able to go home the same day after assessment and multidisciplinary input within the MDH. As expected with a highly selected cohort, of the 100 patients transferred, 92% were discharged, noting that medical admission had already been planned for 31% of these patients prior to the involvement of the geriatrician. In conclusion, it is feasible for a cohort of older patients presenting to the ED to be managed within the MDH instead with additional potential for reducing avoidable admissions.

KEYWORDS: Ambulatory care, medical day hospital, frailty

Introduction

The medical day hospital (MDH) has been an important component in the provision of multidisciplinary care to older patients since the 1960s. Patients attending day hospitals have lower odds of death, as well as trends towards reduced hospital bed use and institutionalisation compared with subjects receiving no comprehensive care.[1] However, a recent Cochrane review concluded that there is no convincing benefit of attending a day hospital over other comprehensive services delivered in the community or the patient's home.[2] Are there, therefore, other innovative ways in which our day hospitals can be used for the benefit of older people living with frailty? Given the current pressures on our emergency departments (EDs) combined with the increasing numbers of older people living with frailty who present to the ED, we hypothesised that there may be a subset of such patients who could be managed safely within the MDH instead, benefiting from comprehensive multidisciplinary assessment within an older-friendly environment, thus also relieving some of the pressure within the ED. We report on the first 100 patients going through this pilot in a large inner-city hospital that has suffered considerable ED pressures and has over 28,000 patients over the age of 75 attending the ED within the trust annually.

Methodology

The author is a consultant geriatrician with sessional time within the ED pre-existing this innovation, which has already been shown to reduce avoidable admissions of older patients.[3] Because of the need for strict gatekeeping during the pilot stage, the patients were selected by the author while already working within the ED, using professional judgement as to appropriateness rather than specific criteria at this stage. These patients were transferred from the ED to the MDH with a plan already in place from a consultant geriatrician. Each patient was then managed by nursing staff with specific expertise in elderly care who arranged further focused multidisciplinary input as required, followed by discharge directly from the MDH. During the pilot stage, this was managed within pre-existing staffing resources with no additional funding; this meant that only a subset of these patients received true comprehensive geriatric assessment (CGA). For similar reasons, only small numbers (0–3) were sent from the ED to the MDH each day, with view to increasing staffing resource, patient numbers and proportion of patients receiving full CGA once feasibility was established.

Outcome

Outcome data for the first consecutive 100 patients transferred from the ED to the MDH were analysed (Table 1). The median age was 85 years (range, 60–102); 62% were female and 87% were living in their own home. 40% had had three or more ED attendances within the previous 12 months. The clinical frailty scale[4] was recorded for the last 35 consecutive patients and ranged from a scale of 2 (well) to 7 (severely frail), with a median clinical frailty scale of 5.

By far, the commonest presenting complaint among this cohort of patients was a fall (58%), with a further 17% presenting with pre-syncope, syncope or postural hypotension,

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Table 1. Summary data for the first 100 patients pulled from the emergency department to the medical day hospital.

Demographics		Elements of CGA achieved		Outcome		Re-attendance within 7 days	
Median age	85	Consultant geriatrician	100	**Discharged**		**No**	88
Domicile:		Elderly care nurse	100	No follow-up	58		
Own home	87	Medication review	100	With further input	34	**Yes (same problem)**	
Residential home	11	Therapy input	44	Total	92	Admitted (NB all falls)	7
Nursing home	1			**Admitted**		Discharged	1
Community bed	1			Direct to elderly	6	**Yes (different problem)**	
Median clinical frailty scale[4] (frailty data for last 35 patients only)	5			To other ward areas	2	Admitted	1
				Total	8	Discharged	3

CGA = comprehensive geriatric assessment

thus making 'falls and syncope' comprise three-quarters of the patients seen. As expected from such a highly selected cohort, 92% of patients were discharged from the MDH, with six of the eight patients requiring admission being admitted directly to our elderly care ward, with a length of stay of only 24 hours. Prior to transfer to the MDH, it had been planned to refer 31 of these 100 patients to medical teams for admission. Some were already on beds within the ED pending space on medical wards, having already been clerked and reviewed by medical teams. A small number (8%) were identified in the triage area and were redirected straight to the MDH, bypassing in-depth ED assessment.

All 100 patients were reviewed by a consultant geriatrician and a nurse with specialist expertise in elderly care. Medicines reconciliation was carried out by the MDH pharmacist. 44% of patients had therapy review; 32% by a therapist and a further 12% by a community advanced nurse practitioner with additional generic therapy skills. A small number were also seen by clinical nurse specialists in diabetes, chronic obstructive pulmonary disease and Parkinson's disease. Interventions carried out included intravenous fluids and medication, Synacthen testing, postural blood pressures and serial electrocardiograms, neurological observations post head injury, wound care and management of leg ulcers. Of those discharged, 34 out of 92 had further input arranged, for example community therapy support, intermediate care, a temporary package of care or further clinic follow up. 7% were subsequently admitted with the same problem within 7 days. Of these, all were frequent fallers and all had had full multidisciplinary review prior to discharge from the ED. A further four patients reattended with different problems, three of whom were discharged, noting that two of these were frequent attenders. This reattendance rate was higher than the overall hospital average of 6.3% for the over 75 years age group, although this overall average includes all presenting complaints and we would clearly expect higher reattendance rates for patients who frequently fall.

Conclusion and next steps

In conclusion, it is possible for MDHs to be used to provide comprehensive multidisciplinary ambulatory care for a subset of older patients living with frailty who present to the ED. This was not designed to be a specific admission prevention strategy, but rather to manage, in an alternative setting, patients who were expected to be suitable for discharge later, thereby relieving some of the pressure on the ED. However, unexpectedly, 31% of the patients in our cohort had already been planned for medical admission, showing an additional potential benefit in this regard.

This was a highly selected group of patients for whom the consultant geriatrician felt that an ambulatory model of care was appropriate. We also acknowledge that some of the patients who were referred by the ED for medical admission would almost certainly have been discharged from the acute medical unit (AMU). However, this pilot demonstrates that the MDH is a potential alternative to both the ED and AMU for the ambulatory and multidisciplinary management of a subset of older patients living with frailty. Of particular note is the potential for the MDH to provide CGA in an ambulatory setting to patients who present as emergencies. There is clear evidence that CGA provides significant benefits in terms of functional decline, mortality and institutionalisation rates.[5] We were able to provide CGA (geriatrician, nursing, therapy and pharmacy review) to 44% of patients transferred without any increase in resource. Social work support, if available, would almost certainly provide further benefit. Further thought regarding the reattenders is also required.

Having established feasibility, we now plan to increase staffing resources in order to be able to provide CGA within the MDH to a greater number of patients presenting to the ED. We also plan to develop referral criteria so that patients can be selected safely for transfer to the MDH by persons other than the consultant geriatrician. In view of the frailty of many older patients presenting to the ED, the numbers able to be managed in a seated assessment area will always be small compared to the larger numbers of younger ambulant patients managed in traditional ambulatory care settings. However, we believe that by managing a small cohort of patients in this way we can provide significant benefits both to the patients themselves, through providing acute assessment combined with CGA in an older-friendly environment, and to the ED, by helping flow within it.

Key learning points

- With appropriate resource and patient selection, MDHs are able to provide multidisciplinary ambulatory care and CGA to a subset of older people living with frailty who present to the ED.
- Patients presenting with falls comprise a significant proportion of patients who can be managed in this manner.
- Further thought needs to be given to the management of older patients who fall frequently and attend the ED frequently, some of whom may have the potential to be managed within the MDH as an alternative to the ED. ■

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