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ORIGINAL ARTICLE

Assessment of hospital inpatient discharge summaries, written for general practitioners, from a department of medicine for the elderly service in a large teaching hospital

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Abstract
Background The discharge document summarising an acute inpatient stay in hospital is often the only means of communication between secondary and primary care. This is especially important in the elderly population who have multiple morbidities and are often on many medications.
Aims This study aimed to assess if information important to general practitioners is being included in inpatient hospital discharge summaries for patients of the medicine for the elderly service in a large teaching hospital.
Methods After a thorough literature review, a "gold standard" letter was defined as having included a discharge diagnosis, medications on discharge and follow-up plans. Forty computerised discharge summaries were retrospectively assessed for inclusion of these parameters. The study group consisted of the first eight sequentially discharged patients under the care of each of the five consultants during a 1-month period (1 September 2011–30 September 2011).
Results A discharge diagnosis was included in 37 of the 40 summaries (92.5 %), medications on discharge were included in 39 summaries (97.5 %) and follow-up was recorded in 35 summaries (87.5 %).
Conclusions This study showed that the information assessed was available in the vast majority of discharge summaries for patients admitted acutely under the care of this medicine for the elderly service. Improvements can be made, including documentation of follow-up plans.

Keywords Discharge summary · General practitioners · Medicine for the elderly · Geriatrics

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Introduction

The discharge document summarising an inpatient stay in hospital is often the only means of communication between secondary and primary care. The majority of doctors in primary care (GPs) consider it very important to hear about their patients on discharge from hospital [1]. However, studies have suggested that primary care physicians are not always satisfied with the communication that exists [1, 2]. Furthermore, the format and content of discharge summaries have long been a cause for concern [3]. Discharge summaries for an elderly patient group were studied, as a previous study found that there is a low rate of completion of information critical for safe transition of older adults to the community [4]. There are currently no Irish quality standards on discharge documents specifically relating to a geriatric patient group. It is important that discharge summaries contain sufficient and good quality information pertaining to the course of the admission, and note any new diagnoses and medications discontinued or commenced [3]. This is especially important in the elderly population who have multiple morbidities and are often on many medications. Good relaying of pertinent information ensures continuity of care and thus improves the quality of patient care. This consequently improves patient outcomes [5]. Furthermore, inaccurate information in discharge summaries about a patient's discharge medications may increase rates of readmission to hospital [6, 7].

Several studies have identified areas where a discharge summary can lack quality [8, 9]. Electronic discharge summaries with a standardised template, as found in the hospital under study, not only improve legibility of summaries but are also thought to improve their quality [10]. Omitted information remains a problem [11]. In 2013, the health information and quality authority (HIQA) published a national standard on information to be included in a discharge summary [12]. It aims to improve continuity of care. However, this standard is not specific to the discharge of geriatric patients. Similarly, a checklist tool for writing discharge summaries has been developed by researchers at University College Cork. This tool has been shown to statistically improve the scope of items included in a discharge summary [13]. A previous study revealed as many as 40 % of summaries lacked a list of discharge medications and up to 43 % lacked follow-up plans [10]. The aim of this study was to assess the inclusion of content of importance to GPs, in hospital discharge summaries after acute admission of geriatric patients, as allowed in a computerised discharge summary template.

Methods

The study focused on discharge summaries from acute inpatient stays under the care of a department of medicine for the elderly service in a large teaching hospital. A list of the patients discharged from the service during the month of September 2011, was obtained. The content of 40 of these discharge summaries was retrospectively assessed. The service has five consultants, each with their own team of doctors. The study group consisted of the first eight sequentially discharged patients, who fulfilled the criteria in the next paragraph, under the care of each of the five consultants, during the month of September 2011.

Exclusion criteria consisted of (i) patients who died during the admission, as coded as such on the list of discharges, (ii) summaries that stated 'respite' in any of the sections of 'reason for admission,' 'diagnosis' or 'progress during stay,' (iii) patients whose location during the admission was listed as any of the long stay units in the hospital and (iv) patients whose location during the admission was listed as 'emergency department'(ED). Summaries for both respite and long stay patients were excluded since these were not acute admissions. Patients discharged from the ED were not included as these were likely patients who did not need inpatient admission and who were discharged after assessment by the medicine for the elderly team. These patients were assumed to have an ED discharge summary. Twenty two patients met one or more of the above four exclusion criteria, so were excluded from the study. If a patient met any of the exclusion criteria, the summary of the next patient sequentially discharged from under that consultant's care, was selected.

Having extensively researched Irish Quality standards on discharge documents, including the websites of the Irish Gerontological society, and of the Royal College of Physicians of Ireland, there are currently no Irish Quality standards on discharge documents specifically relating to geriatric patients [14, 15]. The aim of this study was to define a "gold standard" discharge summary for geriatric patients. A thorough literature review, including searching for similar audits, was conducted on Medline, and the websites of the Department of Health, HIQA, Scottish intercollegiate guidelines network (SIGN) and 'GP notebook', to ascertain the information GPs rate as important to have in a discharge summary for geriatric patients.

The discharge summary throughout the hospital is a standardised computerised template. Within the template, there are eleven parameters, which require completion by the discharging doctor. All other parameters are automatically populated by the computer (Table 1). From the literature review, three of these eleven parameters were

Table 1 Sections within discharge summary template

Headings	Subheadings
Patient details	Medical record number/date of birth/gender/age/phone number/address
GP details	Name/address/phone number
Admitting information	Admitting source/doctor (consultant)/time and date of admission
Discharge information	Discharge date/discharging consultant
[a]Reason for admission	
[a]Diagnosis	
[a]Problems	
[a]Progress during stay	
[a]Follow-up	[a]OPD follow-up/outstanding investigations/recommended GP actions
[a]Other information	[a]Theatre and non-theatre procedures/history of transmissible organisms/transfusion record
[a]Investigations during stay	[a]Key laboratory/radiology/other investigations
[a]Allergies	
[a]Discharge medications	[a]Medication/dose/frequency/route/duration in days
[a]Discontinued medications	[a]Medication/dose/frequency/route/discontinue reason
[a]Personnel details	[a]Name/title/specialty/medical council number of doctor completing discharge summary

[a] Sections completed by the doctor completing the discharge summary

consistently quoted, as being of most importance to GPs. These three parameters were diagnosis, medications on discharge and follow-up plans. These were the parameters chosen for study. A "gold standard" discharge letter for geriatric patients was, therefore, defined as having inclusion of at least the discharge diagnosis, the medications on discharge and follow-up plans. Each of the parameters under study has a section on the form. Each of the 40 discharge summaries selected to audit was assessed in terms of the entry of this information in the summary.

Diagnosis was said to have been included if at least one ICD-10 diagnosis was included in either of the sections on the template of 'diagnosis' or 'reason for admission.' There was further examination of the cases in which there was an ICD-10 diagnosis in the 'diagnosis' section, but not in the 'reason for admission' section. In these cases, diagnosis was said to have been included if the ICD-10 diagnosis in the 'diagnosis' section correlated with any symptoms (not coded for in the ICD-10 system) listed in the 'reason for admission' section. This aimed to establish if there was inclusion of a primary diagnosis that led to the patient's stay in hospital, since additional longstanding diagnoses (such as 'urinary incontinence,' for example) or diagnoses that arose during the patient's stay may also have been included in the summaries.

The study did not assess the suitability of the hospital discharge summary standardised template but rather the data included in the template by the discharging doctor. A completion rate of close to 100 % should be achieved with the use of this discharge summary template.

Results

A discharge diagnosis was included in 37 of the 40 summaries assessed (92.5 %). Follow-up was recorded (even if "nil required" or similar stated) in 35 of the 40 summaries assessed (87.5 %). Medications on discharge were included in 39 of the 40 summaries (97.5 %). Results were similar across the five consultant teams. These findings are summarised in Fig. 1.

Discussion

Discharge diagnosis, follow-up, and medications on discharge were chosen for study as these have been shown to be the most important data for GPs [1, 2].

The hospital under study has the advantage of having a computerised template, which serves as a prompt for the completing doctor to include the information under study. However, a previous study assessing the discharge summaries completed on another hospital's computerised system, found that even with a computerised template for discharge letters, 29 % of information was found to be incomplete or misleading [11].

As summaries from all five teams were assessed, this eliminated selection bias (where some teams may have been more proficient than others at including information on the parameters under study). September was selected as the study month, as new team doctors would have had 2 months to familiarise themselves with the summary template by this stage. The consultants had varying numbers of patients discharged from their services; therefore, the consultants who discharged most patients were likely to have discharge summaries under study that were representative of the start of September rather than of the whole month. As the team members did not change during the month of September this is unlikely to have affected results significantly.

The medication on discharge parameter was the information most often recorded. This is a positive outcome in terms of patient safety. Though not assessed in this study, it is crucial that all changes to a patient's medication during an admission are documented. A previous Irish study showed that discrepancies in documentation of discharge medications affected 65.5 % of patients under study [16]. Information on follow-up plans was the parameter least

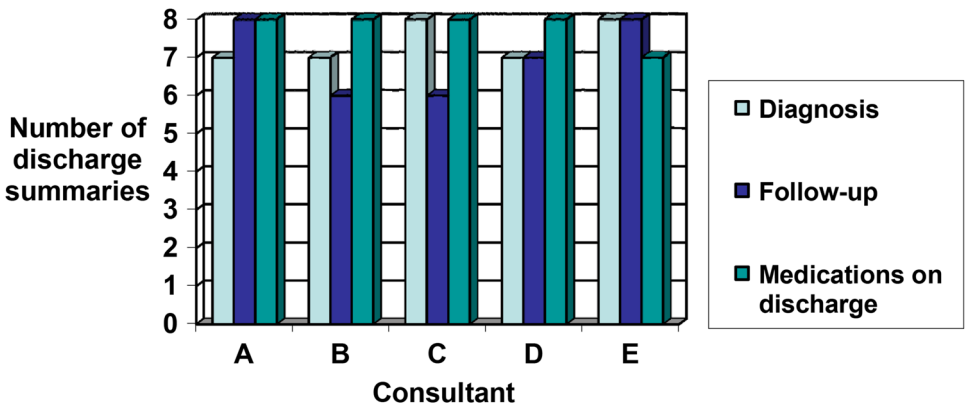

Fig. 1 Number of discharge summaries, from each of the five consultant teams, including information on diagnosis, follow-up and medications on discharge

well recorded. Better documentation of this is essential as patients may not be aware of follow-up plans or may not relay this information to their GP [15]. A discharge diagnosis was contained in 92.5 % of the summaries. A potential weakness of this study was that it represented a sample of the discharge summaries completed by the department in the month under study. However, it did cover all five consultants within the department.

It is important to recognise that in addition to the parameters under study, other information should be included in the discharge summary of an elderly patient. Such information would include the baseline and discharging cognitive status (e.g. inclusion of Mini-Mental State Exam score) of the patient, the baseline and discharging activities of daily living (ADL) ability of the patient, and details of any new social needs the patient may encounter on discharge.

The discharge summary, of the hospital under study, prompts the inclusion of information on the three items under study. The template also allows for inclusion of this additional information important for the discharge of elderly patients back to the community. This is facilitated by free text boxes in the sections for completion by the discharging doctor. However, as it is a standardised template for the hospital as a whole, it does not have specific subheadings for this additional geriatric-specific information.

The inclusion of information relevant to each specialty is encouraged in the HIQA guidelines [12]. Alteration of the generic hospital discharge summary template to include subsections specific to geriatric patients would allow for more ease of inclusion of such information. However, HIQA recognises the impracticalities of producing a national standard of discharge summaries specific to each hospital-based specialty. As the hospital template currently stands, perhaps the medicine for the elderly department could give guidance to their teams as to which further information, of relevance to geriatric patients, should be included in the summaries. This should lead to improved consistency of summaries. Currently, the inclusion of this additional information is author dependent, so was not chosen for study.

Any psychological, functional or social needs the patient may have should be included in a discharge summary for geriatric patients. As alluded to above, these domains are not specifically catered for in the current hospital discharge summary template. However, the care in the department under study involves comprehensive geriatric assessment, the aim of which is to develop a coordinated plan for treatment and follow-up, and involves assessment of the older person by several disciplines [18]. Via this process these additional aspects of the discharge are discussed among the multidisciplinary team (including, but not exclusively, physiotherapists, occupational therapists, speech and language therapists, social workers and medical team) caring for each patient. Prior to discharge, there is communication of any ongoing or new needs to the patient and their family. Ideally this information should be included in the discharge document. The rate of inclusion of these details was beyond the scope of this study.

It has been shown that feedback on studies such as this can significantly improve inclusion rates of information critically important in geriatric medicine [4]. The Department of Health recommends that staff should be involved in review of discharge protocols [17]. Communication of the results of this study to the doctors in this service would, therefore, highlight the need for this information to be completed and would ensure that they continue the high rates of inclusion of this information in discharge summaries from this service.

Conclusion

This study showed that in the vast majority of cases the information assessed was available in discharge summaries for patients admitted acutely under the care of this medicine for the elderly service. It is not possible to know the extent of the role of the computerised template in prompting completion of the information, but it likely contributes to the service's success in this regard. The template allows for inclusion of the psychological, functional and social needs of patients. These should be detailed in summaries, where appropriate. Medications on discharge were included in 97.5 % of the summaries, which is encouraging for patient safety. However, improvements can be made to ensure safe and effective continuity of care, especially in the documentation of follow-up plans.

Conflict of interest None.

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