

COMMUNICATION AT THE PRIMARY / SECONDARY CARE INTERFACE

A REVIEW OF THE LITERATURE AND A STAKEHOLDER ANALYSIS

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ABSTRACT INTRODUCTION

Information linkage between primary healthcare providers and secondary care providers in Mater Dei Hospital has traditionally been poor in Malta. The ticket of referral and the discharge letter have traditionally been the only way continuation of care is communicated via the two sets of providers and these have been criticized in terms of content, completion or for their absence on many occasions. The aim of this study was to assess the current changing situation and recommend measures that could be taken to improve matters in the foreseeable future.

METHODOLOGY

A qualitative methodological approach was conducted during March-April 2016. Semi-structured interviews were performed on five key personnel across the primary-secondary care interface. Respondents were asked on their views on the current referral process, the current discharge process, and primary/secondary care collaboration for the management of chronic diseases. Subsequent questions explored the possible negative aspects for each interface point and what measures could be used to improve them.

CONCLUSION

A multi-faceted problem requires a multi-faceted approach encompassing changes in the current business process, improvements in communication at the referral and discharge stages, and having robust information technology support.

According to the European Working Party on Quality in Family Practice (EQUIP), improving the quality of cooperation is not considered a high priority in any of the European healthcare systems.¹ However, problems at the primary/secondary care interface result in poor quality care. As each component of care focuses primarily on its own affairs, patients are 'left in limbo' with no party taking ownership of the patients' overall progression. This undercuts communication through the healthcare system.¹

Continuity of care is the extent in which the patient journeys along a series of separate healthcare events in a coherent and seamless way despite involvement of different healthcare professionals across different levels of care.²

There are two main types of continuity of care:

1. Relational continuity,
2. Managerial continuity.

Relational continuity refers to the sustained relationship between one or more practitioners and a patient spanning across individual healthcare episodes.³

Managerial continuity refers to the degree in which complex and specialised healthcare is delivered in a coherent, consistent and integrated way. Informational continuity is an important tool for management continuity and refers to the appropriate transfer and use of patient information to link individual healthcare episodes.³

The focus of this report is mainly on informational continuity.

In Malta, there are two main pathways to specialist services: public and private. General practitioners (GPs) in both the public and private sector act as gatekeepers. They can refer patients to either public or private specialists. However, patients have direct access to both GPs and specialists in the private sector. Patients can be referred by GPs to public specialists either using a paper-based or electronic format. Following discharge from public hospitals, patients are provided with an Electronic Case Summary (ECS) which is generally written by Foundation Year (junior) doctors. The ECS, together with medicines data, laboratory and imaging results, and hospital appointment data are available to patient-nominated GPs via the web-based myHealth system.

INTRODUCTION

Modern healthcare systems are complex organisations through which patients must navigate to access care. Coordination of care across the primary/secondary care interface via good communication is essential in the delivery of good quality healthcare.

There are a number of different models of interaction across primary and secondary care,⁴ however, there are two main points which are common to all where clinical handover occurs:

1. The Referral: from primary care to secondary care,
2. The Discharge: from secondary care to primary care.

The referral letter is the predominant means of communication from GPs to specialists in secondary care.

Continuity of care requires good communication between the GPs and the specialist. Informational continuity can only be achieved when the transfer of information occurs in a clear and complete manner.

In Malta, Chetcuti et al. and Cassar et al. showed that only two thirds of all referral letters are completely legible with about one third being partly legible. In these two studies, almost all tickets of referral were hand written.^{5,6}

Correct patient details are essential to ensure basic continuity of care. Chetcuti et al. and Cassar et al. showed that only the patients' name and surname were consistently written down in the referral letter. The unique national identification number, which is used to book appointments and link data, was missing in 9% and 0.6% of cases respectively.^{5,6}

Cassar et al. found that the doctor could not be identified in 5.4% of cases whilst Chetcuti et al. showed that the referring doctor's name was missing in more than 20% of cases.^{5,6} Chetcuti et al. suggested that the fact that a significant proportion of GPs failed to provide clear contact details implies that they do not expect or are not interested in receiving feedback from secondary care.⁵

Clinical details in referral letters were found to be consistently poor across many studies.⁵⁻⁹ Westerman et al. noted that only 39.5% of all referral letters were of good to excellent quality. Other studies showed that relevant clinical information was missing in 5.4% and up to 85% of cases;^{5,10} between 22.8% and 25.1% of referrals did not include primary care-based investigations in the referral letter.^{6,10}

Inappropriate referrals cause inequity to specialist services and inefficient use of limited healthcare resources.¹¹⁻¹² In one study, 13% of referrals were deemed as inappropriate with a significantly higher proportion of referrals to medical specialities (19.6%) rather than surgical specialities (8.6%) ($p < 0.01$).¹⁰ Cassar et al. found that up to 44.2% of all surgical referrals were found to be inappropriate, with the majority being referred to the wrong surgical subspecialty.⁶

Reasons for referral from primary care to secondary care vary and are not simply to establish a diagnosis, for specific investigations or for treatment or an operation. Other reasons for patient referral include patient reassurance, reducing medico-legal risk, handing over of care or to obtain a second opinion.¹³ Also, perceived patient pressure is a strong independent predictor to refer patients to secondary care.¹⁴

The discharge process involves a transfer of responsibility from specialists in secondary care to GPs in the community.¹⁵ The discharge letter or summary is the traditional tool used to communicate the clinical information required for seamless continuity of care. The provision of a timely, complete and

accurate discharge summary to GPs can prevent adverse events, and hospital readmissions.¹⁶⁻¹⁷

The availability of the discharge summary is not only dependent on its prompt completion but also on its successful transfer to primary care. In a systematic review, Kattel et al. showed that medians of 55% and 85% of discharge summaries are transferred to GPs within the first 48 hours and four weeks, respectively. This was despite the fact that the discharge summaries were almost always available (98%) in the patient's record.¹⁸

Kattel et al. also showed that administrative data such as patient demographics and admission/discharge dates were almost always included in the discharge summaries (both medians of 97%). However, other administrative data, namely the physician's name and GPs name were less often included (81% and 70%, respectively). The primary diagnosis and the hospital course were almost always provided (median of 99%). However, other diagnoses (median of 82%), diagnostic results (median of 60%) and discharge medication (median of 78%) were less consistent. Discharge instructions and follow-up plans were included in medians of 98% and 42% of discharge summaries respectively. Whilst all of these indicators improved when compared to a previous systematic review,¹⁹ pending tests at discharge fell from 60% to a median of 25%.

The accuracy of information within a discharge summary is a very important component of continuity of care. Wilson et al. found that just over one third of discharge summaries contain errors of which 17.5% were medication errors, 17.3% were clinical errors and 14.4% were follow up errors.²⁰ Also, McMillan et al. noted that the number of discharge letters with one or more errors was significantly greater in medical patients when compared to surgical patients. This is probably due to the fact that medical patients were older, often taking a greater number medicines and were more likely to have had changes in their medication during the inpatient stay. Whilst error rates were high, the majority (87.4%) were minor.²¹

Completeness of information is another important component of continuity of care. It is essential that the discharge summary includes a full list of drugs that the patient is expected to take irrespective of the nature of admission to hospital, so as to avoid the possible assumption that a medicine was discontinued.²² Also, it is crucial to state when and why a drug has been discontinued.²¹ The same is true for adverse drug reactions in hospital. Green et al. noted that up 89% of adverse drug reactions were not recorded in the discharge summary.²³

To the best of the researchers' knowledge, there have been no studies to date which investigated the current patient care hand-over across the primary-secondary care interface in Malta. The aim of this study was to investigate the weak links within the communication at the primary-secondary care interface and to identify measures that could be taken to improve matters in the foreseeable future.

METHODOLOGY

In this observational and descriptive type of research, five stakeholders across the primary and secondary care interface were identified. These were contacted in writing, all of whom accepted to be interviewed. The respondents consisted of one senior general practitioner (more than 10 years of clinical experience) (R1), one junior general practitioner (less than 10 years of clinical



experience) (R2), one consultant in a surgical speciality (R3), one consultant in a medical speciality (R4) and one public health physician (R5). Fieldwork took place in March and April 2016. After obtaining informed written consent, respondents were asked semi-structured questions on their views on the current referral process, the current discharge process, and primary/secondary care collaboration for the management of chronic diseases. Subsequent questions explored the possible and negative aspects for each interface point and what measures could be used to improve them (Table 1). Interviews were audio-recorded and analysed for common themes.

RESULTS AND DISCUSSION

Three main overarching themes emerged from the interviews: the business process, communication, and information technology support.

1. THE BUSINESS PROCESS

The researchers identified a number of changes that could improve the business process across the primary/secondary care interface.

Referral guidelines and policies

Referral guidelines and management proformas “are essential” (R1). According to the results of a Cochrane review, the

dissemination of structured referral guidelines coupled with regular follow-up can be used for common conditions.¹¹ However, passive distribution of such referral guidelines do not improve the quality of referral letters.

A recent study by Wahlberg et al. showed that paper-based and electronic referral templates with regular follow-up on their use improved the quality of the referral letters for dyspepsia, suspected colonic malignancy and chest pain.²⁴ Referral guidelines and management proformas need to “be based on objective scientific evidence” (R5) and could include “investigations (which could) be ordered beforehand to speed up the process” (R2), so that patients can be investigated appropriately prior to referral. This allows for better prioritisation of appointments based on urgency, for example fast-track colon cancer referral to the surgical department (R3).

The main limitation of using referral templates is that they should only be used for common conditions as there is the risk that they become more of a burden than of help. Akbari et al. suggested that this might be addressed by advances in health informatics.¹¹

There is a “need for leaders in primary care to guide primary care providers to what is good practice in referrals” (R5). Whilst R5 stated that “primary care providers need to be able to classify the seriousness of the case”, R4 stated that “an urgent referral should be accompanied with a phone call”. R4 continues that

Referral Process

Q1	What do you think about the current referral process?
Q2	What are the positive aspects of the process?
Q3	What are the negative aspects of the process?
Q4	What measures do you think could improve the process?
	Prompts: easy access to specialists/referral guidelines/management proformas/training of GPs/GP phone link to a referral centre/easier electronic referral forms

Discharge Process

Q5	What do think of the current discharge process?
Q6	What are the positive aspects of the process?
Q7	What are the negative aspects of the process?
Q8	What measures do you think could improve the process?
	Prompts: eliminate hand written discharge letters/provide discharge letters on the same day/training of juniors doctors/decrease work load/standardisation of discharge letters
Q9	Do you believe that the current discharge process provides complete, accurate and relevant information for continuity of care?

Primary/Secondary Care Collaboration for the Management of Chronic Diseases

Q10	What do you think about primary/secondary care collaboration during management of chronic diseases e.g. COPD, cancer etc?
Q11	What barriers do you think there are for such collaboration?
Q12	What measures do you think could improve the collaboration?
	Prompts: standardised email consultation process/protected time for specialists to answer emails/collocation of GP and specialist/GPs in specialist centres and specialists in primary healthcare
Q13	Would you like to add anything that has not been mentioned in this interview and you think will help to improve communication at the primary/secondary care interface and in so doing the continuity of care of patients?

Table 1. Semi-structured interview questions.

"referrals should not have 'urgent' written on the referral form as per policy ... and that ... inappropriate referral forms should be turned down". However, R5 argues that "this 'punishes' the patient and that the real long-term solution... is to make sure that electronic patient records are implemented at both ends, both at the primary care end and secondary care end and integrated so that they can communicate easily from one system to the other".

Patient registration

As R5 explained, "it is not easy to identify the patients' family doctor." Patient registration, where patients have a named GP, could enhance relational "continuity of care" (R2). This is a formal way to "build a relationship between the patient and GP ... you would expect the quality of the referral letter to be better when the GP knows the patient better ... and the discharge letter will be sent to him" (R3). This initiative is also supported in the literature.^{3,25}

Shift to primary care

GPs should be allowed to "have more responsibility and have patients 'discharged' from outpatients to their care especially with optimised treatment" (R2). Also, "evidence-based care pathways for named diseases" can help GPs actively follow up patients (R4). As one participant explained, "handover ... of breast cancer care five years after diagnosis to a group of private GPs has only just started" (R3). This shared care approach based on a chronic condition is supported by the literature.²⁵

Quid pro quo

R4 suggested that private GPs should "give something back" for hospital services. For example, in order to be able to order a prostate specific antigen (PSA) blood test, private GPs must include examination findings and come to a yearly one hour course on prostate management. "Organising seminars on particular topics (can be used as a platform to get to) know each other better" (R3). Indeed, R1 clearly stated that "I work best with people I know."

2. COMMUNICATION

Respondents felt that communication across the primary/secondary care interface could be improved. Respondent R2 felt that during the discharge process it is important to liaise "with the patients' GP with regards to the social aspect before the patient is discharged, especially for elderly and complex medical cases" (R2). Respondent R1 commented that "a notification when a patient (of ours) is discharged from hospital is the way forward".

Standardisation of discharge summaries improves access to information, better describes the hospital episode, and ensures informational continuity of care.²⁶ The ECS is generally written by the "youngest member of the team" (R3) and whilst "lately, there has been quite an improvement" (R1) "the quality ... needs to improve" (R3). "Treatment on discharge is not always written ... and treatment ... which was stopped (and the reason why) is

GPs "NEED BETTER ACCESS" TO THEIR PATIENTS' DATA



not always mentioned in the discharge note" (R2). One possible solution is having the consultant or resident specialist review the ECS before it is sent out (R3, R4). Medicine reconciliation could be improved by having a single shared electronic patient record between primary and secondary care providers and the community pharmacist.²⁷ Also, there is a need for continuous professional development (CPD) "emphasising the importance of proper record keeping ... explaining the need ... of accurate input, the importance of structuring of data and the importance of timeliness" (R5). The accuracy of discharge summaries might be improved with training and education of junior doctors.^{21,28-29}

Two other modes of communication across the primary/secondary care interface are emails and phone calls. "Email is a good way of communicating because it is more instant than letters and it allows you some time to reply which is better than a phone call ... The problem is the overload... that sometimes the effort you put in to answering your emails takes up a lot of time" (R3). However, whilst "emails are useful ... a phone call is better" (R1) "for urgent communication" (R4).

3. INFORMATION TECHNOLOGY SUPPORT

Information Access

GPs "need better access" to their patients' data (R1). The myHealth system is "so cumbersome ... it should be easier to use" (R4). Often the "most needy patients cannot make use of the system" (R1). Also, specialists in secondary care have no way to check the ECSs or blood results of their patients from home (R4).

Electronic referral form

Respondents commented that the online referral form is "convenient"; however "it isn't very friendly and quite slow on the mobile phone" (R2). Whilst it serves as a "bridge between the paper referral and the telephone call ... the uptake has been poor" (R3). Basic patient and doctor data, legibility and clinical information can be improved upon by introducing electronic standardised proformas. These proformas would automatically populate administrative data from electronic health records and provide a logical framework for referral depending on the speciality of interest. In one study, the amount of clinical information handed over improved from 18.9% to 56% after the introduction of a standardised electronic means of communication.³⁰ This also led to an improvement in the prioritisation of appointments. However, another study showed that the introduction of electronic referral letters on top of providing good-quality written feedback did not appear to improve the quality of the referral letters.³¹

THE myHealth SYSTEM IS "SO CUMBERSOME"



Electronic discharge summary

Discharge summaries should be ready on the same day of discharge from hospital and either sent to the patients' family doctor by email or given directly to the patient.³²⁻³³ A systematic review showed that electronic discharge summaries improve timeliness in relation to paper discharge letters, and also, ensure completeness and accuracy of clinical information.³⁴ They also ensure legibility.³² However, electronic discharge summaries have a higher number of errors and/or omissions including medicine transcription errors to paper discharge letters.^{28,35}

Since the introduction of the ECS, the discharge letter is "more structured", with reliable demographic information and "prompts" to complete the form (R5). However, according to one respondent, it is a "glorified word document with some drop down menus" and "more drop down menus especially for the discharge diagnoses are needed" (R4). Another respondent stated "the discharge letter should be produced automatically and electronically from the case notes... (however, introducing electronic health records) is very very difficult and I feel that the IT system in our hospital is not very strong" (R3).

CONCLUSION

Information linkage between primary healthcare providers and secondary care providers in Mater Dei Hospital has traditionally been poor in Malta. The ticket of referral and the discharge letter have traditionally been the only way continuation of care is communicated via the two sets of providers and these have been criticized in terms of content, completion or for their absence on many occasions. This study suggests that improving communication at the primary and secondary care interface requires a multi-faceted approach through improvements in the business process, communication and information technology support.

The main limitation of this study lies in the small number of potentially biased respondents. A follow up study recruiting more participants across the primary and secondary care is recommended. ❄

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