

## Developing a way to improve communication between healthcare professionals in secondary care

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### Abstract

**Aims and objectives:** The purpose of this study was to identify day-to-day communication problems between healthcare professionals (HCPs) within secondary care and to investigate ways to improve communication: an area identified by the Trust's board that needed improvement.

**Setting:** The study was undertaken at a London Teaching Hospital on a General Emergency Medical ward and all stages of the study involved representatives from medicine, nursing, pharmacy and therapy.

**Methods:** Communication between HCPs was recorded using a standard pro-forma to provide insights into staff communication, interactions and failures, and ways to improve communication. The perceptions of the HCPs were explored and compared through one-to-one interviews and a focus group identified ways to overcome these communication problems. The HCPs identified the need for a specific place to communicate, to be able to request comments and decisions from fellow HCPs, and to follow up on monitoring. They described this as a joint communication note (JCN).

**Results:** A total of 29 HCPs participated in the study (8 doctors, 12 nurses, 4 pharmacists and 5 therapists). All HCPs were involved in the observation phase, 8 were interviewed and 8 took part in the focus group. Communication problems included incomplete documentation; difficulties contacting other HCPs; no formal methods or places to provide information or ways to follow up if it had been actioned.

**Conclusions:** The HCPs felt that the JCN would be beneficial and would make communication easier long term and definitely highlighted existing problems with communication. The differences between the professions highlighted the need to account for professional and behavioural differences when implementing any future developments in communication.

**Keywords:** *Communication between HCPs, risk management and communication, joint communication note, day-to-day communication*

### Introduction

It is widely accepted that communication between healthcare professionals (HCPs) is central to delivering high quality patient care and is increasingly important for demonstrating professional accountability and responsibility (Berko & Wolvin, 1989; Davis, 2000). High profile cases have been reported where poor communication directly led to patient harm. The Cambridgeshire Report, for example, highlighted a catalogue of communication failures between HCPs across the healthcare interface, led to the death of a patient (Cambridgeshire Health

Authority, 2000). HCPs are required to communicate effectively and efficiently and most importantly, follow up issues requiring intervention by fellow HCPs.

Poor communication has been shown to lead to disruptions in continuity of care, delayed diagnoses and duplication of or unnecessary interventions. In addition, day-to-day contact affects the ways that HCPs communicate: the less communication there is between professionals, the more adverse the outcomes to patient care, so increased communication is promoted as good practice (Finch, 2000). Communication is a dynamic, interactive process influenced by skill level and previous experience (Department of

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Health, 1998); as such, communication between HCPs is not always smooth. Any failures in communication may be due to differing practices between professions, or social or psychological barriers to communication, any of which may not change overnight (Epstein, 1995; Gosbee, 1998; Department of Health 1999).

Awareness of and attitudes towards health information are often unsatisfactory among clinicians who are reported to have little awareness of the importance of good quality communication among health agencies (Lyons Payne, McCabe, & Fielder, 1998; Lyons & Khot, 2000). Poor communication also has cost implications. A decade ago, the Audit Commission found that between 25 and 45% of clinicians' time was spent on collecting patient data, equivalent to 15% of the Community Trusts' running costs (Makaram, 1995). It was estimated that 10% of Trusts' budgets could be wasted due to poor information management and that improvements could result in estimated savings of £30 million per year in England and Wales (NHS Executive, 1999). It seems that the NHS is not well-equipped to handle information and the processes of information transfer within hospitals are not robust (Audit Commission 1995; Wyatt & Wright, 1998; Rigby, Fosström, Roberts, & Wyatt, 2001). There is a need to improve communication between HCPs and across healthcare settings. The first stages in improving communication are to understand the barriers that exist that prevent good communication, to gain insights into why and where communication breaks down and to involve HCPs in designing interventions to improve communication. At the time of study, improving communication was a priority for the Trust together with improving multidisciplinary working: both issues being tied up together. There was a drive to understand the issues around communication breakdowns and to develop methods whereby HCPs could communicate more easily with each other. These drivers were formulated into the aim of this study.

### Study aims

The purpose of this study was to identify day-to-day communication problems between HCPs within secondary care and to investigate a way to improve communication and increase understanding of each others' roles and contribution to patient care.

### Methods

#### *Study site and participants*

The study was undertaken at a London Teaching Hospital. Representatives from all healthcare professions were involved at each stage to ensure that the development, implementation and evaluation of the intervention was relevant to practice. The study was funded by a research grant from the study Trust as part

of an initiative to explore ways to improve communication. Ethical Approval was obtained (N/98/057). The research team was based at the Trust which further enabled the project to be undertaken in practice.

The study took place over 2 months so the results are not, therefore, generalisable, but instead provide insights into communication problems which may exist elsewhere. Throughout the study, there were clearly issues around the differences in the ways HCPs worked and communicated—some did not read or act on others' messages, or that they perceive their methods of communication to be distinct from others.

#### *Identifying problems within current communication processes*

The main purpose of observing communication between HCPs was to provide a context for the way the staff work and interact on the wards, how communication could fail and perhaps identify ways to improve communication. A standard pro-forma was used to record general aspects of communication, including the duration of discussions, phone calls and discussions with staff. These events were observed over a 1 month period—various times of the day were observed to ensure the issues identified were as generalisable as possible. No night time communications were observed but, when discussed with the ward staff, they said communication problems were different at night time and that the majority of problems occurred during the day when busy and this should form the focus of this study. The HCPs' perceptions of their communication with each other were explored through one-to-one interviews conducted with a sample of 8 HCPs: 2 nurses, 2 doctors, 2 pharmacists and 2 physiotherapists. These were transcribed, coded and analysed by the principal investigator and checked by a second independent researcher to ensure credibility. The emergent themes were compared between HCPs to assess any differences between professional groups.

#### *Designing the intervention*

A single focus group was conducted to identify and discuss ways to overcome these problems. The focus group represented the participating professions and comprised 2 nurses, 2 doctors, 2 pharmacists and 2 physiotherapists. The sample differed from those who were involved in the interviews—simply because the HCPs could not commit to participating in all aspects of the study. This was not thought to affect the findings as more perceptions were obtained and the focus group seemed to validate the findings of the interviews and observations by the acknowledgement of the problems described.

The HCPs identified the need for a place for each to communicate, request comments and decisions from

fellow HCPs and to follow up on monitoring. They described this as a joint communication note (JCN) where they could transfer and acknowledge important messages. This JCN formed the basis of the “intervention” which was implemented and evaluated on the ward during a subsequent project.

**Results**

*Study sample*

The study was undertaken at a London Teaching Hospital on a General Emergency Medical ward containing 23 beds. A total of 29 HCPs participated in the study (8 doctors, 12 nurses, 4 pharmacists and 5 physiotherapists). Different numbers of staff were involved during the different phases of the study, as would be expected of an intervention on communication in practice: 8 HCPs were interviewed and 8 other HCPs took part in the focus group. All HCPs were observed during the initial periods and the findings were fed back to all participants in the study.

During the 1 month of observations, a total of 137 instances of communication problems were observed,

though a denominator of “communications” was not established so it is difficult to ascertain the proportion of problems that occur daily, weekly or monthly—whether this is “normal” or excessive or indeed representative. These were described as usual occurrences that caused additional stress in the workplace and needed to be overcome to allow the HCPs to work on increasingly complex patient cases in practice.

The interviews and observations highlighted problems with communication, which included: incomplete documentation; difficulties making contact with other HCPs; no formal place to write messages to each other; and, no means to check or follow up any action that had been taken.

*Findings from the observations*

HCPs were observed following a patient’s admission to the ward. The observations highlighted the four main sources of documentation routinely used to record and communicate information about a patient, their care and the ways forward in their treatment (Figure 1). Whilst each HCP felt their documentation

Asynchronous Communication	Sources of Documentation
<p style="text-align: center;"><b>Doctors</b></p> <p>Often have to be beeped or phoned to resolve urgent issues, otherwise notes are left. They report high levels of stress having to rely on memory to make decisions remotely from the patient or being asked for immediate responses when away from the case</p>	<p style="text-align: center;"><b>Medical notes</b></p> <p>Mainly used by doctors to document medical history, presenting complaints and treatment plan</p>
<p style="text-align: center;"><b>Nurses</b></p> <p>Often the HCPs who have to beep, phone or leave notes for others. They are often contactable as they remain on the wards, but report feeling stressed when they cannot contact another HCP or when they have finished a shift and remember an issue for clarification</p>	<p style="text-align: center;"><b>Nursing notes (CARDEX)</b></p> <p>Mainly used by nurses to record observations (blood pressure, temperature etc) and care issues for the patient</p>
<p style="text-align: center;"><b>Pharmacists</b></p> <p>Sometimes required to clarify issues around prescribed drugs, particularly in specialist situations, respond to beeps and calls when required. They report feeling stressed when they cannot get hold of a prescriber to verify changes will take place and worry over weekends (where pharmacy services are minimal)</p>	<p style="text-align: center;"><b>Drug Chart</b></p> <p>Used by pharmacists to check, amend and verify prescribed drugs Used by nurses and doctors to document drug administrations</p>
<p style="text-align: center;"><b>Physiotherapists</b></p> <p>Tend to work independently in specific cases, communicate with the doctor and the nurse. They are often contacted by beep to clarify issues for a specific patient. Report feeling stressed if changes are made to a patient’s therapy without them being informed</p>	<p style="text-align: center;"><b>Therapy Notes</b></p> <p>Tend to be solely used by therapists to document issues around diet, physiotherapy needs, sometimes accessed by nurses</p>

Figure 1. Observation of communication between HCPs.

was appropriate and useful, they were all separate in terms of location and purpose. In addition, they sought to divide the documentation about a specific patient rather than consolidate it, so that the HCPs had to communicate separately (and usually asynchronously) with each other to clarify issues not immediately clear in the documentation. It is widely accepted that asynchronous communication can take more time and often results in more stress occurring as issues take longer to resolve.

The observations highlighted a general lack of structure in the way HCPs communicated with each other, including how, when and where they communicated. Staff became stressed when they couldn't access information readily or when there were problems with technological support. The process was often confused; HCPs found it difficult to contact each other or be certain that messages were received and acknowledged. All HCPs reflected that some joint method of communication would alleviate a lot of the stress around remembering to contact someone for clarification, which was the main issue for nursing staff, and remembering to clarify one (or several) issues at the same time, which was the main issue for medical staff. In each profession, delays in communication or indeed, feeling pestered for information, caused stress, so finding a way to reduce these stresses would improve the working life of HCPs as well as patient care. These are summarised in Figure 1 and Table I.

#### *Findings from the interviews*

Eight HCPs were interviewed—2 nurses (Nurses 1 and 2), 2 doctors (Doctors 1 and 2), 2 pharmacists (Pharmacists 1 and 2) and 2 physiotherapists (Physiotherapists 1 and 2). During the interviews, the main issues identified as problems included a lack of complete documentation for each patient which made it difficult to make decisions: sometimes the signature and contact number were missing; perhaps there were too many notes in various locations on the wards; often it was difficult to use the computers; and, sometimes the information was not up to date. The doctors in particular felt that they had to rely on their memories too much and “carry” too much information at any one time. All HCPs felt there was no standardised way to acknowledge messages or to say what has been done for an individual patient without trawling through the medical notes.

“Sometimes you have problems with the handwriting, you can hardly make out what some doctors have written”

Nurse 1

“you could get information from the medical notes . . . sometimes the drug history section is perhaps less complete than you would like because for obvious

Table I. Problems with communication identified from the interviews, observations and focus group work.

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#### Problems with communication and associated risks

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Often HCPs have to deal with incomplete documentation which makes it harder for them to be certain how best to proceed. It is widely accepted that without full information about the patient and all options for furthering care, errors can occur.

Often HCPs have difficulties making contact with other HCPs, communication involves bleeps, phones, notes or a combination and one may never be certain that they have received the message. If it's difficult to find someone to clarify an issue or to action something in the treatment of a patient, it is stressful for the other HCPs and could lead to errors.

HCPs have no formal methods of communicating with each other (as opposed to uni-disciplinary forum or meeting where difficult cases can be discussed). There is no formal multidisciplinary meeting where than simple issues can be clarified, except for the ward round. It would be good to identifying a place to communicate problems, things to be followed up, issues for clarification.

There is no formal place to write messages to each other, as above, it would be useful to have a formal process or place to communicate things to be followed up and actioned by respective staff.

There is no easy way to check if appropriate action has been taken. For example, if a dose needs to be clarified, the pharmacist needs a place to request this information and where such clarification can be provided efficiently.

There is a general lack of structure in the way healthcare professionals communicate with each other, including how, when and where they communicate.

The process was often confused; HCPs found it difficult to contact each other or be certain that messages were received and acknowledged.

Staff became stressed when they can't access information readily or when there are problems with technological support, it can hinder progress when dealing with a patient. It is widely known that increased stress leads to increased risk of errors occurring.

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reasons, you know, the doctors don't often have time, or um, to take a sort of detailed drug history, perhaps they may not realise the importance of certain drugs, so for instance carbamazepine, they just would write carbamazepine, but they would not think is it a SR [slow release] preparation or not, so some things that are important to us the doctors may well not, not pick up.”

Pharmacist 1

“...information has to be accessible as well, obviously if you have to plough through loads and loads and loads of junks of notes, to find something you could just as easily just get by ringing up the GP, you going to take the short cut . . .”

Pharmacist 2

The implications of poor communication were readily identified, which highlighted the need to develop an effective intervention

“...it’s the information is what we base our care plan on. The kind of care we give the patients will depend on the kind of information we get from everybody who is involved...”

Nurse 2

“Just because maybe you don’t write it in the communication book at that point you forget you go home... then the patient won’t be prepared and the test won’t be done.”

Nurse 1

The participants found the concept of communication difficult to define but took it for granted as essential and important for good practice. That “good communication” was taken for granted could account for some of the associated problems that the participants identified.

“I really find it difficult... (laugh)... I can’t think of the right word, because they are the sort of words you take for granted. You never sort of really think about what they mean, do you?”

Doctor 1

“I suppose, communication is just anything that you can, any way of showing someone what you want them to understand or given someone what you want them to understand. That was a difficult question. You don’t think about it really, do you, it is just a word that you use, but yea, I suppose it is anyway you are imparting skills or knowledge or whatever that you want them to understand.”

Nurse 1

The lack of access to the required information, the actual person required, together with an overall lack of time, were identified as the main barriers to good communication in order to proceed effectively with the care of a patient. Information was often incomplete or missing or the handwriting was illegible, which together with time pressures could compromise good communication and effective patient care.

“Because there is so little time in the day... If it takes about half an hour to find out one thing about one person, then you, you know, you just can’t do it... you just haven’t got the time to spend on each patient.”

Doctor 2

“You can send of a referral form, we don’t know whether it has actually got there. Um, whether it has been sent to the wrong place, um, whether the person that you have sent it to is actually working and not off sick.”

Nurse 2

“... people not reading what I have written... often I find out that writing in the medical notes, they are not always followed through or haven’t been read.”

Physio 2

“A few times doctors walk away with the notes and you don’t know where they are, there have been a few occasions where notes have been lost for a day or two because somebody mistakenly takes it away, without informing people.”

Nurse 1

Another barrier to good communication was a lack of understanding of each others’ roles and responsibilities. Without a full understanding and appreciation of these roles, they felt that good and full communication was inhibited.

“...doctors are supposed to be co-ordinating everything else that is going on, so we’re supposed to know about the OT, about the physio, about the nursing, and we are supposed to be sort know a little bit about all the bit and what is going on with the patients so that we can co-ordinate the whole thing.”

Doctor 2

“I mean... what kind of information the OT’s need? I don’t know I really have no idea I don’t know what their needs are.”

Pharmacist 1

“We’ve got care co-ordinators, I don’t know what all their roles are, but I see them sort of floating around. I don’t know what a care co-ordinator does.”

Pharmacist 2

#### *Findings from the focus group*

Eight other HCPs took part in the focus group: two pharmacists (Pharmacists 3 and 4), 2 doctors (Doctors 3 and 4), 2 nurses (Nurses 3 and 4) and 2 physiotherapists (Physios 3 and 4). The composition of the group differed to the interviews. The purpose of the group was to discuss the problems and perceived difficulties with communication and to come up with ways to overcome the problems. The main themes that emerged were: the need for a place to communicate, request comments and decisions from fellow HCPs and to follow up on monitoring. These are summarised in Table I, together with the main themes emerging from the interviews and observations. The following quotes illustrate the development of the intervention, a JCN, where the HCPs could write and acknowledge important messages.

“There should be somebody who can tell you who is available, who’s there. Or it should be written down

somewhere, somewhere accessible. I would like to see somewhere joint, somewhere where I could ask another HCP a question, or they could ask me and then I could write my answer there for them to see immediately rather than wading through all the notes”

Doctor 3

“I would personally like to see some kind of joint note, where all professionals write in one record, and I will find that particularly useful as an aid to communication... to help with knowing what other members of the multi-disciplinary team are achieving or what the queries are with that particular patient.”

Nurse 4

“This joint note thing is a great idea... for pharmacy in particular, I find it very difficult to identify a place where I can communicate or document or request some action from my fellow professionals... except for the drug chart, and we are not particularly au fait with writing in the medical notes. And, as you rightly say, sometimes you just want to tell someone something very quickly or confirm something without wading through all the notes... from a pharmacy perspective, this is a very good idea”

Pharmacist 3

“I agree with the idea... of course there may be problems in practice but this is what this is all about... an we’re all aware we don’t communicate well enough at the moment so why not try this out... it would be a very useful thing to try... I like the idea that it’s a joint note on a case by case basis... somewhere to communicate about an individual patient’s care and that should be reflected in what we call it... Joint Communication Note would be the thing... that’s exactly what it is”

Physio 3

The participants agreed with the above suggestion, that a central point of communication was needed; somewhere where they could write notes to each other about patient-related problems or interventions required or undertaken. They identified a need for some method whereby information could be acknowledged, a true method of communication, which was described as the JCN. This comprised a *sheet with columns* for each HCP to write to each other and prompt their colleagues to review sections of the notes, etc. The group agreed that this JCN be attached to the front of each patient’s notes to ensure that it was easily accessible to all involved in the care of an individual patient.

The case for the JCN was a “signposting” place in addition to all the other forms of communication. The HCPs recognised that this wouldn’t solve all problems but that it seemed to be an ideal place to start with a solution. It should be emphasised that the advantages

of the JCN are over the regular medical notes were perceived accessibility of responding to your colleagues’ requests for specific information whereas the notes themselves form a record of the tests and interventions and patient care. It was acknowledged that the JCN could well add to the problem of several types of documents to record information in (notes, cardex, etc.) but, if the purpose of the JCN was made clear, the group was confident that this additional information would be of use rather than hindrance. The evaluation of the JCN worked in practice is reported elsewhere and looked at the problem of a lack of complete documentation for each patient and how the JCN worked (or did not) in practice.

## Discussion

The purpose of this study was to identify problems and to investigate ways to improve communication between HCPs within secondary care. Throughout the study, there were clearly issues around the different ways professionals worked and communicated, including the fact that some professionals do not read or act on others’ messages and perceived their methods of communication to be distinct from others. These are fully evaluated in a subsequent paper (Åström, Duggan, & Bates, in press).

Using the interviews and group work helped to engage the staff and get their perceptions on the importance and scale of communication issues in practice. Whilst there were similarities in the perceptions of the different HCPs, together with their ideas for a note where they could all communicate (Table I),

Table II. Needs identified from the interviews, observations and focus group work.

Identified needs for improved communication
There is a need for a specified place for each HCP to communicate which is easily accessible for other HCPs a place for joint communication, a place where we can highlight issues for follow up and resolution
There is a need for somewhere to easily log requests and actions about various aspects of patient care (including drug therapy, dietary issues, nursing care and medical issues)
There is a need for somewhere to request comments and decisions from fellow HCPs, rather than continuously “ploughing through” the notes all the time
There is a need to follow up a patient through various aspects of their care and communicate about monitoring. This is essential for thorough follow up and good patient management
A joint communication would enhance understanding of each others’ roles and responsibilities. It would be easier to identify the contributions to patient care from each HCP
An easily accessible JCN would make it much easier to track a request, how it has been actioned or simply to communicate an individual patient’s progress

different professional groups used the JCN to different extents. They also differed in the sorts of information they gave and requested which, on further exploration, highlighted some perceived differences in power: the nurses in particular felt they always had to chase their medical colleagues for further information to be able to “do their job properly”. These differences in professionals’ perceptions warrant further exploration as they go some way to explain breakdowns in communication in the first place (Table II).

Despite the extensive involvement of HCPs and training involved, it was often difficult to engage staff fully and to get them to attend the necessary discussions. This study highlights the many breakdowns in communication systems in secondary care and the need for improved communication between HCPs and an effective forum where they can acknowledge each other’s intervention, which is essential for governance. Effective communication requires effective teamwork between professionals and patients and it is essential that this culture is fully in place. There are very few robust and efficient routes of information transfer, depending mainly on individual innovation rather than any systematic approach. Different disciplines all have their own system and preference for modes of communication, which need to be acknowledged and explored so as to implement good communication between HCPs in future interventions.

**Conclusions**

The study highlights the problems associated with information transfer in a secondary care setting and the need to develop a culture where HCPs can highlight individual issues for resolution and where others can provide this information in a timely and effective way.

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**References**

Astrom, K., Duggan, C., & Bates, I. Evaluating an intervention to improve communication between healthcare professionals within secondary care. *Pharmacy Education*.  
 Berko, A., & Wolvin, D. (1989). *Communication*. Boston: Houghton Mifflin.

Cambridgeshire Health Authority. (2000). *Methotrexate Toxicity. An inquiry into the death of a Cambridgeshire patient in April*. London: HMSO.  
 Davis, C. (2000). Getting health care professionals to work together: There’s more to collaboration than simply working side by side. *British Medical Journal*, 320, 1021–1022.  
 Department of Health. (1998). *The new NHS: Modern, dependable*. London: HMSO.  
 Department of Health. (1999). *The NHS: A first class service*. London: HMSO.  
 Epstein, R. M. (1995). Communication between primary care physicians and consultants. *Arch Family Medicine*, 4(5), 403–409.  
 Finch, J. (2000). Interprofessional education and team working: A view from the education providers. *British Medical Journal*, 321, 1138–1140.  
 Gosbee, J. (1998). Communication among health professionals. *British Medical Journal*, 318, 642–646.  
 Lyons, J., & Khot, A. (2000). Managing information overload: Developing an electronic directory. *British Medical Journal*, 320, 160.  
 Lyons, R., Payne, C., McCabe, M., & Fielder, C. (1998). Legibility of doctors’ handwriting: Quantitative comparative study. *British Medical Journal*, 317, 863–864.  
 Makaram, S. (1995). Interprofessional cooperation. *Medical Education*, 65–69.  
 NHS Executive. (1999). Learning to manage health information. In *A Theme for Clinical Education*. London: HMSO.  
 Rigby, M., Fosström, J., Roberts, R., & Wyatt, J. (2001). Verifying quality and safety in health informatics services. *British Medical Journal*, 323, 552–556.  
 The Audit Commission. (1995). *Setting the records straight*. London: HMSO.  
 Wyatt, J., & Wright, P. (1998). Design should help use of patients’ data. *The Lancet*, 352, 1375–1378.

**Appendix 1**

**Data collection form**

Staff member (profession? grade?)	
Contract type (permanent? temporary?)	
Type of communication?	If documentation-details (include where, when, follow up) If discussion-details (include how, who with, duration, direct contact, messages left with? Etc)
Other issues	Confidentiality? Synchronicity? Problems? Privacy?