Continuity of care for medical inpatients: standards of good practice

Prepared on behalf of the
Royal College of Physicians by

Dr David Metz, Research Fellow
Dr Declan Chard, Chair, Trainees Committee
Professor Jon Rhodes, Member of Council
Professor Roy Pounder, Clinical Vice President

Royal College of Physicians

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Summary

Continuity of care is vital for the optimal management of acutely ill medical patients in the current fast-moving NHS. This document identifies 12 standards that can be applied to medical practice, all of which should improve continuity of medical care and are amenable to external audit. The document sets out a range of practical ideas and suggestions which could be implemented by individual medical teams or acute Trusts.

Standards of good practice to improve continuity of care

Introduction

Continuity of care for hospital inpatients is a key element of successful emergency medical care and it cannot be left to chance. It has always been a priority but, with changes in working patterns resulting from implementation of the European Working Time Directive (EWTD) by junior doctors in August 2004, it requires extra focus. The EWTD offers the potential benefit of clinicians who are less tired delivering patient care, but also a challenge – the need to abandon on-call rotas and to introduce shift work for junior doctors in most acute medical specialties. Care delivered through shift work means that patient management cannot be delivered by a traditional team, with one or more members remaining in the hospital over night on call.

Threats to continuity of care are, however, not new. In 2002, the most common configuration of medical care in an English acute hospital at 2 am was one specialist registrar (SpR) on call, one senior house office (SHO) and one pre-registration house officer (PRHO), responsible for 193 medical inpatients, 27 of whom had been admitted in the last 24 hours; these patients would probably have been under the daytime care of five or six different teams.

Good continuity of care for medical inpatients is beneficial because:

■ it helps to maintain an effective dialogue between clinicians and patients, allowing a relationship of trust to be established and sustained

■ it promotes efficiency and economy, reducing the need to obtain the same information repeatedly from one patient

■ it should reduce the chance of adverse events by ensuring that a patient's active problems and ongoing management plan are known to the team currently responsible for his or her care

■ it supports the education and motivation of doctors in training.

There has been little published research exploring strategies to ensure continuity of care and, unless specified, the suggestions presented in this document have not been tested formally, but intuitively appear to be practical solutions to elements of the problem. Not all of these will be suitable for every situation; local innovation should be encouraged and practical solutions propagated. While written as an aid to a medical team, many of the suggestions will probably be more successful if applied hospital-wide, as part of its Standard Operating Procedures.

There is to be a massive investment by the NHS in information technology (IT), with more extensive use of digital patient records, but it is likely to be some time before these

plans are implemented. These IT developments will require detailed input from active clinicians, if the enormous potential clinical benefits are to be maximised. The medical record is at the heart of continuity of care, and the discipline of using an electronic set of inpatient notes has the potential of massive benefit for continuity of care. However, changes to the current paper-based systems should be considered in the interim, with a view to longer-term technological solutions.

Standards of good practice to improve continuity of care

Standard 1
A patient should know the name of the medical team responsible for his or her care

A team will need to ensure that each of its patients knows the name of the team – especially if the patient's care is transferred. A firm business card, with the name of the consultant, may be appropriate.

At all times, one team should lead and should be responsible for arranging investigations, acting upon results and overseeing treatment decisions. The names and roles of the team members should be readily available to the patient and ward staff. It is important that the Patient Administration System (PAS) always has the correct name of the consultant in charge of each clinical episode.

Identification of the correct team could be achieved by the creation of a Medical Team Record, a printed, five-sheet 'no-carbon-required' document started by the admitting team, and signed by the doctor authorising the patient's admission (see Appendix 1). The top sheet would go to the admissions clerical officer, ensuring that the PAS has the correct information at the time of admission. The remaining sheets would remain inside the patient's clinical notes. If the patient's care is transferred to another team, the Medical Team Record page would be updated before the transfer of care becomes official. The date of transfer, and the new team's information, would be completed and signed by a member of the new medical team accepting responsibility for the patient's care, and the top copy given to the ward clerk or nurse in charge. Thus up-to-date correct information on a patient's team should be available consistently from the PAS.

Junior doctors rotate frequently, so it is important that bleep numbers are allocated to a post, rather than a person, within a firm – so the same bleep number will always contact the appropriate team member.

The role of the consultant as leader of each team cannot be over-emphasised, but he or she is also subject to the terms of the EWTD, and will need to hand over responsibility to consultant colleagues. In terms of continuity of care, the consultant's role will change dramatically as the NHS moves from a consultant-led service to one that is consultant-delivered.

Standard 2
A medical team should know the name and location of every patient under its care

When a doctor or medical team arrives at work, they should be able to identify immediately all the patients who are under their care, including the new admissions overnight. In some hospitals, doctors can access and print out a current patient list from the PAS, including their current location. This system shows the value of robust processes for admission and transfer of care where, as soon as a change occurs, the PAS is updated. Alternatively, a patient list maintained on the team computer can provide a simple and efficient solution.

Standard 3
Medical teams should not routinely have patients outlying from their home wards

'Outliers' – patients located in wards distant to those usually frequented by the patient's lead clinical team – create major problems for continuity of care. They are often located on wards where the nursing staff are unfamiliar with either the patient's medical problems or the medical team; patients may be omitted from ward rounds because they are away from the home wards.

Generally, the need for outlier patients should be eliminated; having frequent outlier patients on non-medical wards is not good practice, and should prompt a review of a hospital's bed allocation.

The introduction of responsibilities for outliers on specific wards is one possible solution to outliers, particularly during a crisis over bed shortage. This would mean that each medical team would not only have its home ward or wards, but also would cover routinely all medical patients on a restricted number of nearby non-medical wards. All medical patients admitted to these non-medical wards would be transferred automatically to the team's care.

Standard 4
A single medical team should be responsible for a patient's care at any one time

Continuity and efficiency problems can arise when multiple specialist teams are required for the care of a patient. In the interest of continuity of care, however, ideally there should be one team in charge of a patient's management at any one time.

The role of specialist teams who are asked to consult on a patient's care should be defined. The consulting team should write a clear opinion in the progress notes, ideally reinforced by a telephone call or email message to a doctor in the patient's lead team.

Ultimately, the patient should be the responsibility of the team that is in sole charge. Thus, referrals should at all times be treated as requests for an opinion. In the same way, out-of-hours cover doctors should not make any major changes to ongoing patient management (except, of course, in an emergency). Any such changes must be documented carefully in the progress notes, and reported at handover.

Standard 5
Doctors should have sufficient protected time for patient handover

Handover occurs on several levels, both within and between teams. The average length of stay for a medical inpatient in 2001/2002 was five days; hence during such a stay there would be at least 10 transitions between teams (from daytime to out-of-hours teams, and back). For those over 75 years old, the average length of stay in 2001 was 17 days. Effective handover is paramount in maintaining continuity of patient care. Many hospitals, however, have no clearly defined system for this, and it is entirely up to individual junior doctors as to how much, or how little, information is handed over. The Royal College of Physicians recommends a 10- to 30-minute period for appropriate handover of a team's medical inpatients (more if bedside review required).

The medical handover should be a training and educational exercise, as well as an activity which develops an overall management plan during the patient's admission. It needs to include an understanding of the patient's past medical history, working diagnoses and management plan. It will refer to pathology, as well as therapeutic and management options, while recognising uncertainties concerning diagnosis and prognosis. It should anticipate problems.

The first step in improving handover would be to incorporate handover time into every clinician's timetable. This time should be considered sacrosanct, and only emergency patient care should prevent the relevant doctors from attending.

Handovers usually take place between clinicians of equal level – for example, SHO to SHO or SpR to SpR. Some hospitals have tried setting up team handovers, with house officers and registrars together, and even consultant-led handovers. These have the advantage of increasing the quality of handover, while allowing junior doctors to learn from their senior colleagues. It might also increase the likelihood of regular handover occurring, although it may be harder to find a time when all can be present.

Standard 6
On transfer of care, a patient's new team should have immediate access to all necessary clinical information

Models have been set up for standardising routine handover, including formal sign-out cards, PDA (personal digital assistant) handovers, and Intranet patient databases. They allow for clear definitions on what information should be handed over – for example, the severity of each patient's illness, tasks that need to be performed (including

reviewing the results of pending investigations and implementing management plans contingent upon these results or clinical events), and resuscitation status. Some models of handover categorise patients further by illness severity, eg A, B and C (or simply identify the clinically unstable patients).

Intranet-based handover databases could perhaps be assisted by creating a system where PAS data are inputted automatically into the Intranet handover database, rather than requiring a doctor to enter every detail. This could be done directly from the Medical Team Record page. Thus, the database of patients would already be set up, and would only require covering doctors to enter changes to status, diagnosis or treatment as they occur.

There can be confusion as to whether a patient has been seen by the medical team on a particular day, especially if the patient is an outlier. The introduction of a Clinical Visitor's Chart, at the foot of every bed, could resolve this problem. This would be a simple document, kept with the observation charts, on which only the date, time, and clinician's identity would be entered. Every health professional visiting a patient could quickly write this information, whilst reviewing the patient's bedside charts. This chart could include doctors, pharmacists, physiotherapists, social workers, medical students etc. The named nurse would also sign this chart when starting each shift.

Thus, the nurse looking after a patient could simply glance at the Clinical Visitor's Chart, see that the treating doctor has been around, and could then review the patient's progress notes for further details. This suggestion is neither a substitute for maintaining full progress notes, nor a reason for failing to talk with the patient's nurse.

Standard 7
Out-of-hours (evenings, nights and weekends) doctors should be aware of the patients under their care who are particularly unwell

Awareness of those patients who are particularly unwell is of the utmost importance to clinical and ward staff, particularly if medical care is to be proactive rather than reactive. In the same way as the doctors during the day complete a round of all their patients, doctors on duty out-of-hours could undertake a round of such unwell patients by reviewing the handover database.

Medical early warning scoring systems can identify patients who are deteriorating, and should prompt 'prospective transfer' to higher dependency areas of the hospital.

Standard 8
Each clinical action and annotation in patient notes should be traceable to the doctor concerned

If clear identification cannot be achieved by doctor's signature and name alone, this could be achieved by the introduction of an alpha-numeric 4-digit code for every

healthcare worker employed by an individual hospital. Made up of a combination of the letters of the alphabet and numbers (excluding those which clash with letters, ie 1, 5, 0), a code could be constructed, perhaps based on a doctor's name (thus Dr AB Smith could be ABS2). All clinicians working at a hospital (including locum workers) would receive their unique code when they join. The codes would be stored on the hospital Intranet, with relevant details of name, GMC or similar professional number, job title, current bleep or phone extension, and email address. Thus, all doctors within the hospital team could be quickly identified from their code. A 4-digit code, with 1,185,921 combinations, would last the average UK hospital for decades.

Doctors would then complete all patient note entries by signing and writing their code (rather than their bleep number, which often changes hands as shifts change). A call to review a patient when covering would not be considered complete until this code had been written in the notes. Indeed, omission of the code could be considered a serious failure to maintain adequate clinical notes.

Standard 9
A patient's resuscitation status must be stored sensitively, but also be accessible immediately

A patient's resuscitation status must be quickly accessible to those involved in a patient's care, which will help to prevent inappropriate or unwanted resuscitation, and the distress this causes to the patient's family, friends, nearby patients and hospital staff. The best way to impart this information easily and confidentially is during handover. In lieu of this, it is of the utmost importance, for identification and legal reasons, that an official DNAR form is completed and readily available. For example, this form could be included at the back of every inpatient admission file, whether or not is to be completed. Thus, in the event of an arrest, staff will know where to look for the DNAR status; the form will either be completed or blank but either way, the information can be retrieved immediately (and in an appropriate and sensitive manner).

An admissions pack would include the Medical Team Record, about 10 pages of blank continuation pages in a binder, as well as the hospital's standard treatment chart and the form to record resuscitation status. It could also contain the forms for the discharge prescription and the hand-written discharge letter to the GP. On discharge, this collection of new records would be filed in the patient's main notes, before he or she leaves the ward.

Maintaining patient confidentiality can be a challenge with digital records. While paper-based notes are not entirely secure, they cannot be read remotely and thus are intrinsically more secure than networked databases. It is imperative that sensitive information is only accessible to those involved with the care of the patient. Hospital computer systems have password protection, but the more confidential the

information – for example, illness severity and resuscitation status – the more important it is to restrict access. Thus multiple layers of security would need to be created, allowing widespread access to less sensitive information, such as patient location, and tightly restricted access to more sensitive data.

Standard 10
Doctors should know the outcome of their decisions

With on-call rota systems, doctors in training could often admit a patient and then see that patient through diagnosis, treatment and (hopefully) recovery. This provided valuable feedback, allowing doctors to see the consequences of management decisions, and to learn from them. However, with a shift structure, the doctor who admits the patient may never see him or her again. Thus they are limited in their ability to learn, despite their position as junior doctors. If at all possible, the structure of a team and its rotas should be designed to enhance continuity.

One way to ensure feedback would be to have a copy of the discharge summary sent to all doctors involved in a patient's care, or at least those doctors who admitted the patient. These doctors could be identified using the Medical Team Record page.

Standard 11
When designing a medical rota for junior doctors, the first priority should be daytime continuity of care on the wards

Continuity of care has positive implications for patient satisfaction (being treated by the same doctors, developing trust) and doctor education and satisfaction (seeing the effects of their management). However, this does not apply to all areas of a doctor's work. Having the same doctor on call for consecutive days in the outpatient department or for procedural lists (for example, emergency endoscopy) serves no purpose in terms of continuity. It is on the ward that having the same faces from day to day offers real benefits.

Thus, in designing rotas, daytime continuity on a ward should be made the top priority. One or more junior doctors could be assigned to the 'continuity' ward-based jobs: they would cover the wards for as many consecutive days (particularly weekdays) as allowed by the EWTD, giving strong continuity to the inpatient team. When doing this, they would not break for night duty, educational leave, outpatients or procedures – these jobs would be carried out by other doctors from the team. They would then rotate to ensure that they experience all aspects of each appointment.

The ward team would be strengthened if continuity of daytime care were to be the priority at all levels (house officer, SHO, SpR, consultant), with overlap in days worked between the different levels, as there would always be at least one doctor present who was there on the previous day.

Increasing continuity on the daytime ward would also decrease time needed for night-to-day patient handover, as only new patients, and changes to existing patients, would need to be discussed.

Whether or not the emergency admission of patients would be part of the ward doctor's work, or carried out by an 'admitting doctor' from the remaining pool, is a matter of contention. Having the ward registrar or SHO admit patients at a busy hospital potentially takes them away from the ward too much, losing that essential inpatient continuity. However, there is inevitable loss of continuity when the doctors who admit the patients are different from those who later look after the patients on the ward.

Standard 12
A discharge letter, summary or report should leave the hospital within 24 hours of a patient's discharge

The discharge summary is the hallmark of good continuity of care from inpatient to outpatient settings. The summary must be completed promptly, and include the final diagnosis (or problem list), medications (including why any changes were made, and therapeutic drug failures), procedures, test results and those still outstanding, and follow-up plans.

However, in the present NHS, the time to dictate full summaries is often not available, and there may be insufficient secretarial support to type the letter promptly. Speed is the essence of this communication, and a short hand-written report dispatched on the day of discharge is usually more useful than a long report appearing weeks later.

It has been suggested that database-generated discharge summaries increase the likelihood that a summary will be completed in time, compared to dictated summaries.

Whilst immediate access to a patient's old records is ideal, often they are in transit or cannot be retrieved within 24 hours. The pathology computer system often provides much useful information. A hospital Intranet, carrying Word files of recent letters and discharge summaries, would be relatively easy to develop whilst more sophisticated computer-based records are awaited.

References consulted when compiling these standards were:

1   Royal College of Physicians, 2003. *Implementation of the European Working Time Directive by August 2004.* www.rcplondon.ac.uk/pubs/books/EWTD/ewtd_supplement.pdf

2   www.statistics.gov.uk/STATBASE/ssdataset.asp?vlnk=7398

3   www.statistics.gov.uk/lib2001/Section3534.html

4   www.rcplondon.ac.uk/pubs/handbook/gpt/gpt_handbook_app4.htm

5   www.pgmd.man.ac.uk/randd/pdfs/37patienthandover.pdf

6   Lee LH, Levine JA, Schultz HJ. Utility of a standardized cut-out card for new medical interns. *J Gen Intern Med* 1996;**11**:753–5.

7   www.cmaj.ca/cgi/reprint/160/3/319.pdf

Appendix 1
Medical Team Record sheet

CLIP THIS FORM INSIDE FRONT OF PATIENT'S NOTES

Patient's Name _____ Hospital No _____

D.O.B._____

MEDICAL TEAM RECORD

	Team 1	Team 2	Team 3	Team 4
Date of admission		✗	✗	✗
Date of transfer of care	✗			
Consultant				
Specialty				
SpR bleep				
SHO bleep				
HO bleep				
Code and signature of doctor accepting care				

Instruction: with each change of team, a doctor must complete and sign the details of the new team, and give a copy to ward or clerical staff.