**Council 20 May 2010 DOC 10/62 (Item 9)**

**A scoping project: Handover – the need and the best practice**

1. **Executive summary**

Handover is the system by which the responsibility for immediate and ongoing care is transferred between healthcare professions. Changing work patterns mean that establishing standards for handover should be a priority.

The results of an electronic survey of trainees and consultants confirmed that this is recognised as an important topic, one for which guidance is required, and that the performance of handover varies significantly across the NHS.

Key findings of a multi-professional workshop held at the Royal College of Physicians, were that work on handover would build on other areas in which the college is active, such as patient safety, team and multi-professional working, workforce issues, improved record keeping and communication. The work would be relevant to all specialities, and cross healthcare professional boundaries.

We recommend that the Royal College of Physicians seeks grant support and collaboration for a two phase project.

Phase 1

1. Will endeavour to review and collate the evidence to support the importance of handover in clinical practice.
2. Will be the focus of a national virtual electronic network, and limited face to face contact, of those currently researching and working on this topic.
3. Will seek to achieve multi-professional engagement in devising recommendations for handover processes and standards.
4. Will define key training needs and auditable standards.

Phase 2

1. Will seek to disseminate the output from stage one, through partnerships with pioneers in pilot sites.
2. Through this will establish and validate tool kits for wide implantation.

We ask Council to support the continued work by the Royal College of Physicians in this area.

1. **Introduction**

The Royal College of Physicians recognises that changing patterns of work must not detract from the ultimate responsibility of doctors for ensuring that their patients are safe, diagnosed efficiently and treated effectively, and feel confident and familiar with those caring for them. Handover is the system by which the responsibility for immediate and ongoing care is transferred between healthcare professionals.

Modern working practice does not permit continuous responsibility. There is an emphasis on team working and a trend towards shift working as the NHS tries to adhere to the European Working Time Directive. Shift –type working is established and active handover is fundamental in many ‘safety-critical’ industries analogous to medicine and indeed in some medical specialities (eg. neonatal medicine, obstetrics and intensive care). There is significant scope to learn from these examples.

Patients expect and should have a specific consultant and designated nurse and other health care professionals advising on the management of their condition, but there are times at night or at weekends and during an emergency admission when the responsibility for care must pass from one team, or consultant, to another.

The delivery of care addressed here is within the hospital setting. Handover is also required for some patients during a process of assessment at a point when a decision about admission has not yet been made or between settings of care (eg. hospital and the community). Handover may involve the Hospital at Night team, shifts of doctors and nurses with multiple responsibilities including receiving emergency admissions but also initiating investigations or therapies for those recently admitted.

Handover has several purposes:

1. To ensure that changes in the clinical teams responsible for providing care are not detrimental to the quality of healthcare that a patient receives.
2. To improve communications between all members of the health care team and with the patient and his/her family.
3. To ensure recognition of unstable and unwell patients and that their management remains optimal and is clear and unambiguous, and by that process to improve patient outcomes.
4. To improve efficiency of patient management by clear baton passing.
5. To improve patient experience and confidence.

In order to scope current perspectives of the use of handover, an online survey of both trainees and consultants was undertaken. We summarise here the results of the survey and the output of a workshop, ‘Handover- the need and best practice’ held at the Royal College of Physicians for invited participants on May 20th 2010. In that workshop delegates (see appendix) from a number of organisations and potential stakeholder groups discussed the survey and used it as a starting point for wider consideration of the outstanding issues relating to handover which might be addressed in a project led by the RCP. The President, Professor Sir Ian Gilmore introduced the workshop, and the project Clinical Lead, Dr Jean McEwan, set the background and aims of the workshop.

#  Results of survey of trainees and consultants Handover survey results

### General comments

An invitation to participate in the survey was e-mailed from the RCP Medical Workforce Unit, to 1,885 consultants and 5,532 trainees, and a single e-mail reminder was sent to all consultants and trainees affiliated with the RCP. Results are based upon 536 responses received from 251 consultants (47.1%), 279 specialist registrars (52.3%), working in 190 different hospitals throughout England, Wales, Scotland and Northern Ireland. The likelihood of bias in the results is acknowledged.

Handover of several different types of responsibilities and services was reported, including acute take (97% respondents), service, unit or ward handovers (93% respondents), and hospital wide handover (90% respondents). 10 respondents identified their sites as having no handover arrangements. Active consultant participation in handover is uncommon (acute take handover 34%, service handover 32%, hospital-wide handover 9%). 59% of respondents did not know who was responsible for ensuring and leading development of handover practices at their site.

1. **Transfer of Care and formal handover**

Care for patients most commonly passed between consultants (69%) and their junior teams (66%) once or twice within 24 hours. 27% of respondents identified situations in which care passed between teams of juniors three times or more within 24 hours.

60% of transfers of responsibility between consultants and 45% of those between trainees were rarely or never associated with any handover process.

### When it does occur the process of handover is almost exclusively doctor-led (92%), usually by an ST3+ grade (68%), though 66 % of handover meetings were described as multi-disciplinary. Handover is predominantly verbal, with just over half involving additional written communication, however permanent records are uncommon (only a fifth). Handover processes are rarely the subject of audit (only 10%).

### The survey revealed that handover was recognised in the jobplan/timetable of only half of the respondents. Only 12% reported induction and education in handover processes and another 20% of respondents reported induction into the local processes of handover only. This means that over 60% had no experience of either education or induction into the processes used locally.

1. **Opinions on Handover**

72% agreed strongly that ‘handover is an important issue’. While only 9% disagreed with the statement ‘it is clear what represents good handover’, 64% agreed there was a need to develop new methods of handover. 80% felt that there was a need to understand how to implement handover. Only 33% agreed handover was currently done well and barely a third indicated that they knew of active work on the issue of handover within their organisation.

1. **Examples of handover from outside healthcare, the role of human factors**

Mr Ian Stokes, Operating Management System Advisor from the Safety and Operations department at BP, described the handover systems in the high risk petro-chemical process industry. He described a hierarchy of control and a bias towards safe hardware, inherent safety and reducing the scope for human error. He emphasised the need for clear and excellent communications between people and departments. Not only was the transfer of data required, but also the opportunity to obtain clarification and demonstration of understanding were essential. A check list of key content was useful but the design of any shift log (handover sheet) needed to reflect local operational needs and it is therefore imperative that local users of the documents and procedures are involved in their design and development. A fundamental aspect of handover implementation was ensuring that the participants recognised its value.

Mr Ronnie Lardner of the Keil Centre, Edinburgh, described how ‘human factors’ including safety critical communication, were at the heart of major incidents in hazardous industries. Handover, including that in the clinical setting, may require specific ways of safely and accurately transmitting and acknowledging information. The most accurate handover is face to face and uses both verbal and written communication.

Mr Lardner went on to describe what can be learned from review of major industrial incidents. Planned maintenance work continuing over shift change, a lack of procedures on how to conduct handover, with an over reliance on written logs, poor capture of essential data and inaccurate carry-forward of information over shift changes were all notable features in industrial disasters. In discussion, there was acknowledgement of potential for all of these situations in medical handover. Similar parallels in medicine were recognised in high risk handovers: work (eg. care and assessment of patients) continuing over a shift change; over-riding of safety systems (eg. failure to check drug doses); deviations from normal working , (eg. weekends with different work patterns); return after a lengthy absence from work (eg. after maternity, research or study leave); handover between experienced and inexperienced staff (trainee doctors may be unwilling to challenge clarity of handover from consultant colleagues).

The key principals which lead to improved handovers and safety are the involvement of the professionals in the improvement process, agreeing minimum behaviour standards, and defining the information needs. Observation and feedback are key to progress. Written guidelines on how to conduct handover, training on the process and on the required communication skills all produce improvements but monitoring and audit of procedures is feasible and essential to sustain the changes.

In the oil industry, there are wide variations in the standards of practice, and often room for improvements.

1. **Examples of good handover practice in medicine**

Dr Lee Hudson (ST6 trainee in paediatrics and neonatal intensive care) described the handover system in the Neonatal intensive care unit at the Elizabeth Garrett Anderson Hospital (UCLH NHS Foundation Trust). He described a bedside summary, witnessed by the parents of the child, with a typed handover sheet of demographic and clinical information, which was revised between each round and dated and timed to replace preceding versions, all electronically stored on a central server. This process meets many of the handover criteria, but is clearly time consuming and may not be directly transferable from an ITU –like setting to a general medical take population.

Dr Alan Fletcher, of Sheffield Teaching Hospitals, described how he had revolutionised the handover of specific tasks to new shifts of trainees. The process is based on the hospital intranet and is password protected. It is in effect a message board and task management system. It allows delegation of tasks by the senior doctors, and facilitates prioritisation. It is archived and activity generates an audit trail. Almost 18,000 unique message tasks have been posted and in over 90% there is evidence of the task completion.

1. **Small group discussion summaries**

The workshop participants split into smaller groups to discuss specific topics.

### Patient and participants: do we recognise who should hand over and what and who should be handed over?

It was agreed that handover should be multidisciplinary – doctors, nurses, site managers, are all potential participants, though the exact mix will depend upon roles and responsibilities at various sites. There was no certainty about what information should be handed over. This needs to be agreed, and for which people. It was argued some information will be useful for all; other bits of information may be only of interest within certain professional groups. Information should be considered not solely in terms of clinical information (relating individual patients) but also system information and resources (eg. ITU bed availability).

It was agreed that systems which recognise of different ‘risk categories’ of patients (for example red, amber, green or MEWS scoring) may be useful in handover processes. Patients are often very widely distributed over a site and this is a major obstacle to achieving bedside handover of high-risk patients in general medicine. SBAR methodology may help to ensure that context is transferred along with tasks.

### What are the System Drivers?

This group discussed what will make handover happen and be adopted as standard practice. It was agreed that it is essential to have standards and guidelines which make it make it clear what good handover is. This is not simply about transferring tasks, but primarily imparting understanding, context and clinical responsibility.

Good handover will happen when its value is recognised, and the current requirement for an evidence base to medical practice means that the evidence for that value must be gathered, presented and disseminated widely both as data and stories. In addition, role models, demonstrating examples of the effects of good practice, should be publicised. The RCP will have a vital role here in setting standards of practice and endorsing the handover of responsibility as part of good medical practice and professionalism.

Two other things are seen as critically important in making handover happen. Firstly, the process should be easy and systems and tools (IT and proformas) should work well and facilitate, rather than hinder. Secondly, handover and its monitoring and audit, should be considered for incorporation into quality accounting, ie. measures of organisational performance.

###  What might be the barriers to implementation?

In many ways these are the opposite of the drivers.

A poor environment will hinder adoption of the process of handover. Therefore physical space, dedicated function/purpose for handover at that time, with proximity to workplace, and freedom from interruptions is mandatory. If this becomes an optional add-on rather than a defined responsibility, with specific allocated time in work and job plans, there will be poor engagement.

Behavioural change may be required: lack of punctuality of participants, and particularly of the leader, is a major disincentive to joining the process if it delays departure and wastes time.

Any financial outlay, eg. for overlapping work time or IT support, is likely to be inhibitory, but if cost savings can be demonstrated or implied from evidence already available, because of improved efficiency and patient safety, it may be justified. The current economic climate cannot be ignored.

### 11. What are the essential processes/methods required to ensure good handover?

Handover should be ‘owned’ by the institution, with the trust accepting responsibility for ensuring that the systems and conditions are in place to allow it to happen (eg. overlapping duty times). This may require rationalisation of shift patterns of different professional groups (doctors and nurses) and will certainly require the provision of an appropriate environment.

There will be a need to define core principles which can be adapted locally, but with a commonality of content, such as that seen in the WHO surgical checklist. A combination of written and face to face verbal handover is likely to be best, and in this era electronic data recording and access must be the way forward.

Education and training will be essential and needs to cover generic and local requirements, the use of specific terminology, how to prioritise patients and work, and training in specific communication techniques and skills. With observation, feedback and coaching on clarity and acknowledgement and confirmation of information received. Monitoring and audit of both the process and the content are key to continued improvement.

**12. Summary**

The results of the survey and the workshop demonstrate that handover is widely recognised as ‘mission critical’ and yet there is enormous variability in reported standards. It is seen as a clinical imperative and activity by the Royal College of Physicians in this area is welcomed. However this is an area in which many individuals, teams and some organisations, such as the Health Foundation, are undertaking work. A lack of leadership and co-ordination seems evident.

While many doctors feel they know what ought to happen, and there has been a lot of work in industry and in medicine, the evidence base for this requires review and collation. There is a requirement for guidance and recommendations on how to carry out effective handover and also how to implement it.

The work involved encompasses several other themes and strands of work already underway in the college, such as patient safety, team and multi-professional working and improved record keeping and communication.

We recommend that the Royal College of Physicians seeks financial support and collaboration for a two stage project which will firstly endeavour to:

1. Review and collate the evidence to support the importance of handover in clinical practice.
2. Be the focus of a national network of those currently researching and working on this topic.
3. Engage a wide range of professionals and organisations in devising recommendations for handover processes and standards.
4. Define key training needs and auditable standards.

A second stage would seek to disseminate the output from stage one, through partnerships with pioneers in pilot projects to establish and validate tool kits for wider implementation.

We ask Council to support the continued work by the Royal College of Physicians in this area.

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