Improving handover of acute orthopaedic admissions

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Abstract

Handover is a crucial part of patient care and is a well recognized cause of patient harm if not performed well. The introduction of full shift working for doctors has placed even more emphasis on this area of patient care. We identified handover of orthopaedic admissions in our unit was substandard. A prospective audit over a one week period including the weekend was undertaken. The Royal College of Surgeons of England guidance on handovers was used as minimum criteria and we also included criteria essential for handover of orthopaedic patients. This initial audit revealed a poor standard of handover. 21 patients were included and in particular patient location (57%), responsible consultant (14%), and pending investigations (29%) were poorly performed. In addition two patient safety incidents were noted, including one admission that was not handed over. To improve the handover we created a trauma specific handover proforma. We then conducted a re-audit again over a one week period including the weekend with the proforma in use. There was a notable improvement, 17 patients were included and only 3 criteria fell below 80%. We presented our findings at the local audit meeting where the results were discussed with all members of the trauma team. We suggested that an electronic proforma, accessible from multiple computers within the hospital may improve handover further. This was created in conjunction with the IT department. Once again we reaudited handover over a one week period including the weekend with the electronic proforma in use. 23 patients were included and a further improvement was noted; only one criterion fell below 95%. In conclusion handover of acute fracture admissions within the unit has undoubtedly improved. The electronic proforma tool was a simple, cost effective, and accurate method of improving handover.

Problem

Handover is now a crucial part of patient care and is a well recognized cause of patient harm if not performed well [1].

The British Medical Association (BMA), the National Patient Safety Agency (NPSA), and the General Medical Council (GMC) [2] have all recognized and highlighted the essential nature of accurate and effective handover. This has further increased in significance as a result of recent changes within medical practice, in particular the introduction of full shift working. In 2007 The Royal College of Surgeons of England produced guidance on handovers, specifically for surgical teams [3].

Background

The Ulster Hospital in Dundonald is one of the busiest district general hospitals within Northern Ireland. There is an acute and elective general surgical unit as well as a busy Orthopaedic Trauma unit. Seven general surgical and two trauma Senior House Officers (SHOs, comprising Foundation year 2 doctors and core surgical trainees) combine on the rota to cover both specialties out of hours. This ‘cross cover’ has led to difficulties for SHOs covering two teams overnight and subsequently handing over care of acute admissions to different teams at a similar time each morning.

There are also two other important handovers during each working day. One between the day shift (8am-5pm) SHO to the long-day SHO (5pm-9pm) and again to the night shift SHO (9pm-8am).

In addition to this some of SHOs covering Trauma had very limited experience of the specialty as their day to day work was in General Surgery. Therefore determining what information was of clinical importance for efficient handover of Trauma admissions was occasionally problematic for these less experienced trainees.

This combination of circumstances led to an informal handover of orthopaedic admissions, often at a substandard level, and commonly patients were not handed over at all. This was undoubtedly a systemic risk to patients and our junior staff and so we aimed to improve the handover of these admissions by creating a proforma tool. This we hoped would not only improve handover and therefore patient safety but give SHO’s a template to work from regarding important elements of the patient history or examination relevant to Trauma. In addition recording the handover would also provide valuable data for further audit [4].

Baseline measurement

As members of the Trauma team we had concerns about the standard of handover from the out of hours cover and its possible impact on patient care. We undertook a prospective audit over a one week period including handover over the weekend. We used the Royal College of Surgeons of England guidance regarding safe handovers as minimum criteria. We also included criteria which we felt was specific and important for acute fracture admissions. The minimum requirements included were; name, date of birth, patient location, responsible consultant, current diagnosis, results, and pending investigations. Criteria we also included were as follows; patient Mini-Mental State Examination (MMSE) and baseline mobility, urgency and frequency of review, management plan, operational issues (e.g. relevant medications such as warfarin/clopidogrel), and any outstanding tasks (e.g.
An electronic version of the proforma was suggested, and trauma coordinators about the best way to further improve the meeting. We discussed as a team including consultants, junior staff, and trauma coordinators and expected standard of handover and therefore improve patient care and reduce risk. With the introduction of full shift work, the importance of effective handover has undoubtedly increased. We must therefore ensure that this vital part of providing the best possible care for patients is not overlooked.

Creating the proforma also helped SHOs less familiar with Trauma admissions quickly identify important priorities for handover of acute admissions. It also provided an enhanced training opportunity for cross covering SHOs who felt better prepared to present the patient information. No proforma or online system can ever fully replace good communication between professionals. However we have highlighted how some relatively simple adjuncts electronic or otherwise can significantly improve handover and therefore improve patient care and reduce risk. With the introduction of full shift work, the importance of effective handover has undoubtedly increased. We must therefore ensure that this vital part of providing the best possible care for patients is not overlooked.

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handover tool has proven to be a simple, cost effective, and accurate method of improving communication in a complex out of hours system. It is also a highly reproducible quality improvement project that would be applicable to many teams in many specialties.

References


Declaration of interests

Nothing to declare.

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Ethical approval

Ethical approval was not sought for this project, according to local policy within the South Eastern Trust this work met the criteria for operational improvements exempt from ethics review. This work was primarily intended to improve local care and not provide detailed knowledge in the field of inquiry. This works meets the criterion as handover is a universally accepted part of patient care and we simply evaluated improvements in handover as a result of introduction of paper and electronic proforma.