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Investigating medical handover practice:

A process evaluation of a new initiative from an acute setting.

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Executive Summary

Background

Since October 2011, Grantham and District Hospital has utilised a morning handover within their Emergency Assessment Unit (EAU). In 2013, the opportunity was taken to enhance the traditional handover model in order to incorporate medical training, guideline and bundle reminders and safety incident reporting to improve patient safety. The University of Lincoln was commissioned to evaluate the feasibility and impact of the above new model of morning handover.

Aim

- To explore the experiences of those who attend the handover and perspectives of those involved with its delivery and medical education.

- To inform Grantham and District Hospital and the wider medical community of the potential feasibility, benefits and drawbacks of an innovative approach to the delivery of morning handover.

Methods

- Questionnaire data distributed to fourteen junior and middle grade doctors attending the handover were analysed.

- Four in-depth interviews were conducted with consultants involved with the delivery of the handover and key stakeholders in postgraduate education.

- Three focus groups were conducted with staff who attended the handover; comprising middle grade doctors, junior doctors and senior nurses.

Results

Questionnaire data revealed the most common perceived advantage of the handover was the ability to discuss patient care, whilst the overriding negative aspect was its time consuming nature. Interview and focus group participants either considered the hypothetical theory behind the new model of handover or provided their views and experiences of the model in practice. Although the data was analysed separately, participants highlighted similar themes throughout their discussions. These included; purpose and focus, multiprofessional attendance, leadership and management, incorporating training and educational elements, barriers and implications, and outcomes and the future. Key stakeholders in medical education identified potential advantages of incorporating training into a handover as improving decision making and enhancing clinical aspects, with participants who attended the handover noting particular value of clinical reminders to complete care bundles. However, all participants considered the barriers of this implementation to include; time constraints, delays in patient care and displacing clinical safety, and the potential negative effect on the mindset of staff.

Conclusion

The foremost principle of a handover is to ensure that there is a robust clinical handover of continuous patient care from the outgoing to the incoming team. Results from the handover evaluation indicated that the EAU morning handover was overall valued by staff members, with particular commendation of the nursing input. While there was noted potential to augment this process with unique educational elements, it is essential that the delivery and content is carefully managed and structured in a manner which does not detract from the primary focus of a clinical handover, and compromise clinical decision making. It is suggested that the EAU morning handover may benefit from having a more consistent time bound structure, allowing the team to have a clear focus on managing and directing optimal patient care and concerns, whilst providing relevant educational aspects which improve patient safety and quality of care. It is also important to be mindful of the specific needs of the department for which any chosen model of handover is adopted. Once a unified departmental approach has been agreed, it is recommended that further regular evaluation be conducted in order to monitor the evolving process and sustain any improvements made.

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1.0 INTRODUCTION

1.1 Background

The General Medical Council (2015) propose that handover of patient care should provide continuity of care and maximise the learning opportunities within clinical practice. In addition, there is also increased recognition that the handover process plays a key role in securing continuity, quality and safety in patient care (Jenkin, Abelson-Mitchell & Cooper, 2007) and that enhanced training and systems for effective, safe and standardised handovers are of paramount importance when maintaining high standards and efficiency of clinical care (Royal College of Physicians, 2011; British Medical Association, 2004).

The information transfer involved in a handover has been suggested to occur at the point of a shift change or a clinician's break, when a patient is transferred between wards or hospitals, and during admission, referral or discharge (Manser & Foster, 2011). Whilst achieving an effective handover is considered to be the duty of every doctor, it is also proposed that this is a skill which needs to be taught, learned, practised and developed by all those who attend handover meetings (Royal College of Surgeons of England, 2007).

Guidance from the Royal College of Physicians *acute care toolkit* advises that a good handover; identifies unstable patients, ensures that clinical team changes are not detrimental to the quality of healthcare, improves communication and the efficiency of patient management and patient experience, and is a teaching and learning opportunity for those in training (Royal College of Physicians, 2011). However, publications are increasingly reporting that across different healthcare settings, current handover processes are highly variable and potentially unreliable (Manser & Foster, 2011). Patient handover has also been internationally recognised as a high-risk area for patient safety (Manser & Foster, 2011), and a time point at which errors and patient harm have the opportunity to be prevented (Royal College of Physicians, 2011; LaMantia et al, 2010; Arora & Johnsen, 2006). It is therefore essential to investigate ways in which effective handover practice can be achieved.

1.1.1 Case Study: Handover within the Emergency Assessment Unit (EAU) at Grantham and District Hospital

In 2011, the East Midlands Deanery recommended the implementation of a clinical handover within the Emergency Assessment Unit (EAU) at Grantham and District Hospital. The department has since developed and implemented three handovers a day; two of which are consultant led (at 9:00 and 17:00), and a further final handover at 21:00. The original format of the 9:00 morning handover developed in October 2011, involved on-call and day time EAU doctors and comprised a quick presentation of sick patients admitted and jobs to be completed. However, following the Francis Report (2013) and the placement of United Lincolnshire Hospitals Trust (ULHT) into special measures in February 2013 (following higher than average mortality rates), the opportunity was taken to utilise the

morning handover in order to improve medical training and change the culture towards patient safety, risk assessment, and safety reporting.

The Acute Medical Task Force also recommends the development of a supportive culture of education, training, self-improvement and teamwork, which is founded on the principles of patient safety and high-quality clinical care (Royal College of Physicians, 2007). However, it is acknowledged that training opportunities may be less readily available than in previous years, with 52% of consultants reporting a decrease in the time available to spend with trainees between 2007 and 2010 (Federation of the Royal Colleges of Physicians of the UK, 2011).

This new model of handover is therefore currently used as an opportunity to utilise an educational tool and promote a more detailed approach, including more specific patient histories and presentations of medical care. The handover is consultant led and attended by middle grade and junior doctors. A more multidisciplinary approach was also added to the handover in November 2013, with the inclusion of the attendance of a senior nurse. The ideal of this extended handover is to allow for the prioritisation of tasks for the subsequent ward round (e.g. by instructing urgent specialist reviews and scans), provide guideline reminders, review appropriate risk assessment procedures, and allow for the reporting any of safety incidents overnight. The handovers are recorded using a standardised form in accordance with the Royal College of Physicians' guidelines.

The rationale for allowing an extended period of time to deliver this handover is to:

- Improve the implementation of evidence based guidelines in practice.
- Reinforce the culture of urgently acting on safety problems.
- Improve the learning experiences within clinical practice.
- Provide reminders of the implementation of relevant care bundles.
- Encourage risk assessments for conditions which could be discharged early.
- Review critical incidents occurring during the previous night shift.
- Support the implementation of new Trust strategies and policies.
- Review available medical staffing and division of duties for the day.

2.0 METHODOLOGY

This process evaluation utilised mixed methods in order to investigate the feasibility and potential benefits and drawbacks of a new model of morning handover within an acute Emergency Assessment Unit (EAU).

2.1 Ethical Approval

An application was made on 9th May 2014 to the Research Ethics Committee within the School of Health and Social Care at the University of Lincoln. This was approved on 21st May 2014. Copies of the application and approval letter are included at Appendix 1.

Approval was also sought from the Deputy Director of Operations at Grantham District Hospital for departmental authorisation to carry out the evaluation. A copy of the approval letter is included at Appendix 2.

2.2 Objectives

The objectives of the evaluation were:

- To analyse quantitative questionnaire data produced from a survey designed to investigate the opinions of junior and middle grade doctors who attend the weekday morning handover at Grantham EAU.

- To conduct qualitative interviews and focus groups to further explore the views and experiences of those involved in the new model of handover.

- To consider whether the implementation of the new model had provided any indication of a more effective handover and the extent to which it may have potential impact on clinical practice.

2.3 Methods

2.3.1 Internally Distributed Questionnaire

A survey was distributed to junior and middle grade doctors who attend the EAU morning handover on weekdays in order to initially explore their views and experiences of the handover process (included at appendix 8). The questionnaire explained that the department had harnessed teaching into the 9:00 medical handover, in order to promote patient safety. Participants were asked to provide their thoughts on the handover, in order to provide evaluation and development of the process. A total of 14 responses were received. It is estimated that around 20 questionnaires were distributed in January 2014. Quantitative data were analysed using SPSS.

2.3.2 In-depth Interviews and Focus Groups

Designing the topic guides

A semi-structured topic guide was developed for the qualitative interviews and focus groups with staff members who attend the EAU morning handover and key stakeholders in postgraduate medical education at Grantham Hospital. The topic guide was designed to explore in depth their views and experiences of engaging with the morning handover, or

their opinions from a strategic training and management perspective. The tool was therefore adapted slightly to account for whether or not the participant physically attended the handover. The topic guide was also informed by preliminary results from the questionnaire; however it was noted that this was only distributed to junior and middle grade doctors.

Respondents were also encouraged to elaborate on any issues of particular importance or relevance to the study. A copy of the topic guide is included at Appendix 7.

Collecting the Qualitative Data

Interviews were conducted with:

- Two medical consultants with past and present experience of attending and leading the EAU morning handover.

- Two key stakeholders in Postgraduate Medical Education (PGME) at Grantham District Hospital (to gain insight into a strategic training and management perspective).

Letters of invitation were sent out to prospective participants, which instructed them to contact a member of the research team to arrange a convenient appointment should they were willing to take part (included at appendix 3). A member of the team visited the hospital in order to conduct the four interviews, between 1st July and 11th July 2014. Interviews lasted between 30 minutes to 45 minutes and all were digitally recorded and transcribed.

Three separate Focus Groups were conducted with:

- Middle Grade Doctors (n=5) who attend the morning handover at Grantham EAU
- Junior Doctors (n=11) who attend the morning handover at Grantham EAU
- Senior Nurses (n=3) who attend the morning handover at Grantham EAU

Posters advertising the study were displayed within Grantham EAU department and included an invitation to prospective participants to attend the separately arranged focus groups (included at appendix 4). The number of participants who were able to take part in the study was therefore dependent upon their availability on the particular day of the organised focus group. The research team visited Grantham District Hospital in order to conduct the three individual focus groups, between 24th June 2014 and 4th July 2014. All the focus groups took place on the premises of Grantham Hospital in a private room away from the immediate work environment. Focus groups lasted between 45 minutes to one hour and all were digitally recorded and transcribed.

All participants were given an information sheet (included at Appendix 5) and reassured that participation was voluntary and that anything discussed within the interviews or focus groups would be anonymised. Once participants were happy with the process and had the opportunity to ask any questions, they were given a consent form to sign, which also

indicated their consent to be digitally recorded for the purpose of the study (included at Appendix 6).

For both the focus groups and interviews, no personal information appeared on any of the transcripts, with only unique ID codes used. The transcripts were stored on a password protected computer at the University of Lincoln and printed versions were stored in a locked filing cabinet on the university premises.

Interviews were analysed using thematic framework analysis (Ritchie and Spencer 1994). The key stages of analysis included; familiarisation of the data, identifying a thematic framework, indexing through applying the framework to the data, charting the data, and mapping and interpretation (Ritchie and Spencer 1994).

3.0 RESULTS

The EAU morning handover at Grantham and District Hospital is attended by the on call medical team and the EAU ward team. The opinions and experiences of those who attend the EAU morning handover were explored via questionnaires, interviews and focus group, and are detailed below.

3.1 Questionnaire Results

A questionnaire was distributed to all middle grade and junior doctors who attend the morning handover within the EAU at Grantham and District hospital and was returned by 14 participants. It is not known how many potential participants initially received the questionnaire. The grade of doctor which the sample represented included: eight core or trust doctors, two middle grade doctors, two foundation doctors, one locum senior house officer (SHO) and one doctor whose grade was unknown.

The questionnaire was designed by the department in order to evaluate and develop the handover process. Participants were asked to provide their thoughts on the handover, including their views and experiences of their attendance. Questions included considerations of the handover in terms of safety, relevance, efficiency, clinical guidelines, anxiety, length, advantages, disadvantages, and areas of change. Quantitative survey data were analysed using SPSS.

Questionnaire Data revealed that:

- All participants believed that reported safety matters were always taken seriously and that handovers make clinical care safer.

- The majority of participants (79%) considered matters discussed at handover to be almost always relevant and found it helpful to learn about clinical guidelines and care bundles.

- The majority of participants (79%) reported a preference to discussing safety incidents verbally rather than filling in forms. Free text responses revealed that participants preferred such a method of safety reporting due to the perceived lengthy and time consuming process of filling in the appropriate forms.

- Half of participants (50%) considered the handover process was too long on most days, whilst 29% disagreed with this statement and 21% were undecided.

- A minority (29%) reported presenting at the handover to be a source of anxiety. Free text highlighted that reasons for such anxiety included general anxiety of speaking to an audience, uncertainty of diagnosis, tiredness, and inability to remember precise details.

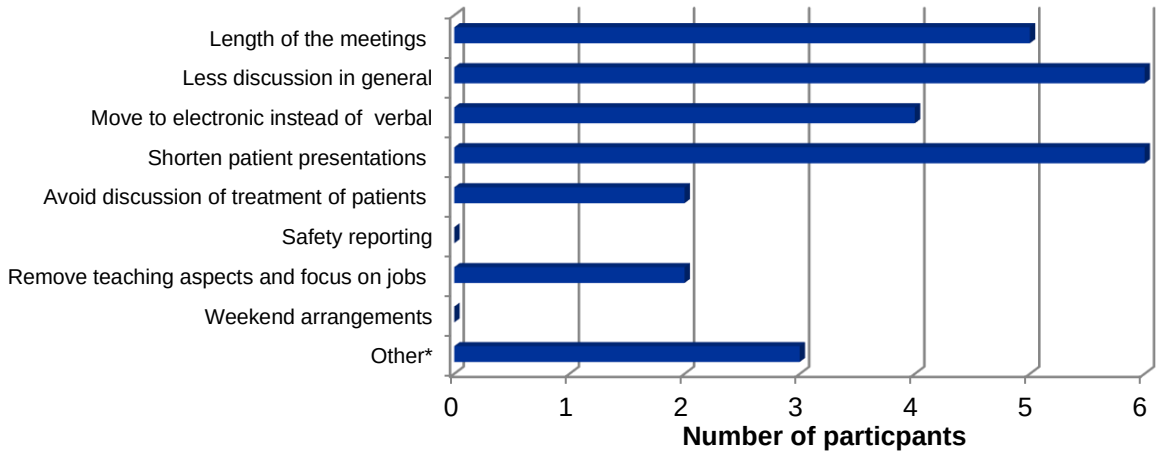
- There was a mixed view regarding whether a more detailed handover made the morning rounds easier and more efficient with 57% in agreement, 29% undecided and 14% disagreeing with the statement.

- Free text revealed that the most common perceived advantage of the handover was the ability to discuss patient care, whilst the overriding negative aspect was its time consuming nature.

- Half of the participants (50%) reported that in the past two years, they had worked in other hospitals or departments where handovers were used. Three of these participants felt that in comparison the morning handover at Grantham EAU was better and four participants felt that it was about the same.

Participants were asked to consider which elements of the morning handover that they would change if they were given the opportunity. They were provided with a selection of nine elements to choose from and were asked to tick all which applied. This included the opportunity for participants to indicate their own suggestions through the use of an ‘other’ option. Figure 1 illustrates these results and details the most popular areas of change as; less discussion in general, the shortening of patient presentations, and the length of the meetings.

Figure 1: Histogram detailing what participants would change about the morning handover



**Other = combination of electronic and verbal / focus on the important things (i.e sick patients, need to know basis) / punctuality.*

3.2 Content analysis of perceived advantages and disadvantages

Within the questionnaire, participants were also given the opportunity to detail what they thought worked well in the Grantham morning handover. Themes of participants' free text responses to the open ended question are detailed below in table 1, including the percentage of instances each theme was mentioned and examples. The most popular consideration was the benefit of being able to discuss patients and patient care.

Table 1: Participants' perceived advantages of the morning handover

Theme	Percentage	Examples
Discussion of patients and patient care	36%	Pertinent points about patient care are discussed.
Communication between teams	29%	Knowing the on call team
Jobs to be actioned and events overnight	29%	You come to know what happens overnight and what jobs need to be done.

Teaching elements	22%	Immediate feedback, constructive criticism of my patients
Safety	15%	Issues related to patient care/ safety
Other (including development of presentation skills, filling in paperwork, requesting x-rays)	22%	I have personally found an improvement in my ability to speak to a group of people.

Participants were also asked to consider whether they felt that the morning medical handover had any disadvantages. Themes of these responses are shown below in table 2, including the percentage of instances each theme was mentioned with examples. The overriding negative aspect which participants detailed was the time consuming nature of the meeting.

Table 2: Participants' perceived disadvantages of the morning handover

Theme	Percentage	Examples
Time consuming	43%	It is easy to get side tracked into interesting but time consuming discussions
Relevance	29%	Issues not relating directly to patient management take up too much time
Tired night team	15%	Night team is usually exhausted and would want to leave to have a good rest
Other (including too much detail and punctuality)	15%	Sometimes punctuality may be a problem

3.3 Report on the qualitative interviews

3.3.1 Postgraduate Medical Education Staff Members

In order to gain a strategic training and management perspective and understanding of the handover process, in-depth interviews were conducted with two key stakeholders in Postgraduate Medical Education (PGME) at Grantham and District Hospital. As the EAU department has a strong interest in educational aspects of handovers, it was important to capture these views. Themes of data were grouped in order to produce these results
The evaluation team analysed the interviews separately and subsequently identified five overarching themes which were present across both interviews. These are shown below:

- Purpose and focus of a handover
- Leadership and management of a handover
- Potential advantages of incorporating an educational element
- Potential barriers and implications of incorporating an educational element
- Outcomes and the future

Participants' comments and discussions were largely of a hypothetical nature, due to their absence at the particular handover in question, and subsequent lack of knowledge of specific details. Considerations were made of the potential, ideal and theory behind this particular EAU morning handover.

Purpose and focus of a handover

One theme which was particularly prevalent throughout the interviews was participants' considerations of the purpose of a handover, including what they felt should be focused on and what the priorities should be within this setting. Participants highlighted the essential nature of the clinical aspect of a handover, whilst noting the desirable presence of an educational element. For example one participant commented:

> "*I think the first and foremost principle of handover is that we have a robust clinical handover. So we need to make sure that the appropriate patients are handed over between shifts on the EAU in a way that allows the incoming team to pick up problems, to make sure they know what tasks need to be done and which patients need to be monitored etc. So although it is desirable to have an educational element on top of that, I would not regard that as a primary role."* (PGME)

Participants also discussed that they believed handovers should be patient focused, with integrated continuity of care rather than fragmented care. The opportunity to prioritise the care of patients and subsequently delegate work appropriately was acknowledged as an advantage which could be associated with having a properly structured handover. One participant explained:

> *"Traditionally doctors just go to the ward and start from bed one to bed twelve. And if the sickest patient was in bed twelve, you would get to them last. If you have a proper handover, you will realise that twelve is the sickest and needs prioritising. Also you can distribute the work appropriately. You can delegate".* (PGME)

The opportunity to prioritise patient care is therefore suggested to be associated with promoting clinical safety and quality. These elements were further discussed by participants as key contributors to the overriding aim of a handover, particularly noting the essential nature of effective communication between various teams and secondary nature of educational aspects. One participant also gave his support for handovers which promote a multiprofessional approach, and explained his reasons for why bringing together all those involved in patient care is advantageous, particularly noting the value of the nursing input:

> *"The modern approach to handover is a multiprofessional approach, where all the professions who are involved in patient care should actually get together in terms of transferring information to the other. There are times when if it is just doctor to doctor, we just tend to concentrate on the very minute aspects. Doctors only tend to spend thirty minutes with a patient unless it is a complex case. But the nurse is with the patient 24/7 and they may have noticed changes and subtle details which would be relevant to the care of the patient and the input of the nurse is extremely important."* (PGME)

However, whilst considering the target audience of the morning handover and which staff members should be present, another participant commented on whether the information discussed at the morning handover would be relevant for foundation doctors:

> *"They really don't need to be there for the EAU handover. They discuss different sets of patients. The foundation handover is about the in-patients on the wards. People they've been looking at overnight. The admissions handover is with more senior grades of doctor at the EAU meeting. So if the foundation doctors were to go to the EAU handover, their argument has been that they would be twiddling their thumbs listening to patients that have been coming in overnight."* (PGME)

Participants clearly emphasised the belief that the overriding aim and purpose of a handover should be a robust clinical handover, which is patient focused and promotes safety and quality. Whilst this platform was acknowledged as an opportunity for education, this role was considered to be one which was secondary to the main focus. A multiprofessional approach to handovers was also promoted and considerations of which staff members should attend the handovers were also made. However, participants did not have knowledge of who exactly attended the handover in its current format.

Leadership and management of a handover

It was evident from the participant interviews that the leadership and management of the meeting were perceived to be a strong determinant of an effective handover. With specific regard to incorporating education into the handover process, these factors were considered by participants to be crucial for its success. These elements were interpreted as being particularly important in order to avoid a potentially negative outcome of turning the meeting into either a seminar or an inquest. It was suggested that the handover process needed to be carefully managed and balanced in order to implement teaching without undermining the confidence of the doctors. This was further reiterated by participants contemplating the practical barriers of incorporating learning into an open forum, where there are many

different professionals present who may have a variety of behaviours and preferences for ways of learning. For example participants commented:

> *"It depends on how it is handled and how you incorporate the educational aspects of it. You could lose the focus of the meeting and turn it into a seminar. I think it needs careful handling so that the primary focus isn't lost…I think there is also potentially a parallel issue with the danger of it turning into an inquest about the events overnight and again it needs careful handling. If we are looking at the psychological aspects of how junior doctors may feel, the outgoing ones may feel that they are under a microscope or spotlight of how they have performed overnight and it could turn into a more critical meeting."* (PGME)

> *"Extroverts may be happy with the situation but introverts may feel threatened. Some people may perceive the critical questions as being personally criticised… Some people can take it personally and become defensive rather than see it as an education opportunity. Some may feel harassed. So it is very important for us to get the right tool addressing those issues. We need to be mindful of that. That is where leadership of the handover comes in".* (PGME)

It was also suggested that there would be a need to manage the expectations of the meeting, so that those who attended understood and appreciated the importance and purpose of the morning handover. In addition to integrating the expectation of education into the morning handover for those learning, it was also noted as being an important expectation for those leading the handover. However, it was also highlighted that it was important to liaise with trainees regarding the format of the learning environment. One participant explained that:

> *"It should be consistent and therefore I would be keen that whoever is leading the meeting feels obliged to provide an educational element… It has to be integrated into the expectation of the meeting. Again we try to be very responsive. I wouldn't want to impose this on the trainees but work with them. It's about deciding with them how best they can learn from this experience".* (PGME)

In addition, the leadership was also interpreted as being important in order to determine the format and structure of the meeting, particularly when managing the length of the process. One participant commented that the appropriate length of time for a handover was dependent upon the department and that for a smaller department this would usually be about half an hour. It was noted that clear leadership should determine the style and content of any given handover:

> *"You do not necessarily need to discuss every patient in detail. The lead should identify one or two things. Some would be business like, some in depth, some purely educational. That's where the leadership comes in.* (PGME)

This flexibility in the structure of the handover was reiterated by another participant who explained that while it was felt to be important for it to be well time managed; this did not necessarily result in the need for the meeting to then follow a rigid format. However, this participant also commented that it was important for the education being delivered to be of good quality and for the individual leading the handover to be aware of the educational

needs of what they were aiming to deliver. One participant also explained that while the structure cannot be too specific as each handover may change on a daily basis, it can be helpful to utilise an agenda for the meeting:

> "*It can be useful to have an agenda. Initially to give figures like number of overnight admissions. These are the new patients, what are their names and diagnosis and what has been done. Then move on to deteriorating patients. Then lastly look critically at some of the issues that have arisen.*" (PGME)

It was noted by participants that careful management and effective leadership was essential if education was to be successfully incorporated into a handover, by integrating it into the expectation of the meeting, whilst ensuring that the key focus was not lost. This included the suggestion that if the department decides on the inclusion of education, the leader should be obligated to provide an educational element. However, aspects such as different leadership and teaching styles could potentially create challenges for providing training for those who lead the handover. Effective leadership and management of the handover were also deemed necessary in order to promote teaching which empowers rather than undermines the confidence of the doctors, and for managing the different preferences of learning styles for those who attend a given handover. It was also suggested that the structure of the handover could be flexible and adapted to suit the individual needs of the department, as one size does not fit all. However, the importance of effective leadership of the meeting in this context was further emphasised.

Potential advantages of incorporating an educational element

During the participant interviews, considerations were made about the possible utility of teaching and learning within a handover setting. One participant commented on the potential rationale behind altering the training at Grantham EAU:

> *"If we get the training right we are more likely to attract high calibre trainees and good doctors to the region".* (PGME)

Whilst an educational aspect was not regarded as a primary role for handovers, it was noted that there was potential for incorporating such an element. For example participants stated that:

> *"It has potential to be a very good venue for learning because you have trainee doctors all together in the same room discussing cases and there is the potential for expanding upon that simple handing over information."* (PGME)

> *"It is an opportunity for education, which is very important. From the variety of cases admitted overnight or discussed the incoming team in an educational manner can critically appraise the patient care. We can then stimulate them to go back and get like a refresher. He can go and look at his books or read a journal and see if opinions given yesterday were contrary to what has been published".* (PGME)

When considering the unique opportunity for education within a handover setting, participants also offered reasoning behind why this may be beneficial and gave examples of the context and type of learning which may be delivered. For example participants explained that:

> *"To improve the decision making process which is very critical for us as doctors. We have got to be able to see the information and put all the pieces together and come up with a diagnosis. Or what a probable diagnosis might be and initiate investigations to try and illuminate one after the other".* (PGME)

> *"If you have been admitting cases overnight then the time when you are most likely to recall those cases potentially and learn from those cases is if you get feedback within a few hours. So you admit a case overnight and it's discussed at a meeting. Then that maybe a time when they are more receptive to that".* (PGME)

One participant also noted that if education and learning elements were effectively incorporated into the handover, you could potentially gain the added advantage of enhancing the clinical aspects of the meeting:

> *"Equally I think if this is done well, you can augment and enhance the clinical aspects of a meeting. So given that it's not just about safety, it's about quality, which obviously interrelates".* (PGME)

It was identified that the correct training could potentially result in attracting high calibre trainees and doctors. Although the inclusion of training and education within a handover setting was not regarded by participants as a primary role or focus of a handover, incorporating such elements could have potential benefits, including stimulating attendees and critically appraising patient care, improving doctors' decision making process and enhancing clinical aspects.

Potential barriers and implications of incorporating an educational element

This particular theme considered issues which participants felt needed to be addressed when contemplating the reality of incorporating an educational element into the morning handover. Barriers which were noted included the time constraints of a handover, the fatigue of doctors, issues of going beyond working hours, and pressing priorities such as finishing or commencing a shift. These issues were discussed by participants who considered what could happen if the handover was stretched into a longer meeting. For example:

> *"There is a limited time to have a meeting and the outgoing team has been on duty several hours. They are going to be a little tired, perhaps eager to get home. There is a danger if the meeting becomes prolonged, you will disenchant the doctors who are leaving because they are keen to go. Because you are working to a time directive, you clearly can't go beyond a certain time".* (PGME)

Conversely, the consequences which may arise if the meeting was delivered in the time frame available was also considered, including displacing clinical safety and quality in order to introduce an education element. One participant contemplated what could potentially be the worst case scenario for a handover incorporating educational elements and the implications of safety for such a scenario:

> *"Worst case scenario is that you have a sprawling meeting that grossly overruns, in which case you violate the working time directive. You have tired and irritable doctors and also the jobs that need to be done because there is a time pressure in the morning to get the jobs that need to be done and those jobs get delayed because there is a delay caused by the meeting".* (PGME)

As augmenting the morning handover with educational elements was perceived to have the potential to enhance the attending doctors' training, one participant considered whether it would therefore be an advantage to have the widest audience possible present. However, the practical barriers of changing the shift patterns of surgical and medical trainees and bringing them into alignment (with surgeons typically starting earlier than medics) were acknowledged.

> *"Should we disrupt the foundation doctor current arrangements so that they can attend the handover meeting at 9.00 and benefit from the education that happens? My answer to that is that I don't want to disrupt a system that works at the moment until I'm assured that the education is of such value, quality and relevance."* (PGME)

The same participant then further explained a reluctance to change the current system of working shift patterns. These included the potential dangers of changing a system which works well, resistance to change from the feedback given by doctors, and disengagement due to varying educational needs and relevance. For example:

> *"One of the things that we strongly emphasise from an educational point of view is that each training grade and each speciality has its own curriculum and training requirements and one size does not fit all. So the idea that you have a big meeting which covers everything from surgery to medicine actually I don't think it would work. And it wouldn't fit the educationalists view of how you should be delivering the teaching".* (PGME)

Whilst participants acknowledged the potential benefits of incorporating educational elements into a handover, they were also mindful of any potential barriers and implications which may hinder the success of such an implementation. This led participants to recognise the limited time constraints of a handover, the associated barriers of an extended handover, the subsequent delays in patient care and the potential negative effect on the mindset of those who attend the meeting. On the other hand, the disadvantage of integrating training into the available time frame, thus potentially displacing clinical safety and quality was also considered. Discussions of who should attend the morning handover and the issues associated with changing shift patterns also occurred.

Outcomes and the future

Throughout this theme participants made comments about what outcomes they would ideally like to see and what they hoped for the future of the EAU morning handover. This included promoting a multiprofessional dimension, measuring the quality of the handover, adhering to the overriding aim of the handover and sustaining any improvements made. For example:

> *"What I want to see is some evidence that this is working and proving valuable. One of my particular interests is in measuring quality. It is very difficult to do… Whether it's just as simple as asking people to rate the experience. Asking trainees at monthly intervals, 'how did you find the handover'?...I'd just like to be reassured that people are finding it useful and that it's not getting in the way of the clinical stuff. It's about having that reassurance. That it's not affecting their working hours. That they are not getting disgruntled. And also that it's not affecting the clinical quality of the handover."* (PGME)

> *"I'm hoping…we will be able to critically look at what they are doing and see if it conforms with the Royal College standards and see if what they currently do can be improved and if there are limitations what can we do. If there are new techniques or ideas we need to implement to enhance the quality of the handover. Hopefully then they introduce a new system and look at it again down the line to make sure those improvements are sustained."* (PGME)

Participants highlighted the essential nature of considering value and quality of a handover and critically appraising the extent to which it falls in line with the standards set by official bodies. However, it was also acknowledged that measuring such factors is somewhat difficult. Nonetheless, participants reiterated that it was important to consider the utility of the handover, in order to ensure a main focus on clinical quality, adherence to the working time directive, an awareness of the mind-set of attendees, and attention to key sustainable improvements.

3.3.2 Handover Attending Staff Interviews and Focus Groups

Themes of data were grouped in order to produce the results for the evaluation of the new model of morning handover at Grantham and District Hospital EAU from the views of members of staff attending this particular handover. This consisted of the main elements which participants felt to be important when considering their individual experience of attending the handover, factors which may affect their engagement with the handover process, and the potential impact on clinical practice. Participants included consultants who attended individual interviews and middle grade doctors, junior doctors and senior nurses, who attended focus groups. Consultant interviews were carried out in order to capture the individual perspective of the strategic training elements of the handover, and focus groups were conducted to explore the staff experience (within professional groups) of attending the handover.

The evaluation team analysed the data from the interviews and focus groups and subsequently identified six overarching themes present across all groups. These themes are similar to those which emerged from the Postgraduate Medical Education staff member interviews. These included:

- Purpose and focus of the morning handover
- Multiprofessional engagement and teamwork
- Leadership and management of a handover
- Incorporating training and educational elements into the morning handover
- Timing issues, barriers and the structure of the day
- Alternative approaches and the future

Each theme is represented by all three focus groups and two consultant interviews and therefore includes quotes from; Middle Grade Doctors (M.G), Junior Doctors (J.D), Senior Nurses (S.N) and Consultants (C).

Purpose and focus of the morning handover

One theme which was consistent across the focus groups and interviews was participants' consideration of what they thought the role and purpose of a handover should be. Most participants commented on the transition of patient information from the night team to the day team. For example:

> *"I think the major aim of that handover is to ensure that the transition from the on-call night team to the day team highlights any sick patients."* (S.N)

> *"It is essential that we convey the clinical data for each patient that is being managed on the wards. Any critical things that might have happened overnight."* (M.G)

The implementation of an EAU morning handover was largely considered by participants as an advantage, with the process evolving and progress being made since it was first put in place. However, it was noted that there was still room for improvement, with suggestions including a clearer focus and clarity of the role and purpose of the handover. For example one participant explained:

> *"It was a new thing. We just recently started. And people did not entirely know what their role was or what the meeting was all about… We were doing better, we started off rubbish but we were getting there. We could have done better staying more focussed. A patient summary and what he wants us to do. And to keep on educating everybody."* (C)

Some participants discussed that they felt that it was beneficial to have a formal EAU morning handover where there was an expectation to attend. This in turn created certain opportunities, including having access to a range of staff and the familiarisation of team members within a particular shift. For example:

"They're a captive audience, so they are expected to attend, they have to attend and there are very few events where I have access to them and I have to make the most of that." (S.N)

"At least you know who is actually working with you on that shift. You might not see a registrar at all for the whole week if you don't see them at the handover. So you will definitely know who the junior is and who the senior is". (J.D)

It was also noted by one participant that this formal arrangement, which brings different teams together, has helped to improve patient care and safety by handing over the important information:

"Everyone is aware of patient safety. Patients are more at risk out of hours than during working hours. So anything missed, any issues can be picked up at the 9 o'clock handover. So handover is very important". (M.G)

Participants' comments also highlighted varying perspectives and perceptions as to what the purpose of the handover should be and what needs to be concentrated on, particularly with reference to the opportunity to incorporate learning, educational and training elements. For example:

"There was always a handover in my mind and there was a period where they thought let's try and make it more educational but I think peoples' general reaction wasn't that positive. Again over time it's become less educational." (J.D)

"Training is very important but it's the finding the right time and place to do this. It depends on the definition of the goals which we need to achieve with that specific activity. If the goal of the handover is to handover the new patients all the incidents that happened from the night team". (C)

Discussions of the purpose of the handover also led participants to consider the necessity of discussing every patient on the EAU, with some disagreement as to whether or not this occurred. Participants also contemplated the relevance and target audience of the handover for certain members of staff. Throughout the junior doctors' focus group, several participants commented on whether it was necessary and useful for foundation year one doctors (F1) to be present for the meeting, and suggested this may depend upon the particular shift in question. This also seemed to lead to the suggestion that it would only be relevant for some doctors to attend the morning handover if they needed to communicate with EAU staff members, rather than being interpreted as an opportunity to benefit from educational or training elements. For example:

"My opinion is that we should concentrate on the salient or critically ill patients, we don't have to know about every patient on EAU, more so when we're not based on EAU. So just concentrate on the patients from the admissions, and then if a patient is ill overnight we can handover but not to run through everybody on the list." (M.G)

"I think the night time handover to the F1s is more useful because if you have sick people on the wards you're going to need the registrar to see them…Whereas in the mornings it's probably only useful for people on EAU because sometimes if EAU is very busy and the wards are very quiet we can come down and help but otherwise there is not much need to be there". (J.D)

> *"We don't cover EAU as F1s. We might help but we don't technically cover it. So the EAU handover isn't relevant to us other than if we want to have contact with EAU members."(*J.D)

Introducing a formal morning handover in the EAU department was generally considered by participants as beneficial, through bringing different teams together to hand over important information, which in turn improved patient care and safety. However, it was apparent that there were a variety of interpretations as to what the purpose of the handover was or should be. This was evident throughout discussions regarding training, format, content, relevance and target audience.

Multiprofessional engagement and teamwork

Another strong feature throughout the participant interviews and focus groups was the benefit of having a multiprofessional team present at the morning handover. One participant explained who was present at the morning handover (in addition to the ward sister) and the subsequent advantages which this attendance then brought:

> *"It also makes me look more visible as a ward sister so that if they've got any issues that they want to raise they actually know who to come to. I suppose we should just take a step back and just say that the handover is made up of the on call medical team, as well as the consultants and the EAU ward team, so it changes every day. So I can see more of our own doctors and I think it makes them feel more involved as a team".* (S.N)

Having these various teams and a wider audience present at the handover was described by two participants as beneficial in terms of the opportunity to discuss any issues and support each other through potentially difficult situations. For example one participant commented that:

> *"We can bounce ideas off about lots of other things, so it's not just about structuring education; it's about supporting each other through difficult situations as well. You know maybe the junior team have had a poorly patient admitted overnight, they've tried to discuss that area with relatives and it's just gone wrong for whatever reason."* (S.N)

When considering the nursing input into the handover, participants unanimously perceived this to be particularly advantageous. The reasons behind this general consensus included the ability to prioritise and escalate patients and provide a detailed overview of what was happening within the department (with the night team focusing on seriously ill patients). Participants also noted that they viewed the nursing input as an advantage as it offered a different perspective to one which was solely medical. This therefore gave the opportunity to compliment the information given by the medical night team and allow the teams to be aware of a variety of issues, subsequently benefitting the patients. For example participants commented that:

> *"Of course, because they spend the most time with the patients. We just see them for half an hour and disappear. If they tell us that one patient is more unwell than*

the others we do prioritise on the ward and see that patient first and then move on the less sick patients, so it does help yes." (M.G)

"A lot of patients may need attention in a different way. For example who could go home and we could create beds. Though it's not a clinical urgency…that information would only come from nurses. Or somebody's transport fell through and they are going to be staying another day. So not entirely clinically related but management issues." (C)

"It's very good because having the night team doctors handover certain things about the patients then you can get a nursing perspective on a patient saying that they are not quite well. So sometimes even if they don't mention a patient because they forget or were not informed the nurse compliments that information. The nursing input is very important." (C)

One participant explained that the role of the nurse co-ordinator involved having an awareness of the entire ward, which made it pivotal for directing support and staffing. The opportunity to be able to carry out this task from both a medical and nursing perspective was therefore an advantage of having this job role represented at the morning handover. An explanation was also provided for why the nursing input might additionally help to improve the productivity of the ward, through an awareness of the overall situation outside of the unit:

"So it's getting things done and moving the patients along so we're freeing up beds. Whether that is transferring, discharges, you know we've got the overall picture. Because we liaise very closely with the bed managers so we know what's going on outside our doors. And we know what A&E is up to as well." (S.N)

When asked whether the nursing input aided communication within the teams, one participant stated, *"Definitely, they know more than we do".* An explanation for why this may be the case was offered by a participant who stated that:

"I think one of the other benefits is it does provide a bit of a conduit between the patients and the medical team as well, you know nurses are very much patient advocates… You can actually share information that relatives and patients have passed onto the nurses, they may not actually get to the medical team for whatever reason. We don't get many complaints… but the ones that we do tend to revolve around communication and potentially more often medical communication than anything, because they can tend to talk in jargon quite a lot, or very quickly or make assumptions about patients understanding that isn't there." (S.N)

However, whilst the nursing input was perceived to be valued by those who attended the morning handover, an issue which was brought up by one participant was that although *"the whole purpose of that meeting is that everybody shares"*, that this does not necessarily occur consistently:

"I think the team can be very hierarchical, if it's allowed to be. And I think for me the biggest challenge is about everybody being seen as an equal within the team.

Yes we've all got different roles and responsibilities and levels of accountability but we all have the same level of importance within that team as far as I'm concerned and I don't think that's reflected and that comes out in that meeting sometimes." (S.N)

Participants considered the multiprofessional element of the handover to be an advantage in order to promote teamwork and communication, support colleagues, prioritise patient care, and represent both medical and nursing perspectives. However, it was also suggested that the handover didn't always necessarily promote aspects of equality and consistency throughout the process of communicating information between various teams and professions.

Leadership and management of the handover

A theme which was particularly salient across all interviews and focus groups was the discussion of the crucial leadership and management of the handover process. One element that was prevalent was the suggestion that the format of the handover was dependent upon the member of staff who was leading the meeting. This would usually be a consultant within the EAU department. Some participants commented that they therefore considered the focus, detail and style of the morning handover to be somewhat inconsistent. Participants also noted that the time it took to deliver the handover was also dependent upon the leadership and management of the meeting. For example:

"It's consultant dependent. Some want to speed through. Others like to try and go into a bit more depth about conditions that patients have". (J.D)

In further reference to the consultant dependent nature of the handover, one participant noted that it would not always be clear what type of meeting staff would be attending each morning. It was commented that the lack of consistency in the length of the morning handover subsequently made it hard to balance workload:

"*That's where there's some inequity in the length of time it takes to run that meeting. So you can't then balance your workload and think well ok we're going into a 9 o'clock meeting, it will take us till half past and we will be done and gone, because sometime you can still be in there at 10 o'clock*." (S.N)

Another factor which was perceived to be inconsistent and linked with the length of the handover was the amount of detail and information which was required when handing over patients, including which patients needed to be handed over to the incoming team. For example participants commented that:

"Some consultants don't overrun. They are happy what we tell them, some want more detail. So it can vary as to who wants what". (MG)

"It depends on the consultant. I agree with my colleague that sometimes they (handovers) can be prolonged because we go over every patient". (MG)

It was evident from the participants' discussions that there was a general consensus that there was a lack of consistency surrounding the format and length of time of the morning handover. However, it was not clear whether these formats, which promoted varying degrees of detail and repetition when presenting and handing over a patient, were for educational value.

> *"One tries to make it educational and the other doesn't. One consultant view is that a handover is a handover and the role is to handover the patients you have seen in the night and what jobs are left to crack on with. Another consultant likes to repeat things. And whether that's for educational value or not I won't comment".* (J.D)

> *"All they need to know is this patient was sick, we did this and they're your priority to see next. Instead you have to sit and listen to that full presentation when you know they're going to go and listen to it again, and I get a degree of frustration around that. Now that's a use of time that I don't feel is beneficial. Now that's not all of the consultants that do that."* (SN)

Although it was evident across all focus groups and interviews that participants viewed the nursing input as beneficial for both patients and those who attend the handover, it seemed that the structure of the handover did not necessarily allow sufficient time and attention to the nursing input. This appeared to be the case irrespective of the individual leadership style adopted within the handover. For example participants within the nursing focus group explained that:

> *"Even the one that does run smoothly, we are still in any other business, we're still tagged on the end."* (S.N)

> *"I think the fact for me is actually if we do run out of time and somebody has become poorly while we're in there and the doctors have to go, we're the bits that get left, because we don't matter." (S.N)*

One participant also suggested that it was unnecessary to structure the meeting so that it was separated into medical and nursing inputs and that patient care should be considered as a whole:

> *"For me it's really quite sad that we have to separate things into nursing concerns and medical concerns because as far as I'm concerned they're patient concerns."* (S.N).

Participants further discussed the structure of the meeting noting that at times "*it can be a bit random and unstructured*". When participants were asked whether it was always clear at the end of handovers as to who was doing what, one participant responded "*no not all the time*", with another adding, "*it depends who leads it*". Participants were therefore asked to consider whether they thought that the morning handover could benefit from being more structured and consistent and they discussed potential difficulties with this notion. For example participants commented that:

> *"I don't know but sometimes when things are spelled out for you exactly what a patient needs and if we went through all the patients like that we would all know. It might be a bit patronising I suppose. I think that works well when you have a mobile*

workforce with temp staff coming in when there is some structure and everybody is singing from same hymn sheet." (J.D)

"I would like a consistency around that meeting. I would like it…if our senior consultants led it the same way, but quite how you would iron out those personality differences I don't know, because then that would give you more of a structure, you wouldn't need maybe a standard operating procedure or to be tapping your watch, because you know that that structure would be there, the same from both of them." (S.N)

One participant further acknowledged the difficulty of leading and managing a handover, where preferences of leadership styles may vary and are often subjective. However it was explained that the most efficient and effective handover would be the most desirable:

"*It's really difficult because I'm sure some people prefer that leadership and that clear focus and steer and some people struggle with the fact that the other consultant might be slightly more laid back, so you know it is subjective. Either way I think that the one that is the slickest quickest and gets the most information is the best*." (S.N)

Participants discussed that they felt that good leadership and management were crucial for an effective handover. However, they also revealed that they considered the format, style and timing of the handover to be inconsistent and dependent upon the member of staff leading the meeting. This subsequently led to issues such as the inability to balance workloads, varied interpretations of educational value of the different styles, and unclear allocation of tasks and expectations of staff handing over patients. However, the difficulty of aligning different leadership styles to create a standardised delivery, and the subjective nature of audience preferences of such leadership styles were also acknowledged. It was also suggested that the handover structure did not allow sufficient time and attention to each perspective and that patient care should be considered as a whole.

Incorporating training and educational elements into the morning handover

A theme which was notable throughout the analysis was participants' discussion of the inclusion of educational and learning elements within the morning handover. Two participants discussed what they believed to be potential rationale behind incorporating these elements into this particular handover, including the caseload of patients and expectations of official bodies. They stated:

"I thought that the only reason they brought in the educational element in this hospital was because they didn't have a huge amount of patients to handover and this was main reason for bringing in all the detail and discussion about a patient." (M.G)

"The deanery has a certain expectation of handover as well, you know one of the reasons that we did embed it is because the deanery were concerned about how we were supporting the juniors". (S.N)

Although there was a certain degree of understanding of the reasons behind incorporating training and education elements in some focus groups, it was apparent from participants' discussions that various interpretations and perceptions of the presence, type and utility of these aspects within the handover existed. Whilst some participants commented on theoretical discussions in reference to education, others noted bedside teaching and clinical reminders. When considering the advantages of the morning handover, two participants stated that they thought incorporating learning aspects was beneficial. The reasoning they gave for this position included allowing for opportunities such as providing training for the junior doctors and discussing what happened during the night shift. Conversely, other participants commented that although training and education was important, it was not effective within the setting and environment of the morning handover. The issue of delivering and defining education within this particular setting was specifically acknowledged by two participants who commented on the fact that it was difficult to qualify and quantify what would you call learning. For example one participant explained:

> *"It depends what you class as educational as well. What one doctor thinks is a relevant point isn't necessarily what the juniors want".* (J.D)

In order to try and provide some context of how education was incorporated, one participant explained how what they perceived to be useful education was delivered. This account led the participant to discuss the use of care 'bundles'; a set of evidence-based practices which promotes a structured way of delivering the best possible care for patients undergoing particular treatments with inherent risks. The participant explained:

> *"I'd use that 9 o'clock meeting just to share 10 minutes of education on a specific topic. Or I'll go in and I'll share audit results where we're not doing too well and try and get some medical engagement… I'll use that 9 o'clock meeting just to say right our safety quality dashboard figures this month showed you haven't completed your sepsis bundles or you haven't completed your DNR CPR forms correctly and we will just spend a bit of time educating and discussing any concerns they've got."* (S.N)

Two participants in an alternative job role focus group also provided context of the educational value of these reminders, and explained how prompts to complete bundles at the morning handover were an advantage to staff as they helped towards achieving targets. On the other hand, participants also discussed potential negatives with certain perceived learning aspects, including the frustrating nature of a theoretical handover and the unnecessary nature of extended discussions of stable patients. One participant explained that while the utility of reminding staff to complete certain bundles could be appreciated, certain elements may be unnecessary for the purpose of the handover in question:

> "*That takes only five minutes to remind everybody. It becomes prolonged when they ask about the smallest thing like urine deposits. When somebody has seen the patient and you present it then you present it very concisely, and then there is no need to go into the medications, what they might be allergic to and all of those things, because that can be seen when you are reviewing the patients."* (M.G)

Participants cited potential reasons why they perceived augmenting the morning handover with education to be ineffective. For example several participants suggested that teaching sometimes detracts from the handover and that staff often get distracted and start to disconnect. They commented that this could then lead to issues of safety and efficiency, including increasing the likelihood that clinically relevant information be missed, scans not ordered, and referrals not followed up. Two participants discussed the difficulty of balancing the two potentially conflicting aims of a clinical handover and training. For example:

> *"It detracts from the handover if you are trying to do two things. Even the person who is doing the education will be rushing through to get to the handover. Or the educational bit lacks to get through the handover. It's difficult to get a balance and also I don't think juniors are in the right frame of mind for it".* (J.D)

> *"Sometimes it can be frustrating because you are trying to hand over a patient and because people are getting distracted you are getting interrupted half way through your handover. You're handing over a patient with perhaps not the most relevant thing that you are trying to hand over because it might be you who has a learning point to jump up on and pick on. Sometimes that can be a bit distracting. The bit that you actually want to tell them gets lost.* (J.D)

Participants within the junior doctor focus group also considered the teaching they received to be somewhat inconsistent, and that while the didactic teaching was good, the type of training that they felt they were lacking was bedside teaching. Several participants suggested alternatives to including education in the morning handover and discussed their rationale behind such thinking. These alternatives included bedside teaching, lunchtime meetings and one to one teaching. For example:

> "*Make a slot later in the day for some people to go for some bedside teaching and a quick 10 min discussion, away from the patient, about the condition. It only needs to be half an hour or so. And it's much more relevant if you've seen said patient. The best way of learning is to see the signs and talk about it."* (J.D)

> *"That big presentation of a patient is important but it's not important in that setting. It's more important sometimes at the bedside, so that the patient can be correcting anything that the doctors is saying that's not right, or feels more involved in their care."* (S.N)

It was clear that staff members who attend the EAU morning handover had varying perspectives as to what they interpreted as educational and whether this was beneficial. One participant noted that they only felt that they were in receipt of education and training in a passive sense. Other participants considered education to be clinical reminders, sharing audit results and updating staff on guidelines, whilst others regarded engaging in theoretical discussions to be intended for educational value. Whilst some participants described the opportunity to provide training for the junior doctors at the handover as an advantage, others commented that this may detract from the clinical aspects within this setting.

Timing issues, barriers and the structure of the day.

Participants discussed the effects that they considered timing issues, barriers and the structure of the day to have on the morning handover. The time frame for which there is a crossover of the on-call night team and EAU day team is between 9:00 and 9:30 am, allowing for a half hour window for the morning handover to be delivered. There is also a high dependency unit (HDU) round at 8:00 which the EAU consultant attends before the handover, potentially resulting in delays to commencing the handover. Participants discussed that they felt that 30 minutes was an appropriate length of time for the meeting, but noted that it often runs to 45 minutes. When considering which elements may contribute towards the handover running over some participants mentioned discussing every patient, theoretical discussions and starting the meeting late. It was largely accepted by participants that incorporating education into the handover resulted in an extended length of time taken to deliver the morning meeting. Participants discussed what they considered to be the implications of an extended handover which could potentially impact negatively on the structure and flow of the day and delay patient care. For example:

> "*If you are adding on half an hour to the handover that's half an hour less to get patients seen and organised before the ward round and other things like scans etc. that need to be requested at times in the day and if you lose that extra half hour in the morning that suddenly becomes critical. Patients could miss scans and be in for another day*". (J.D)

> "*Decisions aren't being made as to care given to the patients, or discharges home or the other paperwork and things that need to be done*" (S.N)

> *"I know from recommendations that the handover is a good opportunity for junior doctors teaching, but if we change the whole system it will affect the things we have to do in the day".* (C)

Participants discussed that one of the barriers of having an extended handover in order to incorporate training was the fatigue and tiredness of the team who had been on the night shift. Participants discussed the frustrations and barriers associated with a handover which is extended past 9:30 for someone who has been on such a night shift. This included the consideration that even if the education delivered in the morning handover was valuable that this barrier would affect participants' engagement with the teaching. For example:

> "*Also more often or not, you've done a 12 hour shift and you are cream crackered. And if it rolls on you are not being paid to be there. So that can grate a bit".* (J.D)

> *"If you've just done a night, it's no use to you because even if it is valuable information, you won't remember it".* (J.D)

On the other hand, participants also noted that due to the structure of the day the incoming team might also feel that they have competing and pressing priorities during the handover rather than engaging with teaching. One participant stated:

> "*Even if you are that day team that has come on at 9:00, you are aware that you have an entire ward to see. You are kind of sitting there wanting to just get on with*

it. It's probably not the right attitude but it doesn't include the fact you are not taking anything in anyway if you are not wanting to engage". (J.D)

Some participants also acknowledged the presence of a meeting at 12:00 am and commented that this was an allocation of time which was meant to be detailed and that this can also further lead those who attend the morning handover to be more conscious of time constraints. For example:

> "*We do have a detailed ward round at 12 o'clock, and then another handover at 5:00. So the 12 o'clock round is meant to be detailed. We can take up to 45 minutes on that."* (M.G)

> *"So that's what makes you very conscious of the timing of that 9 o'clock meeting, because you know that's going to happen at 12, so even if that 12 o'clock ward round is prolonged…the doctors are then going to have less time to put their plans in place in the afternoon".* (S.N)

The time constraints of the morning handover were acknowledged by participants throughout their discussions. There was a general consensus that incorporating education into this timeframe resulted in an extended handover, which could potentially run over doctors working hours, delay patient care and impact negatively on the structure of the day. The issues associated with a handover which went beyond the half an hour window also consisted of barriers of fatigue for nightshift staff and the pressing priorities of the patient caseload for incoming staff members.

Alternative approaches and the future

With participants discussing what they considered to be the advantages and disadvantages of the current morning handover, this led to considerations of what might be changed and potential alternative approaches. Participants explained that the morning handover of patients from the night team to the day team can sometimes become mixed up with the EAU morning meeting. This could help to explain the varying priorities and interpretations of the relevance of the information discussed in the handover, which may depend on a staff members' shift and job role. Several participants therefore suggested that the morning handover process could be improved by separating the morning handover of patients with the EAU morning meeting, which could then include elements of education. For example:

> "*Maybe they should separate it out. So you can go into sick patients overnight and then go into EAU and then do what you like because the night team don't need to stay through a handover of every single patient on the EAU*". (J.D)

> "*Maybe we need to do the night team handover first and then they can go. For us in EAU that meeting is very important to our daily routine because it's how we plan the day."* (M.G)

One participant discussed that while the presence of a teaching element is important in the morning handover, the night team should maybe not be present at this point. However, this would mean that those in the night team would then not have the opportunity to benefit from the learning aspects. Other participants felt that the education should be taken out of

the handover in order to promote a simple, quick and factual business like handover. For example one participant commented:

> *"We have several responsibilities in the morning, my belief is that the morning handover should be a simple, factual process. To give us information about the patients in the ward. Which patients need our most attention. But instead of it being used to tell history of the patient, sometimes it could be improved by only telling factual things."* (C)

Some participants also suggested that in order to improve the effectiveness of the morning handover, it would be advantageous for consultants to start their rounds earlier. One participant explained that feedback and teaching could then be given before the handover so that the night team could then hand over the information in the morning handover and then leave. This participant believed that this would be useful for the junior doctors, consultants and the patients and commented that:

> "*If the consultants are really interested in more information from the doctors who treated the patients they can if they are able to start their round say at 7. That could be helpful for both for juniors and consultants and for patients. Consultants can get some good information from juniors. It would be good for the juniors to learn if they have done something wrong or right, get some feedback. It would be good for patients too. They are seen and have a plan. Then they can just hand over and go home. The night team I'm talking about." (M.G)*

In order to address the issue of the handover potentially impacting negatively on the flow of the day by delaying aspects of patient care, some participants suggested that the handover could also start earlier and discussed the subsequent benefits. Comparisons were also made to other hospitals where this has been the case. For example:

> *"A lot of the EAU's that I've worked on start earlier. Again because of this issue of trying to get things sorted out. You start earlier, you get patients seen earlier. You get all their investigations started earlier and get them back earlier. Before the consultant goes home they've got a plan." (J.D)*

> *"That would make a lot more sense for the surgical handover as well. The surgical ward round is at 8.30. The medical handover matches with the medics but not with the surgical day."* (J.D)

A further suggestion which may improve the morning handover was made by two participants who separately considered that it would be beneficial for those who are handing over patients to be aware of the information that they are expected to present. Other areas of suggestion for the future of the morning handover included extending the handover to other wards within the hospital, continuing with the reminders and more consistent allocation of time and structure. Many participants also discussed the possibility of having elements of an electronic handover and explained why they felt that this would be beneficial. For example:

> *"It needs to be electronic. At the moment the paper copies are accumulating in the office. You have a record of the things you handed over. What do you do with them*

afterwards? You've been held accountable but how do you dispose of it? Most hospitals are starting to make them electronic." (C)

"If it is written on the computer we have access to the system on that handover sheet. If it depends on me to chase that result of that specific patient, I can open the handover sheet on any computer and say I have done it, and for an audit. In the past they were kept on the sideboard and if you want to know which patients you've had this year, you will struggle to find it." (C).

Participants' suggestions of how the EAU morning handover could be improved included separating the morning handover of patients with the EAU morning meeting, providing guidance and training for those handing over patients, starting the handover and consultant rounds earlier, more consistency in the time allocation and structure, and incorporating electronic elements. Other approaches for the future included extending the style of handover to other wards within the hospital and continuing with the clinical reminders.

4.0 DISCUSSION

4.1 Questionnaire and Qualitative Data

The data from the questionnaire revealed that the majority of participants reported that they found it helpful to learn about clinical guidelines and care bundles. This was further emphasised in the focus groups, with participants promoting the utility of being reminded at the handover to complete certain care bundles. Half of the participants (50%) reported that in the past two years, they had worked in other hospitals or departments where handovers were used. When asked how this handover compared to other hospitals in the quantitative survey; three participants felt that in comparison the morning handover at Grantham EAU was better, and four felt that it was about the same.

The qualitative data highlighted a PGME concern for the potential danger of turning the handover into an inquest; however this did not come into fruition as focus group participants did not raise any issues with regards to feeling intimidated within the handover setting. The questionnaire data also revealed that only a marginal amount of participants reported the handover as being a source of anxiety. Clarity of what is expected of staff presenting a patient in the handover may help to alleviate any feelings of anxiety. Questionnaire data also highlighted that only half of participants thought the handover was too long on most days. However, the focus group participants commented that the length of the handover was consultant dependent, which may explain the varying perceptions.

Depending on their job role, interview and focus group participants either considered the hypothetical theory behind the new model of handover or provided their views and

experiences of the model in practice. Although analysed separately, participants generally discussed similar themes and elements that they perceived to be important. Several aspects were universally accepted, such as the overriding purpose of a handover, the perception that the nursing element was beneficial, that the leadership and the management of the meeting was crucial, and that there were certain barriers such as fatigue and the concerns of an extended handover. Qualitative data revealed the nursing input to be particularly valued. However a participant in the senior nurses' focus group highlighted that the handover was separated into nursing concerns and medical concerns, and promoted an overall focus of patient concerns.

During a PGME interview, one participant also considered what was perceived to be the potential dangers and risks associated with incorporating an educational element into the handover model. This included having a meeting which had tired and irritable night shift doctors present and overran its time frame, and subsequently went beyond the working hours of staff and delayed the jobs to be done for the following shift. Whilst discussing their experiences of attending this particular handover, participants highlighted these factors and noted them as current issues. The ability to delegate work was also perceived to be an advantage of a handover. However, it was also noted by one participant that following the handover, it was not always clear what the task allocation was for the commencing shift.

In addition to shared opinions across the two different perspectives, several discrepancies also occurred. For example, it was understood by one participant involved in PGME at Grantham and District Hospital that there was a negative response from the junior doctors regarding changing shift patterns to bring the surgical and medical handover into alignment. However, when participants in the junior doctors' focus group brought up the suggestion that the morning medical handover could start earlier, one participant noted that this would make more sense for the surgical handover and explained that the medical handover matches the medics but not with the surgical day. There also was also a lack of clarity and an element of confusion surrounding which members of staff were required to attend the morning handover.

4.2 Meeting educational standards

The General Medical Council propose that patient handover should provide continuity of care for patients and maximise the learning opportunities in clinical practice (GMC, 2015). The opportunity to provide the night team with feedback is therefore an important training tool and has the potential to be utilised within the handover setting, as noted by PGME participants. However, some participants who reported on attending the handover acknowledged that while training and education were important, there were concerns about its effectiveness within a handover setting. However, this position is likely to be affected by what participants classed as education, and what was interpreted as being provided for educational value within the handover (i.e. whether this was clinical reminders or theoretical discussions). One participant suggested that while the teaching element was important in the morning handover, the night team should maybe not be present at this point. However, this would result in the night team not being present for the delivery of any learning aspects.

The General Medical Council also recommends a learning environment which allows staff to raise concerns about patient safety without fear of adverse consequences, and for these concerns to be addressed immediately and effectively (GMC, 2015). Encouraging safety reporting within a handover setting could therefore allow for the opportunity for an increased awareness of safety incidents and offer appropriate feedback. Participants who took part in the focus group did not comment on feelings of intimidation within the handover. However, strong leadership of discussions would be needed in order to promote inclusiveness and minimise threats in this context. There may also be a need to clarify the role of reporting safety incidents in the handover for those who attend, in order to promote the platform for such a discussion of patient care. It may therefore be useful to utilise a terms of reference which explicitly details the handover process.

5.0 CONCLUSION

5.1 Limitations of the evaluation

The number of participants who were able to take part in the focus groups was dependent upon their availability to attend on the particular day for which the forum was of the organized. As the data highlighted that the handover did not appear to be consistently implemented, any advantages or disadvantages experienced by participants cannot be attributed to the handover process as a whole.

5.2 Recommendations

5.2.1 Clarification of the purpose of the EAU morning handover

The implementation of an EAU morning handover was perceived by participants to be an advantage for both staff and patients. However, although there was disagreement of what the overriding purpose of a handover should be, it is recommended that there is a clarification of what the purpose and specific goals are within this particular meeting.

- It is important that all staff involved understand what to expect from the handover and what contribution they should be making. Clarification of the role of the handover may help to bring an element of consistency. It is suggested that how best to achieve this is decided as a unit.

- Utilising an agenda detailing specific headings to follow on a daily basis may contribute towards clarifying the purpose of the handover, by promoting a more focused and structured approach. However, it is recommended that the unit considers an agenda which allows for flexibility of structure and is the most efficient and effective for their specific daily needs.

- It may also be beneficial to utilise a terms of reference which explicitly states what is involved in the handover. This could then be used in an induction for new staff to the unit and would also help to clarify the main purpose of the handover, and which patients need to be discussed in this setting. If safety reporting is to be an important part of the model, this should be made clear for attendees.

5.2.2 Agreement of the content and format of the handover

It is important that there is an agreement between those involved with delivery of the handover and those directing medical education, as to the content and format of the handover.

- It is recommended that the consultants who deliver the morning handover come to an agreement as to the purpose and structure of the handover, and adhere to the subsequent format which is decided. This will help to alleviate some of the frustrations amongst the wider medical team associated with an inconsistent approach.

- The unit will need to decide if education and training is to be included in the morning handover. If the decision is made to continue with its implementation, it is advised that there is clarity of what elements are intended for educational value. It is recommended that the unit continues to liaise with trainees and be responsive to those that the education is intended for. For example, participants particularly noted the utility of clinical reminders provided in the handover to complete care bundles.

- It will be important for the unit to consider how to safeguard against potentially negative impacts of the agreed format. Strong leadership of the discussions is needed in order to promote inclusiveness and minimise threats.

- It is recommended that the team decide on and adhere to an appropriate time point for the handover to commence, and consider an appropriate length of time for the purpose of the meeting. To achieve this, the content of each handover needs to be tailored accordingly. It will also be important to consider the working hours and mind-set of staff that are required to attend.

- It may be useful for there to be clarification for attendees as to which patients are to be discussed at handover, due to participant disagreement and potential confusion as to whether or not this occurred. For example, clarity regarding

whether the format requires a review of every patient in the unit, a presentation of every new patient admitted, and for every sick patient to be highlighted.

5.2.3 Streamlining the multiprofessional team approach

The multiprofessional approach to the morning meeting was considered to be an advantage for the handover and is recommended to continue. It is considered that streamlining this approach which promotes team work and multiprofessional engagement, would benefit both staff and patients.

- The inclusion of a representative from the nursing team was considered by participants to be particularly advantageous and valued by those attendees. However, it is recommended that the nursing input is further enhanced and more effectively integrated into the handover. This would promote equality within the team and highlight the value of the nursing input, rather than one which was perceived by the nurses to be secondary in nature to medical issues.

- Equal parity to all patient concerns is advised, with a more consistent allocation of time needed. There is the potential to integrate the nursing input into every patient handed over, in order to promote a patient centred approach rather than one which is segregated into medical and nursing concerns. This would allow for the nursing input to be given throughout the meeting, rather than attention being given at the end of the meeting, where the likelihood for it to be missed is increased.

- Clarification is also needed of which members of staff should be present at the meeting. For example, a decision will need to be made by the unit as to whether it is appropriate for the surgical team and ‘F1’ doctors to be present. It is also suggested that it should be made clear as to what the role of different teams and members of staff should be within the handover.

5.2.4 Consideration of alternative approaches

It is advised that alternative options and approaches to the handover should be fully considered. In order to come to an agreement on the optimal approach, it is recommended that the benefits and drawbacks of any suggestions are fully explored by the whole team (including senior management). However, when considering the style of the handover, the team will need to be mindful of the specific needs of the unit.

- Junior doctors’ suggestions of alternatives to incorporating education in to the morning handover should be considered. These included lunch time sessions and additional bedside teaching, which they considered to be particularly lacking. However, the limitations of these alternatives should also be considered (e.g. the night team not receiving feedback, the availability of consultants).

- Other suggestions which may hold investigative worth include separating the EAU morning meeting with the morning handover, starting rounds earlier, incorporating electronic elements and training staff in the optimal way to present a patient at handover.

5.2.5 Future Evaluation

It is recommended that further evaluation be conducted in order to monitor the effects of this evolving process, in order to ascertain the most efficient and effective design.

- Future evaluation could utilise regular staff experience surveys of those attending the handover. This could map any changes and contribute towards ensuring that any improvements are sustained. If the decision is made to continue to deliver training in the handover, this may be particularly important for assessing the utility of any educational elements for the junior staff.

- One key consideration which future evaluation should be mindful of is how to measure the quality of the handover. It is also important to assess to what extent the handover in question conforms with national standards, and whether there are any new models which may enhance aspects of safety and quality.

- It may be useful to document the start and finish times of all future handovers, to act as a factual record of timings.

5.3 Conclusion

The foremost principle of a handover is to ensure that there is a robust clinical handover of continuous patient care from the outgoing to the incoming team. Results from the handover evaluation indicated that the EAU morning handover was overall valued by staff members, with particular commendation of the nursing input. While there was noted potential to augment this process with unique educational elements, it is essential that the delivery and content is carefully managed and structured in a manner which does not detract from the primary focus of a clinical handover, and compromise clinical decision making. It is suggested that the EAU morning handover may benefit from having a more consistent time bound structure, allowing the team to have a clear focus on managing and directing optimal patient care and concerns, whilst providing relevant educational aspects which improve patient safety and quality of care. It is also important to be mindful of the specific needs of the department for which any chosen model of handover is adopted. Once a unified departmental approach has been agreed, it is recommended that further regular evaluation be conducted in order to monitor the evolving process and sustain any improvements made.

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