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Determination of Opinions Regarding Written Handover and Its Importance for Patient Safety: A Questionnaire-Based Study

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ABSTRACT

Introduction: Handover is the communication of clinical information to support the transfer of patient care and is a major contributing factor to patient safety. Handovers can be provided verbally or in a written format. This study aimed to determine the opinions regarding written handover and its importance, postulating that it has a critical role in ensuring patient safety and has justification for implementation where not present.

Materials and Methods: An observational online questionnaire comprising ten questions was sent to doctors at Luton and Dunstable University Hospital in September 2014. Answers to the questions were provided as free text or single row rating scale in a drop-down menu. The data were exported into SPSS to be analysed. Frequency and percentage of the answer choices were derived for each question.

Results: The majority of respondents were physicians (51.3%). Those who had written handover stated that it was accurate with regards to patients' clinical details (45%) and that inaccurate handover impedes quality of care and clinical management (61.7%). In cases where patient handover was not present, 28.3% of the respondents strongly agreed that handover could improve patient safety and staff familiarity with patients.

Conclusion: The results suggest that written handover is a very powerful communication tool through which patient safety can be ensured, and its local and national implementation and maintenance are a possible logistical challenge. It is recommended to conduct further studies on this issue to determine its effectiveness once standardised and implemented within this study location, and at other care units.

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Introduction

Clinically, handover is defined as the communication of information between individuals and/or teams of healthcare providers to support the transfer of patient care. Through handovers, professional responsibility and accountability are maintained over a temporary or permanent time (1, 2). With the transition of information, responsibility of patient care and safety is assumed by the recipient. Handover is perceived to be a major contributing factor to patient safety.

'Communication during patient care handovers' was previously highlighted by the World Health Organisation as a 'High 5s' patient safety initiative (3).

Inaccurate and incomplete handover can contribute to diagnostic delays, inappropriate treatment, and serious medication and nursing errors, which might lead to malpractice legal claims associated with coroners' cases (4-6). Inaccurate handover can lead to confusion regarding patients' clinical status (7); moreover, it may result in healthcare professionals relying on patients' family or caregivers for information, which is ethically inappropriate and against confidentiality (8). The most common handover scenarios in day to day practice include communication between paramedics and emergency personnel, physicians and nursing staff, and among medical professionals (e.g., between general practitioners and specialists); additionally, interdepartmental handovers are between healthcare professionals belonging to the same team (8, 9). Changing working shift patterns in hospitals and community-based settings have resulted

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in more shift-based practices, which makes continuity of care a greater challenge than before.

Therefore, effective handovers are essential for ensuring continuity of care between shifts, and providing high-quality care (2).

Handover can be provided verbally, in a written format, or both at the same time. Written handover typically involves a written list of patients, relevant demographic details and hospital identifiers, significant past medical history, current presenting complaint(s), relevant investigations requested and the respective results, and a management plan. The format of handover is considered to be important and often under-utilised (2). Considering the absence of standardised templates for patient handover, the format utilised to create written handover, or patient list, varies between institutions or systems based on their established methods

Using results of the previous studies and informal discussions with medical staff and healthcare professionals regarding the consequences of inadequate handover, this study was devised to determine the opinions of physicians regarding written handover in routine secondary care-based practice using a formal questionnaire. In this study, it is hypothesised that low quality or inaccurate written handover would impede patient care and safety and where not present, it would improve patient safety.

Materials and Methods

Questionnaire and data collection

This observational study was conducted in Luton and Dunstable University Hospital, an approximately 500-bedded acute district general hospital. A questionnaire was designed regarding written handover for physicians of all medical career grades, and all departments. The questions were developed and reviewed by the authors of this paper, and the validity of the instrument was established through member checking (a group of respondents). The questionnaire was an online survey (Survey Monkey®), the link of which was emailed on three separate occasions to the participants (n=495).

The link to the survey was left accessible during September 2014. The respondents were anonymous and the questionnaires did not contain demographic information.

The questionnaire comprised ten questions. The first page of the questionnaire stated the purpose of the study and gave assurance of confidentiality of the data. The initial question on the subsequent page asked the job title and department of the respondents. Questions on the third page focused on determining the attitudes and importance of written handover, regardless of being present in the hospital. Options for answers to questions one to nine were provided as drop-down menus with an accompanying open-text field. A single row rating scale was provided for the tenth question on page four of the questionnaire.

Data analysis

The data were exported from the Survey Monkey® website into SPSS for statistical analysis. Frequency and percentages of answer choices for each question were calculated.

Results

For questions, answer choices and complete results refer to Table 1. There were 70 respondents to the questionnaire, with a total response rate of 14%. Ten respondents did not complete the questionnaire after question two to a sufficient level and therefore, their responses were not included in the results for questions two to ten, yielding a total of 60 respondents.

The results showed that 51.3% of the respondents were consultants or professors. None of the respondents were medical students, and 4.29% of them stated they were ‘Other’ but did not specify what exactly their job title or grade was in the free text field provided.

Additionally, 76.7% (n=46) stated that they had a written handover at their workplace, while 23.4% did not. The majority (58%) of the participants reported that their written handover was in the format of word document, which was updated twice a day for 40% of users. The responsible healthcare professionals for updating it were ward doctors in 70% of the cases.

The answers to question six were positive in 45% of cases, while in 35% of the cases it was negative. In addition, 61.7% of the respondents chose ‘yes’ and 16.7% selected ‘no’ for question seven. For question eight, 78.3% of the respondents answered ‘yes’.

Additionally, 78.3% of the respondents had a verbal handover along with the written one. Those who did not, had mixed opinions regarding its efficiency in improving knowledge of the patient list if present.

These opinions were expressed in the free-text field of this question. The majority of respondents chose ‘strongly agree’ (28.3%) for question ten. The complete results are presented in Table 1.

Table1: Questions, Answer choices and Frequency and percentage of answer choices

Question (Q): Answer choices, frequency, and percentage

Q1: Please select your job title.

Answer choices	Doctor (FY1)	Doctor (FY2)	Doctor (ST/GPST/ CT1-2, SHO)	Doctor (ST3 upwards/ SpR)	Doctor (Consultant/ Professor)	Medical Student	Other	Total
Frequency	3	7	8	13	36	0	3	70
Percentage	4.29	10.00	11.43	18.57	51.43	0	4.29	100

Q2: Do you have a written handover document/'patient list' on some/all of the wards you work on? If 'no', please move to Question 10 on the next page.

Answer choices	Yes	No	Total
Frequency	46	14	60
Percentage	76.7	23.4	100

Q3: what is the format of your written handover?

Answer choices	Did not answer	Excel document	Handwritten	Word document	Other	Total
Frequency	12	5	4	35	4	60
Percentage	20	8.3	6.7	58.3	67	100

Q4: To your knowledge, how often is the written handover document updated? Is it sufficient?

Answer choices	Did not answer	Once a day	Once every 2 days	Twice a day	Other	Total
Frequency	12	16	2	24	6	60
Percentage	20	26.7	3.3	40.0	10	100

Q5: Who is responsible for updating it?

Answer choices	Did not answer	Ward doctor	Nursing staff	Other	Not sure	Total
Frequency	12	42	2	2	2	60
Percentage	20	70	3.3	3.3	3.3	100

Q6: Do you find the written handover accurate with regards to recent clinical events, investigation results, and/or management plans?

Answer choices	Did not answer	Yes	No	Total
Frequency	12	27	21	60
Percentage	20	45.0	35.0	100

Q7: Does an inaccurate written handover list impede clinical management and quality of care in your opinion? If yes, to what extent? Have you experienced/witnessed any clinical errors because of this? If so, what was the outcome?

Answer choices	Did not answer	Yes	No	Total
Frequency	12	37	11	60
Percentage	20	61.7	18.3	100

Q8: Does an accurate written handover document aid with familiarising you with the patient, recent clinical events etc.?

Answer choices	Did not answer	Yes	No	Total
Frequency	12	47	1	60
Percentage	20	78.3	1.7	100

Q9: Do you have an accompanying verbal handover when you first review or receive your written handover document? If 'no', do you think your knowledge of the patient list would improve if you were to have an accompanying verbal handover?

Answer choices	Did Not Answer	Yes	No	Total
Frequency	12	38	10	60
Percentage	20	63.3	16.6	100

Q10: If you answered 'no' to Question 2: Would you agree or disagree that your wards/departments would show an improvement in patient safety and staff familiarity with patients if a written handover document were to be produced?

Answer choices	Did not answer	Agree	Disagree	Neither agree nor disagree	Strongly Agree	Strongly disagree	N/A	Total
Frequency	11	12	2	3	17	6	9	60
Percentage	18.3	20	3.3	5.0	28.3	10	15.0	100

Discussion

The results showed that the use of a written handover is important for physicians in secondary care. Only 45% of the respondents reported accuracy in their written handovers. The answers to question seven were positive in 61.7% of the cases, while they were negative in 16.7% of the cases. Moreover, 28.3% of the participants believed that patient safety would be enhanced if a written handover was present (the introduction of written handover in clinical environments where it is not currently present would ensure safe clinical practice). Comments in the free-text field stated that an inaccurate handover 'could lead to a serious untoward incident' and it 'hinders continuity of care'.

The global evidence indicate the need for safe handover and the considerable effort that has been made to achieve this purpose. In the UK, the National Patient Safety Agency have published risk assessment templates for handover between night and day shifts and vice versa, accentuating the importance of documentation of all patients who are handed over and compulsory handing over of documentation to the next team (2). Since patient safety is a 'critical challenge' for the Australian healthcare system, various state agencies for clinical governance were established to ensure patient safety and provision of high-quality care. In the United States, mandated care quality and patient safety measures were introduced with incentive payment systems (2).

Ensuring adequate implementation of the abovementioned measures is a matter of concern as well. The Garling Report (2008) in New South Wales, Australia, stated that 'system wide' improvement regarding patient safety had not yet been delivered (10). In 2014, The Australian Council on Healthcare Standards published a submission to the Australian Commission on Safety and Quality of Healthcare concerning Acute Coronary Care and Antimicrobial Stewardship Clinical Care Standards. Quality statements in this report suggested that medication chart documentation should support effective clinical handover and that documentation of clinical handover should be included (8, 11). Thus, progress is in situ regarding handover policies, but are not yet present nationwide in Australia to ensure sustainability in the provision of safe, high-quality clinical care. It is evident that nationwide implementation of this policy is a difficult and highly complex task.

Management of clinical governance and allocation of financial resources will play a part in the improvement of handover provision, and clinical governance has to become and remain accountable for this issue. For this purpose, a 'bottom up' approach that is, local innovation shared within regions and then the nation, is required.

According to the present and the previously performed studies, written handover in its most basic form can contribute to higher patient safety and more comprehensive care. However, in the UK, there is a noticeable drive within hospitals to introduce and refine 'electronic handover', typically computer programs with inbuilt pre-determined clinical categories for the required patient information whereby free text can be entered (12). In so doing, the safety of written handover with apparently greater accuracy is ensured. A study conducted in a teaching hospital in London comparing paper-based and electronic forms of handover reported that there was a significantly higher number of completed fields in electronic handovers than in their written or paper-based equivalents and thus, providing better continuity of care (12). Task completion in electronic handover ('e-Handover') in an acute UK hospital trust was consistently high as reported in another study, highlighting the potential clinical successes gained from electronic handover (13).

Assurance of safety, minimisation of discontinuity of care, and increased familiarization of patients with individual professionals (as part of a multidisciplinary team) are the clinical benefits of adequate handover for patients. Healthcare professionals can benefit from patient handover in terms of professional protection, stress reduction with information required documented clearly, and overall job satisfaction for providing better care. Administrative data were reported to be updated every 24 hours with location of patients and responsible clinicians readily available to reduce adverse events and risks (2).

The review of the literature and the results of this study indicated that inaccurate written handover can impede clinical management and quality of care and accurate written handover can aid with familiarizing medical staff with patients and keep them updated on the recent clinical events. In this study, the response rate was low, since the hospital e-mail address book was used for distribution of the questionnaire and we did know whether the accounts were still active or not. In summery, written handover should be introduced into routine practice after discussions and recommendations from clinical governance management groups (2).

Conclusion

Our results strongly suggested that accurate written handover has a highly significant role to play in provision of high-quality and safe patient care.

However, extensive work should be done to improve patient handover both locally and nationwide. It is recommended to perform a similar questionnaire-based study with qualitative analysis for re-assessing opinions regarding clinical handover in local units where written handover has been just implemented and established. Moreover, performing focused observational studies at the time of implementation of written handover in the aforementioned units can be helpful. Conducting

similar studies in other hospitals is also required to determine whether the previously published guidelines are being implemented appropriately (2), and if not, whether introducing stricter regulations for this issue can minimise difficulties for its eventual national, standardised implementation.

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