Public yet private: the status, durability and visibility of handover sheets

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Abstract

Drawing on data from a multi-site case study of a range of clinical settings, this paper explores the form of nursing handover sheets and the processes through which they are created and updated. We argue that these documents function as both public and private documents, having relevance for the whole ward while also acting as a personal workspace. Such dual functionality needs to be supported by any technology that seeks to provide for the work of handover, if the handover sheet is to continue to act as a space for work, rather than just a repository of information.

1. Introduction

A range of artifacts may be used to support handover, ranging from formal, legal documents to informal 'scraps' [1-3]. As part of a project that aims to model the collaborative work of handover and investigate technology to support handover, we are conducting a multi-site case study in order to understand current handover practice. This paper reports on the form of the nursing handover documents that we have collected as part of the study and the processes through which they are created and maintained.

2. Methods

Data was collected from five settings across three United Kingdom (UK) hospitals: a general medical ward (hospital 1), an emergency assessment unit (EAU; hospital 1), a paediatric surgical ward (hospital 2), a medical admissions unit (MAU; hospital 3), and a high dependency unit (HDU; hospital 3). Data will be collected from a further five case sites later in the project, following initial analysis of the data collected so far. Research Ethics Committee approval was obtained for this study and written consent was obtained from both staff and patients that participated in the study.

Data collection involved observation and, where appropriate, audio recording of handovers, as well as time spent in the ward in order to understand the work of the setting. Informal interviews were conducted with staff members. Examples of artifacts used to support handover were gathered and photographs of the settings were taken. A total of 450 hours of observations were conducted between May and November 2007. Following each period of observation, fieldnotes were written up and entered into Atlas.ti. Framework Analysis [4] was used to analyse the data gathered on nursing handover sheets and their use.

3. Findings

3.1. Form

In all but one of the wards, paper copies of the nursing handover sheet are printed from a Word document, with patient details organised in a table, a separate row for each patient and ordered by bed number. Copies are printed before the shift handover so that each nurse has her own printed copy. Nurses annotate their printed copies with verbal information received during the handover.

The only ward where this is not the case is the EAU, where it is felt that the frequency with which patients are moved to and from the ward means that it would not be possible to keep such a document up to date. Instead, prior to the shift handover, oncoming nurses stand at the nurses' station, copying down the bed numbers and patient names from the whiteboard for the patients that will be looked after by their team. Sometimes these notes are made on a photocopied sheet formatted with appropriate headings; when these sheets are not available, nursing staff make their notes on a blank sheet of paper. During the handover, the oncoming nurses make written notes. In the general medical ward, some nurses make their own

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handwritten notes during the handover, instead of using the printed handover sheet.

3.2. Transformations

We were interested in not only the form of the handover sheets but how they are updated and changed. In the four settings where a Word document is used, the electronic copy is routinely updated. On the general medical ward, it is updated when time allows, by whoever is able to. On the paediatric surgical ward, the handover sheet is updated towards the end of each shift. Typically, the outgoing charge nurse takes responsibility for this, although other nurses may also add information. On the MAU and HDU, the handover sheet is generated using locally developed software. When a patient is admitted to the ward, basic details (name, date of birth, sex) are uploaded to the software from the hospital's patient administration system (PAS). Additional information is entered by ward staff about each patient and this is used to generate the Word document. If a patient is transferred from the MAU to the HDU, the information entered about them becomes accessible to HDU staff and automatically feeds into their handover sheet. Patient details are entered and updated towards the end of the shift by the charge nurse.

Across the settings, information needed to update the handover sheet is gathered by asking questions of the nurses and health care assistants (HCA) and checking the medical record or nursing notes. Sometimes a change is made just to one patient's details, motivated by a conversation with a colleague, e.g. updating details of a patient's nutrition needs following a conversation with the dietician.

However, on one of the wards, the handover sheet is not updated during every shift; on one occasion the handover sheet appeared not to have been updated for a couple of days. Incorrect information was also observed in handover sheets on two of the wards. For example, on two occasions, patients' names were spelt incorrectly on the handover sheet, although nursing staff were aware of this and the mistake was pointed out by the outgoing charge nurse in the shift handover.

On the EAU, while the handwritten handover sheets do not typically persist beyond the end of the shift, strategies to gather information to populate the handover sheet were also observed. Following the handover, the oncoming nurses have to, one team at a time, update the coordinator about their patients. In doing this, they rely on the notes that they made during the handover but the flow of information is not one way; the coordinator may give them additional information about their patients, which they add to their notes. Some EAU nurses check the medical record for their patient, particularly if it is a patient that they have not looked after before, and use that to add additional notes to the handover sheet.

Across all settings, the paper copies of the handover sheets also undergo transformations throughout the shift. As already mentioned, nurses annotate their sheets during the shift handover and may also add additional notes as information about patients is passed on to them (e.g. the time a patient is going to theatre). Hand-drawn boxes get ticked as tasks are completed. Further notes get added when a new patient arrives on the ward.

4. Discussion and conclusions

The findings above describe the nursing handover sheets from five units across three hospitals. The presence of incorrect or out of date information on some of the handover sheets raises questions about the status of these documents. We would argue that, whether handwritten or produced as a Word document, handover sheets have typically been assigned the status of informal documents; paper copies are typically thrown away at the end of the shift and, in contrast to most documents used to record patient data, no audit trail or backup of these documents is maintained. With the increasing presence of electronic patient records and patient administration systems, it seems likely that these documents will increasingly take on a more formal status, as in the MAU and the HDU, where the information that populates the handover sheet is recorded and available beyond the confines of the individual ward, giving it a permanence and visibility that contrasts strongly with other forms of handover sheet. If the software used in the MAU and HDU is rolled out across the rest of the hospital, information entered by staff will follow the patient to whichever wards they are subsequently transferred to, to be viewed, edited and used by staff on those wards. At present, the software is being developed to also support the doctors' handovers, so that both nursing and medical staff will be using the same information.

While a more formal, permanent and visible form of handover sheet may increase the accuracy of the information contained within it, there may be other consequences of such a change that are hard to predict. For example, in previous work, a large shared display was introduced into a paediatric ward to support medical handover [5]. This experimental intervention became a mechanism for submitting the work of the shift to the scrutiny of senior staff. As a consequence, the junior doctors became reluctant to record tasks that had not been completed, despite the fact that this was important information to hand over.

While not making the information visible in the same way, we consider that simply making the information available to groups who have previously not had access to that information may result in certain types of information no longer being recorded. At present, with their status as informal documents and with no audit trail of when changes were made and by whom, those who update the handover sheets are not accountable for what they record. For example, in one of the case sites, someone had put a note on the handover sheet that the patient 'MUST NOT LEAVE HOSPITAL' because there were concerns that the patient, an elderly gentleman, was being abused by the relatives that were responsible for caring for him. There was certainly sensitivity about where this information was recorded and who may have access to it. The bold reminder on the handover sheet was of vital importance for this patient's care and we would not want such information to be lost because of fears of not being able to provide an adequate account for such concerns. Previous studies have highlighted how there may be information that is passed on in the verbal handover that is not recorded elsewhere; for example, on a paediatric ward, information may be passed on about how the parents are coping with their child's illness [6]. The handover sheet's status as an informal document provides a safe space where such information can be recorded.

Consistent across all sites is the ability of the sheets to act as both public and private documents, having relevance for the ward or unit as a whole while also holding information for the individual, becoming 'personal workspaces' [7]. It is considered important by staff that they have a summary of all patients on the ward, not just those that they are responsible for caring for. This allows them to respond to queries from relatives and to care for patients when a colleague goes on a break or has to leave the ward. Yet for the patients that they are caring for, they are able to add additional notes, about tasks to be completed, blood results that need to be chased up etc., so that the handover sheet becomes not only a summary of information but also a form of to do list, helping them to coordinate their work. Such dual functionality needs to be supported by any technology that seeks to provide for the work of handover, if the handover sheet is to continue to act as a space for work, rather than just a repository of information.

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