International Journal of Nursing Studies 48 (2011) 1024–1038

Contents lists available at ScienceDirect

International Journal of Nursing Studies

journal homepage: www.elsevier.com/ijns

Review

# The role of documents and documentation in communication failure across the perioperative pathway. A literature review

Sandra Braaf*, Elizabeth Manias, Robin Riley

*Department of Nursing, Melbourne School of Health Sciences, The University of Melbourne, Australia*

ARTICLE INFO

*Article history:*
Received 5 November 2010
Received in revised form 18 May 2011
Accepted 19 May 2011

*Keywords:*
Communication
Document
Documentation
Literature review
Perioperative
Record keeping

ABSTRACT

*Objective:* Communication practices of healthcare professionals have been strongly implicated in the cascade of events that unfold into poor outcomes for surgical patients. The purpose of this paper is to explore the role of documents and documentation in communication failure among healthcare professionals across the perioperative pathway. The perioperative pathway consists of 3 interconnecting, but geographically distinct domains: preoperative, intraoperative and postoperative.

*Design:* A comprehensive search of the literature was undertaken to provide a focused analysis and appraisal of past research.

*Data sources:* Electronic databases searched included the Cochrane Database of Systematic Reviews, the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Medline and PsycINFO from 1990 to end February 2011. Additionally, references of retrieved articles were manually examined for papers not revealed via electronic searches.

*Review methods:* Content analysis was used to draw out major themes and summarise the information.

*Results:* Fifty-nine papers were selected based on their relevance to the topic. The results highlight that documentation such as surgeons' operation notes, anaesthetists' records and nurses' perioperative notes, deficient in the areas of design, quality, accuracy and function, contributed to the development of communication failure among healthcare professionals across the perioperative pathway. The consequences of communication failure attributable to documentation ranged from inefficiency, delays and increased workload, through to serious adverse patient events such as wrong site surgery. Documents that involve the coordination of verbal communication of multidisciplinary surgical teams, such as preoperative checklists, also influenced communication and surgical patient outcomes.

*Conclusions:* Effective communication among healthcare professionals is vital to the delivery of safe patient care. Multiple documents utilised across the perioperative pathway have a critical role in the communication of information essential to the immediate and ongoing care of surgical patients. Failure in the communicative function of documents and documentation impedes the transfer of information and contributes to the cascade of events that results in compromised patient safety and potentially adverse patient outcomes.



**What is already known about the topic?**

- Poor documentation contributes to sentinel and adverse hospital inpatient events locally and internationally.
- Flawed communication is a highly preventable contributor to sentinel and adverse hospital inpatient events.

* Corresponding author.
*E-mail addresses:* scbraaf@pgrad.unimelb.edu.au, sbraaf@optusnet.com.au (S. Braaf).

0020-7489/$ – see front matter. Crown Copyright © 2011 Published by Elsevier Ltd. All rights reserved.
doi:10.1016/j.ijnurstu.2011.05.009

- The perioperative setting is a complex area vulnerable to sentinel and adverse patient events.

**What this paper adds**

- This review highlights the importance of addressing the communicative quality and function of documents and documentation from a multidisciplinary perspective across the perioperative pathway.
- Documentation performed by healthcare professionals in the perioperative environment, such as surgeons' operation notes, anaesthetists' records and nurses' perioperative notes, has the potential to result in communication failure and the delivery of suboptimal patient care.
- Documents such as preoperative checklists have the capacity to be used in coordinating verbal communication of multidisciplinary surgical team members within the perioperative environment, thereby improving patient care.

## 1. Introduction and background

Communication practices of healthcare professionals have been strongly implicated in the cascade of events that unfold into poor outcomes for surgical patients. Locally and internationally, research into sentinel and adverse events, consistently demonstrates the operating room environment and communication breakdown as recurring constituents in the generation of serious adverse incidences (Australian Institute of Health and Welfare (AIHW) and Australian Commission on Safety and Quality in Health Care (ACSQHC), 2008; Joint Commission on Accreditation for Healthcare Organizations (JCAHO), 2007; National Patient Safety Agency (NPSA), 2009). Additionally, flawed communication is routinely identified as a highly preventable contributor to adverse inpatient events (JCAHO, 2007), making investigation into healthcare professionals' communication in the perioperative environment an area worthy of attention.

Communication failure, defined as a flaw in the content, audience, occasion or purpose of the communication act (Lingard et al., 2006), can transpire from all forms of communication including documents and documentation. A document is written, printed or electronic text that provides a record of information that is typically used by healthcare professionals as a resource, such as hospital protocols, policies or guidelines. By comparison, documentation involves the accumulation and dissemination of information, such as the process of recording patient data on an anaesthetic chart or in a patient's medical record (Moore, 2004).

Australian and US sentinel event reports reveal that documents and documentation are significant factors in the development of events that lead to serious patient harm (AIHW and ACSQHC, 2008; JCAHO, 2007). Australian sentinel event reports for 2007–2008, identify written and verbal communication as contributing factors to 16% of all sentinel events, whereas policy and procedure guideline documents are noted to play a part in 43% of all sentinel events (AIHW and ACSQHC, 2008). In the US, root cause analysis of all sentinel events found communication (verbal and written) to be the main cause (JCAHO, 2007). Notably, these findings highlight documents and documentation as problematic, and a cause of failure in healthcare professionals' communication.

Providing leadership on global health matters, the World Health Organisation (WHO) guidelines for safe surgery recognises the vital role of documents and documentation for effective communication and the exchange of critical information in the operating room (WHO, 2009). The WHO acknowledges that clear, accurate and available documents and documentation are paramount to preserving patient safety. However the patient's surgical journey expands beyond the isolation of the operating room, as the patient travels through 3 interconnecting, but geographically distinct domains: preoperative, intraoperative and postoperative, collectively known as the perioperative pathway (Australian College of Operating Room Nurses (ACORN), 2006).

Multidisciplinary surgical teams utilise documentation from a variety of sources over the course of the perioperative pathway. Nurses customarily receive the patient for surgery into a preoperative holding area and screen the documentation prepared in the unit from where the patient has originated. As the patient progresses to the operating room, the documentation disperses as nurses, anaesthetists and surgeons all take responsibility for recording different information. Gradually, the documentation reunites in the post anaesthetic care unit (PACU), in preparation for the patient's details to be passed on to a postoperative unit. Thus, as the patient transits through multiple departments, healthcare disciplines and clinical teams of the perioperative pathway, the critical role of documentation in relaying information is highlighted, particularly in the context of clinical handover. Documentation of patient data can be used to supplement verbal methods of communication and increase the reliability of information when healthcare professionals handover (Bhabra et al., 2007; Pothier et al., 2005).

Clinicians working across the perioperative pathway also draw on documents for the purposes of coordinating work, which in turn are used to organise verbal communication. Hospital protocols, for example, which stipulate the preparation and transfer of patients to the operating room, organise clinicians' time and work space to coordinate and shape their work activities (Riley and Manias, 2007). Hence, communication of accurate and current information in these documents is paramount for the delivery of quality and safe patient care.

## 2. Methods

### 2.1. Research questions and purpose

The research questions framing this paper are: what is the role of documents and documentation in developing communication failure among healthcare professionals across the perioperative pathway? What are the possible effects on patients from communication failure among healthcare professionals across the perioperative pathway?

The purpose of this paper is to explore the role of documents and documentation in communication failure