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# A nursing perspective of interprofessional work in critical care: Findings from a secondary analysis

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ABSTRACT

*Purpose:* This article presents a secondary analysis of nurse interviews from a 2-year comparative ethnographic study exploring cultures of collaboration across intensive care units (ICU). Critically ill patients rely on their interprofessional health care team to communicate and problem-solve quickly to give patients the best outcome available. Critical care nurses function at the hub of patient care giving them a distinct perspective of how interprofessional interactions impact collaborative practice.
*Materials and methods:* Secondary analysis of a subset of primary qualitative data is appropriate when analysis extends rather than exceeds the primary study aim. Primary ethnographic data included 178 semistructured interviews of ICU professionals from 8 medical-surgical ICUs in North America; purposeful maximum variation sampling was used to represent each profession accurately. Fifteen anonymized ICU nurse interview transcripts were coded iteratively to identify emerging themes impacting interprofessional collaborative practice.
*Results:* Findings suggest that quality of interprofessional collaboration is a product of a multitude of factors occurring at multiple levels within the organization. Managerial and organizational factors related to ICU nurse training and staffing may impede development of nurses' interprofessional skills.
*Conclusion:* Deliberative development of ICU nurses' interprofessional skills is essential if nursing is to move from primary coordinator to active collaborator in patient management.



## 1. Introduction

Collaborative interprofessional interactions, a key factor in critical care team (CCT) performance, influence patient outcomes [1-5]. Critically ill patients are vulnerable both clinically, where small errors in care can produce significant morbidity and mortality [3,4], as well as psychologically, where patients may experience "voicelessness" due to their life-threatening conditions and power imbalance in the patient-provider relationship [6,7]. Critically ill patients in the intensive care unit (ICU) depend on the collective expertise and skill of the CCT to function cohesively, collaboratively, and effectively to give patients the "greatest chance of high-quality survival" [8, p. 1]. Although the idea of practicing collaboratively as an interprofessional team appears simple, findings from a growing body of knowledge reveal that interprofessional team work is a highly complex, nonlinear concept comprising multiple interrelated factors that are not easy to teach, practice, or define [9-11]. Reeves and colleagues [11] posit that health care teams can engage in 4 types of interprofessional interactions, or work (interprofessional work), depending on the level of shared vision across team members, context, clinical problem to be solved, and urgency of resolution (Table 1). The 4 types of interprofessional work are teamwork, collaboration, coordination, and networking, with teamwork requiring the greatest cohesiveness of communication and collective action among team members, such as a cardiac arrest code team.

A multitude of team, organizational, and managerial factors can impact patient outcomes in the ICU [4,12-14]. Models conceptualizing possible interrelationships among these factors have been proposed but not quantified regarding the respective contribution of each factor to defined outcomes [11,14]. Emerging evidence suggests that of the 3 types of factors, team factors, particularly those that shape interprofessional interactions where exchange of critical information and problem solving may or may not occur, play a crucial role in ICU patient outcomes [3,4,11]. Manthous and Hollingshead [4] posit that a high-functioning, collaborative CCT is characterized by respect among all team members; the authors assert that such a team does not happen by chance but is built deliberatively through ICU physician and nursing

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**Table 1**
Interprofessional work [11]

| |
|---|
| *Interprofessional teamwork* (shared team identity and responsibility, integrated, interdependent work) |
| *Interprofessional collaboration* (no shared team identity but shared decision-making and problem-solving) |
| *Interprofessional coordination* (no shared team identity; work in parallel but meet to discuss shared work) |
| *Networking* (no shared team identity; individuals communicate expertise or skill as needed within network) |

leaders who create a culture of psychological safety that allows team members to safely voice an opinion and contribute their expertise in caring for the patient [4]. In the absence of psychological safety to engage in collaborative problem solving, Manthous and Hollingshead contend that the team may miss critical information, thereby setting the stage for error-prone decision making [4]. Organizational and managerial factors such as directives regarding nurse to patient ratios, training, and allocation of hard resources can also impact CCT performance [4,12]. Reeves and colleagues' [11] conceptual model for understanding interprofessional teamwork (Fig. 1) captures the interrelationships between the multitude of team, organizational, and managerial factors that can impact patient outcomes; the factors are organized into 4 interrelated domains: relational, processual, organizational, and contextual. Evidentiary support for the model is growing [1,2,5].

Intensive care unit nurses operate at the intersection of team, organizational, and managerial factors due to the dual nature of their role. As a member of the CCT, ICU nurses function at the "hub of patient care" working closely with the interprofessional CCT to provide round-the-clock surveillance, problem solving, decision making, and advocacy for their patients [7,15, p. 12]. As a hospital employee, ICU nurses are subject to organizational policies as well as being the direct recipients of managerial decisions regarding nurse-patient ratios [4,16]. Intensive care unit nurses may be placed in a position of having to continually balance varying interests of their ICU colleagues (especially physicians) as well as patients, families, and administrators [7]. Given ICU nurses' dual role, ICU nurses' lived experience of interprofessional work, as conceptualized by Reeves and colleagues (Table 1), is important for gaining a more in-depth understanding of how underlying interprofessional interactions influence safety and quality care in the ICU. Indeed, this is a topic of interest that spans multiple stakeholder groups including administrators, clinicians, patients, policymakers, and researchers [1,17-22].

The purpose of this article is to present a secondary analysis of anonymized nursing semistructured interview transcripts from a 2-year comparative ethnographic study exploring cultures of collaboration across ICUs in North America [1,5,21]. The specific aim of this article is to report on a focused analysis of ICU nurses' perspective of factors that enhance or impede their interprofessional work guided by Reeves and colleagues' interprofessional teamwork model (Fig. 1). Secondary analysis uses preexisting data to explore new or additional research questions [23]. Secondary analysis of qualitative data, specifically, carries its own set of methodological and ethical issues that must be addressed [23]. These issues can be summarized in 3 related questions: Is there an appropriate fit between the primary data and secondary research questions? Is the analytic technique in the secondary analysis sufficiently similar to the analytic technique used in the primary study? Are informed consent and confidentiality (ethical considerations) obtained in the primary study appropriately applicable to the secondary analysis or must additional consent be obtained? [23,24].

## 2. Materials and methods

### 2.1. Appropriate fit

Secondary analysis of a subset of qualitative data is appropriate when the analysis provides a "similar but more focused analysis relative to the primary study" [25, p. 409]. The overall aim of the primary ethnographic study was to develop a deeper understanding of factors that support collaborative team–based and patient family involvement in ICUs in a purposeful sample of 8 ICUs, 2 in Canada and 6 in the United States [21]. Data collection included 1117 hours of observation and 178 semistructured interviews of a number of ICU professionals including, but not limited to, nurses, doctors, pharmacists, case managers, social workers, patients, and family members across 8 ICUs. Publications

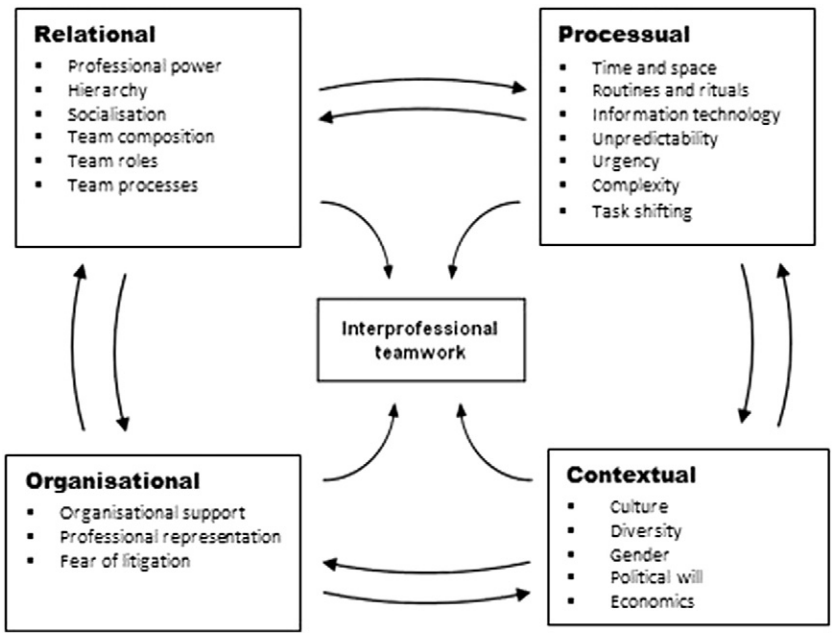


**Fig. 1.** A framework for understanding interprofessional teamwork [11] (reprinted with permission).