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Comparing interprofessional and interorganizational collaboration in healthcare: A systematic review of the qualitative research

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ABSTRACT

Background: Interprofessional and interorganizational collaboration have become important components of a well-functioning healthcare system, all the more so given limited financial resources, aging populations, and comorbid chronic diseases. The nursing role in working alongside other healthcare professionals is critical. By their leadership, nurses can create a culture that encourages values and role models that favour collaborative work within a team context.

Objectives: To clarify the specific features of conceptual frameworks of interprofessional and interorganizational collaboration in the healthcare field. This review, accordingly, offers insights into the key challenges facing policymakers, managers, healthcare professionals, and nurse leaders in planning, implementing, or evaluating interprofessional collaboration.

Design: This systematic review of qualitative research is based on the Joanna Briggs Institute's methodology for conducting synthesis.

Data sources: Cochrane, JBI, CINAHL, Embase, Medline, Scopus, Academic Search Premier, Sociological Abstract, PsycInfo, and ProQuest were searched, using terms such as professionals, organizations, collaboration, and frameworks.

Methods: Qualitative studies of all research design types describing a conceptual framework of interprofessional or interorganizational collaboration in the healthcare field were included. They had to be written in French or English and published in the ten years between 2004 and 2014.

Results: Sixteen qualitative articles were included in the synthesis. Several concepts were found to be common to interprofessional and interorganizational collaboration, such as communication, trust, respect, mutual acquaintanceship, power, patient-centredness, task characteristics, and environment. Other concepts are of particular importance either to interorganizational collaboration, such as the need for formalization and the need for professional role clarification, or to interprofessional collaboration, such as the role of individuals and team identity. Promoting interorganizational collaboration was found to face greater challenges, such as achieving a sense of belonging among professionals when differences exist between corporate cultures, geographical distance, the multitude of processes, and formal paths of communication.

Conclusions: This review sets a direction to follow for implementing changes that meet the challenge of a changing healthcare system and the transition towards non-institutional care. It also shows that collaboration between nurses and healthcare professionals from different healthcare organizations is still poorly explored. This is a major limitation in the existing scientific literature, especially given the potential role that could be played by nurses in enhancing interorganizational collaboration.

What is already known about the topic?

- Interprofessional and interorganizational collaboration have become important components of a well-functioning healthcare system, all the more so given limited financial resources, aging populations, and comorbid chronic diseases.
- Nurses play critical roles in working alongside other healthcare professionals and in promoting interprofessional collaboration by their positive leadership.

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What this paper adds

- Conceptual frameworks of interprofessional collaboration within healthcare organizations and across healthcare organizations' boundaries have been used interchangeably. This systematic review shows that there are distinctions to be made and that some components such as team identity, formalization, and professional role clarification are more difficult to achieve in interorganizational than in interprofessional collaboration, and should, therefore, receive more attention when planning or implementing interorganizational collaboration.
- Collaboration between nurses and healthcare professionals from different healthcare organizations is still poorly explored. This is a major limitation in the existing scientific literature, especially given the current shift towards non-institutional, multidisciplinary care and the potential role that could be played by nurses in enhancing interorganizational collaboration.
- The problem of power struggles between nurses and physicians is a well-recognized one. This review provides a set of goals designed to overcome the problem, namely, building trust, mutual respect for professions and individuals, mutual acquaintanceship, and professional role clarification.

1. Introduction

Interprofessional collaboration has become an important component of a well-functioning healthcare system (Gaboury et al., 2009). Collaboration in public health has been studied in terms of the relationships within multidisciplinary teams within organizations and across the boundaries of different organizations and sectors (Axelsson and Axelsson, 2006). Indeed, collaboration between healthcare providers is necessary in any health care setting, as there is no single profession that can meet all of a patient's needs (Matziou et al., 2014). In health and social care literature, there is considerable variation in the definition of collaboration. Interprofessional collaboration can be viewed as "two or more healthcare professionals who have specific roles, perform interdependent tasks, and share a common goal; a negotiated agreement which values expertise and contribution that each individual brings to patient care" (Gagliardi et al., 2011). For the purposes of this review, these professionals work within the same organization. We differentiate this from interorganizational collaboration, which we define as the set of processes in which healthcare professionals representing multiple organizations engage when working interdependently on patient care (Keyton et al., 2008).

Over the past decade, we have witnessed a move towards community-based healthcare, as opposed to the traditional in-hospital model of care (Van Hoof et al., 2016). Against a background of limited financial resources, aging populations, and comorbid chronic diseases (Barnett et al., 2012, World Health Organization, 2010, Van der Wees et al., 2016), a substantial investment in healthcare system redesign has been made in order to reduce the socio-economic impact of patient complexity on individuals and societies (McPhail, 2016). To that end, community-based care and extra-mural services have developed into organized networks of professionals and organizations, with the aim of providing patient care at the "right place" and with more task substitution to primary care (Van Hoof et al., 2016). However, in several contexts where integration policies are absent or scarce, we still observe duplication and fragmentation of health and social services, especially when provided by professionals from different organizations. For these reasons, the promotion of interorganizational collaboration is becoming a top priority for policymakers and regulatory actors in order to move towards coordinated structures able to provide efficient, high-quality care in outpatient settings. Interorganizational collaboration has the potential to make interventions more cost-effective by reducing redundancy of effort, and to produce greater value by capitalizing on partners' strengths (Olson et al., 2011).

Nevertheless, interprofessional collaboration remains as significant as interorganizational collaboration. Interprofessional collaboration has been proven to improve healthcare processes and outcomes (Zwarenstein et al., 2009). Some of the specific outcomes studied include readmission to emergency departments, length of stay, and quality of health care (Tsakitzidis et al., 2016).

In both contexts, the nursing role keeps expanding and nurses tend to be more autonomous in their areas of expertise (Matziou et al., 2014). At the same time, they play critical roles in working alongside other healthcare professionals (Clarke and Hassmiller, 2013). Moreover, by their leadership, nurses can create a culture that encourages values and role models that favour collaborative work within a team context (Wong et al., 2013).

While various conceptual frameworks have addressed both types of collaboration, the particularities and specific features of each remain unprecise. Initiatives to foster collaboration could suffer from this lack of clarity. Efforts toward collaboration should be guided by a clear understanding of the strategic components of each group's conceptual frameworks.

This systematic review aims to identify existing frameworks of interprofessional and interorganizational collaboration in healthcare and to clarify the particularities and specific features of each. It should help policymakers, managers, healthcare professionals, and nurse leaders to better understand the key challenges of collaboration in each of these settings. It could, thus, provide valuable insights for planning, implementing, or evaluating collaboration, taking into account the specific settings in which collaboration occurs.

2. Methods

This systematic review is based on the Joanna Briggs Institute's (JBI) (2014) methodology for conducting synthesis, which includes: the statement of the research question, in accordance with the review objectives and guided by the PICo mnemonic; the definition of inclusion criteria; the search strategy; assessment of the methodological quality of papers considered for inclusion; the data extraction tool and data synthesis approach; discussion; the limitations of the review; conclusion; and the implications for practice and research.

2.1. PICo

PICo stands for the Participants, the Phenomena of Interest, and the Context. Although several mnemonics are available to guide the structuring of systematic review questions, the JBI uses the PICo mnemonic to frame reviews of qualitative evidence. The expression of the phenomena of interest is the outcome; accordingly, a specific outcome Section or statement is not recommended in *meta*-synthesis (JBI, 2014). The different parts of our formulation of PICo were as follows:

Participants: Professionals OR organizations.

Phenomena of Interest: collaboration AND conceptual framework.

Context: healthcare.

2.2. Research question

Our question is: "What conceptual frameworks analyse interprofessional or interorganizational collaboration in healthcare?"

For the definition of a framework, we refer to Seibold (2002), who outlined the importance of an explicit link between the underlying concepts that constitute this theoretical construction: 'A conceptual framework links discrete concepts based on multiple theories and is seen as an impetus in the development of theory.'

2.3. Inclusion criteria

Inclusion criteria were set in accordance with our PICo.

2.3.1. Types of participants

this review considered studies that included healthcare professionals with any type and length of practice and/or healthcare organizations at the primary- and secondary-care levels.

2.3.2. Phenomena of interest

this review considered studies that included a conceptual framework of interprofessional or interorganizational collaboration in the field of healthcare: studies that either investigated an existing framework of collaboration or presented a framework as a result of research.

2.3.3. Types of studies

this review considered qualitative studies of all research design types, as we chose to explore collaboration from the actors' perspective and based on their experiences. Our argument is that, for a complex social concept to be understood in depth from the actors' perspectives, qualitative research is the most appropriate scientific method.

Papers had to be written in French or English, as these are the languages we understand, and published over a ten-year period from 2004 to 2014. Studies addressing concepts that are similar to or linked to interprofessional collaboration, such as interprofessional education, were excluded. Studies addressing the determinants of successful collaboration, its barriers, and facilitators in isolation were also excluded, as we were mainly interested in how these determinants are linked to each other in a conceptual framework.

2.3.4. Context

this review considered studies that explore interprofessional and/or interorganizational collaboration in any healthcare setting: hospitals, primary and community healthcare settings, patient homes, etc. These settings could be located in any country or cultural or geographical context.

2.4. Search strategy

We followed the JBI three-step search process as described below (JBI, 2014):

First, we performed an initial search limited to the MEDLINE database to identify the text words used to address the concept of collaboration. Identified MeSH terms and keywords turned out to be broad, as authors used a multitude of terms, interchangeably, to describe and address collaboration: inter, multi, professional, disciplinary, teams, agency, organizations, and collaboration. They also used terms related to conceptual frameworks as such: components, concepts, and frameworks.

Second, we used all identified keywords and index terms to carry out another search across the following databases: Cochrane; JBI; CINAHL; Embase; Medline; Scopus; Academic Search Premier; Sociological Abstract; PsycInfo; and ProQuest (dissertations and theses).

Third, we went over the reference lists of all identified reports and articles in order to identify additional studies to be included in our review. We also searched Google Scholar and Open Grey for grey literature.

2.5. Assessment of methodological quality

Papers selected for retrieval were assessed for methodological quality, independently, by two reviewers. In order to be retained, a conceptual framework had to be based on strong empirical data. This critical appraisal of the internal validity of research papers was performed using the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI- Critical Appraisal checklist for Interpretive and Critical Research) (cf. see Appendix A in supplementary material). The Instrument includes criteria such as the presence of congruity between the different parts of the qualitative research, adequate representation of all participants, the consistency of the conclusion with the analysis of the results, etc. Disagreements between the two reviewers were resolved by discussion or by resorting to the judgment of a third reviewer when needed. As shown in Fig. 1, 7262 papers were identified from our search across selected electronic databases. A total of 77 papers were retrieved for full-text examination and 16 papers were included in the synthesis. The included studies fulfilled all of the quality criteria with the exception of six studies. Two peripheral quality criteria were not met in these studies: criteria 7 (The influence of the researcher on the research, and vice-versa, is addressed); and criteria 9 (Ethical approval by an appropriate body) which was missing or unclear in five reports (see Table 1).

2.6. Data extraction

Data were extracted from papers using the JBI-QARI data extraction tool (cf. Appendix B in supplementary material). This allowed the reviewers to identify and synthetize the key features of each paper, such as methodology, phenomena of interest, setting, participants, etc. We adjusted the instrument by adding two items to the "findings" feature: the components of the frameworks and their variables (cf. Appendix C in supplementary material).

2.7. Data synthesis

First, we started by examining the contexts in which collaboration was studied. We assembled the selected papers into two groups: the first contained papers discussing interprofessional collaboration; the second, papers discussing interorganizational collaboration. Then we started the translation phase. The aim of this phase was to undertake a constant comparison between the original concepts of the different frameworks. In other words, we were constantly examining whether "concepts which have different labels are nonetheless describing the same idea" (Noblit and Hare, 1988). For this purpose, we compared the definition and the main attributes and characteristics of each original concept. This comparison led to collapsing them into a refined list of final concepts (see Appendix D in supplementary material). Then we established links between the concepts within groups and summarized them in a single map. Finally, we compared the two maps, to determine what differences and similarities could be observed across these two groups.

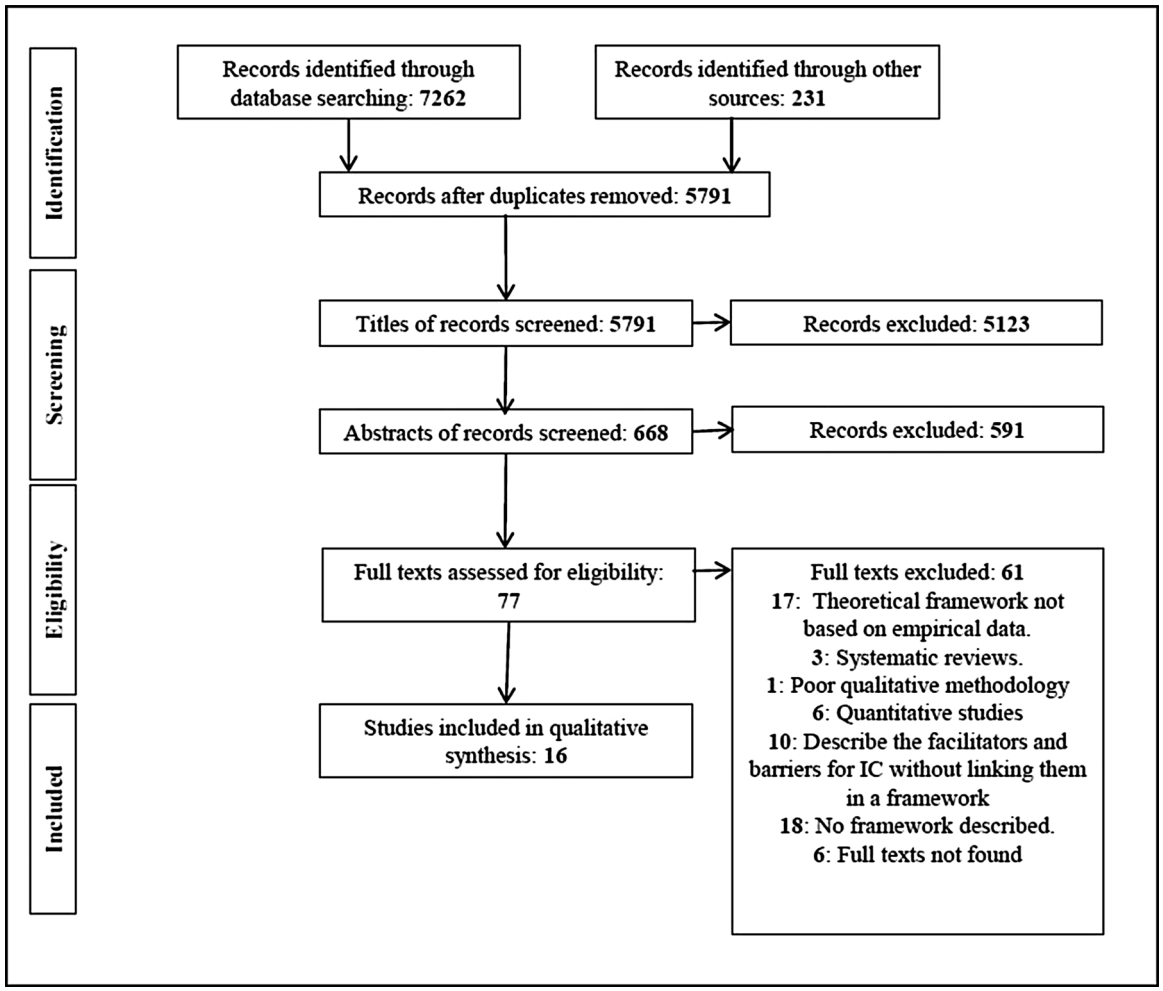


Fig. 1. Flow diagram detailing search results and the retrieval and selection of studies.

3. Results

Of the 16 studies included in our review, 8 addressed interprofessional collaboration (cf. Table 2)., 7 presented frameworks of interorganizational collaboration (cf. Table 3), and 1 studied both and was consequently included in both groups and its findings were used to illustrate the similarities that have been found between the two groups' frameworks.

Table 1
Results of the critical appraisal of the studies included.

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Bradley et al., 2012	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	U	Yes
Croker et al., 2009	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	U	Yes
Croker et al., 2012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crowley, 2008	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
D'Amour et al., 2008	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dey et al., 2011	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dugan, 2012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dunlop and Holosko, 2004	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	U	Yes
Ervin, 2004	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Gaboury et al., 2009	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hepp et al., 2014	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jani et al., 2012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	U	Yes
Kosremelli Asmar, 2011	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mior et al., 2010	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reeves et al., 2014	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shepherd and Meehan, 2012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	U	Yes

U = Unclear.

3.1. Similarities between frameworks of interprofessional and interorganizational collaboration

We identified several components that were similar in both groups' frameworks. These components are "communication, trust, respect, mutual acquaintanceship, power, shared goals, consensus, patient-centredness, and task characteristics". There is also the "environment" in which collaboration happens, which plays a major role in both contexts (cf. Fig. 2 page xx).

Communication is, obviously, the key concept in both frameworks.

In interprofessional collaboration, communication plays a key role and is described as being the core of the processes through which collaboration takes place between healthcare professionals within an organization, at both individual and organizational levels.

Indeed, while formal (team meetings, rounds, charting) and informal (corridor chats and email exchanges) (Croker et al., 2009, Croker et al., 2012, Hepp et al., 2014, Reeves et al., 2014) communication takes place between individuals and groups, it is up to the organization to facilitate and formalize it by using tools such as protocols and agreements (D'Amour et al., 2008). Moreover, information systems implemented by the organization allow rapid and complete

Table 2
Included studies that present frameworks of interprofessional collaboration within healthcare organizations.

Author(s), year, title of the paper	Methods	Design	Participants	Context	Concepts*
Croker, Higgs, &Trede, 2009. "*What do we mean by collaboration and when is a team not a team?*"	Hermeneutic phenomenology	Observation Semi-structured interviews	Observation: Rehabilitation teams (n = 9) comprising at least 3 health professional disciplines. Interviews: Team members (n = 49)	Rural, regional and metropolitan areas. New South Wales, Australia	○ Process ○ Purpose ○ People
Croker, Trede, & Higgs, 2012. "*Collaboration: What is it like? Phenomenological interpretation of the experience of collaborating within rehabilitation teams"*	Hermeneutic phenomenology	Observation Semi-structured interviews	Observation: Rehabilitation teams (n = 9): medical, nursing, occupational therapy, physiotherapy, speech therapy and social workers. Interviews: Team members (n = 66) Patients and caregivers (n = 11)	Hospitals and rehabilitation centers located in rural, regional and metropolitan settings, Australia	○ Engaging ○ Entering ○ Establishing ○ Envisioning ○ Effecting Reflexivity Reciprocity Responsiveness
D'Amour, Goulet, Labadie, Martin-Rodriguez, & Pineault, 2008. " *A model and typology of collaboration between professionals in healthcare organizations"*	Multiple-case research	Semi-structured interviews Analysis of written material	Managers and professionals in healthcare facilities providing perinatal services (n =33)	Health regions in the province of Quebec: urban, mixed urban-rural, and rural regions, Quebec, Canada	○ Shared goals and vision ○ Client-centered orientation ○ Mutual acquaintanceship ○ Trust ○ Centrality ○ Leadership ○ Support for innovation ○ Connectivity ○ Formalization tools ○ Information exchange
Dugan Day, 2012. *« Interdisciplinary hospice team processes and multidimensional pain: a qualitative study"*	Grounded theory	Observation Semi-structured interviews	Multidimensional pain palliation teams (n = 15): physician, office nurse, nurses who made home visits, social worker, chaplain, and home health aide	Rural non-profit hospice Rural for-profit hospice Canada	○ Interdependence ○ Newly created professional activities ○ Role flexibility ○ Collective ownership of goals ○ Reflection on process
Gaboury, Bujold, Boon, & Moher, 2009. *"Interprofessional collaboration within Canadian integrative healthcare clinics: key components"*	Not specified	In-depth, semi-standardized interviews	Participants from 5 clinics (n = 21): 11 complementary and alternative practitioners; 7 physicians and 3 participants with other biomedical therapy backgrounds (nursing or dentistry)	Integrative healthcare clinics located in urban areas in four provinces Canada	○ Input ○ Processes ○ Output
Hepp & al, 2014. *"Using an interprofessional competency framework to examine collaborative practice"*	Secondary data analysis	Semi-structured interviews	Staff members from 6 acute care units in 3 hospitals (n =113): 44 nurses, 8 nursing assistants, 4 managers, 10 unit clerks, 30 other healthcare providers, 2 diagnostic imaging staff, 7 physicians, 5 support services staff, and 3 other staff.	Alberta hospitals-Canada	○ Patient/client/family /community-centered care ○ Communication ○ Role clarification ○ Team functioning ○ Collaborative leadership ○ Conflict resolution

Jani, Tice, &Wiseman, 2012. *"Assessing an interdisciplinary health care model: the Governor's Wellmobile program"*	Case study	Observation Formal, structured interviews Semi-structured interviews Report analysis	Direct service staff (nurses), administrators, and social worker (n = 5)	Community-based primary healthcare and social services delivery program - Mid-Atlantic State USA	○ Interdependence/ Perspective on assessment ○ Collective ownership of goals ○ Newly created professional activities ○ Flexibility ○ Evaluation/reflection on process
Kosremelli Asmar, 2011. *« La collaboration interprofessionnelle: cas d'un service de pédiatrie d'un hôpital universitaire au Liban [in french]- Interprofessional collaboration : the case of a pediatric unit in a university hospital in Lebanon"*	Multiple case study	Observation Face to face semi-structured interviews Patients charts analysis	Healthcare professionals from 3 pediatric units (n = 20): 8 doctors, 1 head nurse, 5 nurses, 3 nurses aid, 1 physiotherapist, 1 psychologist, and 1 dietician.	In-hospital pediatric department: surgical, medical, and intensive care units - University hospital Rural area Lebanon	○ Actors ○ Internal environment ○ External environment ○ Prerequisites ○ Facilitators and barriers. ○ Outcomes
Reeves & al, 2014. *"Interprofessional collaboration and family member involvement in intensive care units: emerging themes from a multi-sited ethnography"*	Comparative ethnography	Observations Semi-structured interviews Analysis of documents Informal conversations	56 interviews with Intensive Care Units staff (nurses, doctors, pharmacists, social workers), patients, and family members, from 4 hospitals.	Intensive Care Units in teaching hospitals: 2 academically oriented units, and 2 with a more general community -based nature. US cities.	○ Relational factors ○ Processual factors ○ Organizational factors ○ Contextual factors

*Detailed descriptions of the concepts identified in each study are presented in Appendix E (in supplementary material).

information exchange (D'Amour et al., 2008). However, one adverse effect of utilizing information technology may be the encouragement of parallel work practices with less face-to-face collaboration (Reeves et al., 2014).

The crucial role of communication is widely addressed by authors in this group. They point out that communication makes possible role negotiation and development in cooperation with others (Croker et al., 2012), as well as role clarification and the span of discipline boundaries (Dugan, 2012), and fosters relationships between the individuals in the team (Gaboury et al., 2009).

In interorganizational collaboration, the centrality of communication lies primarily in 1) its role in linking other key concepts such as trust, power, and professional roles and 2) its direct influence on each of these concepts as it enhances trust, balances power, clarifies professional roles, and helps those involved to share values.

The authors in question agree on the importance of establishing high degrees of communication between healthcare professionals belonging to different organizations. They see this as a key factor for successful collaboration (Mior et al., 2010), and emphasize the need to find the best way for information to flow between each level of a complex interorganizational system (Shepherd and Meehan, 2012). D'Amour et al. (2008) argue that a common infrastructure for collecting and exchanging information is actually this "best way". In order to effectively enhance relationships, communication has to be regular (Bradley et al., 2012, Crowley and Sabatelli, 2008), active (Crowley and Sabatelli, 2008), reciprocal (Bradley et al., 2012, Dey et al., 2011), and open, as both parties need to be comfortable communicating with each other (Bradley et al., 2012, Dunlop and Holosko, 2004). Moreover, Bradley et al. (2012) describe varying degrees of communication, where minimal, unidirectional, and unsustainable contacts are linked to lower levels of collaboration. Authors also agree that communication should be both formal and informal (Bradley et al., 2012, Dunlop and Holosko, 2004, Mior et al., 2010). More importantly, communication is seen as a key element in defining the professional role of each actor (Crowley and Sabatelli, 2008).

Trust, respect, mutual acquaintanceship, and power are also key determinants in both situations and are in obvious interaction with one another. Trust is built up over time, and is affected by the nature and quality of previous experiences of collaboration (Bradley et al., 2012, Dunlop and Holosko, 2004, Jani et al., 2012, Reeves et al., 2014). It is also affected by mutual acquaintanceship. Indeed, Bradley et al. (2012) consider that "trust can only be achieved in a familiar world." Authors identified several sources of distrust, which can be summarized as follows: 1) doubting the other's motivation in providing care and the perceived benefit for him/her (Bradley et al., 2012); 2) feeling threatened by the other's involvement and being afraid of losing some territory (Dey et al., 2011); 3) difference in philosophies and scope of practice (Mior et al., 2010); 4) negative images of the profession (Mior et al., 2010); and 5) lack of confidence in the other's skills and lack of awareness of the other's role in patient care (Bradley et al., 2012). Jani et al. (2012) and Dugan (2012), both using the Bronstein model of interdisciplinary collaboration, talk about interdependence as a result of this confidence: "*From the premise that each profession embodies a unique expertise, trust begins to build into reliance and then into interdependence.*"

On the other hand, trust, mutual acquaintanceship, understanding (Crowley and Sabatelli, 2008, Gaboury et al., 2009), and mutual respect for the profession and the individual are thought to be the key elements in balancing power. Power struggles seem to be mainly present in the relationships between healthcare actors from different hierarchical, social, and economic levels within an organization and across

Table 3
Included studies that present frameworks of interorganizational collaboration.

Author(s), year, title of the paper	Methods	Design	Participants	Context	Concepts*
Bradley, Ashcroft, & Noyce, 2012. "*Integration and differentiation : A conceptual model of general practitioner and community pharmacist collaboration"*	Secondary data analysis	In-depth semi-structured interviews	General practitioners (n = 27) and community pharmacists (n =31)	Primary care - England	○ Locality ○ Service provision ○ Trust ○ knowing each other ○ Communication ○ Professional roles ○ Professional respect
Crowley & Sabatelli, 2008. "*Collaborative childcare health consultation : A conceptual model"*	Grounded theory	In-depth interviews	Pairs of childcare centers' directors and health consultants (n =10)	Childcare health consultation services - Connecticut – USA	○ Beginning the role ○ Identity bargaining ○ Developing the relationship role ○ Open and active communication ○ Comprehensive commitment ○ Mutual respect ○ Congruent philosophies and values. ○ An expanded role ○ A conflicted relationship and limited role
D'Amour, Goulet, Labadie, Martin-Rodriguez, & Pineault, 2008. *"A model and typology of collaboration between professionals in healthcare organizations*"	Multiple-case research	Semi-structured interviews Analysis of written material	Managers and professionals in healthcare facilities providing perinatal services (n =33)	Health regions in the province of Quebec: urban, mixed urban-rural, and rural regions, Quebec, Canada	○ Shared goals and vision ○ Client-centered orientation ○ Mutual acquaintanceship ○ Trust ○ Centrality ○ Leadership ○ Support for innovation ○ Connectivity ○ Formalization tools ○ Information exchange
Dey, de Vries, & Bosnic-Anticevich, 2011. "*Collaboration in chronic care: unpacking the relationship of pharmacists and general medical practitioners in primary care"*	Not specified	Face to face semi-structured interviews	General practitioners (n =7) and community pharmacists (n =18)	Primary care – Western Sydney-Australia	○ Knowledge confidence ○ Face to face contact ○ The act and nature of communication ○ Bi-directional communication ○ Trust, good rapport, respect and common goals ○ Commitment to collaboration and mutual cooperation
Dunlop & Holosko, 2005. *"The story behind the story of collaborative networks-Relationships do matter!"*	Not specified	Qualitative interviews	Upper level public health managers responsible for implementing the healthy babies/healthy children (HBHC) program (n =22)	Public health units/departments in the HBHC program - Ontario, Canada	○ Historical conditions ○ Institutional conditions ○ Financial conditions ○ Operational processes

					○ Organizational processes ○ Relational processes
Ervin, 2004. "*Assessing interagency collaboration through perceptions of families"*	Exploratory, descriptive	Face to face interviews	Families who had used community agencies or organizations of the county health department (n =12)	Primary care - Upstate New York County (rural county) - USA	○ Awareness indicators ○ Resource dependency ○ Domain similarity ○ Consensus ○ Client outcomes
Mior, Barnsley, Boon, Ashbury, & Haig, 2010. "*Designing a framework for the delivery of collaborative musculoskeletal care involving chiropractors and physicians in community-based primary care"*	Grounded theory	Phase 1: interviews and focus groups Phase 2: focus groups	Interviews: Key informants (n =16): academia, administration, chiropractic, medicine, midwifery, nursing, and physiotherapy. Focus groups: Participants (n =62): chiropractors, physicians, and patients.	Community-based primary care - Ontario, Canada	○ Trust ○ Patient centeredness ○ Communication ○ Practice parameters ○ Service delivery
Shepherd & Meehan, 2012. *"A multilevel framework for effective interagency collaboration in mental health"*	Not specified	Semi-structured group and individual interviews Analysis of relevant policy documents	Members of the Government departments of Health, Hosing and Disability Services and Non-Government Organizations (n = 133): Clinicians, service integration coordinators, housing officers, support facilitators, staff from NGO. Clients receiving services (n = 28)	Mental health services: government and non-government organizations - Queensland, Australia	○ Strategic level ○ Agency level ○ Service provider ○ Client Integration coordinator

*Detailed descriptions of the concepts identified in each study are presented in Appendix E (in supplementary material).

organizational boundaries. More specifically, the physicians' dominance over other actors such as nurses or community pharmacists was often brought up (Bradley et al., 2012, Dey et al., 2011, Reeves et al., 2014). Power struggles give rise to negative attitudes and the inability, from both sides, to relate to each other as equals (Dey et al., 2011).

Shared goals and consensus were also part of both groups' frameworks

For successful interorganizational collaboration, actors must have shared goals and a common purpose (D'Amour et al., 2008, Dey et al., 2011, Dunlop and Holosko, 2004, Shepherd and Meehan, 2012) of providing quality care to their patients (Crowley and Sabatelli, 2008) and promoting patient-centred care (D'Amour et al., 2008, Mior et al., 2010, Shepherd and Meehan, 2012). They should also have congruent philosophies and values and a commitment to collaboration and mutual cooperation (Dey et al., 2011). In relation to interprofessional collaboration, authors saw the process of forming collective goals (Dugan, 2012) as being made possible by dynamic team communication and negotiation (Croker et al., 2012). These goals must be clearly stipulated (Kosremelli Asmar, 2011) and shared by all (D'Amour et al., 2008, Dugan, 2012, Jani et al., 2012). The concept of "consensus" was also brought up by authors from both groups. In interorganizational collaboration, consensus refers to the extent to which each organization agrees or disagrees with a specific set of goals, tasks, and issues (Ervin, 2004). In interprofessional collaboration, on the other hand, "consensus" refers to an implicit understanding of how team members should work together (Croker et al., 2012).

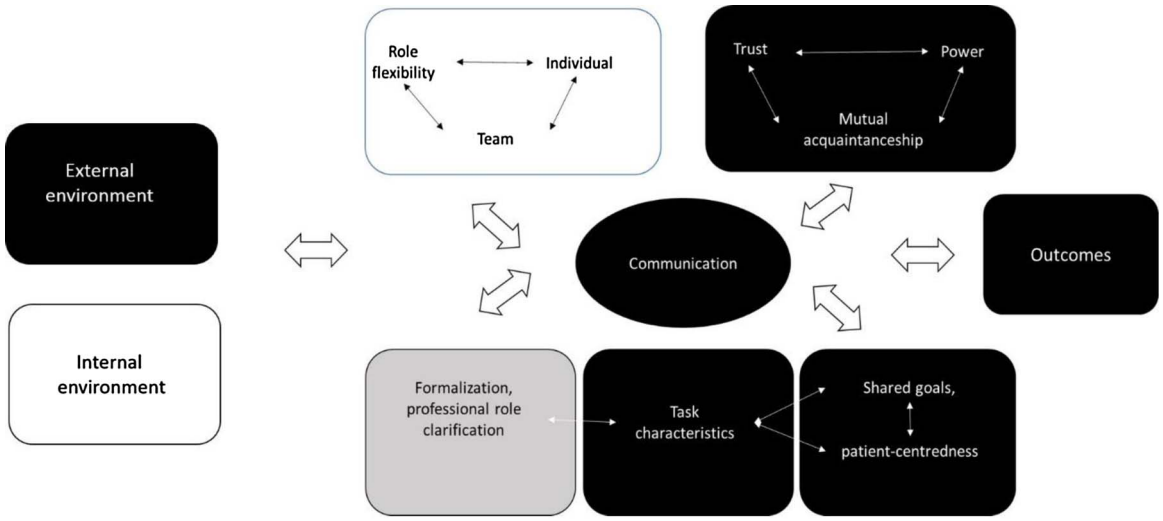
Patient-centredness was also a major component in frameworks of both interprofessional and interorganizational collaboration.

For Mior et al. (2010), "collaboration would enable patient participation in clinical decisions making and management, and be respectful of patient choice." They defined patient care as being the centre of the framework of interorganizational collaboration. Similarly Shepherd and Meehan (2012) described collaboration on four levels, one of which is the "client". For them, clients should "take an active role in care and treatment."

In the interprofessional collaboration group, Hepp et al. (2014) investigated patient-centred care through indicators such as care quality, meeting patient needs, safety standards, and care and decision-making centred on patients and their families. Dugan (2012) explored the participation of patients and families in pain management and care, while Croker et al. (2012) highlighted the fact that "patients' wishes and aspirations were brought into the meetings" between team members. In Kosremelli Asmar (2011), patients and families were seen as active actors in interprofessional collaboration as well as beneficiaries.

Another similarity between the two groups is in relation to **task characteristics**. In the interprofessional collaboration group, Reeves et al. (2014) and Kosremelli Asmar (2011) emphasized the effect that complex and urgent tasks have on collaborative work: they argued that periods of crisis encourage professionals to work together in a more cohesive and collaborative way. Similarly, in the interorganizational collaboration group, one of the five major components of the conceptual framework used by Ervin (2004) to assess interagency collaboration is about task characteristics and their scope, complexity, and uncertainty.

Finally, similarities between **the environmental factors** were also identified in both groups. For interorganizational collaboration, the environment includes the external network, political, demographic, social, and economic factors affecting organizations (Ervin, 2004),



Legend:

	Indicates concepts common to interprofessional and interorganizational collaboration frameworks
	Indicates concepts specific to interprofessional collaboration
	Indicates concepts specific to interorganizational collaboration

Fig. 2. Comprehensive framework of similarities and differences between interprofessional and interorganizational collaboration.

which either enhance or constrain their collaboration. The main elements of the environment can be summarized as follows:

1) The models of service delivery and government policies (Shepherd and Meehan, 2012); centrality (D'Amour et al., 2008); decision-making levels and processes (Dunlop and Holosko, 2004, Shepherd and Meehan, 2012); patients' access to care on the financial level and with or without referral, as well as the provider's reimbursement policies (Mior et al., 2010).
2) Sufficient or scarce resources in the community, especially in case of domain similarities (Dunlop and Holosko, 2004, Ervin, 2004, Shepherd and Meehan, 2012).
3) The geographic location of organizations, rural or urban, and their proximity to each other (Bradley et al., 2012, Shepherd and Meehan, 2012).
4) Legislation and its definition of the scope of each organization's practice (Mior et al., 2010).

Similarly, for interprofessional collaboration, this macro or external environment in which the organization is embedded has an impact on collaboration between actors; this involves the broader cultural, political, social, and economic issues that frame collaboration (Reeves et al., 2014). For instance, a private healthcare system, where competition for profit is the main driving force, can be considered a major barrier to interprofessional collaboration (Kosremelli Asmar, 2011). Economic factors such as financial limitations for both patient and practitioners and the lack of a reimbursement plan (Gaboury et al., 2009) undeniably affect the patient referral process and, consequently, interprofessional collaboration. Social and cultural factors, such as the image of a profession, can also make professionals more inclined to engage in collaboration or reluctant to do so (Gaboury et al., 2009, Kosremelli Asmar, 2011).

Interprofessional collaboration frameworks, however, differ from interorganizational ones in the emphasis put on the "internal" environment's role in facilitating or constraining collaboration within the organization. The **structural** and **organizational** characteristics of a healthcare facility play a significant role in interprofessional collaboration. These include:

1) Developing and promoting a shared vision of goals and a patient-centred orientation (Croker et al., 2012, Jani et al., 2012, Kosremelli Asmar, 2011).
2) Implementing an evaluation of the interdisciplinary effort and reflection on the process (Dugan, 2012, Jani et al., 2012).
3) Formalizing collaboration and clarifying the roles and responsibilities of each partner (Kosremelli Asmar, 2011).
4) Creating formal channels of communication and information exchange, as well as providing time and space for informal communication between individuals and groups (Croker et al., 2012, Kosremelli Asmar, 2011).
5) Allocating adequate resource support in terms of time, space, and human and material resources for task completion (Croker et al., 2012, Jani et al., 2012, Kosremelli Asmar, 2011).
6) And the overall planning of local institutional structures and

management processes (Reeves et al., 2014). This includes providing support, creating a workplace which is free of discrimination and harassment, and implementing a culture of safety where responsibility for error is widened to include all team members and the organization in which they work (Reeves et al., 2010).

3.2. Differences between frameworks of interprofessional and interorganizational collaboration

In addition to the internal environment's importance in interprofessional collaboration frameworks, we were able to identify a set of several other differences between the two groups, which are related to formalization, professional role clarification, the individual's role, team identity, leadership, and outcomes (cf. Fig. 2).

Formalization plays a greater role in interorganizational collaboration than in interprofessional collaboration.

Studying interorganizational collaboration frameworks, authors often emphasize the necessity of formalizing collaboration, using tools such as policies and procedures (Shepherd and Meehan, 2012), or through established collaborative processes. Dunlop and Holosko (2004) described three sets of processes: operational, such as membership recruitment and decision-making processes; organizational, which includes types, levels, and complexity of collaborative network structures; and relational, which is mainly about interpersonal relationships. These relational processes were also described in the interagency collaboration model used by Ervin (2004).

In interprofessional collaboration frameworks, these processes are mainly used to determine the characteristics of communication, its formal or informal nature (Croker et al., 2009), and its frequency (Gaboury et al., 2009).

The need for **professional role clarification** is also related to this need for formalization. The lack of clarification of one's own professional role and those of others is thought to be a significant barrier to interorganizational collaboration, as it creates confusion and power struggles. Authors agree upon the necessity of a clear role description (Shepherd and Meehan, 2012), a definition of task characteristics such as the scope and complexity of each actor or agency (Ervin, 2004), a definition of practice parameters (Mior et al., 2010), and awareness of other organizations' resources, goals, and capacities (Ervin, 2004).

It is also essential for professionals to be aware of each other's training in order to understand each other's roles and to respect, trust, and recognize each other's expertise (Bradley et al., 2012, Dey et al., 2011). Crowley and Sabatelli (2008) bring to light the notions of "role making" and "identity bargaining" as critical themes in collaborative relationships. As stated earlier, the key to role negotiation and definition is thought to be open and active communication between actors.

In interprofessional collaboration frameworks, authors also agree that professional roles and the scope of practice should be clearly understood (Hepp et al., 2014, Reeves et al., 2014). They also point to the need for individuals to be aware of each other's clinical paradigms, education, and training (Gaboury et al., 2009, Kosremelli Asmar, 2011) as well as of their own limitations (Gaboury et al., 2009). Indeed, this awareness facilitates the patient referral process and therefore enhances collaboration. However, the difference with interorganizational collaboration frameworks lies in the emergence of the concept of deliberate role blurring, where members of a discipline perform what might not be considered their primary role on the team (Dugan, 2012); this is at odds with the need for formalized professional roles. The concept of role flexibility, moreover, means that individuals compromise on their predetermined roles and are dynamic and reactive in providing services (Jani et al., 2012). This reactivity may be impeded in interorganizational collaboration by formal communication flows.

Another major difference between the two groups is the focus, in interprofessional collaboration, on the **individual**. Authors stress the importance of remembering "that each contribution is made by a person" (Croker et al., 2012). For this reason, individual input becomes crucial within frameworks of interprofessional collaboration. Key factors here include *education* and *training* (Kosremelli Asmar, 2011); individual *characteristics* such as openness, respect, and readiness to value different contributions (Croker et al., 2012, Jani et al., 2012); individual *capabilities* such as the ability to cope with change, reciprocity, and reflexivity (Croker et al., 2012); individual *representations* (Croker et al., 2009); and individuals' *motivations,* as each individual should be willing to engage in collaboration (Kosremelli Asmar, 2011) and accept other people's diversity (Croker et al., 2012) for a collaborative relationship to be possible.

Moreover, actors working together within the same organization are referred to as a "**team**". (Croker et al., 2009, Croker et al., 2012, Dugan, 2012, Gaboury et al., 2009, Hepp et al., 2014, Reeves et al., 2014), whose members are engaged in an open relationship (Hepp et al., 2014). Together, they envision together frameworks for patient care (Croker et al., 2012) they share a common vision and a holistic, multidisciplinary approach to patient and family care (Kosremelli Asmar, 2011). The characteristics of team composition, such as size and membership (Reeves et al., 2014), play a significant role in a collaborative relationship, as do characteristics such as team members' abilities, attitudes, and backgrounds (Gaboury et al., 2009)

Within a team, informal communication and relationships are omnipresent and are even what turns a group of people into a "team". This informality is facilitated by the fact that actors work "closely" and "could go to people any time in the day and ask them about the clients" (Croker et al., 2009). It also helps that they share team spaces − as opposed to profession-specific spaces −- in the care unit or the organization: this encourages regular interaction and communication (Reeves et al., 2014).

Again, blurred boundaries and a lack of clarity in structure and processes could be observed in teams (Croker et al., 2009), while in interorganizational collaboration, as stated earlier, there is a major emphasis on formalization and role clarification.

While frameworks of interprofessional collaboration clearly emphasis the need for collaborative **leadership** (Gaboury et al., 2009, Hepp et al., 2014, Kosremelli Asmar, 2011, Reeves et al., 2014), a decision-making authority who would be responsible for solving problems on the one hand and empowering staff on the other, frameworks of interorganizational collaboration refer to an "integration coordinator" who would facilitate communication across levels, organize meetings, and be familiar with interorganizational programmes and their clients (Shepherd and Meehan, 2012).

Finally, the **outcomes** of collaboration were part of both groups' frameworks. However, two distinctions could be made; 1) while in both groups outcomes were expected to be observed at the patient, community, and organizational levels, the "individual" and "group" levels were only described in frameworks of interprofessional collaboration − this is consistent with the fact that individuals and teams are key determinants in this group; and 2) outcomes are mentioned, but not explained, in interorganizational collaboration frameworks, whereas in interprofessional collaboration groups outcomes are reported on different levels.

On an individual level, interprofessional collaboration is thought to increase professionals' satisfaction, mainly by modifying their workload, which allows them to dedicate more time to intellectual occupations (Gaboury et al., 2009). Authors also point to task completion and

knowledge creation and exchange as major results of collaboration (Croker et al., 2009, Gaboury et al., 2009, Kosremelli Asmar, 2011).

As for outputs on a group level, interprofessional collaboration enhances the development and sustainability of a team (Croker et al., 2012) characterized by mutual support (Kosremelli Asmar, 2011), interdependence, and trust (Dugan, 2012). This, in turn, improves morale and encourages staff to feel more empowered (Hepp et al., 2014). Moreover, through teamwork, professionals "can begin to perform untried tasks routinely performed by other disciplines." (Dugan, 2012, Jani et al., 2012)

The organization benefits from the improved working atmosphere and the enhanced affective commitment of its practitioners (Gaboury et al., 2009), as well as from the positive image and success projected to the outside world (Kosremelli Asmar, 2011).

On the institutional and societal levels, interprofessional collaboration leads to improved quality of care, a multidisciplinary and holistic approach in patient care management, and increased patient satisfaction (Croker et al., 2012, Kosremelli Asmar, 2011). Finally, patients' families benefit from the support and comfort provided by team members (Kosremelli Asmar, 2011).

4. Discussion

In this review, we chose to differentiate between interprofessional collaboration within an organization and collaboration across organizational boundaries, with a view to understanding the specific nature of each and thereby shedding light on key challenges faced by governments, healthcare professionals, and nurse leaders in planning, implementing, or evaluating collaborative care.

The results showed that there are more similarities than differences between the two frameworks. Some framework elements, indeed, applied to both situations. This is the case with the framework described by D'Amour et al. (2008). The conceptual framework used by Reeves et al. (2014) to assess interprofessional collaboration in intensive care units was originally built in relation to "interprofessional teamwork" (Reeves et al., 2010) within and across healthcare organizations. Similarly, Hepp et al. (2014) used the National Interprofessional Competency framework − developed "to guide interprofessional education and collaborative practice for all professions in a variety of contexts" − to examine collaborative practice in acute care units. However, and despite undeniable similarities, the findings of this review suggest that there are distinctions to be made and specific components to be taken into consideration when implementing, evaluating, or working to improve collaboration in one setting or another.

Indeed, promoting interorganizational collaboration has been found to pose a bigger challenge than promoting interprofessional collaboration. As shown in the results, professionals working within the same organization eventually become a "team" and develop a certain cohesion due to physical proximity, informal communication, and a common organizational culture. In interorganizational collaboration, on the other hand, this sense of belonging is less easily achieved, especially given differences between corporate cultures and their models of governance, as well as issues relating to geographical distance, the multitude of processes, and formal paths of communication. Morris and Matthews (2014) illustrated the challenge of communication in healthcare professionals' own words: "that's the whole thing about interprofessional teams. If you can't communicate, there's no team…If you don't communicate, you might as well be on your own". Communication is indeed thought to be a key strategy in bringing people together. While recent advances in information technologies have contributed to enhancing interorganizational collaboration by offering "electronic bridges" and creating "virtual teams" (Reeves et al., 2010), the use of this technology does not always meet the healthcare professionals' needs, nor is it considered an effective tool for their specific environment. As a result, it meets with great resistance from potential users. Another obstacle to interorganizational collaboration is the negative perceptions of actors, often based on concern that collaboration would overburden systems that already lack the necessary resources and workforce to handle current demand by adding yet another task: working with other, unfamiliar professionals with historical, organizational, and philosophical differences (Blakey, 2014). Finally, there is the great difficulty, if not impossibility, of establishing daily rounds where team members could express their opinions and feel they are being heard, which could lead to greater team cohesiveness (Morris and Matthews, 2014). This is particularly relevant for interorganizational collaboration in rural settings, where opportunities for interaction are restricted (Reeves et al., 2010).

Nurses could play a major role in tackling these challenges of interorganizational collaboration. They are in an excellent position to assume the lead role in the collaborative effort, because of their professional status and close interaction with clients (Koerner and Huber, 2006). Moreover, "new" nurses' roles within primary care teams have been developing over the past decade, focusing, for example, on case management. This involves the coordination of care and the facilitation of communication and collaboration among healthcare team members (Watts et al., 2011). Despite these developments, none of the interorganizational collaboration frameworks in our review explored collaboration between nurses and other healthcare professionals. This represents a weakness in the existing literature; future studies should focus more on specific research questions such as how nurses can promote a sense of belonging and team identity within multidisciplinary teams across different organizations or how they can enhance team cohesiveness in the context of interorganizational collaboration.

In pointing out some of the challenges of interorganizational collaboration, we do not pretend that achieving a high level of interprofessional collaboration is a simple task. Nor do we believe that putting people together within the same organizational walls, without first addressing issues such as epistemological and ontological backgrounds and group identities (Barrow et al., 2014), is sufficient to actually make them work together. Despite the co-location of services and people, lots of barriers to collaboration might still exist. Lawn et al. (2014) identified three main categories of obstacles: infrastructural arrangements such as governance structure, resources, and information management systems; territorial behaviour such as taking ownership of space and inhibiting others from using it at the same time; and finally, people's "simple" unwillingness to collaborate. Power struggles within healthcare organizations have also been studied as a major factor that impedes collaboration, especially between physicians and nurses (Matziou et al., 2014). The findings of this review provide a set of goals that could help to balance power, including trust, mutual respect for professions and individuals, mutual acquaintanceship, and clarification of professional roles.

On the other hand, although one might think that the "macro" environment plays a more important role in interorganizational collaboration than within an organization, the results of this review suggest that this is not the case. Environmental factors and the healthcare system as a whole are equally vital for collaboration of both kinds. The way the provider reimbursement plan works, for example, could limit patient referrals, create competition between professionals, and lead

them to hold on to their patients, whether they are working in the same organization or not. Fee-per-service payment appears to be a particular threat to collaboration, in both groups, as a professional could consider that he or she was "wasting time" on meetings, phone calls, and patient case-study discussions, when he/she could have been consulting.

More than ever, governments are now required to review providers' reimbursement plans and to enhance their integration policies in order to avoid competition, duplication of services, and inefficiency. They also need to create a legislative framework that clarifies the scope of each actor and organization's practices. Interorganizational collaboration has become a top priority for healthcare systems, as extra-mural and community-based services have been growing consistently, internationally, in an attempt to switch from acute, hospital-oriented, reactive care to preventive and proactive care (Tsiachristas et al., 2015). If governments aspire to tackle the challenge of chronic disease and to reduce the social and economic impact of patient complexity, collaboration within primary care services and across primary and secondary care levels should be reinforced. Interorganizational collaboration thus becomes of particular significance for governments if they aspire to an efficient, effective, patient-centred, collaborative care model. Finally, it is crucial to remember that collaboration is a voluntary process, so policymakers must also invest in incentive measures designed to encourage and facilitate this collaboration.

Finally, in this review we chose to compare frameworks of collaboration, as we were interested in how their concepts are linked and influence each other. These links are depicted in Fig. 2. The figure highlights the central and fundamental position of communication in both contexts and its role in linking concepts. It also emphasizes the role played by the environment in enhancing or hindering both interprofessional and interorganizational collaboration, with a particular focus on how the "internal" environment affects collaboration within an organization. In addition, the framework in this figure shows the links present within a "family" of strongly interrelated concepts such as: trust, mutual acquaintanceship, and power; the need for professional role clarification and formalization; the input of individuals and their characteristics and roles within a team; and, finally, shared goals in the quest for improved collaboration, better quality of care, and greater patient-centredness.

5. Limitations of the review

Qualitative comparison could be difficult because of overlaps and nuances. Moreover, "each researcher will have different substantive interests, see different comparative puzzles, and achieve different synthesis." (Noblit and Hare, 1988). In order to address this challenge, two reviewers constantly examined and compared results. We have tried to be quite explicit about how we proceeded and how we have presented our findings.

The set of components presented in the results of this systematic review is not exhaustive, nor could it ever be. Nevertheless, we have tried to offer a wide range of "essential ingredients" as described by the authors.

Another limitation of the current review might be related to the broad keywords used for the bibliographic research, such as multidisciplinary, interdisciplinary, interagency, teamwork, collaboration, etc. Perhaps specifications for each term could have been made. However, by broadening the scope of the research, we reduced specificity and thereby the risk of missing relevant articles, knowing that actors used this same multitude of terms interchangeably. Moreover, the results highlighted the persistent lack of consensus on a definition of interprofessional collaboration. Some authors pointed out the confusion existing about this concept, without, quite understandably, proposing a new definition.

6. Conclusion

The results of this systematic review showed a multitude of similarities between the conceptual frameworks of interprofessional and interorganizational collaboration in healthcare. Communication, trust, respect, mutual acquaintanceship, power, shared goals, congruent philosophies and values, consensus, patient-centredness, task characteristics, and environment were the main concepts common to the two groups. Other concepts were of particular importance to interorganizational collaboration, including the need for formalization through tools such as policies and procedures and the need for professional role clarification, while, in interprofessional collaboration, deliberate role blurring and flexibility are perfectly acceptable. The role of each individual and team identity are also more central to interprofessional collaboration. Finally, the outcomes of collaboration, especially at the individual and group levels, were emphasized more strongly in the interprofessional collaboration group.

This review has offered clarification of the particularities and specific features of interprofessional and interorganizational collaboration in healthcare, and could therefore inform policymakers, managers, healthcare professionals, and nurse leaders and set a direction to follow for implementing changes that meet the challenges of a changing healthcare system and the transition to non-institutional care.

7. Implications for practice

- The findings of this systematic review suggest that collaboration within an organization increases professionals' satisfaction, enhances the development and sustainability of a team, improves the working atmosphere, and reinforces the affective commitment of practitioners to their organization. In other words, interprofessional collaboration contributes to the development of a high-quality work environment. Creating this attractive environment across healthcare organizations' boundaries seems to be more challenging: it would, however, contribute to the solution of the primary-care workforce shortage, especially in relation to the recruitment and retention of primary-care physicians and nurses.
- Managing interprofessional collaboration requires specific efforts and a leader who has the capacity to motivate professionals, increase their commitment to the mission and values of the organization, and lead them to rise above their personal interests (Lavoie-Tremblay et al., 2016). Moreover, this transformational leader must demonstrate respect and understanding for the roles and contributions of others (Steaban, 2016). By their central professional status and close interaction with patients, nurses are in the best position to assume this leadership role. Few organizations and governments provide the resources needed for training leaders to adopt this supportive approach.
- Preparing professionals to work in teams is essential. Interprofessional education should be promoted beyond the primary curriculum and become an essential part of a team's continuing education. This educational setting would shape team identity, increase understanding of divergent paradigms, and reduce misperception of different backgrounds.

8. Implications for research

- This systematic review did not explore the level of importance of each component of collaboration with a view to achieving set goals. It would be interesting, in the future, to attempt to rank components in terms of their importance or "indispensability" for achieving successful collaboration in each specific setting.

Conflicts of interest

None

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at https://doi.org/10.1016/j.ijnurstu.2017.11.002.

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