# Interprofessional Collaboration and Patient Health Outcomes in Urban Disadvantaged Settings: A Grounded Theory Study

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## Abstract

**INTRODUCTION** Interprofessional interventions improve the ability of health professionals to work in teams, communicate effectively, respect and appreciate each other, and develop shared patient-centric values. While these interventions can change attitudes and beliefs about interprofessional collaboration, the relationship between interprofessional collaboration and patient health outcomes remains poorly understood, particularly for socioeconomically disadvantaged populations. This study sought to explore the relationship between interprofessional collaboration and patient health outcomes in urban disadvantaged settings.

**METHODS** Constructivist grounded theory methodology was used to perform 4 focus groups and 19 individual interviews with health professionals working in these settings in the United States. Emergent themes were developed into a conceptual model that captures their views on the link between interprofessional collaboration and patient health outcomes in these settings.

**RESULTS** 114 qualitative themes were identified and collapsed into 10 theoretical categories (interprofessionalism, building trust, coordination, facilitating sharing, patient care, enhancing reciprocity, common goals, effecting change, healthcare system disparities, and patient individual, group or population disparities), all of which were then merged into two theoretical concepts that explain all of the data (social capital and disparities).

**CONCLUSION** Interprofessional collaboration works via better coordination and optimization of patient care, which explains how better patient health outcomes may be achieved. However, it is social capital and its cognitive elements of trust, sharing and reciprocity that underlie this phenomenon and explain why better health outcomes may be possible via interprofessional collaboration. Additional research studies exploring patient perspectives and the structural elements of social capital in this context are warranted.

**Implications for Interprofessional Practice**

- Interprofessional collaboration builds trust among health professionals, patients, their families and communities.

- Improved trust facilitates the sharing of information, decision-making roles and care delivery tasks, which are all components of good care coordination.

- Better care coordination leads to improved reciprocity in patient care from all stakeholders, including greater continuity of and adherence to care, provision of holistic care, and implementation of supportive institutional policies.

- Patient health outcomes can be improved when all stakeholders are responsive to all the elements of the relationship between interprofessional collaboration and patient care.

- Social capital, and its corollaries of trust, sharing and reciprocity, are the foundations of the relationship between interprofessional collaboration and patient health outcomes.

## Introduction

Effective collaboration among health professionals is key to optimizing patient health outcomes. The increased complexity of healthcare systems (Institute of Medicine, 2001), the high degree of specialization within the health professions (Irvine, Kerridge, McPhee, & Freeman, 2002), the worsening non-communicable disease burden (World Health Organization, 2012) and the increasing scarcity of resources (Institute of Medicine, 2012) require healthcare delivery that is well coordinated, team-based and patient-centered to achieve optimal patient health outcomes within resource constraints.

Interprofessionalism, interprofessional collaboration, or interprofessional collaborative practice (IPCP), embody the philosophy that when two or more individuals from two or more health professions learn with, from and about one another and work together, there can be substantial improvements in the quality and efficiency of care, and its delivery becomes more cohesive and patient-centered (Herbert, 2005; World Health Organization, 2010). Thus, IPCP is the act of collaboration by continuously learning with, from and about each other, preferably with involvement of the patient, family and community, in the process of improving healthcare quality and optimizing patient health outcomes (Australian Interprofessional Practice and Education Network, 2012; World Health Organization, 2010). It is the construct that interprofessional learning (**IPL**) interventions are seeking to influence.

Interprofessional learning interventions that are designed to stimulate IPCP include interprofessional education (IPE), practice (IPP) and organization (IPO) (Reeves et al., 2011). **IPE** consists of all educational initiatives where students or professionals from at least two different health professions learn with, from and about each other to facilitate effective collaboration and improve the quality and efficiency of care as well as patient health outcomes (Centre for the Advancement of Interprofessional Education, 2002; World Health Organization, 2010). Examples includes lectures, case simulations, and other didactics engaging students from more than one health profession. **IPP**, on the other hand, consists of all endeavors that are interprofessional in nature but move beyond the educational realm, where health professionals are collaborating actively with each other, including learning with, from and about each other in the practice setting, to accomplish the common goals of improving healthcare and patient health outcomes (Australian Interprofessional Practice and Education Network, 2012; World Health Organization, 2010). **IPO** is a special type of IPP that expands the roles of health professionals to include health policy development and other organizational-level methods of collaborative engagements (Reeves et al., 2011). Exam-

ples of IPP include interprofessional meetings, briefings or rounds among licensed health professionals working on the wards or other clinical settings, while examples of IPO include team-based quality improvement initiatives and the collaborative formulation of organizational staffing policies (Reeves et al., 2011; Reeves, Goldman, & Zwarenstein, 2009). All of these IPL interventions are thought to ultimately lead to better patient care and health outcomes and reduce healthcare costs (Interprofessional Education Collaborative Expert Panel, 2011).

A systematic review (Lapkin, Levett-Jones, & Gilligan, 2011) has shown that IPL initiatives improve IPCP educational outcomes, such as student and health professional attitudes, beliefs, knowledge, skills and abilities (Canadian Interprofessional Health Collaborative, 2012). Several other systematic reviews have shown that IPL interventions also improve IPCP healthcare outcomes, such as behaviors, organizational practice, and patient and provider satisfaction (Canadian Interprofessional Health Collaborative, 2012). For example, IPL reduces length of stay and improves patient care management (Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013; Reeves et al., 2008; Zwarenstein, Goldman, & Reeves, 2009).

However, several knowledge gaps persist. The lack of empirical evidence on the relationship between IPCP and patient health outcomes is pervasive. Health outcomes can be defined as those that can be measured objectively using modern medical diagnostic tools (ex. quality of life, survival from heart attacks, and the incidence or prevalence of diabetes mellitus). Patient health outcomes are directly related to population health outcomes, which accounts for the differential distribution of health outcomes in a population and its various social groups (Kindig, 2007). Many studies explicitly call for measuring the relationship between IPCP and patient health outcomes and exploring how IPCP effects changes in healthcare and patient health outcomes (B. F. Brandt, 2014; Reeves et al., 2013; Reeves et al., 2008; Zwarenstein et al., 2009), yet this call remains largely unanswered in the literature. This evidence gap is particularly poignant when IPCP is envisioned in the context of the health and healthcare disparities (Fiscella & Epstein, 2008; Institute of Medicine, 2002; Krist, Johnson, Callahan, Woolf, & Marsland, 2005; Perloff, Kletke, & Fossett, 1995) faced by socioeconomically disadvantaged communities (Vanderbilt et al., 2013; Xyrichis & Lowton, 2008).

Social capital, which consists of the sum of the cognitive and structural or interpersonal linkages that connect people together (Islam, Merlo, Kawachi, Lindstrom, & Gerdtham, 2006), has been proposed as a possible theoretical framework by which IPL acts to enhance IPCP (Gloede, Hammer, Ommen, Ernstmann, & Pfaff, 2013; Godley & Russell-Mayhew, 2010) and thereby potentially improve patient health outcomes. However, this proposed mechanism has not been demonstrated inductively or grounded in any empirical qualitative study to date. Furthermore, while social capital may explain how IPL improves the cognitive and structural functionality of collaborative relationships among health professionals (Godley, Barron, & Sharma, 2011; Godley & Russell-Mayhew, 2010), no explanatory mechanism on how IPCP works to change patient health outcomes, a more downstream but highly prized effect, has been proposed.

These knowledge gaps must be addressed to achieve interprofessional collaboration at all levels of the educational continuum (Institute of Medicine, 2013), establish a lasting and meaningful commitment to and a real partnership with patients, families and communities – particularly those facing substantial disparities in health and healthcare – and improve population health outcomes (Institute of Medicine, 2014). IPCP has substantial implications for health professional education, policy, and practice in the United States (US) (Reeves et al., 2011). Health professions students must increasingly be more interprofessionally competent to maximize patient-centered care, and health educators require empirical evidence on the association between IPCP and patient health outcomes to justify crafting appropriate and effective educational policies (Hammick, Freeth, Koppel, Reeves, & Barr, 2007) and validate the curricular utility of interprofessional rather than uni-professional education (Thistlethwaite, 2012). Hospital and healthcare systems administrators and clinicians need research evidence demonstrating how the implementation of IPL will improve patient health outcomes and reduce costs (B. F. Brandt, 2014; Interprofessional Education Collaborative Expert Panel, 2011). The purpose of this study is to inductively explore the relationship between IPCP and patient health outcomes in disadvantaged settings in the US from the perspective of health professionals working in this context.

## Review of the Literature

The exact mechanisms linking IPL interventions with healthcare and patient health outcomes have long been unclear (Barnsteiner, Disch, Hall, Mayer, & Moore, 2007; Barr, Freeth, Hammick, Koppel, & Reeves, 2006; Barr, Hammick, Koppel, & Reeves, 1999). Several systematic reviews have explicitly called for the conduct of research studies that seek to explain how IPL interventions lead to changes in healthcare and patient health outcomes (Reeves et al., 2013; Reeves et al., 2008; Zwarenstein et al., 2009). A search of the literature via Google Scholar, Medline, CINAHL and Scopus, using the key words "interprofessional" and "health" or "patient" or "professional" yielded 9 relevant qualitative research studies (Adams, Orchard, Houghton, & Ogrin, 2014; Bajnok, Puddester, Macdonald, Archibald, & Kuhl, 2012; Bradley Eilertsen et al., 2009; Chong, Aslani, & Chen, 2013; Eloranta, Welch, Arve, & Routasalo, 2010; Fredheim, Danbolt, Haavet, Kjonsberg, & Lien, 2011; Goldman, Meuser, Rogers, Lawrie, & Reeves, 2010; Hjalmarson, Ahgren, & Kjölsrud, 2013; Maneze et al., 2014) that have explored various aspects of this relationship.

Most of these studies used an unspecified qualitative descriptive methodology (Adams et al., 2014; Bradley Eilertsen et al., 2009; Chong et al., 2013; Eloranta et al., 2010; Fredheim et al., 2011; Goldman et al., 2010; Hjalmarson et al., 2013; Maneze et al., 2014), except one that used a grounded theory approach (Bajnok et al., 2012). None of the included studies took place in the US: 3 studies were done in Canada (Adams et al., 2014; Bajnok et al., 2012; Goldman et al., 2010), 2 studies were from Australia (Chong et al., 2013; Maneze et al., 2014), 2 studies took place in Norway (Bradley Eilertsen et al., 2009; Fredheim et al., 2011), 1 study was from Finland (Eloranta et al., 2010), and 1 study originated from Sweden (Hjalmarson et al., 2013). Participants included a range of health professionals as well as patients and their family members or care takers. The studies were conducted in a variety of clinical settings, including primary care, acute care hospitals, community health centers, or a mix of these and other settings. Only one study done in Australia was conducted in a low-resource setting (Maneze et al., 2014).

The following 3 broad types of qualitative research questions were posed in these studies: What does it take to establish functional interprofessional teams from the perspective of health professionals (Adams et al., 2014; Bajnok et al., 2012)? What is the overall experience of health professionals (Bradley Eilertsen et al., 2009; Chong et al., 2013; Eloranta et al., 2010; Hjalmarson et al., 2013) and patients (Maneze et al., 2014) with interprofessional collaboration? What are the strengths and weaknesses of (Fredheim et al., 2011; Goldman et al., 2010) and barriers and facilitators to (Maneze et al., 2014) interprofessional collaboration? Although these studies addressed research questions that generated themes related to the relationship between IPCP and patient health outcomes, these themes were incidental findings as none of the studies sought out to explore this relationship explicitly, suggesting that these studies were unlikely to capture the types of rich data that emerge from having implemented an explicit and exhaustive qualitative methodology such as grounded theory (Charmaz, 2006).

Finally, a systematic review of the qualitative literature, using the meta-aggregation approach of the Joanna Briggs Institute (Lockwood, Munn, & Porritt, 2015), was conducted to synthesize the evidence on the phenomenon of interest (Y. Jadotte, Holly, Chase, Powell, & Passannante, 2016). This review demonstrated that there were no studies conducted from the perspective of health professionals working in low resource settings in the US and no studies that inductively explored the link between IPCP and patient health outcomes using grounded theory methodology (Y. Jadotte et al., 2016). However, while there is a lack of qualitative evidence on the relationship between IPCP and patient health outcomes, there is some qualitative evidence on the relationship between IPCP and healthcare outcomes.

Specifically, the IPCP healthcare outcomes of patient and professional satisfaction have been given some credence in the literature as potential links in the pathways to achieve the downstream goal of better patient health outcomes (Herbert, 2005). Prior research has shown that health professional satisfaction is an important measure of the quality of the work environment and a key determinant of sound healthcare delivery. For example, a systematic review of studies examining physician satisfaction with healthcare practice in the United States has found that physician satisfaction is impacted by job-related indicators, including collegial support and demands of the work environment. This

review also reported a greater impact of these factors on primary care physicians (Scheurer, McKean, Miller, & Wetterneck, 2009). A large cross-sectional study among nurses had similar findings, showing that work factors such as supervisor support and work-group cohesion impacted professional satisfaction (Kovner, Brewer, Wu, Cheng, & Suzuki, 2006).

However, the mechanism by which IPL leads to health professional satisfaction itself remains elusive. Social capital has previously been identified as a mechanism to explain this relationship (Soubhi, 2010). For example, one study suggests that social capital has implications for both the structure and content of social networks at work, moderates the general social climate at work and influences employee cooperation with managers and colleagues (Flap & Völker, 2001). Other studies have found that social capital in the workplace enhances the coordination of care among hospital staff (Gloede et al., 2013), minimizes clinician emotional exhaustion (Driller, Ommen, Kowalski, Ernstmann, & Pfaff, 2011), supports hospital-wide knowledge sharing, significantly influences patient safety outcomes (Chang, Huang, Chiang, Hsu, & Chang, 2012), promotes patient-oriented customer service behaviors that enhance patient and provider satisfaction (Hsu, Chang, Huang, & Chiang, 2011), and is a strong predictor of job satisfaction and quality of life at work (Felix, 2003). In addition, studies have found that interprofessional collaboration among health researchers functions through social network ties and is amenable to a social network analytic lens (Godley et al., 2011; Godley & Russell-Mayhew, 2010). Social capital may thus serve as a missing bridge between IPL, as an educational or practice intervention, and the optimization of healthcare and patient health outcomes, the most prized goal. While some of the links between IPL, social capital and some IPCP healthcare outcomes, such as patient or healthcare professional satisfaction, have been explored to date, many aspects remain unsolved. For example, there is little literature on the role of social capital as a potential resource that health professionals can tap to mitigate the social determinants of health, particularly in socioeconomically challenging settings in the US. There is also no evidence on how the health and healthcare disparities embedded in these settings in the US might influence or constrain the capacity of health professionals for collaborative practice.

## Methods

This study explored the relationship between IPCP and patient health outcomes, from the perspective of health professionals working in disadvantaged settings in the US. A review of the literature shows that no prior conceptual models have been developed using an inductive research design to address this particular research question. Thus, a constructivist grounded theory design (Charmaz, 2006) was implemented to allow potential theoretical mechanisms that may explain this relationship to emerge from the inductively-derived data. The central research question was: How do health professionals who work in urban disadvantaged settings in the US perceive the relationship between IPCP and patient health outcomes within the context of healthcare and health disparities embedded in these settings?

### Data Collection

Four semi-structured focus group (totaling 23 participants from a variety of health professions) and 19 individual interviews (with 8 participants who identified themselves as members of the "allied health professions", plus 6 physicians, 4 nurses, and 1 dentist) were conducted with licensed health professionals who had worked in the targeted setting for at least six months. All focus groups had at least 4 participants and an interprofessional make-up: at least 2 different health professions were represented in each of them. A semi-structured interview instrument that was piloted with a smaller sample and yielded good data relevant to the research question (Y. T. Jadotte, 2014) was used to guide the data production process. Focus groups allowed the capture of co-constructed data among participants (Charmaz, 2006), while individual interviews allowed themes related to the longstanding power differentials within the health professions to emerge (Hall, 2005). The theoretical purposive sampling approach of grounded theory was used: additional interviews were conducted until the constant comparative analytic method yielded theoretical saturation, wherein no new codes or iterations of codes emerged in several consecutive transcripts (Charmaz, 2006), at which point data collection ended. All interviews were audio-recorded using a professional high-quality portable microphone and digital device and transcribed by a professional transcriptionist. The transcripts and audio-recordings were reviewed together by the principal investigator to

ensure full transcriptional data accuracy. The final sample size consisted of 42 participants and 23 transcripts.

## Data Analysis

The study followed the constant comparative analytic method: the textual data from each transcript were analyzed by the principal investigator and a second coder, and all newly identified themes were integrated into an emerging theory grounded in the data, prior to conducting the next interview and gathering more data. The results of this analysis guided the collection of further data for analysis (Charmaz, 2006). Open, focused and theoretical coding were used to code, categorize and relate the data into a plausible theory on the relationship between IPCP and patient health outcomes in disadvantaged settings. An axial coding strategy, which is more consistent with objectivist grounded theory (Charmaz, 2006), was not used in this study to allow a more data-grounded theory to emerge with less direct influence from the coders and investigators. The principal investigator and another coder not affiliated with the investigators evaluated the reliability of the coding strategy using an emergent codebook to code a random sample of 17%, or 4/23, of the transcripts. Independent coding of a 10-20% random subset of a qualitative study's transcripts is considered sufficient to perform the calculation of inter-rater reliability (Hruschka et al., 2004; Lombard, Snyder-Duch, & Bracken, 2004). The coding strategy had an 85% level of agreement between the two coders, which satisfies acceptable qualitative methodological quality control benchmarks (Hruschka et al., 2004).

An incident-by-incident coding approach, rather than a line-by-line approach, was implemented to allow the identified codes to emerge into themes and categories that meaningfully capture both discrete and overlapping ideas on the phenomenon under study (Charmaz, 2006). Directed content analysis was used for coding. This approach entails the *a priori* development of a codebook based on pilot data or theoretical knowledge of the literature, and the application of the codebook to the data produced in a study (Hsieh & Shannon, 2005). Any text that did not fit the existing codes was assigned a new code, which is congruent with constant comparative analysis and the need to achieve theoretical saturation. This coding strategy facilitated the inductive creation of a conceptual model grounded in the data

that provided a mechanistic framework to explain the association between IPCP and patient health outcomes, within the context of disadvantaged settings in the US. The software program Dedoose was used to code and categorize the qualitative data, while the graphical software program OmniGraffle helped to create diagrams of the conceptual model.

## Ethical Review and Approval

This project was approved as an expedited study with minimal risk by the institutional ethical review board of Rutgers Biomedical and Health Sciences, protocol number 20140001018.

## Findings

The incident-by-incident open and focused coding approach in this study yielded 114 unique codes, resulting from data reduction for 1809 excerpts from the participants. By further reducing these 114 codes into 10 unique categories and two overarching theoretical concepts (as listed in table 1) that captured all categories and codes, theoretical coding facilitated the organization of all themes into a plausible mechanistic model that answers the research question. The identified theoretical concepts expanded the explanatory power of the model as they are established and well-researched constructs. Figure 1 diagrams this conceptual model to facilitate the illustration of its pathways. Key excerpts are provided in Appendix A to capture the participants' voices in support of the identified themes. Categories are listed in **bold**, while codes and sub-codes (which are codes that could be subsumed into other codes) are *italicized*. The relationship between the themes that emerged and current knowledge in the literature is covered in the discussion section, as part of the additional literature review at the conclusion of a grounded theory study (Charmaz, 2006). During the theoretical coding stage, a dialectical relationship emerged among pairs of the 10 categories which helped make sense of these data. As such, findings are presented together for those pairs: **building trust** and **interprofessionalism; facilitating sharing** and **coordination; enhancing reciprocity** and **patient care; effecting change** and **common goals**; and **healthcare system disparities** and **patient individual, group or population disparities**.

| Theoretical Concepts | Categories | Codes |
|---|---|---|
| Social capital | Building trust | Overcoming entrenched attitudes, looking beyond traditional hierarchies |
| | Interprofessionalism | Appreciation for different specialties, diversity in professional skills, communication, teamwork, interrelatedness of interprofessional competencies, interprofessional interventions, tackling disparities |
| | Facilitating sharing | Being part of the team, improving the work environment |
| | Coordination | Information sharing, care delivery, decision-making |
| | Enhancing reciprocity | Working together over time, holding each other accountable |
| | Patient care | Adherence, continuity of care, institutional policies |
| | Effecting change | Impacting objective outcomes, influencing subjective outcomes |
| | Common goals | Bringing efficiency to healthcare systems, improving patient outcomes |
| Disparities | Healthcare system disparities | Differential system demeanor toward stakeholders, facility-provider disconnect, healthcare misconduct, information technology/electronic health record limitations, differential support systems for teams, healthcare facility differences, sociopolitical disparities can lead to poor care delivery or care fragmentation |
| | Patient, individual, group or population disparities | Empathy gap, lack of trust, differential expectations, complex problems, low socioeconomic status |

**Table 1.** *List of theoretical concepts, categories and codes.*

The findings for the themes of Building Trust and Interprofessionalism show that health professionals believe IPCP consists of having an appreciation for the different specialties, valuing diversity in professional skills, communicating effectively, and working well in teams. They also suggest that health professionals believe IPCP does not always happen without specific interventions to nurture it and that it must be grounded in common goals shared among all health professionals, including the need to bring greater efficiency to the healthcare system and improving patient outcomes.

The findings for the themes of Facilitating Sharing and Care Coordination suggest that health professionals view care coordination as the central element through which interprofessionally competent healthcare teams can improve patient health and system outcomes. Three important components of care coordination were unearthed: effective care delivery, purposeful information sharing, and reliance on team-based decision-making that truly values and includes the perspectives of all health stakeholders at all times.

The themes of Enhancing Reciprocity and Patient Care emerged as the next step in the pathway. Specifically, the concept of patient care is broken down into its subcomponents that can be impacted by IPCP-driven care coordination. According to health professionals, effec-

tive patient care means ensuring the continuity of care, facilitating patient adherence to care plans, and establishing policies that support rather than inhibit care. It is this type of care that is most likely to yield the desired population health outcomes and healthcare system goals. Effective patient care is thought to lead to real change and improvements in the Common Goals of all health professionals, including subjective and objective patient and system outcomes.

The themes of Health and Healthcare Disparities emerged as significant barriers to the optimization of patient health outcomes using IPCP. The data shows that both systemically-embedded disparities and disparities individually embodied in some patients are thought to be a major impediment to the provision of team-based, coordinated, continuous, and patient-centered care. A number of healthcare systems disparities are perceived to be critical to this pathway, including differences in the types of support systems that are available to facilitate teamwork (such as the unavailability of potential collaborators or the long distances separating them), the need for health professionals to adapt to roles and tasks beyond their usual practice, and the fact that the healthcare system treats its stakeholders differently, which influences the capacity of these stakeholders to work together in teams to achieve common goals.
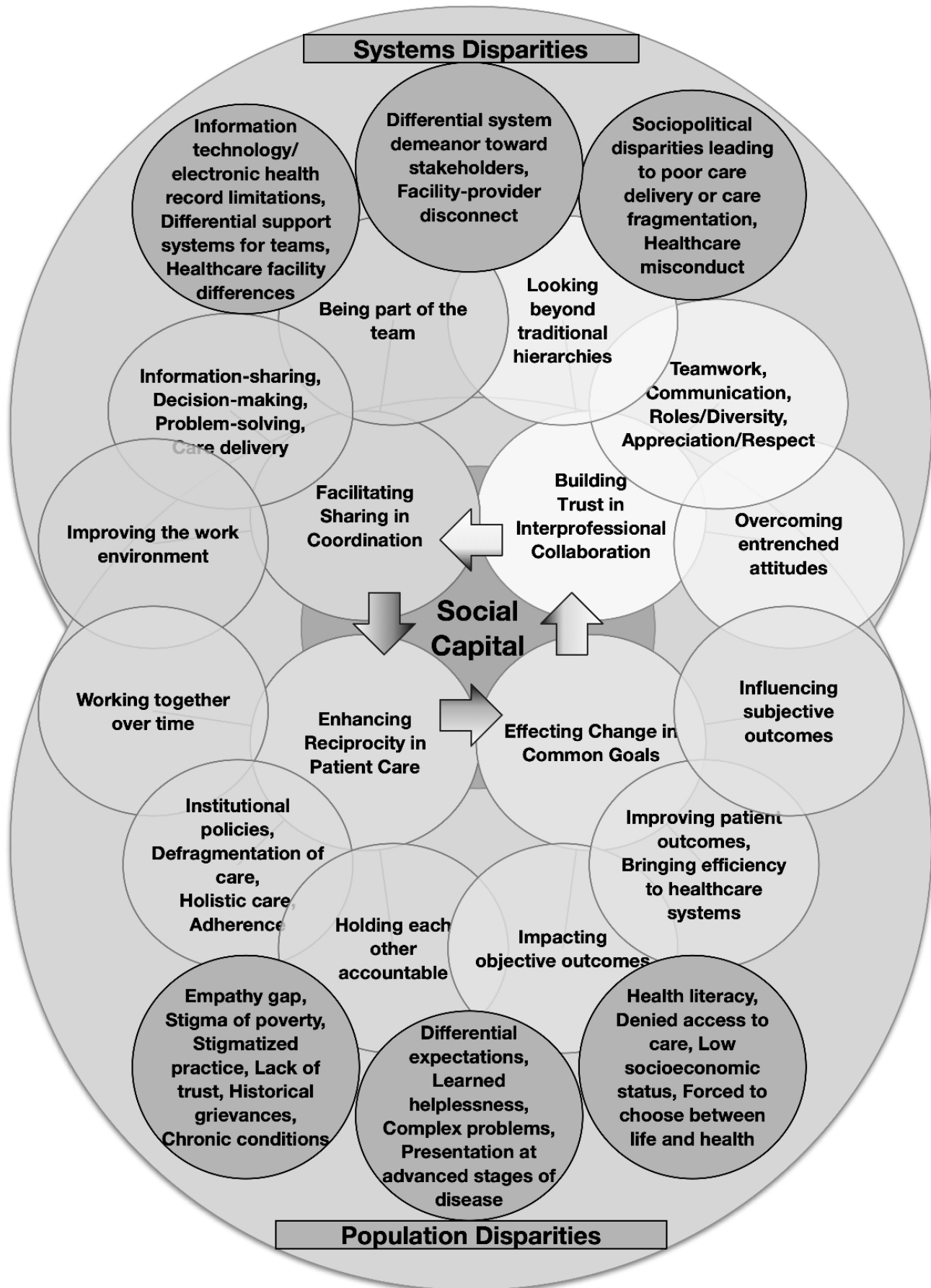
**Figure 1.** *Illustration of the theoretical model relating IPCP and patient health outcomes in the context of disties, from the perspective of healthcare professionals working in this setting. This figure emphasizes the feedback loops that are thought to occur in the phenomenon under study.*

Other perceived system disparities include: the inherent power differentials amongst health professionals and between health professionals and patients; the large gaps in compensation for health professionals who work in poor and underserved areas, as well as for those who work in preventive or primary care; the differences in the healthcare facilities themselves (including the availability of language services, large patient caseloads and prolonged waiting times); the unevenly distributed capabilities and limitations of information technology or electronic health record systems; and the numerous inequitable healthcare laws and policies that disparately affect some populations more than others, resulting in either challenges in care delivery or the fragmentation of care. Information sharing is another element that can be severely impeded by healthcare system disparities. More specifically, there is often a substantial disconnect in the sharing of information between health professionals and healthcare facilities, which is thought to be responsible for much of the healthcare misconduct that is associated with some locales. This includes patient misconduct, such as doctor shopping and misuse of opioid prescriptions, and health professional misconduct, such as accepting kickbacks for referrals.

Certain disparities were thought to apply specifically to disadvantaged populations. Low socioeconomic status was seen as the most substantial disparity for these patients, and it was linked to patients being essentially denied access to care and being forced to choose between life and their health (such as having to choose to pay for food over medications). These situations were perceived as frustrating to the health professionals who care for them. Because of these formidable challenges to care, many patients (particularly those who have been severely disadvantaged and historically mistreated by the healthcare system, such as poor Blacks and Latinos) have a lower level of trust in the healthcare system and the health professionals who attempt to care for them, have learned to be helpless and fail to demand that their care be collaborative in nature, and often give up on pursuing adequate care. The ultimate results of these disparities in the patient's support system are: greater failure to adhere to all forms of care, even when it may be available to them and is offered by health professionals working collaboratively, and the embodiment of the disparities in the healthcare system and the patient's environment in the form of presenta-

tion at advanced stages of disease and emergence of chronic diseases at much younger ages than otherwise expected.

## Discussion

A prior qualitative systematic review of the literature had already identified a number of key themes on the manifest pathway between IPCP and patient health outcomes that are congruent with the findings of this study (Y. Jadotte et al., 2016). These include: the attainment of the 4 IPCP core competencies as a fundamental initial goal; care coordination as the most proximal variable affected by IPCP; and patient care as the next most relevant step in the pathway. Other key ideas that were already known from this synthesis of the literature include: the importance of team leadership as a key element in care coordination; the value of shared decision-making and problem-solving in healthcare; the role that continuity of care (or lack thereof) as well as social, economic and cultural barriers can play in patient care; and finally the impact that the lack of mutual accessibility and commitment on the part of health professionals and healthcare systems can have on the successful achievement of IPCP (Y. Jadotte et al., 2016). While the manifest pathway (i.e. the *how*) of the relationship between IPCP and patient health outcomes was known, the literature to date had not yet addressed the latent pathway, which answers the question of *why*. For example, why does IPCP facilitate care coordination? Although it was generally understood that IPCP should affect care coordination, that better care coordination should lead to better patient care, and that improved patient care should optimize health outcomes (Y. Jadotte et al., 2016), the mechanisms via which these effects were accomplished remained unclear.

This study provides an inductively developed and detailed model for how these complex relationships manifest. It also empirically identifies care coordination as one plausible mechanism by which IPCP acts to change patient health and system outcomes. While there is currently no literature on the relationship between IPCP and care coordination, a prior systematic review aimed to develop a working definition of care coordination, and to identify theoretical frameworks linking care coordination to healthcare factors and interventions and patient health outcomes (McDonald et al., 2007). The authors defined care coordination as: "the deliberate

organization of patient care activities between two or more participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of health care services. Organizing care involves the marshalling of personnel and other resources needed to carry out all required patient care activities, and is often managed by the exchange of information among participants responsible for different aspects of care" (McDonald et al., 2007, p. 41). The themes of information sharing and care delivery modeling identified in this review were also found in this grounded theory study. However, this study clarifies that "the marshalling of personnel and other resources" may signify a need to establish clear mechanisms for decision-making.

The critical role of health information technology in information sharing is also an important contribution of this study to the interprofessional care literature. A prior systematic review examining the role of health information technology (HIT) – such as electronic health record systems – in improving the Triple Aim of cost, quality and outcomes, concluded that there is a link between the use of such technology and the use of evidence-based guidelines for patient care, enhanced surveillance and monitoring of patient conditions, and decreased medication errors (Chaudhry et al., 2006). This study suggests that perhaps this relationship occurs because HIT can facilitate information sharing, which is a key element of care coordination. Since care coordination is thought to play a key role in the prevention of errors and medical complications, it may be that effective information sharing is the pathway by which HIT helps reduce medication errors, as indicated in this prior review. No prior studies had inductively examined this particular phenomenon in the interprofessional care literature by making the link between these different variables (Y. Jadotte et al., 2016).

The theme of care delivery, which consists of the approaches chosen by health professionals and healthcare systems to implement patient care interventions, had not yet appeared as an important element in this pathway in the interprofessional care literature (Y. Jadotte et al., 2016). A key insight here is the idea that IPCP may not be successful without care delivery models that are supportive of its function. Many well-known care delivery models exist, including the patient centered medical model, nurse managed health clinic, and accountable care organization (American Nurses Asso-

ciation, 2010). However prior studies on the phenomenon of interest had not yet identified that the care delivery model itself may determine how effective IPCP can be in fulfilling the promise of better health and system outcomes (Y. Jadotte et al., 2016).

This study suggests that in the context of IPCP, patient care should be conceptualized as the combination of continuity of care, patient adherence, and institutional policies. No prior studies had identified which specific aspects of patient care can theoretically be affected by IPCP (Y. Jadotte et al., 2016). A prior systematic review on the definition of continuity of care concluded that "[it] is achieved by bridging discrete elements in the care pathway – whether different episodes, interventions by different providers, or changes in illness status – as well as by supporting aspects that endure intrinsically over time, such as patients' values, sustained relationships, and care plans. Processes designed to improve continuity – for example, care pathways and case management – do not themselves equate to continuity. For continuity to exist, care must be experienced as connected and coherent" (Haggerty et al., 2003). This study suggests that the processes designed to improve continuity of care, as mentioned above, can be thought of as care coordination. For example, what is case management but the coordination of information sharing between health professionals, patients, families and healthcare systems? As such, this study advances the field's knowledge by identifying specifically what continuity of care should consist of with regards to IPCP.

The concept of "being part of the team" as an element of care coordination is an important contribution of this study that is supported by a prior systematic review of the literature which concluded that "involving patients has contributed to changes in the provision of services across a range of different settings. An evidence base for the effects on use of services, quality of care, satisfaction, or health of patients does not exist" (Crawford et al., 2002). This review is congruent with two thematic findings of this study: having all stakeholders be part of the team, including patients, is a fundamental underlying explanatory element in care coordination; and care coordination primarily works by improving the continuity of care. However, this insight had not yet been documented in the interprofessional care literature as a fundamental output of IPCP (Y. Jadotte et al., 2016). Furthermore, this study demonstrated inductively that

social capital and its cognitive facets of trust, sharing, and reciprocity (Islam et al., 2006) may represent the underlying theoretical constructs that explain why IPCP works, forming the latent mechanism that facilitates IPCP's impact on patient health and system outcomes. Specifically, this phenomenon happens in 4 steps. Interprofessional interventions build trust among healthcare teams, by helping all those involved in them to look beyond traditional hierarchies and perspectives and overcome the entrenched attitudes that have for so long stalled the development of truly effective teams. Once trust has been built within a team of health professionals and the patient, everyone is part of the team and works diligently to improve the work environment. Consequently, information sharing, decision-making, problem-solving, and care delivery modeling become more streamlined. As this process continues, team members over time learn to work well together and become more likely to hold each other accountable for ensuring optimal patient care: this means providing care that is continuous (that is, non-fragmented and holistic), that patients adhere to, and that is well supported by institutional policies. Finally, when patient care takes on this optimized form where all stakeholders are receptive and reciprocating, improvements in patient health and system outcomes can take place in both the objective and subjective realms. Once change has been effected in these two realms of measurement, there is further motivation for health professionals to continue working collaboratively, and the cycle repeats itself.

Lastly, this study also identified the influence of disparities in health and healthcare as significant barriers to the achievement of better health outcomes via IPCP. Although there is ample literature on the topic of social capital and its link to health disparities from outside the realm of interprofessional care (Berkman & Glass, 2000; Bourdieu, 1986; Islam et al., 2006; Macinko & Starfield, 2001), as well as editorials (Soubhi, 2010) and deductive empirical studies (Godley et al., 2011; Godley & Russell-Mayhew, 2010) that measured social capital in the context of interprofessional care, no prior inductive research studies specific to this phenomenon and to the context of the lives of disadvantaged populations in the US had been identified (Y. Jadotte et al., 2016).

There are a number of study limitations. Similar to all primary qualitative research, this theoretical model is intrinsically subjective, at risk of sampling error given the small sample size, and subject to poor external validity given that it used a convenience sample. However, the literature review shows that the study's findings are nevertheless consistent with a systematic review of the qualitative literature on this phenomenon. In addition, given that the sample originated solely from the urban setting, it is possible that the study's proposed mechanistic pathway only applies to this setting and is not transferable to the broader healthcare environment of the US. However, this seems unlikely since the constant comparative analytic approach yielded clear distinctions between the general mechanisms of action of IPCP and the impact of disparities on these mechanisms. Importantly, the profession of social work was underrepresented in the study sample: only one social worker was interviewed. This is because the protocol for this study modeled the sample after the IPEC 2011 expert panel report, which was produced by a committee of health professional organizations in the US that at the time did not include the profession of social work (Interprofessional Education Collaborative Expert Panel, 2011), even though now this collaborative recognizes and includes social work in all of its deliberations (Interprofessional Education Collaborative, 2016).

## Conclusion

Interprofessional collaboration, including effective communication, teamwork, appreciation for different specialties and diversity in professional knowledge and skills, occurs when all health stakeholders learn to trust each other and therefore serves as a potentially effective tool to build cognitive social capital (Islam et al., 2006). The task of building trust requires overcoming entrenched attitudes and looking beyond traditional hierarchies in healthcare. Once IPCP is achieved, there are improvements care coordination, which consist of the facilitated sharing of information, decision-making and care delivery modeling, all of which become possible because with successful interprofessional collaboration, everyone is part of the team (including the patient and family) and the work environment is improved. Subsequently, patient care is optimized, including better continuity of care, adherence to care, and supportive institutional policies, all of which are based on an enhanced level of reciprocity, which itself depends on all team members working together over time and holding each other accountable for patient care. Only when patient

care is optimized in this way does it become possible to truly effect change in objective outcomes (i.e. patient health outcomes and system efficiency) and subjective outcomes (i.e. improved employee and patient satisfaction), all of which are the common goals of health stakeholders. Numerous system disparities (i.e. facility-provider disconnect, differential system demeanor toward stakeholders, healthcare misconduct, differential support systems for teams, information technology/electronic health record limitations, sociopolitical disparities that can lead to poor care delivery or care fragmentation, healthcare facility differences) and population disparities (i.e. differential expectations, empathy gap, lack of trust, low socioeconomic status, complex problems) impede the IPCP pathways to better health outcomes for disadvantaged populations.

Thus, while it is important to ensure that health professionals become increasingly more interprofessionally competent (Interprofessional Education Collaborative, 2016; Interprofessional Education Collaborative Expert Panel, 2011), this study suggests that there is also a substantial need to provide additional support for those who work with disadvantaged patient populations, if they are to accomplish their task of providing holistic, non-fragmented, and patient-centered team-based care. By making a research-grounded link between interprofessionalism and the perennial problem of health and healthcare disparities that is endemic in the US, this study proposes that there is a significant need for further study on the impact of disparities on the function of healthcare teams. This includes the impact of disparities on the patients and families as integral members of the team, as well as on the health professionals who are tasked with the role of healing them in a context that is unsupportive and more cumbersome than it ought to be.

This study adds much to the interprofessional care literature by answering the calls made by many researchers (B. Brandt, Lutfiyya, King, & Chioreso, 2014; B. F. Brandt, 2014; Reeves et al., 2013; Reeves et al., 2008; Zwarenstein et al., 2009) and organizations (Institute of Medicine, 2015) to specifically study the role of context in the pathway between IPL and health and system outcomes. In particular, it expands the model developed by the National Academy of Medicine (NAM) on measuring the impact of IPE on collaborative practice and patient outcomes, by deciphering the steps in the pathway

between IPL and patient health and system outcomes. In essence, this study found that the IPL *outcomes* are linked to better care coordination, which leads to improved patient care, and results in optimization of *health and system outcomes*. This is perhaps the most fundamental contribution of this study to the current body of knowledge on this phenomenon. The study also suggests that the *enabling or interfering factors* that may influence *learning outcomes* as well as *health and system outcomes* as stated in the NAM's model may consist of the *systems and population disparities* identified in this study. For example, the NAM categories of *financing policy* and *workforce policy* can be related to the themes of *institutional policies* and *sociopolitical disparities* in this study. More importantly, however, this study elaborates clear mechanisms via which these types of factors influence the phenomenon of interest, which had not yet been done in the literature.

A number of areas of research remain to be investigated. Additional qualitative studies are warranted, especially those that explore the perspectives of patients. Studies using less subjective methods are also needed to truly study this phenomenon, for example using non-participant observations documenting the interactive behaviors of health professionals and patients. This will minimize the Hawthorne effect and allow more valid measurements of how interpersonal interactions grounded in IPCP truly impact care coordination, patient care, and population health and system outcomes. Studies with comparator groups to which health professionals are randomized are also desirable.

In addition, more inductive and deductive research is needed that verifies whether social capital is indeed the underlying theoretical mechanism of action in IPCP and examines the structural components of social capital, including the types of social networks that IPCP helps build and the types of social ties (i.e. strong or weak) by which it connects all health stakeholders. Some aspects of this phenomenon have already been investigated in the published literature. For example, one study looked at the social networks of patients and how they impact health outcomes (Christakis & Fowler, 2009), while others have examined how the social networks of health professionals facilitate collaborative work (Godley et al., 2011; Godley & Russell-Mayhew, 2010). Although this study has begun the work of bridging these two distinct areas of investigation, it re-

mains unclear whether the social capital of health professionals, including the types of social networks and social ties, influences patient health outcomes. This study proposes one theoretical pathway by which that critical phenomenon could take place.

By identifying explicit measurable variables in this pathway, this study empirically clarifies what prior studies had proposed using consensus methods (Institute of Medicine, 2015), and it provides a useful evidence base to guide practice and future research. For example, because social capital may be the canonical theory underlying IPCP, health professionals should now be more cognizant that their perceptions of IPCP itself could be a key element in optimizing population health and system outcomes and that their social ties with colleagues and patients may play a key role in the achievement of these desired outcomes. It also renews the call for health professionals and policy makers to contend with the abysmal effects of health and healthcare disparities as fundamental barriers to the optimization of health and system outcomes via interprofessional collaboration.

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# Appendix A:

List of key excerpts that capture the participants' voices in support of the identified themes. Categories are listed in bold, while codes are italicized.

| Themes/Findings | Key Excerpts |
|---|---|
| **Building trust** | "I think it's changing. I think it's changing because a lot of other professions are coming to the fields. Now suddenly a lot of nurse practitioners are around, physician assistants, they're also taking care of patients, the primary care providers. I think now it's changing, but it will take a lot of time until it will be real professional collaboration. We don't have trust in each other. This is the major barrier." |
| *Overcoming entrenched attitudes* | "And I just feel like there's a lot of kind of entrenched attitudes about how things are done that are really difficult to overcome. And I don't know, it might take like a whole generation before some of these folks have been doing this for so long are finally kind of out of the system. If they're really not willing to change, you know, that might just be for the best. So hopefully the people we're training now are developing more of the skills." |
| *Looking beyond traditional hierarchies* | "I think what the bigger challenge is what I call the social dynamic of teams. If you look at the history of health care in this country, it was a very doctor centric, doctor driven model. The doctor was God, walked on water, and everybody bowed down and did what he or she said. And most often it was a he, and everyone worked to serve the doctor. We are now evolving to a place where everyone should be working to serve the patient." |
| **Interprofessionalism** | "The question for me as we're having this discussion is what exactly is collaboration. Is collaboration more so everybody working together in harmony? Is collaboration everybody doing their part when their number is called? Or is collaboration something different altogether? And I think that's what's not been quite defined in health care right now, exactly what cooperation is." |
| *Appreciation for different specialties* | "God, it's like you get more done when you acknowledge what each profession brings to the table." |
| *Diversity in professional skills* | "Yeah I think it's pretty clear, you know, that it's using various talents of the professions around you." |
| *Communication* | "Sometimes those answers may not be answers that we agree on, and how do we develop communication strategies that will allow us to do that. And I think at the same time, it really is also coming to some common understandings around how we can communicate." |
| *Teamwork* | "I consider it team work, you know if you're taking care of let's say patients, be it a nurse or a doctor, one person can't do it so you need to kinda collaborate as a team." |
| *Interrelatedness of interprofessional competencies* | "I actually reject the premise of the question to be honest with you because I think that part of the reason that these competencies were developed in the way they are is that communication without valuing teamwork and without understanding the need for respect between different professionals doesn't work. That's the problem. Health professions education 101 is all about communication. Clearly, the problem has been that it's all about communication without layering on these other very important competencies that inform what that communication should look like. So I actually don't think about it that way at all. I don't think about communication standing alone ever." |
| *Interprofessional interventions* | "So obviously I'm involved in this leap of faith that we're doing that says if we train people to work together, then they will know how to work together better when they get out and that will make them more skilled as part of teams." |
| *Tackling disparities* | "I mean I can see how interprofessional collaboration should be able to help address disparities." |
| **Facilitating sharing** | "Yes. That's why I help them ask the right questions. That's why we help them here. That's why we do that. That's why we have coordination of care letters. That's why we're permitted to call the medical doctor. That's why we teach them or refer them how to go and get dental care. That's why when the doctors work with them here, they'll refer them to a sleep disorder clinic or a nutritionist or audiologist or whatever they may need. The psychiatrists here do that. And then as a therapist, I help and work with them to ask the right questions because you can't get the right services if you don't ask the right questions." |
| *Being part of the team* | "They're very good at it up there. They really know how to do it. They're very much into everybody is a part of the team." |
| *Improving the work environment* | "And plus I think it just makes life easier. If there's something that I'm doing that I don't need the nurse or the medical assistant to do, then it frees their time to do something else that would be important because there's always something more to do. It's never ending." |

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| **Care coordination** | "I had recent experiences with my kids, having same day procedures stuff, one last year the other earlier this year. And I see there's a difference though in pediatric care. I'm not sure if they're more concerned because they're caring for little kids or…it seems like they were more coordinated. We knew what to expect [*information sharing*]. We went from step A to step B to C [*care delivery*]. And the nurses were more forthcoming with explaining to us what to expect, the doctors and so on [*decision-making*]. I did think that it was way more coordinated than care for other populations." |
| *Information sharing* | "So if you imagine a care pathway – what do doctors and the team do? First, we gather lots of information which is usually assessments, screening." |
| *Care delivery* | "[…] We went from step A to step B to C [*care delivery*]." |
| *Decision-making* | "[...] for them to make decision about their own care. So how do you know I manage my medications while I have to do all these dietary restrictions or what do I do about my discharge even when I have to wait for a bed to be delivered to my house or for the oxygen tank to be delivered. They need to see or they need the interprofessional collaboration to help them with decision-making." |
| **Enhancing reciprocity** | "They have confidence in us, they have faith in us, and they follow through because we follow-up. Have you been to the eye doctor? Did you go to the dentist? Remember we talked about that? Did you get your flu shot?" |
| *Working together over time* | "It means that obviously it's not just one profession taking care of patients. There are a lot of professions taking care of patients, and it means that instead of all acting like we are independent and our work doesn't affect each other and affect the patients, that we actually are cognizant of the fact that it does, and that we kind of make the conscious effort to work together." |
| *Holding each other accountable* | "Well you want the nurse who's discharging that patient to be looking at this documentation, to feel that sense of responsibility to kind of say, okay, let me just make sure. We have your checklist. You're coming back at this time. Whoops, I don't see anything that would indicate why you need an antidepressant. Let me just go double check on that." |
| **Patient care** | "In terms of from the moment the patient comes in the room to making them in a comfortable setting, giving them an appointment time that works around their schedule and also of course when we're open, when the facility is open, all the way down to when they meet with the nurse, the doctor, just making them comfortable, making them educated, making sure they know what's going on, what's to come, what's the risk." |
| *Adherence* | "Well I think adherence to shared treatment plans, like the plans that you come up with, I think that's a big important component of it [patient care], especially when you're involving the patient as part of the team and you're getting the perspective of let's say the social worker." |
| *Continuity of care* | "Well, now that I look back on it, as much as I like her primary care physician, I would probably go to maybe if they exist a gerontologists, or maybe seek out a team, maybe a practice where there's a nurse practitioner or a PA who leads a team and coordinates a team say for someone who has dementia or someone who has diabetes, just someone who is familiar with the team concept. Because it really didn't matter who, whether it be the endocrinologist or the neurologist, but they just needed to speak to a team of other professionals to make a plan of care. They couldn't just make these silo plans of care." |
| *Institutional policies* | "But sometimes we're handcuffed because the hospital kicks a patient out, and even though we [healthcare professionals] want them to stay, you don't really often get a choice. That's a tough one." |
| **Effecting change** | "And it is a process because you're going from a certain way of delivering health care to a different way, so it's always a little painful to change." |
| *Impacting objective outcomes* | "Initially, it was a little bit from the physician's point of view how you will decide what I'm going to do. But now, they came to the – probably because the outcomes are better – they're more accepting the team recommendation. And I feel it's getting better, it's getting much better." |
| *Influencing subjective outcomes* | "So I think aside from the time, I haven't noticed anything wrong because I think it makes life easier. It truly does. The change, yeah, makes it hard. But when you actually do it and you do it correctly, the members of the team at least feel like they're making a difference, and I think that's just rewarding in itself." |
| **Common goals** | "But I have to say, everyone wants those changes because they want the outcomes. So they're willing to make those changes." |
| *Bringing efficiency to healthcare systems* | "I think overall the system is much more efficient from you know [interprofessional collaboration]… and also it removes a lot of frustration. From the patients' end, they perceive it as an effective system that works." |
| *Improving patient outcomes* | "Patient outcomes are better if people work together." |

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| **Healthcare system disparities** | "And they [some healthcare systems or hospitals] just don't have the resources. So it's completely dysfunctional as far as I'm concerned. Even though they have that kind of team in place, they don't have the resources available to address more complex situations." |
| *Differential system demeanor toward stakeholders* | "…I think it's more about if you know the system where you're going into it really makes a huge difference. That's why I would say that if I have used their services in the past they were good, and if they were not good I had the ability to speak to somebody who was responsible for those services. So I think it was a little bit different for me. So I don't think I can put in any of that in there." |
| *Facility-provider disconnect* | "I think the much bigger issue is there are instances where there's poor communication with the subspecialist. You send a patient to a subspecialist, they do stuff to your patient. This happens all the time. They do stuff to your patient. I remember I had a patient who I hadn't seen for several months, came back, and he had had a cardiac cath. So you refer the patient, the cardiologist kind of does their thing, they don't bother to communicate with you, and you're kind of saying I haven't seen Mr. Jones for a while, and it turns out Mr. Jones has been in the hospital and had a cath, out, and that's a problem. That's a real problem." |
| *Healthcare misconduct* | "Nobody knows, because the hospital doesn't know what the physician is prescribing, they actually have to be sent in for pain management at some point, to reduce their dependency and not making them dependent on those drugs. But the whole thing is lost in that lack of communication net or mess. So there are several lapses in care where patients somehow take advantage of that missed…what do you call it…lack of interprofessional communication. So they're playing you, everybody against each other. So…you know." |
| *Information technology or electronic health record limitations* | "Uniform EMRs [electronic medical record systems], I would say, yes. Because professionals, they can't collaborate if they use different language, if this language doesn't understand another language. So I think it needs to be the same language. It needs to be some kind of electronic system, a uniform electronic system, everybody put notes. At least if we don't speak with each other in person, we can create each other a note and collaborate on this platform." |
| *Differential support systems for teams* | "I am probably looking at it a different way though. Because what I am thinking in my mind is that the provider… and I've worked in a lot of underserved areas, and what I realize is that they don't have the same support system, they don't have the same amount of people to collaborate with". |
| *Healthcare facility differences* | "The problem is these are also the least resourced settings in the sense that you have a very high volume of patients who have such intense needs that it sometimes becomes difficult to facilitate teamwork." |
| *Sociopolitical disparities can lead to poor care delivery or care fragmentation* | "I agree with X and I was actually gonna talk about the umm low income, underserved, a lot of them are urban inner-city populations, tend to not be insured so they go to the emergency room for a lot of their care and this is probably one of the least coordinated specialties in health care. There's no follow-up. It's not like when you go to your primary care doctors and they call you to follow-up to see how you're doing on your meds or anything like that. So it becomes even more fragmented". |
| **Patient, individual, group or population disparities** | "And I'll tell you a story, someone I know, he had prostate cancer, and they did the…at the time they did a PSA it was positive. He went to a clinic because he didn't have money…he was sent to a private person and they wanted $3500 or whatever he couldn't afford it, so he ended up going to a clinic and he got like a 6-month I don't remember but it was a long waiting time for the appointment, and he just said you know…when it was time, they cancelled because the person was either sick or couldn't…so he just said 'I'm not going to be bothered'. So he never bothered to go. By the time he came to the clinic I was at he was…he was really like really advanced stage of cancer". |
| *Empathy gap* | "And another big one is our clear disregard for families [at this urban hospital], more so I think in urban populations than [other hospitals] or rich white hospitals. I think they're more sensitive to family needs there than they are here. Families are seen as a problem, not as the patient family. You know, they're oh, no, the wife is coming, she's going to ask me questions, that kind of stuff." |
| *Lack of trust* | "Now you're talking about even underserved populations where they…there is…there are a lot of examples around mistrust because "we don't have healthcare services", "we don't have doctors around us", "we have to wait 3 months to get an appointment" and things like that. So that just contributes to the disparities and prevents people from getting into practices that may have interprofessional collaboration and may actually provide good outcomes." |
| *Differential expectations* | "No, I don't think a lot – I'm angry as a healthcare professional – I don't think a lot of patients are angry because they don't even know that that kind of collaboration should be occurring, and I think they should be angry. I think they should have an expectation that it's not 100% on them. It's hard to consider your own health outcomes and think about how they could have been improved by interprofessional collaboration when you don't have an expectation of interprofessional collaboration. If you never thought that it was possible for the pharmacist to call the doctor and say that this prescription isn't covered, then why should you be angry when you never got your prescription and now you're in a bad state? Right? If you didn't know that it should have happened, how can you be angry that it didn't happen?" |
| *Complex problems* | "Because I think poverty, what happens a lot of times, I think some of the people that they might be getting treatment as the patient, it's not just asthma or COPD or a heart or whatever that's going wrong. There are so many other things that are at the table when they come." |
| *Low socioeconomic status* | "They can't afford to go see all these people…And sometimes they don't have the time. They have demands with family at home, they don't have the time to go to these various places, they have to pick and choose…And the finances as well. They tell you they have to buy food or go pay for this [medication]…food is more important." |