

Western  Graduate&PostdoctoralStudies

Western University  
Scholarship@Western

---

Electronic Thesis and Dissertation Repository

---

3-26-2013 12:00 AM

## Hospital-Based Nurse Practitioner Practice: An Exploration of Interprofessional Teams.

Christina J. Hurlock-Chorostecki  
*The University of Western Ontario*

Supervisor

Dr. Cheryl Forchuk  
*The University of Western Ontario*

Graduate Program in Nursing

A thesis submitted in partial fulfillment of the requirements for the degree in Doctor of Philosophy

© Christina J. Hurlock-Chorostecki 2013

Follow this and additional works at: <https://ir.lib.uwo.ca/etd>



Part of the [Other Nursing Commons](#)

---

### Recommended Citation

Hurlock-Chorostecki, Christina J., "Hospital-Based Nurse Practitioner Practice: An Exploration of Interprofessional Teams." (2013). *Electronic Thesis and Dissertation Repository*. 1157.  
<https://ir.lib.uwo.ca/etd/1157>

This Dissertation/Thesis is brought to you for free and open access by Scholarship@Western. It has been accepted for inclusion in Electronic Thesis and Dissertation Repository by an authorized administrator of Scholarship@Western. For more information, please contact [wlsadmin@uwo.ca](mailto:wlsadmin@uwo.ca).

HOSPITAL-BASED NURSE PRACTITIONER PRACTICE: AN EXPLORATION OF  
INTERPROFESSIONAL TEAMS

An Integrated-Article Thesis

by

Christina J. Hurlock-Chorostecki

Graduate Program Labatt Family School of Nursing

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy

The School of Graduate and Postdoctoral Studies  
The University of Western Ontario  
London, Ontario, Canada

© Christina J. Hurlock-Chorostecki 2013  
THE UNIVERSITY OF WESTERN ONTARIO  
School of Graduate and Postdoctoral Studies

## Abstract

Nurse practitioner (NP) roles within hospital teams are evolving worldwide. However, understanding of their practice within the context of interprofessional (IP) teamwork remains limited. This two-phase study undertaken within Ontario, Canada provides a new multi-perspective understanding of the value of NP practice within IP hospital teams. Constructivist grounded theory, a modification of the classic methodology, guided an interpretive approach based in exploration of process and meaning construction, privilege and power exposure, and juxtaposition with extant theory. A conceptual rendering of NP practice was determined through supplemental analysis of 30 team member focus groups. This new perspective emerged as three practice foci: easing others' workload, holding patient care together, and evolving practice. Phase two substantiated and expanded the team member rendering through exploration of perceptions of 17 hospital-based (HB) NPs, exposure of privilege and power influences, and congruence with theoretical aspects of IP teamwork and collaboration. The study offers four new discoveries: a team perspective framework of HB NP practice, dimensions of the HB NP role position within hospital teams, explanation of why HB NP role clarity remains elusive, and an emerging theory of HB NP IP practice. The emerging theory illuminates three practice foci that are distinct yet hold relationships of interest: evolving NP role and advancing the specialty, focus on team working, and holding patient care together. The emerging theory provides understanding of HB NP actions deemed of value within IP teams and identifies the HB NP role as pivotal in promoting IP work. The study provides pragmatic and useful new knowledge that is of interest to NPs, healthcare providers, hospital leaders, and academics. The categories provide foci that may aid in assessing needs, envisioning role enactment or change, and considering role outcome measures. Sub-categories emphasize how HB NPs can practice to the full extent of their value, including promotion of IP practice. Privilege and power awareness may aid in effective role integration and conflict resolution. The emerging theory provides a new perspective to enhance NP curricula. Further research may use or test the framework to continue building knowledge of this expanded nursing role.

## Keywords

nurse practitioner

interprofessional

practice

hospital

grounded theory

focus groups

teamwork

collaboration

## Co-authorship Statement

The integrity of this thesis as one completed document was the responsibility of Christina Hurlock-Chorostecki. Christina is the primary researcher and author for this research study, therefore analysis, as well as drafting and revising written material was her responsibility. The thesis supervisor (C. Forchuk) and supervisory committee members (C. Orchard, M. van Soeren, and S. Reeves) provided substantial intellectual contributions to the study design, interpretation of analysis, and drafting of three articles for publication.

Chapters two, three, and four, articles for publication, are co-authored by the primary author, the thesis supervisor, and the members of the supervisory committee. The thesis supervisor and the supervisory committee provided multiple critical reviews of intellectual content of each article. Each co-author critiqued and advanced sections of the articles related to their area of expertise. These include research design (CF, SR), advanced practice nursing (CF, CO, MvS), nurse practitioner practice (MvS), and interprofessional knowledge (CO, SR). All authors provided final approval of each article prior to submission for publication.

## Acknowledgements

I wish to thank many people for their role in my Doctoral journey. First, thanks to my academic supervisor, Cheryl Forchuk. Cheryl, thank you for your guidance, patience, and vision. You nurtured in me a new understanding of Doctoral research. You challenged me to theoretically contextualize nurse practitioner practice while maintaining my integrity as an expert in the role. Your challenge has shaped within me a new vision of translating theory within practice.

Thank you to each of my thesis committee members, Mary van Soeren, Scott Reeves, and Carole Orchard. Your constant encouragement and interprofessional expertise aided me in reaching great depth of knowledge. Scott, I value the many reflective Skype conversations. Your availability, despite distance and changing roles, was important to my learning.

A special thank you to Mary, my practice, and research mentor of many years. You enlightened me through your broad knowledge of the nurse practitioner role and visions for the future. Your mentorship and visionary approach led me to where I am today. Mary, your expertise and encouragement have been invaluable throughout my nurse practitioner and Doctoral journeys.

I also wish to thank the many healthcare providers who participated in this research. It is with your perspectives that we learn and grow.

I must thank Maureen Loft, a good friend and colleague. Maureen thank you for “being there” on good days and bad. Your listening, insightful responses, and humour have given me strength. The Doctoral journey is one best travelled together. Miigwech.

To my children, Eric and Jessica, I must say thanks. You have remained supportive of my goals and provided encouragement over many years. You surprised me with gifts of laughter and creativity at the most important times. You are amazing. Dziękuję.

My most heartfelt thank you is to Jay, my husband. Without you by my side, I would not be where I am today. You provided the stimulus, encouragement, and support needed to keep me moving forward. Thank you for your respect. Thank you for accompanying me to presentations, reading drafts of my work, and keeping me centred on reality. But, most of all, thank you for the many meals in front of the computer and for making me laugh. Now let us go sailing!

# Table of Contents

Abstract .....	ii
Keywords .....	iii
Co-authorship Statement.....	iv
Acknowledgements.....	v
List of Tables .....	ix
List of Figures .....	x
List of Appendices .....	xi
Abbreviations .....	xii
Definitions.....	xiii
Chapter 1 .....	1
1. Introduction.....	1
1.1 Shaping of the Study.....	1
1.2 Research Purpose and Questions .....	3
1.3 Research Approach.....	4
1.4 Contribution of the Study.....	5
1.5 Integrated Article Format.....	5
1.6 References for Chapter One.....	8
Chapter 2.....	11
2. Hospital-Based Nurse Practitioner Roles and Interprofessional Practice: A Scoping Review .....	11
2.1 Method .....	12
2.1.1 Search Processes .....	12
2.2 Analysis.....	13
2.3 Results.....	13

2.3.1	Literature Mapping .....	13
2.3.2	Conceptual Mapping .....	19
2.4	Discussion .....	21
2.5	References for Chapter Two .....	22
Chapter 3	.....	28
3.	The Value of the Hospital-Based Nurse Practitioner Role: Development of a Team Perspective Framework .....	28
3.1	Method .....	29
3.2	Analysis.....	30
3.3	Results.....	32
3.3.1	Easing Others' Workload.....	32
3.3.2	Holding Patient Care Together .....	37
3.3.3	Evolving Practice .....	40
3.4	Discussion.....	42
3.5	Conclusions.....	49
3.6	References for Chapter Three .....	49
Chapter 4	.....	53
4.	Labour saver or building a cohesive interprofessional team: The role of the NP in hospital settings using grounded theory.....	53
4.1	Method .....	54
4.2	Analysis.....	56
4.3	Results.....	57
4.3.1	Evolve NP Role and Advance the Specialty.....	58
4.3.2	Focus on Team Working.....	61
4.3.3	Focus on Patient Care .....	63
4.4	Discussion.....	65



4.4.1	Evolve NP Role and Advance the Specialty .....	67
4.4.2	Focus on Team Working .....	68
4.4.3	Hold Patient Care Together .....	68
4.5	Juxtaposing with Extant IP Theory .....	69
4.6	Conclusion .....	73
4.7	References for Chapter Four .....	74
Chapter 5 .....		77
5.	Discussion .....	77
5.1	Formation of HB NP IP Practice Theory .....	77
5.1.1	Team members' perspective of role value .....	78
5.1.2	NP perspective of role value .....	78
5.1.3	Privilege and power construction .....	79
5.1.4	Grounding with IP Theory .....	86
5.2	Contributions to Knowledge .....	89
5.2.1	New contributions .....	89
5.2.2	Conclusions .....	90
5.2.3	Implications .....	92
5.2.4	Future research .....	94
5.3	References for Chapter Five .....	95
Curriculum Vitae .....		123

## List of Tables

Table 1: Details of Primary Research Reviewed. ....	17
Table 2: Mapping of IP Terms Employed, and Manner of Use in NP Research.....	20
Table 3: Focus Group Participants by Profession.....	30
Table 4: Determinants and Assessment of Data Set Re-Usability.....	31
Table 5: Team Perspective and NP Category Alignment. ....	58
Table 6: Team Perspective and NP Sub-Category Alignment.....	66
Table 7: NP Role Summary across the Globe. ....	100
Table 8: Research Quality.....	116

## List of Figures

Figure 1: Team Perspective Framework. ....	43
Figure 2: Hospital-Based NP Interprofessional Practice Framework. ....	69
Figure 3: Dimensions of Hospital-Based NP Role Position. ....	81
Figure 4: HB NP IP Practice Theory. ....	122

## List of Appendices

Appendix A: Historical Background of the HB NP Role in Ontario.....	98
Appendix B: Ethics Approval Letters .....	103
Appendix C: Letter of Information. ....	106
Appendix D: Journal Letters of Permission. ....	109
Appendix E: Team Focus Group Interview Tool.....	111
Appendix F: NP Focus Group Interview Tool.....	113
Appendix G: Research Study Quality.....	116
Appendix H: HB NP IP Practice Theory.....	118

## Abbreviations

ACNP	Acute Care Nurse Practitioner
CGT	Constructivist Grounded Theory
GT	Grounded Theory
HB	Hospital-Based
IP	Interprofessional
MD	Medical Doctor (physician)
NICF	National Interprofessional Competency Framework
NP	Nurse Practitioner
NP-A	Nurse Practitioner – Adult
NNP	Neonatal Nurse Practitioner
NP-P	Nurse Practitioner - Paediatrics
NP-PHC	Nurse Practitioner – Primary Health Care
RN	Registered Nurse
RN(EC)	Registered Nurse (Extended Class)

## Definitions

This thesis employs the following definitions for clarity to promote the establishment of sound knowledge:

### **Hospital-based Nurse Practitioner**

Nurse practitioner (NP) is an expert registered nurse prepared educationally at an advanced level to meet clinical competencies, and credentialed to practice within her/his country. Regulatory mechanisms to expand practice beyond general nursing commonly include protection of the title ‘nurse practitioner’, the right to diagnose, authority to prescribe treatment and medication, authority to refer, and authority to admit to hospital (INP/APNN, 2012). The most common healthcare setting for NP role is the community yet some countries support NP roles within hospital settings. The term hospital-based (HB) NP used in this thesis refers to an NP of any credential employed by a hospital to care for patients.

### **Interprofessionalism**

Interprofessionalism is cohesive and interdependent work carried out among members of different professions who hold complementary knowledge and skills (D'Amour, Ferrada-Videla, San Martín-Rodríguez, & Beaulieu, 2005; D'Amour & Oandasan, 2005). The prefix of “inter” indicates collaboration and interdependency between persons (Oandasan & Reeves, 2005) and the suffix “professional” describes a calling that requires intensive academic preparation in specialized knowledge such as medicine, nursing, physiotherapy and others (Oandasan & Reeves, 2005).

### **Collaboration**

Collaboration is defined as a process “by which interdependent professionals are structuring a collective action towards patients’ care needs” (San Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005, p. 133). Collaboration is described as a process that is essentially interpersonal (D'Amour, et al., 2005) and has a measurable

outcome (Canadian Interprofessional Health Collaborative, 2010; Goldman, Zwarenstein, Bhattacharyya, & Reeves, 2009). Four conceptual terms that describe the collaborative process include coordination, cooperation, shared decision making, and partnerships (Orchard, King, Khalili, & Bezzina, 2011; Sullivan, 1998).

## **Teamwork**

Interprofessional teamwork is defined as “work which involves different health and/or social professions who share a team identity and work closely together in an integrated and interdependent manner to solve problems and deliver services” (Reeves, Lewin, Espin, & Zwarenstein, 2010, p. xiv). Teamwork in healthcare reduces duplication, improves coordination, enhances safety, and improves care quality (Reeves, et al., 2010). Conceptual terms related to teamwork in healthcare include: team identity, interdependence integration, shared responsibility, common goals, and open communication (Reeves, et al., 2010; Xyrichis & Ream, 2008).

## **References for Definitions**

- Canadian Interprofessional Health Collaborative. (2010). A national interprofessional competency framework. 1-32. Retrieved from [http://www.cihc.ca/files/CIHC\\_IPCompetencies\\_Feb1210.pdf](http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf)
- D'Amour, D., Ferrada-Videla, M., San Martin-Rodriguez, L., & Beaulieu, M.-D. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care, 19*(s1), 116-131. doi: 10.1080/13561820500082529
- D'Amour, D., & Oandasan, I. (2005). Interprofessionality as the field of interprofessional practice and interprofessional education: An emerging concept. *Journal of Interprofessional Care, 19*(s1), 8-20. doi: 10.1080/13561820500081604
- Goldman, J., Zwarenstein, M., Bhattacharyya, O., & Reeves, S. (2009). Improving the clarity of the interprofessional field: Implications for research and continuing interprofessional education. *Foundations of Continuing Education, 29*(3), 151-156. doi: 10.1002/chp
- INP/APNN. (2012). Definition and characteristics of the role Retrieved December 28, 2012, from <http://icn-apnetwork.org/>

- Oandasan, I., & Reeves, S. (2005). Key elements for interprofessional education. Part 1: The learner, the educator and the learning context. *Journal of Interprofessional Care*, 19(s1), 21-38. doi: 10.1080/13561820500083550
- Orchard, C., King, G., Khalili, H., & Bezzina, M. B. (2011). Assessment of interprofessional team collaborative practice (AITCS): Development and testing of the instrument. *Journal of Continuing Education in Health Professionals*, 32(1), 58-67.
- Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2010). *Interprofessional teamwork for health and social care*. Oxford: Wiley-Blackwell.
- San Martín-Rodríguez, L., Beaulieu, M.-D., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of theoretical and empirical studies. *Journal of Interprofessional Care*, 19(s1), 132-147. doi: 10.1080/13561820500082677
- Sullivan, T. (1998). *Collaboration: A health care imperative*. New York: McGraw-Hill.
- Xyrichis, A., & Ream, E. (2008). Teamwork: A concept analysis. *Journal of Advanced Nursing*, 61(2), 232-241. doi: 10.1111/j.1365-2648.2007.04496.x



## Chapter 1

### 1. Introduction

This chapter provides background information that shaped this PhD study. The chapter is divided into five sections. First, the founding events that shaped the study are discussed. Second, the research purpose, and questions are presented. Following this, the research approach is briefly outlined. The study's original contribution is shared in the next section. The chapter ends in a summary description of the thesis format.

#### 1.1 Shaping of the Study

Three founding events shaped this study. First, participation as a co-investigator of a mixed methods study exploring the integration of specialty nurse practitioners (NP) into the Ontario healthcare system provided a basis for my interest. This study provided a view of the hospital-based (HB) NP role from a new vantage point, the team member. Second, intensive involvement in the political process of advancing NP practice within Ontario while enacting the president role of the provincial NP association enhanced my knowledge of healthcare system needs and the differences offered by community and HB NP roles. Third, the growing political and academic interest in interprofessional (IP) collaboration and teamwork to foster improvement in delivery of healthcare presented an opportunity to examine the HB NP role within this context.

In 2008, I had the opportunity to partner with experienced researchers to explore the NP role as it was enacted within Ontario hospitals. The opportunity was unique since research had predominantly focussed on the role within primary health care, leaving the hospital role less understood. Lack of understanding of the NP role in hospital teams was apparent in my NP practice within these teams. This 18-month research project, funded by the Ontario Ministry of Health, described the nature of the hospital-based NP role with respect to enactment of advanced practice nurse role domains and interactions with team members. The findings suggested NP roles impact provider and patient satisfaction, team

function, patient access to care, and promotion of best practices. In addition, study findings highlighted policy regulation and legislation limitations impacting full specialty NP role implementation. The mixed methods study design produced qualitative data from role observation, focus groups and interviews, and quantitative data from questionnaires and role tracking. The findings from this research can be found in the report to the Ontario Ministry of Health and Long Term Care (van Soeren, Hurlock-Chorostecki, Kenaszchuk, Abramovich, & Reeves, 2009). My involvement in the development of the study protocol, data gathering, and analysis provided me with knowledge that raised new questions. Of greatest interest was the suggestion NP roles may enhance IP care within hospital teams that arose from team member focus group data. The thematic analysis of the focus group data was broad, and focussed on describing the NP role and impact. The focus group data provided a valuable data set worthy of further exploration.

At the same time I had accepted the position of president of the Nurse Practitioners' Association of Ontario, the professional voice of Ontario's NPs (Nurse Practitioners' Association of Ontario, 2012). This position provided me with increased knowledge of social and political influences on NP practice within the province and the nation. The presidency period was politically charged. Between 2007 and 2009 three reviews of healthcare professions were completed by the Advisory Council for the Ontario Minister of Health (Health Professions Regulatory Advisory Council, 2007, 2008, 2009) advocating for increased scope of practice of non-physicians, and IP collaboration. During this time, successful political lobbying and media campaigns transformed the vision of the NP in three key manners. The removal of a limited medication list for NP prescribing acknowledged the NP role as a safe and efficient healthcare provider. Regulation of specialty acute care NPs within the extended class of nursing recognized NP role value across the healthcare spectrum. Legislating authority for NPs to admit, treat, and discharge hospital in-patients established NPs with specialist knowledge as appropriate providers of episodic hospital care. Participation in public and political debates furthered my interest in understanding healthcare system needs, particularly within hospital teams, what role the NP could play in meeting these needs, and the power influences challenging role enactment within IP teams.

Provincial advocacy for IP care was strongly advertised with the introduction of the Blueprint for Action (Closson & Oandasan, 2007) and further supported through Ministry of Health reports and newsletters (Health Professions Regulatory Advisory Council, 2008; HealthForceOntario, 2007, 2009). The benefits of IP care, improved use of clinical resources, increased access to healthcare, reduced conflict between healthcare professionals, and improved patient outcomes, quality of care, and safety, were needed to improve healthcare delivery (Closson & Oandasan, 2007; Frank & Brien, 2008; Infante, 2006; Lemieux-Charles, 2006; Litaker et al., 2003; Oandasan et al., 2006; Reason, 2004; Schmitt, 2001; Zwarenstein, Goldman, & Reeves, 2009). The politically supported focus of moving away from silo-practice toward care provided by cohesive, interdependent groups of healthcare professionals (D'Amour, Ferrada-Videla, San Martin-Rodriguez, & Beaulieu, 2005) instilled a drive to gain knowledge of NP role enactment within the context of IP teams.

The events highlighted a problem of interest. The NP role within hospital teams existed in the shadow of the primary health care NP role for decades. Since the 1960s in Ontario, research of community-based NP roles and physician-NP dyads shaped NP education and policy (Appendix A). Comparatively less attention paid to HB NP roles continues to create confusion with role clarity and integration. This led to a curious thought: Employment of NPs within hospitals for greater than a decade suggests the role supports positive outcomes, yet there remains a lack of research on how and why NPs enact their roles within IP hospital teams. The three aforementioned events presented me with the incentive, interest, and opportunity to design a research study to critically explore the NP role within the context of IP hospital teams. My continued NP practice and personal experience in role implementation further my interest in creating new knowledge to meet the changing needs of the healthcare system.

## 1.2 Research Purpose and Questions

The purpose of this research study was to critically explore the perceived value of the hospital-based nurse practitioner (NP) role maintaining a focus on construction of their practice within the context of interprofessional (IP) hospital teams. The product is beyond

role description and therefore offered as an emerging substantive theory of HB NP IP practice. This study addressed the following research questions:

1. What is the hospital team members' shared perception of the value of the NP role working within hospital teams, and how does this relate to the NP shared perception?
2. How do the shared perceptions relate to the socio-political influences and position of the NP role within hospital teams?

### 1.3 Research Approach

The methodology of constructivist grounded theory (CGT) as described by Kathy Charmaz (2006) was used as the guiding approach. Charmaz (2006) reasoned CGT combined theoretical constructs of symbolic interactionism, interpretivism, constructivism, and critical theory to support generation of theory arising from the standpoint of those living the phenomenon thus allowing everyday application. Constructivist GT, a modification of classic GT, supports interpretation, inclusion of the researcher's view, and comparison with extant theory to create theory (Charmaz, 1990, 2006). The assumptions within CGT, reality as multiple and provisional truths, linkage of facts with values, construction of meanings and processes informed by social contexts, and construction of power creating privilege and inequality, aligned with the research questions.

The research was conducted in two phases. The first phase was a supplementary analysis of team member focus group data acquired in 2009 during the aforementioned study held in Ontario (van Soeren, et al., 2009). The data were explored for team members' perceptions of value, and power inequities of the NP role within hospital teams. The second phase involved attaining the Ontario HB NP perception of their role value and response to the team member perception. The previous study excluded the HB NP voice. The Research Ethics Board at Western University and the Lawson Research Institute approved the study (Appendix B). The letter of information provided to participants is available in Appendix C.

This study was limited to NPs and team members working as employees within rural and urban community, academic, and northern hospitals in Ontario. The NP participants provided care to hospital in-patients, out-patients, or both. This included emergency departments, specialty clinics, surgical and medical care, and rehabilitation. The NPs worked within established teams such as orthopedic surgery, or across teams as a consulting service such as palliative care. Although the study did not include NPs working in community primary health care, or Long Term Care settings, it did include NPs educated and credentialed as Primary Health Care (PHC), Adult, and Paediatrics.

## 1.4 Contribution of the Study

This study provides four new contributions to knowledge of the NP role and practice within IP hospital teams. A team perspective framework offers insights into important needs of IP team members, IP tensions, and useful HB NP actions. The emerging HB NP IP practice theory integrates multiple perspectives of HB NP practice with exposed power and privilege, and grounds this with IP theory. The theory provides a pragmatic rendering of HB NP practice within the context of IP hospital teams. The resultant theoretical presentation moves beyond role description and integrates existing theoretical knowledge and conceptualization of IP and NP practice thus providing a new view of NP practice within the complex context of IP. A diagram, dimensions of HB NP role position within IP teams, provides two new contributions. First, the diagram explains the importance of perpetual change within three directions to enable NP role change in response to patient, team, program, and organization system needs. Second, the diagram offers an explanation of why HB NP role clarity has remained elusive. These contributions improve role understanding for practicing NPs, healthcare professionals, hospital leaders, and academics.

## 1.5 Integrated Article Format

This thesis represents my interpretation of HB NP practice within IP teams. It is based on interpretation of multiple perspectives of HB NP practice, power and privilege influences that enable or disable effective practice, and congruencies with extant IP theory. The

organization of this thesis is based on the Integrated-Article format regulated by the School of Graduate and Postdoctoral Studies at Western University, London, Ontario.

**Chapter 2**, *'Hospital-based nurse practitioner roles and interprofessional practice: A scoping review'* is the first of three articles. The article is a scoping review of literature from 2008 to 2012 of the NP role within hospital teams completed to provide current understanding of this rapidly evolving role. The literature was mapped to country of origin and then conceptually mapped to 12 key interprofessional terms. One hundred and three abstracts were reviewed; twenty-eight published articles from four countries met the inclusion criteria. Twenty were original research articles representing 16 different studies, and eight were literature reviews. Findings of this review indicate a greater expansion of research on the HB NP role in Canada compared with other countries in this timeframe. Globally, the focus has trended toward exploration of NP role description, outcomes, perception, and integration within hospital teams. A continued concern is the lack of NP role title standardization impacting the ability to build a consistent knowledge base within and across countries. In addition, interprofessional terms used within these papers are inconsistent thus hindering the development of adequate knowledge within this context. In spite of increasing numbers of publications, there remains a limited understanding of the HB NP practice within the context of IP collaboration and teamwork.

**Chapter 3**, *'The value of the hospital-based nurse practitioner role: Development of a team perspective framework'* is the first of two articles presenting analysis of the data. This article describes analysis of phase one of the research study and answers the initial part of the first research question "What is the hospital team members' shared perception of the value of the NP role working within hospital teams...". To gain such an understanding, a supplementary analysis of 30 team member focus groups was completed using CGT methodology to provide a new perspective of the value of NP practice within Ontario, Canada HB IP teams. This conceptual rendering of the team members' shared perspective of NP actions provides insight into the meaning and importance of the NP role. Participants emphasized the importance of trust to fostering efficacy of three categories of NP practice, easing others' workload, holding patient care together, and

evolving practice. A team perspective framework of HB NP practice is presented as the first stage in developing a theory of HB NP IP practice within hospitals. Moreover, the framework provides multiple perspectives to the meaning and value of HB NP practice beyond basic role description. Healthcare professionals, hospital leaders, academia, and NPs may use the framework to enhance role respect and understanding.

**Chapter 4**, *‘Labour saver or building a cohesive interprofessional team: The role of the NP in hospital settings using grounded theory’*, the second data analysis article, presents the NP shared perception of their value, explores for convergence and divergence with the team perspective framework presented in chapter three, and juxtaposes findings with IP theory. Seventeen NPs employed within hospital teams across seven Ontario hospitals participated in group and individual interviews. Most NP perceptions substantiated the team perspective. NPs presented alternative priorities, and missing or “invisible” work. A multi-perspective HB NP IP practice framework emerged consisting of three key practice foci (main categories) that form the meaning of HB NP role value (evolve NP role and advance the specialty, focus on team working, and hold patient care together). Eight sub-categories define how HB NPs construct actions within each category (gap vigilance, create and evolve NP role, enable team efficiency, working together, filter and assess knowledge, legitimate voice, knowledge broker for patient and family, and reducing patient/family burden). The category ‘focus on team working’, when juxtaposed with existing IP teamwork theory, illustrated theoretical congruency with IP teamwork and collaboration. Similarity with IP theory suggests HB NPs play a pivotal role in building team cohesiveness and promoting IP work. This chapter answers the second portion of the first research question “how does the team perception relate to the NP perception” and begins to address the second research question “how do the shared perceptions relate to the socio-political influences and position of the NP role within hospital teams”.

**Chapter 5**, *‘Discussion’*, provides an integrated summation of the entire research study. A reconstruction of the imaginative understanding of how and why NPs enact their roles within IP hospital teams forms an emerging theory of HB NP IP practice. The theory emerges from combined knowledge generated from multiple perspectives, exposure of

privilege and power, and grounding with extant IP theory. Summaries of key findings from the team and NP perspectives highlight the diversity of subjective meaning intrinsic to the emerging theory. A critical review of privilege and power contributes to social, political, and economic understanding within the emerging theory. A discussion of privilege addresses the second research question “how do the shared perceptions relate to the socio-political influences and position of the NP role within hospital teams” and offers a diagram of three continua as an explanation. Exposure of power types and their sources highlights where tensions can and do arise and important HB NP actions within the emerging theory to aid in resolution. Further discussion of IP factors identified in chapter 2, and IP theory contributes to justification of the IP nature of HB NP practice within the emerging theory. Four contributions from the study to advance knowledge are offered as new: Team Perspective Framework (Chapter 3), HB NP IP Practice Theory (Chapter 5), Dimensions of HB NP Role Position within IP teams (Chapter 5), and explanation of why HB NP role clarity remains elusive (Chapter 5). The chapter closes with 12 key conclusions from the study, several implications for NPs, hospital leaders, healthcare professionals, academics, and policy makers, and seven future research suggestions.

## 1.6 References for Chapter One

- Charmaz, K. (1990). 'Discovering' chronic illness: Using grounded theory. *Social Sciences Medicine*, 30(11), 1161-1172.
- Charmaz, K. (2006). *Constructing grounded theory*. London: Sage Publications.
- Closson, T., & Oandasan, I. (2007). Interprofessional care: A blueprint for action in Ontario Retrieved January 6, 2011, from <http://www.healthforceontario.ca/upload/en/whatishfo/ipc%20blueprint%20final.pdf>
- D'Amour, D., Ferrada-Videla, M., San Martin-Rodriguez, L., & Beaulieu, M.-D. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care*, 19(s1), 116-131. doi: 10.1080/13561820500082529
- Frank, J., & Brien, S. (2008). The safety competencies: Enhancing patient safety across the health professions. 1-56. Retrieved from



<http://www.patientsafetyinstitute.ca/English/education/safetyCompetencies/Documents/Safety%20Competencies.pdf>

- Health Professions Regulatory Advisory Council. (2007). Scope of practice for registered nurses in the extended class (nurse practitioners): A jurisdictional review. Toronto.
- Health Professions Regulatory Advisory Council. (2008). Mechanisms to facilitate and support interprofessional collaboration among health colleges and regulated health professionals. Toronto.
- Health Professions Regulatory Advisory Council. (2009). Critical links: Transforming and supporting patient care. Toronto.
- HealthForceOntario. (2007). Interprofessional care. In J. Tepper (Ed.), *HFO Newsletter: A report to Ontario's healthcare leaders* (Vol. 2, pp. 1-6). Toronto, ON: Government of Ontario.
- HealthForceOntario. (2009). Interprofessional care II. In J. Tepper (Ed.), *Newsletter: A report to Ontario's healthcare leaders* (Vol. 6, pp. 1-6). Toronto, ON: Government of Ontario.
- Infante, C. (2006). Bridging the “system's” gap between interprofessional care and patient safety: Sociological insights. *Journal of Interprofessional Care*, 20(5), 517-525. doi: 10.1080/13561820600937598
- Lemieux-Charles, L. (2006). What do we know about health care team effectiveness? A review of the literature. *Medical Care Research and Review*, 63(3), 263-300. doi: 10.1177/1077558706287003
- Litaker, D., Mion, L. C., Planavsky, L., Kippes, C., Mehta, N., & Frolkis, J. (2003). Physician–nurse practitioner teams in chronic disease management: The impact on costs, clinical effectiveness, and patients' perception of care. *Journal of Interprofessional Care*, 17(3), 223-237. doi: 10.1080/1356182031000122852
- Nurse Practitioners' Association of Ontario. (2012). NPAO Webpage. Retrieved November 15, 2012, from [www.npao.org](http://www.npao.org)
- Oandasan, I., Baker, G., Barker, K., Bosco, C., D'Amour, D., Jones, L., . . . Way, D. (2006). Teamwork in healthcare: Promoting effective teamwork in healthcare in Canada Retrieved January 25, 2011, from [http://www.chsrf.ca/Migrated/PDF/ResearchReports/CommissionedResearch/teamwork-synthesis-report\\_e.pdf](http://www.chsrf.ca/Migrated/PDF/ResearchReports/CommissionedResearch/teamwork-synthesis-report_e.pdf)
- Reason, J. (2004). Beyond the organisational accident: The need for "error wisdom" on the frontline. *Quality and Safety in Health Care*, 13(s2), ii28-ii33. doi: 10.1136/qshc.2003.009548

- Schmitt, M. H. (2001). Collaboration improves the quality of care: Methodological challenges and evidence from US health care research. *Journal of Interprofessional Care*, 15(1), 47-66. doi: 10.1080/13561820020022873
- van Soeren, M., Hurlock-Chorostecki, C., Kenaszchuk, C., Abramovich, I., & Reeves, S. (2009). The integration of specialty nurse practitioners into the Ontario healthcare system, Retrieved January 4, 2010, from <http://www.npao.org/Uploads/SNP%20report%202009.pdf>
- Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: Effects of practice-based interventions on professional practice and healthcare outcomes. *The Cochrane Collaborative*(3). doi: 10.1002/14651858.CD000072.pub2

## Chapter 2

### 2. Hospital-Based Nurse Practitioner Roles and Interprofessional Practice: A Scoping Review

The need to contain health care costs while maintaining services is a recurrent issue globally. The hospital sector, as a consumer of large portions of healthcare and public budgets, is under increasing pressure to improve access to care, ensure quality, and reduce costs. One optimizing approach is more effective use of health human resources, while another is creation of IP collaboration and teams (Closson & Oandasan, 2007; HealthForceOntario, 2008; Romanow, 2002; Zwarenstein, Goldman, & Reeves, 2009). Interprofessionality extends beyond the concept of multiple profession groups to include cohesive, interdependent, and complementary working (Oandasan & Reeves, 2005). Collaboration is an interpersonal process of structuring collective action (D'Amour, Ferrada-Videla, San Martín-Rodríguez, & Beaulieu, 2005; San Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005) while teamwork is characterized by group identity and integrated problem-solving (Reeves, Lewin, Espin, & Zwarenstein, 2010). Creation of collaborative IP teams is an important strategy because data indicate IP practice improves patient outcomes, quality of care, safety, use of clinical resources, increases access to healthcare, and improves professional recruitment and retention (Closson & Oandasan, 2007; Frank & Brien, 2008; Infante, 2006; Lemieux-Charles, 2006; Litaker et al., 2003; Oandasan et al., 2006; Reason, 2004; Schmitt, 2001; Zwarenstein, et al., 2009). Development of successful IP practice includes creation of healthcare teams that facilitate the use of complementary skills which supports the use of all members' full scope of practice to improve cost-effectiveness, patient outcomes, and recruitment and retention of staff (Buchan & Dal Poz, 2002; Dubois & Singh, 2009).

Nurse practitioner (NP) roles are increasingly included within hospital teams to facilitate direct advanced patient care, provide nursing leadership and education, and implement unit specific research (Hurlock-Chorostecki, van Soeren, & Goodwin, 2008; Kilpatrick et al., 2010; Kleinpell, 2005; Mick & Ackerman, 2000). Innovative NP specialty roles have

augmented patient care, and regulatory and legislative bodies have recognized this contribution by facilitating full scope of NP practice in many jurisdictions. However, it remains unclear if the NP role assists in optimizing IP collaboration and teamwork. Because of the pressing need to understand IP practice and the expansion of the HB NP role, a scoping review of the current literature regarding these NP roles and their role within IP teams is reported here. These results will be of interest to administrators, researchers, educators, and clinicians.

## 2.1 Method

The aim of this review was to gain an understanding of the nature of existing knowledge of the NP role within IP hospital teams. Two objectives were to highlight the breadth of knowledge generated in a specific timeframe, map reviews and primary study articles to the country of origin, and map primary study findings to key IP concepts.

### 2.1.1 Search Processes

This review searched MEDLINE, CINAHL, Cochrane Library, and Scholars Portal for both primary studies and reviews related to NP roles. The search was limited to published literature written in English in the last five years as a comprehensive review of international literature (van Soeren, Hurlock-Chorostecki, Kenaszchuk, Abramovich, & Reeves, 2009) and Canadian literature (Kilpatrick, et al., 2010) between 2003 to 2008 were previously completed. Search terms included: ‘advanced practice nurse’ and ‘nurse practitioner’ in combination with ‘hospital’, ‘practice setting’, and ‘acute care’. Reference lists of applicable articles were hand searched for further relevant articles. Abstracts of literature reviews and primary studies were reviewed for an explicit focus on the NP role within hospital teams and findings relevant to the NP role.

One hundred and three abstracts were reviewed. Twenty-eight met the search criteria. Twenty articles within this cluster reported findings of 16 research studies, with three studies publishing multiple articles. The remaining eight were literature reviews. One document was a research report, which included an extensive literature review thus nine literature reviews are reported.

## 2.2 Analysis

Analysis was undertaken by two mapping exercises. First, literature was mapped within the specific timeframe (January 2008 through July 2012) to highlight where hospital NP role interest lies globally (Rumrill, Fitzgerald, & Merchant, 2010). Second, conceptual mapping for key IP terms to determine their use within the primary study cluster (Rumrill, et al., 2010). Twelve key IP terms, determined through a previously completed literature review, were used to conceptually map the primary studies: team identity, interdependence, integration, shared decision-making/responsibility, common goals, open communication, coordination, cooperation, partnership, role clarification, leadership, and conflict resolution.

## 2.3 Results

### 2.3.1 Literature Mapping

Literature reviews and primary studies are presented as two sub-groups. Similarities and differences explored within each sub-group resulted in six themes of research interest and activity. Themes within the literature reviews are role understanding, and role status. Primary study themes include workforce description, role integration, role outcomes, and role perception.

#### 2.3.1.1 Literature reviews

Reviews of the literature were completed by authors in the USA (4), Canada (3), and Australia (2). Several authors describe confusion with NP titles and accountability within and between countries (Duffield, Gardner, Chang, & Catling-Paull, 2009; Kleinpell, Hudspeth, Scordo, & Magdic, 2012; Lowe, Plummer, O'Brien, & Boyd, 2012; van Soeren, et al., 2009).

**Role understanding:** Duffield and colleagues (2009) from Australia, reviewed international literature (1987 to 2008) for NP role titles and scopes of practice, and determined title and practice diversity exists with a trend toward consistency globally.

The lack of NP role clarity was restated by a second Australian author group reviewing international literature (Lowe, et al., 2012). Kleinpell and colleagues (2012) synthesized USA literature of NP scope with authoritative resources and determined a lack of role understanding exists. Three reviews addressed role understanding through role comparisons with other healthcare providers, specifically the Physician Assistant role in the USA (Hooker, Cipher, Cawley, Herrman, & Melson, 2008; Kleinpell, Ely, & Grabenkort, 2008), and the Clinical Nurse Specialist role in Australia (Lowe, et al., 2012). One USA review, an outlier in the cluster, explored for evidence of innovative NP role implementation, specifically as a hospitalist (Rosenthal & Guerrasio, 2009). Regardless of country of origin, issues of role title and understanding the nature of NP practice remains unclear.

**Role status:** Two Canadian reviews reported on a five year span (2003 to 2008) of published literature of the NP role within hospitals (Kilpatrick, et al., 2010; van Soeren, et al., 2009). Kilpatrick and colleagues (2010) completed a review of Canadian literature to describe the current status of Acute Care (hospital-based) NP roles and clustered under themes of role utilization to full scope of practice, utilization of non-clinical practice domains, and team acceptance and collaboration. The Canadian research team of van Soeren and colleagues (2009) completed a review of international literature in the same time period and grouped literature within themes of practice patterns, role value, role implementation, and interprofessional collaboration. Sangster-Gormley and colleagues (2010) completed a literature review (1997 to 2010) of NP role implementation within Canadian hospitals and suggested three important concepts: involvement, acceptance, and intention. These reviews provide the context of existing knowledge regarding the NP role within hospital settings and set the stage for development of further research to understand and advance the knowledge base of the evolving role (Rumrill, et al., 2010).

#### 2.3.1.2 Primary studies

Sixteen primary studies were completed in four countries Canada (7), USA (4), Australia (3), and UK (2) (Table 1). Three of the Canadian studies reported findings in multiple articles resulting in 20 reviewed documents.

**Workforce description:** Two Canadian studies described the NP role within hospitals (Hurlock-Chorostecki, et al., 2008; Kilpatrick, Lavoie-Tremblay, Lamothe, Richie, & Doran, 2012; Kilpatrick et al., 2012a; Kilpatrick et al., 2012b). Hurlock-Chorostecki and colleagues (2008) reported on a workforce survey of Acute Care (hospital-based) NPs within Ontario Canada using a questionnaire developed by the Ontario NP professional body and researchers. The validated 30 item questionnaire (Sloan, Pong, Rukholm, & Caty, 2006) provided NP role description based on practice setting (academic or community hospital), work time allocation, NP specialization, and the lack of prescribing authority. Kilpatrick and colleagues (2012b) reported time and motion studies to describe two cardiology NP roles in two Canadian hospitals. Observations and interviews supported development of a theory of role enactment that included boundary work and perceptions of team effectiveness (Kilpatrick, Lavoie-Tremblay, Lamothe, et al., 2012; Kilpatrick, Lavoie-Tremblay, et al., 2012a). Workforce description was reported only in Canada within the review timeframe. One outlier in this theme was a USA survey of NP roles that explored the relationship between NP credentials and healthcare setting (Keough, Stevenson, Martinovich, Young, & Tanabe, 2011). Rather than describing the workforce, the authors determined NPs work in healthcare settings not traditionally related to their NP credential. A similar finding was reported by van Soeren and colleagues (2009) in Canada.

**Role integration:** Two Canadian, and one Australian, studies explored NP role implementation and integration within hospital settings (Desborough, 2012; Rashotte & Jensen, 2010; van Soeren, et al., 2009). A two year Canadian study explored role integration of 46 NPs within hospital teams in nine Ontario hospitals (van Soeren, et al., 2009). The authors reported NPs fulfill the four domains of practice set out in the national Advanced Practice Nurse Framework (Canadian Nurses Association, 2008) with academic hospitals supporting more time for research and leadership. The NP role was viewed as a clinical leader based on results of the IP survey of team members (van Soeren, et al., 2009). Rashotte and Jensen (2010) explored the nature of being a NP within acute care hospital teams with 26 NPs employed in four academic hospitals across Canada and suggested NP integration is a five stage transformational journey. An

Australian study suggested legitimacy and credibility were central to successful NP role implementation in all settings including hospitals (Desborough, 2012). Successful role integration and processes were of interest within the Canadian and Australian research.

**Role outcome:** Half of the articles, from all four countries, focused on NP role outcomes related to quality of care and patient safety, and included measures of clinical practice guideline compliance, length of hospital stay, wait time and leave without treatment rate (emergency departments), patient satisfaction, and frequency of unnecessary emergency department visits post discharge (Gracias et al., 2008; Jarrett & Emmett, 2009; Jennings et al., 2008; Robles et al., 2011; Searle, 2008; Sidani, 2008; Sidani & Doran, 2010; Steiner et al., 2009; Thrasher & Purc-Stephenson, 2008; Williamson, Twelvetree, Thompson, & Beaver, 2012). Improvement in quality of care and patient safety related to NP role introduction was consistent across all but one study (Steiner, et al., 2009). Steiner and colleagues (2009), reported no difference in wait time, length of stay, and leave without treatment rates when the NP role was compared to emergency physicians in Canada. Conversely, Jennings et al (2008) in Australian emergency departments, and Jarrett and Emmett (2009) in a USA trauma unit determined the addition of the NP role positively impacted patient wait time and length of stay. Searle (2008) surveyed nursing and medicine roles within one Australian hospital emergency department and reported improved collaboration as an NP role outcome. Another positive outcome measure within the USA was NP rate of compliance with clinical practice guidelines (Gracias, et al., 2008). In Canada, Sidani and Doran (2010) identified a relationship between NP care coordination and patient satisfaction across eight Canadian hospitals. A USA study explored rate of readmission to emergency departments after surgical ward discharge and determined a significant reduction after introduction of the NP role (Robles, et al., 2011). Williamson and colleagues (2012), in a study of five UK hospital NP roles describe the NP role as a ‘lynchpin’ positively impacting nurses and facilitating the patient’s journey. Centrality of the NP role on hospital teams was also reported in the Canadian study by van Soeren and colleagues (2011). Role outcome studies, the most common research published in the review time frame, measured management valued outcomes attributed to



NP roles as a result of introduction within a team or retrospectively compared to traditional models.

**Role perception:** Perceptions of NP roles within hospital teams in Canada and the UK were sought through patient and team member surveys (Melby, Gillespie, & Martin, 2010; Sidani, 2008; Thrasher & Purc-Stephenson, 2008). In Canada, Thrasher and Purc-Stephenson (2008) surveyed emergency department patients and reported patients preferred care from the NP. Similarly, Sidani (2008), surveyed patients in eight Canadian hospitals and reported satisfaction with NP care provision based on attendance to their needs and problem resolution. Conversely, a UK survey of an emergency department NP role, completed by healthcare professionals and patients, determined the NP role was not well supported (Melby, et al., 2010). Satisfaction with the NP role within hospitals varies between countries.

**Table 1: Details of Primary Research Reviewed.**

Author /Country	Study approach and aim	Sample	Findings
Gracias et al 2008 USA	-12 month cohort crossover study. -Evaluate ACNP critical care delivery.	2 ACNPS, 1 ICU	Clinical practice guideline compliance rate improved with ACNP role. Statistically significant reduction in patient mortality.
Hurlock- Chorostecki et al 2008 Canada	-Descriptive study (survey) -Report on ACNP workforce in Ontario	Response rate 65% (N=173).	Wide variety of NP specialty practices. Predominantly employed in teaching hospitals. 75% of NP time devoted to direct care.
Jennings et al 2008 Australia	-Descriptive -Compare ED with NP to traditional MD model.	Chart review of 527 patients cared for by NP compared to 284 cared for in traditional model.	Patients cared for by NP had significantly reduced wait time and length of stay in ED.
Searle 2008 Australia	-Descriptive study (survey of NPs, RNs, MDs). -Determine impact of new NP role in ED.	Survey created from literature review. 1 ED; 37 surveys returned (number circulated unknown).	NP role improved interprofessional collaboration, team dynamics, efficiencies, quality of care, enhanced job satisfaction, nursing professionalism. Reduced manager and MD workload.
Sidani 2008 Canada	-Repeated measures design. -Patient perceptions of	320 patients in 8 hospitals (2 cities in Ontario) surveyed with	Patients satisfied with care, attendance to their needs, and problem resolution.

	care provided by ACNP.	5 validated tools.	
Sidani & Doran 2010			Patients perceived high levels of care coordination.
Canada			Counseling improved patient physical function, Education improved social function.
Thrasher & Purc-Stephenson 2008	-Patient survey of NP care satisfaction.	Survey created from literature review. 113 patients surveyed after attending ED in 1 Ontario hospital.	71% of patients satisfied to see NP in the ED.
Canada			
Jarrett & Emmett 2009	-Observational study -Describe trauma NP role.	2 NPs, 1 hospital	NP moved patients through the system effectively. Positive impact on length of hospital stay.
USA			
Steiner et al 2009	-Observational study -Impact of new NP role in 1 ED	1 ED, 1 NP role. 68 NP shifts compared to 51 MD shifts worked by 21 MDs.	No significant difference in wait time, length of ED stay, and leave without treatment rate.
Canada			
van Soeren et al 2009	-Mixed methods (Interprofessional Collaboration Scale, role tracking, self-report, focus groups). -Explore NP role integration	46 NPs in 9 hospitals across Ontario. Interviews & survey of 243 team members and 17 patients. 2 year study.	NP role strongly linked to enhancing capacity of team members. Patient and provider satisfaction with role. Augmented physicians with different perspective of care, acted as a clinical leader and role model for nurses.
Canada			
van Soeren, Hurlock-Chorostecki, & Reeves 2011			NP was central to team collaboration and communication. Considered a leader for team debriefing. NP role "bridging" augmented professional roles.
Canada			
Melby et al 2010	-Descriptive mixed methods -Explore patient and professional perception of NP role in ED.	144 health professionals and 10 patients surveyed with AANPQ tool. Response rate 28%.	Confusion of the NP role expressed by 40% of respondents. Lacked support for NP to diagnose and treat autonomously.
UK			
Rashotte & Jensen 2010	-Hermeneutic phenomenological study -Explore the nature of being an NP in hospital.	26 NPs from 4 teaching hospitals in Alberta, Ontario, and Quebec were interviewed.	Transformational journey. 5 themes: being called to be more, being adrift, being an acute care NP, being pulled to be more, and being more.
Canada			
Keough et al 2011	-Survey of Adult, Family and ACNP in US. -Determine where each	200 surveys sent. 69.8% response rate.	All NP types practice across all healthcare settings.
USA			

---

	NP type is employed.		
Robles et al 2011 USA	-Retrospective case control study -Explore impact of NP role on inpatient surgery unit.	Compared patient records 1 year before (415) and one year after (411) introduction of NP role on a single surgical unit.	NP role improved use of resources. 50% reduction in unnecessary ED visits. Continuity of care improved discharge.
Desborough 2012 Australia	-Constructivist grounded theory; 2 month study. -Explore processes of NP role implementation.	Interviews and focus groups with 7 NPs in a variety of settings.	Developing legitimacy and credibility is central. Achieved through developing clinical practice guidelines, collaborating, communicating, and transitioning to practice.
Kilpatrick, Lavoie-Tremblay, Richie, Lamothe, Doran & Rochefort 2012 Canada	-Descriptive study. -Explore cardiology NP role (time & motion studies, interviews, & field notes). 3 month study.	2 ACNPs in 2 hospitals in Quebec, Canada. 59 interviews.	Described role enactment. Direct clinical work comprised greatest time. Role enactment varied.
Kilpatrick Lavoie-Tremblay, Lamothe, Richie, & Doran 2012			Developed theory of ACNP role enactment. Main concepts: boundary work, perception of team effectiveness, and role enactment. Impacted on 5 levels. Outcomes suggested as 4 concepts.
Kilpatrick et al 2012b			Description of boundary work. Key concepts: loss of valued functions, trust, evolution, and interpersonal dynamics.
Williamson et al (2012) UK	-Ethnographic study -Explore NP impact on patient care and nursing practice.	5 NPs (observed and interviewed), 14 nurses, 5 patients. One Trust.	NP was a lynchpin for the interprofessional team. NP role enhanced communication & practice, facilitated the patient's journey.

*Note:* MD = physician, NP= nurse practitioner, RN=registered nurse, ACNP=acute care nurse practitioner, ED= emergency department.

### 2.3.2 Conceptual Mapping

Primary studies were re-examined for inclusion of IP terms. Eight articles, six different research studies, contained IP terms within their findings (Desborough, 2012; Kilpatrick, Lavoie-Tremblay, Lamothe, et al., 2012; Kilpatrick, Lavoie-Tremblay, et al., 2012a; Searle, 2008; Sidani & Doran, 2010; van Soeren, et al., 2009; van Soeren, et al., 2011;

Williamson, et al., 2012) (Table 2). The IP terms identified were communication, collaboration, shared responsibility, coordination, integration, and leadership. Consistency of IP term use was lacking.

**Table 2: Mapping of IP Terms Employed, and Manner of Use in NP Research.**

Author	IP term employed	Manner of use
Desborough et al 2012	Collaboration	-development of core collaborative relationships established NP credibility.
	Communication	-open & transparent communication was essential for NP role success.
Kilpatrick et al 2012	Communication	-NPs increased information sharing across multiple professions
Kilpatrick et al 2012a	Communication	- NPs listened to concerns and considered opinions of all team members.
Searle 2008	Collaboration	-suggested improved collaboration between MDs and RN, between RNs, and between hospital departments after NP role introduced.
Sidani & Doran 2010	Coordination	- determined a positive relationship between NP care coordination and patient satisfaction.
Van Soeren et al 2009	Collaboration	- collaboration measured as communication & accommodation; NP received highest scores from multiple professionals. -suggested bi-directional consultation with multiple professions represents a collaboration process. -observed up to 42% of NP time was spent on collaboration activities.
	Leadership Coordination	-NP observed as a leadership role ( hospital specific). -NP role strongly linked to enhancing team member capacity through coordination of team members within patient care. Role centrality was important for coordination.
	Shared responsibility	- shared leadership measured; NPs viewed as strongly supporting.
Van Soeren, Hurlock-Chorostecki, & Reeves 2011	Integration	-NP aided integration of team members in patient care.
	Collaboration	-bi-directional consultation enhanced collaboration.
	Shared responsibility	-sharing of clinical work accomplished through NP bridging across multiple professional boundaries.
Williamson et al 2012	Communication	-NP described as a lynchpin for communicating plan of care and translating medical instructions to team members.
	Shared responsibility	- patient care responsibility shared between NP and junior doctors.

*Note:* MD=physician, NP=nurse practitioner, RN=registered nurse

## 2.4 Discussion

The findings reported here update previous reviews of HB NP literature (Kilpatrick, et al., 2010; van Soeren, et al., 2009) and illustrate inclusion of IP terms in recently published studies. The literature reviews were predominantly from North America with less than one quarter from Australia. The main issue identified was a global concern for clarity defining the NP role to support building evidence (Duffield, et al., 2009; Kleinpell, et al., 2012; Lowe, et al., 2012). Primary research studies, predominantly from North America, reflected a transition from comparisons of NP roles with medicine, and collating facilitators and barriers (Kilpatrick, et al., 2010; van Soeren, et al., 2009) to exploration of role perception, integration, and outcomes. In addition, research is beginning to include larger samples and multiple sites (Melby, et al., 2010; Rashotte & Jensen, 2010; Sidani, 2008; van Soeren, et al., 2009) suggesting a trend toward more rigorous research methods. In contrast, interest in the NP role in USA hospitals has shifted to explore trends of diversity of NP credentials for those employed in innovative roles (Keough, et al., 2011; Kleinpell, et al., 2012; Rosenthal & Guerrasio, 2009). Only one study explored the NP role within the context of IP (van Soeren, et al., 2011).

A small number of IP terms were identified in the primary study cluster suggesting researchers are including IP language, yet diversity in the manner of use continues to limit advancing knowledge of the NP role in hospitals within the context of IP. Suggestions of NP role processes involved with IP development are broad and include the frequency and ease of liaising between team members and different teams, a consistent presence, and a willingness to share leadership of patient care decision-making (Desborough, 2012; Kilpatrick, Lavoie-Tremblay, Lamothe, et al., 2012; van Soeren, et al., 2009; van Soeren, et al., 2011; Williamson, et al., 2012). NP communication, commonly reported as enhancing collaboration and team efficiency, was defined as skills of open, transparent, and engaging communication as well being a resource of patient information (Desborough, 2012; Kilpatrick, Lavoie-Tremblay, Lamothe, et al., 2012; Searle, 2008; van Soeren, et al., 2009; van Soeren, et al., 2011; Williamson, et al., 2012). Two studies reported enhancement of team member roles through professional boundary

bridging by the NP (Kilpatrick, Lavoie-Tremblay, Lamothe, et al., 2012; Kilpatrick, Lavoie-Tremblay, et al., 2012a; van Soeren, et al., 2009; van Soeren, et al., 2011), suggesting a potential NP influence toward cohesiveness, interdependence, and shared decision-making beyond the NP-physician dyad. Although IP terms are used in recent hospital NP research, discussion remains primarily speculation due to inconsistent use of terminology and a lack of planned exploration within the context of IP.

There are limitations to this review. It was based on a small number of studies and reviews identified through specific databases. Therefore, all articles on HB NP practice may not have been included. The articles were not explored for methodological rigor, but provided an overview of the nature of studies and reviews of NPs within hospital teams. The IP concepts were mapped to illustrate existence of terminology within the articles, not to critique the research process, thus this is not a comprehensive IP exploration.

In summary, NP practice remains relatively unexplored within the complex nature of IP collaboration and teamwork within hospitals. Future research is needed to optimize understanding of the NP role within hospital teams and the IP context. Sound evidence of the NP role on hospital teams within the context of IP may support role clarity in the rapidly changing healthcare environment, improve understanding of processes and meanings of NP practice that aid IP collaboration and teamwork, and provide knowledge to update NP theories and education for this evolving role.

## 2.5 References for Chapter Two

- Buchan, J., & Dal Poz, M. (2002). Skill mix in the healthcare workforce: Reviewing the evidence. *Bulletin of the World Health Organization*, 80, 575-580.
- Canadian Nurses Association. (2008). Advanced nursing practice: A national framework. 1-53. Retrieved from [http://www.srna.org/images/stories/pdfs/nurse\\_resources/2009\\_advanced\\_NP.pdf](http://www.srna.org/images/stories/pdfs/nurse_resources/2009_advanced_NP.pdf)
- Closson, T., & Oandasan, I. (2007). Interprofessional care: A blueprint for action in Ontario Retrieved January 6, 2011, from <http://www.healthforceontario.ca/upload/en/whatishfo/ipc%20blueprint%20final.pdf>

- D'Amour, D., Ferrada-Videla, M., San Martin-Rodriguez, L., & Beaulieu, M.-D. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care, 19*(s1), 116-131. doi: 10.1080/13561820500082529
- Desborough, J. (2012). How nurse practitioners implement their roles. *Australian Health Review, 36*, 22-26. doi: 10.1071/AH11030
- Dubois, C., & Singh, D. (2009). From staff-mix to skill-mix and beyond: Towards a systemic approach to health workforce management. *Human Resources for Health, 7*, 1-19. doi: 10.1186/1478-4491-7-87
- Duffield, C., Gardner, G., Chang, A., & Catling-Paull, C. (2009). Advanced nursing practice: A global perspective. *Collegian, 16*, 55-62.
- Frank, J., & Brien, S. (2008). The safety competencies: Enhancing patient safety across the health professions. 1-56. Retrieved from <http://www.patientsafetyinstitute.ca/English/education/safetyCompetencies/Documents/Safety%20Competencies.pdf>
- Gracias, V., Sicoutris, C., Stawicki, S., Meredith, D., Horan, A., Gupta, R., . . . Schwab, W. (2008). Critical care nurse practitioners improve compliance with critical practice guidelines in “semiclosed” surgical intensive care unit. *Journal of Nursing Care Quality, 23*(4), 338-344.
- HealthForceOntario. (2008). Data & planning. In J. Tepper (Ed.), *HFO Newsletter: A report to Ontario's healthcare leaders* (Vol. 5, pp. 1-4). Toronto, ON: Government of Ontario.
- Hooker, R., Cipher, D., Cawley, J., Herrman, D., & Melson, J. (2008). Emergency medicine services: Interprofessional care trends. *Journal of Interprofessional Care, 22*(2), 167-178.
- Hurlock-Chorostecki, C., van Soeren, M., & Goodwin, S. (2008). The acute care nurse practitioner in Ontario: A workforce study. *Canadian Journal of Nursing Leadership, 21*(4), 96-112.
- Infante, C. (2006). Bridging the “system's” gap between interprofessional care and patient safety: Sociological insights. *Journal of Interprofessional Care, 20*(5), 517-525. doi: 10.1080/13561820600937598
- Jarrett, L., & Emmett, M. (2009). Utilizing trauma nurse practitioners to decrease length of stay. *Journal of Trauma Nursing, 16*(2), 68-72.
- Jennings, N., O'Reilly, G., Lee, G., Cameron, P., Free, B., & Bailey, M. (2008). Evaluating outcomes of the emergency nurse practitioner role in a major urban

- emergency department, Melbourne, Australia. *Journal of Clinical Nursing*, 17(8), 1044-1050.
- Kaasalainen, S., Martin-Misener, R., Kilpatrick, K., Harbman, P., Bryant-Lukosius, D., Donald, F., . . . DiCenso, A. (2010). A historical overview of the development of advanced practice nursing roles in Canada. *Canadian Journal of Nursing Leadership*, 23(special issue), 35-60.
- Keough, V., Stevenson, A., Martinovich, Z., Young, R., & Tanabe, P. (2011). Nurse practitioner certification and practice settings: Implications for education and practice. *Journal of Nursing Scholarship* 43(2), 195-202. doi: 10.1111/j.1547-5069.2011.01395.x
- Kilpatrick, K., Harbman, P., Carter, N., Martin-Misener, R., Bryant-Lukosius, D., Donald, F., . . . DiCenso, A. (2010). The acute care nurse practitioner role in Canada. *Canadian Journal of Nursing Leadership*, 23(special issue), 114-139.
- Kilpatrick, K., Lavoie-Tremblay, M., Lamothe, L., Richie, J., & Doran, D. (2012). Conceptual framework of acute care nurse practitioner role enactment, boundary work, and perceptions of team effectiveness. *Journal of Advanced Nursing*, early online publication. doi: 10.1111/j.1365-2648.2012.06046.x
- Kilpatrick, K., Lavoie-Tremblay, M., Ritchie, J., Lamothe, L., Doran, D., & Rochefort, C. (2012a). Boundary work and the introduction of acute care nurse practitioners in healthcare teams. *Journal of Advanced Nursing*, 68(7), 1504-1515. doi: 10.1111/j.1365-2648.2011.05895.x
- Kilpatrick, K., Lavoie-Tremblay, M., Ritchie, J., Lamothe, L., Doran, D., & Rochefort, C. (2012b). How are acute care nurse practitioners enacting their roles in healthcare teams? A descriptive multi-case study. *International Journal of Nursing Studies*, 49(7), 850-862.
- Kleinpell, R. (2005). Acute care nurse practitioner practice: Results of a 5-year longitudinal study. *American Journal of Critical Care*, 14(3), 211-221.
- Kleinpell, R., Ely, W., & Grabenkort, R. (2008). Nurse practitioners and physician assistants in the intensive care unit: An evidence-based review. *Critical Care Medicine*, 36(10), 2888-2897.
- Kleinpell, R., Hudspeth, R., Scordo, K., & Magdic, K. (2012). Defining NP scope of practice and associated regulations: Focus on acute care. *Journal of the American Academy of Nurse Practitioners*, 24, 11-18. doi: 10.1111/j.1745-7599.2011.00683.x
- Lemieux-Charles, L. (2006). What do we know about health care team effectiveness? A review of the literature. *Medical Care Research and Review*, 63(3), 263-300. doi: 10.1177/1077558706287003



- Litaker, D., Mion, L. C., Planavsky, L., Kippes, C., Mehta, N., & Frolkis, J. (2003). Physician–nurse practitioner teams in chronic disease management: The impact on costs, clinical effectiveness, and patients' perception of care. *Journal of Interprofessional Care*, 17(3), 223-237. doi: 10.1080/1356182031000122852
- Lowe, G., Plummer, V., O'Brien, A., & Boyd, L. (2012). Time to clarify - the value of advanced practice nursing roles in health care. *Journal of Advanced Nursing*, 68(3), 677-685. doi: 10.1111/j.1365-2648.2011.05790.x
- Melby, V., Gillespie, M., & Martin, S. (2010). Emergency nurse practitioners: The views of patients and hospital staff at a major acute trust in the UK. *Journal of Clinical Nursing*, 20, 236-246. doi: 10.1111/j.1365-2702.2010.03333.x
- Mick, D., & Ackerman, M. (2000). Advanced practice nursing role delineation in acute and critical care: Application of the Strong model of advanced practice. *Heart & Lung*, 29(3), 210-221.
- Oandasan, I., Baker, G., Barker, K., Bosco, C., D'Amour, D., Jones, L., . . . Way, D. (2006). Teamwork in healthcare: Promoting effective teamwork in healthcare in Canada Retrieved January 25, 2011, from [http://www.chsrf.ca/Migrated/PDF/ResearchReports/CommissionedResearch/teamwork-synthesis-report\\_e.pdf](http://www.chsrf.ca/Migrated/PDF/ResearchReports/CommissionedResearch/teamwork-synthesis-report_e.pdf)
- Oandasan, I., & Reeves, S. (2005). Key elements for interprofessional education. Part 1: The learner, the educator and the learning context. *Journal of Interprofessional Care*, 19(s1), 21-38. doi: 10.1080/13561820500083550
- Rashotte, J., & Jensen, L. (2010). The transformational journey of nurse practitioners in acute-care settings. *Canadian Journal of Nursing Research*, 42(2), 70-91.
- Reason, J. (2004). Beyond the organisational accident: The need for "error wisdom" on the frontline. *Quality and Safety in Health Care*, 13(s2), ii28-ii33. doi: 10.1136/qshc.2003.009548
- Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2010). *Interprofessional teamwork for health and social care*. Oxford: Wiley-Blackwell.
- Robles, L., Slogoff, M., Ladwig-Scott, E., Zank, D., Larson, M., Aranha, G., & Shoup, M. (2011). The addition of a nurse practitioner to an inpatient surgical team results in improved use of resources. *Surgery*, 150(4), 711-717.
- Romanow, R. (2002). Building on values: The future of health care in Canada. Retrieved January 19, 2011, from <http://dsp-psd.pwgsc.gc.ca/Collection/CP32-85-2002E.pdf>
- Rosenthal, L., & Guerrasio, J. (2009). Acute care nurse practitioner as hospitalist: Role description. *AACN Advanced Critical Care*, 20(2), 133-136.

- Rumrill, P., Fitzgerald, S., & Merchant, W. (2010). Using scoping literature reviews as a means of understanding and interpreting existing literature. *Work*, 35, 399-404. doi: 10.3233/WOR-2010-0998
- San Martín-Rodríguez, L., Beaulieu, M.-D., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of theoretical and empirical studies. *Journal of Interprofessional Care*, 19(s1), 132-147. doi: 10.1080/13561820500082677
- Sangster-Gormley, E., Martin-Misener, R., Downe-Wanboldt, B., & DiCenso, A. (2010). Factors affecting nurse practitioner role implementation in Canadian practice settings: An integrative review. *Journal of Advanced Nursing*, 67(6), 1178-1190. doi: 10.1111/j.1365-2648.2010.05571.x
- Schmitt, M. H. (2001). Collaboration improves the quality of care: Methodological challenges and evidence from US health care research. *Journal of Interprofessional Care*, 15(1), 47-66. doi: 10.1080/13561820020022873
- Searle, J. (2008). Nurse practitioner candidates: Shifting professional boundaries. *Australasian Emergency Nursing Journal*, 11, 20-27.
- Sidani, S. (2008). Effects of patient centred care on patient outcomes: An evaluation. *Research and Theory for Nursing Practice: An International Journal*, 22(1), 24-37.
- Sidani, S., & Doran, D. (2010). Relationships between processes and outcomes of nurse practitioners in acute care: An exploration. *Journal of Nursing Care Quality*, 25(1), 31-38. doi: 10.1097/NCQ.0b013e3181b1f41e
- Sloan, C., Pong, R., Rukholm, E., & Caty, S. (2006). Nurse practitioner workforce survey and NPAO electronic registry project report (pp. 1-72). Thunder Bay: Laurentian University.
- Steiner, I., Nichols, D., Blitz, S., Tapper, L., Stagg, A., Sharma, L., & Policicchio, C. (2009). Impact of a nurse practitioner on patient care in a Canadian emergency department. *Canadian Journal of Emergency Medical Care*, 11(3), 207-214.
- Thrasher, C., & Purc-Stephenson, R. (2008). Patient satisfaction with nurse practitioner care in emergency departments in Canada. *Journal of American Academy of Nurse Practitioners*, 20, 231-237.
- van Soeren, M., Hurlock-Chorostecki, C., Kenaszchuk, C., Abramovich, I., & Reeves, S. (2009). The integration of specialty nurse practitioners into the Ontario healthcare system, Retrieved January 4, 2010, from <http://www.npao.org/Uploads/SNP%20report%202009.pdf>

- van Soeren, M., Hurlock-Chorostecki, C., & Reeves, S. (2011). The role of nurse practitioners in hospital settings: Implications for interprofessional practice. *Journal of Interprofessional Care*, 25, 245-251. doi: 10.3109/13561820.2010.539305
- Williamson, S., Twelvetree, T., Thompson, J., & Beaver, K. (2012). An ethnographic study exploring the role of ward-based advanced nurse practitioners in an acute medical setting. *Journal of Advanced Nursing*, 68(7), 1579-1588.
- Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: Effects of practice-based interventions on professional practice and healthcare outcomes. *The Cochrane Collaborative*(3). doi: 10.1002/14651858.CD000072.pub2

## Chapter 3

### 3. The Value of the Hospital-Based Nurse Practitioner

#### Role: Development of a Team Perspective Framework <sup>1</sup>

Globally, healthcare system change intent is to engage professionals within IP teams to the full extent of their education. Regulation and legislation that define scope of practice are changing to authorize full use of knowledge. The NP role is one such professional utilized to improve access to healthcare while controlling costs (Perry, 2009). A focus on primary healthcare renewal influenced development of a large body of research describing the NP role within primary healthcare settings (Donald et al., 2010). Research has demonstrated the NP extended scope of practice that combines nursing (wellness activities) and medicine (disease diagnosis and treatment) is an effective IP role (Litaker et al., 2003; Martin-Misener, Downe-Wamboldt, Cain, & Girouard, 2009). Hospital-based NP roles slowly emerged in some jurisdictions, albeit numbers remain small in comparison (Hurlock-Chorostecki, van Soeren, & Goodwin, 2008). As a result, there exists far less published evidence of NP practice within the hospital setting.

Teams of professionals traditionally provide hospital care. However, the predominant model is of multi-professional practice where each member attends to care from his or her own professional silo. Interprofessional teamwork requires healthcare professionals to share a team identity and work interdependently to reduce duplication, improve coordination, and enhance safety and care quality (Reeves, Lewin, Espin, & Zwarenstein, 2010). Teamwork evidence is built on conditions of stable membership, developed interpersonal relationships, and routine work hours (Galbraith, 1973). Consistent team membership and routine work hours in primary healthcare settings may be well suited to fulfilling these conditions. However, within hospital settings different challenges and facilitators are likely to affect the ability to function interprofessionally. Hospital care, provided 24 hours a day, seven days a week, results in short-lived team relationships

---

<sup>1</sup> A version of this chapter has been reviewed for publication in the Journal of Interprofessional Care. See Appendix D for letter of permission.

(Reeves & Lewin, 2004). Hence these teams face the challenge of creating and sustaining team identity that supports interdependent problem solving and care delivery (Reeves, et al., 2010). One HB role has been alluded to be key in facilitating IP teamwork through their consistent presence, the NP (van Soeren, Hurlock-Chorostecki, & Reeves, 2011; Williamson, Twelvetree, Thompson, & Beaver, 2012).

To date research has not sought to understand HB NP practice specifically within the complex context of interprofessionality. Therefore, a two-phase study to critically explore perceptions of HB NP role value within IP teams was carried out. Social and professional expectations, obligations, and understandings suggestive of influence and worth were of interest to establish role value. In phase one, the team members' perception was explored since listening to team members provides a fresh base from which arises new understanding of social bonds and interactions (Galinski, Ku, & Wang, 2005). Phase two builds on phase one adding the HB NP perception, framing HB NP IP actions with extant IP theory, and employing a critical lens to expose power inequalities. Team members and NP individual perceptions were analyzed to establish a collective social meaning or shared perception. This paper focusses on the first phase of the study, to answer what is the team members' shared perception of the value of the NP role within hospital teams, and provides an emerging framework.

### 3.1 Method

The methodological approach was constructivist grounded theory (CGT) as described by Charmaz (2006). Charmaz's CGT approach is a modified grounded theory approach that is interpretive, focusses on process construction rather than descriptive themes, and applies a critical lens. A secondary analysis was completed on an existing data set attained in 2009 (van Soeren, Hurlock-Chorostecki, Kenaszchuk, Abramovich, & Reeves, 2009). The primary analysis was thematic; based in role description. This secondary analysis is supplemental since it addresses in-depth emerging aspects not previously addressed: perceptions of role value, HB NP processes (actions), and power influences suggesting IP practice (Heaton, 2004). The data set consisted of transcripts from 30 focus group sessions held with 210 volunteers from hospital teams who regularly worked with

a NP participating in the primary study. Participants were asked to describe experiences of working with an NP (Appendix E). The focus groups were held at nine academic and community hospitals in rural and urban settings in southern and northern Ontario, Canada. This was considered a logical location for the study since two thirds of Canadian NPs are registered and employed in Ontario with approximately 30% working within Ontario hospitals (College of Nurses of Ontario, 2012), and legislation changes since 2011 have progressed NPs to full scope of their practice within hospital settings. Team member focus groups consisted of multiple professionals who regularly worked in a group with a NP, but excluded the NP(s) they worked with. The multiple professions represented at focus groups are shown in Table 3.

**Table 3: Focus Group Participants by Profession.**

<b>Profession</b>	<b>n</b>
Nursing (RN 87, RPN 11 )	98
Medicine	23
Operational Leaders	17
Social Workers	17
Secretaries & Ward Clerks	12
Physiotherapists	10
Dietitians	9
Pharmacists	8
Occupational Therapists	4
Speech & Language Pathologists	3
Radiation Technicians	2
Respiratory Therapists	2
Other (pastoral care, midwife, psychologist, physician assistant)	5
<b>TOTAL</b>	<b>210</b>

## 3.2 Analysis

Prior to analysis an assessment of data set re-usability for secondary analysis was completed. Re-usability was assessed using Heaton's (2004) determinants of accessibility, quality, and suitability. Assessment details are described in Table 4.

**Table 4: Determinants and Assessment of Data Set Re-Usability.**

Determinant	Assessment
Accessibility	Original recordings and transcripts are stored by the current researcher therefore easily available. Ethical approval was not required for secondary analysis of data sets attained from previously Research Ethics Board approved research.
Quality	30 focus group transcripts of 210 professionals ensured a reasonable group size. Transcriptions were accurate when compared to the recordings. No data were missing. Researcher ability to review and reflect on the data set was strong as the primary researcher was a co-investigator of the previous study.
Suitability	There is convergence of the aims of the previous and current studies: to better understand NP work within hospital teams. This study deepens the previous analysis providing for emergence of new knowledge.

*Note:* Assessment was based on Heaton's (2004) re-usability determinants.

The assessment indicated the data set was readily accessible, retained quality data, and suitable for the planned investigation. Therefore, the data set was determined to be of high quality and prepared for analysis.

Analysis within CGT is continuous and iterative moving forward toward interpreting and backward to the data to remain grounded in the participants' perspective (Charmaz, 2006). Analytical processes included coding, constant comparison, theoretical sampling, conceptualizing, and researcher reflection through memoing. Focus group transcripts were analyzed in the order in which they occurred. Initial coding was line-by-line searching for actions and meanings. Initial codes were given labels using gerunds (e.g. being available, researching) to maintain a focus on process. Initial codes underwent constant comparison first within a transcript then between transcripts to uncover similarities and differences and focus the codes. For example being present was similar to, and further defined, being available. Similar codes were merged together until the code was substantially illustrated, thus labeled a category or sub-category. A category explicated ideas that formed role value meaning while sub-categories provided how the HB NP constructed actions within a category. As these categories emerged, coding focused on constant comparison of codes to categories, and categories to categories, to refine categories and reveal relationships. Divergent codes were explored to further

define category properties, and consider influences and relationships with the emerging categories. Regular reflection memoed by the principal researcher aided contemplation of key categories, why the category was important to team members, relationships between NP actions and categories, and how the NP enacted the category. Abstract memoing of categories and relationships triggered theoretical sampling of existing theory to further elaborate on categories. Trust, legitimacy, best practice, evidenced-based practice, evolution, and adaption were terms and concepts that were explored in theoretical literature to determine appropriate terminology and refinement of definitions. Frequency and intensity of discussion furthered understanding of perceived value and emerging categorical relationships. Analysis was stopped once no new category properties emerged, thus rendering categories theoretically saturated. Therefore this analytical approach is aligned with the aim of CGT and reveals construction of processes and meanings grounded in the participants' perspective (Charmaz, 2006).

### 3.3 Results

Three main categories of HB NP practice arose from the analysis of the team members' perception: easing others' workload, holding patient care together, and evolving practice. Categories explicate role value meaning. Sub-categories related to each main category illustrate how team members experienced the NP enacting the category. Participant quotes are presented as illustrative examples.

#### 3.3.1 Easing Others' Workload

The key category, which centres on HB NP processes that eased team member workloads, was described consistently across all focus groups. The importance of easing others' workloads was increased efficiency for team members within their specific professional functions:

“[NPs] have really proven themselves to be ...a real asset to the team whether it be just reducing the workload of other professionals” (registered dietitian).



“Because [NPs] have been working with me collaboratively, I have been able to do an even greater number of patients and do other work at the same time.” (physician)

Most team members perceived the HB NP had more time to devote to necessary details related to patient issues and care planning:

“The nurse practitioner deals with more details... a little bit more specific dealings with the patient.” (occupational therapist).

“They take time and they know. They have the time I guess. That’s what their role is.” (registered nurse).

Easing Others’ Workload has five related sub-categories explicating how the HB NP constructs actions within the category. These are, knowing the healthcare system, connecting team members, being available, speaking legitimately in two worlds, and taking on complex work.

### 3.3.1.1 Knowing the healthcare system

Knowing the healthcare system relates to how the HB NP is able to network by connecting people across the healthcare spectrum thus facilitating smooth patient transitions and patient flow. Many focus groups perceived the HB NP accomplished coordination across hospital programs and the healthcare system through minimal phone calls and a more direct referral or request:

“[The NP] understands the system in the region. [The NP] understands the levels of care that are available in different institutions in the region, what’s available in different communities, that what’s available in [this city] is different than what’s available in other towns. [The NP] is aware of volunteer services that are available. And not only does [The NP] know what’s available, [The NP] knows who to call about each of those things, in each of those places.” (physician).

### 3.3.1.2 Connecting team members

The action of connecting team members, consistently described across focus groups, included perceptions the HB NP understood team member roles, engaged team members appropriately, and created connections between team members. This latter capacity was cited as “[The NP] makes life much easier for us and for everyone together, we’re connecting more between the team members.” (physician). A social worker described engaging team members:

“[The NP] knows how and when to be engaging those members of the team both in terms of understanding the assessment and what the patient’s needs are and what they’re contributing to the plan of care”. (social worker)

Most participants expressed their perception was the HB NP held a central position in effectively connecting team members through coordinating interdependent tasks and empowering team members to achieve shared patient goals.

“[NPs] are central to all the roles. They really know all the different roles that allied health members play and they can liaise with them depending what the needs of the patient; they know exactly who to contact”. (operational leader).

### 3.3.1.3 Being available

Being available means the HB NP is easy to contact as a resource for team members and therefore facilitates timely changes to patient care:

“The NP is more at times readily available and we can deal with things in a very timely fashion and efficiently.” (physiotherapist).

Having the HB NP easily available was described as creating “comfort” for many team members when wait time for action changes was reduced, thus improving their efficiency. Whereas comments describing the HB NP as a “security blanket” and someone “...to offer advice or confer with” created comfort for many participants when the role was respected as legitimate, and the person trusted. A few participants described

frustration resulting from HB NP unavailability supporting the importance of being available in easing workload. This comment illustrates how the HB NP reduced wait time:

“You call [the NP] and she calls back right away so things don’t have to sit and wait. And if she’s up on the floor she’s able to coordinate a lot and write orders and that sort of thing so patients are getting the care and attention they need quicker.”  
(speech language pathologist).

An implied meaning of being available was HB NP dedication to a program or specialty unit demonstrated through frequent presence on the unit, and being readily contactable. A registered nurse comment illustrates the importance of program dedication:

“We can walk up to an NP who’s standing right there at your desk because they’re always around and get that order written.” (registered nurse).

The frequency and intensity of discussion of being available and speaking legitimately in two worlds across focus groups suggests these are two highly valued sub-categories. They were most often raised at the same time suggesting there may be synergy between the two sub-categories.

#### 3.3.1.4 Speaking legitimately in two worlds

Actions within the sub-category represent the medical science knowledge and skills integrated with NP nursing knowledgebase. Legitimacy is validated through legislated authority and regulated NP credentialing. Most participants described HB NP actions as clarifying “exactly what I can do with a client on a particular day” (occupational therapist), dealing “with the medical piece...so [I] can process things a lot more quickly” (social worker), and “translating” messages between professions as intrinsic to speaking legitimately in two worlds. Some participants described confusion of role legitimacy, which led to negating the importance of this sub-category. A physician described NP legitimacy this way:

“[The NP] understands both worlds. [The NP] can speak in a legitimate voice in both worlds. And so [The NP] does that in a way where [The NP] can translate and have currency and legitimacy and be trusted in all those different camps, all those different fields, those different disciplines.” (physician)

### 3.3.1.5 Taking on complex work

Taking on complex work is assuming complicated or multifaceted tasks. These tasks require a great deal of time, coordination, and, occasionally conflict resolution. Most focus groups perceived the HB NP had time to pick up extra tasks other team members were unable or unwilling to manage. Three examples of taking on different types of complex work follow:

Resolving conflicts with families:

“Any staff member can go to the nurse practitioner and have more immediate...that sort of medical piece provided to the family on a more immediate basis, which can help to de-escalate a family fairly quickly”. (social worker)

Coordination of complex tasks to reduce gaps in care provision:

“Having nurse practitioners really makes sure the tests get done on time, the results get back to the appropriate person on time, people get discharged on time, people get seen in a timely manner so the number of cracks seem to get smaller and smaller, less and less.” (physician)

The multifaceted work of addressing issues, often related to social determinants of health and psychosocial challenges:

“[NPs] take into account what’s going on socially, what’s going on financially; so if there’s a need for you to be involved they come and get you. Their background being nurses, they just see the patients as a patient with a new environment as opposed to just a diagnosis.”(social worker)

### 3.3.1.6 Trust

Trust was consistently described across all focus groups as a pre-requisite condition for HB NP effectiveness. Several remarked trust was undermined, and the HB NP role was unsuccessful, when team members resisted inclusion of the role within the team.

Physicians and operational hospital leaders were frequently identified as resistant team members. Trust in the role, based on HB NP education, scope of practice legitimacy, and system knowledge, created team comfort that HB NP actions were valid beyond the realm of general nursing foundation indicating it was safe for patient care to accept role overlap and HB NP autonomous decision-making:

“The thing that struck me the most and I think most of my colleagues, was the level of their training. ... it was quite obvious they were well trained, well educated and had a large fount of knowledge and we felt very comfortable utilizing them.”  
(physician).

“We really rely on the nurse practitioner to know their limitations and understand their scope of practice.” (physician)

Trust in HB NP personal attributes such as problem-solving skills, confidence, approachability, and availability, furthered team member comfort demonstrating for most that it was safe for them to act on HB NP decisions, thus effectively easing their workload:

“The follow-through is consistent, so there’s a lot of trust there when you give them something that they’re going to follow-through and handle it.” (social worker).

“The NP’s we have are confident in their knowledge, they’re experienced and they’re confident in their knowledge and because of that there’s no reluctance [to trust their decisions]” (pharmacist).

### 3.3.2 Holding Patient Care Together

Holding patient care together was defined as HB NP clinical actions. Most team members define these actions as directly impacting efficient coordination and delivery of seamless

clinical patient care. The HB NP actions related to this category were consistent across all focus groups as important to keep patients from “falling through the cracks”, provide consistency, and provide a safety net for patient care:

“Being on top of doing the holistic approach, I mean we all try that but sometimes it falls through the cracks, so she’s very good at that too; coordinating with other services that need to be involved.” (speech language pathologist).

There are five sub-categories: connecting with team members, following-up/through, knowing the issues, focus on whole patient, and connecting with family.

### 3.3.2.1 Connecting with team members

These actions, described at most focus groups, differed from connecting team members. The HB NP was perceived by most as a consistent, central member of the team who facilitated communication amongst members of the team. The necessity of trust and understanding the legitimate authority to enable this type of connecting was conveyed by several participants. The action of connecting with team members provided a “complete picture” of the patient situation:

“We may not see each other but [the NP] is kind of a central person so if we each communicate then you feel that your perspective or your concern ... is going to be communicated to the other members so [the NP] is kind of the centre of the spoke.” (social worker).

“[the NP is the] one consistent person that you can rely on for lots of information and to kind of pull all the pieces together.” (registered dietician)

### 3.3.2.2 Following-up and following-through

These HB NP actions were valuable to team members and the provision of quality patient care. Many team members related the consistent presence of the HB NP as providing a capacity for dependable follow-up of patient care decisions:

“[The NP] is really good at identifying issues and following through with them until they’re resolved or at least brought to as much resolution as they can” (respiratory therapist).

“The consistency [of the NP role] is invaluable to have for follow-through with care with families with the plan of care.” (operational leader).

Some team members discussed witnessing HB NP follow-up discussions with patients and felt these sessions alleviated frustration and promoted trust between the patient and the HB NP. “If there’s a follow-up then [the patient] will be seeing [the NP] again, and I think that instills some confidence in the patient.” (registered nurse)

### 3.3.2.3 Knowing the issues

Knowing the issues related to HB NP actions of gathering and retaining patient knowledge. Knowledge of the patients’ health alteration and responses to treatment was perceived as facilitating rapid situation assessment and decision-making when the patient’s condition changed. Many team members valued HB NP skills of quickly addressing issue changes, rapidly focussing in on the problem, and making decisions they could act on to solve the problem. A pharmacist described the value of the HB NP as “someone who knows what’s going on, knows what the issues are, and can resolve problems quickly.” (pharmacist).

### 3.3.2.4 Focus on the whole patient

Most team members described HB NPs as using a “human approach” (physiotherapist, social worker). This included communicating with patients at their level of understanding, and looking at “a broader picture of the patient” (registered nurse). Many team members perceived patients as being more at ease and having more satisfaction that their needs were met after meeting with the HB NP. An operational leader expressed:

“[the NP] interacts with the patients in a language that they understand and so there’s a greater reception from the patients...you’re seeing greater patient satisfaction as well as family.” (operational leader)

Most team members commented on witnessing increased patient comfort when the HB NP was available to patients. They suggested this was the result of reduced time responding to patient questions and timely care provision.

#### 3.3.2.5 Connecting with family

This sub-category was both similar to, and different from, focus on whole patient actions. Most described similar actions as being the consistent person for family connections, reducing frustrations, providing information, and resolving family member concerns. Discussions of family connections suggested the NP mitigated conflict and frustration between family and the team. The high frequency of discussion of connecting with family and focus on whole patient suggests these are two groups of actions highly valued by team members.

### 3.3.3 Evolving Practice

The three sub-categories of evolving practice, discussed in several focus groups, held equal importance to team members, creating and evolving role, researching, and filtering and assessing knowledge. Evolving practice included promoting evaluation of existing practices for future improvement of care practices, program deliverables, and the HB NP role focus; “really helping to define the future of the program” (operational leader).

#### 3.3.3.1 Creating and evolving the role

Some expressed expectations the HB NP would create and evolve their role to effectively address care and program gaps or duplications, “absorbing whatever role needed to... make a team” (registered nurse). Several participants valued continuous role evolution to ensure gaps did not reappear, whereas a few felt role evolution by individual HB NPs reduced role clarity since it produced role differentiation between hospitals and programs.

#### 3.3.3.2 Researching

Researching was described as a central HB NP evolving action by some focus groups. It was enacted through creation of research projects, participation on research teams,



critique of published research, and dissemination of findings. A valued research action was exploring program needs:

“[The NP should be] taking a lead role in identifying research needs and leading that research right through to completion; publication, presentation, dissemination of results on a national level.” (operational leader).

### 3.3.3.3 Filtering and assessing knowledge

Several team members expected the HB NP to apply advanced nursing skills and medical knowledge to filter, critique, and disseminate new evidence that would benefit the patient population, team, and program:

“[NPs] help facilitate bringing our practice to a higher level, so bringing in the current practice changes and best practice guidelines”. (registered nurse)

There was an implicit expectation by several that the HB NP would take a leadership role in developing and enhancing hospital programs, maintaining and improving care environments, and introducing and integrating practice guidelines and evidence into patient care, although tasks related to direct patient care remained the priority. HB NP “driven” evolution was described this way:

“In setting up the clinic even from the beginning the best practice guidelines for heart failure were used at the time and they’re continually updated accordingly when new guidelines come out if there are changes.” (registered nurse)

Team members shared a perception of three key foci of HB NP practice that created a valuable role, easing their workload, holding patient care together, and evolving practice. These foci were distinct, yet interrelated, process categories. Easing other’s workload was the key category whose value had to be satisfactory in advance of the others. The condition of trust was required before the constructed actions associated with easing others’ workload could be effective. A bi-directional relationship existed with the remaining categories simultaneously once trust existed and actions began to ease others’ workload. Variable combinations of sub-categories within easing others’ workload

facilitated sub-categories of the two other categories. The two categories, holding patient together and evolving practice, appear to inform the sub-categories within easing others' workload about changing patient, team, or program needs requiring further action to ease the workload. Two sub-categories, being available and speaking legitimately in two worlds, seem synergistic and create the most valuable effect.

### 3.4 Discussion

These categories and sub-categories have emerged as a framework of the team members' perception identifying new understanding that addresses what has not been discussed in current literature. The three main categories of HB NP role value meaning (easing others' workload, holding patient care together, and evolving practice) each have related sub-categories that explicate actions of how the HB NP enacts each category. Illustrations of why HB NP actions were important to team members also emerged and are presented alongside the sub-categories. Trust, a condition of importance to team members, appears to be a pre-requisite to HB NP efficacy. The team perspective of HB NP practice framework is illustrated in Figure 1.



The HB NP actions of being available and speaking legitimately in two worlds, were described across the focus groups with the highest level of frequency and the greatest depth of discussion. This suggests these are essential to role value. Team members valued the availability of the HB NP to validate their observations and decisions, inquire about a disease or diagnostic process they were unfamiliar with, or request a legitimate decision for change to care provision. Thus, the availability of the HB NP did not simply ease workload but also enhanced care through their legitimate voice representing both medical and nursing worlds. This legitimacy authorized the voice of the HB NP beyond that of most team members, bringing it in close parallel with physician authority, and supported timely team member coordination of patient care changes. The HB NP was perceived as providing a timely, available resource that greatly reduced the waiting period for care changes. Team members valued this reduction for two reasons. First, their work day felt more organized and they could complete more tasks. Second, they believed the patient benefitted from more timely changes in care provision. These actions became essential and effectively eased workloads when role overlap was unopposed.

Role overlap, the horizontal or vertical substitution of professional tasks, optimizes patient care and creates tensions between professions necessitating boundary negotiation (Nancarrow, 2004). Professions create and control their boundaries within a specific and expanding body of knowledge to maintain quality expertise and occupation control (Freidson, 2001). Two HB NP actions, speaking legitimately within two worlds and taking on complex work, reflect professional role boundary overlap. Speaking legitimately in two worlds illustrates the expansion of nursing role boundaries, through NP education and legislated authority, into what once was the exclusive jurisdiction of medical knowledge. In the past, role tensions between medicine and HB NPs have been described (Plager & Conger, 2007). Yet, this analysis suggests boundary negotiation is occurring and is acceptable to physicians and HB NPs. Physician acceptance and respect was described by team members as a powerful influence on HB NP value. Roles under tight physician control or resistance were valued less. The second action, taking on complex work, describes boundary negotiation between the HB NP and numerous professions as the HB NP takes on work that can be undertaken by others (Nancarrow,

2004). A recent small study of two HB NPs begins to suggest boundary negotiation is key to HB NP role success (Kilpatrick et al., 2012a). The framework presented here moves beyond description of boundary negotiation toward understanding how the HB NP is negotiating role overlap. Role overlap tensions were described by different professions when the HB NP role “overstepped role boundaries”, tried to “do it all”, and changed their role. Role overlap by HB NPs becomes acceptable when reductions in patient care gaps and care burden amongst team members are perceived.

Trust was essential to acceptance of the HB NP role. Personal experience with how well the HB NP balanced the actions highlighted within the framework built or destroyed trust. A lack of trust created a negative image of the role and its value. Trust has been defined as an expectation of predictable, fair, and competent actions that are not opportunistic (Connell & Mannion, 2006). Team members described two types, trust in the role and trust in the person. Trust in the role is comparable to Competency Trust, described as respect for a person’s ability to complete professional work (Newell & Swan, 2000). Participant’s faith in HB NP education and recognition of the legal scope of practice fostered trust the HB NP would listen to the team members’ point of view, focus quickly on key patient issues, make reasonable care decisions, and solve presented concerns. Trust in the person is similar to Newell and Swan’s (2000) depiction of Companion Trust, described as belief in a person’s goodwill. Positive conversations of role overlap implied the existence of trust in HB NP action as personal goodwill and not opportunistic. Awareness of team member needs, and balancing the extent of actions to meet those needs, was an implicit expectation. Extending actions too far, or not far enough, held the inherent outcome of destroyed trust. For example when the HB NP was not available, some team members felt frustrated and would circumvent the HB NP in the future, or simply not value further HB NP actions. When the HB NP was too available a few team members expressed reliance on the HB NP creating loss of their own skills such as critical thinking, or fear of opportunistic role overlap deeming them redundant. The importance of trust within hospital IP teams is reasonable and rational. Hospital care commonly involves uncertainty of patient conditions. Team members involved with rapid and unforeseen patient changes are placed in a position of vulnerability requiring trust in

the person making patient care decisions (Newell & Swan, 2000). The findings and emerging framework provide new information for HB NPs and educators on the importance of trust development as a major enabler of successful and effective HB NP role integration, the expectation of the HB NP to develop and maintain trust, and how trust is fostered through balancing the extent of each action.

The remaining two categories, holding patient care together and evolving practice, reflect the multiple domains of advanced nursing practice (Canadian Nurses Association, 2010; Mick & Ackerman, 2000; Sidani & Irvine, 1999). Holding patient care together is defined as HB NP actions that directly impact efficient coordination and delivery of seamless clinical patient care. The category is valued for keeping patients from “falling through cracks”, providing a safety net for patient care, and providing a consistent role. Actions associated with holding patient care together primarily focus on clinical activities of assessment, diagnosis, and therapeutic management of patients. The focus on the whole patient and connecting with families is suggestive of nursing skills of patient centred care. Connecting with team members contains actions suggestive of IP categories such as engaging others, enhancing open communication, and respectful relationships through role understanding (Xyrichis & Ream, 2008) as well as interdependent problem-solving (Reeves, et al., 2010).

Evolving practice is defined as HB NP actions that promote evaluation and improvement of care practices, program deliverables, and NP role focus. Value is expressed as ensuring gaps are addressed and keeping others’ practice current. Evolving practice and related processes represent advanced nursing practice domains of leadership, support of systems, research, and education (Canadian Nurses Association, 2010; Mick & Ackerman, 2000). Participation in research to identify and respond to gaps in care extended from the micro direct care provision level through to the macro healthcare system level. At the team level participants expected HB NP role vigilance to engage in role and program change to help the team ensure gaps were reduced. Thus, these two categories represent advanced nursing practice yet contain aspects of authority beyond standard nursing professional boundaries enhancing action impact. This framework is the result of quality research

providing categories of value, actions constructed, and meanings that can foster effective role introduction and evolution within hospital teams. It begins to highlight for NPs, academia, and operational leaders the expectations, challenges, and outcomes that influence successful role integration and support.

Quality of this research is demonstrated through the criteria of credibility, originality, resonance, and usefulness (Charmaz, 2006). **Credibility:** The quantity of transcripts provided sufficient data to merit claims in the analysis, the variety of professional voices ensured team representation beyond a single profession (nursing) or the common nursing-medicine dyad, and a systematic approach to constant comparison maintained consistency of interpretation. Thus, the emerged categories represent credibility of multiple views and a broad range of actions and meanings. **Originality:** Emerged categories offer new insights into the NP role explored, and conceptual rendering of categories presents new actions and meanings not discussed in current literature. Thus, originality was established. **Resonance:** Researchers of the original study concur with emerged codes and categories thus the interpretation resonates with participant voices. Consideration of the most common and substantial issues presented by the participants, exploration of links between existing theory and emerged categories, and the inclusion of tacit and explicit meanings augment resonance of the participant voice. **Usefulness:** Exploration of processes and meanings beyond nursing knowledge, interpretation remaining close to the lived experience of team members, and inclusion of tacit implications ensures broad usefulness and every day application. Furthermore, the inclusion of multiple perspectives can inform theory of NP practice and conceptual rendering provides a sound base to support further research, thus establishing its usefulness.

These findings fill a gap in the knowledge of evolving HB NPs role across the globe. Research to date has focused on HB NP role utilization (Hurlock-Chorostecki, et al., 2008; Kilpatrick et al., 2012b; Kleinpell, 2005; Sidani et al., 2000; van Soeren, et al., 2009), role comparisons (Hooker, Cipher, Cawley, Herrman, & Melson, 2008; Kleinpell, Ely, & Grabenkort, 2008; Sidani et al., 2006; Steiner et al., 2009), and role outcomes such as practice guideline compliance, length of hospital stay, and patient satisfaction

(Gracias et al., 2008; Jarrett & Emmett, 2009; Jennings et al., 2008; Kleinpell & Gawlinski, 2005; Robles et al., 2011; Searle, 2008; Sidani, 2008; Steiner, et al., 2009) but not on how and why the role functions within IP teams. A few research studies have included team member data with a focus on reporting attitudes toward NP role implementation (Griffin & Melby, 2006; Melby, Gillespie, & Martin, 2010), processes of role implementation (Desborough, 2012; Kilpatrick, Lavoie-Tremblay, Lamothe, Richie, & Doran, 2012), and role impact (Searle, 2008; Williamson, et al., 2012). Therefore, the findings from this analysis provide new information and further earlier knowledge by viewing the HB NP role from the team perspective validating NP actions and their meanings as valuable to hospital team members. Identification of tacit and implicit perceptions of how and why actions are valuable advances this framework beyond HB NP role description.

Limitations of this first phase of the study include the broadness of the focus group interview question in addressing concepts of IP practice. Team members were asked to describe their experience working with the NP on their team, which may limit the extent of collaboration and teamwork discourse within the transcripts. Therefore, interviews inviting conversation specific to collaboration and / or teamwork may have revealed different processes. The process of secondary analysis limits theoretical sampling to studying related literature since re-interviewing participants to refine emerging categories is not possible. The findings presented here represent the first phase of analysis of a larger CGT study and thus is an early rendering of the HB NP role within IP teams with limited consideration of power and constraining influences. The analysis focused on conceptualizing HB NP processes from the team members' perspective, capturing their meanings of how and why actions were constructed, and was not raised to a high level of abstraction. The intention is to address further conceptualization and theorizing in the next phase of the study during integration of the HB NP voice and evaluation of power inequities.



### 3.5 Conclusions

This paper has focused on the first phase of a study of NP role value within hospital teams. An emerging framework of team members' shared perception contained three main categories and 13 related NP processes. This emerging framework may benefit HB NPs, hospital leaders, and academics. Phase two of the study will further development of the framework through inclusion of the HB NP perception and consideration of power influences.

### 3.6 References for Chapter Three

- Canadian Nurses Association. (2010). Canadian nurse practitioner core competency framework. 1-21. Retrieved from [http://www2.cna-aiic.ca/CNA/documents/pdf/publications/Competency\\_Framework\\_2010\\_e.pdf](http://www2.cna-aiic.ca/CNA/documents/pdf/publications/Competency_Framework_2010_e.pdf)
- Charmaz, K. (2006). *Constructing grounded theory*. London: Sage Publications.
- College of Nurses of Ontario. (2012). Membership totals at a glance Retrieved April 30, 2012, from <http://www.cno.org/en/what-is-cno/nursing-demographics/membership-totals-at-a-glance/>
- Connell, N., & Mannion, R. (2006). Conceptualisations of trust in the organisational literature. Some indicators from a complementary perspective. *Journal of Health Organization and Management*, 20(5), 417-433.
- Desborough, J. (2012). How nurse practitioners implement their roles. *Australian Health Review*, 36, 22-26. doi: 10.1071/AH11030
- Donald, F., Martin-Misener, R., Bryant-Lukosius, D., Kilpatrick, K., Kaasalainen, S., Carter, N., . . . DiCenso, A. (2010). The primary healthcare nurse practitioner role in Canada. *Canadian Journal of Nursing Leadership*, 23(special issue), 88-113.
- Freidson, E. (2001). *Professionalism: The third logic on the practice of knowledge*. Chicago: The University of Chicago Press.
- Galbraith, J. (1973). *Designing Complex Organizations*. Reading, MA: Addison-Wesley.
- Galinski, A., Ku, G., & Wang, C. (2005). Perspective-taking and self-other overlap: Fostering social bonds and facilitating social coordination. *Group Processes & Intergroup Relations* 8(2), 109-124.

- Gracias, V., Sicoutris, C., Stawicki, S., Meredith, D., Horan, A., Gupta, R., . . . Schwab, W. (2008). Critical care nurse practitioners improve compliance with critical practice guidelines in “semiclosed” surgical intensive care unit. *Journal of Nursing Care Quality, 23*(4), 338-344.
- Griffin, M., & Melby, V. (2006). Developing an advanced nurse practitioner service in emergency care: Attitudes of nurses and doctors. *Journal of Advanced Nursing, 56*(3), 292-301. doi: 10.1111/j.1365-2648.2006.04025.x
- Heaton, J. (2004). *Reworking qualitative data*. Thousand Oaks, CA: Sage.
- Hooker, R., Cipher, D., Cawley, J., Herrman, D., & Melson, J. (2008). Emergency medicine services: Interprofessional care trends. *Journal of Interprofessional Care, 22*(2), 167-178.
- Hurlock-Chorostecki, C., van Soeren, M., & Goodwin, S. (2008). The acute care nurse practitioner in Ontario: A workforce study. *Canadian Journal of Nursing Leadership, 21*(4), 96-112.
- Jarrett, L., & Emmett, M. (2009). Utilizing trauma nurse practitioners to decrease length of stay. *Journal of Trauma Nursing, 16*(2), 68-72.
- Jennings, N., O'Reilly, G., Lee, G., Cameron, P., Free, B., & Bailey, M. (2008). Evaluating outcomes of the emergency nurse practitioner role in a major urban emergency department, Melbourne, Australia. *Journal of Clinical Nursing, 17*(8), 1044-1050.
- Kilpatrick, K., Lavoie-Tremblay, M., Lamothe, L., Ritchie, J., & Doran, D. (2012). Conceptual framework of acute care nurse practitioner role enactment, boundary work, and perceptions of team effectiveness. *Journal of Advanced Nursing, early online publication*. doi: 10.1111/j.1365-2648.2012.06046.x
- Kilpatrick, K., Lavoie-Tremblay, M., Ritchie, J., Lamothe, L., Doran, D., & Rochefort, C. (2012a). Boundary work and the introduction of acute care nurse practitioners in healthcare teams. *Journal of Advanced Nursing, 68*(7), 1504-1515. doi: 10.1111/j.1365-2648.2011.05895.x
- Kilpatrick, K., Lavoie-Tremblay, M., Ritchie, J., Lamothe, L., Doran, D., & Rochefort, C. (2012b). How are acute care nurse practitioners enacting their roles in healthcare teams? A descriptive multi-case study. *International Journal of Nursing Studies, 49*(7), 850-862.
- Kleinpell, R. (2005). Acute care nurse practitioner practice: Results of a 5-year longitudinal study. *American Journal of Critical Care, 14*(3), 211-221.

- Kleinpell, R., Ely, W., & Grabenkort, R. (2008). Nurse practitioners and physician assistants in the intensive care unit: An evidence-based review. *Critical Care Medicine, 36*(10), 2888-2897.
- Kleinpell, R., & Gawlinski, A. (2005). Assessing outcomes in advanced practice nursing practice: The use of quality indicators and evidence-based practice. *AACN Clinical Issues, 16*(1), 43-57.
- Litaker, D., Mion, L. C., Planavsky, L., Kippes, C., Mehta, N., & Frolkis, J. (2003). Physician–nurse practitioner teams in chronic disease management: The impact on costs, clinical effectiveness, and patients' perception of care. *Journal of Interprofessional Care, 17*(3), 223-237. doi: 10.1080/1356182031000122852
- Martin-Misener, R., Downe-Wamboldt, B., Cain, E., & Girouard, M. (2009). Cost effectiveness and outcomes of a nurse practitioner-paramedic-family physician model of care: The Long and Brier Islands study. *Primary Health Care Research & Development, 10*, 14-25. doi: 10.1017/S1463423608000959
- Melby, V., Gillespie, M., & Martin, S. (2010). Emergency nurse practitioners: The views of patients and hospital staff at a major acute trust in the UK. *Journal of Clinical Nursing, 20*, 236-246. doi: 10.1111/j.1365-2702.2010.03333.x
- Mick, D., & Ackerman, M. (2000). Advanced practice nursing role delineation in acute and critical care: Application of the Strong model of advanced practice. *Heart & Lung, 29*(3), 210-221.
- Nancarrow, S. (2004). Dynamic role boundaries in intermediate care services. *Journal of Interprofessional Care, 18*(2), 141-151. doi: 10.1080/13561820410001686909
- Newell, S., & Swan, J. (2000). Trust and inter-organizational networking. *Human Relations, 53*(10), 1287-1328.
- Perry, J. (2009). The rise and impact of nurse practitioners and physician assistants on their own and cross-occupation incomes. *Contemporary Economic Policy, 27*(4), 491-511. doi: 10.1111/j.1465-7287.2009.00162.x
- Plager, K., & Conger, M. (2007). Advanced practice nursing: Constraints to role fulfillment. *The Internet Journal of Advanced Nursing Practice, 9*(1). Retrieved from <http://www.ispub.com/journal/the-internet-journal-of-advanced-nursing-practice/volume-9-number-1/advanced-practice-nursing-constraints-to-role-fulfillment.html> doi:10.5580/187
- Reeves, S., & Lewin, S. (2004). Interprofessional collaboration in the hospital: Strategies and meanings. *Journal of Health Services Research & Policy, 9*(4), 218-225.
- Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2010). *Interprofessional teamwork for health and social care*. Oxford: Wiley-Blackwell.

- Robles, L., Slogoff, M., Ladwig-Scott, E., Zank, D., Larson, M., Aranha, G., & Shoup, M. (2011). The addition of a nurse practitioner to an inpatient surgical team results in improved use of resources. *Surgery, 150*(4), 711-717.
- Searle, J. (2008). Nurse practitioner candidates: Shifting professional boundaries. *Australasian Emergency Nursing Journal, 11*, 20-27.
- Sidani, S. (2008). Effects of patient centred care on patient outcomes: An evaluation. *Research and Theory for Nursing Practice: An International Journal, 22*(1), 24-37.
- Sidani, S., Doran, D., Porter, H., LeFort, S., O'Brien-Pallas, L., Zahn, C., . . . Sarkissian, S. (2006). Processes of care: Comparison between nurse practitioners and physician residents in acute care. *Canadian Journal of Nursing Leadership, 19*(1), 69-85.
- Sidani, S., & Irvine, D. (1999). A conceptual framework for evaluating the nurse practitioner role in acute care settings. *Journal of Advanced Nursing, 30*(1), 58-66.
- Sidani, S., Irvine, D., Porter, H., LeFort, S., O'Brien-Pallas, L., Simpson, B., . . . Redelmeir, D. (2000). Practice patterns of acute care nurse practitioners. *Canadian Journal of Nursing Leadership, 13*(3), 6-12.
- Steiner, I., Nichols, D., Blitz, S., Tapper, L., Stagg, A., Sharma, L., & Policicchio, C. (2009). Impact of a nurse practitioner on patient care in a Canadian emergency department. *Canadian Journal of Emergency Medical Care, 11*(3), 207-214.
- van Soeren, M., Hurlock-Chorostecki, C., Kenaszchuk, C., Abramovich, I., & Reeves, S. (2009). The integration of specialty nurse practitioners into the Ontario healthcare system, Retrieved January 4, 2010, from <http://www.npao.org/Uploads/SNP%20report%202009.pdf>
- van Soeren, M., Hurlock-Chorostecki, C., & Reeves, S. (2011). The role of nurse practitioners in hospital settings: Implications for interprofessional practice. *Journal of Interprofessional Care, 25*, 245-251. doi: 10.3109/13561820.2010.539305
- Williamson, S., Twelvetree, T., Thompson, J., & Beaver, K. (2012). An ethnographic study exploring the role of ward-based advanced nurse practitioners in an acute medical setting. *Journal of Advanced Nursing, 68*(7), 1579-1588.
- Xyrichis, A., & Ream, E. (2008). Teamwork: A concept analysis. *Journal of Advanced Nursing, 61*(2), 232-241. doi: 10.1111/j.1365-2648.2007.04496.x

## Chapter 4

### 4. Labour saver or building a cohesive interprofessional team: The role of the NP in hospital settings using grounded theory<sup>2</sup>

Healthcare renewal is fostering transitions from siloed professional practices to care by synergistic groups of healthcare professionals working to their full scope of practice (Romanow, 2002). The need to understand how teamwork is improved and augmented is important to replicate successful strategies as healthcare professional make this move. Numerous authors have outlined how IP collaboration and teamwork improves use of clinical resources, increases access to healthcare, reduces conflict between healthcare professionals, and improves patients' care quality, safety and outcomes (Closson & Oandasan, 2007; Frank & Brien, 2008; Infante, 2006; Lemieux-Charles, 2006; Litaker et al., 2003; Oandasan et al., 2006; Reason, 2004; Schmitt, 2001; Zwarenstein, Goldman, & Reeves, 2009). Yet how this collaboration occurs within hospital teams remains unclear (O'Leary et al., 2010). One role that has been alluded to be pivotal in hospital IP team work is the NP (Desborough, 2012; van Soeren, Hurlock-Chorostecki, & Reeves, 2011; Williamson, Twelvetree, Thompson, & Beaver, 2012).

There is no clear evidence of how or why NPs enact their role within an IP context although two studies suggest NP bridging of professional boundaries may be enhancing team member roles (Kilpatrick et al., 2012; van Soeren, et al., 2011). The nature of the NP role is such that the dual role within traditional medical practice (such as prescribing, and diagnosing), and nursing (such as physical care, psychosocial support) supports the ability to cross this professional boundary (Kleinpell, 2005; Litaker, et al., 2003; Sidani & Doran, 2010). However, there is no detailed exploration of the phenomenon within the

---

<sup>2</sup> A version of this chapter is under review for publication in the Journal of Interprofessional Care. See Appendix D for letter of permission

multi-IP context reported to date. Therefore, a two-phase study to explore HB NP practice, using team members' and NPs' perceptions of how the NP role was enacted within the IP team, was undertaken.

The aim of the study was to critically explore HB NP role value focussing on construction of their practice within IP hospital teams. This was achieved through exploring team member shared perceptions of the value of NP roles within hospital teams, examining how the team shared perception relates to the shared NP perception of their role, and exposing how these relate to the socio-political influences of power and privilege that position the NP role within the teams. Social and professional expectations, obligations, and understandings of the NP role presented as desirable, worthy, or influential defined role value. The collective social meaning emerging from the data analysis of both the team and NP groups represents their shared perception. In a previous paper (Chapter 3) the findings of the first phase of the research, the team member shared perception, was described. This shared perception explicated the "team member" ideas of the state of HB NP practice and is presented as the team perspective framework. The team perspective presents HB NP practice as one with three main action categories, easing others' workload, holding patient care together, and evolving practice. The focus of this paper is presentation of NP perceptions, discussion of how these substantiate, extend, or alter the team perspective framework, and consideration of similarities of HB NP category actions when juxtaposed with current IP literature. Future analysis includes broad consideration of power and privilege.

## 4.1 Method

Charmaz's (2006) approach to constructivist grounded theory was used to explore data from NP interviews and integrate the findings with the results from team members' interviews previously reported in chapter three. This approach holds values and methods that differ from classic grounded theory. It is interpretive, explores how and why meanings and actions are constructed, values the researcher's view, explores power influences, and positions emerging theory with current theory (Charmaz, 2000, 2006).

Western University Research Ethics Board and the Lawson Clinical Research Impact Committee provided ethical approval for this study.

NPs within Ontario were invited to participate in group or individual interviews. Invitations were circulate to potential HB NP participants via email by site leads of the previous study, through the regional representatives of the Ontario NP Association, and a notice of opportunity to participate was placed on the Ontario NP Association's web page. Ontario was selected as a reasonable setting to explore HB NP practice since there is sustained growth of employment within hospitals, legislation supports full NP scope of practice, and Ontario registers the majority of Canadian HB NPs (Canadian Province and Territory Nursing Colleges; College of Nurses of Ontario, 2012; Hurlock-Chorostecki, van Soeren, & Goodwin, 2008). Inclusion criteria consisted of 1) registration with the College of Nurses of Ontario in the extended class of nursing (inclusive of all NP specialty certificates), 2) current employment within a hospital team in the role of NP working with patients, and 3) employed in the current NP role for greater than one year. Seventeen NPs (15 females, 2 males) from seven Ontario hospitals participated. Focus groups were held in four geographical locations within the province. Three individual interviews were held with HB NPs from additional locations. Nine NPs were employed in academic hospitals and eight in community hospitals, three of which were employed in a northern Ontario location. Five NPs worked strictly within in-patient teams, six strictly with out-patient teams, and six worked in a team providing care for both in- and out-patients. Twelve different specialty practices were represented: geriatric consult (n=2), neurosurgery, orthopedics, diabetes, geriatric rehabilitation, renal dialysis, emergency (n=3), intensive care (n=2), trauma, oncology, cardiology (n=2), and veterans care. Ten participants held Adult NP certification, five held Primary Health Care (PHC) certification, and two held dual certification in Adult and PHC. The range of years employed as an NP was two to 26 (mean= 10, median=11, mode= 5,11,12).

Group and individual interviews were audiotaped and transcribed verbatim. The interview process invited participants to share their perception of the value of their role (Appendix F). The team perspective framework from the first phase of the research

project was then shared with the NP participants. This provided the opportunity to explore their perception of what was realistic, and what was missing or understated. The team perspective framework emerged through analysis of data from 30 focus group sessions with 210 members of hospital teams working with an NP (Chapter 3). The framework consisted of three main categories (easing others' workload, holding patient care together, and evolving practice) and 13 sub-categories (being available, speaking legitimately in two works, taking on complex work, connecting team members, knowing the healthcare system, knowing the issues, focusing on the whole patient, following-up/through, connecting with family, connecting with team members, researching, creating and evolving the NP role, and filtering and assessing knowledge).

## 4.2 Analysis

Participant interview coding and analysis revealed how the NPs perceived the value of their role, and how they responded to the team perspective framework. Line by line coding within each interview and then between interviews was completed initially. Constant comparison of codes for similarities and differences, using NVivo 10 computer software, aided establishing analytical distinctions (Charmaz, 2006). Focus was maintained on explicating action rather than describing therefore supporting category rather than theme development (Charmaz, 2006). Categories emerged from converged codes and researcher memos once adequate properties were determined. The principal researcher regularly reflected on the data through memoing to identify categories key to the NP perception, why the category was important, its relationships with other categories, and to scrutinize resulting actions for personal preconceptions. Expert opinion sought throughout the analysis ensured emerging categories were credible, original, and clear.

Theoretical sampling was used to qualify and elaborate emerging category boundaries. Questions related to "invisible" NP work arose through researcher memoing. In the individual interviews NP participants were invited to comment on what was "invisible" work, to whom it was invisible, and why invisible work was important to understanding HB NP practice. Once no new categories emerged, and existing categories were



theoretically saturated, the analysis of the NP data was determined complete. The established NP perspective enabled a comparison of constructed meanings and actions for relationships.

Theoretical sorting and diagramming were completed to compare categories of the two perceptions at an abstract level (Charmaz, 2006). Comparing category properties, contexts in which the category existed, and the importance of the category aided in identifying convergent and divergent perspectives. Integration of the two perspectives fostered substantiation and extension of the team perspective, and emergence of a multi-perspective framework. Four key participants reviewed the emerging framework twice during the analysis to ensure resonance. Expert opinion sought throughout the process ensured credibility and clarity of the emerging multi-perspective framework. Exploration of existing theory relevant to emerging categories challenged researcher interpretation, clarified ideas, and enriched comparisons (Charmaz, 2006). For example, theoretical literature of trust, legitimacy, and leadership informed the importance and relationships of the concepts with the emerging framework. The main category, focus on team working, triggered interest in exploring for clarity and relevance with IP teamwork theoretical literature to establish how this category holds up to existing theory (Charmaz, 2006). The final product of the analysis is an emerging framework of HB NP IP practice constructed from a grounded team perspective, and informed by the NP perspective and influences of power and privilege (Charmaz, 2006).

### 4.3 Results

Three main categories of actions arising from the analysis of the NPs' perception aligned closely with those of team members (Table 5). These were, evolve NP role and advance the specialty, focus on team working, and focus on patient care. Related sub-categories represent NP perceived approaches of enacting each category describing how the actions were constructed.

**Table 5: Team Perspective and NP Category Alignment.**

Team Member	NP
Easing others' workload	Focus on team working
Holding patient care together	Focus on patient care
Evolving practice	Evolve NP role and advance the specialty

### 4.3.1 Evolve NP Role and Advance the Specialty

This category centres on identification of gaps in the healthcare system and how NPs adjust their role to address the gaps. NP discussion of this category was frequent, intense and emerged consistently across all interviews. The importance of evolving the role and advancing the specialty was to improve patient care quality and safety, and sustain the NP role. One NP described the importance of evolving the role and advancing the specialty as:

“To practice our role in the way we feel, within our scope of practice, is appropriate for the service that we’re working with, the population we’re working with, and the workload we’re working with...” (NP #1)

This category has two related sub-categories; create and evolve the NP role, and responding to program gaps.

#### 4.3.1.1 Create and evolve the NP role

Creating and evolving the NP role was daunting to many. Most NPs discussed the importance of building trust in both the NP role and themselves as key to successful role implementation. Most NPs described support from hospital leaders, physicians, and NP peers as key to success and when support was lacking, NPs felt unvalued and unable to enact an effective role. Overpowering leaders and physicians restricting the NP role were major influencers of NP role dissatisfaction and resignation.

“The NP role was not empowered by the physicians at all; they hadn’t asked for it, they didn’t want it, they had no interest in it.” (NP #16)

NPs described negotiating, and challenging powerful roles as important when support was lacking to ensure an effective role.

“When they define your job from an administrative point of view but they don’t have any data to support why they want you to do that, I always have a question of why.” (NP #14)

Leadership skills and mentoring were discussed as key to create and evolve an effective NP role.

“Leadership [skill] is ultimate to be able to [create the role]; if you’re not a leader, if you don’t have the skills, because I think anybody can learn the clinical piece to being an NP, it’s having the skills to actually implement that role that makes you a successful NP.” (NP #11)

NPs were concerned with the degree of understatement of leadership within the team perspective framework. NPs stated when time spent in leadership activities was unrealized by team members it devalued the extent of NP contribution.

“No one person really knows the extent to the numbers of things that I’m involved with from patient care and its various aspects to the projects, to other activities, the phone calls that I take from community patients; no one person particularly sees the full breadth of the work that I do.” (NP #17)

Flexibility to evolve the role was described as important by all participants. Flexibility remained a challenge for new NPs who were unaware of the necessity to constantly engage in evolving. Role evolution fostered role effectiveness and sustainment; however, it may hinder role clarity.

“I replaced a nurse practitioner after eight and half years and I thought I’d be walking into an established nurse practitioner role, but it’s not. It’s constantly in flux and it’s, you’re sort of defined as you roll along.” (NP #13)

Role flexibility and leadership skills enabled the NP to evolve in response to new and changing program gaps. Most indicated an importance of involvement in activities such as program visioning to engage leadership and research skills. These skills supported alignment of evidence with program and patient population needs. Active involvement in broad organizational and specialty knowledge augmented exposure of new and changing needs or gaps. Flexibility in role enactment enabled effective and timely NP response to address gaps.

“You know I’ve got one foot in the box and I’m scared that [management is]going to close me into a box and I’m not going to get that freedom of vision that you need as an NP to grow the program and to help the program to move along.” (NP #14)

#### 4.3.1.2 Responding to program gaps

Most participants held in-depth discussions of the importance of involvement in monitoring gaps and evolving the NP role. The ability to evolve the role and fill gaps in a timely manner influenced safety and efficiency. Participants described frustration with ineffective “gap filling” suggesting this was common when NP representation was not included in strategy planning. One participant shared frustration of a lack of senior leadership vision when he/she chose to fill “physician holes” with temporary NP assignments:

“It’s just the ease with which they think they can pluck the NP’s out of the important work that they do to put them on another assignment.” “It’s like ‘oh well we’ll just yank a couple of NPs from emerg and put them on this gap’ not really knowing what kind of a gap that’s going to create in emerg.” (NP #8)

### 4.3.2 Focus on Team Working

Focus on team working is another main category discussed by all participants. Focus on team working involved engaging multiple professionals to coordinate patient care and education. An engaged team working toward quality patient care was important to the NP participants. Engaging team members was one action used regularly by NPs.

“...asking for their input in rounds, asking for their expertise, why don’t we go and get physio because they might be able to help us with this, let’s bring this group together and maybe we can develop an approach to this particular problem” (NP #17)

NPs discussed trust as important for team work. More commonly, NPs described a need for appreciation and inclusion. Appreciation for the NP role and inclusion within the social team environment were expressed by many as important to sustain what NPs felt was an interdependent, respectful atmosphere. Without appreciation and inclusion, most NPs spoke of dissatisfaction with the role and several provided this as a reason for resignation. Many NPs described not fitting “into the nursing world [nor] into the physician world” (NP #16) as exclusion leaving them isolated. Most NPs described the “incredible power” (NP #16) team members continue to provide to physicians as negatively influencing working together. One participant stated it this way:

“...if the physicians don’t want to work well with you, then the rest of the team doesn’t either.” (NP #5)

While another stated “Nurses have this myth about what the physicians actually know about the patient and are controlling behind the scenes...” (NP #16) suggesting nurses may defer to a physician based on a culture of physician power rather than value the NP’s decision based on advanced knowledge of the patient and the situation.

Several participants described disregard of NP leadership vision and capabilities by operational leaders as limiting NP role effectiveness within the team.

“I felt that the director wasn’t going in the same way that I felt my role was going in terms of what were the priorities for patient care.” (NP #16)

The category, focus on team working, has three sub-categories that describe how the NP actions are constructed. These include working together, enabling team efficiency, and educating team members.

#### 4.3.2.1 Working together

Most participants described working together as knowledge sharing and coordinating. NP participants often described the importance of respectfully bridging role boundaries of other professions as key to working well together.

“There’s some overlap between professions, there’s a big overlap between the physician and my role and I see that as a good thing.” (NP #2)

Role overlap was valuable for multiple professions, supporting the NP role as more than physician extension.

“The social worker and I often spend a lot of time together in family meetings and so who would be best to lead this meeting, who would be best, here’s what we see of this family, and sometimes he’ll say well I think I should take the lead, and other times I’d like if you take the lead.” (NP #17)

#### 4.3.2.2 Enabling team efficiency

NP participants believed they enabled an efficient team through their consistent presence, knowledge of the healthcare system, and their legal authority to make timely changes to patient care. Most participants shared a perception their consistent presence was an enabler of team efficiency as it provided access to the NP and their repository of patient knowledge.

“[The NP is the] constant whereas the consultants rotate, the residents rotate, medical students rotate and ... I keep a high level knowledge of what’s going on and at times a detailed knowledge of what’s going on.” (NP #15)

Key to enabling efficiency and team member engagement was the legitimate authority to make or support patient care decisions in a timely manner.

“Being there as the liaison with some authority, I think [NPs] allow [other professionals] to give their maximal input in terms of where the patient should go so it actually enables them to make decisions when they’re the right person to be making that decision.” (NP #2)

NPs believed they acknowledged and advocated for full use of expertise of other professions as well as engaged their expertise in patient care and shared goal setting.

#### 4.3.2.3 Educating team members

Educating team members ensured quality patient care and enhanced team working. All NP participants mentioned this action as a formal and informal activity.

“One thing the team really loves about the nurse practitioner is being a resource for the team, being up-to-date with the latest information, and sharing best practice.” (NP #8)

“With the staff learning they’re becoming more part of the team because ... you teach them or ... you challenge them all the time.” (NP #14)

#### 4.3.3 Focus on Patient Care

Focus on Patient Care is the third main category. This category of actions aimed to return patients to intact meaningful lives. All participants described the focus on patient care as application of system knowledge and direct patient care approaches. Participants described activities within two important contexts: gap reduction in patient care and safety, and healthcare system improvement through patient flow and reduced recidivism.

Focus on patient care contains three sub-categories: reducing patient/family burden, knowledge broker for patient and family, and having legitimate authority.

#### 4.3.3.1 Reducing patient/family burden

All NP participants discussed descriptions of reducing patient/family burden. Actions focused on using a holistic approach, addressing social determinants of health, and maintaining a focus on patient quality of life and life style choices. These actions were employed throughout the hospital stay and in planning for transition to home. For example:

“Making sure we’re setting those patients up with appropriate services so they don’t come back [to the hospital] when they need extra help at home.” (NP #11)

“The time that I spend with them which allows me to do more education, really explore with them some of the components of their disease that impacts not only themselves but it’s impact on their family and so using the term holistic in the sense....of their ability to do their activities of daily living and what that means to them as what their quality of life looks like.” (NP #17)

#### 4.3.3.2 Being available to patient and family

Being available to patient and family consists of consistent knowledgeable NP role availability to patients. All participants discussed consistent knowledge of patient uniqueness and responses to illness and treatments as valuable. The NP acted as a repository of patient care and response information providing easy information access for patients as well as team members.

“Because of the NP being immersed in the patient care issues and following the labs and ordering the tests and writing the progress notes [the NP] knows the patient here so when somebody comes up to you, 99% of the time you know the patient issues.” (NP #16)



#### 4.3.3.3 Working with legitimate authority

Legitimate authority, described by many participants, related specifically to the aspects of care legally authorized to NPs through their education and nursing college registration. This included tasks that overlap the profession of medicine such as diagnosing and prescribing, and the high level of accountability for following-through and ensuring quality care.

“[the NP] knows exactly what [they’re] going to do and look after it so it solves the problem quickly and [they] know to do the follow up... it’s still problem solving instead of calling the MD.” (NP #1)

The HB NPs shared a perception of three key foci of their practice that created a valuable role: evolve NP role and advance the specialty, focus on team working, and focus on patient care. The HB NPs described evolve NP role and advance the specialty as highly valuable. Actions related to this category facilitated enactment of the remaining two categories. A new condition of inclusion and appreciation emerged as important for sustaining an effective focus on team working. These similarities and differences provided depth to the team perspective.

## 4.4 Discussion

The NP perspective provided substantiation and extension of the team perspective framework. Construction of meanings and actions were explored at the team member and NP data levels supporting clarification and consolidation of sub-categories (Table 6).

**Table 6: Team Perspective and NP Sub-Category Alignment.**

NP Category (Team member category)	Team member sub-categories	NP sub-categories (HB NP IP practice framework)
Evolve NP Role & Advance the Specialty (Evolving Practice)	Create and evolve the role	Create and evolve the NP role
	Researching	Responding to program gaps (Gap vigilance)
	Filtering & assessing knowledge (specialty)	
	Knowing the healthcare system (organization related)	
Focus on Team Working (Easing Others' Workload)	Following up/through (with team)	Enabling team efficiency
	Knowing the issues (team related)	
	Connecting team members	
	Being available	
	Knowing the healthcare system (team related)	
		Taking on complex work
	Connecting with team members	
Focus on Patient Care (Holding Patient Care Together)	Filtering and assessing knowledge (for team members)	Educating team members (Filter and assess knowledge)
	Working legitimately in two worlds	Working with legitimate authority (Legitimate voice)
		Being available to patient and family (Knowledge broker for patient and family)
	Connecting with family	
	Follow-up/through (with patient issues)	Reducing patient/family burden
Knowing the issues (patient related)		
Knowing the healthcare system (patient related)		

Further analysis resulted in an emerging HB NP IP practice framework (Figure 2). The emerging HB NP IP practice framework provides a new understanding of the NP role within hospital IP teams that extends beyond the independent NP role and NP-physician dyads. The framework retains three key foci, categories of actions that form the meaning

of HB NP practice. The main categories are evolve NP role and advance the specialty, focus on team working, and hold patient care together. Convergent and divergent views furthered defining how NPs construct actions within each category resulting in eight sub-categories (create and evolve NP role, gap vigilance, enable team efficiency, working together, filter and assess knowledge, legitimate voice, knowledge broker for patient and family, and reducing patient/family burden). Two conditions relate to the category of focus on team working: trust, and inclusion and appreciation. Two main categories, focus on team working and evolve NP role and advance the specialty, illustrate NP role value from both the team member and NP perspectives explored. Their equal position within the framework illustrates the balance of NP and team member view of the significance of the role. The third main category, hold patient care together, relates to direct patient care. The NP and team member views of the importance of NP actions were similar. The role was described as important in meeting valued goals of improving quality and safe patient care through gap reduction, and improved patient flow. In addition, team members valued NP consistency and NP efficient use of professional roles while NPs valued an engaged team and ability to sustain the NP role. Comparative exploration of convergent and divergent aspects of the NP perspective allowed merging and abstraction of categories and related sub-categories with the team perspective framework to support a multi-perspective framework of HB NP IP practice.

#### 4.4.1 Evolve NP Role and Advance the Specialty

The focus of this category involves gap vigilance and creating or evolving the NP role. Both team member and NP groups highlighted addressing gaps and utilizing research skills. NPs, however, added other missing or invisible factors such as committee work, mentoring, leading change, and knowledge translation. NPs raised concern there was a lack of understanding by team members of the time spent to sustain the NP role. The absence of recognition of leadership through committee work, project work, active involvement in systems work, and knowledge translation was also of concern to NPs.

#### 4.4.2 Focus on Team Working

The NP role focus on team work included four approaches to constructing actions. These approaches centred on enabling team efficiency, working together, filtering and assessing knowledge, and using a legitimate voice to facilitate timely care delivery changes for team members. The NP perspective provided further insights into NP actions and aims advancing the comparative team member category from a focus on easing the work of individuals to actions that closely resembled IP work. Trust held an important relationship with the category identified by both participant groups, although more strongly expressed by team members. Many NP participants emphasized a new important relationship with this category, inclusion and appreciation. Appreciation for the NP role and inclusion within social and professional groups were expressed by NPs as necessary to sustain their ability to focus on team working.

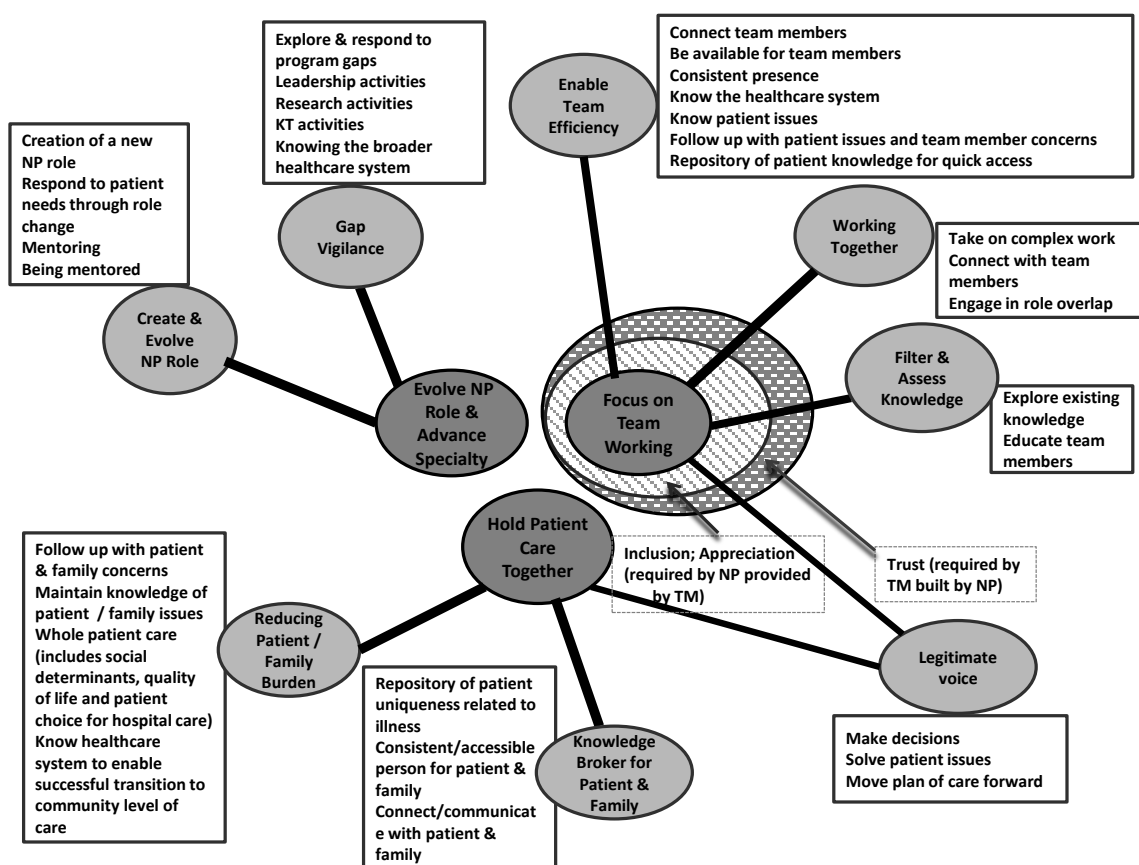
#### 4.4.3 Hold Patient Care Together

Team members clearly described NP direct clinical actions as important for safe patient care. The NP perspective substantiated actions that keep patients from falling through gaps and promote seamless patient care. The consistent presence of the NP, combined with legitimate medical knowledge and authority, enabled quality, timely communication with patients. Team members, most of whom worked rotating shifts, valued NP role consistency and described the role as a central hub from patient care. The advanced knowledge and presence of the NP role supported reducing patient and family burdens of acute illness requiring hospital stay and transitioning to home.

The three foci remain distinct process categories with relationships. Evolve NP role and advance the specialty holds a balanced relationship with focus on team working. The sub-category actions create a constant feedback loop of identification, application, and knowledge translation between the two categories. Their combined effect enhances HB NP practice to more than a focus on patient care creating the effect of holding patient care together for the patient and the team. Patient care (the third category) is primarily the recipient in a relationship with the two key categories. A less significant relationship provides feedback from hold patient care together to the key categories. The condition of

trust remained important as a pre-requisite to focus on team working. The new condition of inclusion and appreciation held a weaker relationship with the category and a moderate relationship with the development of trust.

**Figure 2: Hospital-Based NP Interprofessional Practice Framework.**



*Note.* Dark circles = main categories indicating role value meaning; patterned circles = antecedents of inclusion/appreciation and trust; light circles = sub-categories reflecting how HB NP enacts the category; Boxes = abstract meanings of HB NP action. TM=team members.

## 4.5 Juxtaposing with Extant IP Theory

The role value meaning, and how and why actions were constructed within the category focus on team working, and their similarity with IP factors described in chapter two was intriguing. Factors considered important to IP working, shared decision-making, common goals, open communication, coordination, cooperation, and leadership, existed within the category. Juxtaposing this category with current IP theory allows intriguing comparisons

and demonstrates relevance of this category to the IP context (Charmaz, 1990, 2006; Puddephatt, 2006). The Contingency Framework of IP work described by Reeves, Lewin, Espin, and Zwarenstein (2010) was used to explore for associations between NP actions within the HB NP IP practice framework to forms of IP work and consider the nature of identified power influences. The Contingency Framework (Reeves, et al., 2010) suggests there are four different forms of IP work: networking, coordination, collaboration, and teamwork. The authors indicate the type of IP work engaged in is determined through matching the level of five elements of teamwork (shared team identity, clear roles and goal, interdependence, integration, and shared responsibility) with level of team tasks (predictability, urgency, and complexity) based on the purpose and local need. They describe teamworking as the most focussed type of IP work that is contingent upon high levels of teamwork elements within a complex, urgent, and unpredictable local need. Collaboration, coordination, and networking hold increasingly relaxed teamwork elements and levels of team tasks. Four types of factors are suggested influences for IP teamworking: relational (e.g. socialization, hierarchy), processual (e.g. routines, rituals), organizational (e.g. organizational support), and contextual (e.g. culture, economics) (Reeves, et al., 2010). The framework has been welcomed as an innovative sociological model for teamwork within healthcare yet some caution the content reflects a limited number of studies (Cheluk, 2011; Wong, 2011). The Contingency Framework was employed in research of IP education and IP collaboration to explain findings of organizational and professional influence on attitudes toward IP work (Kenaszchuk, MacMillan, van Soeren, & Reeves, 2011). More recently the Contingency Framework was employed in two studies within hospital teams (Crocker, Trede, & Higgs, 2012; Lingard et al., 2012). Lingard and colleagues (2012) used the framework to explore complexity and collaboration contexts within a hospital team and determined the complex goals and shifting roles of hospital teams are not accounted for within current IP collaboration models. Crocker and colleagues (2012) employed the broad view of IP work to gain an understanding of collaboration within a hospital team and supported many influences on IP teamwork.

The category focus on team working, when juxtaposed with the Contingency Framework of IP work, illustrates NP actions mirroring multiple types of IP work, particularly collaboration and teamwork. The hospital context provides an environment of urgent, complex, and unpredictable situations, conditions requiring the two highest forms of IP work: collaboration and teamwork (Reeves, et al., 2010). Urgent, complex, and unpredictable patient and team situations are common within hospitals, and often managed by NPs who are present and available on the patient care unit, and hold legal authority to make care delivery changes. Availability of the NP role coupled with legal authority to make medical-based care delivery decisions allow rapid response to solve patient issues. Timeliness reduces fracturing of care actions and fosters maintenance of interdependent tasks of professions.

NP participants valued an engaged team. Actions expressed by NPs and team members suggested NPs act to foster this engagement. Trust developed through NP attention to team needs, and how well the NP balanced extending into actions and professional boundaries. The day-to-day presence of the NP role promoted linkages of patient information within a team of constantly changing IP team members. Consistency, valued in both perspectives, ensured quality and accurate communication of changing patient information amongst team members. This was especially necessary in situations of urgency. There was a perception of inclusiveness where NPs acknowledge team members' work as important, maximized the use of their professional skills, and ensure frequent connection with team members. NP knowledge of professional roles, confidence in team member professional expertise, and valuing of shared leadership described by both perspectives facilitated interdependence and shared responsibility required in collaboration and teamwork. The engaged team enhanced timely responses to patient care needs and supported a productive vision of team function. These actions reflect varying levels of the elements of teamwork proposed by Reeves et al. (2010).

NP and team member perspectives suggested the NP role was central within the team and enacted actions that support cohesiveness. Overlapping knowledge with several professionals promoted role understanding, and open communication. Open

communication connected team members and provided opportunity for several elements of teamwork: shared decision-making, shared goals, and clarity of responsibilities. The advanced NP knowledge supported communication of rationale for decisions, evidence and pathophysiology, fostering clear goals and a cohesive approach to care delivery. Described NP actions of coordination of patient transfers, completing intricate time-consuming procedures, and sharing leadership illustrate elements of teamworking on various levels. Participant descriptions indicated changes in NP roles dependent upon needs. This may represent NP initiated changes in actions to adjust to the type of IP work required by the situation.

Power influences arose from hospital operational and senior leaders, and physicians negatively influencing HB NP integration. Tensions between team members and NPs influenced NP role effectiveness. Unwarranted leader constraint of HB NP role enactment reduced role flexibility thus inhibiting HB NP role evolution to match changing patient and team needs. A lack of flexibility could also restrict HB NP actions used in response to altering forms of IP work required to meet increasingly complex or urgent goals. Hospital leader approaches that exclude HB NP roles from organizational system knowledge reduced HB NP effectiveness in monitoring and responding to gaps. The lack of organization system knowledge reduces the NPs' ability to integrate hospital goals with directions for team approaches to care delivery. Organisational support is necessary to promote IP work, and factors such as those described above have the potential to severely inhibit effective collaboration and teamwork (Reeves, et al., 2010).

Another explanation for ineffective role integration can be the social theory of professionalization. Physician tensions with NP roles can be described as a professionalism approach to maintain control of the body of the work of medicine, the type of relationships with other professions, and negotiation of ambiguous boundaries establishing who directs care (Freidson, 2001). Physician approval of the HB NP as an autonomous decision-maker created acceptance of HB NP role legitimacy within the team, thus providing opportunity for HB NP to promote IP work. Without autonomous decision-making, the HB NP role is rendered unable to facilitate IP work, particularly



collaboration and teamwork. Team members expressed HB NP roles sometimes exerted power that inhibited IP collaboration, while NP participants countered describing team member power through choosing whether to heed HB NP care directions based on acceptance of the NP role. Further exploration of power influences on enactment of the HB NP role is warranted.

Limitations to this study are considered. The findings explored here are within the IP context although neither team members nor NPs were specifically invited to address IP actions or values. Additionally, different jurisdictions have varying regulations governing NP practice and levels of education alter role enactment. This study is based on participants from one province within Canada and findings may not generalize to different social, historical, or situational contexts. Finally, the findings were explored using one IP teamwork model. Exploration with another model may raise different relationships and understandings.

## 4.6 Conclusion

The NP role was explored from their perspective and information from that analysis applied to the existing team perspective framework creating a new multi-perspective framework. Theoretical exploration of the category Focus on Team Working using the Contingency Framework of IP work revealed associations with current IP literature. Congruence of the category with IP work thus suggests HB NPs have a role in building cohesive IP teams. The resultant HB NP IP practice framework therefore serves several purposes. Connections between system knowledge and inclusion of program and hospital goals with clinical practice are highlighted. This can aid hospital leaders in positioning the HB NP within the leadership level to align team identity with program and hospital goals. Current and future HB NPs can use the framework to understand actions to promote IP work, including situations where tensions exist within and across team roles. Academia can use the framework to inform NP curricula and enhance NP graduate knowledge of effective role integration, as well as a basis for further research.

## 4.7 References for Chapter Four

- Canadian Province and Territory Nursing Colleges. Retrieved July 15, 2012, from <http://www.cno.org/>, <http://www.arnpei.ca/>, <http://www.arnnl.ca/links.php>, <http://www.crnns.ca/>, <http://www.nanb.nb.ca/>, <http://www.crnmb.ca/>, <http://www.oiiq.org/>, <http://www.srna.org/>, <http://nurses.ab.ca/>, <https://crnbc.ca/>, <http://www.rnantnu.ca/>, <http://www.yrna.ca/>
- Charmaz, K. (1990). 'Discovering' chronic illness: Using grounded theory. *Social Sciences Medicine*, 30(11), 1161-1172.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (2nd ed.). London: Sage Publications.
- Charmaz, K. (2006). *Constructing grounded theory*. London: Sage Publications.
- Cheluk, B. (2011). Interprofessional teamwork for health and social care [Book Review]. *Journal of Interprofessional Care*, 25(3), 233-234.
- Closson, T., & Oandasan, I. (2007). Interprofessional care: A blueprint for action in Ontario Retrieved January 6, 2011, from <http://www.healthforceontario.ca/upload/en/whatishfo/ipc%20blueprint%20final.pdf>
- College of Nurses of Ontario. (2012). Membership totals at a glance Retrieved April 30, 2012, from <http://www.cno.org/en/what-is-cno/nursing-demographics/membership-totals-at-a-glance/>
- Crocker, A., Trede, F., & Higgs, J. (2012). Collaboration: What is it like? - Phenomenological interpretation of the experience of collaborating within rehabilitation teams. *Journal of Interprofessional Care*, 26, 13-20. doi: 10.3109/13561820.2011.623802
- Desborough, J. (2012). How nurse practitioners implement their roles. *Australian Health Review*, 36, 22-26. doi: 10.1071/AH11030
- Frank, J., & Brien, S. (2008). The safety competencies: Enhancing patient safety across the health professions. 1-56. Retrieved from <http://www.patientsafetyinstitute.ca/English/education/safetyCompetencies/Documents/Safety%20Competencies.pdf>
- Freidson, E. (2001). *Professionalism: The third logic on the practice of knowledge*. Chicago: The University of Chicago Press.

- Hurlock-Chorostecki, C., van Soeren, M., & Goodwin, S. (2008). The acute care nurse practitioner in Ontario: A workforce study. *Canadian Journal of Nursing Leadership, 21*(4), 96-112.
- Infante, C. (2006). Bridging the “system's” gap between interprofessional care and patient safety: Sociological insights. *Journal of Interprofessional Care, 20*(5), 517-525. doi: 10.1080/13561820600937598
- Kenaszchuk, C., MacMillan, K., van Soeren, M., & Reeves, S. (2011). Interprofessional simulated learning: Short-term associations between simulation and interprofessional collaboration. *BMC Medicine, 9*(29), 1-10. Retrieved from Biomedcentral website: [www.biomedcentral.com/1741-1715/9/29](http://www.biomedcentral.com/1741-1715/9/29)  
doi:10.1186/1741-7015-9-29
- Kilpatrick, K., Lavoie-Tremblay, M., Ritchie, J., Lamothe, L., Doran, D., & Rochefort, C. (2012). Boundary work and the introduction of acute care nurse practitioners in healthcare teams. *Journal of Advanced Nursing, 68*(7), 1504-1515. doi: 10.1111/j.1365-2648.2011.05895.x
- Kleinpell, R. (2005). Acute care nurse practitioner practice: Results of a 5-year longitudinal study. *American Journal of Critical Care, 14*(3), 211-221.
- Lemieux-Charles, L. (2006). What do we know about health care team effectiveness? A review of the literature. *Medical Care Research and Review, 63*(3), 263-300. doi: 10.1177/1077558706287003
- Lingard, L., McDougall, A., Levstik, M., Chandok, N., Spafford, M., & Schryer, C. (2012). Representing complexity well: A story about teamwork, with implications for how we teach collaboration. *Medical Education, 46*, 869-877. doi: 10.1111/j.1365-2923.2012.04339.x
- Litaker, D., Mion, L. C., Planavsky, L., Kippes, C., Mehta, N., & Frolkis, J. (2003). Physician–nurse practitioner teams in chronic disease management: The impact on costs, clinical effectiveness, and patients' perception of care. *Journal of Interprofessional Care, 17*(3), 223-237. doi: 10.1080/1356182031000122852
- O'Leary, K. J., Ritter, C. D., Wheeler, H., Szekendi, M. K., Brinton, T. S., & Williams, M. V. (2010). Teamwork on inpatient medical units: Assessing attitudes and barriers. *Quality and Safety in Health Care, 19*(2), 117-121. doi: 10.1136/qshc.2008.028795
- Oandasan, I., Baker, G., Barker, K., Bosco, C., D'Amour, D., Jones, L., . . . Way, D. (2006). Teamwork in healthcare: Promoting effective teamwork in healthcare in Canada Retrieved January 25, 2011, from [http://www.chsrf.ca/Migrated/PDF/ResearchReports/CommissionedResearch/teamwork-synthesis-report\\_e.pdf](http://www.chsrf.ca/Migrated/PDF/ResearchReports/CommissionedResearch/teamwork-synthesis-report_e.pdf)

- Puddephatt, A. (2006). An interview with Kathy Charmaz: On constructing grounded theory. *Qualitative Sociological Review*, 2(3), 5-20.
- Reason, J. (2004). Beyond the organisational accident: The need for "error wisdom" on the frontline. *Quality and Safety in Health Care*, 13(s2), ii28-ii33. doi: 10.1136/qshc.2003.009548
- Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2010). *Interprofessional teamwork for health and social care*. Oxford: Wiley-Blackwell.
- Romanow, R. (2002). Building on values: The future of health care in Canada. Retrieved January 19, 2011, from <http://dsp-psd.pwgsc.gc.ca/Collection/CP32-85-2002E.pdf>
- Schmitt, M. H. (2001). Collaboration improves the quality of care: Methodological challenges and evidence from US health care research. *Journal of Interprofessional Care*, 15(1), 47-66. doi: 10.1080/13561820020022873
- Sidani, S., & Doran, D. (2010). Relationships between processes and outcomes of nurse practitioners in acute care: An exploration. *Journal of Nursing Care Quality*, 25(1), 31-38. doi: 10.1097/NCQ.0b013e3181b1f41e
- van Soeren, M., Hurlock-Chorostecki, C., & Reeves, S. (2011). The role of nurse practitioners in hospital settings: Implications for interprofessional practice. *Journal of Interprofessional Care*, 25, 245-251. doi: 10.3109/13561820.2010.539305
- Williamson, S., Twelvetree, T., Thompson, J., & Beaver, K. (2012). An ethnographic study exploring the role of ward-based advanced nurse practitioners in an acute medical setting. *Journal of Advanced Nursing*, 68(7), 1579-1588.
- Wong, J. (2011). Interprofessional teamwork for health and social care. [Book Review]. *Clinical Chiropractic*, 14, 32-33.
- Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: Effects of practice-based interventions on professional practice and healthcare outcomes. *The Cochrane Collaborative*(3). doi: 10.1002/14651858.CD000072.pub2

## Chapter 5

### 5. Discussion

In this final chapter an integrated summary of the research study findings is presented. The chapter is divided into two sections: Formation of the HB NP IP practice theory and contributions of the study to knowledge. Four contributions that raise the HB NP IP practice framework to theory are presented; 1) team member perspective of NP role value, 2) NP perspective of their role value, 3) privilege and power constructions related to the NP role, and 4) grounding with IP theory. Contributions of the study to knowledge include key study conclusions, implications, and future research.

#### 5.1 Formation of HB NP IP Practice Theory

What stands as theory is a common dispute. Constructivist grounded theory is an evolved methodology thus holds a new interpretation of what stands as theory. Charmaz (2006) describes theorizing as a reconstruction activity of imaginative understanding of a research problem or phenomenon that is analytic, abstract, and substantive. Theorizing within this study involved an iterative process of grounding and generating, first in the multiple realities and later in facts, values, and social life to reach abstract understanding of process and meanings (Charmaz, 2006). The emerging HB NP IP practice theory is generated through iterative grounding in multiple perspectives, implicit and explicit power and privilege, and IP theory. Value perceptions and described power influences from the two participant groups informed the resultant HB NP IP practice framework presented in chapter four. Inclusion of multiple perspectives allowed for integration of diverse subjective meanings of NP actions producing a more comprehensive understanding of reality (Charmaz, 2000, 2006). Exploration of power embedded in socio-political positions and value systems supported consideration of forces and tensions. These forces and tensions enabled or disabled NP action construction within the IP context. Exposing them, furthers usefulness of the emerging theory (Charmaz, 2006). The formation of the emerging theory is based on quality research assessed using

criteria of credibility, originality, resonance, and usefulness (Appendix G) (Charmaz, 2006).

### 5.1.1 Team members' perspective of role value

Team members' experiences of working within a hospital team with a NP provided meaning of NP value to team professionals. Three key NP action foci create role value, easing others' workload, holding patient care together, and evolving practice. Team members identified the importance of NP actions, and exposed power influences. The shared value perception focused on NP actions that created a safety net for patient care, and enhanced the efficiency of individual team members. The shared team goal for safe patient care was achieved through NP actions that assumed time-intensive, detailed work, or works not currently done (referred to by participants as gaps). Enhancing team member efficiency related to timely decision-making as well as role boundary overlap. Most professions, not only physicians, described shared knowledge and tasks that enabled role boundary overlap. Key factors that constructed NP role value included legitimate advanced knowledge and authority, and ease of team member access to the NP. However, trust with the NP role was necessary before factors were valued. Team members implied the NP was responsible to develop and maintain trust and factors of value.

### 5.1.2 NP perspective of role value

The HB NPs' lived experience of working within a hospital team provided a different perspective of NP role value meaning. Comparatively important actions and meanings were identified and power influences exposed. The shared value perception focused on NP actions aimed to improve patient care and the healthcare system. Key factors that constructed NP role value included the NPs capacity for role evolvment, effective response to program gaps, and influence to build an engaged team. The NP perspective substantiated NP actions identified by team members, and suggested alternate views to category importance. Actions deemed "invisible" by NPs were also exposed and their importance considered. In contrast to team members, NPs felt their response to program gaps through evolving their role and advancing the specialty were of greatest importance to ensure quality and safe patient care. NP participants described much of this work as

“behind the scenes” and invisible to team members. For example, NPs felt team members were not aware of the time NPs spent coordinating, facilitating, communicating, and engaging in program improvement projects. They also described clinical time spent admitting, discharging, and providing system change knowledge to physicians and medical residents as invisible to operational and senior leaders.

### 5.1.3 Privilege and power construction

Application of a critical lens throughout the analysis exposed constructions of privilege and power as a result of social and political structures thus grounding the HB NP IP practice framework in these contexts (Charmaz, 2006). The socio-political position of the HB NP within the IP team is based on role value meaning constructions that create privilege, subordination, inequality, or power. Constructions of role value meaning suggested an ideology of the effective position of the HB NP role within the hospital team as one sensitive and responsive to patient, team, and system needs therefore constantly adjusting in response to changing needs. Exposed HB NP privileges provide enlightenment of actions employed that potentially foster status-quo (to protect advantages), create tensions, and enable productive or oppressive power. Both participants groups described competing power interests between roles and individuals. These interests exposed forces preventing HB NPs from shaping decisions that influence effective role integration and outcomes.

#### 5.1.3.1 Privilege

Implicitly and explicitly shared privileges of the HB NP role arose from four factors. These are 1) education within the medical model of illness and management, 2) legal authorization to make decisions regarding medical diagnosis and care management, 3) graduate university education beyond entry to practice for nursing, and 4) care accountability that differs from standard hospital direct care nursing roles. These factors influenced constant repositioning within the hospital team based on simultaneous movement along three continua: nursing-medicine, dominant-subordinate, and clinical-organization / healthcare systems. The intersection of the three continua represents the position of the NP role within the IP team (Figure 3).

**Nursing-medicine continuum:** The horizontal continuum is representative of the knowledge bases of nursing and medicine therefore has nursing and medicine as opposite poles. This continuum represents the spectrum of NP approaches based on the degree of wellness or disease knowledge required. The NP position adjusts along the continuum to meet the current clinical needs of the patient, patient population, or specialty. Advantages for the NP include comprehension of both nursing and medicine perspectives and use of knowledge to adjust language and approaches preferred by either profession to attain credibility.

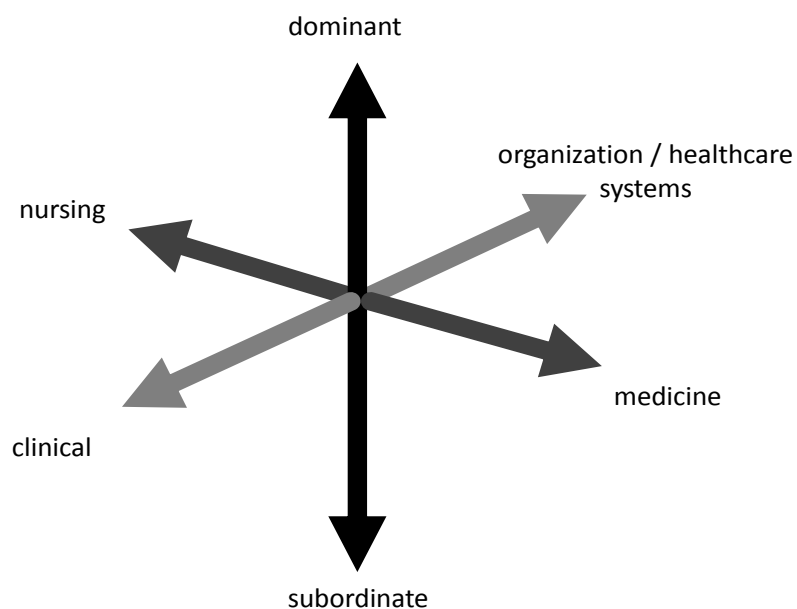
**Dominant-subordinate continuum:** The NP position on a second, vertical continuum illustrates varying degrees of dominant and subordinate activities dependent on the urgency or complexity of the patient situation, and the group membership. Healthcare provision retains the concepts of dominant and subordinate where the dominant agent provides a command and the subordinate voluntarily complies due to social values or politically created regulation or legislation (Weber, 1968). Legal authorization for HB NPs to diagnose, order and interpret diagnostic tests, refer to specialists, and prescribe therapeutic treatments or medications creates gradations of NP dominance over team members to follow “orders”. Multiple professionals, as well as NPs described this authority as valuable in promoting timely care delivery and enabling team member efficiency. Urgent situations required immediate decisions and therefore a highly dominant position was essential, while less urgent situations afforded the HB NP time to engage team members in goal development and care decisions. Group composition also influenced HB NP position on the dominant-subordinate continuum. For example, when no physician was present, the HB NP would write an “order” for another health care professional to enact thus creating a HB NP dominant- team member subordinate relationship. When a physician was present, the HB NP position shifted along the continuum in response to the level and type of specialty knowledge required in the situation and who held it.

**Clinical-organization / healthcare systems continuum:** The third continuum represents the shifting of the NP position along the continuum between participation in clinical and



organizational or healthcare systems work. Leadership and change management actions are essential to organizational and healthcare system work. Graduate education, and direct care expectations different from standard hospital direct care nurses provide advantages of being current in broad systems knowledge and being included in strategic initiatives. Team members valued the “big picture” perspective the HB NP brought to the program through broader organization involvement. They also highlighted the impact for the organization when the NP role was enabled to share specialty knowledge beyond the hospital setting. This continuum illustrates the importance of NP role flexibility in moving along this continuum from participating in direct care decision making to involvement in systems knowledge and activities. This flexibility allowed NPs to balance their clinical expertise with their application of healthcare system knowledge, research, and leadership to address care gaps, enhance specialty knowledge, and effect system change.

**Figure 3: Dimensions of Hospital-Based NP Role Position.**



*Note.* Three continua illustrate the dimensions impacting the position of HB NP role within the IP team. Anchors represent socio-political influences of professional knowledge (nursing-medicine), legal authority (dominant-subordinate), and participation (clinical-organization or healthcare systems).

The position of the NP role within the hospital team is one of constant repositioning dependent on the NP capacity to assess and respond in a timely manner to patient, team member, program, and organization needs. NPs described their role as one in constant evolution while responding to gaps as team members spoke of their ability to “absorb whatever role is needed” (registered nurse). The constant motion and numerous locations of intersection of the HB NP position within the team provide a new explanation for how and why the role is beneficial and highlights a fresh consideration of why role clarity has remained elusive.

### 5.1.3.2 Power construction

Construction of productive and oppressive power, and resulting tensions between individuals and groups within the hospital team emerged from the data. Experiences of tensions and oppressive power influencing HB NP role enactment were described by both team members and NPs as arising predominantly from physicians and hospital leaders (operational and senior). NPs described tensions and power influences emanating from other team members (professions). In contrast, team members highlighted tensions created by HB NP actions suggestive of NP efforts to maintain role advantages and exert power. Identification of tension and power related to categories of NP actions within the HB NP IP practice framework substantiates conditions under which productive and oppressive actions arise and are maintained (Charmaz, 2006).

Tensions between physicians and HB NPs arose from four main concerns. These were physician confidence in NP competence to make autonomous decisions, negotiation of role overlap, control of time commitment priorities, and fiscal competition. Physicians spoke of concerns with HB NPs scope of practice as consuming aspects of what had traditionally been their exclusive domain. Physicians expressed having limited knowledge of NP education, which hindered their confidence in NP patient care decisions. Physicians feared that NPs might not recognize the limits of their knowledge resulting in delays in requesting physician intervention. The introduction of NP roles creating competition for scarce healthcare dollars was also a physician concern.

Team members described monitoring the value and legitimacy of the HB NP role based solely on physician acceptance. Team members considered physician restrictions, such as requiring the HB NP to review all situations with them prior to decision-making, as physician dominance creating tensions and power inequities. Varying perspectives of approaches to meet team needs between the HB NP and physicians led to disagreements, and at times complete physician disregard for the NP role. This type of power exemplifies professionalism as one source of group control (Freidson, 2001; Sullivan, 1999; Svensson, 2006). Professional power is based on occupational control of specific knowledge refined through theory and research, numbers of qualified persons entering the profession, and the jurisdiction of knowledge and skill application (Freidson, 2001). For physicians, their political and economic resources gained through professionalism has allowed for maintenance of their privileged position. The NP role challenges this position. For example, negotiation of professional role boundary overlap consists of establishing the rights to the work (thus impacting available work), and determining of role task supervision (Freidson, 2001). Role overlap through the expanded scope of NP practice has placed physicians and NPs in conflict related to legitimate authority and autonomous decision-making.

The HB NP IP practice framework provides insights into means and actions to negotiate role overlaps and moderate tensions. Physicians who spoke of positive relationships with HB NPs described their trust in these NPs' knowledge and decision-making. Developing and maintaining trust to alleviate or overcome role overlap tensions have been minimally described in the literature (Kilpatrick et al., 2012; Nancarrow, 2004). The HB NP IP practice framework demonstrates a relationship between trust development and maintenance, and physician acceptance of full scope of NP practice within the IP team.

Tensions and power differentials between HB NPs and hospital leaders focused on leader-enforced role restrictions. These restrictions impacted role vision and enactment, and reduced NP flexibility. Leader control of NP resources, such as systems information, time commitment, and finances, limited NP effectiveness. Managerial valuing of organizational measurable outcomes, at times, altered the NP role. At the same time, NP

participants discussed frustrations with uninformed, rigid, or short-term visions for HB NP utilization by hospital leaders. They felt these restrictive approaches limited team and specialty support, and created NP monotony and role stagnation resulting in silo practices. Managerialism, enacted through control by hospital leaders, is reported to be slowly overpowering professionalism through measuring professional worth not by patient outcomes but by attainment of organizational efficiency goals and state required outcomes (Freidson, 2001; Svensson, 2006). Managerial power sanctions leaders to limit or alter roles to achieve organizational outcomes thus promoting normative practices that meet the interests of the organization (Svensson, 2006). The HB NP IP practice framework illustrates how hospital leader approaches to limit organizational knowledge translation, and restrict access to mentoring of NP colleagues negatively influence HB NP role benefits for the organization. The ability to move along the clinical-organization / healthcare systems continuum, combined with HB NP dialogue of their passion to change the status quo, suggests that HB NPs are well positioned with teams to promote system change at the clinical level. However, achieving the same is dependent on hospital leaders conveying organizational information to HB NPs. When present this information supports effective role evolution to address gaps, and needed resources to advance patient care delivery within the organization and specialty (Almost & Laschinger, 2002). HB NP access to organizational information, resources, and structural empowerment promoted trust of leadership, collaboration, and reduced job strain (Almost & Laschinger, 2002). Hospital leader control of HB NP time commitments created tensions with actions valued by team members, and in particular physicians. Team members acknowledged frustration with limited leader support for HB NP time to carry out research or share new knowledge that could advance the specialty. Physician expectations of HB NP priorities and time spent completing medical work were not always congruent with leader expectations, creating tension. NPs reported working within a physician-management matrix of power domination often forced them to choose allegiance to one over the other. Matrix management and medicine reporting was found to exist in more than 60% of HB NP roles in a workforce survey (Hurlock-Chorostecki, van Soeren, & Goodwin, 2008). Some NPs, when caught in this position for prolonged periods of time, chose to resign from the program. This finding suggests that power inequities create role dissatisfaction leading to

intention to resign or actual turnover. The three dimensions of HB NP role position provide hospital leaders with an explanation of how systems knowledge and allegiance pressures impact on the effectiveness of HB NP actions. Hospital leaders, who advocate for the importance of a balance between HB NP clinician and systems actions, can enable HB NP efficacy. In turn, hospital leader supports and resources of HB NP actions can effectively facilitate change within the clinical realm in alignment with organizational outcome needs.

Physician and hospital leader tensions commonly arose from political constructions while social relations and opinions account for similar tensions with other team members. When HB NPs balanced their use of informational, legitimate, and expert power, team members respected the NP (see Chapter three for discussion of NP balancing of actions). These socially based power relationships have been described in the literature (Freidson, 2001; Mintzberg, 1989; Raven, 1992). Team members described the centrality and consistency of the HB NP role and its actions as holding patient care together. This power was based on the development and maintenance of trust between HB NPs and team member, a role deemed by team members as the responsibility of the NP. The link between trust and power is well described in the literature (Connell & Mannion, 2006; Cottrell, Neuberger, & Li, 2007; Gilson, 2006). HB NPs may not realize the importance of their power nor how their actions influence development and viability of trust. The NP role as a repository of patient information and consultant to clinical team members was also seen as central for team members and support of their role. The importance of NP centrality in teams was recently described in research (van Soeren, Hurlock-Chorostecki, Kenaszchuk, Abramovich, & Reeves, 2009; Williamson, Twelvetree, Thompson, & Beaver, 2012). However, consideration of impact of HB NP actions and power influences have not been reported previously. Power inequities between NPs and team members arose from poor communication of key knowledge creating the perception of disrespect. NPs and team members were equally guilty of “not listening” to each other thus creating tensions and the potential to engage in ineffective patient care or team actions. Informational power afforded to HB NPs held the potential of power inequity and may explain the return of gaps when the NP was away. HB NP efforts to take exclusive

control over managing gaps may be a method of defining NP specific tasks and outcomes as a means to secure both employment and associated privilege.

Power sources influencing NP practice within hospital teams are multifaceted and impact the effectiveness of NP role integration and enactment. Awareness and attention to power inequity and tensions can contribute to role integration and enactment closer to identified subjective ideologies. Clear understanding of privilege, power, and actions to reduce tensions and conflict can potentially foster improved integration of NP roles within teams. The expanded awareness of power and privilege thus informs choices to enable a positive focus on IP teamwork and collaboration.

#### 5.1.4 Grounding with IP Theory

Exploration of HB NP actions using IP theory provides an understanding of HB NP practice within the complex context of IP hospital teams. The review of recent NP literature in chapter two identified limited exploration of HB NP practice within the context of interprofessionality. Purposeful comparison of the HB NP IP practice framework with IP theory provides fresh insights into construction of meanings and actions within the IP context. NPs described a goal of building an engaged team to enable quality patient care delivery within the category of Focus on Team Working. Chapter four identified congruencies between actions within the category and the four levels of IP working described in the Contingency Framework (teamwork, collaboration, coordination, and networking) (Reeves, Lewin, Espin, & Zwarenstein, 2010). The identified congruence suggests HB NPs play a key role in building cohesive teams and fostering smooth team transitions to appropriate levels of IP work based on team and patient needs. Further exploration of the HB NP IP practice framework reveals known IP factors within all three concepts.

NP actions mirror IP factors identified in the literature review in chapter two. These actions were described as coordinating, formal and informal knowledge sharing, respectful language use, early engagement of IP team members, inviting team members perspectives, and connecting team members. Therefore, within the IP context, the HB NP

is a key player in promoting interprofessionality within the IP team. Actions reflective of IP factors are apparent throughout the HB NP IP practice framework. Respectful, frequent, and timely communication ensured both patients and team members are well informed of the plan of care. Networking, described as valuable within all categories, aided in coordination of interdependent team tasks, smooth patient transitions, and fostered national and international specialty connections. Connecting team members, early engagement, and sharing leadership suggest that HB NPs value collaborative working.

Collaboration competencies, described as role clarification, team functioning, dealing with interprofessional conflict, and collaborative leadership, are presented as a National Interprofessional Competency Framework (NICF) (Bainbridge, Nasmith, & Orchard, 2010). The legitimate authority to change patient care plans coupled with the above-mentioned IP factors used by HB NPs to build an engaged team, suggest a high competency level for collaborative leadership. The multiple NP actions identified within the category Focus on Team Working illustrate competency in team functioning. Exploration of power and privilege exposes where and how IP conflict can arise. The HB NP IP practice framework provides insights for NPs to work toward positive approaches to deal with IP conflict. For example, building trust, balancing actions, and maintaining awareness of degree of role overlap can mitigate tensions and conflict. In contrast to the NICF, the HB NP IP practice framework goes beyond IP understanding. Both the theory and the dimensions of HB NP role position highlight how NP role flexibility, and access to broad organizational information and resources can mitigate clinical IP role tensions triggered by organizational efficiency activities generated by state required outcomes. The ability of the HB NP to foster clinical and system quality and change depends on hospital leader support of role flexibility along the three dimensions of HB NP role position.

The HB NP IP practice framework identified the importance of role flexibility and evolution. This may be describing the challenge HB NPs face in attaining the NICF competency of self-role clarification. The three dimensions of HB NP role position

suggests role clarity cannot be well defined through the compartmentalization or clear delineation of tasks we traditionally rely on to determine role success. The perpetual motion of HB NP role position among the dimensions allows the HB NP to effectively fill gaps, initiate change, and foster changing levels of IP team working. This suggests achieving role clarity in the traditional sense would impede HB NP role function thus negatively impact desired patient and system outcomes.

The described contributions raise the HB NP IP practice framework to that of a substantial theory grounded in the lived experience of team members and HB NPs. The team perspective is the interpretive base of the theory and provides role value meaning, action based properties of this meaning, and the importance of resultant outcomes. The team perspective introduces the importance of building trust and balancing the extent of actions (extending within boundaries of others' professional role) to role effectiveness. Role value meaning arises as three conceptual categories, or practice foci, (evolve NP role and advance the specialty, focus on team working, and hold patient care together) grounded in process, rather than themes, thus provides more than role description (Charmaz, 2006). The HB NP perspective provides substantiation of the existing categories and adjusts their levels of importance to balance the perspectives. HB NP insights enhance category definitions making them clear and more abstract. Missing and understated actions further understanding of important role actions. Exploration of privilege integrates socio-political influences and furthers abstraction. The socio-political position of the HB NP emerges as the intersection of three continua illustrating the importance of perpetual role change based on identified team, system, and patient needs. The socio-political position affects construction of role value meaning creating privilege, subordination, inequality, or power. Exposure of power enhances depth of the categories (Charmaz, 2005). Understanding the cause of tensions from professional, managerial, and informational inequities enables predicting action outcomes and can guide toward effective role implementation, and integration. Grounding of the HB NP framework with existing IP theory furthers abstraction and depth of the categories (Charmaz, 2006). The grounding with IP theory links how and why HB NPs construct actions with IP factors, collaboration competencies, and transitions through multiple levels of IP work.



Therefore, the described contributions justify the generation of HB NP IP practice as an emerging substantial theory (Appendix H).

## 5.2 Contributions to Knowledge

Analysis of the research findings refines, extends, and challenges current knowledge of the NP role within IP hospital teams. Contributions comprise of new knowledge including a framework, an emerging theory, and a diagram of dimensions of role position. Offered are key conclusions, implications for professionals, and suggestions for future research.

### 5.2.1 New contributions

Four new contributions are offered to advance knowledge. These are presented in summary format with location of the full text in parentheses.

- A team perspective framework offers the perception of NP role value within the IP hospital team grounded in the lived experience of IP hospital team members (Chapter 3)
  - Three main categories represent the key practice foci creating role value meaning: easing others' workload, holding patient care together, and evolving practice. Easing others' workload is most valuable.
  - Two sub-categories, how NP actions are constructed, are of greatest value to team members: being available and working legitimately in two worlds.
  - The importance of constructed actions, why they are constructed, is to enable quality, safe, and timely patient care, enhance team member efficiency, and evolve practice.
- A HB NP IP practice theory based in the team perspective and substantiated by the NP perspective, and influences of power and privilege is offered as a pragmatic interpretive rendering of HB NP role value within the IP hospital team (Chapter 4 and Chapter 5).
  - Three main categories represent the key practice foci creating role value meaning: evolve NP role and advance the specialty, focus on team

working, and hold patient care together. Evolve NP role and advance the specialty, and focus on team working are equally high in value.

- Eight sub-categories, each with their own properties, illustrate how actions are constructed.
- The importance of constructed actions, why they are constructed, is to enable quality, safe, and timely patient care, build an engaged team, improve patient flow through the healthcare system, advance the specialty, and sustain the NP role.
- Three dimensions of HB NP role position within the IP hospital team is offered as an explanation of how socio-political influences shape NP practice responses (Chapter 5)
  - Three dimension are: professional knowledge (nursing-medicine continuum), legal authority (dominant-subordinate continuum), and participation (clinical-organization / healthcare systems continuum).
  - The position of the NP role, the intersection of the three dimensions, moves in response to NP assessment of patient, team, program, and system needs.
- Three dimensions of HB NP role position within the IP hospital team is offered as an explanation of why HB NP role clarity remains elusive (Chapter 5)
  - The perpetual motion of HB NP role position among the dimensions allows the HB NP to effectively fill gaps, initiate change, and foster changing levels of IP team working.
  - Defining the HB NP role through compartmentalization or clear delineation of tasks would impede HB NP role flexibility negatively impacting desired patient and system outcomes.

### 5.2.2 Conclusions

Twelve conclusions discussed throughout chapters two to five are offered here in bullet format as a summary. Location of the full discussion is provided to enable the reader to return and rediscover the context of the conclusion.

- Exploration of HB NP practice is occurring within four countries across the globe focusing on a variety of interests. Research of role enactment within the IP team context remains relatively unstudied or at least unreported at this time. Given the level of importance placed on IP collaboration and teamwork globally, and the continued employment of the NP role within hospital teams, it is timely to explore the HB NP role within the context of IP teams (Chapter 2).
- The HB NP role is seen by team members as valuable provided it attends to easing team members' workload, holding patient care together, focussing on team working, advancing the specialty practice, and evolving the NP role (Chapter 3).
- Two HB NP approaches were essential for team members, being available and holding legislated authority to make care decision changes. Team members valued the effect as the timely coordination of patient care changes, improved organization of their day, and a sense of an eased workload (Chapter 3).
- The development and maintenance of trust is the HB NPs responsibility. Trust, essential to acceptance of the NP role, was required before other HB NP actions could be effective (Chapter 3).
- The NP role importance within the IP team is enactment of actions that enable quality, safe, and timely patient care, enhance knowledge and efficiency of team members, improve patient flow through the system, advance the specialty, and sustain the NP role (Chapter 4).
- Role flexibility and evolution are essential to effective gap vigilance; NP monitoring for and responding to address the gap. Gap vigilance creates a "safety net" for patient care (Chapter 4).
- NP perspective of their role value closely aligns with team members perspective providing substantiation to the categories and sub-categories. Missing and understated actions within the team member perspective are described by NPs as "invisible work" that is completed "behind the scene" or on their own time (Chapter 4).
- HB NPs enact their role at the intersection of three dimensions of their position within the IP team (nursing-medicine, dominant-subordinate, and clinical-

organization / healthcare systems) where the intersection is in perpetual motion based on NP continuous vigilance of, and response to, changing patient, team, program, and system needs (Chapter 5).

- The perpetual adjustment of the intersection along the three dimensions of role position impedes role clarity within a culture that values a compartmentalized, task delineated role definition (Chapter 5).
- Power inequity and tensions impact NP role integration and effective role enactment. Professional (medicine) and managerial power were highly influential while social power and tensions were enacted between other team members and NPs (Chapter 5).
- A key tension impacting HB NP role integration and efficacy is conflicting managerial and medicine professional power. Prolonged tension of this type is a precursor to NP role dissatisfaction and resignation (Chapter 5).
- Several actions in use by HB NPs mirror IP factors that, combined with the central and consistent NP presence, become key levers to stimulate IP collaboration and teamwork. HB NPs model IP factors through early engagement of team member expertise, inviting team members to share their expertise, frequent connecting and communicating with team members, and promoting shared leadership (Chapter 4 and Chapter 5).

### 5.2.3 Implications

Implications arising from the study specific to NPs, hospital leaders, healthcare professionals, academics, and policy makers are offered here. The emerging HB NP IP practice theory, and the dimensions of HB NP role position diagram provide NPs with pragmatic tools that are useful at the practice level. The emerging HB NP IP practice theory provides new knowledge that can be used by NPs to articulate their role within IP hospital teams. It can be applied to new role implementation, introduction of a new NP into an existing role, role negotiation, and maintenance of existing role effectiveness. The introduction of IP considerations reveals actions NPs can engage in or perfect to enhance their contribution toward IP collaboration and teamwork. Exposure of privilege and

power influences may enlighten NPs to the sources and potential approaches to manage tensions and employment dissatisfaction effectively. Categories and their properties can aid in identifying role outcome measures, especially as roles evolve and legislative authority changes. Finally, the dimensions of role position can be used by NPs to determine the socio-political influences impacting their position within the IP team, consider the effective position to meet the current situation or need, and judge their use of power and privilege.

Hospital operational and senior leaders can use the findings from this study in multiple manners. The findings can aid leaders in understanding how to support or create a HB NP role to facilitate attainment of operational goals, meet program needs such as advancement of specialty knowledge and team member support, and identify approaches to create and sustain NP roles within their organization or portfolio. Hospital leaders can work with NPs to align hospital and program needs with NP categories to establish measureable outcomes. The findings provide new information for leaders that highlight the importance and value of engaging NP roles in organizational information and processes to effect change, and exposes the negative impact on NP roles when leaders share a power matrix with physicians.

The study findings are also of value to other professions. Key findings include knowledge of identified shared goals of quality, safe, and timely patient care suggesting an IP approach. Enlightenment of how power and privilege influence role integration and enactment are valuable for professional understanding of their role in creating and resolving tensions. Professional organization leaders and policy makers can use the findings to inform regulatory and legislative changes for NP practice.

The frameworks, diagram, and emerging theory offered here provide new information for academics of all professions. The findings from this study can inform curricula changes within general nursing programs, nurse practitioner programs, and interprofessional education. Finally, the study provides new questions arising from the findings that may be of interest to researchers. These questions are offered here.

## 5.2.4 Future research

- The HB NP IP practice theory emerged from data within one healthcare jurisdiction. Understanding may be limited to role enactment within Ontario, Canada hospitals. Future research should build on this work through testing and revising the framework within different jurisdictions to increase its relevance.
- This study offers an in-depth investigation from multiple perspectives of how and why HB NP actions are constructed, and the importance of their consequences. Future research can test the applicability of the findings to NP roles within community and other settings to consider role similarity and difference.
- The emerging HB NP IP practice theory offers a pragmatic tool for use by practitioners. The theory differs from previous frameworks, including the Canadian national NP framework, and provides new information on NP role practice. Research comparing and critiquing contributions from the HB NP IP practice framework with existing frameworks is necessary to inform revision during this time of role practice growth.
- Categories, sub-categories, and their properties described in the HB NP IP practice theory redefine work content of HB NP roles thus providing new approaches to consider HB NP outcomes. To build on this work, future research should explore the HB NP IP practice theory to consider and align measurable HB NP outcomes.
- One key category within the emerging HB NP IP practice theory, hold patient care together, describes NP actions of interaction with patients and families to enable resolution of health alteration issues and successful transition to community level of care. These perceptions arise from team members and NPs within the hospital. Future research including perceptions of hospitalized patients and their families and perceptions of primary care providers assuming care after hospitalization would provide greater comprehension of HB NP actions and their effect.
- Centrality and consistency of the HB NP role, communication, early engagement of team member expertise, and propensity to share leadership emerged as key IP

levers employed by HB NPs within the category Focus on Team Working. Further research is required to determine if, and to what extent, the NP employed levers influence IP collaboration and teamwork.

- An intraprofessional concern raised by study participants was the impact the NP role had on the RN role. Some nurses identified the role as an opportunity for nurse advancement while a few others expressed concern introduction of an NP within the team altered their role and relationship with physicians. Within Ontario, recent legislative changes extending NP authorities, and the current approach of lobbying to expand the scope of the general nurse class, have the potential to create new tensions and role clarity concerns. Professional nursing organizations should consider research to explore intraprofessional tensions to optimize role utilization.

The resultant emerging HB NP IP practice theory offers an interpretive understanding of HB NP practice that is beyond description yet remains useful in every day practice (Charmaz, 2006). The emerging theory reflects the multiple realities of working with a HB NP role as well as the reality of working as a HB NP within an IP team. Facts, values, and social influences interwoven in the interpretation substantiate and clarify fresh meanings and actions of HB NP practice within IP teams (Charmaz, 2006). The HB NP IP practice theory is useful for NPs, leaders, and academia to understand and explain the role within hospital teams, predict influences on outcomes, and therefore guide appropriate role introduction and effective integration to achieve desired patient, team, and system outcomes. The theory also provides a new foundation for further conceptual, explanatory, and predictive research (Charmaz, 2006).

### 5.3 References for Chapter Five

Almost, J., & Laschinger, H. (2002). Workplace empowerment, collaborative work relationships, and job strain in nurse practitioners. *Journal of the American Academy of Nurse Practitioners*, 14(9), 408-420.

Bainbridge, L., Nasmith, L., & Orchard, C. (2010). Competencies for interprofessional collaboration. *Journal of Physical Therapy Education*, 24(1), 6-11.

- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (2nd ed.). London: Sage Publications.
- Charmaz, K. (2005). Grounded theory in the 21st century: Applications for advancing social justice studies. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (Vol. 3rd ed.). London: Sage Publishing.
- Charmaz, K. (2006). *Constructing grounded theory*. London: Sage Publications.
- Connell, N., & Mannion, R. (2006). Conceptualisations of trust in the organisational literature. Some indicators from a complementary perspective. *Journal of Health Organization and Management*, 20(5), 417-433.
- Cottrell, C., Neuberg, S., & Li, N. (2007). What do people desire in others? A sociofunctional perspective on the importance of different valued characteristics. *Journal of Personality and Social Psychology*, 92(2), 208-231. doi: 10.1037/0022-3514.92.2.208
- Freidson, E. (2001). *Professionalism: The third logic on the practice of knowledge*. Chicago: The University of Chicago Press.
- Gilson, L. (2006). Trust in health care: Theoretical perspectives and research needs. *Journal of Health Organization and Management*, 20(5), 359-375.
- Hurlock-Chorostecki, C., van Soeren, M., & Goodwin, S. (2008). The acute care nurse practitioner in Ontario: A workforce study. *Canadian Journal of Nursing Leadership*, 21(4), 96-112.
- Kilpatrick, K., Lavoie-Tremblay, M., Ritchie, J., Lamothe, L., Doran, D., & Rochefort, C. (2012). Boundary work and the introduction of acute care nurse practitioners in healthcare teams. *Journal of Advanced Nursing*, 68(7), 1504-1515. doi: 10.1111/j.1365-2648.2011.05895.x
- Mintzberg, H. (1989). *Mintzberg on management: Inside our strange world of organizations*. New York: Free Press.
- Nancarrow, S. (2004). Dynamic role boundaries in intermediate care services. *Journal of Interprofessional Care*, 18(2), 141-151. doi: 10.1080/13561820410001686909
- Raven, B. (1992). A power/interaction model of interpersonal influence: French and Raven thirty years later. *Journal of Social Behaviour and Personality*, 7(2), 217-244.
- Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2010). *Interprofessional teamwork for health and social care*. Oxford: Wiley-Blackwell.



- Sullivan, W. (1999). What is left of professionalism after managed care? *Hastings Center Report*, 29(2), 7-13.
- Svensson, L. (2006). New professionalism, trust and competence: Some conceptual remarks and empirical data. *Current Sociology*, 54, 579-593. doi: 10.1177/0011392106065089
- van Soeren, M., Hurlock-Chorostecki, C., Kenaszchuk, C., Abramovich, I., & Reeves, S. (2009). The integration of specialty nurse practitioners into the Ontario healthcare system, Retrieved January 4, 2010, from <http://www.npao.org/Uploads/SNP%20report%202009.pdf>
- Weber, M. (1968). *Economy and society: An outline of interpretive sociology*. New York: Bedminster Press.
- Williamson, S., Twelvetree, T., Thompson, J., & Beaver, K. (2012). An ethnographic study exploring the role of ward-based advanced nurse practitioners in an acute medical setting. *Journal of Advanced Nursing*, 68(7), 1579-1588.

## **Appendix A: Historical Background of the HB NP Role in Ontario.**

As of January 2013, there are 2,135 NPs registered in Ontario, Canada with 624 registered in the NP specialty of Adult or Paediatrics (College of Nurses of Ontario, 2013). The NP role in Ontario has a history of a staggered approach to role education and legislative advancements. This approach created confusion with role clarity, integration, and adequate advancement of knowledge through research.

Since the 1960s, Ontario educated nurses for roles that overlapped with what was traditionally within the realm of medicine. A key study in Burlington Ontario demonstrated safety and efficacy of this innovative nursing role (Spitzer et al., 1974), yet education programs were terminated in 1983. Gaps in hospital care provided the opportunity for expanding nursing roles and new NP education programs were offered at McMaster University in 1986 for neonatal intensive care (NNP). The University of Western Ontario offered a post Masters program for Expanded Role Nurses to work in tertiary care hospitals from 1987 until the late 1990s. In 1994, the Ontario government elected to establish the NP role in primary health care and supported creation of a new primary health care NP education program. This program was offered at ten universities. A significant amount of research of the NP role within primary healthcare settings informed the role in this setting (DiCenso & Matthews, 2005). The same year, the College of Nurses of Ontario established regulations for an “extended class” of nursing. Nurses in this class would be authorized to work in a collaborative relationship with a physician to diagnose, prescribe diagnostic tests from a limited list, and prescribe medications from a limited list. Legislation for the extended class of nursing was proclaimed in 1998. It was determined that only the primary care role would be authorized through the new PHC specific NP education and College registration, to create a group of “generalists” to meet the primary health care needs of people in communities (Health Professions Regulatory Advisory Council, 1996). NP roles within hospitals were viewed as more complicated and potentially requiring different education and scope of practice and thus became referred to as “specialists” (Health Professions Regulatory

Advisory Council, 1996). This latter group was excluded from the new education, regulation, legislation, and most NP research at the time. They remained in the general class of nursing.

NPs continued to be employed within hospitals despite exclusion from the extended class of nursing. The University of Toronto offered hospital-based NP education for paediatric and adult specialties beginning in 1994. These graduates assumed the title of acute care NP (ACNP). The role was valuable, safe and efficient, and supportive of reducing physician workload (Sidani et al., 2006; van Soeren, Kirby, & Andrusyszyn, 2002). A 2005 NP workforce survey estimated that approximately 400 specialist or ACNPs worked in Ontario hospitals despite having neither specific implementation funding, nor recognition of their extended nursing knowledge (Hurlock-Chorostecki, van Soeren, & Goodwin, 2008). Of interest, the survey also noted hospitals as the second largest employer of NPs registered as PHC (van Soeren, Hurlock-Chorostecki, Goodwin, & Baker, 2009).

The hospital-based specialist NP role was legally included in the extended class of nursing in 2008, the year following legal protection of the title “nurse practitioner”. The titles NNP and ACNP were retired to support new credentials of NP-Adult, and NP-Paediatrics. Legislation proclaimed in 2011 provided all NP classifications (NP adult, NP paediatrics, and NP primary health care) increased autonomy. The limited lists were removed providing NPs the authority to prescribe medications and diagnostic tests. NPs have been authorized as prescribers of controlled substances nationally although provincial legislation and College of Nurses regulations remain as working documents. This limitation is expected to be removed within the next two years. Restrictions in the Public Hospital Act were also removed providing NPs the authority to autonomously treat hospital in-patients and discharge them from hospital care. The authority to autonomously admit patients to hospitals became effective for NPs the following year, 2012. To date, some regulations and hospital policy require revisions before NPs can practice to full legally authorized scope of practice.

The NP role within Ontario has significantly advanced in a short period with the regulation of HB NP roles and expanded authority. Comparison across the globe remains a challenge due to variations of titles and definitions of authority between countries. Variation within jurisdictions and multiple levels of authorizing create complexity of role understanding. Table 7 is offered as a simplified and limited comparison based on available published documents.

**Table 7: NP Role Summary across the Globe.**

Country	Date of inception	Authority to diagnose	Authority to prescribe treatment	Authority to prescribe medication	Authority to refer to other professionals	Authority to admit to hospital	Title protection
United States	1960s	•	•	•	•	• <sup>1</sup>	•
Canada	1960s	•	•	•	•	• <sup>1</sup>	•
Australia	1990s	•	•	•	•	• <sup>1</sup>	•
United Kingdom	2000s	•	•	•		• <sup>1</sup>	
New Zealand	2000s	•	•	•			•
Thailand	2000s	•	•	•	•		

*Note.* This chart is inclusive of countries publishing information of NP roles. 1= authority varies throughout the country Sources: (American Academy of Nurse Practitioners, 2010; Australian College of Nurse Practitioners, 2013; Nurse Practitioner UK, 2013; Nursing and Midwifery Board of Australia, 2012; Queen's Printer for Ontario, 2011; Royal College of Nursing, 2012a, 2012b; Sheer & Wong, 2008; van Soeren, Hurlock-Chorostecki, Kenaszchuk, Abramovich, & Reeves, 2009)

## References for Appendix A

- American Academy of Nurse Practitioners. (2010). Quality of nurse practitioner practice (2nd ed., pp. 1-4). Austin.
- Australian College of Nurse Practitioners. (2013). What is a nurse practitioner? Retrieved February 1, 2013, from <http://www.acnp.org.au/content/what-is-a-nurse-practitioner.html>

- College of Nurses of Ontario. (2013). Membership totals at a glance Retrieved January 7, 2013, from <http://www.cno.org/en/what-is-cno/nursing-demographics/membership-totals-at-a-glance/>
- DiCenso, A., & Matthews, S. (2005). Report on the integration of primary health care nurse practitioners into the province of Ontario: Executive summary revised (pp. 1-32). Toronto: IBM Business Consulting Services and McMaster University.
- Health Professions Regulatory Advisory Council. (1996). Advice to the Minister of Health: Nurse practitioner referral (pp. 1-81). Toronto.
- Hurlock-Chorostecki, C., van Soeren, M., & Goodwin, S. (2008). The acute care nurse practitioner in Ontario: A workforce study. *Canadian Journal of Nursing Leadership, 21*(4), 96-112.
- Nurse Practitioner UK. (2013). Employment Retrieved February 1, 2013, from <http://www.nursepractitioner.org.uk/Employment.html>
- Nursing and Midwifery Board of Australia. (2012). Nursing and midwifery endorsement nurse practitioners registration standard. Retrieved February 1, 2013, from <http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx>
- Queen's Printer for Ontario. (2011). Expanding the role of nurse practitioners in hospitals Retrieved February 1, 2013, from <http://news.ontario.ca/opo/en/2011/04/expanding-the-role-of-nurse-practitioners-in-hospitals.html>
- Royal College of Nursing. (2012a). RCN competencies: Advanced nurse practitioners (pp. 1-26). London: Royal College of Nursing.
- Royal College of Nursing. (2012b). Results of the ANP forum survey 2012. Retrieved February 1, 2013, from [http://www.rcn.org.uk/development/communities/rcn\\_forum\\_communities/nurse\\_practitioner/news\\_stories/results\\_of\\_the\\_anp\\_forum\\_2012\\_survey](http://www.rcn.org.uk/development/communities/rcn_forum_communities/nurse_practitioner/news_stories/results_of_the_anp_forum_2012_survey)
- Sheer, B., & Wong, F. (2008). The development of advanced nursing practice globally. *Journal of Nursing Scholarship, 40*(3), 204-211.
- Sidani, S., Doran, D., Porter, H., LeFort, S., O'Brien-Pallas, L., Zahn, C., . . . Sarkissian, S. (2006). Processes of care: Comparison between nurse practitioners and physician residents in acute care. *Canadian Journal of Nursing Leadership, 19*(1), 69-85.
- Spitzer, W., Sackett, D., Sibley, J., Roberts, R., Gent, M., Kergin, B., . . . Olynich, A. (1974). The Burlington randomized trial of the nurse practitioner. *New England Journal of Medicine, 290*(5), 251-256.

- van Soeren, M., Hurlock-Chorostecki, C., Goodwin, S., & Baker, E. (2009). The primary healthcare nurse practitioner in Ontario: A workforce study. *Canadian Journal of Nursing Leadership*, 22(2), 58-72.
- van Soeren, M., Hurlock-Chorostecki, C., Kenaszchuk, C., Abramovich, I., & Reeves, S. (2009). The integration of specialty nurse practitioners into the Ontario healthcare system, Retrieved January 4, 2010, from <http://www.npao.org/Uploads/SNP%20report%202009.pdf>
- van Soeren, M., Kirby, A., & Andrusyszyn, M. (2002). Lessons learned during implementation of an acute care nurse practitioner role in adult critical care in Ontario. *Annals of the Royal College of Physicians and Surgeons*, 35(S8), 561, 556-562.

## Appendix B: Ethics Approval Letters



### Use of Human Participants - Ethics Approval Notice

**Principal Investigator:** Dr. Cheryl Forchuk  
**Review Number:** 18568E  
**Review Level:** Delegated  
**Approved Local Adult Participants:** 40  
**Approved Local Minor Participants:** 0  
**Protocol Title:** Hospital-based nurse practitioner practice: An exploration of interprofessional teams  
**Department & Institution:** Nursing, University of Western Ontario  
**Sponsor:**  
**Ethics Approval Date:** November 24, 2011                      **Expiry Date:** December 31, 2013  
**Documents Reviewed & Approved & Documents Received for Information:**

Document Name	Comments	Version Date
UWO Protocol Letter of Information & Consent		2011/11/03
Advertisement	Notification of opportunity to participate in a Focus Group	
Advertisement	Email invitation to participate in a Focus Group	

This is to notify you that The University of Western Ontario Research Ethics Board for Health Sciences Research Involving Human Subjects (HSREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the Health Canada/ICH Good Clinical Practice Practices: Consolidated Guidelines; and the applicable laws and regulations of Ontario has reviewed and granted approval to the above referenced revision(s) or amendment(s) on the approval date noted above. The membership of this REB also complies with the membership requirements for REB's as defined in Division 5 of the Food and Drug Regulations.

The ethics approval for this study shall remain valid until the expiry date noted above assuming timely and acceptable responses to the HSREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the UWO Updated Approval Request Form.

Members of the HSREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the HSREB.

The Chair of the HSREB is Dr. Joseph Gilbert. The UWO HSREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000940.

#### Ethics Officer to Contact for Further Information

<input type="checkbox"/> Janice Sutherland (jsutherland@uwo.ca)	<input checked="" type="checkbox"/> Grace Kelly (grace.kelly@uwo.ca)	<input type="checkbox"/> Shantel Walcott (swalcot@uwo.ca)
--	---	--

*This is an official document. Please retain the original in your files.*



Use of Human Participants - Ethics Approval Notice

Principal Investigator: Dr. Cheryl Forchuk  
 Review Number: 18568E  
 Review Level: Delegated  
 Approved Local Adult Participants: 40  
 Approved Local Minor Participants: 0  
 Protocol Title: Hospital-based nurse practitioner practice: An exploration of interprofessional teams  
 Department & Institution: Health Sciences \ Nursing, Western University  
 Sponsor:  
 Ethics Approval Date: April 18, 2012 Expiry Date: December 31, 2013  
 Documents Reviewed & Approved & Documents Received for Information:

Document Name	Comments	Version Date
Revised Western University Protocol	A blog will be used for communication to research participants and as a source of member checking.	




This is to notify you that The University of Western Ontario Research Ethics Board for Health Sciences Research Involving Human Subjects (HSREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the Health Canada/ICH Good Clinical Practice Practices: Consolidated Guidelines; and the applicable laws and regulations of Ontario has reviewed and granted approval to the above referenced revision(s) or amendment(s) on the approval date noted above. The membership of this REB also complies with the membership requirements for REB's as defined in Division 5 of the Food and Drug Regulations.

The ethics approval for this study shall remain valid until the expiry date noted above assuming timely and acceptable responses to the HSREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the University of Western Ontario Updated Approval Request Form.

Members of the HSREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the HSREB.

The Chair of the HSREB is Dr. Joseph Gilbert. The HSREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000940.

Ethics Officer to Contact for Further Information

 Janice Sutherland (jsutherl@uwo.ca)	 Grace Kelly (grace.kelly@uwo.ca)	 Shantel Walcott (swalcot@uwo.ca)
---	--	--

*This is an official document. Please retain the original in your files.*



**LAWSON HEALTH RESEARCH INSTITUTE****FINAL APPROVAL NOTICE**

RESEARCH OFFICE REVIEW NO.: R-11-643

PROJECT TITLE: Hospital-based nurse practitioner practice: An exploration of interprofessional teams

PRINCIPAL INVESTIGATOR: Dr. Cheryl Forchuk

DATE OF REVIEW BY CRIC: January 6, 2012

Health Sciences REB#: 18568E

Please be advised that the above project was reviewed by the Clinical Research Impact Committee and the project:

**Was Approved**

**PLEASE INFORM THE APPROPRIATE NURSING UNITS, LABORATORIES, ETC. BEFORE STARTING THIS PROTOCOL. THE RESEARCH OFFICE NUMBER MUST BE USED WHEN COMMUNICATING WITH THESE AREAS.**

Dr. David Hill  
V.P. Research  
Lawson Health Research Institute

*All future correspondence concerning this study should include the Research Office Review Number and should be directed to Sherry Paiva, CRIC Liaison, LHSC, Rm. C210, Nurses Residence, South Street Hospital.*

cc: Administration



## Appendix C: Letter of Information.

### Hospital-Based Nurse Practitioner Practice: An Exploration of Interprofessional Teams

#### PARTICIPANT INFORMATION SHEET (3 pages)

**Title of Study:** Hospital-based nurse practitioner practice: An exploration of Interprofessional teams

**Doctoral Student:** Christina (Tina) Hurlock-Chorostecki PhD(c), NP-Adult  
University of Western Ontario

**Supervisor:** Dr. Cheryl Forchuk, Arthur Labatt Family School of Nursing, University of Western Ontario

You are being invited to participate in a research study entitled **Hospital-based nurse practitioner practice: An exploration of interprofessional teams**. We are asking you to take part because you are working in a clinical role as a nurse practitioner (NP) in an Ontario hospital. In order to decide whether or not you want to be a part of this study, you should understand what is involved and the potential risks and benefits. This form gives detailed information about the study. Please take the time to read this carefully and feel free to ask questions if anything is unclear, or there are words or phrases you do not understand.

#### WHY IS THIS RESEARCH BEING DONE?

Health Canada is supporting healthcare renewal through health human resource innovation and interprofessional practice. Recent legislation mandates hospitals to ensure positive patient experiences, high quality care delivery, and recognize and support health care providers in improving care access and delivery based on scientific evidence. There has been increased employment of hospital-based NP as a health human resource role innovation in Ontario with little research evidence to support or describe the role on interprofessional teams. It is important to identify if the NP role is perceived to enhance access to care, care quality, and positive patient outcomes, and explore NP processes that contribute to interprofessional teamwork. This knowledge can aid executive team members within hospitals in decisions on service delivery models and team membership, and aid NPs in developing effective roles.

#### WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study is to critically explore NP and team members' perceptions of the value an NP provides to interprofessional teamwork and patient care delivery in Ontario hospitals. In so doing to gain an understanding of meaning and actions of the NP role within interprofessional practice and the impact of this role on the quality of patient care delivery. The final product of the study is anticipated to be a substantive theory of NP interprofessional practice to aid in education, employment, policy development, and effective role integration.

### **WHO WILL BE PARTICIPATING IN THE STUDY?**

Nurse Practitioners, with any of the College of Nurses of Ontario registered specialty certificates, working in clinical roles in hospitals across Ontario will be invited to participate in this study. A minimum of three focus groups will be held across Ontario for NPs working at academic and community, acute and rehabilitation/complex care hospitals. If you are registered in the extended class of nursing, working in a hospital-based clinical role as a NP and have been in the role for one or more years, then you are eligible to participate.

### **WHAT WILL MY RESPONSIBILITIES BE IF I TAKE PART IN THE STUDY?**

If you volunteer to participate in this study, we will ask you to do the following:

- Participate in one 60-90 minute focus group with other NPs.

You indicate your voluntary agreement to participate by attending a focus group and providing your responses. You do not waive any rights by attending a focus group.

### **WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?**

There are no known harms or risk to your participation in this study. Anonymity and confidentiality will be maintained. If you wish to leave the focus group you can feel free to do so at any time. Focus group members are asked to keep everything they hear confidential and not to discuss it outside of the meeting. However, we cannot guarantee that group members will maintain confidentiality.

### **WHAT ARE THE POSSIBLE BENEFITS FOR ME AND/OR FOR SOCIETY?**

The overall benefits of this study will be to inform stakeholders of hospital-based NP practices, especially in relation to interprofessional practice. The findings will add to the limited knowledge of Canadian hospital-based NP roles within the context of interprofessional practice. The findings may assist hospital executives in decisions on service delivery models and team membership, hospital leaders in supporting full integration of NPs on hospital teams, policy makers in legislation changes, academia in revision of NP education, and NPs in implementing new roles. The findings will result in benefits for hospital patients, the interprofessional team, and the healthcare system. The findings also have the potential to uncover working concepts and hypotheses to be used in further studies

### **WHAT IF I DO NOT WANT TO TAKE PART IN THE STUDY?**

It is important for you to know that participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time with no effect on your employment or membership within NP affiliated groups.

### **WHAT INFORMATION WILL BE KEPT PRIVATE?**

The fact that you are taking part in the study will be kept confidential. Your information will not be shared with anyone. All participants will be encouraged to maintain confidentiality but this cannot be guaranteed. All personal information such as your name

will be removed from the data. All information will be securely stored in a locked filing cabinet in a locked office. When the results of the study are published or presented at scientific meetings, your name will not be used and there will be no way that you can be identified. No information that discloses your identity will be released or published without your explicit consent to the disclosure. However, data with no identifying information will be retained for further analysis in the future. As a participant, if you would like to receive a copy of the overall results of this study please put your name and contact information on a blank piece of paper and give it to the interviewer at the focus group session.

All information collected during the study will be stored until the completion of the study and the findings have been released. Your personal information will be destroyed within one year after the study is complete. Audio tapes will be destroyed at the completion of the study. Electronic data and paper based data sheets and analysis will be kept secured and destroyed through shredding or deletion and file removal ten years after publication of the study results. Representatives of The University of Western Ontario Health Sciences Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research.

#### **CAN PARTICIPATION IN THE STUDY END EARLY?**

Yes, however, any information you have provided up to the point at which you withdraw can be used in the study. You may decide at any time that you do not want to be in the focus group. If you withdraw from the focus group, this will in no way affect you as an employee or member of NP affiliated groups. You also may refuse to answer any questions you don't want to answer and still remain in the study.

#### **WILL I BE PAID TO PARTICIPATE IN THIS STUDY?**

There is no payment for participation in this study. You will be provided complementary refreshments at the focus group.

#### **WILL THERE BE ANY COSTS?**

Your participation in the study will not involve any additional costs to you.

#### **IF I HAVE ANY QUESTIONS OR PROBLEMS, WHOM CAN I CALL?**

If you have any questions about the research now or later, please contact Tina Hurlock-Chorostecki, or Dr. Cheryl Forchuk.

If you have any questions regarding your rights as a study participant, or the conduct of the study you may contact the Office of Research Ethics.

**Please initial the bottom of each page to indicate you have read it.**

This letter of information is yours to keep.

Christina (Tina) Hurlock-Chorostecki, PhD(c), NP-Adult  
 Doctoral Candidate

## Appendix D: Journal Letters of Permission.

### Email Letter of Permission: Journal of Interprofessional Care

Subject: RE: Journal of Interprofessional Care - Decision on  
Manuscript ID CJIC-2012-0254

Date: 01/23/13 04:35 AM

From: "Hunter, Dawn"

To: Christina Jean Hurlock-Chorostecki , Joanne Goldman

Dear Christina Hurlock-Chorostecki

Thank you for forwarding me the official letter of request. You are able to use your paper entitled, 'The Value of the Hospital-Based Nurse Practitioner Role: Development of a Team Perspective Framework', which is currently under review with the *Journal of Interprofessional Care*, as a chapter in your thesis. As you are stated in your letter, please do include a note to say that this paper is being considered for publication in the journal.

Please do not hesitate to contact me should you need anything else.

Kind regards

Dawn

**Dawn Hunter**  
Managing Editor

**informa** healthcare

**Email Letter of Permission: Journal of Interprofessional Care**

Subject: RE: letter of permission request  
Manuscript ID CJIC-2013-0065

Date: 03/28/13 05:25 AM  
From: "Hunter, Dawn"

To: Christina Jean Hurlock-Chorostecki

Dear Dr. Christina Hurlock-Chorostecki

Thank you for your email. We grant you permission to use the paper entitled "Labour saver or building a cohesive interprofessional team: The role of the NP in hospital settings using grounded theory", which is currently under consideration for publication in the *Journal of Interprofessional Care*, in your thesis.

As you state below, please do include a footnote stating that the above paper has been submitted for review.

Please do not hesitate to contact me should you need anything else.

Kind regards

Dawn

**Dawn Hunter**  
Managing Editor

**informa** healthcare

## Appendix E: Team Focus Group Interview Tool.

### Semi-Structured Interview Guide

#### Team Focus Groups

Welcome to our focus group for the project **Integration of Specialty Nurse Practitioners into the Ontario Health Care System**. You have volunteered to participate in a focus group to share your ideas around the nurse practitioner/advanced practice nursing role on your unit. In this session we will refer to them as NP/APN.

The project Research Assistant, [name], is here today to provide administrative support. The focus group facilitator is Tina Hurlock-Chorostecki, who is leading the evaluation of the project.

This session will be recorded and transcribed for analysis as part of the evaluation. You will not be identified by name in any report or publication of this material. You will be identified by profession (e.g. nurse, respiratory therapist). You are free to get up and walk around during the session and to leave at any time. The session will last approximately 60 minutes and may end earlier depending on the group discussion.

We have a list of questions we will ask. From the responses of the group we will ask additional questions to help clarify any additional information. Please feel free to add any additional information.

1. Please describe your experience in working with nurse practitioner/advanced practice nurses in general and on your unit.
2. Has the experience now and/or previously been positive or negative?
3. Why have the NP/APN role in your unit?
4. How does NP/APN role influence pt care?
5. What are key attributes of NP/APN role?  
Prompts may include:
  - a. Describe your view of the impact the NP/APN role has on the functioning of the team in your area.
  - b. What is your view of the impact of the NP/APN role on communication around patient care?

- c. What is your view of the impact of the NP/APN on bringing forward best practices (evidence-based care)?
  - d. What is your view of the impact of the NP/APN role on patient continuity of care?
  - e. Does the NP/APN role impact of access to care for the patients and team members?
6. How does the team react to NP/APN role?
  7. What are the biggest barriers to the influence of the NP/APN?
  8. What helps make the NP/APN role successful?
  9. What is the impact of nursing leadership on the NP/APN role – local Director?
  10. Do you have anything further you would like to add?



## **Appendix F: NP Focus Group Interview Tool.**

### **Semi-Structured Interview Guide**

#### **NP Focus Groups**

Welcome to our focus group for the project Hospital-based NP practice: An exploration of interprofessional teams. You have volunteered to participate in a focus group to share your perceptions of the value and socio-political positioning of your role and to share your thoughts on an interpretation of team perceptions of the nurse practitioner role.

My name is Tina Hurlock-Chorostecki. I am leading the evaluation of the project and will be the facilitator of the focus group today.

This session will be recorded and transcribed for analysis as part of the evaluation. You will not be identified by name in any report or publication of this material. You will be identified only by the name you wish to provide. You are free to get up and walk around during the session. You are free to leave at any time. The session will last approximately 60 to 90 minutes and may end earlier depending on the group discussion. If you wish further information on this study, please sign the sheet on the table. The bookmark you have been provided has the url for a weblog. I will be posting information on this regularly. Please visit it to review the model as it is changing and feel free to make comments.

The goal of this session is to gain your perceptions of your role and to elicit your thoughts of an interpretation of perceptions of team members from previous focus groups. I will start by asking you to introduce yourself by a first name, your NP specialty certificate, years of practice as an NP, and your work environment (program name and inpatient, outpatient or both). I invite dialogue related to your thoughts of the value of your NP role. Stories that illustrate your comments are welcomed. I have a list of prompts I may use to encourage reflection and dialogue. From the responses of the group I may ask additional questions to help clarify information shared. Please feel free to add any information you feel is relevant. Later in the time allotted I will share with you an

interpretation of the NP role value as perceived by team members at previous focus groups and invite your comments and reflection on this interpretation.

Are there any questions before we begin?

Introduction: Please state your first name, your NP specialty certificate, years of NP practice, and place of work (program and inpatient/outpatient ). (round table introductions – I will start)

1. I would like to explore your perceptions of the value your role. Please describe the value your role brings to the patients and families in your care and the interprofessional team members you work with.
2. What does interprofessional practice mean to you?
3. Please describe how you act interprofessionally. What does this mean to you, your patients, your team members, your management team?
4. Please describe challenges or situations that impact your ability to practice interprofessionally. What makes this a challenge/benefit for you?
5. Where do you believe you fit within the organization of the team? What do you experience (hear, see, read) that leads you to this position within the team? These may include social relations, public opinion, media generated opinion, language (inclusive or exclusive), personal passion, policies, or history of the role.
6. What actions do you engage in to create or adjust your position within the team?
7. Do you have anything further you wish to add?

\*Note: results from phase one may alter or add prompts to this list to foster depth and clarity of emerging themes.

(After personal dialogue of role value)

I would like to now share with you the interpretation of the hospital employed NP role arising from my analysis of 24 focus groups of hospital team members. I invite your thoughts and comments, both positive and negative, related to this preliminary interpretation. Please feel free to share your initial “gut feelings” as well as reflective insights.

Additional prompts if required:

1. What in this interpretation resonates with you as a realistic view of the NP role?

2. What do you feel is missing or understated in the interpretation that is important to you?
3. Any additional comments?

## Appendix G: Research Study Quality.

Quality of this research study is established using the criteria of credibility, originality, resonance, and usefulness as described by Charmaz (2006). Quality of the first phase of the study was described in Chapter 3. The following chart extends this information to include processes used throughout the entire study to ensure quality research.

**Table 8: Research Quality.**

Criteria	Approach used
Credibility	<ul style="list-style-type: none"> <li>• Open ended questions were used during interviews to reduce researcher influence on participants.</li> <li>• Interview questions were altered to address participant responses and aid in extracting details of emerging concepts.</li> <li>• A large range of participant types were invited to increase richness of data beyond the NP and the nursing-medicine dyad.</li> <li>• A wide variety of hospital types, program specialties, and interprofessional team members were invited to foster credible application of findings.</li> <li>• Transcription and first level coding were done immediately following interviews to support theoretical sampling.</li> <li>• Theoretical sampling of literature emerged from data of potentially known concepts. Theoretical sampling of NP participants emerged from data of missing and understated concepts.</li> <li>• Standard questions were used throughout constant comparison to create depth of meaning and highlight where theoretical sampling should occur.</li> <li>• Researcher memoing was done regularly to enable explicit understanding of sensitizing concepts that trigger theoretical thoughts, to highlight researcher perspective influence, and increase abstraction of emerging concepts.</li> <li>• Peer checking with the principal investigator of the previous study, advanced practice nurses experts, and NPs ensured a balance of researcher interpretation with reality.</li> </ul>
Originality	<ul style="list-style-type: none"> <li>• Researcher use of standard questions to ask of the data maintained a focus on the study intent.</li> <li>• Researcher memoing immediately following an interview noted data of new interest or surprise to be explored further.</li> <li>• Team member perspective was coded first and enabled openness to an interpretive frame that was not the researchers.</li> </ul>

- Emerging concepts that challenged researcher preconceptions were addressed.
  - Extant literature explored throughout analysis highlighted fit within current literature or a fresh insight.
  - Inviting comments from advanced practice nurse experts, and interprofessional experts encouraged insights into new conceptual rendering.
- Resonance
- Exploring privilege and power provided opportunities to interpret tacit processes.
  - Principal investigator of the previous study concurred the concepts within the team perspective framework resonated with participant voices.
  - NP reflection on the team perspective framework suggested the early framework made sense to NPs.
  - Presentation of the emerging HB NP IP theory to multiple NPs revealed acceptance the framework resonated with them.
  - Theoretical sampling of extant literature linked emerging concepts with leadership, mentoring, education, trust, and legitimacy.
  - Researcher theoretical sensitivity to interprofessional collaboration and teamwork aided in identifying concept properties similar to interprofessional literature.
  - Comparison of framework concepts to interprofessional theory aided in exploring links to current knowledge.
- Usefulness
- Category priorities within the emerging HB NP IP theory were determined through quality of discussions as well as quantity thereby ensuring useful application.
  - The emerging HB NP IP theory remains focused on process grounded in participant experiences enabling its use within everyday practice.
  - Clear identification of points of view enables usefulness of the emerging HB NP IP theory to multiple roles.
  - Clear descriptions of processes related to categories enhance application within everyday practice.
  - Described antecedents and consequences provide guides to practice.
  - Comparison of the HB NP conceptual framework with interprofessional theory increases transferability of the knowledge beyond that of the participants.
- 

*Note:* from Charmaz, K. (2006). *Constructing grounded theory*. London: Sage Publications.

## Appendix H: HB NP IP Practice Theory.

Category:	Focus on Team Working
Role value meaning.	
Definition:	<ul style="list-style-type: none"> <li>Engaging multiple professionals, working together or with other programs, to coordinate patient care and education.</li> </ul>
Importance:	<ul style="list-style-type: none"> <li>Builds an engaged team working toward quality patient care.<sup>2</sup></li> </ul>
Why actions are constructed.	<ul style="list-style-type: none"> <li>Supports efficient use of professional roles.<sup>1</sup></li> </ul>
Pre-requisites:	<ul style="list-style-type: none"> <li>Trust.<sup>1</sup></li> <li>Inclusion/appreciation.<sup>2</sup></li> </ul>
Related sub-categories:	<ul style="list-style-type: none"> <li>Enable team efficiency.</li> <li>Working together.</li> </ul>
How actions are constructed.	<ul style="list-style-type: none"> <li>Filter &amp; assess knowledge.</li> <li>Legitimate voice.</li> </ul>
Properties:	<ul style="list-style-type: none"> <li>Clinical actions that keep the NP available to team members. Actions that maintain a repository of patient information and broad system resources. Use of communication that links professionals and ensures timely, accurate, and problem solving information.</li> <li>Actions that enable respectful bridging of professional boundaries to fill gaps and to improve team efficiency. Actions to engage team members in changing levels of IP work.</li> <li>Actions that seek opportunities for knowledge to support team needs. Actions that provide education to team members.</li> <li>Clinical actions that require an expanding scope of practice to move care decisions forward in a timely manner. Actions that negotiate clarity of NP authority to make clinical decisions.</li> <li>Actions to develop and maintain trust in role and person.</li> </ul>
Examples:	<p>Consistent presence<sup>1</sup></p> <p>Available<sup>1</sup></p> <p>Know the healthcare system<sup>1</sup></p> <p>Act as a resource for team<sup>1,2</sup></p> <p>Follow up with patient issues and team concerns<sup>1</sup></p> <p>Have a focus on solving issues<sup>1</sup></p> <p>Focus on key issues<sup>1</sup></p> <p>Address issues quickly<sup>1</sup></p> <p>Know team roles<sup>1</sup></p> <p>Coordinate care<sup>1</sup></p> <p>Connect with team members<sup>1</sup></p> <p>Use team member knowledge and skills to their maximum<sup>2</sup></p> <p>Acknowledge team member perspective as important<sup>2</sup></p> <p>Create connections between teams<sup>1,2</sup></p> <p>Maintain knowledge of the patient and changing plan of care over time<sup>1,2</sup></p>

Fill gaps <sup>1</sup>  
 Engage in conflict resolution <sup>1</sup>  
 Invite team member perspectives <sup>1,2</sup>  
 Display confidence in team member knowledge, values expertise <sup>2</sup>  
 Read, critique, & disseminate new knowledge <sup>1</sup>  
 Provide formal/informal education <sup>1,2</sup>  
 Resource for understanding plan of care, explains rationale <sup>2</sup>  
 Ensure evidence based practice <sup>1,2</sup>  
 Negotiate role overlap, balance extent of actions <sup>1</sup>  
 Lead change <sup>1,2</sup>  
 Authorized diagnosis, diagnostic testing, referral, prescribing <sup>1,2</sup>

- Outcomes:
- Efficient use of team member time.
  - Timely care delivery changes.
  - Increased patient safety when gaps are minimized.
  - Improved patient flow through the healthcare system.
  - Smooth transitions between levels of IP work required based on situation urgency.
  - Reduced errors.
  - Enhanced collaboration.

---

*Note:* 1 = team member perspective; 2 = NP perspective.

Category:	Evolve the Role & Advance the Specialty
Role value meaning.	
Definition:	<ul style="list-style-type: none"> <li>• Identifying gaps and adjusting the role to address gaps.</li> </ul>
Importance:	<ul style="list-style-type: none"> <li>• Sustains the NP role.<sup>2</sup></li> </ul>
Why actions are constructed.	<ul style="list-style-type: none"> <li>• Improves quality and safety of care.<sup>1,2</sup></li> </ul>
Related sub-categories:	<ul style="list-style-type: none"> <li>• Gap vigilance.</li> <li>• Create &amp; evolve the role.</li> </ul>
Properties:	<ul style="list-style-type: none"> <li>• Actions using research knowledge and skill to monitor for changing needs (gaps) in the program, team, patient population, and specialty. Actions of responding to patient, team, program, and specialty needs and gaps through flexible role change.</li> <li>• Actions of seeking knowledge to support evidence-based and best practice. Actions supporting development and implementation of guidelines, policies, and other supportive documents. Actions that seek out opportunities to gain or share knowledge to support specialty advancement.</li> <li>• Leader related actions aimed to examine, strategize, and enact changes to assist in attaining organizational efficiency goals. Actions of leading special projects.</li> <li>• Education and mentoring for new NP roles, NP students, and NP graduates.</li> </ul>
Examples:	Explore and respond to program needs and gaps <sup>1</sup>

Leadership activities <sup>1,2</sup>  
 Research activities <sup>1,2</sup>  
 Filter and assess knowledge available (be aware of new evidence) <sup>1,2</sup>  
 Knowledge Translation activities: Keep team up to date, share knowledge outside team (across organizations, province, nation) <sup>1</sup>  
 Participate or lead program change <sup>1</sup>  
 Ensure evidence-based or best practices <sup>1,2</sup>  
 Know the broader healthcare system, build a network for knowledge <sup>1</sup>  
 Be a resource for more than tasks <sup>2</sup>  
 Advocate for Team Member roles <sup>2</sup>  
 Flex time & responsibilities to address gaps <sup>1</sup>  
 Reduce duplication of care <sup>2</sup>  
 Listen to those outside team (community) <sup>2</sup>  
 Connect with community healthcare providers <sup>2</sup>  
 Be actively involved in big picture (program vision, hospital vision) <sup>1,2</sup>  
 Explore outside of program for ways to change approaches <sup>2</sup>  
 Participate in Quality Improvement activities (program/hospital) <sup>2</sup>  
 Push boundaries <sup>2</sup>  
 Lead or represent on committees (within the program/hospital/LHIN) <sup>2</sup>  
 Champion projects <sup>2</sup>  
 Create trust in role and self <sup>1</sup>  
 Actively participate in creation of new NP roles <sup>2</sup>  
 Mentor other NPs and nurses <sup>2</sup>  
 Accept/request mentoring <sup>2</sup>  
 Evolve personal specialty practice and NP practice in general <sup>1,2</sup>  
 Be willing and flexible to change role <sup>1,2</sup>  
 Prepare incoming NPs for high level of accountability <sup>2</sup>  
 Maintain nursing in NP practice <sup>2</sup>  
 Communicate knowledge and needs between system or organization and clinical practice <sup>1,2</sup>

- Outcomes:
- Improved healthcare delivery
  - Enhanced knowledge between organizational and clinical goals
  - Timely practice change based in evidence or best practice
  - Increased care quality and safety with gap reduction
  - NP role satisfaction and sustainment
  - NP role understanding (improved team acceptance, improved role flexibility supported)
  - Improved NP role integration
  - Addressed managerial and informational tensions and privileges
  - Improved NP role flexibility (Manager influence)

---

*Note:* 1 = team member perspective; 2 = NP perspective.



Category:	Hold Patient Care Together
Role value meaning.	
Definition:	<ul style="list-style-type: none"> <li>Applying system knowledge and direct patient care approaches to focus on returning patients to intact meaningful lives.</li> </ul>
Importance: Why actions are constructed.	<ul style="list-style-type: none"> <li>Reduces gaps in patient care and improves safety.<sup>1,2</sup></li> <li>Provides consistency for team member roles.<sup>1</sup></li> <li>Improves patient flow through the healthcare system and reduces recidivism.<sup>1,2</sup></li> </ul>
Related sub- categories:	<ul style="list-style-type: none"> <li>Knowledge broker for patient &amp; family.</li> <li>Reducing patient/family burden.</li> <li>Legitimate voice.</li> </ul>
Properties:	<ul style="list-style-type: none"> <li>Clinical actions to monitor and solve patient issues. Actions of authorized decision-making, diagnosing, testing, prescribing, referring including following-up tests and plans.</li> <li>Actions of communication with patient and family. Actions focused on social determinants of health, holistic care.</li> <li>Actions to maintain a repository of information of the patient, their needs, and response to treatment.</li> <li>Actions to link patients beyond the NP specialty across the healthcare spectrum.</li> </ul>
Examples:	<p>Solve patient issues<sup>1</sup></p> <p>Move plan of care forward<sup>1,2</sup></p> <p>Quickly focus on key issue<sup>1</sup></p> <p>Create trust with patient &amp; family<sup>2</sup></p> <p>Resource for team questions &amp; care suggestions<sup>1</sup></p> <p>Problem solving (diagnosis, diagnostic testing, prescribe, refer)<sup>1,2</sup></p> <p>Accountable for follow up<sup>1</sup></p> <p>Connect with patient &amp; family<sup>1</sup></p> <p>Consistent person for patient &amp; family<sup>1,2</sup></p> <p>Communicate with patient &amp; family at their level of understanding<sup>1</sup></p> <p>Reduce family frustrations with visibility and communication<sup>1,2</sup></p> <p>Resolve patient &amp; family concerns<sup>1</sup></p> <p>Know patient (health issues, coping, needs) and response to care<sup>1,2</sup></p> <p>Monitor subtle patient changes<sup>1</sup></p> <p>Maintain knowledge of patient and family issues<sup>1</sup></p> <p>Follow up with patient &amp; family concerns<sup>1</sup></p> <p>Provide holistic patient care (include social determinants of health, life style choices, quality of life, and patient choice for hospital care)<sup>1,2</sup></p> <p>Know healthcare system to enable successful transition to community level of care<sup>2</sup></p> <p>Coordinate transition to community care<sup>2</sup></p> <p>Create an NP network<sup>2</sup></p> <p>Set up patient with appropriate services (in hospital)<sup>2</sup></p> <p>Gain and use knowledge of other specialties to aid in whole patient care<sup>2</sup></p>

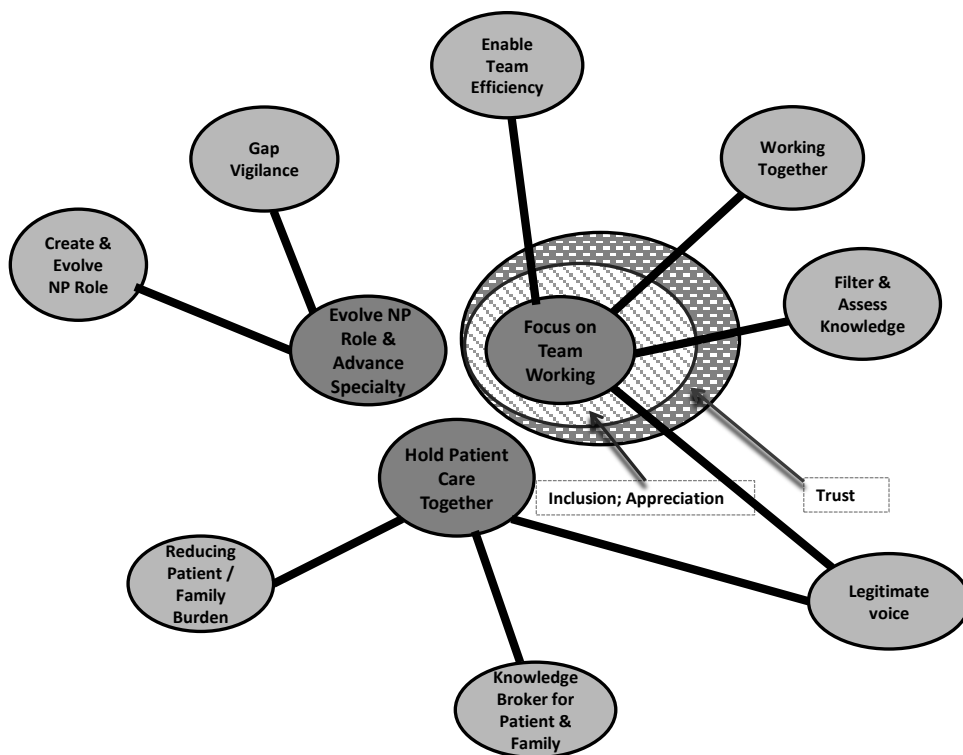
Gain knowledge of and use community services <sup>2</sup>  
 Make community referrals <sup>2</sup>  
 Expedite referrals <sup>1,2</sup>  
 Address prevention and management of health and co-morbidities as well as acute specialty care <sup>2</sup>

- Outcomes:
- Reduced adverse events and errors
  - Reduced gaps
  - Reduced patient and family anxiety / frustration with timely care decisions
  - Patient & family satisfaction with care
  - Facilitates patient flow across the healthcare system
  - Facilitates patient flow within the hospital
  - Seamless patient transitions
  - Reduced recidivism

---

*Note:* 1 = team member perspective; 2 = NP perspective.

**Figure 4: HB NP IP Practice Theory.**



## Curriculum Vitae

**Name:** Christina J. Hurlock-Chorostecki

**Post-secondary  
Education and  
Degrees:**

Lambton College  
Sarnia, Ontario, Canada  
1981 Nursing Diploma

University of Windsor  
Windsor, Ontario, Canada  
1998 B.Sc.N.

University of Windsor  
Windsor, Ontario, Canada  
2001 M.Sc.N.

University of Toronto,  
Toronto, Ontario, Canada  
2002 NP Diploma

Western University  
London, Ontario, Canada  
2013 Ph.D.

**Honours and  
Awards:**

Sigma Theta Tau, Iota Omicron Chapter  
Research Award (\$1500.00)  
2011

Western University  
Graduate Thesis Research Award (\$1000.00)  
2011

Sigma Theta Tau, Iota Omicron Chapter  
Clinical Excellence Award  
2010

Nurse Practitioners' Association of Ontario  
Nurse Practitioner Leadership Award  
2007

Pfizer Pharmaceuticals & NPAO  
Clinical Excellence Award (\$1500.00)  
2007

St. Joseph's Health Care, London  
 Excellence in Leadership, Coaching & Mentoring Award  
 2004

Windsor University  
 Graduate Nursing Merit & Leadership Award  
 2000

**Work Experience  
 Teaching Related:**

Date	Position	Course	Supervisor	Department and Institute
October 2002 to present	Adjunct Assistant Professor	Guest speaker graduate NP classes & graduate nursing classes	Dr. C. Forchuk Dr. M. van Soeren Dr. S. Ray	Labatt School of Nursing, University of Western Ontario
January 2010 to April 2010	Contract	Development of cardiac related segments of Adult NP exam preparatory workshop	Ms. W. Kirenko	Bloomberg Faculty of Nursing, University of Toronto
October 2010	Contract	Pathophysiology for NP (Cardiac class)	Dr. M. van Soeren	School of Nursing, McMaster University
October 2009	Contract	Pathophysiology for NP (Cardiac class)	Dr. M. van Soeren	School of Nursing, McMaster University
February 2009	Contract	Item writer for NP examination	Dr. E. Staples	School of Nursing, McMaster University
June to August 2008	Contract	Development of 2 cardiac modules for online NP education		School of Nursing, University of Ottawa

April to May 2008	Contract	Development and delivery of PDA workshop for nurses across Ontario	Ms. I. Bajnok	RNAO Centre for Excellence
September 2004, 2005, 2007, 2009	Teaching Assistant	Central Line Insertion. Infection Control Education Day, 3 <sup>rd</sup> year Medical Clerks.	Dr. M. Johns	Schulich School of Medicine & Dentistry, University of Western Ontario
2001 winter semester	Teaching Assistant	Biomedical Ethics	Dr. D. Foley	Faculty of Nursing, Windsor University
1999 winter semester	Teaching Assistant	Nursing Research	Dr. D. Foley	Faculty of Nursing, Windsor University

**Work Experience  
NP Related:**

Date	Position	Institution
May 2012 to present	Nurse Practitioner, Adam Linton Dialysis Unit	London Health Sciences Centre
October 2008 to May 2012	Nurse Practitioner, Transitional Care Unit	St. Joseph's Health Care, London
April 2011 to present	Associate Scientist	Lawson Health Research Institute
April 2005 to October 2008	Nurse Practitioner, Cardiac Surgery Intensive Care	London Health Sciences Centre
January 2001 to April 2005	Nurse Practitioner, Intensive Care	St. Joseph's Health Care, London

**Brief Research Summary (5 years)**

PhD thesis research, 2011-2013. Hospital-based nurse practitioner practice: An exploration of interprofessional teams. **\$8,616.00** (Faculty advisor: Forchuk, C. Committee: van Soeren, M, Reeves, S, Orchard, C)

- Co-Investigator, 2010-2013 The development of research program to enhance utilization Of nurses and nurse practitioners in the Ontario health care system through discovery, integration and application. Nursing Research Fund, MoHLTC, Nursing Secretariat & Research Unit 2009/10. **\$1,252,152.00** (PI: Sidani, S., MacMillan, K. Co Investigators: Reeves, S., van Soeren, M., Donald, F., **Hurlock-Chorostecki, C.**, Staples, P.)
- Principal Investigator, 2009-2010. Nursing PDA Initiative and Site-investigator of University of Toronto Project. MOHLTC funded. Parkwood Hospital project (**\$12,511.00**). (PI for University of Toronto: Dr. D Doran).
- Co-Investigator, 2008-2009. Integration of Specialty Nurse Practitioners into the Ontario Health Care System. Nursing Research Fund, MoHLTC, Nursing Secretariat & Research Unit Grant # 06430. **\$315,000**. (PI van Soeren, M, **Hurlock-Chorostecki, C.** Co Investigators: Kenaszchuck, C, Abramovich, I, Reeves, S)
- Principal Investigator, 2007-2008. A case-control analysis of readmissions and deaths within 48 hours of discharge from a Cardiac Surgery Recovery Unit. London Health Sciences Centre, CSRU (internal funding). (PI: **C Hurlock-Chorostecki**. Co-Investigators: Butler, R, Bainbridge, D, Novick, R.)

### **Publications (2008 to 2013)**

#### ***Book Chapters:***

- Thurman, P., van Soeren, M, & **Hurlock-Chorostecki, C.** Acute Respiratory Distress Syndrome. (2012)IN: *Critical Care Nursing: A Holistic Approach*. Morton, PG & Fontaine, D eds. 10<sup>th</sup> ed. Lippincott Williams & Wilkins, Philadelphia.
- van Soeren, M, & **Hurlock-Chorostecki, C.** Acute Respiratory Distress Syndrome. (2009)IN: *Critical Care Nursing: A Holistic Approach*. Morton, PG & Fontaine, D. eds. 9<sup>th</sup> ed. Lippincott Williams & Wilkins, Philadelphia.

#### ***Invited Commentaries:***

- van Soeren, M, & **Hurlock-Chorostecki, C.**, Pogue, P. & Sanders, J. (2008). Primary Healthcare Renewal in Canada: A glass half empty? *Health Care Quarterly* 8(2), 39-44.
- Hurlock-Chorostecki, C.** (2009). Commentary on: Sathiaraj E, Murthy S, Mansard MJ, *et al.* Clinical Trial: Oral feeding with a soft diet compared with clear liquid diet as initial meal in mild acute pancreatitis. *Evidence Based Nursing* 12, 22.

#### ***Reports:***

- van Soeren, M., **Hurlock-Chorostecki, C.**, Kenaszchuk, C., Abramovich, I., & Reeves, S. (2009). *The Integration of Specialty Nurse Practitioners into the Ontario Healthcare System* (Research Report No. 06430).

#### ***Journal Articles:***

- Hurlock-Chorostecki, C.**, Forchuk, C., Orchard, C., van Soeren, M., & Reeves, S. (2013). Labour saver or building a cohesive interprofessional team: The role of the NP in hospital settings using grounded theory. Under review for publication: *Journal of Interprofessional Care*.
- Hurlock-Chorostecki, C.**, Forchuk, C., Orchard, C., Reeves, S., & van Soeren, M.

- (2013). The value of the hospital-based nurse practitioner role: Development of a team perspective framework. Reviewed for publication: *Journal of Interprofessional Care*.
- van Soeren, M., **Hurlock-Chorostecki, C.**, & Reeves, S. (2011). The role of nurse practitioners in hospital settings: Implications for interprofessional practice. *Journal of Interprofessional Care* 25(4), 245-51. early online December 23, 2010. doi: 10.3109/13561820.2010.539305
- van Soeren, M., **Hurlock-Chorostecki, C.**, Goodwin, S. & Baker, E. (2009). The Primary Health Care Nurse Practitioner in Ontario: A Workforce Study. *Canadian Journal of Nursing Leadership* 22(2), 58-72.
- Kroh, M., & **Hurlock-Chorostecki, C.** (2009). A Shared Staffing Model in Two Critical Care Environments. *Canadian Nurse* 105 (2), 23-25.
- Hurlock-Chorostecki, C.**, van Soeren, M., & Goodwin, S. (2008) The Acute Care Nurse Practitioner in Ontario: A Workforce Study. *Canadian Journal of Nursing Leadership* 21(4), 96-112.
- 7 published articles 1999-2007.

### **Presentations (2008 to 2013)**

#### ***Poster Presentations***

- **Hurlock-Chorostecki, C.**, Hunt, J, Yates, D., & Acorn, M. *Let's Be CLearE About Advanced Nursing Roles in Complex Care: Who Does What?* NPAO Conference, London, Ontario, November 2012
- **Hurlock-Chorostecki, C.**, *Hospital-based Nurse Practitioner Practice: An Exploration of Interprofessional Teams.* Lawson Health Research Day, London, Ontario, March 2012
- **Hurlock-Chorostecki, C.**, Hunt, J, Yates, D., & Acorn, M. *Let's Be CLearE About Advanced Nursing Roles in Complex Care: Who Does What?* Complex Continuing Care Conference, Toronto, Ontario, April 2011
- Ferguson, H., Parisien, C., & **Hurlock-Chorostecki, C.** *Moving Complex Care into the 21<sup>st</sup> Century: Welcome to the Transitional Care Unit!* Complex Continuing Care Conference, Toronto, Ontario, April 2011
- van Soeren, M., **Hurlock-Chorostecki, C.**, Kenaszchuck, C., Reeves, S. *The Integration and Impact of Nurse Practitioners on Team Function.* Sigma Theta Tau Biennial Convention, Indianapolis, Indiana, October 2009.
- **Hurlock-Chorostecki, C.**, Butler, R., Bainbridge, D., Novick, R., *A Case-Control Analysis of Readmissions and Deaths Within 48 Hours Of Discharge from A Cardiac Surgery Recovery Unit.* Canadian Cardiovascular Congress, Toronto, Ontario, October 2008.
- 7 poster presentations 2001-2007

#### ***Oral Presentations-Invited:***

- **Hurlock-Chorostecki, C.** Forchuk, C., Orchard, C., van Soeren, M, & Reeves, S. *A New Theory of NP Practice within Hospital Interprofessional Teams.* London & Region Advanced Practice Nurses Retreat. London, April 5, 2013.

- **Hurlock-Chorostecki, C.** Forchuk, C., Orchard, C., van Soeren, M., & Reeves, S. *A Grounded Theory of Hospital-Based Nurse Practitioner Practice*. Ontario Hospital Association Conference, Toronto, March 25, 2013.
- **Hurlock-Chorostecki, C.** *A Career of Curiosity, Creativity, & Innovation*. Iota Omicron Induction Ceremony, University of Western Ontario, London, November 2011.
- **Hurlock-Chorostecki, C.** *NPs into the 21<sup>st</sup> Century: Using technology to make life, work and patient safety easier*. Half day Workshop. Nurse Practitioners' Association Conference, Hamilton, November 2011.
- **Hurlock-Chorostecki, C.** *Where we're at and where we're going: the Future of Canadian Healthcare (Panel Member with an Ontario physician and an Informatics Specialist)*. Canadian Undergraduate Conference on Healthcare, Kingston, Ontario, November 2010.
- **Hurlock-Chorostecki, C.** *iNP: Using Apple PDAs to make life, work and patient safety easier*. Repeated half day Workshop. Nurse Practitioners' Association Conference, Toronto, November 2010.
- **Hurlock-Chorostecki, C.** *Multiple Perspectives on Knowledge to Action: Engage, Enable, Inspire (Panel Member with 3 nursing leaders across Canada - political, education, research and clinical)*. Community Health Nurses of Canada Conference, Toronto, Ontario, June 2010.
- **Hurlock-Chorostecki, C.** *APNs and Technology: Can you really afford not to be current?* Hamilton APN Grand Rounds, Burlington, Ontario, June 2010.
- **Hurlock-Chorostecki, C.** *Integration of Specialty Nurse Practitioners into Ontario's Health Care System*. Ontario Hospital Association Conference; Integrating Nurse Practitioners Across the Continuum of Care. Toronto, Ontario, March 2010.
- **Hurlock-Chorostecki, C.** *Technology to Enable Best Practice*. Chatham Kent Health Alliance Champions Breakfast, Chatham, January 2010.
- **Hurlock-Chorostecki, C.** *Writing to be Published*. Chatham Kent Health Alliance Leadership Lunch, Chatham, January 2010.
- **Hurlock-Chorostecki, C.** *Nurse Practitioners an Innovative Solution for Canada's Health Care*. Sanofi-Aventis Strategic Forum, Montreal, June 2009.
- **Hurlock-Chorostecki, C.** *Nurse Practitioners and the Next Generation of Collaborative Care; Broadening the Scope*. Insight Conference on Collaborative Primary Health Care, Toronto, March 2009.
- **Hurlock-Chorostecki, C.**, *In the Palm of Your Hand or in Your Pocket: PDAs and Nurse Practitioner Practice*. A one day workshop. NPAO Annual Conference, London, November 2008.
- **Hurlock-Chorostecki, C. & Loft, M.**, *Nurse Practitioner Role Implementation: Transitions, Reflections, Directions*. Student NP Luncheon Lecture. NPAO Annual Conference, London, November 2008.
- 15 invited presentations 2001-2007



### ***Oral Presentations - Abstract***

- **Hurlock-Chorostecki, C.**, *Hospital-Based NP: An emerging model of NP interprofessional practice*. Nurse Practitioners Association of Ontario Annual Conference, London, Ontario, November 2012
- **Hurlock-Chorostecki, C.**, *Hospital-based Nurse Practitioner Practice: The Team Perspective*. American Academy of Nurse Practitioners Annual Conference, Orlando, Florida, June 2012.
- **Hurlock-Chorostecki, C.**, *Hospital-based Nurse Practitioner Practice: An Exploration of Interprofessional Teams*. Labatt Family School of Nursing & Iota Omicron Annual Research Conference, London, Ontario, May 2012
- van Soeren, M., **Hurlock-Chorostecki, C.**, & Reeves, S. *The Positive Impact of Nurse Practitioners on Interprofessional Care Promotes Improved Health Resource Utilization*. Canadian Association for Health Services and Policy Research (CAHSPR) Conference, Toronto, Ontario, May, 2010.
- **Hurlock-Chorostecki, C.**, van Soeren, M. *The Integration and Impact of Nurse Practitioners on Team Function*. Nursing Research Conference University of Western Ontario, May 2009.
- **Hurlock-Chorostecki, C.**, *Keeping the Patient Whole: Nurse Practitioner led approach to long stay patients in a Canadian Cardiovascular ICU*. British Association of Critical Care Nurses Conference, York, UK. September 2008.
- 10 abstract presentations 2003 - 2007

### **OTHER SCHOLARLY AND PROFESSIONAL ACTIVITIES**

Member: College of Nurses of Ontario – Registered in General Class Nursing since 1981. Registered in Extended Class Nursing, NP-Adult certificate since 2008.

Member: Registered Nurses Association of Ontario since 1998

Member: Nurse Practitioners' Association of Ontario since 2001

Board Member: Nurse Practitioners' Association of Ontario (2004-10)

President: Nurse Practitioners' Association of Ontario (November 2008-09)

Member: KT Canada Trainee since 2010

Chair: London and Region Advanced Practice Nurses (2003-05)

Political Officer: London and Region Advanced Practice Nurses (2007-09)

Member: Canadian Nurses Association - *certified nurse in critical care* (1995-2011)

Invigilator: Canadian Nurses Association certification exam (2011)

Member: American Academy of Nurse Practitioners since 2002

Member: Sigma Theta Tau Iota Omicron since 2001

Peer Reviewer: Canadian Journal of Nursing Leadership since 2008

Peer Reviewer: Journal of Interprofessional Care since 2012

Committee Member: Physician Assistant Implementation Steering Committee for Ministry of Health & Long Term Care (2007-2011)

Committee Member: Nursing Toolkit Advisory Team Nursing Secretariat, Ministry of Health, (2008-2009)