Separate Estates:
A case study analysis of competency assessment processes among clinicians in a Canadian academic hospital

M. Leigh Chapman

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
Graduate Department of Nursing
Lawrence S. Bloomberg Faculty of Nursing
University of Toronto

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Abstract

This study examined competence and competency assessment of regulated health professionals (RHPs) through a case study approach that utilized the Boyatzis model of effective performance. In order to explore how competency assessment was enacted and understood, and how RHPs perceived and experienced competency assessment in a large Canadian academic hospital, the study used three sources of data: key informant interviews (n=19), focus group interviews (n=32), and a review of organizational documents. Participants included RHPs, managers, directors, executives, and other non-health participants, such as human resources professionals. Data were analyzed inductively using Braun and Clark’s (2006) theoretical thematic analysis, and deductively using Hsieh and Shannon’s (2005) directed content analysis, all in NVivo Version 11 for Windows.

Data revealed the absence of common language for competence across the hospital’s RHP participants. Participants referred to regulatory concepts and competency frameworks when asked to define and describe competence or competency assessment in the hospital setting. At the same time, a strong organizational rhetoric around excellence was evident, as was frequent commentary on incompetence. There was little discussion on RHPs who fell between excellence and incompetence. When describing organizational competency assessment processes, participants were equivocal about what was assessed and whether this assessment focused on organizational values or practice competencies.
Fundamental differences in competency assessment processes exist for unionized RHP employees, non-unionized RHP employees and appointed physicians who were not employees, creating a situation of “separate estates”. These estates made interprofessional collaboration difficult by reinforcing uniprofessional perspectives, preventing organizational level discussions of competence and limiting the organization’s ability to harmonize processes across RHPs. Competence did not feature as a prominent concern for most participants who expressed the view that as long as the individual remained in good standing with their regulatory body, competency was not a matter of organizational concern.

Recommendations call for healthcare organizations to implement best practice approaches to competency assessment across all RHPs; to establish congruence between organizational and regulatory assessments of competence; and to align assessment language between healthcare workplaces and regulatory bodies in order to facilitate meaningful discussions concerning competence in the practice setting and address the issue of “separate estates”.

Dedication

This thesis is dedicated to my beautiful Liam, who grew up over the life of the project.
Acknowledgements

My heartfelt gratitude for guiding me through the entire PhD process goes to my doctoral supervisor, Dr. Sioban Nelson. Sioban expertly guided me through all stages of the PhD journey with understanding and empathy. I appreciated Sioban’s encouragement to write (and write!) at all phases of the PhD journey and guidance in steering me back to my thesis when life, at times, deterred my focus.

I feel honored to have been guided by such an esteemed committee which included Dr. Brian Hodges, Dr. Lianne Jeffs, and Dr. Elise Paradis. Your wisdom and belief in me and my work propelled me forward and I am deeply thankful for your support and encouragement.

I also value the thoughtful feedback from my external examiner, Dr. Sheri Price, and thorough questions from my internal examiner, Dr. Lisa Cranley.

To negotiate the juggling act of family life, work and doctoral studies requires a committed partner and this thesis would not have been possible without the support at home from my husband Scott. Our son Liam was a toddler when I started this work, and is now an interesting and engaging 9 year old who is really happy my thesis is now finished. I also owe huge thanks to my mom, who meticulously edited all of my written work, even at the most inopportune times, while also helping to babysit, mend clothes and cook.

My colleagues at the Wilson Centre and Lawrence S. Bloomberg Faculty of Nursing helped keep me grounded and provided solidarity throughout the long and sometimes lonely phases of doctoral work.

I lost half of my family during my PhD. Despite the devastating and painful losses of my brother and father, I was fortunate to have serendipitously gained a chosen family. The harm reduction community who once nurtured my brother, understood my family trauma and Brad’s death and generously embraced me while helping me grieve, even though joining this community meant that I experienced many more losses. My thesis was derailed at times by my engagement in the overdose crisis. Looking back, I know that this vital harm reduction work was necessary. I remain grateful for the opportunities to engage in frontline activism, social justice and direct
action. I will forever mourn the preventable losses of my friends, Raffi, Ang, and especially Leon (Pops) Alward.

I also acknowledge the financial support that I have received from the Canadian Nurses Foundation, Registered Nurses’ Foundation of Ontario, Nursing Leadership Network, Nursing Research Interest Group, as well as internal awards from both the University of Toronto and Lawrence S. Bloomberg Faculty of Nursing.
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PROTOCOL REFERENCE # 32635

February 5, 2018

Dr. Gioban Nelson
OFC OF V-PRES & PROVOST
DIVN OF V-P & PROVOST

M. Leigh Chapman
OFC OF V-PRES & PROVOST
DIVN OF V-P & PROVOST

Dear Dr. Nelson and M. Leigh Chapman,

Re: Administrative Approval of your research protocol entitled, "A case study analysis of competency assessment processes in a Canadian academic health sciences centre"

We are writing to advise you that the Office of Research Ethics (ORE) has granted administrative approval to the above-named research protocol. The level of approval is based on the following role(s) of the University of Toronto (University), as you have identified with your submission and administered under the terms and conditions of the affiliation agreement between the University and the associated TAHEN hospital:

- Graduate Student research - hospital-based only
- Storage or analysis of De-identified Personal Information (data)

This approval does not substitute for ethics approval, which has been obtained from your hospital Research Ethics Board (REB). Please note that you do not need to submit Annual Renewals, Study Completion Reports or Amendments to the ORE unless the involvement of the University changes to that ethics review is required. Please contact the ORE to determine whether a particular change to the University's involvement requires ethics review.

Best wishes for the successful completion of your research.

Yours sincerely,

Daniel Gyewu
REB Manager

Research Oversight and Compliance Office - Human Research Ethics Program
McKeen Building, 12 Queen's Park Crescent West, 2nd Floor, Toronto, ON M5S 1B8 Canada
Tel: 416 946-3773 • Fax: 416 946-3763 • ethics.review@utoronto.ca • http://www.research.utoronto.ca/for-researchers/administrative/ethics
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Chapter One: Introduction

Background

The problem of competency assessment emerged for me as a highly contextualized problem in practice. For clinicians working in health care organizations, competence is ostensibly an essential, yet often invisible, part of everyday practice and a regulatory requirement for all health professions. Yet, in my experience, a health professional’s regulatory obligations for competency assessment appear to be entirely disconnected from their practice and employment responsibilities. Furthermore, it has always been unclear to me how competence is understood and assessed in a workplace setting and if or how organizational processes relate to health professionals’ status with their regulatory body. Health professionals are required to engage in an institutionalized set of processes that are auditable under state sanctioned professional self-regulation (Nelson, 2012) and also abide by organizational rules and policies and procedures. Exploring competency assessment in the workplace among those with both organizational and regulatory accountabilities was precisely the issue that I wanted to explore further through this dissertation research.

In 2015, the then Ontario Deputy Ministry of Health and Long Term Care Dr. Bob Bell stated that "assessment of competency needs to be contextual and needs to take place in the environment in which providers work" (Bell, 2015). As a matter of principle it is hard to disagree with this statement, but for me it raised questions about how it could be achieved. And while I found Bell’s poignant call for a contextual assessment of competency in the workplace resonated, at the same time, I was left with many questions concerning the possibility of and supports for competency assessment in the practice setting.
Definitions and Conceptualizations of Competence

Definitional issues impact the operationalization of competence in various environments, and will be described in turn. Competence is understood in myriad ways, depending on the setting in which it is enacted. As a concept, competence takes on different meanings in regulation for pre versus post-licensure professionals. Similarly, competence is viewed in one light for trainees or learners in the field of health professions education, and in another light for those in the workplace under the domain of human resource management.

In the regulation of health professionals, *competence* has a very specific meaning. It connotes a minimum threshold for licensure and maintaining public protection; an individual attribute that is assessed and assured in safeguarding care in the public interest. Competency assessment also prioritizes the individual health care professional. In an effort to include all contexts of practice, regulatory bodies have focused on the generalist practitioner whose practice is apparently decontextualized.

In Canada, health regulatory colleges in each jurisdiction have several functions related to the provision of health care that are outlined in relevant regulation and legislation. In Ontario, the *Regulated Health Professions Act, 1991* and associated health profession Acts establish the governing framework for regulated health professions in Ontario (Queen’s Printer for Ontario, 2019a). Health professions in Ontario are self-regulated, which implies in part that the governing authority under professional law is granted to the members of the professional group (The College of Physicians and Surgeons of Ontario, 2019a). In regulating the practice and governing members of the professions, the *Regulated Health Professions Act, 1991* requires colleges to fulfil several requirements. Most health regulatory colleges summarize their authority under provincial legislation as consisting of a process for registration and entry to practice (i.e. pre-
licensure); monitoring and maintenance of standards of practice through quality assurance (QA) procedures; investigation of complaints; and professional misconduct issues (i.e. post-licensure) (College of Nurses of Ontario, 2019a; The College of Physicians and Surgeons of Ontario, 2019a). Clearly, the issue of competence pertains to all regulatory processes, however, the regulatory concept of competence for registration and entry to practice differs from the monitoring and maintenance of continued competence that is realized through QA procedures. For this study, my interest lies in the maintenance of competence post-licensure and how this is enacted in a hospital setting specifically.

Among those requirements established in the RHPA, 1991, there are several related specifically to the maintenance and assessment of continuing competence (i.e. quality assurance/QA) as follows:

- To develop, establish and maintain programs and standards of practice to assure the quality of the practice of the profession.
- To develop, establish and maintain standards of knowledge and skill and programs to promote continuing evaluation, competence and improvement among the members.
- To develop, establish, and maintain standards and programs to promote the ability of members to respond to changes in practice environments, advances in technology and other emerging issues. (Queen’s Printer for Ontario (2019b).

Members of the profession are accountable for their conduct and practice through self-regulation while the regulator provides assistance and oversight (College of Physiotherapists of Ontario, 2018a). However, both the level and amount of assistance and oversight varies greatly amongst all of the 26 health regulatory colleges in Ontario.

Although all regulated health professions in Ontario share common legislation (i.e. the RHPA), each regulatory college has a profession-specific act which details its interpretation and operationalization of the legislation. It is the profession-specific act that outlines the regulation
for members’ QA requirements for continuing competence. Each regulatory college develops its own processes to operationalize QA requirements for monitoring and assessing competence through profession-specific practices.

Differences in profession-specific acts result in a great deal of variety in how the monitoring of members’ continuing competence is achieved. For example, the College of Physicians and Surgeons of Ontario (CPSO) monitors and maintains standards of practice through feedback as well as peer and practice assessments (CPSO, 2019a; 2019b). The College of Physiotherapists of Ontario (CPO) require their respective members to maintain ongoing competence and continually improve their practice by completing a self-assessment, continuing professional development, and practice assessment (CPO, 2018b). The College of Nurses of Ontario (CNO) quality assurance program relies largely on practice reflection and also includes self-assessment, practice assessment and peer assessment (CNO, 2019a).

All regulatory colleges share a common definition of competence, despite differences in the operationalization of their QA programs. As a rule, regulatory colleges define competence as consisting of knowledge, skill and judgment. The College of Nurses of Ontario (CNO) (2018) elaborates on this basic regulatory conceptualization by defining competence as “A nurse’s ability to integrate the professional attributes required to perform in a given role, situation or practice setting. Professional attributes include, but are not limited to, knowledge, skill, judgment, attitudes, values and beliefs” (p.14). Other regulatory colleges also provide additional detail pertaining specifically to the expected competence of their members. For example, the College of Respiratory Therapists (RT) of Ontario (2019) details how RT competencies (i.e. knowledge, skills, judgment, and abilities) are acquired through RT education, employment and relevant experience.
Overall, the regulatory construction of competence described herein, including the definition of competence and continuing competence/QA program requirements, refers to an individual who is highly attuned to deficiencies in their competence and who has the ability to accurately self-assess. This reliance on self-assessment raises questions about what happens to regulated health professionals who, after meeting a competency threshold for entry-to-practice, are subsequently inaccurate in their self-assessment and unable to identify deficiencies in their competence. Furthermore, the regulatory notion of a competent individual operating in a seemingly generic, context-free environment contrasts with the highly contextualized practice setting of healthcare workplaces. This difference creates a juxtaposition between how competence is defined in regulation and how it is operationalized in healthcare workplaces.

Health professions education scholar Glenn Regehr (2015) suggested that self-assessment, which is so deeply entrenched in the regulation of health professionals, is manifested as *independence in practice* [emphasis added]. Regehr (2015) also criticized the lack of support structures in the practice environment. This construction of an independent practitioner who engages in self-assessment contradicts the realities of the practice environment, especially when considering the collaborative and interprofessional ways in which care is delivered. An individualistic notion of competence is also problematic given the myriad contextual influences in a health care workplace and highly contextualized interdependent practice setting.

The education of health professionals takes place in part in healthcare workplaces, therefore competence is *necessarily* context-specific in this field. Thus, the appeal of competencies lies in their ability to offer consistency across settings. Hodges and Lingard (2012) suggest that what counts as competence is evident in the ways in which educational programs are structured and in the accountability processes that are implemented around them. With respect to
medical education, they suggest that “competencies and outcome-based education are measures that the profession has adopted to better regulate itself in the context of public concerns about patient safety, differential access to care, and the medical profession’s struggle with the increasing complexities of practice” (Hodges & Lingard, 2012, p.2). Competence in this context is conceptualized as being closely connected to health professionals’ self-regulatory responsibilities.

Hodges & Lingard (2012) claim that the ubiquity of the idea of competence has led to imprecision surrounding competency terminology and a lack of clarity about competency assessment. Interchangeable use of the terms competence and competency has resulted in a lack of conceptual clarity in everyday vernacular. In an attempt to differentiate the terms competence and competency, Khan and Ramachandran (2012) provide helpful clarifications about the terminology in medical education. Khan and Ramachandran (2012) propose use of the term competency strictly for the skill itself and competence as the ability to perform the skill and attribute of the person performing the skill. Furthermore, Boursicot et al. (2011) describe competence as what an individual is able to do in clinical practice, while performance describes what an individual actually does in clinical practice [emphasis in original]. In the broader field of health professions education, the distinction between competence and performance is noteworthy and may be attributed to a differentiation between learners and those who can perform specific actions independently.

In the clinical context, competence implies having the ability to make satisfactory and effective decisions or to perform a skill in a specific setting or situation (Khan and Ramachandran, 2012). Competence here is highly contextualized and closely tied to performance. However, ten Cate, Snell & Carraccio (2010) critique the failure to consider the
interplay between competence and context in the determination of patient outcomes and application of competencies in the clinical environment as reductionist. They argue that competence entails “more than the possession of knowledge, skills and attitudes; it requires the ability to apply these in the clinical environment to achieve optimal results” (ten Cate, Snell & Carraccio, 2010, p.669).

Frank et al. (2010a) also highlight the importance of context in medical education in the following description of the term ‘competence’:

> Competence refers to the array of abilities across multiple domains or aspects of physician performance in a certain context. Statements about competence require descriptive qualifiers to define the relevant abilities, context, and stage of training. Competence is multi-dimensional and dynamic. It changes with time, experience and setting (p.641)

Competence in medical education is intended to convey something integrative and context-dependent as opposed to a strictly behaviourist and decontextualized abstraction of knowledge, skills and attitudes (ten Cate & Scheele, 2007; ten Cate et al., 2010). In this field, competence has been described as a holistic term that refers to a person’s overall capacity or ability to do something successfully (ten Cate and Scheele, 2007).

In their book entitled *Competency-based Nursing Education* Anema and McCoy (2010) describe competency as focused on an individual’s ability to perform activities related to work, life skills or learning and competence as actions or skills the person should be able to demonstrate. In this manner, competencies define the elements that are an expected part of one’s competent professional practice. Nurses’ competence is conceptualized in much the same way as other health professions. For example, Pijl-Zieber et al. (2014) consider competence to be a quality or state of being. Similarly, clinical competence for nurses is considered an outcome of personal skills developed through professional training courses (Tzeng, 2004), which too
parallels other health professions’ requirements of continuous learning and professional development. Thus, in the context of nursing education, competence is considered to reflect an individual’s skills or actions and a developmental outcome that is attained as a result of additional education and training. These conceptualizations of competence as dynamic and outcome-oriented also hold true for other health professionals.

Rather than focus on competence in one or two professions exclusively, others focus on competence in the health professions more generally. For example, in an Australian analysis of competencies in the health professions, Gonczi (1994) defines competence as follows:

1) a behaviourist or task-specific approach that is assessed by observation or performance for evidence;
2) an attribute or generic skills-approach and general attributes that are crucial to effective performance, based on general competences already learned; and
3) an integrated or task-attribute approach.

Gonczi’s (1994) description differs from more recent definitions of competence which have tended to move away from behaviourist and task-specific notions towards more holistic conceptualizations of competence (e.g. ten Cate & Scheele, 2007; ten Cate et al., 2010).

Common to all of the health professions’ education scholarship is a shared preoccupation with the need for competence to be assessed, observed and/or demonstrated. Moreover, while the “gold standard” (p.463) in assessment is to demonstrate competency, to do so requires having an assessment process for competency in place (Roberts et al., 2007). Distinctions between clinical competence and performance appear to be unique to health professions education but other fields share its focus on assessment and/or measurement of competencies.

In competency studies in organizational behaviour and human resource management, there is an explicit focus on the causal relationship between competency and performance. In
fact, scholars in this field have conducted competency studies aimed at testing competencies empirically to determine their predictive ability in relation to job performance (e.g. Boyatzis, 1982; 1986; Spencer and Spencer, 1993). These studies arose largely out psychologist David McLelland’s (1973) seminal work which shifted the impetus in organizational science away from academic aptitude and knowledge content tests, towards competency studies. The notion of competence being causally related to performance builds on McLelland’s (1973) initial conceptualization of competencies as a critical differentiator of performance. McLelland’s work revolutionized human resource management through the introduction of competency-based human resources and left a lasting impact on the field (Boyatzis, 2007).

*Competence at Work: Models for Superior Performance* by Spencer and Spencer (1993) is frequently cited as one of the most influential resources on competency in human resource management and among industrial-organizational psychologists. These authors cite a seminal job competence assessment (JCA) methodology initially developed by McClelland and McBer in the early 1970s that heavily influenced subsequent practice. Spencer and Spencer (1993) define competency as “an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation” (p.9). In this sense, competencies are underlying characteristics of people and a competency predicts behaviour in a number of situations and job tasks (Spencer and Spencer, 1993). According to this definition, a competency is considered to be causally related to behaviour and it is highly contextual.

Other descriptions of competency in organizational studies also emphasize the importance of context. For example, Araujo & Taylor (2012) describe a competency as consisting of any measurable characteristic of a person that differentiates a level of performance in a given job, role, organization or culture; as learned capabilities that are observable and
measurable. Thus, in the field of organizational behaviour and human resource management, competency is contextualized and competency definitions generally include job tasks or the job situation and describe a relationship between competency and job performance. The preoccupation with measurement and assessment found in health professions education also rings true in this definition by Araujo & Taylor (2012), and more broadly, in this field.

In their work on competencies, Spencer and Spencer (1993) place great emphasis on personality variables including motives, traits, self-concept, knowledge and skill. This work builds on McLelland’s (1973) initial positioning of competency variables as being more inclusive, holistic and comprehensive than other psychological constructs such as intelligence. Spencer and Spencer (1993) suggest that it is more cost-effective to provide training to secure employee abilities, such as knowledge and skill, and to select employees based on their core characteristics such as motives and traits. Divorcing knowledge and skills from other core characteristics in human resource management also differs from the regulatory conception of competence in health professions as comprising knowledge, skill and judgment. Emphasis on other personality variables in addition to knowledge and skill provides a more detailed conceptualization of competence. Moreover, the separation of knowledge from other personality variables has practical implications for human resource planning including the selection and training of employees. Additionally, the use of competencies provides a human resource management approach that is broadly applicable to selection, career pathing, performance appraisal and development (McClelland, 1973).

To summarize, there are different definitions and conceptualizations of competence, depending on the field. Competence in regulation emphasizes knowledge, skill and judgement essential for protection of the public, in a seemingly generic and context-free practice setting.
Competence in health professions education gives primacy to assessment, and in particular, the observation and/or demonstration of competence. In human resource management, competence, though focused on the individual, is contingent on the context of the workplace.

**Alternative perspectives on competence**

There are notable differences in definitions of competence in regulation, health professions education and human resource management and organizational behaviour. However, definitions from these diverse fields share a common conceptualization of competence that is centred on the individual. Increasing efforts to define professional competence, particularly among the health professions, has resulted in a “competency movement” (Reeves, Fox & Hodges, 2009; p. 451). This “movement” has resulted in the emergence of several alternative ideas about competence, including whether competence is an individual or collective phenomenon, how competence can be understood discursively and which trends are emerging in health professions education. These perspectives, described here in turn, highlight alternatives to current conceptualizations and provide the opportunity to look critically at tacit beliefs around competence.

The individualist perspective on competence may seem sensible since regulatory bodies govern individuals and organizations select, train and assess individuals in the workplace. According to Lingard (2012), “individualism is a logical emphasis in a system where licensure, billing and medico-legal accountability function on an individual practitioner basis” (p.49). Lingard (2009) also suggests that our way of seeing competence reflects the individualist orientation of the education system. Yet, this individualistic orientation does not jive with the collectivist notions of health professionals working together as a healthcare team in a setting where interprofessional collaboration is encouraged and celebrated.
The creation of competencies may be regarded as an effort by professions to define certain activities that ‘belong’ to them and as a means of securing and legitimizing a health professional’s unique role (Reeves, Fox & Hodges, 2009). Multiple outcomes-based competency models have emerged as ways of considering actual performance and of setting measurable standards of practice (Whitehead, Austin, Hodges, 2011). These competency-based approaches can be regarded as reinforcing conventional discourses about professional norms, behaviours and attitudes, and perpetuating existing domains of professional legitimacy (Reeves, Fox & Hodges, 2009). Moreover, the growth of competency frameworks in education (Whitehead, Austin & Hodges, 2011) reflects and reproduces dominant values in health professional culture (Lingard, 2012).

While Lingard (2009) suggests that competence reflects our individualist healthcare system and education culture, others suggest that competence may help define professional scopes of practice by differentiating the roles of one profession from another (Reeves, Fox & Hodges, 2009). Yet, these domains often overlap (Reeves, Fox & Hodges, 2009). Consequently, the individualist view of competence fails to address how regulated professionals operate within the health care system in the delivery of care.

Viewing competence as an individual phenomenon has been critiqued as being inappropriate and inadequate when considering the realities of team practice in healthcare (Lingard, 2012). Reeves, Fox and Hodges (2009) allude to the detrimental effect of the competency movement in the health professions by suggesting that it actually interferes with interprofessional practice. Lingard (2009) also critiques competency models by stating that the conventional discourse of competence deflects our attention from a larger educational and clinical problem by focusing on the individual when “competent individuals can—and do, with
some regularity—combine to create an incompetent team” (p. 626). In other words, an incompetent team can be comprised of competent individuals (Lingard, 2009). Thus, an individualist conceptualization of competence is inadequate in a culture of healthcare where “the provision of care is a team sport” (Lingard, 2012, p.42).

As clinical practice strives to become more interprofessional and team-based, Hodges (2013) has proposed that the locus of competence is shifting from individuals to teams. As a result, the individualist conceptualization of competence creates tension between the individual professional and collaborative expertise (Lingard, 2012). As a way of rethinking competence in the context of teamwork and as an alternative to the conventional view of competence, Lingard (2009; 2012) calls for a *collectivist discourse of competence*. Lingard (2009) argues that a collectivist discourse of competence reflects growing attention in social and organizational spheres to healthcare’s nature as a complex system. Moreover, the individualist approach has become untenable as evidence has emerged to support the importance of team-based competence in health care (Hodges, 2013). In the context of team performance, collective competence includes knowing how to jointly produce knowledge, rather than simply reproduce information (Lingard, 2009). Kuper (2007) describes this co-construction of knowledge as the product of interactions between two or more individuals or groups. Thus, through participation (Lingard, 2012), Lingard (2009) describes knowledge as being constructed through ‘coupling’:

> Such models of team cognition reflect the key notion of ‘coupling’, the idea that parts of a system are not discrete but, rather, that their connectedness is such that a change or weakness in one part of the system affects both other parts and the performance of the whole (p.627).

Conceptualizing collective competence shifts the dominant understanding of learning and competence from one that is statically based in individuals to one that is dynamically produced...
in situations (Lingard, 2012). This collectivist perspective seems to be much more reflective of
the contingent realities of team-based practice in contemporary health care practice settings.

Reeves, Fox & Hodges (2009) suggest a need for the development of competencies to be
accompanied by recognition of the constraints and conflicts they can impose. Elucidating
alternatives to individualist notions of competence helps to address limitations of conventional
competency models in terms of professional interactions (Whitehead, Austin & Hodges, 2011).
However, Lingard (2009) cautions that a discourse of collectivist competence is not without its
own blind spots since it raises the problem of deflected attention from individual accountability.
Healthcare is increasingly understood as a complex system in which collaborative practice plays
a key role in shaping quality healthcare delivery (Lingard, 2012). It is clear that research
pertaining to the impact of competency implementation on interprofessional practice is needed
(Reeves, Fox & Hodges, 2009).

Lingard (2012) suggests that there are ample opportunities to “explore the mutual
influences of individual and collective competence, towards a better understanding of the
complexity of their interrelationships” (p.67). One way forward is through interprofessional
education, which aims to enable collaborative practice, and has become a core curricular
component in many health professions education programs around the world (Paradis &
Whitehead, 2015). Opportunities to conceptualize health professional education questions using
both discourses of competence (i.e. individual and collective), in turn, shifts the rhetoric away
“from talking just about competent practitioners to talking also about competent performances of
teams (Lingard, 2012, p.67).

Hodges (2012) suggests that competence is “neither role, trait, capacity, nor attitude but a
mechanism tied up in the way professional groups maintain their status in society” (p.14). This
view of competence, supported by several health professions education scholars (i.e. Hodges, 2006; 2012; Lingard, 2009; 2012; Reeves, Fox & Hodges, 2009; Whitehead, Austin & Hodges, 2013), posits that competency is best understood as a discourse or “way of seeing the world” (Hodges, 2006, p.690). Considering competence in this way eliminates the need to distinguish the various definitions and multiple uses of the term, for example, as a capacity, an attribute, a role or a means to assert professional ownership over particular aspects of healthcare (Whitehead, Austin, & Hodges, 2013).

According to Hodges (2006; 2012), medical education has defined competence in different ways such as knowledge, performance, as reliable test score (i.e. psychometric), as reflection, and as production over the last century. These, he suggests, are discourses, which create very different possibilities for people and for institutions (Hodges, 2006). Hodges (2012) suggests that discourses of competence comprise “all of the current linguistic (speech and text), behavioural (performance and appearance) and material (architectural, institutional) representations of what it is to be a competent professional at a particular time in history or in a particular place” (p.24). Additionally, Whitehead, Austin and Hodges (2013) suggest that a discursive understanding of competence forms the fabric of health professions education. They argue that this understanding is helpful in this context as it eliminates the need to “parse, slice and dice the various definitions and multiple uses of the term” (Whitehead, Austin and Hodges, 2013, p.125).

Recently, Paradis and Whitehead (2018) chronicled the discursive evolution of interprofessional education and recommended the need to address issues of power, structures and systems which limit and constrain health professionals’ ability to collaborate. They argue that, for effective transformation of health care delivery, education for collaboration must include
learning in practice settings about how to navigate and transform these entities (i.e. power, healthcare structures and systems) (Paradis & Whitehead, 2018). Furthermore, Paradis & Whitehead (2018) advocate that collaboration to transform care delivery must explore “the multiple layers of interactional, organizational, cultural, and financial barriers that constrain individual behavior and hamper quality care” (p.1461). They highlight the need to look at workplace systems and structures to support education for collaboration (Paradis & Whitehead, 2018).

Competencies have become immensely influential in outcomes-based educational frameworks as a solution to some of the questions raised about standards of care and concern about quality, patient safety and errors in healthcare (Whitehead, Austin & Hodges, 2011). Broadly, outcomes-based education in the health professions has emerged as a priority for curriculum planners striving to align with societal needs in response to calls for greater accountability in all aspects of the professions (Frank & Danoff, 2007). Since competency-based educational (CBE) frameworks are designed to consider actual performance in practice settings, these frameworks are considered a means of setting measurable standards and ensuring that trainees emerge from educational processes able to provide safe, high-quality patient care (Whitehead, Austin & Hodges, 2011).

Competency frameworks have proliferated both conceptually and geographically in health professions education (Hodges & Lingard, 2012). This is especially the case in medical education where competency frameworks influence all of medical training in the Western world (Hodges & Lingard, 2012). CBE is an emergent topic in medical education, however, there is great heterogeneity in the emerging field of medical CBE (Frank et al., 2010b). To address this,
Frank et al. (2010b) reviewed published definitions of CBE in medicine which led to the development of the following definition of CBE in medical education:

> Competency-based education is an approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from an analysis of societal and patient needs. It de-emphasizes time-based training and promises greater accountability, flexibility and learner-centredness (p.636).

This definition was proposed as a 21st century definition of CBE to unify the scholarship in the field, create a common language in the medical education enterprise, and facilitate a global dialogue to advance the field (Frank et al., 2010b). CBE is also described as being closely linked to accountability mechanisms in response to public demands and patient needs, due, in part, to patient consumerism and calls for greater professionalism (Frank & Danoff, 2007).

In Ontario, the Educating Future Physicians Project (1990-1996) was driven by a perceived need for medicine to be more accountable to the needs of society (Whitehead, Austin and Hodges, 2011). This project resulted in the CanMEDS initiative (1996-present) of The Royal College of Physicians and Surgeons of Canada (RCPSC) competencies for medical education, which is described as a national, needs-based, outcome-oriented, competency framework (Frank & Danoff, 2007). The CanMEDS framework details a physician competency framework using seven roles (Frank, 2005; Frank & Danoff, 2007; RCPSC, 2019a). Although the CanMEDS framework is Canadian in origin, it has been adapted in other countries around the world (e.g. the Netherlands and Australia) and continues to enjoy global uptake (Hodges & Lingard, 2012).

The widespread uptake of the CanMEDS framework, as an example of a competency-based framework, is not without controversy. For example, Norman (2015) suggested that a key problem with the use of such outcomes-based models is objective proliferation; namely, the distillation of goals into numerous categories of sub-goals which become unmanageable and lack
specificity. There are also assessment challenges inherent in outcomes-based models. For example, current testing of outcomes-based models continues to use methods from previous discourses of knowledge and performance, in the absence of “a foolproof way to measure outcomes” (Kuper, Whitehead & Hodges, 2013, p. e854).

Nevertheless, the rise in popularity of competency-based frameworks in health professions education may signal an effort towards efficiency. One unique feature of competency-based education models is their explicit focus on learning outcomes over duration of time in an educational program. For example, in medical education, the RCPSC initiation of ‘Competence by Design’ (CBD) focuses on “learning instead of time” (RCPSC, 2019b). CBD has radically shifted curricula in medical specialty education by de-emphasizing time-based training and instead, focusing on the process of learning and achievement of outcomes (RCPSC, 2019b). According to Kuper, Whitehead and Hodges (2013), the focus on outcome-based models highlights a production discourse of competence and values efficiency, accountability, quality assurance and standardized measures. The trend towards increasing quality, efficiency and accountability continues to be prominent in health care organizations in Ontario and across Canada.

Organizational performance monitoring of healthcare in Ontario

In 2010, new legislation for Ontario health care organizations was implemented which focused on organizational accountability through quality and performance outcomes. Specifically, the Excellent Care for All Act (ECFAA) became law in June 2010. The impact of this legislation was most prominent in acute care facilities, where newly established standards continue to affect most aspects of a hospital’s quality agenda including the need for quality committees, quality improvement plans, performance-based compensation for executives, and
other regulatory changes related to critical incident reporting (Queen’s Printer for Ontario, 2008a; Ontario Hospital Association, 2019). Thus, introduction of the ECFAA legislation provides a powerful indication of the drive for increased organizational accountability provincially through its almost exclusive focus on organizational quality outcomes.

Organizations also bear responsibility for quality monitoring of the performance of their employees. This is most often achieved through individual employee’s performance evaluation which is written annually, semi-annually or quarterly for almost every employee within a company, regardless of rank and position (Ewald & McCallum, 1989). Performance appraisal processes are a vital part of an organization’s human resource management processes as they provide information on a number of different personnel functions.

Many organizations use competence – the “how” of performance (p.266) – as the basis for their performance management systems and related processes (Spencer & Spencer, 1993). In fact, according to Boyatzis (2008), the concept of competency-based human resources went from being a new technique to common practice since McClelland’s initial proposal in 1973 of competencies as a critical differentiator of performance. Information on competence is obtained from more qualitative assessments that are oriented to the future and focused on employee development (Spencer & Spencer, 1993). Rowe (1995) advances the ideas of Spencer and Spencer (1993) by suggesting that a competency assessment approach provides the foundation on which an organization can build an effective human resource development strategy.

Boyatzis (2008) claims that almost every organization with more than 300 people uses some form of competency-based human resource management. However, he also laments the lack of academic and applied research on competency assessment and development in
organizational studies, since “many of the competency validation studies have been done by consultants who have little patience for the laborious process of documenting and getting the results published” (Boyatzis, 2008, p.5). Clearly, there is a place for competency monitoring in the performance management of an individual within an organization. Baker (2014) suggests that healthcare organizations have a legal duty to ensure that healthcare practitioners are appropriately educated, supervised and monitored. However, it is unclear how competencies are understood, particularly in health care organizations, and whether they are utilized in evaluating the performance of regulated health professionals.

Despite organizational performance monitoring mechanisms that target individuals, “healthcare often operates at the margin of acceptable performance” (Jeffs, Tregunno, MacMillan and Espin, 2009, p.76). It is clear that both individual and collective performance of a diverse group of health care professionals has significant safety implications for care provision (Kendel, 2014). Yet, gaps in quality and safety occur in practice with surprising regularity, resulting in significant consequences for patient outcomes. At the individual level, gaps in safety and quality can be attributed to a multitude of factors, including practitioner error and incompetence. When quality and safety issues are aggregated, gaps in quality and safety can elucidate systems issues and deficiencies in organizational performance. At both the individual and organizational level, threats to care quality and safety can have dire consequences for patients.

Kendel (2014) highlights the unique issues inherent in quality monitoring of regulated health professionals, specifically focusing on the limitations of regulatory bodies:

… Once they admit individuals to a profession, professional regulatory bodies have very limited capacity to reliably assure their continuing competence. Most require their
members to complete a minimum volume of continuing professional learning activity as a surrogate for maintenance of competence.

Professional regulatory agencies have even less capacity to effectively monitor and reliably measure the daily performance or actions of their members. They are too remote from the environments in which their members practice to effectively assess their day-to-day performance.

In respect to professionals who practice as employees of health service agencies, most professional regulatory bodies rely on employers to measure and manage the day-to-day performance of their members. (p.28).

However, precisely how organizations execute quality management and performance monitoring of day-to-day employee performance is unknown.

**Problem Statement**

Individualistic and decontextualized notions of competence dominate the literature on competence and competency assessment models. Considering competence as an individual phenomenon fails to address the way in which practice occurs largely in teams in a healthcare context. While emerging literature has challenged individualistic conceptualizations of competence and advanced ideas about collective competence, there have been few attempts to reconsider competence as a more contextualized phenomenon, particularly in a contemporary health care setting.

Boyatzis’ (1982) model of effective performance positions competence as one component that influences effective behaviour, along with job demands and organizational context. Richard E. Boyatzis, an organizational theorist and management expert, conceptualizes competence as contextually-based and shaped by other organizational factors in effecting an individuals’ behaviour. Boyatzis initially tested his model empirically and theoretically to support the role of competencies in influencing managers’ behaviour in a variety of workplace settings. This study
aims to explore competence and competency assessment in a Canadian academic hospital using the Boyatzis model of effective performance as a theoretical framework.

Research Purpose

The purpose of this study is to explore competency assessment in a Canadian academic hospital. This will be achieved using the Boyatzis (1982) model of effective performance as a theoretical framework to examine regulated health professionals’ competence in a contemporary healthcare context. By describing constructs that impact behaviour at the level of the individual and organization, the Boyatzis model of effective performance provides a theoretical lens with which to explore competency assessment in a hospital.

Research Questions

1. Using the Boyatzis model as a theoretical framework, how is the performance of regulated health professionals enacted in the context of a Canadian academic hospital?

2. How is competency assessment understood in the context of a Canadian academic hospital?

3. How do regulated health professionals perceive and experience competency assessment in the context of a Canadian academic hospital?

Overview

This doctoral thesis is comprised of seven chapters. This chapter has provided a conceptual overview of competence in different fields in order to situate competence in various fields of inquiry. By concluding with the problem statement, purpose and research study questions, this introductory chapter orients the reader to the study focus.
Chapter 2 presents an overview and synthesis of the literature pertaining to the assessment of competence of health professionals. Given the dominance of self-assessment of competency in many fields, the purpose of the literature review was to determine the empirical basis for the use of self-assessment and other methods of assessing health professionals in a workplace setting. The literature reviewed includes self-assessment, peer assessment and multi-source feedback as well as various ways to conduct competency assessment in the workplace as described in empirical health and social sciences studies.

Chapter 3 situates theoretical perspectives on competence historically and epistemologically and outlines the conceptual framework used in this research study. It offers an understanding of competence and contemporary examination of how competencies emerged as a means of assessing candidates for the workplace. In this chapter, I describe competency models, including Boyatzis’ model of effective performance from the early 1980s which was used as a theoretical framework for this study.

Chapter 4 describes the study methodology, outlining key elements of the study’s single, embedded qualitative case study. In exploring competency assessment in a Canadian academic hospital, this case study mainly followed the research methods outlined by case study methodologist Yin (2014) and analytic techniques for theoretical thematic analysis by Braun and Clarke (2006) and directed content analysis by Hsieh & Shannon (2005). This chapter will provide an overview of the study methodology and describe specific data collection, analytic, and interpretive methods. I also consider how my positionality might have influenced the study and its findings through reflexivity. Ethical implications and anticipated results conclude Chapter 4.
Chapters 5 and 6 describe the study findings. Chapter 5 was focused on the phenomenon of interest: participants’ understanding of organizational competency assessment processes and practices. Chapter 6 highlights key differences among unionized regulated health professionals, non-unionized regulated health professional employees and appointed staff such as physicians. These differences created the sense that there were “separate estates” within the study hospital, with important elements of separation and inequality in professional dynamics and organizational competency assessment. The thesis uses this theme of “separate estates” as its title to reflect salient findings, such as the division of power and allocation of resources between different groups of health professionals. This political science term provides a fitting means of capturing the hospital’s governance, activities, thoughts, and behaviour around competency assessment of health professionals.

In the final chapter, Chapter 7, the study findings are situated with the literature, bringing them into conversation with extant discourses about competency assessment in the workplace. This discussion chapter concludes with recommendations on ways to better align and integrate the competency assessment of regulated health professionals in hospital workplaces.

Conclusion

The role of competencies is clearly articulated in health professionals’ regulation, education, and human resources management. There has also been an emerging critique of conceptualizations and discourses of competence. Kendel (2014) has suggested that the monitoring of everyday performance is the responsibility of a healthcare organization, as part of its quality management practices. However, it is not clear how competence and competency assessment translate into the everyday practice context of a healthcare organization. Exploring
these issues in a hospital setting is a vital first step in looking at organizational practices and human resource management processes that impact regulated health professionals.
Chapter Two: Literature Review

Background and Introduction

This literature review provides an overview and synthesis of the literature pertaining to competency assessment of professionals in the workplace. It includes self-assessment, peer assessment and multi-source feedback and comprises various ways to conduct competency assessments in the workplace that are described in empirical health and social sciences studies. Established search terms and definitions that comprise workplace-based competency assessment and performance appraisal were used whenever possible to obtain studies already categorized as pertaining to workplace-based assessments. Keyword searches were also conducted in order to obtain studies not catalogued under existing definitions. Search terms such as assessment of competence, job performance, human resource management, personnel evaluation, and quality assurance were used.

Due to the broad scope of the term ‘competency’, studies pertaining to the competency of patients, as opposed to that of health care practitioners arose in several studies. Since the intent of this review was to focus on workplace-based competency assessments of health care practitioners, studies describing patient competence were excluded. Professionals from all disciplines were included to glean similarities and differences in competency assessment processes across professions. Accordingly, health, social sciences and education databases searched included: Medline, PsycInfo, CINAHL, Social Sciences Abstracts, ERIC, Scopus, and Business Source Premier.

This literature review covers the use of self-assessment; self-assessment instruments; self-assessment against a benchmark or performance standards; self-assessment of generalist and specialty competencies; peer assessment; and multi-source feedback (MSF) (see Table 2:}
Literature Review Table). Competency assessment practices involving self-assessment were
dominant in the literature and, therefore, the majority of this chapter pertains to self-assessment
practices. Despite the prominence of self-assessment strategies, there is a robust body of
evidence that lends support to other types of assessment, such as peer assessment and MSF.
Suggestive of alternative strategies to workplace-based competency assessment, this emerging
research will be described in this chapter. The chapter will conclude with a summary of the
literature, highlighting key findings from this review.

Self-assessment

Self-assessment accuracy

There are a number of studies that pertain to the accuracy of self-assessment of
competence among professionals. Most notable is a systematic review by Davis et al. (2006)
which compared the accuracy of self-assessment to external observations of physicians’
competence. In this review paper, the studies (n=17 studies) described a total of 20 comparisons
between self-assessment and external assessments. The majority of these studies (n=13)
demonstrated little, no, or an inverse relationship between accurate self-assessments and external
assessments. Overall, these studies indicated flaws in self-assessment among physicians, finding
high levels of inaccuracy, particularly those who were least skilled and most confident. In fact,
Davis et al. (2006) cite “… a preponderance of evidence” (p. 1094) about physicians’ limited
ability to accurately self-assess, despite the presumption that self-assessment is closely linked to
the provision of quality care. This influential systematic review by Davis et al. highlights
findings about the inaccuracy of physician self-assessment when compared to external
observations.
Other studies also tested self-assessment in attempt to establish its accuracy as a method of assessment. Hodges, Regehr and Martin (2001) found that erroneous self-assessments of some of the lowest performers, presumably at the greatest risk of incompetence, worsened despite multiple interventions. In this study, first-year family medicine residents (n=24) interviewed a standardized patient (SP) in a difficult scenario (i.e. breaking bad news). The interview was followed by the residents’ self-assessment of their performance and a rating of the resident’s performance by an expert faculty member (n=2). Following the initial interview, the residents were then shown four videotaped interviews of the same SP scenario. The videos were designed to benchmark a range of performances from incompetent to advanced competence. After viewing the video, residents were given an opportunity to re-score their initial performances. Although the highest performing residents were able to re-score their self-assessments more accurately after viewing the benchmark videos, residents in the lowest performing group were generally unable to recalibrate their initial self-assessments consistently. In fact, despite the video intervention, the inflated self-assessments of two individuals in the lowest performing group worsened. This study confirmed that exposure to benchmark performances can improve self-assessment accuracy for high performers (Hodges, Regehr & Martin, 2001). However, this study also emphasized the inaccuracy of self-assessments, particularly among the lowest performers, and highlighted the need for an intervention to enhance accuracy.

Since workplace-based competency assessment pertains to regulated health professionals who are employed in health care organizations, studies about pre-licensure health professionals were excluded from this review. However, one study pertaining to nursing students was included since it was the first to challenge the use of self-assessment. Self-assessment has been taken up in nursing education, practice and regulation, therefore, this study provides a novel perspective
by challenging the accuracy and widespread use of self-assessment among nursing students. This Ontario study demonstrated a lack of association between nursing students’ self-assessment and performance (Baxter & Norman, 2011). Using a one-group pre- and post-test study design, senior nursing students (n=27) completed a questionnaire before and after an objective structured clinical examination (OSCE) which assessed their ability to respond to emergency situations. Student self-assessments were then compared to observed performance during the OSCE. Almost all of the correlations between self-assessment and the OSCE were negative which indicated that the self-assessments were inversely related to actual performance. This study also found a discrepancy between perceived and actual ability and overconfidence based on inaccurate assessments (Baxter & Norman, 2011) and is the first published study in nursing to challenge the validity and reliability of self-assessment. Although this study concerned initial competency assessment of nursing students, it supports the other studies that challenge the accuracy of self-assessment by suggesting that it is unreliable in the assessment of individuals.

Fereday (2006) sought to explore the utility of self-assessment in performance feedback among nursing clinicians in Australia. Using a social phenomenology philosophical framework, nursing clinicians (n=26) were interviewed using structured, open-ended questions in seven focus group sessions. Findings indicated that nursing clinicians evaluated their own level of competence through a process of self-assessment and constant self-monitoring of performance. Opportunities for external feedback were generally limited to performance appraisals which were heavily criticized by many participants as a “management-driven organizational requirement” (p.13). The study findings demonstrated a need to provide opportunities for feedback at work to support ongoing self-assessment of competence. This qualitative phenomenological study supports other studies which demonstrate health professionals’ need for formative and
summative performance feedback to support ongoing competency development in the workplace.

Other discipline-specific studies examined competency assessment among allied health professionals in fields such as physical therapy, cognitive therapy, and psychology. For example, Miller (2008) conducted a literature review (n=4 studies) on the accuracy and role of self-assessment in physical therapy with the aim of illustrating the current state of research in self-assessment. Findings supported other studies which indicate that self-assessment cannot be conducted with an appropriate degree of accuracy. Miller (2008) recommended strategies for health professionals to seek external sources of information about their abilities and performance. For example, to supplement self-assessments, Miller (2008) suggested using colleagues to obtain peer feedback, through MSF. MSF and objective testing were also endorsed as means to improve health professionals’ chances of obtaining valid and reliable information about clinical performance. Overall, the literature review by Miller (2008) supported other studies by describing the inaccuracy of self-assessments as sources of information about one’s performance.

Brosan, Reynolds and Moore (2008) examined the accuracy of therapists’ judgment about their own competence in cognitive therapy and investigated whether more or less competent therapists differed in the accuracy of their self-evaluation. A blinded independent expert was used to rate tapes of therapists’ (n=22) cognitive therapy sessions. These sessions were also self-rated by the therapists using the Cognitive Therapy Scale (CTS). Overall, therapist participants were rated as competent or less competent based on observer-rated CTS scores. Although there was a modest but significant correlation between self-rating and expert ratings of competence (Spearman Correlation 0.57, n=22, p<.01), therapists significantly overrated their
competence relative to the expert rater. In particular, over-evaluation of competence was significantly greater in less competent therapists; a finding similar to those of Davis et al. (2006) and Hodges, Regehr and Martin (2001). Brosan, Reynolds and Moore (2008) also suggested that less competent therapists may persist in clinical practice without insight into the need to improve their performance. This suggestion highlights the inherent risk of inaccurate assessments in their failure to detect incompetence in the workplace.

Ehrlinger, Johnson, Banner, Dunning and Kruger (2008) sought to advance our understanding of why less incompetent practitioners tend to lack insight. The authors cited previous research findings by Kruger and Dunning (1999) which demonstrated overestimation of people of low ability and underestimation by people of high ability. This previous research had been heavily criticized within the field of social psychology by those who claimed that self-assessment errors could be reduced to statistical or methodological artifact rather than to an absence of metacognitive competence among poor performers. Thus, Ehrlinger et al. (2008) wanted to address this criticism in their replication study about biased self-evaluations. They did so by trying to attribute the study findings to an absence of the ability to assess one’s own competence (i.e. metacognitive competence) among poor performers in social and intellectual tasks. In other words, the authors suggested that poor performers not only lack the insight to self-assess their skills and abilities but also have an illusory perspective of their ineptitude. Ehrlinger et al. (2008) conducted a total of five studies to test poor performers’ insight into their shortcomings in naturalistic (i.e. vs. laboratory) environments which included a psychology classroom, debate tournament, gun club (i.e. Trap and Skeet competition), and college setting. The first two studies were designed to address claims about previous research by Kruger and Dunning (1999) which suggested that over- and underestimation of bottom and top performers
was due to statistical and methodological artifacts rather than to an absence of metacognitive competence among poor performers. In this manner, these first two studies were replication studies designed to address issues of ecological validity.

The other three studies were designed to test whether incentives enhanced the accuracy of self-assessments. In these studies, poor performers were given incentives to increase the accuracy of their self-assessments. For example, the aim of one of the studies was to examine self-insight among participants in a real-life setting. Participants (n=46) were gun owners from a Trap and Skeet competition at a gun club whose knowledge of firearms, gun safety and usage was assessed. The assessment was conducted using a multiple choice test of Gun Safety and Knowledge modeled after a test published by the National Rifle Association. Participants estimated the quality of their performance either in the presence or absence of a monetary incentive for accurate estimation about their test scores. Participants were explicitly told that the study purpose was to assess whether their confidence in each answer matched, on average, with whether they were correct (i.e. as opposed to how many questions they actually answered correctly). This study found that participants dramatically overestimated the quality of their performance, even when offered a monetary incentive to be accurate. In fact, the least skilled Trap and Skeet shooters demonstrated strong overconfidence and poor insight into their level of knowledge regarding gun knowledge and safety, a key feature of their hobby.

Overall, these studies by Ehrlinger et al. (2008) provide a robust body of evidence about poor performers’ failure to recognize the inferior quality of their performance, even in naturalistic settings and when given incentives to be accurate. After controlling for variability in test reliability and when given strong incentives for accuracy, poor performers overestimated themselves consistently across multiple tasks and subject populations. The authors concluded
their paper with an additional meta-analysis of the literature (n=4 studies) which addressed the psychological mechanisms underlying sources of inaccuracy in performance estimates. The studies included in the meta-analysis ruled out alternative explanations for poor performers’ overinflated self-assessments of their performance. These alternative explanations submitted that it was either a metacognitive error which accounted for weakest performers’ inability to evaluate the quality of their own performance or that the over- and under-estimation was due to statistical or methodological artifact. Overall, the meta-analysis provided further evidence for poor performers’ lack of insight into their errors which led to overly optimistic estimates. Thus, Ehrlinger et al. (2008) reaffirm the notion that poor performers show little insight into their deficiencies when evaluating the quality of their performance on social and intellectual tasks.

Several studies have demonstrated (i.e. Baxter & Norman, 2011; Brosan, Reynolds & Moore, 2008; Davis et al., 2006; Ehrlinger, Johnson, Banner, Dunning & Kruger, 2008; Fereday, 2006; Hodges, Regehr & Martin, 2001; Miller, 2008) that self-assessment has been shown to be an invalid and unreliable method of assessing competence. Nevertheless, self-assessment continues to be used among health professions as a competency assessment strategy. Most troubling is low performers’ over estimation of their competence which was found in multiple studies (e.g. Brosan, Reynolds and Moore, 2008; Ehrlinger, Johnson, Banner, Dunning and Kruger, 2008). Poor performers tend to have an illusory perspective about their performance when they are, in fact, at the bottom of the performance distribution relative to their peers (Ehrlinger et al., 2008). In fact, lower performers consistently overrate themselves despite interventions designed to correct false perceptions about their performance and improve self-assessment accuracy. Although various strategies have been developed to enhance the
effectiveness of self-assessment, it remains problematic as an accurate means of assessing competence.

The studies described above challenge the validity and reliability of self-assessment in a variety of disciplines. Poor performers’ lack of insight has been demonstrated for everyday activities (i.e. hobbies) and workplace-based activities in healthcare and other disciplines. Brosan, Reynolds and Moore (2008) even suggested that less competent therapists may persist in clinical practice without insight into the need to improve their performance. This suggestion highlights a key issue underlying health care professionals’ regulatory and organizational accountabilities. Namely, health care professionals are required to engage in self-assessment as part of their regulatory assurance of quality practice yet, they may be poor performers with little insight into the need to enhance their performance in the workplace. The lack of insight demonstrated among poor performing therapists in the study by Brosan, Reynolds and Moore (2008) is particularly problematic as it points to an extant incompetence in the workplace due to poor performer’s inability to accurately self-assess their competence. Highlighting a major concern for quality and safety, it is important to know how competence is assessed in healthcare workplaces and if and how self-assessment is used in clinical practice as a workplace-based competency assessment strategy. In health care, regulated professionals are expected to be aware of their strengths and areas for improvement; however, poor performers’ lack of insight may pose serious problems in the workplace.

Self-assessment instruments

In addition to the studies testing the accuracy of self-assessment, there have been a number of instruments designed for the self-assessment of competence in a range of disciplines. The studies described herein pertain to self-assessment instruments tested among nurses,
cognitive behavioural therapists, and other clinicians. These tools and scales are almost all
designed to measure participants’ self-assessment of specific competencies. Several studies
described testing instruments or tools for their psychometric properties which were designed
precisely to increase the accuracy of the self-assessment. Studies that described the psychometric
testing of a competency tool or instrument as the study’s main outcome were excluded since the
intent of this review was to capture empirical studies that explored competency assessment
practices more broadly, rather than the validity testing of a specific instrument. Instead of
examining the psychometric properties of particular instruments, this review is focused on the
use of self-assessment instruments to evaluate competencies. Consequently, included studies
described the testing of instruments and how they pertained to self-assessment of competency.
While some studies use existing, validated instruments, others developed their own competency
questionnaires or surveys specifically for use in their study.

Andersson, Jylli, Kajermo and Klang (2007) tested an instrument to examine self-
evaluations among nurses (n=113) with different levels of competence in paediatric care at two
university hospitals in Sweden. The Professional Self-Description Form (PSDF) is an
internationally validated instrument (Cronbach’s alpha 0.94) which was used to have respondents
rate themselves on a seven-point Likert scale on 21 items in comparison to others in the same
profession. It was originally developed as a psychological test for use in studying creative
performance among aeronautics and space administration scientists in the USA and later
validated for use among nurses in the USA. Participants in this study included two groups of
nurses with a general education without a specialist education (i.e. control and trainee groups)
and one group of nurses with specialist education (i.e. specialists). Response rates for all three
groups ranged from 75-86%. Overall, the study found little difference in the self-evaluation of
professional self between the three groups of nurses. For example, self-evaluation of professional self was found to be independent of education level (i.e. specialist or generalist education) and work experience. This finding indicates that regardless of education level and work experiences, nurse respondents’ ratings on the Professional Self-Description Form (PSDF) did not differ. Thus, nurses in each of the three groups rated themselves the same in comparison to nurses from control, trainee and specialists nurses with different levels of education and work experiences. This lack of association in self-assessment between generalist and specialists nurses is suggestive of the need for additional work in these areas and for further psychometric testing of the PSDF instrument. Nevertheless, the study highlights the use of a specific instrument to examine differences in self-assessments among professionals with different amounts of education and practical experience.

The study by O’Leary’s (2012) compared self-assessed competence and experience among critical care nurses using the Nurse Competence Scale (NCS). The aim of O’Leary’s descriptive study was to determine the level of self-assessed nursing competence and relationship to age and experience in nursing. The studies by O’Leary (2012) and Andersson et al. (2007) both defined competence using Patricia Benner’s adaptation of Dreyfus and Dreyfus’ continuum of skill acquisition. However, the study by O’Leary contradicted some of the findings in the study by Andersson et al. (2007). In the study by O’Leary (2012), nurses in a tertiary care hospital in the USA were surveyed using the Nurse Competence Scale (NCS), an established instrument developed in Finland, which consisted of 73 items in 7 different competence categories: 1) Helping Role, 2) Teaching/Coaching, 3) Diagnostic Functions, 4) Managing Situations, 5) Therapeutic Interventions, 6) Ensuring Quality, and 7) Work Role. The items were measured using a visual analogue scale from 0 (low competence) to 100 (high competence)
(Cronbach’s alpha 0.97). The extent or frequency of using the competency items in clinical practice was also measured using a four-point scale (i.e. 1=not applicable in my work; 4=used often). Overall, nurses (n=101) self-assessed their level of competence as ranging from good to excellent and noted increased frequency of using the competency items in the NCS. In particular, statistically significant relationships (r=0.27, p<0.05) were found among study variables which suggests that there is a relationship between self-assessed level of competence in relation to age and experience in nursing. Thus, the longer the nurse’s experience, the greater their self-assessed level of competence. Accordingly, this study supports the connection between years of experience and competence among nurses.

A study by Cowin et al. (2008) investigated whether the Australian National ANCI Competency Standards for Registered Nurses demonstrated correlations with the Finnish Nurse Competence Scale (NCS). Using a non-experimental cross-sectional survey design, self-assessments of competency were conducted by new graduate nurses (n=116) participating in a year-long transition program. Study findings demonstrated a number of statistically significant relationships between the two competency measures (r=0.75). Overall, the evidence of strong convergent validity between the Australian and Finnish competency measures indicates that there are interrelationships between these two competency tools. Future studies of the two measures aimed at evaluating the relationship between competencies and establishing construct validity were recommended for follow-up studies and future research.

Tzeng (2004) conducted an exploratory study to investigate Taiwanese nurse employees’ self-assessment of their nursing competencies, job demands and job performance. In an attempt to clarify the linkage between nurse competency and performance, this study focused specifically on the differences between self-assessment of nursing competency and nurses’
overall satisfaction with their job performance. Using a cross-sectional survey design, the author developed a Questionnaire for Surveying Nurse Work Force for this study. Designed to measure nurses’ overall level of satisfaction toward their work performance, the questionnaire was comprised of 21 competencies clustered into three groups: 1) basic-level patient care skills, 2) intermediate-level patient care and fundamental management skills, and 3) advanced-level patient care and supervision skills (Cronbach’s alpha 0.920, n=212, 21 items). The study results were informed by content validity and jury opinion of the questionnaire. A conceptualization of nurses’ self-evaluation of their job performance was used as an indicator of nursing care quality. The questionnaire was sent to 850 randomly selected nurses from the Kaohsiung Nurse Association member roster in Taiwan, of which 304 were returned (i.e. 35.8% overall response rate). Overall findings suggested that demographic characteristics such as age, education and professional experience contributed to nurses’ self-assessment of their competencies. Tzeng (2004) used multiple regression analysis to determine three significant predictors of nurses’ self-evaluated job performance: 1) nurses’ self-assessment of intermediate patient care skills, 2) the difference between self-assessment and job demands for basic patient care skills, and 3) nurses’ overall satisfaction with their own nursing competencies. From the study results, Tzeng (2004) concluded that there was a relationship between competency and performance although the study’s low response rate limits its representativeness. This study’s conceptualization of nurses’ self-evaluation of their job performance as an indicator of nursing care quality is problematic. The study finding which demonstrated the influence of demographic characteristics (i.e. age, education and professional experience) on nurses’ self-assessment of their competencies counters the belief that self-assessment is related to competence.
In studies designed to measure self-assessment of competence using a specific instrument, the psychometric properties of the tool feature just as prominently as the content of the tool itself. While some of the studies describe or test the use of instruments which use self-assessments (e.g. Andersson, Jylli, Kajermo and Klang, 2007), all of the studies aim to enhance the accuracy of the assessment of an individual’s competence or performance. There have been a number of efforts in nursing and other disciplines to find valid and reliable methods of assessing competence using instruments such as the Finnish Nurse Competence Scale. However, these tools are designed to measure competencies that are specific to one particular group of health professionals rather than being interprofessional tools to assess competencies. Despite attempts to develop tools to measure specific competencies, problems remain with the use of self-assessment as the method of assessment.

Although the tools and instruments are all designed to measure workplace competencies, there is no discussion about the relationship between the competency assessment tools and organizational appraisal processes. Similarly absent is any mention of the association between organizational and regulatory competency assessments. Several studies aimed to use a specific tool or instrument to conduct a self-assessment, which would subsequently inform an educational intervention, however, the connection between the assessment and intervention or even subsequent assessments was not clear. Accordingly, it appears as though self-assessment is implied as an intervention itself, despite evidence which challenges its use.

**Self-assessment using benchmarks/standards**

Several studies also described testing self-assessment accuracy by comparing it to benchmarked or standardized performance to see how closely the individual’s assessment aligned with the benchmark. For example, various studies from medicine, nursing and other
disciplines illustrate diverse ways to utilize self-assessment to measure practitioner competencies against expert performance, established guidelines or standards. For the purposes of the assessment, performance by experts, established guidelines and standards serve as exemplars and as means of benchmarking performance. Moreover, they serve as a referent standard on which to base the accuracy of the self-assessment. In these studies, self-assessment is compared against a benchmark or standard which is intended to portray optimal or expert performance. The gap between the self-assessment and referent expert level is intended to create an opportunity for quality improvement interventions.

A mixed method descriptive study by Meretoja and Koponen (2011) involved pilot testing a systematic model to compare the optimal and actual competence of specialist nurses in the perioperative setting. Experts (n=24) identified fifteen optimal nurse competencies to address future challenges in perioperative care. Optimal competencies were then compared to actual competency profiles completed by individual nurses (n=87) and managers (n=88) which were rated using the Nurse Competence Scale (NCS). Findings indicated nurses’ self-assessment of their actual level of competence was rated lower than the optimal level of competence (average coefficient of variation 0.40 [actual] vs. 0.32 [optimal], p<0.05). Nurse Managers also rated nurses’ actual level of competence significantly lower than the optimal level of competence (average coefficient of variation 0.25). This study’s small sample from a specific clinical setting (i.e. perioperative care) limits its generalizability, however, the pilot testing of this model lends itself to replication studies in other clinical settings with larger samples. Furthermore, the authors suggested that the contextual specificity of competencies and idea of matching competencies to work environments is an important consideration to enhance quality of care and better utilize scarce nursing resources (Meretoja & Koponen, 2011). When considering optimal levels of
competence as a benchmark for acceptable performance, the suboptimal ratings by the nurses and their managers is concerning. These ratings suggest a problem with the NCS assessment instrument in this context, the optimal competencies or competency profiles, and/or, a problem with both the self- and supervisory assessment. Thus, this study may support other studies which point to problems with self-assessment, although there are clearly differences in optimal and actual competence which require further explication. However, contrary to other studies’ findings, the assessments in this study reported under-estimation, as opposed to the over-estimation found in other studies. Nevertheless, this study’s findings support other studies that have reported problems with the accuracy of assessments.

A review by Fowler, Rollinson and French (2011) examined studies of treatment fidelity of cognitive behaviour therapy (CBT) as treatment for psychosis. Citing treatment fidelity as entailing therapist adherence and competence, the authors reviewed methods of assessing adherence and competence using different scales to provide an external check on treatment fidelity. The Cognitive Therapy Rating Scale (CRTS) was used to assess competence and a variant of the Cognitive Therapy for Psychosis Adherence Scale (CTPAS) was also used to assess adherence; both adherence and competence were assessed by independent expert raters. Experts were also used to rate samples of tapes using CBT to establish the presence of the use of adequately competent cognitive therapists. The externally rated fidelity check indicated that, although the trial therapists were rated as highly competent on the CRTS, only 4 of the 13 available tapes appeared to suggest the use of specific CBT for psychosis techniques (Fowler, Rollinson and French, 2011). When adherence was measured, considerable variation in the therapy provided was also observed. Given the complexity of an intervention such as CBT for psychosis, the study findings suggest that assessment of competence alone is insufficient as a
means to assess cognitive therapists. The study’s suggestion that assessment of adherence should also be included is noteworthy as it implies a need to verify the possibility of a deviation from accepted practice techniques or standards.

Blacklidge et al. (2005) developed a knowledge-based reappointment method at a large US paediatric hospital to verify community physicians’ competence. The authors described the use of a case-based self-test to measure physician generalists’ knowledge of evidence-based guidelines for three common paediatric inpatient diagnoses. Guidelines and quizzes were sent to 308 pediatricians and family practice physicians of whom 216 responded (67% response rate). After studying the clinical guidelines, the physicians completed the associated test. Although several physicians surveyed criticized the knowledge-based reappointment process as an ineffective process to measure competencies and abilities, study findings indicated a generally positive response to the case-based self-test. Specifically, 71% of respondents (n=181) felt that the knowledge-based reappointment was a good way to assess physician competency for providing care to hospitalized patients and 84% (n=181) felt that this method of evaluation should be used in the future (Blacklidge et al., 2005). This study demonstrates an organization’s use of an innovative process to verify physician competency by testing knowledge. The use of a case-based self-test to assess physicians’ up-to-date knowledge as a means of measuring competence differs from traditional approaches which tend to equate competence with skill acquisition and performance.

Jackson et al. (2012) developed a quality improvement program related to radiologists’ accuracy in screening mammography. The study aim was to determine whether radiologists’ self-reported performance goals for accuracy in screening mammography were consistent with recommendations published by the American College of Radiology (ACR). Using a mailed
survey of radiologists at mammography registries in several US states, radiologists’ performance goals for interpreting screening mammograms were assessed. Self-reported goals were compared to recommended desirable ranges for recall-rate, false-positive rate, positive predictive value of biopsy recommendation and cancer detection rate published by the ACR. Study findings indicated that radiologists’ performance measures fell outside the desirable benchmarked ranges which, in some cases, demonstrated radiologists’ lack of knowledge about published guidelines. Two features that enhanced the performance measures towards desirable performance were radiologists’ affiliation with academic medical centres and receipt of audit reports. This study highlights the value of audit and feedback as a tool for enhancing performance and the associated danger of radiologist’s self-assessed performance when it falls outside of desirable published benchmarks.

In an attempt to improve standards in malaria microscopy for accurate diagnosis, Ashraf et al. (2012) developed and evaluated a multi-country microscopy external quality assurance network in Asia-Pacific. Aimed at establishing reliable standards and procedures for assessing and assuring quality, the intervention involved conducting external assessments of microscopist competencies against reference slide sets or slide banks. The external assessments also consisted of remedial training for microscopists who failed routine evaluation, international accreditation of microscopists’ competency using national reference levels and cross-checking of slide scores. In each of the 14 participating countries, national microscopy standards were strengthened, which highlights the importance of using a set of competencies as a basis for validation and expertise. Furthermore, the use of reference slide sets or slide banks as benchmarks for microscopists’ performance is an important quality assurance technique.
A study by Howanitz, Valenstein and Fine (2000) surveyed employee competence assessment practices in departments of pathology and laboratory medicine. First, institutions (n=522) were surveyed to explore current competence assessment practices. Second, an evaluation was conducted to assess compliance with institutions’ stated competence assessment practices. Lastly, a written appraisal to determine the competence of 5 specimen-processing staff members per institution was conducted. Findings indicated that 89.8% of participating institutions had a written competence plan and 98.1% reported reviewing employee competence at least yearly using direct observations (87.5%), review of test or quality control results (77.4%), review of instrument preventative maintenance (60%), written testing (52.2%) and/or other methods (20.8%). Results of employees’ (n=14,029) adherence to the laboratories’ general competence plan was lower: 89.7% for direct observations, 85.8% for review of quality control and test results, 78% for review of instrument records, and 74% for written testing. Large institutions and teaching institutions had less compliance with their competence assessment plans. When a written competence assessment was given to specimen-processing staff members (n=2853), 90% responded satisfactorily. As the first inter-laboratory study to describe how competence is assessed in a large number of clinical laboratories, the authors suggested that this study reveals important gaps between yearly performance evaluations which often do not include a determination of employee competence. Furthermore, this study’s positive findings about written competence assessments highlight the importance of feedback in improving performance.

In another study that explored the use of standards to increase the accuracy of self-assessment in pathology, Chaturvedi (2000) described the development and evaluation of the Federal Aviation Administration’s (FAA’s) Civil Aeromedical Institute (CAMI) proficiency testing (PT) program; a program designed to address challenges encountered in post-mortem
forensic toxicology situations for aviation accident cases and medical examiner/coroner cases. The aim of the program was to permit CAMI and other participating laboratories (n=~30) to self-evaluate the proficiency of post-mortem forensic toxicology testing, specifically for drug analysis in different types of preserved and decomposed biological samples (n=29 PT samples). Over the course of seven years, participating laboratories validated their performance through self-assessment and subsequently enhanced their operational performance. As the only PT program that addressed the post-mortem laboratory practice, the CAMI PT program entailed the analysis of ‘true’ post-mortem samples. This was achieved by preparing samples such as urine, plasma, serum, blood, and tissue samples which were purchased from local slaughterhouses and which required putrefaction processes. As it is difficult to obtain serum/plasma from decomposed bodies in the majority of aviation accident fatalities and medical examiner/coroner cases, case histories were excluded from the submissions to represent PT specimens as “true” blind post-mortem specimens (p.423). Samples were shipped to the participating laboratories that could opt to conduct qualitative or quantitative analysis using their standard analytical procedures. After completing the analysis, participants recorded the analytical findings on a report sheet for shipment. A methodical process was used to minimize the establishment of a possible link between the data (i.e. analytical report) and its originating laboratory. Summarized results from the FAA’s CAMI were distributed to participants. Overall, the CAMI PT program was found to be a timely and suitable program for the field of post-mortem toxicology. PT is one way to provide a means for laboratories to self-evaluate proficiency in forensic toxicology testing and assess methods of analysis applicable to the field. This study’s use of PT exemplifies a unique way to assess proficiency and enhance performance on a self-evaluative basis.
In addition to studies using mixed method approaches to examine professionals’ self-assessment against objective criteria or professionally derived standards (e.g. Fowler, Rollinson and French, 2011; Howanitz, Valenstein & Fine, 2000; Meretoja & Koponen, 2011), a study by Stewart and Rae (2012) used a qualitative approach. The authors examined Critical Care nurses’ (n=5) understanding of the UK’s NHS Knowledge and Skills Framework (KSF) in relation to its implementation and their nursing role. Participants demonstrated a lack of understanding about the KSF required of them, especially related to their requirement of self-assessment. The authors concluded that nurses do not maintain skills in self-assessment once qualified to practise; they suggested that there is a knowledge gap (i.e. theory-practice gap) between profession-derived standards and competencies as performance assessment frameworks and nurses’ continuous process of professional development.

In the studies described above, a variety of strategies are used to employ benchmarks or standards on which to compare practitioner self-assessments. Some studies (i.e. Ashraf et al., 2012; Blacklidge et al., 2005; Chaturvedi, 2000; Fowler, Rollinson & French, 2011; Howanitz, Valenstein and Fine, 2000; Jackson et al., 2012; Meretoja & Koponen, 2011) compared self-assessment to benchmarked performance or standard in attempt to enhance the accuracy of the self-assessment or as a quality improvement strategy. In most cases, comparison of the self-assessment to a referent standard or benchmark was part of a broader quality assurance initiative (i.e. Ashraf et al., 2012; Chaturvedi, 2000; Howanitz, Valenstein & Fine, 2000; Jackson et al., 2012). In virtually all of these studies, specific techniques were utilized in an effort to improve the accuracy of the self-assessment of competence. Thus, a better understanding of the role of competency assessment in program development is needed.
In many of these examples, practitioners’ self-assessments fell short of the benchmark. While not surprising, this finding echoes results of other studies which examine the accuracy of self-assessment. Several studies (e.g. Meretoja & Koponen, 2011; Stewart & Rae, 2012) also described some of the difficulties inherent in conducting self-assessment of competence, especially when used as part of a quality improvement effort. In fact, specific strategies such as the use of self-assessment against a benchmark or standard were used to enhance self-assessment as part of the quality improvement initiative. Overall, use of benchmarks or standards was described as a useful means of assessing quality performance, particularly when those who are conducting the self-assessment receive the performance feedback or results of the assessment.

From these studies, it appears that feedback may play a prominent role in supporting ongoing self-assessments of competence. The importance of formative feedback in supporting ongoing competency development in the workplace emerged in other studies (e.g. Fereday, 2006) and appears to be something that may be overlooked when summative assessments such as performance appraisals are conducted in some contexts. In addition, Fereday (2006) cited evidence for health professionals’ need for formative and summative performance feedback to support ongoing competency development in the workplace and criticized performance reviews as an annual occurrence with few opportunities for feedback. Fereday (2006) characterized organizational performance appraisals as ineffective strategies to support ongoing competency development in the workplace. Yet, in some cases, competency assessments served as an opportunity for participants to obtain performance feedback in support of ongoing quality improvement efforts. Clearly, there are discrepancies between organizational performance appraisal, self-assessment and opportunities for ongoing feedback in the workplace. Further examination of the relationship between organizational performance appraisal, competency
assessment and quality improvement is needed. Furthermore, it is not known whether and how feedback is used in workplace-based competency development and assessment strategies. It is also especially important to determine what opportunities exist for feedback and whether they have an impact on competency development in the workplace.

Lastly, affiliation with academic medical centres and receipt of audit reports were two features that enhanced performance measures towards desirable performance (Jackson et al., 2012). Thus, further information is needed about the value of audit and feedback as a tool for enhancing performance as well as the role of affiliation with academic medical centres.

**Self-assessment using generalist and specialty competencies**

The literature also distinguishes between generalist and specialty competencies, whereby generalist competencies are typically considered initial competencies in a given discipline. Specialty competencies are those pertaining to a clinical specialty or specialty field and are generally acquired with further education and/or experience. Studies investigating the implementation of specialty competencies aim to increase the accuracy of the assessment of requisite skills and abilities in a given employment or clinical practice setting. These studies provide examples of the self-assessment of specialty competencies in the workplace in nursing, medicine, allied health disciplines, and human resources.

The aim of the evaluation study by Landsman (2007) was an empirical analysis of self-assessment of competencies for child welfare supervisors (n=67) who were highly specialized in their field. Participants self-assessed supervisory competencies along two dimensions based on their degree of perceived need for skill development and the perceived importance of each competency to their job. By combining perceived need and perceived importance, a score for each competency was produced which was then used to help prioritize areas of focus for training.
Consequently, combined self-assessment scores were transformed into competencies which directed a statewide, federally funded training program designed specifically for child welfare supervisors as part of a recruitment and retention initiative. This study’s use of self-assessment data to develop competencies and direct training was a unique approach to collaborate with workers to improve retention.

McGuire et al. (2012) developed a measure of clinician-level competence in Illness Management and Recovery (IMR) to evaluate provider-level competence and tested its reliability and validity. Two groups of subject matter experts (SMEs) were used to create the IMR competence scale to evaluate provider competence. After 14 iterations of scale revisions, the IMR Treatment Integrity Scale (IT-IS) was developed to measure 13 required items and 3 optional items rated only when the particular skill in IMR is attempted. The properties of the tool showed excellent interrater reliability (.92) and good internal consistency (i.e. using factor analysis) although reliability and validity of individual items on the scale varied widely. The authors concluded that the IT-IS showed promise as a measure of clinician competence in providing IMR and suggested the need for future research to conduct additional psychometric testing of the instrument. The study demonstrated one way to use SME’s to develop a scale to measure competence for research, quality assurance or as a supervisory feedback tool.

The purpose of the study by Ewalds-Kvist, Algotsson, Bergstrom and Lutzen (2012) was to assess psychiatric nurses’ self-ratings in competency areas relative to their clinical environments, gender and levels of education. Ewalds-Kvist et al. (2012) explored the self-rated competence of Swedish psychiatric nurses (n=52) in three clinical environments (i.e. outpatient, inpatient or emergency wards in psychiatric care services) across 21 psychiatric units. In different clinical areas, nurses with or without specialized training in forensic psychiatry had
been shown how to rate their competence differently. Therefore, the study sample included specialist nurses and nurses who had worked for at least five years in psychiatry without specialist training. Nurses were asked to self-rate their competence on a questionnaire that consisted of 56 questions comprising 9 competence areas and background variables (*Nursing and Medical Science; Health Promotion and Illness Prevention; Safety and Quality; Care Environment; Conduct, Information and Education; Research, Development and Training; Personal and Professional Development; Leadership; Test and Treatments*). Study findings indicated psychiatric nurses’ self-rated skills in specific competence areas were influenced by clinical environment, education and gender. There were significant differences among the means of self-rated skill (12.85 [SE=0.82] to 73.45 [SE=2.02]) in the nine areas of competence with t-values (df=51) ranging from 13.14 to 49.88 (p=.000, 2-tailed test). Of note is non-specialist nurses’ overestimation of their skills in comparison to specialist nurses. This suggests that generalist nurses may be more inaccurate in their assessments when compared to specialist nurses. In other words, specialist nurses seemed to perform better in self-rated skills, which supports other studies that show that high performers tend to do better in self-assessment. Overall, this study supports other studies showing overestimation of self-assessed competence, particularly among non-specialists nurses, and highlights the impact of multiple variables on self-rating of competence with specialty competencies.

Cashin, Chiarella, Waters and Potter (2008) describe the development and implementation of the Justice Health (JH) core competencies survey, which was designed to identify education needs of nurses commencing work in JH and provide an objective measure at annual appraisals. Although the population sampled in this study were entry-level nurses, the JH Core Competencies were considered to be specialized competencies since they comprised core
attributes nurses needed to possess to practice safely in a correctional environment of prison health service (i.e. a specialty context or setting). Once the JH Core Competencies were developed into an online self-report survey, the study aimed to pilot test the tool to assess its usefulness as a reflection tool for staff to self-identify their learning and developmental goals. Although the findings indicated a degree of variability in some competency units, nurses (n=83) generally rated their level of skill for each identified competency as high. Despite the low response rate (i.e. 17.5%), the tool was suggested for use at annual review or as a self-report measure for reflection. Above all, this study describes a novel use of specialty competencies and a competency assessment scale that has implications for competency assessment and performance review. However, given the problems with self-assessment identified in previous studies (e.g. Ehrlinger et al. 2008), the majority of this study’s respondents’ high self-rating of their skill for the identified competencies is suggestive of problems inherent in respondents’ self-assessment. Moreover, it is possible that the nurses were, in fact, unable to self-identify their learning and developmental goals related to the JH Core Competencies. Although designed to assess learning goals as part of a nurse’s annual review, the survey’s use of self-report is problematic due to the identified inaccuracy of self-assessment.

Other studies have also attempted to include self-assessment questions in annual review processes. For example, a prospective, longitudinal study by Webster (2009) sought to determine the feasibility of incorporating questions into an annual national self-assessment exam for residents in physical medicine and rehabilitation. Questions from specific core competency domains that were found difficult to quantify and measure (i.e. Systems-Based Practice, Practice-Based Learning and Improvement and Professionalism) were included in the exam. The study’s main outcome measures assessed were the individual test item level of difficulty and
discrimination. Study findings demonstrated that the additional competency questions were successfully incorporated into the exam, without compromising the exam’s overall reliability and validity. However, it is unclear whether resident performance on these subtopic questions was an accurate representation of competency in these domains or whether resident performance on these questions corresponds to performance on other competency outcome measures. This study describes implications of measuring specific specialty competencies in physical medicine and rehabilitation in a self-assessment exam. However, the use of self-assessment as component of ongoing competency assessment is noteworthy given the inaccuracy of self-assessments.

A study by Stupans, Owen, McKauge, Pont, Ryan and Woulfe (2012) developed mechanisms to improve the accuracy of self-assessment. The aim of the study was to develop a competency graduated descriptors tool to support students’ development in experiential placements, facilitate self-assessment and enhance communication between preceptors and students. Although this study pertained to prelicensure students’ competency assessment, it was included because it described students in workplace-based placements and pertained to competency assessments of pharmacy students in their experiential placements. Stupans et al. (2012) developed profession-derived competency standards for the assessment of Australian pharmacy students using a participatory action research (PAR) approach. Competence was considered developmentally using various stages based on a pharmacy student’s level of completion of their university program. Several themes highlighting the value of the tool as a rubric for self-assessment among preceptors who supported students on placements were identified among the study’s findings. However, the students were ambivalent about the tool overall and unsure of its usefulness in supporting learning. Although the tool was developed using a developmental skills approach that had been utilized by other health disciplines in
Australia, this study confirmed findings from a previous study (i.e. Owen & Stupans, 2007) which showed inconsistent attention to a discussion of pharmacy competencies in university pharmacy curricula. While the tool was aimed at supporting workplace learning through the development of a tool for self-assessment against competencies, the language around professional competencies was unfamiliar to the students involved in the study. This seemed to point to the lack of a common degree of familiarity with competencies in practice and education.

There have been several other studies that have used specialist competencies as part of quality improvement strategies. For example, Hugenholtz et al. (2008) conducted a qualitative study using focus groups and semi-structured interviews with a subsample of Dutch occupational physicians (n=14) who participated in a multifaceted intervention to enhance professional performance in evidence-based medicine. The study aim was to assess participating occupational physicians’ perceptions of the value of an educational intervention designed to improve professional performance by enhancing physicians’ specialized knowledge. The educational intervention consisted of a didactic course in evidence-based medicine with recurrent case-method learning sessions. The physicians interviewed described generally positive feedback about the educational intervention. Prior to the implementation of this educational intervention, Dutch occupational physicians lacked a quality assessment method for monitoring their own evidence-based practice and for auditing each other. Thus, Hugenholtz et al. (2008) concluded that participants regarded this intervention in evidence-based medicine as a useful method for enhancing their professional performance. The educational intervention included opportunities for peer feedback in group sessions, however, these were limited to providing feedback on how to find information on cases, rather than evaluative performance feedback. While this study
showed promise in enhancing the performance of occupational physicians, it relied on self-report of participants.

Another study by Fertig (2011) explored certification as a measure of specialist competencies. The study used self-determination theory (SDT) to examine behavioural antecedents and outcomes associated with certification among human resource (HR) professionals (n=382). An electronic survey was delivered to HR practitioners, 41% of whom had certification and over 70% of whom had college degrees. The survey instrument measured motivation to certify, affective occupational commitment, competence and social desirability response bias (i.e. as a control variable). Overall findings suggested that HR practitioners whose behaviour was suggestive of motivation to obtain certification may have more occupational commitment, regardless of whether the individual actually obtains the certification in question. A more internal motivation to certify was associated with a more positive outcome in occupational commitment, which was also referred to in the study as job competence. While this study addresses a gap in certification research, Fertig (2011) recommends that future studies look at the value of certification longitudinally, as opposed to cross-sectionally. Furthermore, it is suggested that competence be assessed through a second source such as performance appraisal to add reliability and validity to any outcomes associated with certification and motivation to certify. This study yields important information about the signal strength of certification and its impact on competence and performance. It also highlights the importance of motivation in employees’ occupational commitment or job competence and the need for multiple ways of assessing competence.

These studies demonstrate unique approaches to measure specific clinical competencies in a variety of disciplines. Some of the studies described (e.g. Cashin, Chiarella, Waters &
Potter, 2008; Ewalds-Kvist, Algotsson, Bergstrom & Lutzen, 2012; McGuire et al., 2012) test competency descriptions or categories that match clinical specialties. Similar to the testing of instruments, specialty competencies are also created as a means of increasing the specificity of the competencies and accuracy of the assessment. In many cases (e.g. Cashin, Chiarella, Waters & Potter, 2008; Hugenholtz et al., 2008; Landsman, 2007; Stupans et al., 2012), self-assessment tools for specialty competencies were developed as a means to inform training, educational program development, or further assessment interventions. In some disciplines, the demonstration of specialty competencies is achieved through certification whereas, in others, specialty competencies are tied to certification which may require an exam for membership in the specialist group. However, this is not necessarily the case in other disciplines such as child welfare supervisors (e.g. Landsman, 2007). On the whole, these studies illustrate a snapshot of specialty competencies which tend to reinforce the dominant use of self-assessment and also reveal a naive bias when it comes to generalists’ ability to accurately self-assess.

Several studies (e.g. Cashin, Chiarella, Waters & Potter, 2008; Landsman, 2007; McGuire et al., 2012; Webster, 2009) describe the creation or testing of specialty competencies, as opposed to generalist competencies. Collectively, these studies suggest that a distinction can be made between generalist and specialty competencies, however, it is not known how such competence is defined in these workplaces contexts. There is also a blurring in the literature between performance and competence. While some studies use established definitions and measures of competence, often the terms are used interchangeably to describe a negotiation between competence and performance. Thus, greater definitional clarity is needed to elucidate the meaning and use of these terms in the workplace. In addition, age, education and professional experience were shown to have an effect on self-assessment. Further exploration of the impact of
demographic characteristics on the assessment of competence is warranted. Moreover, the widespread use of self-assessment, particularly in health professions, is worthy of further investigation.

Peer assessment

The use of peer assessment adds another perspective to evaluation and can be used to compare to self-assessment, or as a stand-alone assessment strategy. Regardless of how it is used, peer assessment adds a unique perspective and raises several important workplace issues; namely, who should conduct the assessment.

The aim of the study by Evans, Leeson and Petrie (2007) was to use peer assessment to counteract the tendency to over- and under-score performance. This was achieved by examining whether post-graduate dental surgeons were able to conduct peer assessments and whether this form of assessment was more reliable than self-assessment when compared with assessment by a trainer. Results of the self-assessment by trainee dental surgeons were compared with the results obtained by peer assessment of the same procedure. Dental surgeons (n=38), peers (n=19) and assessors (n=5) participated in assessing the skills of dental surgeons in removing mandibular third molar from participants in a dental school in the UK. Assessment was done using an assessment scale and global rating scale anchored with descriptors that examined 8 different aspects of performance (such as respect for tissue, time and motion, handling of instruments, knowledge of procedure and use of assistants). Study findings indicated that more trainee surgeons overestimated their ability than those who underestimated it (0.55 Lin concordance correlation coefficient between the mean of the 2 assessors’ and surgeons’ self-assessment scores). Peer assessment was found to be more accurate and reliable than self-assessment when compared to assessment by a trainer or self-assessment (0.58 Lin concordance correlation...
The authors concluded that the use of peer assessment for formative feedback was one way to minimize over-scoring of performance and increase the reliability and validity of the assessment. Use of peer assessment in this manner seems to reconcile some of the problems found in the self-assessment studies that problematized the accuracy of self-assessment ratings.

In another study exploring the use of peer assessment, Haines et al. (2010) described a continuous quality improvement (CQI) process for clinical pharmacists at a Veterans Affairs Medical Centre in the USA. The researchers described the development, implementation and evaluation of a protected peer review process for clinical pharmacists with advanced scopes of practice. A protected practice evaluation committee (PPEC) comprised of clinical pharmacists (n=6) developed performance measures which were used to confidentially review and rate clinical pharmacists cases. Protecting the peer review process meant that data collected could only be reported in aggregate form which prohibited management from making personnel decisions based on the data. The peer review process involved a review by individuals with similar credentials and responsibilities (i.e. the PPEC). As such, the process consisted of an expert peer review that was designed to improve the quality of patient care. Although peer review is commonly used for health care provider groups such as physicians, it has seldom been used in this way with pharmacists. Haines et al. (2010) argue that the protected peer review process has broad clinical utility for other disciplines, especially those with expanding scopes of practice where managers might not possess sufficient expertise to judge the quality of care provided (Haines et al., 2010). This process engaged clinical pharmacists in a continuous quality improvement (CQI) effort, generated aggregate and individual performance data and encouraged self-reflection among participants.
These two studies demonstrate specific ways in which peer assessment was used either to complement self-assessment or independently, as part of a CQI effort. In both instances, peer assessment was used to assess performance, improve practice, and enhance the comprehensiveness of the assessment. Based on these findings, the use of peer assessment as a specific quality improvement strategy is a viable alternative to self-assessment. Moreover, the use of peer assessment shows potential in enhancing the accuracy of self-assessments and is cited as a potential strategy to remedy problems inherent in inaccurate self-assessment. Although additional research on the use of peer assessment among health professionals in the workplace is needed, the two studies described provide empirical support for the use of peer assessment and demonstrate its use as a quality improvement strategy.

**Multisource feedback (MSF) and 360 degree evaluations**

Feedback by other raters has been proposed as a way to ameliorate the problems attached to self-assessment. Specifically, strategies that employ multiple raters or assessment sources to provide assessment information, such as multisource feedback (MSF) and 360 degree evaluations, are suggested as means to seek comprehensive performance feedback of individuals in a variety of work settings.

Andrews, Violato, Al Ansari, Donnon and Pugliese (2013) recently conducted a systematic review of multisource feedback instruments in order to summarize the evidence of feasibility, reliability, generalizability, validity and other psychometric characteristics of the instruments. Using search terms such as MSF, 360-degree evaluation and assessment of medical professionalism, the authors found 48 studies that met the inclusion criteria. Overall, the study found that MSF has adequate evidence of validity, reliability and feasibility for providing health practitioners with quality improvement data including both formative and summative
assessment, as part of an overall strategy for maintaining competence and certification. In particular, MSF was found to be an appropriate system to measure performance and competence of practising psychologists, compared to self-assessment. Citing evidence of the problematic use of self-assessment alone to assess competence and performance of psychologists by registration and licensing boards, the authors propose the use of MSF as a way of monitoring psychologists’ core competence, providing summative and formative assessment, and ensuring quality care. This paper supports other studies which challenge the use of self-assessment as a valid and reliable method of evaluating, maintaining and assuring competent practice as a quality assurance approach for public accountability. The authors recommend the adoption of MSF by North American regulatory and licensing authorities for practicing psychologists.

Miller and Archer (2010) conducted a systematic review to investigate the educational impact of workplace-based assessment on physician performance. Their literature search was limited to common performance assessment tools such as observations of clinical activities, discussion of clinical cases and feedback from peers, coworkers and patients collected by survey (i.e. MSF). In their review of 15 studies and 1 randomized controlled trial (n=16), MSF was found to lead to improved performance. However, individual factors, the context of the feedback and facilitation were found to have an impact on the magnitude of the response to the formative performance assessment. This study yields important findings in the area of formative performance assessment and highlights the need to show conclusive links between workplace-based assessment and performance improvement.

A study by Darr and Catano (2008) sought to understand whether and how developmental MSF ratings compared with those obtained from leadership selection decision makers in a behaviourally structured interview. The study sample included senior managers
(n=77) in a police organization who received feedback on eight competencies which also formed the basis of a promotional interview for senior executive positions. Findings indicated that supervisor, peer, and aggregate ratings predicted subsequent interview performance while subordinate and self-ratings failed to predict interview performance. Thus, this study provides further support for the validity of MSF ratings. As a further benefit, it suggests that managers who receive MSF as part of their development pay most attention to the feedback they receive from supervisors and peers.

Nijveldt, Beijaard, Brekelmans, Verloop and Wubbels (2005) developed and validated a procedure to assess the interpersonal competence of beginning secondary school teachers. Since interpersonal competence involves performance and reflection on one’s performance, both behaviour and reflection were assessed to obtain a comprehensive picture of a teacher’s interpersonal competence. Accordingly, the assessment procedure included the Questionnaire on Teacher Interaction (QTI), a behavioural observation instrument and a self-evaluation instrument. For this small-scale study, the assessors consisted of teachers educators (n=2) and supervisors of secondary teachers’ training (n=2) who participated in the assessment of a beginning teacher (n=1). The results indicated satisfactory validity of judgments by the four assessors and reasonable interrater reliability of the assessment procedure. The study also demonstrated the added benefit of using observation and self-evaluation instruments in addition to the QTI to assess interpersonal competence of teachers. Together, these strategies provided a more authentic picture of teachers’ interpersonal competence and self-awareness.

Another study by Grujich et al. (2012) explored the use of multiple raters to provide feedback on professional role competency. Specifically, the authors conducted a needs assessment survey to understand the perspectives of psychiatry residents on the current method
of evaluating the Professional Role competency and use of MSF as an assessment tool.

‘Professional Role’ was one of seven CanMEDS roles used to evaluate postgraduate medical trainees. A structured, anonymous survey was distributed to residents (n=128) in postgraduate years 1 through 5 of the University of Toronto’s psychiatric program. Of the survey respondents (n=110, 86%), fewer than half of the residents (49%) felt that the Professional Role was being adequately evaluated and most residents (70%) felt that patient care could be enhanced by improving the evaluation of this competency. All residents (100%) felt that their primary supervisor should be involved in their evaluation of Professional Role using MSF. Although the capacity of patients to provide feedback is a salient issue in psychiatry, the study demonstrated support for the use of MSF as a potential assessment tool for evaluating psychiatry residents’ Professional Role competency.

Bradley, Allen, Hamilton and Filgo (2006) also explored the use of MSF by attempting to explain differences between rater groups by examining the result of 360-degree leadership from the perspective of rater self-interest. Using data from a commercially available 360-degree leader development feedback instrument (i.e. CheckPoint 360° Competency Feedback System) and a second-order confirmatory factor analysis model, the authors attributed between-group rating differences to observer perception based upon organization level. Using data from 6,021 cases of feedback ratings of leaders from a number of different industries, the study also sought to demonstrate the influence of leader behaviours on rating differences of members at different levels within an organization. However, the data demonstrated the contrary and implied that all raters are influenced by the leader’s human relations ability and performance results when observing leader performance. The authors concluded: “Human relationships are necessary to achieve organizational results, and good results strengthen leader-follower relationships” (p.21)
and suggested that 360 degree evaluations should consider relationships and results as well as the traditional competency level. Overall, this study highlights the challenges inherent in multi-rater or 360-degree feedback and elucidates factors such as leadership which may account for the variance and agreement between groups of raters.

In a study of Peruvian oil refinery staff, Araujo and Taylor (2012) investigated the use of a MSF assessment tool to determine the relevance of emotional and social competence (ESC) on job performance. The intent of this replication study was to explore whether ESC was related to staff job performance and highlight which Emotional Intelligence (EI) competences would be the most indicative of staff performance. ESC was measured using the Emotional Competence Inventory MSF assessment tool, a 360 degree assessment tool for leadership development. Refinery staff who participated in the study (n=36) invited their supervisors, peers and subordinates to participate as raters. Performance evaluations to measure staff performance were also carried out by superintendents and the refinery manager. The study found partial evidence for the influence of ESC when evaluated by others on job performance. For example, of the 18 ESC rated by others, five were significantly correlated with job performance and four competencies accounted for 70% of the variance in job performance (i.e. self-confidence, achievement orientation, optimism and teamwork and collaboration). However, the study did not find a significant relationship between staff performance and self-evaluated ESC with the exception of the self-rated transparency competency, which was found to correlate positively with job performance. This study’s findings echo results of previous research about the problematic nature of self-ratings and inability of self-assessments to predict performance compared to others’ ratings. It also provides support for the relationship between ESC and job performance.
MSF and 360 degree evaluations were described as ways to provide more thorough assessment information of an individual by producing a more comprehensive assessment. When different assessments are compared, a more complete picture of the individual being assessed is created. Hence, the effectiveness of MSF has been demonstrated in medicine, psychology, psychiatry, teaching, industry and management/leadership. The use of MSF as a workplace-based assessment tool for formative feedback has even been shown to improve performance (Miller & Archer, 2010). Furthermore, MSF has been suggested as a valid and reliable means of assessing competence by regulatory and licensing authorities (Andrews et al., 2013). Andrews et al. (2013) also suggested the use of MSF as an alternative to self-assessment and as a way of monitoring psychologists’ core competence, providing summative and formative assessment, and ensuring quality care. Overall, the studies described above provide a strong body of evidence for the use of MSF as a workplace-based assessment tool.

Summary of Literature Review

Among workplace-based assessment strategies, there are several established methods of assessing competence. Self-assessment remains popular, despite identified flaws with its use as a valid and reliable method of assessing competence. Repeated studies examined the accuracy of self-assessment, however, it is consistently shown to be an inappropriate method of assessing competence. Multiple studies found evidence of poor performers’ overestimation of their abilities and inability to see the need for performance improvement. Moreover, the use of self-assessment as a method of verifying competency is incongruous with its intended quality assurance purpose because it lacks validity as a method of assessment.

Self-assessment is a common component of the evaluation of health professionals. Despite the lack of consensus on accurate tools to assess competence, there was a common
overreliance on self-assessment found in many studies. Its accuracy and application were not questioned in studies designed to exclusively test self-assessment tools and instruments. The specific role of competency assessment processes and practices in a health care organization was not addressed by the empirical studies that tested self-assessment and other methods of assessing health professionals’ competence. Thus, the use of self-assessment in organizational practices such as performance appraisal is not covered in the literature nor is whether or how competence is assessed across disciplines in health care organizations. It is important to know if and how self-assessment is used in workplace-based competency assessment practices with health professionals.

From the literature, it is evident that various tools and instruments have been designed as means of measuring specific competencies. However, the tools and instruments all rely on self-assessment and are aimed at measuring particular competencies among health professionals. Despite attempts to create multiple competency assessment tools and instruments, the literature remains inconclusive about reliable and valid ways of assessing health professionals in the workplace, particularly within an interprofessional milieu. The use of self-assessment notwithstanding, there is a general lack of consensus about the assessment of competence of health professionals.

Regulated health professionals working in health care organizations have both regulatory and organizational accountabilities. Regulatory practices are crucial in enacting many organizational processes, including human resource management, may influence organizational competency assessment practices for health professionals. However, the literature was devoid of a discussion about the relationship between regulatory and organizational assessment strategies for the individual and organization, nor does the literature shed light upon the way in which
health professionals navigate the relationship between their workplace and regulatory body, particularly with respect to competency assessment.

Clear conceptual definitions are important to determine if all studies of workplace-based competency assessment are examining the same phenomenon. Although two studies (i.e. O’Leary, 2012 and Andersson et al. 2007) both defined competence using Patricia Benner’s (1984) continuum of skill acquisition, this definition was not used in other studies. Other studies (i.e. Brosan, Reynolds and Moore, 2008; Reynolds and Moore, 2008) implied that competence was dichotomous and warned of an incompetence that could arise from inaccurate assessments of competence. In addition, there was a blurring between competence and performance in the majority of the studies. Without common conceptions of competence and performance across studies, it is difficult to determine whether competence and performance is being judged in a similar fashion. Similarly, several studies tested generalist and specialist competencies, yet, it is not known if these distinctions between competencies are used among regulated health professionals and organizations. Greater definitional clarity is needed in order to build consensus in workplace-based competency assessment strategies among health professionals.

Studies examining competency assessment strategies generally described contextual variables, such as the setting in which the study took place. For example, several studies feature demographic information such as study participants’ length of service in the organization or specialty area and a description of the study context such as whether the hospital was academically affiliated. Yet, due in part to some of the study methodologies, the relationship between the organizational context, method of assessment and other relevant contextual information was not discussed. For regulated health care employees, it is important to know how competency assessment strategies are conducted in health care organizations. Similarly, the
literature was generally lacking any description of employees’ employment status (i.e. full-time, part-time or casual) and whether they worked in unionized or non-unionized environments. While these issues were absent from the studies described herein, it is possible that they may play a key role in differentiating organizational practices including competency assessment for different groups of regulated health professional employees.

There have also been a number of attempts to develop tools and strategies to measure competencies and to psychometrically test various self-assessment instruments. For example, the use of experts (e.g. Fowler, Rollinson and French, 2011) or SME’s (e.g. McGuire et al., 2012) to rate individuals’ performance demonstrated promise in correcting inaccurate self-assessments of competence. While experts and SMEs were used to recalibrate self-assessments, it is not known how these practices are utilized across health disciplines and in health care organizations. Thus, the potential of experts and SME’s to improve the accuracy of the self-assessment warrants further exploration.

Several studies such as Hugenholtz et al., 2008 described the use of competency assessment as a form of needs assessment to inform an educational or quality improvement initiative. Nevertheless, the impact of the educational or quality improvement initiative on practice was not described. For example, the impact the training programs had on promoting behaviour change in the workplace is not known. Given the scarcity of health care resources, it would be important to know which strategies work to instil a positive change in behaviour, and which strategies are ineffective.

Feedback and the use of audit reports were found to play an important role in enhancing performance in several studies (e.g. Fereday, 2006; Jackson et al., 2012). Although it may seem
self-evident to provide targeted feedback as part of formative assessments, it is not known what types of assessments are conducted in health care workplaces. Moreover, it is possible that opportunities for feedback are limited in a healthcare context. Although annual performance appraisals may be an opportune time for feedback, they typically focus on summative assessment over performance improvement. It is important to know what opportunities for formative feedback exist in health care workplaces and whether audit reports are part of organizations’ performance management repertoire.

Overall, peer assessment and MSF were cited as means of providing more accurate assessments when compared to self-assessment (Evans, Leeson and Petrie, 2007; Andrews et al., 2013). In particular, there is a robust body of evidence about MSF which shows promise as an assessment tool, particularly when contrasted with self-assessment. Thus, feedback by multiple assessors was proposed as an alternative to self-assessment because of its accuracy as a comprehensive performance feedback mechanism. Despite the broad appeal of MSF and peer assessment, it is not known whether these methods are used to assess regulated professionals in health care organizations.

Key Findings from the Literature Review

Among the gaps and contradictions identified in the literature, the most salient are those that reside in the relationship between individuals’ regulatory and organizational accountabilities. Clear understanding of what mechanisms exist within organizations to assess the competency of regulated health professional employees would help delineate between organizational performance appraisal and regulatory competency assessment processes. This understanding would also help guide professionals who are caught in the middle as employees with both organizational and regulatory accountabilities. Thus, it is important to explore
organizational competency and performance appraisal processes of regulated health professionals employed in health care organizations in order to determine where improvement efforts might be targeted. Furthermore, a theoretical explanation of the relationship between regulated health professional employees and the workplace context may help to reconcile the tension described herein.

Given the regulatory reliance on self-assessment of health professionals, it is important to better understand if and how self-assessment is used by organizations to assess the competence of their employees. The suggestions that less competent individuals lack insight into their need to improve their performance positions the overuse of self-assessment as a significant problem from a quality and safety perspective. The risk of an extant incompetence in healthcare workplaces, perpetuated by the overuse of self-assessment, warrants further investigation.

Several strategies showed promise in enhancing assessment, supporting performance improvement, and contributing to quality improvement. For example, the use of feedback, experts, SMEs, audit reports, peer assessment and MSF were found to be helpful strategies to evaluate health professionals’ performance in the workplace. Although peer assessment and MSF showed promise in enhancing self-assessments and providing a more comprehensive assessment picture, use of these assessment strategies among regulated health care employees working in health care organizations is not known.

Organizational context is particularly important for regulated health care providers working as employees in organizations such as hospitals. However, the literature was generally missing descriptions of organizational context, with the exception of one study that explored affiliation with a medical centre as a key feature toward enhancing performance (Jackson et al.,
Further examination of the influence of organizational context on competency assessment and performance appraisal practices is needed. Additionally, it is logical that there might be shared characteristics among regulated health professional employees in organizations, despite differences in their regulation and practice. Yet, it is unclear what these shared characteristics are as there was no consensus in the literature about how to assess the competence of health professional employees in organizations. An exploration of these characteristics is needed in order to better understand shared and distinct organizational and regulatory boundaries among health professional employees.
Chapter Three: Towards an epistemology of organizational competency assessment

Introduction

This chapter traces the way competence came to be considered a vital part of assessment, shedding light on our current understanding of the assessment of individuals in organizations. This historical evolution of competency assessment starts post-WWII, a time when extensive research and testing conducted during the war was taken up in other contexts, such as the workplace. This era of economic growth and development after the war was a time when assessment flourished and organizations tried to determine the best approach for candidate selection and assessment. Several decades later, following psychologist David McClelland’s introduction of the concept of competency into individual assessment in the 1970s, competency models took hold as a means of a comprehensive and holistic assessment of individuals in organizations, beyond IQ testing, behavioural observation and job analysis. In 1982, a prominent management theorist, Richard Boyatzis, proposed his model of effective job performance. This model served as a theoretical framework for this study because it contextualizes the assessment of competence of individuals in organizations.

The transition to behavioural observation in organizations (1950s)

During WWII, the adoption of practices related to personnel testing reached an all-time high (Thorndike, 1949). In all branches of the American armed forces, psychologists with expertise in psychometric testing devised and administered selection and classification tests (Thorndike, 1949). Such tools and techniques were designed to assist employers in their observation of individuals’ behaviour in organizations with respect to candidate selection, training and performance appraisal. Moreover, tests for selection and classification of personnel
were also developed for use in industry, civil service, and education (Thorndike, 1949) to identify potential gaps between a candidate’s perceptions and actions and the norms, policies and objectives of an organization (Vogelsang & Minahan, 2013). This work laid the foundation for workplace assessment of individuals in human resource management activities such as selection, training and evaluation (or assessment) of personnel.

By the middle of the twentieth century, the evolution of what was known as scientific psychology and rise of educational psychology led to the operationalization of various applications of psychological theories in the workplace. Morris (1996) describes the transition from cognitive and educational psychology to the observation of behaviour in organizations as “a groping struggle away from a type of psychology which had very little to show for itself, considering its long history, to a psychological perspective promising achievement of the general goals of science, prediction and control” (p.23). Devices for personnel selection such as objective aptitude and achievement tests came into being around WWI. Robert Thorndike (1949) (i.e. son of educational psychologist Edward Thorndike) claimed that there was great expansion of these tools during the period between the wars, particularly in the areas of candidate selection for college programs, employee selection in various industries and public personnel agencies, and intellectual exploration by psychologists interested in tests and measurement. This expansion was further consolidated by the unprecedented post-WWII investment in research by the US government. That program was designed to produce new scientific knowledge which could be used to create wealth, achieve national goals, improve human life, and solve social problems (Schön, 1987).

In 1954, American psychologist John C. Flanagan published a landmark review article that described the development of the Critical Incident Technique (CIT) (Flanagan, 1954).
Flanagan (1954) proposed that an incident was any observable human activity that is sufficiently complete to permit inferences and predictions about the person performing the act. To be critical, the incident must meet specific criteria: it must “occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects” (Flanagan, 1954, p.327). Thus, the term critical incidents stems from the idea that these behaviours should be critical to success or failure in a position for a given job (Thorndike, 2010). Earlier work by Thorndike (1949) recommended that job descriptions be organized in such a way as to facilitate the identification of activities and characteristics that represent critical requirements of the job, as opposed to a job’s relatively incidental features. The CIT provided a new method of studying behaviour that reflected a set of procedures for collecting direct observations of human behaviour in a way that facilitated “…their potential usefulness in solving practical problems and developing broad psychological principles” (Flanagan, 1954, p.327).

As a method for developing instruments to evaluate performance, use of the CIT was based on involving raters to develop scales to use in selection and training activities (Thorndike, 2010). The first step in creating such an instrument required raters to reach consensus on the dimensions (i.e. specific knowledge, skills and abilities or KSAs) that could be distinguished as important aspects of performance in a given job (Thorndike, 2010). The potential users would then generate a pool of critical incidents, or examples of actually observed behaviour, to illustrate superior, average and inferior performance in each of the selected dimensions (Thorndike, 2010).

According to Flanagan (1954), a key feature of an incident was that it reflected observable activities performed by an individual as discerned by an observer. Flanagan’s (1954)
focus on incidents as observable activities was reminiscent of B. F. Skinner’s work during the post-WWI era when a behaviourist approach to psychology dominated theory and research on behaviour. Like Flanagan, Skinner (1974, 1989) was interested in observable behaviours and the influence of environmental contingencies on behaviour and psychological states (Proctor, 1990).

The CIT provided a method of studying activity requirements for a job or training by way of observable behaviour. It outlined procedures for analyzing and synthesizing observations into a number of relationships that could be tested by making additional observations under carefully controlled conditions (Flanagan, 1954). Given the flexibility and broad applicability of the CIT, Flanagan (1954) hoped that it would provide a comprehensive foundation for procedures in many areas of psychology. Furthermore, use of the CIT served as an alternative to basing decisions on psychological testing of candidates. Inherent in the use of the CIT was the belief that observable behaviours are predictive of job performance (Flanagan, 1954) and that there is a relationship between observed behaviours and subsequent performance.

For the selection of candidates as part of an organization’s human resource management processes, the development of the CIT afforded the opportunity to observe and subsequently select candidates based on behaviours specific to a particular job (Flanagan, 1954). The CIT followed two underlying principles. First, that facts about behaviour be reported objectively, rather than collecting subjective interpretations, ratings and opinions based on general impressions. And second, that reporting be limited to behaviours which, according to competent observers, made a significant contribution to the activity (Flanagan, 1954).

By the mid-20th century, researchers in the field of industrial and organizational psychology increasingly described the use of specific knowledge, skills and abilities, or KSAs, in
techniques such as the CIT. As a human resource management tool, the appeal of the CIT was its ability to produce a list of behaviours and activities that could be used to make inferences about selection, training and performance appraisal. By identifying the KSAs necessary to perform a job, the associated behaviours could be observed, or assessed, and form the basis for organizational decisions. As a selection technique and workplace tool, the CIT exemplified the operationalization of psychological principles, such as Skinner’s explicit focus on observable behaviours and behaviourist approach.

The rise of competency modeling (1960s-early 1970s)

Psychological principles were also operationalized in the development of assessment strategies to evaluate and assess candidates as part of job selection procedures. Job analysis was considered a process used to subdivide jobs into elements, such as tasks, through various procedures (Levine, Ash, Hall & Sistrunk, 1983). Although early research in personnel selection in the first part of the 20th century looked at person-environment (P-E) fit, articles in the published literature about job analysis did not reach an all-time high until the years 1960-1979 (Sanchez & Levine, 2012). American psychologists Sackett and Laczo (2003) were proponents of job analysis, which they defined as “a broad term commonly used to describe a wide variety of systematic procedures for examining, documenting and drawing inferences about work activities, worker attributes, and work context” (p.21). Job analysis provided a means of focusing on knowledge, skills and abilities in conducting attribute-oriented job analysis (Sackett & Laczo, 2003). Sanchez and Levine (2012) argued that the formulation of worker attributes made job analysis a truly psychological endeavour.

Dimensions to include in job analysis procedures included KSAs and other personality characteristics (i.e. KSAOs) such as personality traits, attitudes and values which were valued by
organizations for their ability to correlate with job performance (Sackett & Laczo, 2003). In this sense, psychological principles were applied in the workplace and operationalized due to their predictive value in determining candidate performance. Within industrial and organizational psychology, job analysis has generally been viewed as a foundational activity conducted to support organizational activities requiring job information (Sackett & Laczo, 2003).

However, in the late 1960s and early 1970s, a critique emerged in the field of industrial organizational psychology that job analysis did not include other personality characteristics linked to job performance, such as personality traits, attitudes and values (Sackett & Laczo, 2003). As a result, job analysis was broadened to include other personality characteristics (i.e. knowledge, skills, abilities and other personality characteristics, or KSAOs) (Sackett & Laczo, 2003). The inclusion of personality variables in job analysis procedures along with a full range of other characteristics later became a hallmark of competency modeling techniques, which are often presented as an alternative to or replacement for job analysis (Sackett & Laczo, 2003).

While the purpose of job analysis is to better understand work assignments (Sanchez & Levine, 2009), the primary purpose of competency modeling is to influence the manner in which such assignments are performed such that “presumably strategic, behavioural themes are emphasized when performing every job” (Sanchez & Levine, 2012, p. 408).

The emergence of competencies in Industrial and Organizational Psychology: competence and performance (1973–present day)

Harvard University professor David McClelland’s (1973) influential publication in the American Psychologist entitled Testing for Competence Rather than for “Intelligence” heralded the emergence of competencies in organizational psychology (Sackett & Laczo, 2003). McClelland (1973) questioned the power of intelligence and aptitude tests and provided a strong
critique of the testing movement in the United States, given its immense power over the lives of many Americans. McClelland (1973) called for the abandonment of general intelligence or aptitude tests and proposed alternatives to the testing movement. As an adaptation of Flanagan’s CIT, McClelland and colleagues developed a Behavioural Event Interview (BEI) which enabled interviewers to measure competencies such as achievement motivation or logical ways of thinking and solving problems (Spencer & Spencer, 1993). McClelland (1973) also recommended that tests assess competencies involved in clusters of life outcomes such as communication skills, patience, moderate goal setting, and ego development. He further explained that some of these competencies may be rather traditional cognitive ones involving reading, writing and calculating skills. He suggested including other competencies such as those which had been traditionally called personality variables, “although they might better be considered competencies” (McClelland, 1973, p.10).

McClelland’s work was highly influential. He and other colleagues such as Boyatzis (1982) and Spencer and Spencer (1993) continued to conduct research on competencies (Sackett & Laczo, 2003) in the decades following McClelland’s important publication. In an editorial about competencies in the 21st century, Richard Boyatzis (2008) suggested that McClelland’s initial proposal of competencies as a critical differentiator of performance in 1973 influenced the development of the concept of competency-based human resources, from being considered a new technique to common practice. Nevertheless, McClelland’s paper received criticism for its shortcomings, including its mischaracterization of the research linking cognitive ability to job performance and failure to acknowledge the wide array of constructs other than cognitive ability used in employment settings (Sackett & Laczo, 2003). Moreover, his BEI was considered inefficient and impractical for analysis of many jobs (Spencer & Spencer, 1993).
After McClelland’s initial work in the 1970s, a growing literature about the importance of competencies was emerging in the decades that followed. For example, Spencer and Spencer’s (1993) *Competence at Work: Models for Superior Performance* is frequently cited as the most influential resource describing competence in industrial and organizational psychology and among human resource professionals. It was the culmination of work to develop a generic competency dictionary that would be comprehensive for all occupations (Delahoussaye, 1999). In it, Spencer and Spencer (1993) define competency as “an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation” (p. 9). Thus, competencies were thought to have a predictive quality and be closely related to their measurement in context. Spencer and Spencer’s work extended traditional competency models as being not only a holistic way to assess people but also a means to predict behaviour in different contexts.

In Spencer and Spencer’s model (1993), underlying competency characteristics include motives, traits, self-concept, knowledge and skill whereby knowledge and skill competencies are considered ‘surface’ competencies that are visible and easy to develop through training. Conversely, ‘core’ competencies such as motive, trait and self-concept are more central to personality, hidden, and difficult to develop and assess (Spencer & Spencer, 1993). Spencer and Spencer (1993) also suggest that it is more cost-effective to provide training to secure employee abilities such as knowledge and skill and to select employees based on their core characteristics such as motives and traits. This categorization of competencies and claim that competency predicts behaviour in a number of situations and job tasks has practical implications for human resource planning. Spencer and Spencer’s (1993) work on competencies was preceded by Richard Boyatzis’ work by almost a decade. Boyatzis (1982) elaborated the work of Spencer and
Spencer by seeing competencies as underlying characteristics while also highlighting the influence of contextual features on competence. While Spencer and Spencer’s model was limited due to its singular focus on measurement and prediction, their work remains important in the competency movement since it was one of the first empirical tests of competencies to account for the context of situations and job tasks.

**Boyatzis’ Model of Effective Performance**

For over 40 years, Richard Boyatzis played a pivotal role in developing managerial competencies. This work began in the early 1980s when Boyatzis studied under and worked with some of the foremost academics in the field of training and psychology, such as McClelland and Spencer and Spencer, where they collaborated at their consulting firm McBer and Company, later acquired by Hay Management Consultants (Delahoussaye, 1999). Boyatzis’ (1982) research applied a behavioural lens to human resource management and industrial and organizational psychology and offered a contextualized view of an individual’s competencies in an organizational setting.

Boyatzis published *The Competent Manager: A Model for Effective Performance*, in 1982, which described research findings about elements of his performance-tested competency model of management. His study was designed to determine which management characteristics are related to effective performance in a variety of managerial jobs in various organizations (Boyatzis, 1982). Boyatzis’ work provided evidence for a set of competencies that consistently distinguished superior from less effective managers across organizations and functions (Spencer & Spencer, 1993). The specific objective was to explain differences in general qualitative distinctions of performance, such as poor versus average versus superior managers, which may occur across particular jobs and organizations as a result of certain competencies that are shared...
by managers (Boyatzis, 1982). Building on his work in this area, the 1982 study contributed to the development of Boyatzis’ model of effective job performance which he refined through further empirical work.

Boyatzis (1982) described a competency as “an underlying characteristic of the person that leads to or causes effective or superior performance” (p.21). He elaborated by calling competencies characteristics or abilities of a person which enable him or her to demonstrate appropriate specific actions and also the capabilities that he or she brings to the job situation (Boyatzis, 1982). Boyatzis (2008) later refined this description by referring to competency as capability or ability and as a set of related but different sets of behaviour organized around an underlying construct or “intent” (p.6). He called the behaviours alternate manifestations of the intent, as appropriate in various situations or times (Boyatzis, 2008).

Boyatzis (1982) argued that an individual’s competencies are necessary but insufficient for effective performance in a job. Moreover, effective specific actions or behaviours occur when there is consistency or “fit” between the three critical components of his model of effective job performance: namely, the individual’s competencies, the job’s demands and the organizational environment (see Figure 1 below, and Boyatzis, 1982, p.13). If any one or two of these components are inconsistent and do not correspond with each other, then it is expected that ineffective behaviour or inaction will result (Boyatzis, 1982). Boyatzis’ (1982) model of effective job performance is depicted as follows:
Figure 1: The Boyatzis Model of Effective Job Performance (1982)

Figure 1: Effective action (i.e. performance) will occur when all three of the critical components of the model are consistent, or “fit”. In Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. New York: Wiley, p.13.

Boyatzis’ theory of performance was the basis for his concept of competency (Boyatzis, 2008). He applied basic contingency theory in his model depicting that maximum performance occurs when a person’s capability or talent is consistent with the needs of the job demands and organizational environment (Boyatzis, 1982). Later, Boyatzis included competencies within a broader view of a person’s talent, which encompasses his or her values, vision, and personal philosophy; knowledge; competencies; life and career stage; interests and style (Boyatzis, 2008). Job demands are described by the role and tasks needed to be performed (Boyatzis, 2008). Several aspects of the organizational environment are predicted to have an important impact on the demonstration of competencies and/or design of jobs and roles. Effective specific actions or behaviour are thought to occur when there is some degree of overlap between three overlapping aspects: *individual competence, job demand* and *organizational environment* (Stewart, 1983).
According to Boyatzis (1982), an individual draws from his or her inner resources for the capability to respond when the job responsibilities require specific actions to be demonstrated to produce the desired results. Thus, effective job performance includes the notion that ‘specific actions’ (p.12) have been taken so that the specific results of the job occur (Boyatzis, 1982). His construction of competencies at two levels (Stewart, 1983) requires both action and intent, and includes “... measurement methods that allowed for assessment of both the presence of the behaviour and inference of the intent” (Boyatzis, 2008, p.6). Thus, for Boyatzis, competencies are held to be causally related to effective or superior job performance (Stewart, 1983). Boyatzis (1982) also argues that effective performance includes the idea that specific results required by the job occur because “specific actions” have been taken (p.12) and that specific actions cause, or lead to, the specified results. Moreover, effective performance of a job may be assessed by examining the attainment of output objectives (i.e. results) or the appropriate execution of procedures and processes (Boyatzis, 1982).

On the contrary, ineffective specific actions and behaviour or performance may result if the demands of the job or organizational environment are in conflict, do not correspond with one another, or are “minimally inconsistent” (p.15). Inconsistencies in the components of Boyatzis’ model of effective performance would represent the falsifiability of the theory, which contradicts the theoretical prediction and casts doubt on the theory (Lee, 1989). Furthermore, Boyatzis (1982) suggests that “if the job demands conflict with aspects of the organizational environment, effective performance will either not be forthcoming or it will be costly and highly inefficient” (p.14).

Although Boyatzis’ model of effective performance was designed as a management model, the general categories and definitions make it broadly applicable. Boyatzis (1982) tested
his model theoretically and empirically and suggested that assessment of the degree of effectiveness of a manager’s performance must occur in the context of each organization’s values, norms, standards, and objectives. Thus, Boyatzis effectively contextualized the assessment of job performance and positioned an individual’s competencies as one important component of effective actions or behaviour.

A strength of Boyatzis’ (1982) work is his recognition of the importance of organizational context, including the policies and procedures that are reflected in the internal structure and systems of an organization. Boyatzis’ model illustrates a critical interplay between an individual’s competencies, the organizational environment and job’s demands in order to effect specific actions or behaviours within an organization (Boyatzis, 1982). According to Boyatzis (1982), the model suggests that there is an increased likelihood that effective performance will occur if any two of the components are consistent or congruent. Boyatzis (2008) later refined his model as a theory of action and job performance (see Figure 2: Theory of Action and Job Performance), changing “effective specific actions or behaviour” for “best fit” at the area of maximum overlap of the three overlapping circles.
While the Theory of Action and Job Performance (2008) intends to highlight the need for congruence or “best fit” between the components of the model, Boyatzis’ original model of effective job performance (1982) model clearly and simply shows the critical overlapping relationship between the three components of the model, which results in effective performance. Boyatzis’ (1982; 2008) competency models can be considered an adaptation of the classical psychological model of behaviour which considers behaviour a function of the person and the environment. Given Boyatzis’ view of competencies as a behavioural approach to emotional, social and cognitive intelligence (Boyatzis, 2008), his work advances an important methodology for competency improvement and development (Delahoussaye, 1999). More crucially for the
current project, Boyatzis’ work provides theoretical support for the need to contextualize competency assessment in the organizational context, as will be discussed in the next section.

**Application of the Boyatzis model to the assessment of health professionals**

In the field of industrial-organizational psychology and human resource management described herein, competence is something that occurs in the context of the workplace. Boyatzis’ (1982) model provides an organizing framework for exploring the relationships between an individual’s competencies, the organizational environment and the job demands. In health care and health professions education contexts, competency assessment tends to be focused on behaviours that can be observed, with less attention paid to environmental contingencies and contextual influences on behaviour. Indeed, Grant (1999) and Brooks (2009) have both criticized the tendency for competency-based approaches in healthcare to be entrenched in behaviourism, a reductionist view of competency, and cautioned that observed behaviour can never account for the complexity of human behaviour. While Boyatzis (1982) also highlighted the importance of the behavioural demonstration of competencies, echoing the initial work in the early 20th century on behaviourism, his model went beyond individual behaviour by also including elements of the job and organization as equally contributory components impacting performance.

Boyatzis was careful not to dismiss early work on behaviourism when he was interviewed about the history of the competency movement. He summarized the importance of this early work as follows:

*We ended up, if you will, seduced into doing a lot of competency studies to figure out what makes for an outstanding performer because we wanted to help people change … we also discovered that to be able to get the measures we had to do some methodological work. That was when we started to do this work on the coding systems and interviews and using videotaped sessions, because live coders, as the Assessment Centre (AC) literature continues to show even 30 or 40 years later, are horribly unreliable. That was a
tremendous jump forward for us methodologically because it enabled us to have reliable and … valid measures of these characteristics (Boyatzis, interviewed by Delahoussaye, October 1999, p.12).

Boyatzis called his work a behavioural approach to a person’s talent (Boyatzis, 2008), echoing Skinner’s perspective on the observation of behaviours. Competencies were also considered a means of exploring outstanding performance (e.g. Boyatzis, 1993) although in general, they were considered to be better indicators of future job performance, due to their inclusion of personality variables and other characteristics.

This study uses the Boyatzis model of effective job performance (1982) to explore competency assessment of regulated health professionals in a Canadian academic hospital. The model will serve as a theoretical framework to understand constructs within the hospital setting that impact performance (i.e. or effective action). It is anticipated that the use of this model will offer a means of exploring competency and competency assessment in a contextualized manner, rather than only focusing on competencies at the level of an individual regulated health professional’s behaviour. More specifically, the components of this model will be reflected in the study’s theoretical propositions and data collection strategy. For example, participants will be asked to describe their understanding of a regulated health professional’s competencies within the hospital setting (i.e. an individual’s competencies); the competency expectations of a regulated health professional’s specific role within the hospital (i.e. job demands); and the influence of the academic hospital setting (i.e. organizational environment). These concepts will also be explored in relevant organizational documents. The components of this model will be revisited following data collection when analyzing the study data.

Although Boyatzis’ (1982) model included competencies as one component that contributed towards effective performance, assessment was not an explicit part of his theoretical...
contribution. This study uses the Boyatzis model as a theoretical framework to contextualize competencies and competency assessment in an organizational setting. Thus, despite the absence of assessment in the Boyatzis model, it is expected to still be a productive means of exploring competency assessment in a hospital environment. Boyatzis’ (2008) research applies a theoretical lens to human resource management and industrial and organizational psychology and positions competencies as “behavioural manifestations of talent” (p.8). Application of Boyatzis model of effective job performance (1982) may help explore how the process of individual health professionals’ competence is enacted in the context of an academic hospital.

Application of relevant theory from industrial and organizational psychology is helpful to explore the competency assessment of health professionals in an organizational context. In particular, Boyatzis (1982) contextualizes competence within an organization. The Boyatzis model of effective job performance (1982) illustrates the critical interplay or ‘fit’ that is needed between an individual’s competencies, the organizational environment and job demands to effect specific actions or behaviours. The study’s embedded case study design will use the constructs in the Boyatzis model to sample participants at multiple organizational levels. In theory, this model of effective job performance may also elucidate the relationship between an individual’s competencies, job demands and the organizational environment in a contemporary healthcare context.

Summary of theoretical chapter

This overview of how competence came to be understood situates the theoretical framework for this study within its broader science and history. This examination is germane to this study’s exploration of the processes that health care organizations use to assess health professionals’ competence in the workplace. Application of the Boyatzis model of effective job
performance provides a theoretical framework with which to explore how individuals’ competence is assessed within the constraints of an organization and how competency assessment is understood in a Canadian academic hospital. This model acknowledges the influence of the organization on how an individual enacts their role in fulfilling their job demands. It also offers the opportunity for multi-level perspective (i.e. at the level of the individual, group and organization) which is appropriate for contemporary organizational studies.
Chapter Four: Methodology

Introduction

Qualitative case study research is used for comprehensively studying complex issues in context (Anthony & Jack, 2009; Holloway & Wheeler, 2010; Merriam, 2015). This study applied Yin’s structured approach to case study research, which is situated within a post-positivist paradigm. This paradigmatic approach that implies that the researcher generally seeks an ultimate truth or reality, values the research process and stresses the primacy of the method, (Boblin, Ireland, Kirkpatrick & Robertson, 2013) but also accepts the limits of human understanding. The post-positivist researcher also uses a priori theories and can employ a social science theoretical lens (Creswell & Poth, 2016). For this study, the Boyatzis model of effective performance served as an a priori organizing framework to initially guide the study. This chapter provides an overview of the study methodology and describes specific data collection, analytic, and interpretive methods to ensure quality and rigor. I also consider how my positionality might have influenced the study and its findings through reflexivity.

Study Design and Context

This study used an exploratory design, which helps orient the researcher to the topic under investigation and is well suited for exploring new or unstudied areas when little is known about the phenomenon (Shi, 2008; Yin, 2014). As in other qualitative research approaches, context is important in case study research in the following three ways:

1. case study research explores a phenomenon in context;
2. contextualization features prominently throughout the research process, including during data collection and analysis
3. the researcher has little or no control on the context in which the study takes place (Holloway & Wheeler, 2010).

This study was conducted in a multi-site Canadian academic research hospital in a large urban centre. An academic hospital is a particularly salient setting to study regulated health professionals’ competence since there is great organizational heterogeneity and a variety of contexts within the larger overarching organization. In this study, the organizational context of the study hospital was foregrounded in study design, data collection, and analysis. This meant that the hospital’s multi-site context and organizational structure were key features that were considered when planning the study and when analyzing data.

**Yin’s case study research**

Yin’s (2014) two-part definition of case study research covers the scope and features of a case study and shows how case study research comprises a comprehensive method, covering the logic of design, data collection techniques, and specific approaches to data analysis. First, “a case study investigates a contemporary phenomenon (the “case”) in its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (Yin, 2018, p.15). According to Yin (2014), case study research is “used in many situations, to contribute to our knowledge of individual, group, organization, social, political and related phenomenon” (p.4).

In this study, the “case” or unit of analysis was *competency assessment of regulated health professionals* within an academic hospital. This study context was a Canadian academic hospital, where it was difficult to separate the case or phenomenon of interest from the hospital context itself. Case study research is appropriate and even advantageous as a methodology given this study’s exploration of a contemporary process (i.e. organizational processes and practices...
related to competency assessment) over which the researcher has little or no control (Merriam, 2015; Yin, 2018). Since case study research focuses on understanding the dynamics present in a setting, it is a well suited approach for organizational research (Eisenhardt, 1989) and for studying contemporary events in context (Yin, 2018).

Second, case study research involves the following specific design and data collection features:

- A technically distinctive situation in which there will be many more variables of interest than data points
- A reliance on multiple sources of evidence, with data needing to converge in a triangulating fashion
- Prior development of theoretical propositions that guide design, data collection and analysis (Yin, 2018, p.15)

This study’s use of these specific case study design and data collection approaches will be described in detail throughout this chapter.

Data Collection & Unit of Analysis

This study’s ‘case’ or unit of analysis was the competency assessment of regulated health professionals in a Canadian academic hospital. Accordingly, the study population included primarily regulated health professionals from different disciplines who were either employed or appointed to work in the selected study hospital, including nurses, physicians and other regulated health professionals, hereafter referred to as allied health professionals. Managers, directors, and executives were also sampled purposively in order to understand the views of those conducting or involved in competency assessment and performance evaluation. Several participants who were not regulated health professionals but who were involved in competency assessment and/or performance evaluation of regulated health professionals in some way within the organization (e.g. human resources professionals) were also included.
A case study is characterized by its unit of analysis, case, or bounded system. Identifying the unit of analysis or delimiting the object of study at the outset is a fundamental part of defining the ‘case’ (Merriam, 2015; Yin, 2014). Since the case itself is central to case study research, it is important to consider what is at centre stage or at the core of the inquiry (Polit & Tatano Beck, 2010). Identifying the unit of analysis involves two steps: defining the case and bounding the case (Yin, 2014). Yin (2014) suggests that the tentative definition of the case or unit of analysis is related to the ways the initial research questions are defined. For this study, the overall study purpose helped define the unit of analysis (Shi, 2008; Yin 2014).

**Case Boundaries**

Once a general definition of the case is established, bounding the case becomes important (Yin, 2014). Bounding the case is an act of ‘fencing in’ what will be studied and helping to determine what will and will not be studied in the research project (Baxter & Jack, 2008; Merriam, 2015). Bounding the case helps determine the scope of data collection and especially, how to distinguish data about the subject of the case study (i.e. the “phenomenon”) from data external to the case (i.e. the “context”) (Yin, 2014). Boundaries can be spatial, temporal, and concrete such as a real-life phenomenon that has some concrete manifestation (Yin, 2014); bound by time and activity (Stake, 1995); or can include a definition of the concepts included in the research questions and unit of analysis or case (Baxter & Jack, 2008).

Boyatzis’ model of effective performance and definition of competencies helped form a conceptual boundary for this study. In particular, the study was focused on organizational processes and practices used to assess the competence of the study hospital’s regulated health professional workforce and ways in which regulated health professionals in this context perceive and experience competency assessment. The variety of measures within the hospital for
assessing performance and competence comprised performance appraisal processes; organizational processes, policies and procedures; and educational interventions. These strategies were included in the study scope in order to understand how the performance of regulated health professionals was enacted (i.e. Research Questions #1 and 2). In this way, the Boyatzis’ model of effective performance and theoretical conceptualizations of performance and competence served as useful study boundaries to frame the unit of analysis within the study context. Furthermore, by describing constructs that impact behaviour at the level of the individual, job or position, and organization, the Boyatzis model provided a theoretical framework with which to explore competency assessment in a contemporary hospital context. Boyatzis’ view of assessment as “the appropriate execution of procedures and processes” (p.11) bounded the case conceptually and oriented it towards organizational processes and practices related to competency assessment.

There are nuanced conceptual differences between competence and performance in clinical practice (e.g. see Boursicot et al., 2011; Khan & Ramachandran, 2012 in Chapter 1) but these terms are often conflated in a clinical setting (see Table 1: Competency Definitions and Descriptions). While competencies are an integral component of the Boyatzis model of effective performance, his theoretical analysis of performance assessment was used to initially guide data collection, as a proxy for competency assessment. Thus, in bounding the case, the phenomenon of interest or unit of analysis (i.e. competency assessment or performance assessment of regulated health professionals) was differentiated from the hospital study context.

Creswell & Poth (2016) also suggests defining a case that can be bounded or described within certain parameters, such as a specific place and time. Often, real-life cases that are in progress are studied so that accurate information can be gathered and not lost as time passes (Creswell & Poth, 2016). This study was conducted in a Canadian academic hospital in an urban
setting with the goal of collecting accurate, contemporary data about the process of competency assessment at a specific point in time, with knowledge that such processes regularly undergo revisions.

In most organizations—including the study site—performance appraisals are an ongoing process that can be tracked as they are typically done at least annually (see Chapter 2 references e.g. Cashin, Chiarella, Waters & Potter, 2008; Fereday, 2006; Howanitz, Valenstein & Fine, 2000). The majority of data were collected over the spring and summer of 2016. Participants referred to the first quarter of the hospital’s fiscal year (i.e. April through June) as a “season” focused on performance appraisal, using the hospital’s term for this process. This “season” was used to denote the months during which performance assessments were typically conducted for most professions. The hospital’s practice of annual appraisals and assessments provided a temporal case boundary (Yin, 2014) and provided the opportunity to collect contemporaneous data as competency assessment was under way.

Theoretical Propositions
Established theoretical perspectives sensitize the researcher to explore possible theoretical threads in the research process (Charmaz, 2004). According to Yin (2014), a case study inquiry benefits from prior development of theoretical propositions to guide data collection and analysis. Researchers conducting case study investigations typically assert a priori study propositions at the outset of an inquiry. Study propositions direct the investigator’s attention to what should be examined and begin to tell the researcher where to look for relevant evidence (Yin, 2014). Yin (2014) suggests “even an exploratory case study should be preceded by statements about what is to be explored, the purpose of the exploration, and the criteria by which the exploration will be judged successful” (p.39). Moreover, if a case study includes specific
propositions, it increases the feasibility of completing the research by placing limits on the scope of the project (Baxter & Jack, 2008).

The Boyatzis’ model of effective performance was a useful conceptual framework to apply to this study to help tease apart behavioural manifestations that result from the relationship between an individual’s competencies, job demands, and organizational environment. Boyatzis’ (1982) view that assessment includes whether or not an employee is following certain organizational procedures or processes permitted an exploration of the way in which the performance of regulated health professionals was both understood and enacted. This study’s three theoretical propositions are summarized as follows:

1. A Canadian academic hospital will show the dominance of behaviourism in its approach to competency assessment and performance appraisal.

2. The Boyatzis model of effective performance will elucidate the organizational influences on a regulated health professional’s behaviour in a contemporary hospital context.

3. Regulated health professionals will demonstrate specific actions or behaviour and performance that result from congruence between the critical components of the Boyatzis model of effective performance.

The first proposition arises from the dominance of behaviourism found in discourses of competence explored in Chapter 1, the literature review in Chapter 2 and the theoretical conceptualizations of competence found in Chapter 3. The second proposition proposes that the Boyatzis model will reveal the influence of the organizational context on the behaviour of regulated health professionals. The third proposition puts forward the idea that the process of data collection will reveal critical components of the Boyatzis model (i.e. individual competencies, job demands and organizational environment).
These propositions help focus data collection, determine the direction and scope of the study and establish the conceptual framework that initially guided the research (Miles & Huberman, 1994; Stake, 1995; Yin, 2014). They are not intended to act as study hypotheses, but rather, as means of articulating how the theoretical framework will be utilized in the research process. Once enhanced by the study findings, the theory or theoretical propositions form the groundwork for analytic generalizations that are based on either a) corroborating, modifying, rejecting or otherwise advancing theoretical concepts referenced in designing the case study or b) new concepts that arose upon the completion of the case study (Yin, 2014). According to Yin (2014), analytic generalization occurs at the conceptual level from conditions specified herein at the outset of the study or uncovered at the conclusion of the case study.

**Type of Case Study**

This study used a single case study design for which the objective is representativeness within a study context as the single case captures circumstances and conditions of an everyday or commonplace situation (Yin, 2014). This type of study can be revelatory because the investigator observes and analyzes a phenomenon previously inaccessible to scientific investigation, particularly in exploratory research (Yin, 2014). It can also be considered a descriptive case study because it describes a phenomenon in the real-life context in which it occurred (Baxter & Jack, 2008). Case study designs can be single-case or multiple-case designs with one or multiple units of analysis (Yin, 2014).

Single case studies with units of analysis at more than one level, such as one or more subunits, are called an embedded case study design (Yin, 2014) or a single or holistic case with embedded units of analysis (Baxter & Jack, 2008). This study’s embedded case study design focused on regulated health professionals’ competency assessment at the organizational,
departmental or clinical unit (i.e. programmatic or group), and individual level using constructs in the Boyatzis model. In the study hospital context, these embedded units translated into purposive sampling from subunits at the level of the individual (i.e. an individual regulated health professional), group (i.e. job demands) and organization (i.e. hospital context). Through case studies that often examine individuals and groups, researchers hope to gain in-depth understanding of situations and meanings for those involved (Hancock & Algozzine, 2017).

Baxter and Jack (2008) view an embedded design as a powerful approach since data can be analyzed within the subunits (i.e. between case analysis) and across all of the subunits (cross-case analysis). This type of design also permits examination and analysis of subunits that are situated within the larger case (Baxter & Jack, 2008). An embedded design permits analysis of a specific aspect of the case and involves bringing evidence together from multiple sources whereby the data for the case study comes from more than a single layer (Yin, 2014). For this study, the embedded case study design facilitated a preliminary analysis by participant group (i.e. managers, directors, physicians, executives) and thematic analysis, followed by a directed content analysis (Hsieh & Shannon, 2005).

Data Collection

Case studies typically examine a social setting such as an organization, in which the investigator deliberately includes contextual conditions (Shi, 2008; Yin, 2014). For this study, data were collected in a large multi-site academic health sciences centre that was a member hospital of the Council of Academic Hospitals of Ontario (CAHO, 2019a). This rich study context offered the advantage of being invested in education and its investment in training and development of providers (CAHO, 2019a). As an academic hospital, the study site was actively involved in the education and training of clinicians as part of its teaching mandate. Sampling was
conducted in two hospital sites which were selected from the larger academic organization for their breadth of clinical services and programs.

Case study research features characteristics of other forms of qualitative research, such as “the search for meaning and understanding, the researcher as the primary instrument of data collection and analysis, an inductive investigative strategy and the end product being richly descriptive” (Merriam, 2009, p.39). What is most critical in qualitative research is how the sampling process and sample itself bear on the data collected and interpretations made of them, so that “the sampling process becomes a window on other elements of the research process” (Eakin & Mykhalovskiy 2003, p.191). To gain an in-depth understanding of the phenomenon, qualitative researchers deliberately seek individuals or groups who “fit the bill” (Greenhalgh & Taylor, 1997, p.741) and sampling is done purposively.

**Data Sources, Data Collection Procedures and Recruitment**

A hallmark of a good qualitative case study is its presentation of in-depth understanding of the case, which is accomplished by the collection of many forms of qualitative data (Creswell & Poth, 2016). Multiple sources of data are necessary as relying on one source of data is typically an insufficient means of developing in-depth understanding of the case (Creswell & Poth, 2016). Specifically, Yin (2009) recommends the following six types of information to collect: documents, archival records, interviews, direct observations, participant observation, and physical artifacts.

For this study, organizational documents, key informant interviews and focus groups were used. The use of a variety of data sources ensures that the issue or phenomenon is explored through a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood (Baxter & Jack, 2008). Strong evidence in case study research involves using
different types of data to triangulate or converge in the analytic process, rather than handling each data source individually (Baxter & Jack, 2008).

**Organizational Documents**

Yin (2014) views documentary information as relevant to every case study topic and considers documentary analysis an essential component of data collection plans. Documents in this study included those that pertained specifically to competency assessment and that were available on the hospital internal web browser (i.e. intranet). These documents included administrative documents, performance appraisal forms, competency assessment tools and policies and procedures related to the same.

Initially and prior to conducting the key informant interviews, keyword searches were conducted on the hospital intranet using terms such as assessment, competency, and competency assessment. The purpose of these initial searches was to provide an orientation to the hospital’s lexicon around competency assessment, and to gain some familiarity with organizational performance appraisal processes. These document searches were also intended to address research questions #2 (*Using the Boyatzis model as a theoretical framework, how is the performance of regulated health professionals enacted in the context of a Canadian academic hospital?*) and #3 (*How is competency assessment understood in the context of a Canadian academic hospital?*). Once key informant interviews were underway, participants were also asked to identify relevant documents or to share documents that they referred to during the interviews. These organizational documents helped corroborate data collected through other means, such as from the key informant interviews and focus groups. In particular, the documents revealed how the organization’s values had penetrated its evaluation processes. Additionally, the
documents accessed provided a glimpse into the organizational resources available to regulated health professionals within the study hospital.

Use of documents in this study followed an iterative analytic process. Accessing documents prior to, during and following key informant interviews provided the opportunity to look for corroboratory or contradictory evidence to explore in key informant interviews (Yin, 2014). However, the study documents were not accessed, utilized or analyzed in a systematic manner but rather as a means of providing an orientation to the study hospital and familiarization with the organization’s language around assessment. Although participants sometimes referred to the documents during interviews, they were not treated in the same way during data analysis as there was not a comprehensive assemblage of documents that could be referred to for analysis. Part of the reason for this was logistical: the hospital had amended their performance evaluation processes during data collection and the documents that were accessed initially were not available at subsequent stages of data collection and analysis. Nevertheless, having a complete documentary archive would have been preferable as it would have provided a means to triangulate data sources in a more thorough manner.

Documentary evidence allows the case study investigator to be a “vicarious observer” (Yin, 2014, p.108), using documents to reveal communication among parties attempting to achieve some other objectives. In this study, the documents that were initially accessed served as a lens into organizational assessment processes, which provided a sense of familiarity when discussing organizational processes and practices in the interviews and focus groups. Yin (2014) cautions against accepting documents as literal recordings of events and advises careful use of documents in case study research since the documents are written for a specific purpose and
audience and are not assumed to contain an unadulterated truth. He suggests that case study documents be used to help corroborate and augment evidence from other sources (Yin, 2014).

**Key Informant Interviews**

Key individuals within the organization are expected to present the richest source of data (Baxter & Jack, 2008) and to express themselves openly and freely, “defining the world from their own perspectives” (Hancock & Algozzine, 2017, p.47). Snowball or chain sampling was used to identify information-rich key informants; by asking a number of people whom to interview, the snowball gets bigger and bigger and develops a chain of recommended informants (Patton, 2002). Open-ended semi-structured interviews were conducted with key informants (n=19) within the hospital, including Executive Leaders (n=4), Directors (n=7), Managers (n=3) and Physician leaders (n=4). One executive brought a director as an additional participant to their key informant interview - this person was counted in the total number of key informants but not individually as a director-level participant. In order to maximize confidentiality and anonymity, gender neutral pronouns are used to refer to all study participants.

The organizational Principal Investigator (PI) served as a gatekeeper to permit access to individuals identified from the hospital’s organizational chart. The organizational PI sent the study information email to individuals to introduce the study and ask them to contact me, the student investigator, if they were interested in participating in the study. The Study Information Email and Study Information Follow-up Email served to introduce the study and provide additional information about the study as well as my contact information. Participants who consented to participate in the study through verbal and written consent were then asked about their perspectives on organizational competency assessment and performance appraisal practices.
Interviews took approximately one hour, were audio-recorded and transcribed verbatim immediately following the interview. All of the audio files were deleted after being transcribed once the transcripts were reviewed for accuracy with the recorded interviews. The 19 participants interviewed individually worked in various settings across the two hospital sites in order to capture the breadth of services and programs which differ across settings within the organization. Participants were from different administrative levels within the organizational chart (i.e. managers, directors, and executives), a range of regulated health professions (i.e. registered nurses, physicians, physiotherapists, pharmacists, etc.) and several non-health professionals. Participants from different departments (i.e. Human Resources, Professional Practice, Education, Clinical Services administration, etc.) were sampled, in order to ensure information-rich data within the case study’s embedded units.

Interviews are one of the most important sources of case study evidence (Yin, 2014). The interviews in this study followed Yin’s (2014) suggestion for a flexible format that “resembles guided conversations rather than structured queries” (p.110). Specifically, semi-structured interviews allowed for the collection of primary data, provided an opportunity to respond to emerging issues, new ideas, and issues to explore (Merriam, 2015). The key informant interviews were planned as a key data source, in order to address all three of the research questions (i.e. 1) Using the Boyatzis model as a theoretical framework, how is the performance of regulated health professionals enacted in the context of a Canadian academic hospital? 2) How is competency assessment understood in the context of a Canadian academic hospital? And 3) How do regulated health professionals perceive and experience competency assessment in the context of a Canadian academic hospital?)
Although a precise sample size is not specified in qualitative research, it is recommended that, by studying a few individuals, extensive detail can be collected which should provide ample opportunity to identify themes (Creswell & Poth, 2016). In in-depth interview studies, the final number of participants included depends on the point at which the interviewer starts to hear the same ideas repeated and no new information being shared (Shi, 2008). This point when the collected data yields redundant information, called saturation, is used as a criterion of adequacy and is a central concept of qualitative research (Shi, 2008).

Another guiding principle underpinning qualitative sampling and size is appropriateness, which entails having thorough access to people who can best inform the research question (Morse & Field, 1995). Adherence to the principles of adequacy and appropriateness in qualitative sampling increases the quality of the data and credibility of the findings. The coincident timing of data collection during the hospital’s performance appraisal “season” (i.e. the quarterly time period every year during which performance evaluations were typically conducted) was fortuitous and made data collection efficient. In fact, all of the key informant interviews and focus groups were conducted in less than 3 months and saturation, adequacy and appropriateness were achieved quickly.

Focus Groups

In order to capture the individual level, it was important to interview regulated health professionals working clinically at the point of care delivery. Specifically, I wanted to include their perspective on organizational competency assessment and performance appraisal processes at the level of the individual as opposed to at the manager, director, or executive level. In addition to conducting key informant interviews with individual regulated health professionals, focus groups that included several regulated health professionals were also conducted. The focus
groups helped answer the third research question, *how do regulated health professionals perceive and experience competency assessment in the context of a Canadian academic hospital?* Although there are 29 distinct regulated health professions in Ontario (FHRCO, 2019), approximately half of those professions are represented within the study hospital’s workforce. Interviewing these participants in a group format was a feasible alternative to individual interviews in order to obtain the views of a larger group of individuals. Bringing together a group from a range of professions helped maximize the exploration of different perspectives within the heterogeneous group (Kitzinger, 1995).

After discussing the feasibility of conducting focus groups with the organizational PI and several other key informants, such as the co-chairs of an established organizational practice committee, I was introduced by email to other existing groups of regulated health professionals within the hospital who were then invited to participate in focus groups. Although it was initially anticipated that only 2 focus groups would be conducted, the snowball approach to sampling resulted in 5 focus groups which comprised of between 2 and 13 participants. Four focus groups had a uniprofessional composition (i.e. all participants were members of one profession – either registered nurses, medical radiation technicians or physiotherapists), and one of the focus groups had an interprofessional composition. Two of the focus groups were allotted dedicated time at a pre-established meeting, two of the focus groups occurred prior to or immediately following a pre-established meeting, and one of the focus groups was given a distinct meeting time.

The focus group included questions about individual health professionals’ competency and performance assessments, as well as organizational processes and structures related to such practices (see Focus Group Guide). Given the study topic, the focus group questions may have been threatening for individuals who may have felt that, by participating, their professional status
with their respective regulatory college or employment at the organization was under scrutiny. Although the study information email and consent addressed and attempted to mitigate any perceived risk, the focus group format permitted researching a sensitive topic and even helped facilitate the discussion of potentially taboo topics (Kitzinger, 1995) such as competency assessment and performance evaluation.

For the focus groups and key informant interviews, the questions and prompts were intended to elicit participants’ personal views (e.g. opinions, attitudes and meanings) and explanation of behavioural events (Yin, 2014) related to competency and performance assessment practices within the organization. The interview data (i.e. key informant interviews and focus groups) were analyzed together, as part of Yin’s triangulation techniques for developing converging lines of inquiry with the use of multiple sources of evidence (Yin, 2014).

Ensuring Quality & Rigor

Yin (2014) advocates for four principles of data collection that are relevant regardless of the type of data collected in case study research: 1) use of multiple sources of evidence, 2) creation of a case study database; 3) maintaining a chain of evidence; and 4) exercising care when using data from electronic sources (Yin, 2014). Proper use of the four principles helps establish construct validity and reliability of the evidence and can ensure quality control during the data collection process (Yin, 2014). Since the private electronic sources used in this case study were internal to the organization (i.e. hospital intranet), the first three principles will be described herein as processes for ensuring quality.

Multiple Sources of Evidence

This study’s data sources (i.e. key informant interviews, focus groups and documents) were integrated to provide a rich understanding of the case through multiple sources of evidence.
In case study research, data from multiple sources are integrated in the analysis process, so that “each data source is one piece of the ‘puzzle’, with each piece contributing to [an] overall understanding of the whole phenomenon” (Baxter & Jack, 2008). The use of multiple sources of evidence in case study research allows a broader range of historical and behavioural issues to be addressed (Yin, 2014). Any case study finding or conclusion is likely to be more convincing and accurate if it is based on several different sources of information, following a similar convergence (Yin, 2014).

There is a unique iterative relationship between qualitative data collection and analysis (Eakin & Mykhalovskiy, 2003). Ensuring trustworthiness of data often involves attention to study procedures and sound rationale for using multiple sources of evidence, to safeguard transparency of the data collection process (Eakin & Mykhalovskiy, 2003; Yin, 2014). One way to ensure trustworthiness is through triangulation, which involves the use of more than one method of data collection (i.e. data triangulation) (Eakin & Mykhalovskiy, 2003). For this case study, data triangulation involved comparing the data sources to examine patterns of convergence to corroborate the overall interpretation (Mays & Pope, 2000). In this sense, triangulation provided a way of ensuring comprehensiveness, demonstrating that the research was systematic (Eakin & Mykhalovskiy, 2003) and ensuring validity and reliability (Merriam, 2015).

Credibility includes the trustworthiness, verisimilitude and plausibility of the research findings (Tracy, 2010), in addition to triangulation (Merriam, 2015; Yin, 2014). Other means of achieving credibility and transferability include member checks, validation or verification (Tracy, 2010). For this study, member checking was planned whereby interview participants were given the opportunity to consent to an optional second meeting to review preliminary data.
and/or key themes from the interview, where appropriate. This second meeting would have allowed for participant follow-up or member checking. However, in the end, the second meeting was not conducted for this study as it was deemed to be methodologically unnecessary. As data collection progressed quickly and data saturation was achieved, new participants were asked about key findings from the data based on previous interviews and focus groups. This was only possible once the data from the preliminary examination of organizational documents and from the interviews and focus groups were integrated. Yin (2009; 2014) suggests that it is important to examine each data source individually, as one unit of analysis in an embedded design, and collectively, in order to look for common themes that transcend the case and that resonate throughout the process of data collection.

Case Study Database

Creation of a case study database is a key strategy to organize and document data collected so the researcher can locate specific data during intensive analysis (Merriam, 2015; Yin, 2014). Yin (2014) recommends that documentation commonly consists of two separate collections: 1) the data or evidentiary base and 2) the researcher’s report (Yin, 2014). The separation of these two collections eliminates the potential of commingling the narrative in the case study with the researcher’s interpretation of the data (Yin, 2014). In addition, the use of a database enhances the reliability of the case study since the raw data are available for independent inspection (Baxter & Jack, 2008; Yin, 2014). According to Yin (2014), a case study database increases the reliability of the entire case study.

Yin’s (2014) recommendation to use computer files to facilitate clear distinctions between the two collections that form the case study database were followed. The study data, or evidentiary base, was stored using NVivo Version 11 for Windows. Computer-assisted
qualitative data analysis software (CAQDAS) was used (Baxter & Jack, 2008; Yin, 2018) in addition to Excel and Microsoft Word files (Yin, 2018) to organize the study logistics and narrative data. NVivo helped to contain, organize and analyze the raw study data, particularly after initially completing a manually thematic analysis of the study transcripts. Maintaining an archive of the study documents in NVivo would have helped to avoid the loss of data that occurred.

The purpose of the preliminary data analysis is not for generalizing beyond the case but for understanding the case, or unit of analysis, in its complexity (Creswell, 2013). Word processing software (i.e. Word files) was also used to analyze the case study documents (Yin, 2014) and coded data once they were organized thematically. The coded data in NVivo formed the case study report, which contains the entire compilation of evidence dealing with particular themes or ideas that emerge during and following data collection (Yin, 2014). Excel files were used to organize the study logistics and participant lists, being careful to separate the de-identified list of participants from the coding schema that was used to identify participants.

Yin (2018) also suggests that the researcher’s own notes are likely to be the most common components of a database. During data collection, field notes and jottings were collected manually in handwritten notes when conducting interviews and focus groups. These notes were mainly methodological and procedural checks on data collection which were subsequently referred to when reading the transcripts and re-listening to the interviews and focus groups. When analyzing the transcripts in NVivo, the field notes and jottings were also referred to and additional analytic memos and annotations were made when coding the data.
Chain of Evidence

In a qualitative research paper published in the *British Medical Journal*, Mays and Pope (2000) stressed the need to clearly explain the process of data collection and analysis due to the unavoidable influence of the researcher on objects of inquiry. While rigorous qualitative method practice, such as maintaining a chain of evidence, adds rigor, investigators must also consider whether the data will provide for and substantiate meaningful and significant claims (Tracy, 2010). The care and practice of data collection and analysis procedures also impacts rigor (Tracy, 2010). Describing the process of data collection demonstrates that the research was systematic and enhances the reader’s grasp of the meaning being attributed to the data so the reader can judge whether the interpretations are adequately supported by the data (Eakin & Mykhalovskiy, 2003; Mays & Pope, 2000). Study results must be consistent with the data collected (Merriam, 2015). One way to achieve this is by maintaining a chain of evidence.

For Yin (2014), maintaining a chain of evidence allows an external observer to trace the steps in the research process, from conclusion back to initial research questions or from questions to conclusions. Yin (2014) highlights a sequence of steps that will be followed in this case study in maintaining a chain of evidence. First, the case study report must refer to specific documents and interviews so that the sources used to arrive at specific findings are cited. Next, these specific sources should contain actual evidence and details about the circumstances under which the evidence was collected. Lastly, these circumstances should be consistent with the specific procedures and questions contained in this case study protocol to the links between the protocol and research questions (see Table 2, case study protocol). Overall, the chain of evidence increases the reliability of the information in a case study and allows movement “from one part of the case study process to another, with clear cross-referencing to methodological procedures...
and to the resulting evidence” (Yin, 2014, p. 128). Yin’s procedures for a chain of evidence were followed in initially planning the study, since the interview and focus group guide questions were explicitly cross-referenced with the study research questions. The use of a case study database which comprises the data or evidentiary base and researcher’s report also helped to produce a chain of evidence throughout all study procedures including during data collection and analysis. Coded data were linked back to the original research purpose and questions when writing up the study. These procedures helped ensure primacy of the empirical data in presentation of the study findings.

**Reflexivity**

In addition to the strategies to ensure methodological rigor, qualitative research requires sensitivity to the ways in which the researcher and research process shape data collection (Mays & Pope, 2000). Creswell and Poth (2016) suggest that reflexivity also involves discussing how past experiences through work, schooling, family dynamics and so on shape the researcher’s relationship to and interpretation of the phenomenon. They advocate cultivating the researcher’s self-consciousness about how these experiences may have shaped the study findings, conclusions and interpretations (Creswell & Poth, 2016, 2013). According to Creswell & Poth (2016), the first part of reflexivity involves the researcher talking about the experiences he or she has with the phenomenon being explored. For this study, I carefully considered my reflexive engagement with the topic of competency assessment.

**Reflexive engagement with the topic**

My interest in studying the assessment of competence arose from my professional experiences, initially, as a practice-based problem. When I first worked as a Registered Nurse in critical care, I was required to declare that I had engaged in a process of reflective practice and
self-assessment; a declaration that was required in order to renew my nursing registration annually with the provincial regulatory body in order to practise as a nurse in Ontario. Despite the high acuity setting in which I worked, my participation in the provincial nurse regulator’s annual self-assessment process of reflective practice was the only measure of my competence, besides the hospital’s certification process for particular clinical skills. I was struck by the juxtaposition of my immense responsibilities in providing patient care and the lack of assessment of my practice and competence as a regulated health professional.

Later, I worked for the provincial nurse regulator – the College of Nurses of Ontario – whose primary mandate, like all health regulators, is public protection. It was in this position that I struggled with what I considered to be a glaring disconnect between regulation and practice, narrow definition of public protection and seemingly blind trust in practising nurses’ self-assessment. In particular, I started to question the centrality of reflective practice and self-assessment in the regulatory Quality Assurance (QA) program. I was dismayed with the nursing regulator’s steadfast commitment to reflective practice, especially when contrasted with other health regulators’ more robust QA and continuing competency requirements. For example, I knew that other health professionals were required to complete some form of assessment (i.e. self or peer assessment), which was often coupled with a professional development program to meet regulatory QA obligations. Despite my “insider” experience of having worked for a provincial regulatory body, I had many more questions than answers about nursing regulation and the use of self-assessment.

I also worked for a professional association for nurses, the Registered Nurses’ Association of Ontario, where I facilitated educational programs for interprofessional participants. Organizations would contract the association to deliver professional development
programs to either address a professional practice problem or to educate nurses about best practices using evidence-based guidelines. However, the professional development programs were generally only evaluated for their ability to keep participants engaged in the content, and not for their ability to actually change practice by enhancing participants’ knowledge and skills. In addition, these professional development programs were not linked in any apparent way to performance appraisals and/or competency assessments of employees within the respective organizations.

Subsequently, as a manager of professional practice, I was responsible for the human resource management of several staff, in addition to the strategic advancement of nursing research, education and practice within the organization. In this position, I conducted performance appraisals that consisted of a comparison between the employees’ self-assessment and my supervisory assessment and provided a formal opportunity to provide feedback on employee performance. As a manager, my performance appraisal, on the other hand, was comprised of a 360 degree evaluation (or multi-source evaluation) which included a self-assessment and supervisory assessment. I found the contrast in methods of performance appraisal amongst different employee groups (i.e. management and staff) puzzling. In this role, I also felt that there was a marked disconnect between decision-making within the organization and employees’ regulatory responsibilities whereby there was no real connection between regulation and practice. For example, changes in practice expectations did not take into account a health professional’s regulatory requirements which are reflected in a college’s scope of practice statement or standards of practice. I was left with a need to examine these issues further through this dissertation research.
Positionality

Reflexivity or the position of the researcher (i.e. positionality) also relates to the integrity of the qualitative researcher (Merriam, 2015). Investigators need to explain their ideological or cultural perspectives, dispositions, and assumptions regarding the research (Greenhalgh & Taylor, 1997; Merriam, 2015). The researcher’s role is to justify relevant features of their relationship to the data and to describe the role of these features in data collection and analysis (Eakin & Mykhalovskiy, 2003). A substantive approach is to consider researcher subjective knowledge as a resource and not as a problem of bias to be eliminated or reduced in aiming for neutrality (Eakin & Mykhalovskiy, 2003).

Creswell & Poth (2016) describe the need for qualitative researchers to be self-disclosing about their qualitative writings by ‘positioning’ oneself within the writing. This also involves having a self-consciousness of the biases, values, experiences that are brought to the research study (Creswell & Poth, 2016). As an experienced, mid-career nurse, I was acutely aware that my past experiences shaped my interpretation of the phenomenon. I had held various positions in a number of different organizations, and given this exposure, I brought a pragmatic approach to bear on the topic. In some instances, I was surprised by participants’ cynicism about or cavalier responses to competency assessment within the organization and when this occurred, I acknowledged my shock to my doctoral supervisor.

Although I was an experienced clinician, I was a novice researcher. Yet, my hospital name badge as a student researcher within the study organization allowed me to leverage my hospital ‘insider’ appearance strategically by wearing this identification badge to all interviews and focus groups. In order to remain attuned to my influence on the topic and findings, I had regular opportunities to confer with my doctoral thesis committee members who were all
experienced researchers. I also relied on my committee’s expertise to ensure that I remained reflexive to my experiences and their influence on my interpretations of the data. During data collection, I also kept field notes or “jottings” (Yin, 2014, p.125) and analytic memos (Merriam, 2015) which I reviewed throughout the process of data collection and analysis. These notes often pertained to particular anecdotes participants had shared during data collection, in order to be sure I understood their responses. The notes also provided additional context on the interview, particularly when the semi-structured interview format veered off onto a tangentially related example. Later, when reviewing the transcripts, these jottings also served as a means for me to recall details of the interview that I might have forgotten had I only had the transcript available to me for analysis.

My positionality vis-a-vis the study meant that I needed to follow Yin’s procedures to ensure adherence to the case study methodology. I also needed to follow a very structured approach to data analysis, as will be described herein, including both inductive and deductive coding with both thematic and content analysis procedures. The comprehensiveness of analysis ensured that the data had primacy over any preconceived ideas I had about the study findings. I stayed close to the data when analyzing and writing the study findings, to ensure participants’ voices on the topic of competency assessment were louder than any ideas I had about participants’ responses or the study findings.

Research Ethics

Ethical consideration for research involving human subjects is a necessary part of the research process. Since case study research typically pertains to human affairs and studies “a contemporary phenomenon (the “case”) in depth and within in its real-world context” (p.16), there are important ethical practices which must be followed (Yin, 2014). Yin (2014) describes
several necessary ethical considerations as follows: gaining informed consent, protecting those who participate in the study from any harm; protecting the privacy and confidentiality of those who participate; taking special precautions to protect especially vulnerable groups; and selecting participants equitably. Kvale (1996) also identifies ethical issues specific to interview inquiries, since “an interview inquiry is a moral enterprise” (p. 109) due to the personal interaction between interviewee and interviewer.

A research protocol that included all study emails and documents (see Appendices) was approved by the hospital’s Research Ethics Board (REB) and subsequently received administrative approval by the University of Toronto’s Office of Research Ethics. Data collection commenced once ethical approval for this study was obtained. Given this case study’s use of purposive sampling, protecting the confidentiality and anonymity of participants was essential and accordingly, was a major concern of the hospital’s research ethics board. Written informed consent was obtained and the processes to ensure confidentiality and anonymity were explained prior to and while engaging participants in data collection. Although participants were not compensated for participation in the study, a coffee gift card in the amount of $20 was provided as a small gesture of appreciation. It is expected that study participants were already paid as hospital employees or appointed physicians.

Creswell & Poth (2016) warn against the challenges with obtaining access to the organization and individuals in field research. These challenges include the researcher’s ability to convince individuals to participate in the study and build trust and credibility at the field site (Creswell & Poth, 2016). It was essential to ensure confidentiality and anonymity so participants felt comfortable sharing information. Nevertheless, participants may have felt vulnerable due to the sensitive nature of questions related to competency assessment. Thus, it was imperative to
clearly explain the risks and benefits of the study to participants to ensure participants did not perceive any real or imagined risk to themselves, their employment at the hospital or their registration with their respective regulatory college as a result of participation in this study.

To protect confidentiality and anonymity and ensure participants’ interests were safeguarded, it was important to note that, as the student investigator, only I had access to identifying participant information and the unaltered, or raw, study data (i.e. the participant key). After successful recruitment, participants were assigned an alphanumeric code to identify the participant by embedded unit (i.e. organizational, clinical/departmental/group or individual), role, and regulated health profession (where applicable). The coding scheme was kept electronically on the organization’s server on a password-protected hospital computer in a locked office, separate from the raw data. I was the only one with access to the coding scheme. The raw data was stored at the hospital on my secure password-protected desktop computer on the secure hospital network. Completed consent forms were stored separately from the study data, in a locked filing cabinet. These records were kept separate from all other study documents, data and information obtained as part of the study. These hardcopy materials were safeguarded and will be kept in a locked filing cabinet in a secure area of the hospital reserved for research for a period of 10 (ten) years, as per the hospital’s policy for data ownership, stewardship and security of health information. Electronic data will also be stored on the secure hospital network for the required duration.

Once collected, all interview data was de-identified to remove any identifiable ties back to an individual participant. Data were also aggregated by embedded unit and/or participant group to further protect study participants’ anonymity and confidentiality. Neither my doctoral thesis committee nor the hospital PI had access to any identifying participant information such as
their names and roles or unaltered study data. I was closely supervised by my doctoral thesis supervisor who had access to the unaltered, or raw, study data once anonymized. In this manner, data collection and analysis was independent to avoid any real or potential conflict of interest. Discussions about the study data and findings at doctoral thesis committee meetings involved de-identified data.

Ethical decisions occur throughout the entire research process (Kvale, 1996). Extensive measures, as described herein, were undertaken to ensure participants’ confidentiality and anonymity was protected at all times. Important considerations were made on a continual basis about interaction with those being studied, the data collection instruments, and protections such as informed consent, avoidance of harm, and privacy and confidentiality (Yin, 2014).

Data Analysis

The process of analysis in case study research is complex as the analytic procedures are not formulaic; however, conveying an understanding of the case is the most important consideration in analyzing case study data (Merriam, 2015; Yin, 2009). There is a need to balance the evidentiary base and researcher’s report. However, the absence of a strict analytic routine requires critical procedural decisions when analyzing case study data, paying special attention to carefully document the procedures used (Yin, 2009). The procedural decisions described throughout this chapter that have been made for this study are summarized in the case study protocol (see Table 2).

Yin (2009) refers to the analysis of case study evidence as a process of “marshalling the arguments” and “tallying the data” (p.268). Although coding using computer software (e.g. NVivo) or word-processing software (Yin, 2014) may be a useful preliminary tool for micro level analysis, Yin (2009) suggests examples of broader analytic strategies as follows: 1)
comparing expected and actual patterns; 2) using evidence to build an explanation; and 3) ascertaining and arranging key events chronologically. These steps help to create a strong evidentiary base to provide greater credibility for the case study (Yin, 2009). Furthermore, methodically analyzing the data leads to more defensible findings and conclusions (Yin, 2009).

In the early stages of data analysis, a key analytic strategy was also to return to the theoretical propositions (Yin, 2014). This practice helped ensure that data analysis stayed within the scope of the research questions and permitted the exploration of rival propositions that provide an alternate explanation of the phenomenon (Baxter & Jack, 2008). The iterative process of analysis that involves back and forth iterations between data and propositions enhances confidence in the findings by increasing the number of propositions or rival propositions that are addressed and accepted or rejected (Baxter & Jack, 2008). Thus, the process of returning to the theoretical propositions was done after the data were organized into a coding schema. At this analytic point in the study, returning to the theoretical propositions confirmed and disconfirmed study findings, especially when exploring the salience of particular themes (or patterns, according to Braun & Clarke, 2006) and absence of other ideas.

**Linking the data to the propositions**

Case study analysis involves combining or assembling the data as a direct reflection of the initial study propositions (Yin, 2014). Rationale for returning to the propositions are to conduct “a focused analysis when the temptation is to analyze data that are outside the scope of the research questions” (p.555) and to explore rival propositions as an attempt to provide an alternative explanation of a phenomenon (Baxter & Jack, 2008).

As an *a priori* theoretical model, Boyatzis’ model of effective performance and theoretical work served as a framework to help guide the process of data collection. Yet, use of
Boyatzis’ theoretical definition of competencies and model was also balanced to ensure the data were not forced to conform as *theoretical incongruence* can also be noted as an important study finding. For example, once data saturation had been achieved, there were several participants whose salient verbatim quotations stood out as a means to illustrate particular themes. In this instance, one could look for either “most likely” or “least likely” cases that would likely either clearly confirm or irrefutably falsify propositions (Flyvbjerg, 2011, p.307). During the process of data analysis, the theoretical propositions and research questions were revisited to ensure the study remained within its intended scope. The research questions were explicitly mapped to the coding schema, in order to ensure congruence during this final analytic step prior to writing up the study findings.

**Addressing rival explanations**

An important strategy for interpreting findings is to identify and address rival explanations (Yin, 2014). This involves the need to anticipate, enumerate and specify important rival explanations as part of a case study’s research design work (Yin, 2014). In particular, Yin (2014) suggests the need to consider rival explanations as an analytic strategy that is specific to case study research. Exploring alternative explanations is a well-established tactic for improving the quality of explanations in qualitative research (Mays & Pope, 2000). Purposely looking for variation in understanding the phenomenon through negative, deviant or discrepant case analysis helps enhance credibility of findings (Merriam, 2015). By seeking data to disconfirm expectations or findings, negative case analysis helps refine the analysis so it accounts for all data elements under scrutiny (Mays & Pope, 2000; Merriam, 2015). Inclusion of participants whose perspective on organizational competency assessment contradicted the views held by most other participants was one means of addressing the importance of rival explanations in this
study. These outlier perspectives were included in the data analysis and findings chapters. In addition, the prominence of particular themes was contrasted with the absence of other opposing ideas, or silence of particular participants or groups of participants in relation to the findings, was also found to be a means of addressing rival explanations.

**Developing a case description**

Yin (2014) refers to the development of a case description as an analytic strategy that helps organize the case study. The overall process of analysis in qualitative research is inductive and iterative which allows the investigator to interpret themes emerging from the data. Notably, the researcher must avoid treating each data source independently and instead ensure that the data are converged in an attempt to understand the overall case (Baxter & Jack, 2008). For this embedded case study, I initially analyzed the data by participant group and then thematically. I also examined whether there were differences in the data between the subunits (i.e. between individuals and executives, for example) and across all of the subunits (i.e. across the whole organization and across the two study sites). Embedded units of analysis in this study were analyzed once data collection (i.e. key informant interviews and focus groups) was complete. Exploring the entirety of the data corpus using multiple types of analysis (i.e. thematic analysis and directed content analysis using NVivo) across multiple domains (i.e. by participant group, by subunits, etc.) helped in forming a comprehensive understanding of the overall case.

**Analytic procedures**

The study data were initially analyzed using thematic analysis, a method commonly used for identifying, analyzing and reporting patterns or themes within the data by organizing and describing the data set in rich detail (Braun & Clarke, 2006). However, in contrast to other analytic methods that seek to describe patterns across qualitative data (e.g. thematic discourse
analysis and grounded theory), thematic analysis seeks patterns in the data that are theoretically bounded (Braun & Clarke, 2006). Thematic analysis is not wedded to any pre-existing theoretical framework which makes it amenable to different theoretical frameworks (Braun & Clarke, 2006).

Specifically, Braun and Clarke (2006) suggest the following six phases of thematic analysis: 1) familiarization with the data, 2) generation of initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes, and 6) producing the report. These analytic steps are not linear but more recursive where movement occurs back and forth through the phases as needed (Braun & Clarke, 2006). Eakin & Mykhalovskiy (2003) suggest that procedures function as important triggers to analytic insight. The study’s a priori theoretical propositions and research questions were used as a lens with which to conduct the analysis. My early analytic procedures consisted of an initial comparison of the written transcripts with the recordings (i.e. before deleting the audio data as per the hospital’s policy for data ownership, stewardship and security of health information) in order to familiarize myself with the data, and ensure accuracy of the transcript. I then worked through phases 2, 3, 4 and 5 iteratively and in collaboration with my doctoral thesis committee. Braun & Clarke (2006) suggest that a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set (Braun & Clarke, 2006).

In qualitative studies, thematic analysis involves analyzing the content for themes and recurring patterns of meaning (Greenhalgh & Taylor, 1997; Merriam, 2015). Themes or patterns are sought across an entire data set rather than within a data item, such as an individual interview or interviews from one person (Braun & Clarke, 2006). Braun & Clarke (2006) suggest that theoretical thematic analysis is a type of analysis driven by the researcher’s theoretical or
analytic interest in the topic or area; this is achieved by coding for a specific research question using a more theoretical, as opposed to inductive, approach. For example, given this study’s focus on organizational competency assessment processes and use of the Boyatzis model as a theoretical framework, coding was done to differentiate individual level assessment procedures from an organizational-level understanding of competency assessment more broadly.

Once an initial inductive analysis was complete and a coding schema was developed together with my doctoral thesis committee, I then conducted a directed content analysis using operational definitions for each coding category (Hsieh & Shannon, 2005). The purpose of this second take at analysis was to use a coding schema consisting of two overarching themes and five subthemes to apply to the data. I also wanted to make sense of the large amount of data that were collected, re-examining the data using NVivo, since the initial thematic analysis was done manually. According to Hsieh & Shannon (2005), a directed content analysis involves coding all highlighted passages using predetermined codes as a means of capturing all possible occurrences of a phenomenon; any text that could not be categorized with the initial coding scheme is given a new code. For this study, the directed content analysis followed an initial thematic analysis of the data and the intent of the directed content analysis was to present the evidence by showing codes with exemplars and by offering descriptive evidence (Hsieh & Shannon, 2005). The initial thematic analysis was more inductive and was followed by a directed content analysis that was deductive, using a coding schema to sift through the data.

Hsieh & Shannon’s (2005) directed content analysis helped provide predictions about the relationships among variables or codes (Hsieh & Shannon, 2005); a process that is referred to as deductive category application (Mayring, 2000). The themes and subthemes are listed as follows:
• Organizational-level assessment of competence
  o Defining competence
  o Incompetence and excellence
  o Organizational understanding and enacting of competence

• Professional Dynamics
  o Medicine
  o Professional Practice

These themes and findings will be described in detail in the chapters that follow (i.e. Chapters 5 and 6). The study’s theoretical propositions were found to be somewhat inadequate in capturing the richness of the data and overall study findings, therefore, I conducted a more generic, and less theoretical, thematic analysis. I also found the deductive analytic approach useful in providing a structure to my thesis and as a way to avoid forcing the data into a model with limited fit or with theoretical dissonance. The use of theoretical thematic analysis and directed content analysis provided the opportunity for a thorough analysis and robust interpretation of the data.

**Summary**

The research methods described herein guided this study’s use of a single, embedded, qualitative case study design. This study was conducted in a Canadian academic hospital using semi-structured interviews of key informants and focus group participants, and documentary analysis. An initial thematic analysis (Braun & Clarke, 2006) and subsequent directed content analysis (Hsieh & Shannon, 2005) guided data analysis and interpretation. The study findings will be presented in the two chapters that follow.
Chapter Five: Organizational-Level Assessment of Competence

Introduction

This chapter addresses research questions examines the process by which individual health professional’s competence is enacted (research question #1), how administrators (and others) understand competency assessment (research question #2), and how regulated health professionals perceive and experience competency assessment (research question #3). Starting with participants’ definitions and descriptions of competence (i.e. research question #2), the chapter illustrates what one participant referred to as a “mixed bag of approaches” (D1).

Definitions: “we don’t have a common language for competency!”

During the interviews, several participants seemed perplexed when asked to define competence. For example, before responding, a manager-level participant responded with a sigh and said “heavy question” (M2), while a director-level participant also sighed and said “Oh that’s a big one!” (D6). Meanwhile, a physician participant (P2) described competence as a “loaded” term in both clinical and academic contexts.

Nonetheless, although all the participants made an effort to supply a definition, a number appeared challenged by the difficulty defining competence and handicapped by the lack of a familiar lexicon to draw upon. One director-level participant stated “Okay, I’m just going to start to ramble and see if anything comes out of it” (D1). In a joint interview with a director and executive, one participant appeared uneasy about their difficulty responding, and said “We should have studied this before coming down here” (E1). This same participant later repeated the question and mused aloud whether there was, indeed, an available organizational definition: “How do we define it? I’m sure there is a written definition somewhere” (E1). Other participants sought clarification on the question, asking whether I was asking about competence or
competencies (M3) and what type of competence I was asking about, differentiating clinical competence from other types of competence (E3).

One director-level participant described in detail the consequences of not having an organizational definition of competence, particularly when it comes to defining its antonym, incompetence:

“... what are we talking about when we mention competence because we don’t have a definition; we don’t have something to measure by so we don’t have objective measurements. ... So is it by observation, by whose measurement? It’s very subjective I believe right now. ...it is hard to define competency for a practitioner. As I mentioned it’s thrown around a lot,... we don’t have a common language for competency and a definition that would specify what we’re talking about so we can look at it in an objective way so that it’s not subjective. And currently we don’t have that at [organization name]” (D4).

For this respondent, the organization did not have a way of defining competence. It is not clear if they were previously aware of this gap or if their awareness was prompted by the interview questions. This respondent equated competence with “objective measurements” and was critical of what they saw as subjective assessments of competency and lack of objectivity in “measurement” within the hospital, given the absence of a common organizational fluency on this topic.

In contrast, other respondents readily offered a definition of competence. For example, a manager-level participant provided a concise definition: “Competence to me is somebody who is fulfilling their role sufficiently. Somebody who is competent is good at something; good in their role. So competence is meeting the criteria for their role.” (M3). This participant’s description of competence as being related to someone’s role within the organization is echoed in another participant’s definition:
“How would I define competence – so I think in a very general sense, I would define competence as someone who can execute, do the job, do it well, on time, with the expected result, as planned and avoidance of errors or mishaps. So you notice I didn’t say ‘superb’ or ‘good’ or anything.” (E2).

Here, the participant seemed to define competence as average (i.e. not “good” or “superb”) performance and as a standard that could be used as a means to set practice expectations, reduce errors, and ensure consistent performance. Others also expressed similar ideas about meeting one’s role criteria being considered “average” performance (E3). These participants (i.e. M3, E2 and E3) seemed to normalize competence as an average role expectation for those working at the hospital.

A manager-level participant described competence as a core minimum, highlighting the myriad ways competence is considered important in assuring success in one’s role within the organization and beyond:

“I guess I look at, there is the core and skills and behaviours that you need to have to provide safe, competent care which ensures patient safety and health. That’s the core minimum but I think I also look beyond that into the behaviours that are involved in working with peers and working with families and patients beyond those core physiological safeties, health management pieces into communication and conflict management …. like more broad behaviours and such that are needed just to be in a team and in an organization like this; such as how they respond to change. Because the environment changes on a regular basis whether it’s because of internal or external drivers; things are going to basically change every year. Some things are going to change every year and if change isn’t one of your competencies, you’re not going to make it here. [INTERVIEWER PROMPT: At [organization name] or on this unit?]. At [organization name] for sure and if not, in health care in Ontario. There are drivers coming all the time that change. Just changing the funding models has changed how nurses have to practice as far as things they have to report and if you can’t cope with those changes, incorporate changes, then you’re not going to be able to practice in Ontario even.” (M2)

This participant’s elaboration evolved from initially describing competence as a core requirement to then providing a list of everything needed to be able to work in health care provincially. It is clear that, for this participant, being asked to define competence provoked a
broader response about other requisite skills that are essential in today’s health care environment. This participant described competence as a “core minimum” requirement (M2) to be able to adapt to the constant change in today’s health care environment.

One executive participant defined competence using several metaphors as follows:

“It’s broad and yet it’s actually the water that we all swim in and so I think the paradox is that it’s the water we swim in and yet it’s invisible and we don’t see it, smell it or taste it because we’re swimming in it. Yet it’s like the oxygen we breathe; without it we die or we would have problems with the quality of our life but we take it for granted. It’s the same thing about competency. I think it’s the silence between the notes to use a music metaphor. The notes only sound beautiful because of the silence between them. You don’t ever pay attention to the silence; we don’t ever pay attention to competency and yet it allows a profession to shine and beautiful care to happen. When people are actually playing in the symphony, not only their own melody but the melody of my melody with a social worker, with an OT also playing to their full capacity, then it’s a beautiful piece of music. Otherwise it’s noise. It gives you a headache.” (E4)

Here, competence is described lyrically as something invisible, transparent, and amorphous (i.e. “water”) and also necessary (i.e. “oxygen”), especially in a team-based environment charged with making “music” as opposed to “noise”. This participant offered a broad perspective on professional competence and also described it as more than average performance (i.e. “playing to their full capacity”). They used the metaphor of music and, in particular, the threat of disharmony, to allude to much more dire consequences in healthcare, where the risks of incompetence or ineffective teamwork to patient safety are severe.

A physician participant (P2) criticized the dichotomous and linear connotations of competence and incompetence and suggested that competence is meant to imply a more holistic type of assessment. They disapproved of what they called an arbitrary “cutoff” of being assumed to be competent at the end of a physician training program. This participant also problematized the achievement of competence as an entry-level expectation, whereby the practitioner is assumed to be competent for the rest of their career, which is arguably longer than one’s
education, residency, training and fellowships combined (P2). They described other mechanisms that are enacted to promote competence after this “cutoff”, such as continuing education and professional development, while at the same time, expressed concern that these things are reliant on a physician’s self-assessment. Although the participant explained that the milestone or cutoff at the end of one’s training implies a sense of accomplishment and serves as a safety threshold, they also suggested that it may also conceal a point in time when there is a deterioration of learning new knowledge and skills (P2).

In summary, participants provided a variety of definitions of competence, often wishing aloud that there was an organizational definition that they could cite. In response to questions about how competence and competency assessment was understood (i.e. research question #2), there was little discernible consistency in participants’ descriptions of competence. This lack of consistency was true even among those who shared a common organizational role and/or profession. Participants also contradicted one another by either lamenting the absence of an organizational language or assessment strategy around competence or referring to competence as an average role expectation for those within the organization. Several participants referred to competence as the ability to do one’s job in an adequate way, taking care to distinguish competent from superlative performance. Other participants equated the term competence with subjective assessment, which they found troublesome, prioritizing objective assessment and measurement over the subjectivity of competency assessment. Participants also found their struggle to define the term to be problematic; many seemed to be searching for a singular, common, and correct definition. At least one participant spoke about competence metaphorically, almost as though the lack of an available reference for the term made them find other familiar representations (i.e. water, oxygen, music) to associate with competence. In the absence of an
organizational definition, participants responded creatively to draw on various ideas to define the term ‘competence’.

*Regulatory-speak: “Except for the use of college language”*

In the absence of an organizational vocabulary for competence, individuals turned to regulation to find a common language and regulatory concepts to define competence. This is perhaps not surprising, since regulation is ostensibly familiar to all regulated health professionals. Nevertheless, participants referred to regulatory concepts and tools in various ways. For example, in a focus group of allied health professionals, participants referred to “scope of practice”, a regulatory concept to establish boundaries for one’s professional role, in their definition of competence as follows:

> “Competence to me is when someone is able to perform an action or procedure with confidence and with the skill required within their scope of practice. That’s what I would say – having a set of skills which allows them to complete their everyday duties.” (FG2).

Here the reference to “scope of practice” is noteworthy since this term is often used in regulation to highlight knowledge, skills and judgment that defines a particular profession.

The use of regulatory terms was also echoed in other participants’ responses. For instance, in another focus group, one allied health focus group participant used “competencies” and “standards of practice” interchangeably, and admitted being unable to distinguish between these concepts: “... I’m certainly not an expert at competencies so this whole concept in our profession, we use the term ‘standards of practice’ sometimes versus competencies, and I may need to understand exactly how they are different.” (FG3). For this participant in particular, the use of regulatory terms to define competence or competencies did not seem to provide any greater conceptual clarity.
One director-level participant described filling an organizational void quite explicitly with regulation (i.e. “college” language) when asked to define competence:

“So as for [organization name], this is something that we don’t have anything formally defined or guidelines per se in terms of how we would assess competency. Except for the use of the college language, except looking at the unit level what would an individual need to be meeting the standard of practice.” (D4).

This participant responded by saying they did not have an organizational means of defining competency assessment when asked how to define the term ‘competence’. They also implied that “unit-level” requirements for an individual to meet regulatory standards in a particular clinical area also serve as a means of competency assessment; echoing Boyatzis’ description of job demands and individual competence both contributing towards effective performance.

This same director-level participant also lamented the lack of guidance from the regulatory college in matters related to assessment, and distinguished academic level competencies from regulated health professionals’ competencies, as follows: “... it’s too bad we don’t have more guidance from the college piece as well because it is about practice. It’s not about the schooling aspect of competency when we talk [about] quality; it’s about the practising individuals.” (D4) For this participant, organizational competency assessment pertained to “practising individuals” and was related to quality. The available regulatory support for practising individuals was contrasted with the college “guidance” for pre-licensure professional education programs (i.e. “the schooling aspect of competency”). Thus, in some cases, regulation provided familiar language and tools and in others, it was noticeably absent.

Although participants were asked to define competence, what they often provided instead was a description of the relationship between regulatory standards and organizational requirements. For example, a director-level participant referred to staff competencies as being
anchored in regulatory standards (D2). This participant also said that it is up to the individual professional to know and work within their college standards, in addition to also meeting organizational practice standards, policies, procedures and guidelines (D2). Another director-level participant defined competence as the ability to meet regulatory requirements:

“So in my role, competence is defined as someone who understands the required scope of practice and is able to meet the standards of practice as identified either both by their respective colleges and by the organization. So a scope – their colleges will have a definition of something or provide some direction about that and the organization might tweak that but within the standard around what it might look like; how it might apply or show up on a particular unit. So my expectation is that people have the skill and knowledge around how to do that. If I understand it, the organizational context can shape the way in which the standards and the role is enacted in a working unit. Right, based upon the unique demands of a particular area. Again not stepping outside of the scope but perhaps shaping it in some way.” (D3)

This director participant described their expectation that staff navigate the interplay between the organization and regulatory body as part of their role expectations, even though the participant themselves seemed uncertain about the relationship between the two when it came to standards and competencies. Interestingly, this participant also seemed to view standards of practice as being responsive to the organizational context, which could “shape” role performance based on the needs of a particular clinical area.

Another participant described the organizational-regulatory relationship in idealized and promising terms:

“So when I think about competency, I think that in a perfect world, every individual clinician would actually know what it is within their scope of practice they are held accountable for and that would be guided by the science of the profession and/or the values of the organization and that systems and processes – so for example standardization of thinking about we all know what our competency framework is - we all know would be in place. So in a perfect world, all of that would be aligned. I’m talking to the imbalances in each of these because I think they exist.” (E4)

For this executive-level participant, a “perfect world” would be one in which there was careful alignment between all of the components of practice that are expected of a regulated health
professional, including their regulatory and organizational requirements and the organization’s values.

A physician participant seemed to reiterate the regulatory idea that competence is a minimal safety expectation and also distinguished competence from performance, as follows:

“Competence is, I think I see that as more of a basic safety requirement. Like I do think of it as kind of the minimal level of training that’s required for people to be safe at and in practice. So the minimal amount of training that is required to make people safe in their performance.” (P3)

The notion of competence being a safety threshold was also cited by another physician participant (P2) who, at the same time, also critiqued it as a seemingly arbitrary measure and subjectively defined standard.

In summary, participants had divided views about the use of regulation to define competence. Although they were not asked about regulation explicitly, participants used regulatory language in various ways to describe competence. They often used terms that are ostensibly familiar and accessible for those who share the common feature of being regulated health professionals, such as “standards of practice” and “scope of practice”. For one participant, regulation offered a means to articulate an ideal or goal; they described the potential of an idealized “perfect world” where there was congruence between one’s regulatory scope of practice and organizational expectations (E4). This contrasted with others’ view of competence as a minimum safety expectation or cutoff that participants deemed inadequate. Considering competence to be a minimum expectation has strong regulatory overtones since regulators often position competence as a minimal requirement needed for protection of the public (i.e. patients).

While one director-level participant (D3) considered regulatory tools such as standards of practice to be analogous to a care delivery model; another (D4) seemed to be in want of more guidance from the regulatory body. It is clear that although participants deferred to regulatory
concepts when asked to define competence, how they invoked regulation differed significantly.

Participants generally had difficulty defining competence and when using regulatory concepts as a means to define it, they often identified a gap between organizational and regulatory processes, particularly for practising health professionals.

**Competency frameworks and proxies: “An umbrella concept”**

Several participants used well known frameworks or elaborated proxy measures to define competence. These included well-known competency frameworks (e.g. the LEADS Canadian leadership framework for health care organizations; Benner’s novice-to-expert framework of competency development), clinical practice guidelines, and evidence-based resources. For many, these concepts seemed to serve as stand-ins for competence and competency. In some cases, participants also seemed to conflate the term ‘competence’ with competency assessment.

In a focus group of nurses, one participant defined competence as the ability to follow best practice (FG1). In this same focus group, another participant used the analogy of an umbrella to describe competence. Other participants then proceeded to list an array of things that fall under this umbrella including knowledge, skills, critical thinking, evidence-based practice, best practice guidelines and standards of practice. In another focus group of nurses, a participant also put forward the idea of competence as an umbrella but also seemed to express concern about this ‘catch-all’ view of competence. One focus group participant responded to another participant’s suggestion of a competency “list” as follows:

“I think also when you mention a list, a check list or any kind of list for any of our areas, it would be pages and pages and then find that the competency assessment parts are usually on the more complicated areas. You’re testing them on complicated procedures where you really need a specific body of knowledge but nobody is checking if they’re doing their vital signs properly or nobody ever asks you again after nursing school how to properly do something. ... your ability to interpret evidence-based research, your ability to assimilate ... your ability to do IV’s ... What do the standards say? In my specialty there is a standardized professional guideline that nurses should
adhere to and it’s 430 pages and you go through it again, they’re concepts. They are not hard core, identifiable things that you can standardize from one person to the next.” (FG4)

Here, the participant viewed assessment as a test of competence and mentioned several concepts that might act as proxies for competency assessment, such as standards, different types of assessments and procedures, and the interpretation of evidence-based research. This participant took the view that competencies were broader and more holistic than a checklist and also alluded to the complexity of competency assessment.

One physician participant described assessment as being inherent in competence and implied that assessment offers an assurance or acts as a proxy for competence:

“Clinically, I think competence is more what other people think you should be able to do; like kind of an assessment, like kind of an external assessment of what people think your skill level [is] or what you should be able to do.” (P3)

For this participant, peer assessment seemed to serve as a mirror, reflecting an individual’s clinical competence. This same physician then proceeded to describe delineation between one’s “competent zone” and “comfort zone” as follows:

“There is a difference between comfort zone and competent zone. [INTERVIEWER PROMPT: So what’s the difference?] So the difference would be, depending on how aware you are of your own abilities. It probably comes back to are you aware? And not necessarily a self-awareness, but: are you listening to other people? Are you kind of cognizant of having a limit of your own competence? I mean I’ve never thought of this so I’m going to go back and forth a bit.” (P3)

Interestingly, self-assessment and feedback from peers (i.e. “listening to other people”) featured prominently in this physician participant’s description of competence. In this manner, the participant seemed to indicate that there might be a gap between an individual’s belief in their competence (i.e. their “comfort zone”) and what they are actually competent in (i.e. the “competence zone”). Thus for this participant, accurate self-assessment, or awareness of one’s
abilities, contributes to one’s self-perception of a “comfort zone”, all of which may also serve as proxies for competence.

When another physician participant was asked to define competence, they described competence as something entirely contingent, citing examples from academia and clinical practice:

“... whatever it is you decide is important, are you doing it and are you doing it consistently? I think the key is what’s important. So is it your academic output; is it your clinical practice and your ability to diagnose and treat appropriately and follow existing guidelines. Is it your team competency; are you able to work as part of a multi-disciplinary team and interact with each other and listen and receive feedback? What is it exactly: what is important? And once you have defined what it is, then are you consistently doing this? And if you’re not doing it; why not and what are the barriers and how can we help you get there?” (P1)

This participant viewed competence as something that is both individualized and individually defined; they referred to proxies such as academic output, clinical performance, collaboration, and the use of guidelines as representations of competence.

Although I had asked specifically about competence, many participants used the terms competence and competency interchangeably, often conflating the terms. One frequently cited means of defining competence, particularly for nurse participants, was Patricia Benner’s popular novice-to-expert framework of competency development. For example, in a focus group of nurses, one participant (FG1) described a range of competence (i.e. not competency) and mentioned novice, experienced and very experienced roles where an individual might “fall” within this “grid”. Another participant (FG1) echoed this idea by describing an individual’s self-assessment as integral to their ability to determine their own competence and also to situate themselves on the novice-to-expert continuum relative to their colleagues and mentors. A participant in this same focus group also talked about competence as being more than
dichotomous (i.e. competent or not competent) and described the need for multiple levels of assessment or variables to determine one’s competence (FG1). Yet, in a key informant interview with a director-level participant, when asked how they define competence, they responded with a description of Patricia Benner’s developmental competency scale (D2) but only mentioned the novice and expert roles on the continuum, omitting the other categories in the middle of the scale.

To summarize, competence was a concept that many participants were tentative about so it is not surprising that they cited frameworks and proxies familiar to them when asked about competence. Nevertheless, there was variety in the proxies cited as well as variation in participants’ responses based on their participant group. For example, physician participants tended to refer to competence by way of academic output, clinical performance, skill and comfort and the use of guidelines. Unlike the physician participants, other health professional participants referred to competency frameworks, standards of practice, organizational processes and the use of evidence-based resources. Several nurse focus group participants cited Benner’s novice-to-expert competency framework, often highlighting the importance of competency assessment while also describing competence as dichotomous (i.e. novice and expert) rather than one component on a developmental continuum (FG1). In other words, they misrepresented the competency frameworks by only considering binary aspects of the model, instead of the entire competency continuum. Participants’ reference to expert roles is also a particularly interesting finding that highlights the influence of the hospital context, where excellence is a key organizational value, on individuals.
Excellence versus incompetence: “Builds up to excellence like a pyramid of sorts”

Participants often referred to the organizational value of excellence when asked to define competence and describe competency assessment processes. In some cases, despite being asked about competence, participants also differentiated excellence from incompetence. For example, a director-level participant demarcated excellence and minimum performance when describing the hospital’s human resources performance appraisal processes:

“What I look for is for people not to be just at the bare minimum but they should be going beyond. For example, when we do evaluations, we have ratings of outstanding, excellent, meets expectations, not meeting expectations. If they’re rated in that latter category two years in a row, it’s termination. Meeting expectations is a very high standard and to go beyond that people have to be doing some exceptional work. And to get outstanding which is less than 10 percent of the employees you have to introduce a lot of new knowledge or information, something exceptional. So I would say meeting expectations is always a very high standard - I am looking for excellence in performance and competencies.” (D7)

While this participant acknowledged the exceptional nature of “going beyond [expectations]” and high bar or ”standard” of meeting expectations, they also acknowledged excellence (i.e. “something exceptional”) as a sought-after performance goal within the organization.

Similarly, when asked to define competence, an executive participant differentiated individuals who were “extremely competent” from those who were “non-competent”:

“I think competent basically means that you expect it to be done but you don’t have to be the fastest; you don’t have to be the most perfect but it’s as you expected and the product is finished. That would be competent. ...I think the goal is if each and every one of us is extremely competent in doing what we’re doing, we would be a way better place to begin with. Because what’s worse is you have a few people who are superb but the majority are [sic] non-competent, then you are in trouble. Any time, I would take a group of people who are extremely competent; none of them are superb; but as a team you would deliver every single time.” (E2)

For this participant, competence offered appeal as a standardized and predictable performance expectation. Another executive participant (E3) also made a distinction between competence and excellence and seemed dismissive when asked about competence; they stated frankly that it was
not competence but rather excellence that was their main interest and focus. The organizational expectation of excellence resonated strongly throughout the participant’s interview. At several points during the interview, it seemed as though there was no place for a discussion about competence, given both the participant’s expectation of excellent performance and of organizational excellence.

A director-level participant described the specialized organizational environment as a place with “high standards” as follows:

“At [organization name] we have some very high standards and I know for example because I’ve worked at other health care institutions. I did work for two other hospitals. ... We have higher standards. I know about individuals who just couldn’t make it from a technical standpoint here who were successful at other organizations because the standards aren’t as high. The quality of work or what I should say the skill sets that are required because of the complex cases and so forth; they’re not as great as [organization name] is. A person can be quite competent at another institution but a complete failure here.” (D7)

This participant suggested that competence was insufficient and that a higher standard beyond competence was required to work at this particular hospital.

In a focus group of allied health professionals, one participant said “… competency is the foundation of what practice is here at [organization name] and then it builds up to excellence like a pyramid of sorts” (FG5). While this participant described a competency-to-excellence continuum, they also positioned competency as a foundational practice expectation. This view contradicted other participants’ suggestion that it was not competence but excellence that was the expected level of practice and performance at the study hospital.

A manager-level participant acknowledged the organizational reputation for excellence, but at the same time, questioned whether having an organizational goal of excellence was a reasonable expectation for the average employee. This participant described the organizational
reputation of excellence as follows:

“You know, I think [organization name] is known for excellence and that’s why this word is coming so easily to us and is desirable by everyone. So we do need to recognize that [organization name] has written the history in taking many first steps around the world but can we expect that out of an ordinary employee?” (M3)

This same participant elaborated by considering the organization’s reputation from a patient’s perspective:

“So I’m trying to think from a patient perspective. Why do I come to [organization name]? Do I come to [organization name] from [another country] because here it’s one of the best places for [procedure X]? If I do that, then when I see an Allied Health Professional I expect excellence. So I would imagine there are pockets at the moment where excellence is expected and excellence is called the minimum performance.” (M3)

This participant offered a more critical perspective on the organizational value of excellence that contrasted with other participants’ views. In this example, they referred to “pockets” of “excellence” within the organization, where superlative performance is the norm rather than the exception.

Participants gave the impression that upholding the organizational value of excellence corresponded in some way with competence or competency assessment. For example, in a focus group of allied health professionals, one participant commented that competence and excellence are inextricably linked, as follows: “We’re always looking for excellence rather than competence. You can’t have excellence without competence.” (FG5). The link between excellence and competence was raised in several interviews and, for a few participants, organizational excellence even seemed to trump competence. While competence may have been considered a foundational practice expectation, from these examples, it appears excellence was the expected norm at the study hospital.

In a focus group of allied health professionals, one participant considered competence to
be almost pejorative when engaging in a discussion about what it means to be considered “competent”:

“...in fact I actually don’t like the term competent. It’s such a low bar to set in some sense. Telling someone “Hey you’re pretty competent” is like – (trails off). At [organization name] we do. I know we do it all the time. It used to be highly competent and now it’s fully competent. That’s bare minimum and I think there are clear pieces that are reportable to the college. A few years ago we actually looked at that as an Organization to say are we actually reporting what we need to report. So for instance, if a person is leaving, it’s kind of tempting not to share information with the College if it’s kind of an authority situation but we really looked at what needs to be recorded regardless of working sites. There was some work done interprofessionally around that. [INTERVIEWER PROMPT: On incompetence?] Yes not meeting minimum. It’s really as an opportunity to look at excellence and where do you need to move for that”. (FG3)

This focus group participant depicted competence as “a low bar” and then talked about the regulatory requirement to report incompetence. This response echoed others’ notion of a polarity between incompetence and excellence, with competence falling somewhere in the middle.

Nevertheless, it was surprising that participants described incompetence (i.e. “not meeting minimum”) as an opportunity to look at excellence without first considering competence. This idea implied, paradoxically, that the failure to meet minimal expectations offered the occasion to bypass competence and explore opportunities for growth within the organization and/or within one’s own performance, in the pursuit of excellence. Participants’ description of competence as a “low bar to set” is also interesting in light of others’ description of competence as a core or minimum threshold and as a foundational practice expectation (e.g. M2; M3) and one participant’s appeal for performance that went beyond the minimum (e.g. D7).

In another group of allied health professionals, a participant described the organizational aim of excellence as being embedded in hiring practices:

“... we don’t work at competencies; we’re looking for excellence; that’s where I think it lives. At least that is the hiring principle we try to apply – looking for the best people who can ultimately, with the right foundational support and growth and
development, can go on to lead like that. Who can go on to achieve excellence and advance their practice?” (FG5)

This participant was candid about the hospital’s aim of recruiting excellent candidates and alluded to organizational supports for growth and development. The idea that the organization does not operate at the level of “competencies” and instead, aims for excellence, suggests that the quest for excellence is reflected in organizational selection practices and possibly even all human resources practices (i.e. selection, training/development and evaluation/appraisal).

Nevertheless, competence and excellence appear to be juxtaposed in this example, which raises the question of whether this participant perceives them as incommensurate or incompatible or whether they view excellence as superseding competence. These ideas were also echoed by a physician participant who described their dislike of the term incompetence because of its connotation as being dichotomous rather than on a continuum (P2).

Participants also problematized the term competence and questioned its meaning. In a focus group of nurses, participants described competence as a term they avoid because of its subjective nature:

Participant A: “So I actually avoid the word competency at all costs Participant B: Oh do you? Participant A: Yes, at all costs, because if you ask people ‘what do you mean by competent?’ You’re going to have very different definitions and most people would turn around and say knowledge, skill and judgement. Whose knowledge, what knowledge? “Oh I’m using best practice.” Who has defined the best practice? So competency is a word that we banter around as relevant discourse without having a standardized definition for what we’re actually talking about. And to the point, if we’re talking about knowledge, skill and judgment, well who is deciding on the knowledge; what is it based on? Who has decided on the skills; who has decided on the judgment. Where does the patient come into it and how is it measured and who is measuring it? It’s very subjective.” (FG4)

Here, one participant questioned the contingent nature of the term ‘competence’, despite its normative appeal (i.e. “competency is a word we banter around as relevant discourse”). They
also critiqued competence as implying “best practice” because of the difficulty of knowing the standardized definition of the terminology. Curiously, they did not question the association of best practice and competency despite best practice typically having a particular meaning that implies superlative performance or excellence.

Overall, these findings suggest that there is a great deal of polarity in the findings about organizational competence and excellence. Several participants refer to an excellence-incompetence dichotomy and to competence as being a “low bar” for health professionals at the study hospital (FG3). Participants’ championing of excellence was also critiqued by other participants who instead, saw competence as an acceptable performance expectation. Participants also questioned organizational processes for reporting incompetence among regulated health professionals to the regulatory body (e.g. “are we actually reporting what we need to report?” FG3). These findings create the sense that competence was generally not on the collective radar of many of the participants at the study hospital. There seemed to be a tacit assumption that people were implicitly competent, unless found to be incompetent, and that the organizational goal was oriented towards excellence rather than competence. The opposition between excellence and incompetence may have obscured participants’ ideas about competence as well as organizational competency assessment processes.

Organizational competency assessment processes: “… a mixed bag of approaches”

There was wide variation in participants’ understanding of organizational competency assessment processes. Since it was a key study goal to understand participants’ views of competency assessment processes and practices, a large proportion of the dialogue in the interviews and focus groups was focused on this topic. Although participants were consistently
asked to describe organizational competency assessment processes, the majority of participants instead described organizational performance appraisal or assessment processes instead. That is to say, most participants substituted the term competence/competency for performance or used the words interchangeably. Their responses address research questions related to how competence is enacted within the organization (research question #1) and how this is perceived and experienced by regulated health professionals (research question #3).

When asked “How do you understand [organization name]’s current methods of assessing the competence of health professionals?” a manager-level participant asked for clarification about what it was that I was inquiring about and asked, “You mean do we do it?” (M2). This participant then proceeded to describe the hospital’s system of performance appraisal which includes a mechanism for employee self-assessment and peer review (M2). In other words, this participant described what the hospital does in its performance appraisal processes but did not clarify whether these processes include an assessment of competence.

A nurse participant from one of the focus groups interpreted the question about organizational competency assessment to a query about knowledge, skill and judgment (i.e. using a commonly used regulatory construction of competence). This participant then stated that competency assessment was not currently within the organization’s purview:

“I don’t think as an organization, we’re not there yet to assess knowledge, skill and judgement because what the organization assesses is risk and liability. That is the language of the organization; that is the language of hospitals. And as we talk about risk and liability, one would hope that further down the line, that language, knowledge, skill and judgement would come but I do not believe we’re there yet.” (FG4)

For this participant, risk and liability were the organization’s assessment priorities, rather than competence. A participant from another focus group of allied health professionals agreed that competency assessment did not fall within the organization’s mandate:
“I don’t think we do formal competency assessment to be quite honest with you. I mean we do quality checks, chart audit being one of them. And I think the practice leads meet with staff on a regular basis to review any issues concerning cases.” (FG5)

Although this participant was tentative in their response, it is noteworthy that they responded with examples of organizational measures for assessing quality, safety and practice (e.g. “quality checks, chart audits”) when asked about competency assessment. Overall, it seemed as though the very concept of competency assessment did not translate into the organizational context for several participants. In response to questions about the hospital’s competency assessment processes, participants answered based on what made sense for them, given their role within the organization.

There were, however, several participants who could describe clearly what the organization did to assess performance (i.e. not competence). For example, one executive-level participant detailed the organization’s evolution in its assessment processes over time and questioned whether it was an assessment of performance or competency:

“So as mentioned before the question would be is it really competency assessment that for some period of time, more than a decade, probably more like fifteen years, as a component of our performance management process, there has been an option to include multi-source feedback on competencies that are really heavily related to [organization name’s] values. So they’re very broad. This is an optional activity. Individuals and managers determine individuals to provide feedback. It’s a Likert scale and that information may or may not be included as part of a performance review. So those broad competencies have been fairly consistent over the last decade anyway; the same tool has been used and more recently has been adapted and added to the process within nursing for RNs and RPNs. ...and then at the managerial level work was done about seven or eight years ago, work was done to identify leader competencies and a particular framework was used which was “Leaders for Life”. So this was based on work done across Canada for health care leader competencies. We adapted those and those were incorporated into our manager and director performance evaluation process; again multi-source feedback as well as self-assessment. So that’s my take related to the performance management process.” (E1)
This participant’s detailed description of the organizational history also mentions various assessment procedures and means of assessing competence including the use of multi-source feedback, self-assessment, feedback, a Likert scale, and Leadership competencies (i.e. “Leaders for Life”). Nevertheless, this participant did not offer any clarity on what it was that existing organizational processes actually assessed and whether that assessment included competencies.

Another manager-level participant mentioned the LEADS Canadian leadership framework for health care organizations, referring to it as a competency framework and stating that it is an example of the “true competencies” used by leaders at the hospital (M3). As a relative newcomer to the organization, this participant offered their unique perspective and described both their understanding of competency assessment processes as well as their perception of how others within the hospital understood the organizational enactment of competency assessment:

“I would guess what the front line and the managers understand by this term is multi-source feedback. My second guess is that they would think of a development plan if they have ever used one. But not the majority; I would assume the majority of employees would not even know that we can work on our competencies to develop our professional profiles .... For the moment we have values and we also have the LEADS competencies, LEADS framework, so these are the true competencies that we use at [organization name]. But most people don’t know that and I’m sure because I have seen the new leaders’ orientation and when they hear about the LEADS competencies, it’s something new to them.... [INTERVIEWER PROMPT: ... How do you understand competency assessment at [hospital name]?] Unfortunately, my understanding is that it’s still in an infantile stage. Honestly, I don’t think they were communicated ever, the LEADS competencies and that’s why there are very low levels of awareness. So they are not interwoven in the HR processes. So for me what I think when you’re saying competencies, I say “Oh that’s a good opportunity for us to improve some things [in the organization].” The good thing is I do see it coming so after we finalize the new strategic plan and values, the next thing would be one of my projects, to better the competencies for [organization name]”. (M3)

This participant described organizational performance evaluation processes as being focused on assessing organizational values, rather than competence or performance. Organizational
performance appraisal documents corroborated this finding, as the evaluation entailed a self-assessment and supervisory assessment that evaluated the employee against the hospital’s values. The quoted segment illustrates this manager’s critique of existing organizational assessment processes and shows how the participant perceived differences in the assessment process depending on an individual’s role in the organization. They also compared their perspective with that of leaders and managers within the organization and expressed how they viewed competency assessment and competency development as an opportunity for growth within the organization.

Organizational competency assessment for physicians was described in very different terms because of their appointed, as opposed to employed, status within the organization. One physician referred to competency as being critical especially in determining what happens when problems arise:

“We have a lot of checks and balances in terms of functioning what we call the activity report. With the activity report you know what you’re doing all along and if there are any complaints or concerns, the division head is contacted and he knows that automatically. So there is a way of gauging when a problem has been arising and tell them where the hospital can get involved. The VP of Medical Affairs is usually one of our most important positions in this hospital. You can monitor a lot of these things in competency. We rely on this position, on the Physician-in-Chief and the Division Directors, and in turn [they] give us the feedback.” (P4)

This physician participant described a very direct and automatic mechanism for assessment feedback (i.e. the “activity report”) that was different than the organizational processes described for other professionals within the hospital.

Another physician participant delineated various aspects of physician assessment and questioned the differences between physician assessment and that of others (P1). They used organization acronyms and trade names to describe assessment processes and systems such as Halogen, the online assessment software program used for the performance appraisal of certain
groups of employees. This participant held an administrative position in addition to their physician role within the organization, which may account for the difference of perspective, as follows:

“... assessing position competency, we really are a bit of a lost world. If I think of my role here at [organization name] where I’m a physician as well a [organization name] employee and actually have direct reports to me which is unusual for physicians, I do [organizational performance evaluation] on them every year and we get feedback. And we go through that entire process which has its pros and cons but fundamentally giving feedback is a good thing. We don’t do that for doctors so it’s always struck me because I do that for a chunk of my staff and then I have two physicians who report to me who are not part of the process. Oddly even though they are [organization name] employees, they’re not part of the process. ... I think the competency assessments are incredibly important and if we do competency assessments for doctors, it’s always about medical competency.” (P1)

This participant offered a critique of the different ways of conducting assessment within the organization and also highlighted the importance of providing feedback as part of the assessment process. They described “position competency” as a “lost world” which seemed to be an expression of the tension that exists when assessing physicians when they hold both clinical and administrative roles within the hospital. This participant also seemed to query how and why assessment processes differed for physicians, versus all other hospital workers.

Despite some participants offering an organizational history of assessment procedures and describing different organizational assessment procedures and structures for different individuals within the organization, several participants did not share the same level of understanding. For example, a director level participant detailed their view of a “mixed-bag approach” and their challenges trying to understand the organizational competency assessment processes:

“Newer to this role, I have had actually great difficulty in trying to figure out what the overall process at [organization name] is for assessing competency. So I find that it is a
bit of a mixed bag of approaches depending on who is overseeing the management of a particular professional and what their role is in engaging in performance discussions, evaluations and the like. And what’s come to light to me is when we have individuals who do have performance concerns that is when we don’t have a very explicit and clear process to evaluate what the competency is nor do we have a really solid templated activity in setting out learning plans and to try to determine what the challenges or issues are.” (D1)

New to their role in the organization, this director admitted to lacking a clear understanding of what occurred organizationally and even critiqued existing organizational processes. Yet, they also referred to “a mixed bag of approaches” to reflect the organizational variability in assessment processes and practices. This same participant also questioned what existing assessments measured and what the validity was of existing processes, criticizing them for not looking at specific “metrics” and “outcomes” (D1):

“... I don’t think we’re good at that, so we will in performance appraisals, talk very broadly and generally but nothing nitty gritty to say “How will we know when we’ve been successful?” We’re much better at saying “Here is how I know you did a good job because all of these things happened and it was successful because A, B and C was imagined.” But when it comes to the performance stuff and assessing the competencies, we tend to be a bit broader in general and non-specific.” (D1)

This participant’s perspective was contradicted by another director-level participant’s description of a “robust” process that occurs annually to assess the competence of an individual within the organization (D2). So despite director-level participants sharing a similar organizational role, perception of their understanding of organizational assessment processes differed significantly.

When asked to elaborate on organizational assessment processes, another director-level participant described a formal, annual process of performance review as consisting of “two major pillars” as follows:

“One is personal reflection; so people reviewing their own practice. [INTERVIEWER PROMPT: So, self-assessment?] Yes, self-assessment and then the other is assessment by others and that can be in at the moment at the bedside where you might be working with a peer, where you might be working with an educator. You might be working with a resource person, your practice leader and it’s an opportunity for teaching. Your manager
could be observing something and provide you with feedback. I wouldn’t say it’s perfect but there is a culture of helping each other out. Then in the more formal process, depending where you are in the organization, there is process for more formal feedback from your peers and from the person you report to who would, over a period of time, collect information to sit down with you and review. And I think we try to be very concrete around “what are we doing” so it’s not just like to be a better “X” but what are you going to do to be a better “X”.” (D3)

This participant described a culture of continuous performance improvement with different individuals contributing to the assessment and several different supports for one’s professional development within the organization.

In a focus group of allied health professionals, one participant described a “well-articulated” process for assessing competency within the hospital, as follows:

“But at [organization name], it’s quite well-articulated. It involves the knowledge piece of literature review and a written test, observation, shared practice and demonstration and then a yearly sign off together with a minimum number of times to maintain competence.” (FG3)

For this participant, unlike many others, it seemed as though competency assessment was something clearly defined as part of a “yearly sign off”, or annual credentialing process. However, it is not clear whether this participant was detailing competency assessment for their profession that may have occurred with their regulatory body or professional association or an assessment based on their role in the organization. Nevertheless, this participant’s outlier perspective offered a counterpoint to a nurse focus group participant who frankly stated that competency assessment was not, in fact, under the purview of the organization:

“Nobody is doing competency. I mean, not completely but not in the well-defined framework that identifies and explicitly explains what you’re being tested on or how this competency is being measured. Like I said there are some – do you do it bi-annually; do you do it once a year; do you do it only when you graduate and get your BSCN and it’s just assumed you have that knowledge and you never go back to be tested again.” (FG4)

The above quote illustrates the participant’s understanding of the frequency of the hospital’s assessment practices (e.g. “bi-annually”, “once a year”, “when you graduate”), which they also
problematized for not being a “well-defined framework” for continuing competence within the organization.

The context of the complex, multi-site academic study hospital seemed to play an important role in competency assessment practices. One director-level participant alluded to the important influence of the organizational context on assessment:

“If I understand it, the organizational context can shape the way in which the standards and the role is enacted in a working unit. Right, based upon the unique demands of a particular area. Again not stepping outside of the scope but perhaps shaping it in some way.” (D3)

A nurse focus group participant was more precise in referring to this specific context (i.e. “the unique demands of a particular area”) as “unit culture around different tasks” (FG4). Yet, it remains unclear what role context played in organizational assessment.

Another director-level participant thoughtfully described the difficulty of considering both the individual and organization in conducting assessments:

“... the complexity of our work in health care: it’s not all about what the individual can and cannot do. I think honestly that’s one of the challenges of some of the competency frameworks. It doesn’t always fully acknowledge or fully explicate the considerations around context and how we - I’m a big fan of thinking really critically about how do we establish a context, a culture and an environment that supports individuals to be able to demonstrate competence because sometimes it’s not all about the individual. I think of lots of times where over the years I’ve been called into different things and there is somebody who is identified as not being competent in a particular area. So of course, the answer when they’re calling me is about ‘they need education.’ It’s not always education; it’s not always about the individual; sometimes it’s about the environment as well or the context or the leadership or the physiological safety of the team, lots of different things.” (D6)

This participant suggested that, due to the complexity of the work environment, there may be other contributing factors impacting an individual’s competence. They also alluded to these factors being excluded from existing organizational competency assessment frameworks.

In summary, the variety of responses provided suggests little consensus on organizational
processes for assessment of competency and/or performance – both about what is done in the hospital, what is measured, and what purpose it serves. Many of the participants interviewed were in charge of performance evaluations of their staff and all of those interviewed in individual interviews or focus groups participated in organizational assessment processes, save for the physicians who only held an appointed role. Thus, one director-level participant’s description of a “mixed bag of approaches” (D1) seemed fitting as a way of reflecting participants’ varied understanding of the organizational-level assessment of competence. Participants described performance assessments as including the hospital’s values and also mentioned the importance of the complex organizational context. Nevertheless, from participants’ responses, it seems like the influence of the organizational context on assessment depended largely on one’s role within the organization. Overall, competence seemed to be in the eye of the assessor with no real clarity about organizational processes or consensus on practices amongst participants.

Selection processes: “Somebody hired them”

Although the study focus was on assessment practices, participants also discussed candidate selection practices for recruitment into the organization. When participants raised the issue of candidate selection, they were clear that the organization was interested in hiring those who were of an appropriately high caliber to work there. In one focus group of allied health professionals, participants described the “assumption” that someone had “measured up” being inherent in organizational selection processes:

Participant A: “They come in; they do their job; there are no issues; they haven’t killed anyone. [Interviewer prompt: Because they’re here at [hospital name]? Yes, at some point, they must have measured up is the assumption. Somebody hired them. It may not be me; it may not be my predecessor but someone has hired them and they’ve been here throughout this whole time and they’ve been participating in the clinical work successfully. Participant B: Or else they would not still be here.” (FG2)
Here, Participant A described a tongue-in-cheek threshold for being retained in the organization, notably as an employee “not killing anyone” (FG2). The serious implication was that there have not been any problems therefore they must be competent. This response also deferred the responsibility for competency assessment to someone else (i.e. “somebody hired them”; “they’ve been participating in the clinical work successfully”; “or else they wouldn’t be here” FG2) and put great faith in extant organizational recruitment and selection processes and practices as a means of assessing competence.

In another focus group of allied health professionals, one participant described various mechanisms for determining the “fit” of a candidate being hired to work in the organization:

“In the hiring process at the hospital, we tend to look more for fit. So we look at their training site to see if it’s analogous to our workload here. We tend to hire our own students just because it’s easier to train those students rather than hiring from external. And with the integration with [educational institution name], it makes it even more of an internal candidate. I think what we would look for is someone who has been exposed to the type of patient demographic that we have. So personally, I trained at a community hospital and I found when I came here, my eyes were wide open. One, I have never seen the technology here; and two I had never seen such sick patients, ever, the acuity. Because you walk into the ICU and it’s a different ball game because you’re not going to be buddied up forever and you’re expected to handle yourself in a way you’re not putting the patient at jeopardy because you don’t understand what is around you. …we always ask something like “Why did you apply to this hospital” and we expect that answer to be “This is a large teaching hospital; you’re focused on research and education” and if we don’t get that out of the individual then we actually see what comes out of them.” (FG3)

This participant described a unique and specialized organizational environment that required a particular level of awareness for individuals interested in working there.

A manager-level participant echoed the idea of a “fast paced”, specialized environment and described the process of knowing whether an individual would be a fit for the organization:

“...there is a certain point at which - it’s not intuition; it’s sort of you’ve just learned.
There is sort of that ingrained ability to talk to somebody over forty-five minutes and really figure out if they are going to fit. It’s sort of a really intangible. ... It’s a really intangible - but sometimes there is something intangible that this person is not going to make it here. I mean this is a very fast paced, hectic; not just [specific hospital], but [organization name] as a whole is very fast paced, constant change .... You sort of go: “this one is going to fit the culture” or they’re not. I think the bad part of that is it’s not always about competency. If you have no competence you’re never going to fit but even some people who may be competent might not fit.” (M2)

This manager-level participant stressed the “intangible” aspects of assessment whereby selection practices, for example, are as much about fit as they are about competence. At the same time, this participant did not consider competence to be a panacea for determining a person’s “fit” within the organization. This response also recalls aspects of the Boyatzis model in which the idea of congruence between the individual, job demands, and organizational environment are required to effect competent behaviour or performance.

In another focus group of allied health professionals, a participant alluded to “attitude” and the ability to strive “towards excellence” as being just as essential as basic competencies when hiring new employees:

“...I still think when you talk about hiring new grads and that, you’re looking for them to meet the basic competencies of what practice would be but you’re also seeing that they have the growth capabilities and seeing them showing already the desire to aspire to be better; so striving towards that excellence. I guess we look for the right personality to fit what we want them to do; the right attitude. The right attitude, yes.” (FG5)

This participant focused on the “growth capabilities” of the individual as something beyond “basic competencies” and the right personality was part of ensuring a successful organizational fit. Despite this participant’s description of “striving towards that excellence” (FG5), a manager-level participant described the importance of meeting (i.e. not exceeding) one’s job description when being hired:
“Well they have to meet all of their job demands for their description; so what the actual role expectation is, they have to meet that. And they have to be able to do so safely.” (M1)

For this manager, meeting all of the “role expectation” in a safe manner was essential. Yet a director-level participant provided hypothetical examples that illustrated a lack of “oversight” and rather arbitrary organizational selection processes as follows:

“If I’m a Manager in an inpatient setting and if I want to hire a particular profession there isn’t a lot of oversight into defining what we’re looking for with that particular profession when we’re doing a job description. So if I want to tweak or modify a job description and I’m in a hematology unit, I can write a job description for a social worker and I’ll probably use the core basic one but I add on other things. I don’t know what cross check and validation there is to make sure that the things that are being attributed as competencies for that role are actually validated with a professional college, with a practice leader here at the Organization or with one of the directors or senior professional practice leaders.” (D1)

In contrast to the ways participants described organizational competency assessment with little consistency, participants were fairly unanimous in describing the high standard of practice that was required to be hired at this hospital. Nevertheless, this director-level participant (D1) suggested that there were in fact discrepancies in organizational selection processes and questioned whether there was alignment between the individual’s role within the organization and their competencies.

To summarize, it is clear from participants’ responses that a key component of the organization’s assessment of values was in its selection processes for recruiting and hiring candidates to work at the study hospital. Although the study was focused on competency assessment, participants responded with information on organizational recruitment as it pertained to assessment and selection practices. Participants’ description of the need for “fit” in selection practices also echoed the Boyatzis mode of effective performance which was used as an a priori framework to construct the interview guide questions. Participants were generally aligned in
describing the organizational expectation of a high caliber candidate to work in the study hospital, given its unique and specialized context. The hospital’s focus on excellence also seemed to raise the bar for organizational recruitment processes.

**Organizational competency assessment processes: describing the phenomenon of interest**

Throughout data collection, participants provided various rationales about existing organizational processes and activities. Through detailed analysis, it was important to untangle how and if these practices related to competency assessment, how participant responses addressed the research questions and how the organizational context might have influenced assessment practices. For example, in the organizational documents, performance or competency assessment was handled in a very particular way, largely by focusing on the assessment of an individual against a set of organizational values. When participants were asked about organizational competency assessment practices in the interviews and focus groups, they described existing processes for the organizational performance evaluation. While these processes were largely supervisory assessments, participants also explained how the processes differed for some, such as leaders, and included multi-rater feedback and a 360 degree assessment using an evaluation program external to the organization (i.e. Halogen).

Participants described the organizational performance evaluation process as a supervisory assessment that measured an employee against a set of organizational values. Participants generally described a process in which the employee set goals and completed a self-assessment, unless they were unionized, and the employees were evaluated against these goals by their supervisors. There was ambiguity around how often this assessment occurred. For unionized employees, the organizational norm was that this assessment occurred every two years but for
others, it was less frequent. There were participants who questioned whether the assessment of organizational values was, in fact, an appropriate assessment of competence. This claim was refuted by others who claimed this assessment was an assessment of competence. The organizational documents also corroborated participants’ responses about the assessment being focused on the hospital’s values. In general, this process was the organization’s means of standardizing assessment for the majority of its employees but, according to several participants, did not constitute competency assessment.

Organizational leader participants described a concerted effort to invest in the hospital managers by incorporating the CCHL Leads framework into their evaluations. It was thought that inclusion of this established health care leadership framework would enhance the validity of their assessments. Nevertheless, the use of this framework was also criticized for not being customized to the organization and therefore, not perfectly aligned with the hospital’s values and goals. At the time of data collection, the organization was undergoing intensive work on its mission, vision and values in anticipation of developing a new strategic plan. According to several participants, the use of this external framework (i.e. CCHL Leads) was something that was being reconsidered for its fit with the organization and its goals.

Other participants described a very different organizational evaluation process from that used for point-of-care clinicians, such as nurses and other employees. Managers, Directors, Executives and other supervisors such as physician leaders described a process that involved assessment from multiple raters (i.e. 360 degree feedback) in addition to the ‘standard’ self-assessment against the organizational values and individualized goal-setting process. This process provided the opportunity for feedback from a number of different people, including those from different disciplines and/or departments. The 360 assessment was done on an automated
system external to the hospital (i.e. Halogen). Participants were generally positive about this system but said that its expense prohibited expansion of 360 assessments beyond the upper echelons of the hospital (i.e. executive leaders, directors, physician leaders). Participants also generally appreciated their ability to propose potential raters for vetting by one’s supervisor/manager/director and described this as an occasion to obtain varied, and oftentimes, more constructive feedback. Thus, for some, the 360 assessment process was an enhanced means of organizational assessment and opportunity for those being assessed to continuously improve, beyond a ‘standard’ annual review.

Physicians described only participating in the organizational assessment (i.e. 360 degree assessments using Halogen) if they held administrative positions, in addition to their appointed status. A physician who was appointed to the hospital and who had only clinical responsibilities would not undergo a hospital-based assessment. Instead, their physician-in-chief for their clinical specialty would review their continuing education and curriculum vitae; a process that was described as being similar to the hospital’s appointment and university’s credentialing process in addition to regulatory and specialty college requirements. Since physicians were appointed staff and generally not hospital employees (i.e. unless they held dual roles, as administrators and clinicians), this assessment process was very different and more closely in synch with the regulatory requirements for annual medical licensing renewal than for any other health professional at the hospital. The fact that the physician assessment involved a regulatory component provided an extra-organizational measure designed to ensure safety, particularly given the higher risk procedures the physicians were doing, including major operative procedures. However, this assessment had very little, if anything, to do with the organization in which the physician was appointed to work.
Throughout the study, different types of assessment and their pros and cons were raised by several participants, such as the enhanced validity and reliability of multi-rater feedback and the lack of validity for self-assessment. These participants shared their understanding of why self-assessments were excluded from organizational assessment. For example, in the case of unionized employees, an employee’s self-assessment was excluded from formalized organizational assessments because, according to participants, it may have had a negative influence on the supervisor’s assessment. Participants explained that unionized employees might set goals for themselves when participating in the organizational performance evaluation process but their self-assessments were not included to safeguard against any potential managerial or supervisory bias; this was attributed to the union’s aim of protecting the employee, as stipulated in the collective agreement.

Participants also cited point of care or frontline managers’ span of control as being a reason organizational assessments were enacted the way they were and why they consisted almost exclusively of a supervisory assessment. They cited cases where managers had over 200 direct reports, which made it almost impossible for them to get through their annual or biannual supervisory assessments. In one instance, a participant described having so many direct reports that they completed their performance appraisal process over a two year period only to commence it all over again. Participants worried that adding other assessment data, such as a self-assessment, would make this process excessively cumbersome and potentially unfair.

Overview

In response to questions about how competence is enacted (research question #1), how competency assessment is understood (research question #2), and how competency assessment is perceived and experienced (research question #3), participants generally struggled with how to
discuss the issue of competency assessment. Throughout data collection, participants provided their understanding of organizational competency assessment processes and practices. One notable finding was the lack of shared language for competence and competency assessment. It is not that these terms were alien to participants but rather, the terms seemed to be foreign to participants within the hospital context. They often used words interchangeably, conflating competence, competency and competency assessment, and seemed to be searching for a singular term to define competence that was both correct and broadly understood; a generic and consistent organizational means of defining the term. Several participants conflated the term competence with the way the assessment was conducted, arguing that subjective assessment was problematic and that assessment should be as objective as possible (i.e. it was not what it measured but how it was measured or how the measurement was conducted that mattered). When asked to define competence, participants lamented the apparent void in their organizational lexicon and used a variety of descriptors and definitions to fill this gap.

Regulatory terms are often part of an organization’s common parlance when they have a regulated health professional workforce; this is true for the regulated health professionals in the organization’s employ as well as for other participants within the organization regardless of their professional affiliation or status. Although participants were not asked about regulation specifically, they used regulatory terms to describe and define competence. Nevertheless, their responses were equivocal about whether regulation provided an acceptable standard for professionals within the organization. For some participants, meeting the standards of practice and working within one’s scope of practice was acceptable yet for others, regulation set a minimum expectation of safety that was too low of a bar for the organization and those within it to aspire to. For several participants who stressed the importance of excellence both as an
organizational goal and workforce expectation, the regulatory definition of competence did not seem to hold much valence.

Participants discussed competency frameworks such as the LEADS Canadian leadership framework for health care organizations and Patricia Benner’s novice-to-expert competency development continuum when asked about competence and competency assessment. Participants also cited clinical practice guidelines and evidence-based resources as helpful and familiar algorithms which were often used as proxies and heuristics for competency assessment (i.e. you adhere to the established guideline, ergo, you must be competent). However, what is particularly interesting is the divergent ways these things were mentioned by different participant groups. Physician participants equated competence with their academic achievements, clinical skills performance and professional or discipline-specific guidelines while other participants, including other regulated health professional participants, spoke of competency frameworks, standards of practice, and the use of evidence-based resources. Although Benner’s popular novice-to-expert framework was mentioned by several nursing participants, it was mistakenly referred to as a dichotomous framework. In other words, the polarity of ‘novice’ and ‘expert’ were the only two roles that participants mentioned, instead of including all of the five steps on this developmental competency continuum.

Participants also raised a common theme in discussing the organizational value and pursuit of excellence, in response to questions about competence and competency assessment. Excellence was often contrasted with competence and, in some cases, excellence was touted as both a desirable and aspirational organizational goal. For some participants, competence was a lower standard than what was considered acceptable within the study hospital where excellence was considered/is a key part of the organizational mandate. Participants expressed their wish
equally for the hospital to have a reputation for excellence and those working in the hospital to be excellent.

Several participants also seemed to automatically veer into discussions about *incompetence* when discussing competence, and notably, also *excellence*. This gave the impression that they envisioned an incompetence-excellence dichotomy which, in many instances, *excluded competence*. If competence happened to be cited, participants then implied an incompetence-to-excellence continuum which included competence somewhere in the middle of this spectrum. Participants seemed to uphold the espoused organizational goal and value of excellence which created an unnatural opposition between *excellence and incompetence* (i.e. as opposed to between competence and incompetence!). Focusing so explicitly on excellence may have distorted or shielded participants’ view of competence or, worse still, blinded them to instances of incompetence.

Understanding organizational competency assessment processes from participants’ perspectives was a major aim of this study therefore this topic was the focus of several interview questions and probes. Participants were asked about *competency* assessment processes but for the most part, described organizational *performance* appraisal or evaluation processes; automatically substituting *competency* for *performance* when talking about assessment strategies within the organization. For many, it seemed as though both the very concept and content of competency assessment did not resonate in the hospital’s organizational context. Therefore, in order to respond, participants substituted the assessment or metric that made sense to them based on their organizational role.
Responses were varied and participants described a range of strategies used to assess people in particular roles in the organization, including the hospital’s organizational performance evaluation. The goal-orientation conveyed in the title of this organizational assessment system implied that “performance enhancement” was an inherent part of the process, and perhaps even a priority that superseded assessment. Participants described existing assessment strategies included in this process, which ranged from a supervisory assessment and self-assessment, to a peer assessment and 360 degree assessment using multiple raters (i.e. for managers/leaders, including physician leaders, and using the LEADS framework). Participants attributed the variation in assessment strategies to the different roles of individuals being assessed within the overall organizational hierarchy.

Participants themselves critiqued existing organizational strategies for assessing competence, suggesting that standard organizational assessment for most employees looked at values rather than competence or even performance, or proposing outright that competency assessment was a foreign concept within the study hospital (i.e. participant P1’s reference to the organization being in a “lost world” with respect to the assessment of “position competency”). Several participants even went so far as to state that the organization was not looking at competence in any of its assessments, implying that this was not within the scope of the hospital. Participants also criticized competency frameworks for their exclusion of context, almost insinuating that decontextualized assessment was irrelevant in the hospital setting because of all of the contingencies inherent with practicing in this setting. Still, there were a few participants who described existing organizational processes as an adequate assessment of competence unhesitantly.
Participants’ responses were inconsistent and at times contradictory about what existing organizational processes measured and whether they were adequate and appropriate. Although not all participants were in charge of competency assessment, many were, and all participants took part in or received an assessment on themselves and often for their colleagues and therefore had strong opinions on this topic. The conflicting responses seemed to raise the question about whether organizational assessment looked at competence and whether competence was even within the organization’s purview.

Typically, competency or performance assessments may be considered part of an organization’s human resource management processes. Despite competency assessment being the study focus, participants were also keen to discuss selection processes as being the first opportunity to assess the merit of a candidate applying or being recruited to work in the study hospital. Participants described strategies to assess the fit of a candidate to work in the study hospital, and highlighted the need to balance competence with organizational fit.

Participants generally expressed what they considered to be rigorous selection processes to ensure the hospital was recruiting only the highest caliber employee or appointed staff (i.e. physician), particularly given the organization’s reputation and mandate of excellence. Nevertheless, at least one participant questioned the oversight that went into selection processes and highlighted potential discrepancies in assessing competence and fit. Another participant said facetiously that someone else had assessed the adequacy of an individual’s performance at one particular point in time and since the person had not killed anyone, these were acceptable performance thresholds for their retention in the organization. In participants’ honest examples like these, there seemed to be an implied question that surfaced about who bore responsibility for competency assessment and whether competence was an appropriate consideration for the
organization in the first place. Many participants seemed to imply that competence was of little
interest to those within the hospital, since they were mostly concerned with excellence, and that
existing proxies and/or assessments were sufficient means of benchmarking competence within
the organization.

Conclusion

In the absence of a tangible organizational reference for competence, participants drew
upon various concepts, proxies and heuristics, including regulation and competency frameworks
and tools. Participants described an array of the dominant organizational assessment processes
but generally were unclear whether these included an assessment of competence. However, they
did emphasize how the hospital’s current assessment includes organizational values.

Despite participants’ descriptions of organizational competency assessment processes and
practices which showed little consistency, it was clear from participants’ responses that the study
hospital’s overarching value of excellence impacted its assessment decisions, including
candidate selection and employee hiring practices. Participants’ understanding of competence
and competency assessment also reflected the strong organizational discourse of excellence.
Based on several participants’ responses, competence was considered too low of a bar for the
study hospital. In fact, for some participants, competence was even considered incompatible with
the standard of excellence set by this organization. Taken together, these findings illustrate that
there are significant tensions and contradictions that emerge in a discussion about competence
and competency assessment in this organization.
Chapter Six: Separation and Inequality in Professional Dynamics and Organizational Competency Assessment

Introduction

This second and final data chapter presents findings in relation to who is accountable for practice, as described by the study participants. Like the previous chapter, this chapter has been structured around the coding schema, with data organized around three main categories. First, it starts with participants’ description of the effects of unionization on professional dynamics and performance management as well as the variation in assessment for unionized versus non-unionized employees. Second, it highlights distinctions between appointed hospital staff, such as physicians, and hospital employees, such as all other regulated health professionals, and the impact of these divisions on competency assessment and interprofessional collaboration. Finally, the chapter concludes with participants’ discussion about the professional practice department which is designed as an organizational structure to unify the professions, particularly for issues such as competency assessment. The impact of these separations on competency assessment will also be discussed.

This chapter presents data suggesting that separate and unequal professional dynamics among regulated health professionals impede interprofessional practice by promoting uniprofessional conversations. These fundamental differences in professional status created the sense that there were “separate estates” among these divided groups, whereby they each operated in isolation from one other and formed a distinct domain or professional sphere within the larger organization. The case is put that “separate estates” among health professionals within the hospital imperil organizational accountability systems and make interprofessional collaboration difficult.
When asked about organizational competency assessment processes and practices, participants described these three categories as structural elements inherent in the organization of the hospital’s health professional workforce. These elements included whether regulated health professionals are hospital employees and, among those who are employees, which ones are unionized. Participants also spoke in very different terms about physicians who are appointed to the hospital and granted hospital privileges, compared to other professionals who are hospital employees. In addition to their appointed status, several of the physician participants also held administrative responsibilities and thus held both employee and appointed status positions. Nevertheless, it is clear that being a physician set them apart from other health professionals within the hospital. Participants described these features as being of significant importance when it came to exploring organizational strategies for competency assessment.

It is important to point out that, unlike in Chapter 5, where participants were asked specifically about how they understood and defined competence and competency assessment, key informant and focus group interview questions did not pertain to the unionization of employees, appointment of physicians, or professional practice department. Given the semi-structured interview format, participants were often probed further on the issues they raised and the issues were identified inductively. Without prompting, participants discussed these structural elements repeatedly and highlighted their role in organizational competency assessment. These findings also emerged incidentally and as indirect responses to research question #2 (How is competency assessment understood in the context of a Canadian academic hospital?) and research question #3 (How do regulated health professionals perceive and experience competency assessment in the context of a Canadian academic hospital?). In addition, the second theoretical proposition (i.e. The Boyatzis model of effective performance will elucidate
the organizational influences on a regulated health professional employee’s behaviour in a contemporary hospital context) may have elicited participants’ responses regarding “organizational influences” such as the case of unionized staff; the particularities of medicine; and the role of professional practice. Together, these structural elements created a sense of separation and inequality among health professionals within the hospital. Participants described the professional practice department as an organizational structure within the hospital designed to handle issues of competency assessment. Although this department was considered an important place to house discussions about competency assessment, how this actually functions, particularly in relation to the need to navigate the authority and responsibilities of the professional practice department with the divisions responsible for human resources, clinical operations and professional practice was a different story.

The case of unionized staff
“There are some people who are afraid to deal with unionized employees”

Not surprisingly, participants held a different range of perspectives on unionization, which ranged from pragmatic to pessimistic, depending on their relationship to unionized workers. Participants described the complexity inherent with a unionized workforce including managing human resources, labour relations, terminations and employees in difficulty. Participants also described the value of the union as a means of standardizing and making equitable processes and about the impact of unionization on competency assessment. Each perspective is described in turn. Participants spoke strongly about the union, at times referring to competency assessment being complicated by the unionization of health professionals within the hospital. When participants referred to the impact of the collective agreement on assessment and performance management, they were primarily referring to the hospital’s nursing workforce.
Although other health professionals besides nursing are unionized, nursing is the largest group of health professionals and largest unionized health profession at the study hospital, reflecting a common organization of labour of the nursing workforce across Ontario hospitals.

“This complex environment which is heavily unionized”

A manager-level participant described the impact of unionization and its contribution to the hospital being, what they called a “complex environment” as follows:

“You see again, this complex environment which is heavily unionized, has a heavy organizational structure, does pull HR to an employee relations orientation. So the whole HR is less strategic than it would be say in a pharmaceutical firm. Because forty percent of the staff of XX people is unionized. So what does that mean? When you’re opening the topic on performance management, you’re sorting out half of the population; there is no point in talking about competencies [for unionized people].” (M3)

This participant described how unionization creates complexity in human resource management practices and makes a mere discussion of competencies futile when it comes to the “performance management” of unionized employees. When prompted, they elaborated on the notion of futility, suggesting that even if assessment forms and practices were amended to include an assessment of competencies, the frequency of the assessment would still occur every two years for unionized employees. The participant argued that the consequence of having such an infrequent assessment would mean that the evaluation would not change or influence frontline providers’ work. Therefore, the participant considered it pointless to amend the assessment to include competencies for unionized employees (M3).

This participant expressed a sense of frustration about the union’s impact on human resource management practices and influence on practical components of performance management such as the tools used, frequency of the assessment, and the assessment practices themselves. The participant also alluded to unionization impeding continuous quality
improvement by referring to assessment as being tied to practice changes and to the very “point” of assessment being “reflected in [employees’] work” (M3). This same participant used teamwork as an example to also describe the effect of unionization on changing the hospital’s language around assessment in order to communicate with 40% of the hospital workforce that is unionized:

“If you want to approach that forty percent of the population, you have to speak their language. So when you’re taking about teamwork at a competency level in an executive and a finance manager and you’re telling them about the performance of the team when you go to the nurse and you talk about teamwork then you need to talk about mutual support behaviours, backup behaviours; how does it feel when you are disrespected by someone and so on. So it’s a totally different language.” (M3)

Unionization emerged as a major issue in this interview. Although the participant made reference to needing to use a “totally different language” to discuss teamwork, team performance, and collaboration with unionized employees, they did not provide examples of the content of the conversations with non-unionized employees. The participant also said that if the organization developed a new competency framework, it would need to consider the specific lexicon required to address the needs of the unionized workforce.

In a focus group of nurses, one participant who was responsible for unionized employees spoke about the difficulty managing incompetence organizationally (for unionized employees):

“...despite the fact that we’re always supposed to be monitoring and evaluating competence, it is very very difficult to implement a process whereby we can do that evaluation on a consistent basis. You have your standards from the CNO, things they’re looking for, right? But at the same time, if there truly was somebody that was incompetent in whatever unit, it would take you years to get them out of that unit.” (FG4)

This participant mentioned the regulatory standards as a means of benchmarking performance (i.e. “things they’re looking for”). Although they did not mention unionization explicitly, this participant also highlighted the cumbersome process involved in removing someone from a
particular clinical area for incompetence, presumably because of the protection offered by the union.

Unionization seemed to create complexity in human resource management practices, by impacting the frequency of the assessment and creating the need for a different organizational lexicon. One participant in particular (i.e. M3) critiqued the union’s impact on the strategy capacity of the hospital’s human resources department. It seems that, in many ways, unionization shifted the entire orientation of the hospital and was a strong contextual feature and organizational influence. It is clear that unionization played a key role in how competency assessment was understood in this setting (i.e. research question #2)

“For sure the union helps keep them here longer.”

Although the interviews were focused on competence and competency assessment, participants raised several issues related to unionization, including the process of competency assessment, labour relations, managing employees in difficulty, and terminations. These issues were indirectly related to competence, since they pertained to organizational processes for managing the regulated healthcare workforce.

One director-level participant described the impact of unionization on competency assessment in clear terms:

“I think the practical tools will be different and I think whether or not staff are unionized makes a difference as well…. Yes, so I have all non-unionized people reporting to me; that means I can come and do what I want unless the Organization has made a hard and fast rule to say ‘This is the process you’re going to undertake; this is what you’re going to ask.’ When it tends to be unionized staff, there are more checks and balances in place to make sure it is equitable. So it may not be ideal but I know I’m going to get the same evaluation no matter who the manager is, in theory.” (D1)
For this participant, having a non-unionized direct report implied a particular flexibility in their management practices (i.e. “… I can come and do what I want …”). The participant also implied that although unionization constrained assessment practices (i.e. …there are more checks and balances in place to make sure it is equitable”), it also created consistency, regardless of who was conducting the assessment (i.e. … no matter who the manager is, in theory …”). They described competency assessment tools and processes as being different for unionized and non-unionized employees and paradoxically, explained that these differences were to ensure “equitable” workforce practices among unionized workers (i.e. even though the practices were described as being different, and possibly inequitable, depending on whether or not the employee was unionized). Despite the promise of standardized assessment practices that safeguard against inequity, this participant referred to the assessment of unionized employees as less than ideal, which leads one to wonder whether assessments of unionized employees prioritize equity over adequacy and comprehensiveness.

Unionization also set out rules concerning who could be part of assessment discussions, particularly those related to staff discipline. For this director-level participant, disciplinary conversations indicated the need to “widen the circle” (D3), especially for unionized employees, as follows:

“So it depends upon when you get into the disciplining part or when you’re starting to have to more formally coach or direct people. So a non-union staff member, you can say ‘You really need to pull up your socks around this.’ When you start to become directive around performance, if you’re unionized, you need to start to decide when am I bringing the union into this discussion. So as it starts to drift into something that might look like discipline, it has to have the union touch to it. …. Now with non-union staff the decision is, and it is with union staff as well, “When do you go from doing a performance review to more informally involving HR?” So you wouldn’t bring the union in; if you were unionized, you would have the union, HR and the manager. If non-union, you would just have the manager and HR. But when do you start to widen the circle?” (D3)
This participant spoke in practicalities of how everyday performance management is altered by labour relations and mentioned the key players involved in disciplinary decisions for unionized versus non-unionized employees. They also reiterated other participants’ perspective that unionization changes the conversation, not surprisingly, because of the need to involve union representatives in conversations that escalated from coaching to disciplining staff.

An executive-level employee initially described the hospital’s workforce as non-unionized and assessment practices as harmonized across the organization. However, when questioned during the interview, they quickly corrected themselves:

“The health professions in this organization are not unionized; that means that we use our regular 360 tool and it includes peers from all over the Organization; it’s very inter-professional in other words.” [INTERVIEWER PROMPT: What about the Allied Health and nurses; What about RPNs?] “Allied Health is not unionized; nurses are. Allied Health is not and RPNs are; they are like nurses; they are.” [INTERVIEWER PROMPT: So unionization impacts?]. Participant nods. (E1)

This hospital executive may work in a completely separate environment within the hospital from that of point-of-care providers, which may account for their initial confusion over the regulated health care professionals who are unionized and those who are not. In fact, it is unlikely that any hospital executive would have direct reports who are unionized, due to the organization of the hospital’s management structure. This participant also alluded to how assessments differ for various professional groups.

Unionization of the professional workforce influenced organizational assessment in a number of different ways. It altered hospital processes for managing performance, impacting everything from the forms used, to the type of assessment and frequency of the assessment. This executive participant highlighted the frequency of performance assessment processes for nurses as follows:

“Yes, in nursing though, they increased it to – unless you’re a new nurse, you definitely
have this process in your first year – and if there are any concerns about behaviour; so maybe you’ve been in a new job or learning something, it may be more frequent or annual but after that it’s within every two-year cycle for the nursing. On the union side of the house, it’s annual.” (E1)

For this participant, the frequency of nurses’ assessment depended on their tenure in the organization and which side of the “house” they were on (i.e. union or non-union), compared to physician assessment which they referred to as a completely “separate” and “different” process (E1). However, this executive-level participant’s comment about the frequency of the assessment for unionized employees (i.e. annually) contradicted a manager-level (M3) participant’s critique that the assessment for unionized employees occurred every two years. It is possible that this executive-level participant is further removed from unionized employees and may, in fact, not know how often the assessment occurs. Thus, the participant’s narrative around how often it should occur might offer some comfort about organizational assessment practices, particularly of unionized and/or new employees, even if it is not true.

Attempts to harmonize assessment across the organization may thus be hampered by differences in the status of regulated health professionals. A director-level participant also articulated this idea. Earlier in the interview, the participant had alluded to differences in specific assessment strategies, which I sought clarification on later in the interview as follows:

[INTERVIEWER PROMPT: actually one thing I’ll just pick up on was you talked about some of the assessment strategies that are used. So you talked about, with the non-unionized that’s what you do for feedback with co-workers, management, and people outside of the department but with the unionized, it’s more of a supervisory assessment, sort of traditional supervisory assessment. Are there any other methods of assessment that are used? So, self-assessment; is that used?]

“Self-assessment – you’re right – is used for non-union people. The unionized people – no. There is a reason for that too in that with the unionized individuals, not at all times you know how accurate it is; that’s number one. And number two and the reason for that is they believe if they give a poor self-assessment or an average self-assessment of themselves, management would use that as a rod.” [INTERVIEWER PROMPT: As punitive?] Participant nods. “See the justification is ‘You have said it.’ So it deters
honesty so it’s better that management do it ....” (D7)

This participant cited two reasons for not using self-assessment with unionized employees: 1) accuracy, and 2) perceptions of management implications. In this manner, the union seemed to fulfil its mandate of protecting the rights of employees from an unfair assessment. Interestingly, the type of assessment used – namely the use of a supervisory assessment for unionized employees - was implied as a means of standardizing the assessment and warding off inaccurate ratings. This same participant later elaborated on the methods of assessing unionized employees as follows: “What we are tied to is just the manager’s or supervisor’s observation of the individual as opposed to getting a broader perspective on feedback on the individual in respect to competencies.” (D7) For this participant, unionization seemed to impede a “broader perspective” (D7) in assessment, yet it is unclear who might contribute to a broader assessment and whether this approach is even feasible within the hospital context.

Later in the interview, this same director spoke about the difference in performance management practices for unionized employees in unambiguous terms:

“The restriction with the unionized employees, when we boil down to it, is there are some people who are afraid to deal with unionized employees. You’re afraid of grievances; you’re afraid of push back and so on. ... It’s that fear and the fear of losing. ‘If I do this I can lose and I don’t want that to happen.’” (D7)

Throughout the interview, this participant referred at length to various “restrictions” that existed for those under collective agreements as well as managers’ fears of grievance and of losing arbitrations. When prompted about whether they considered the union to be a ‘friend or foe’, this director-level participant elaborated on their relationship with union representatives, based on their relative status within the organization:

“Because my dealings with the union is different than management. I’ve been around a long time and we go back for years. The rep, I’ve known for over thirty years and this
person is very ethical and has high standards. So if we terminate an employee, they’re falling short of the standards. We have on the other hand, some managers, particularly the younger ones, who aren’t fully acquainted with what’s happening, so they are a bit afraid. Well they haven’t had the experience. But they get around to it after a while.”

(D7)

This participant raised the issue of managers’ fears of grievance and cited inexperience as a cause, which is improved with tenure within the organization (i.e. “after a while”). In their experience, the union also bore responsibility for upholding organizational standards and indicated that termination was the result of an employee “falling short of the standards” (D7). Overall, participants’ responses about unionization differed, seemingly with little distinction between normal or expected organizational practices and employee labour relations issues and those processes that were impeded or enhanced by the union. Participants provided contradictory examples of whether the union helped standardized assessments across the organization for unionized employees, and whether employment and disciplinary decisions were more “idiosyncratic” (D3).

Another director spoke of the union as a means of creating, for the most part, fair processes for employees with respect to performance assessment or evaluation practices:

“I’m thinking about the performance review process, any kind of HR structures that we might need. I think from time to time, we have been hamstrung when people have been in union settings. Again, I think we want to be very mindful to being fair and giving people opportunity which I think, by and large, we are. But certainly I think there have been times when we probably, if it had been a non-union environment, we would have gone one way and because we’re in a union environment, we might stick with people slightly longer than we would have preferred, or accommodated them in some fashion. I’m not quite sure where the balance is around that. It tends to be idiosyncratic I think. ... and one would ask why does one have to have a union? There is a reason for that and that’s why I think thinking about fairness and what the balance is, is quite important for staff and I think the union actually helps enable that.” (D3)

Interestingly, this participant’s response about making employment decisions that are “idiosyncratic” seemed to contradict their notion of the ability of the union to promote equity and
standardized assessments. Although they also pointed out that some people question the need for a union, they spoke of it favourably as a means of balancing power, especially when considering the importance of the union from a staff perspective.

Another director-level participant normalized unionization as a common feature of most healthcare organizations. They highlighted the need to collaborate with “union partners” (D4), especially around assessment practices:

“... there aren’t too many organizations that are non-unionized. Mostly they are unionized. I think the key would be working with our union partners. That is actually a very important point and I think when talking to our union partners, they likely would agree about standardization. Because it is in their best interests as well if we are all, I guess, assessing competency in a standardized manner and that everybody knows what is being measured and how it’s being measured would be really important. And even the “why” I would think.” (D4)

According to this participant, standardization seemed to help the unions maximize their impact and organizations assess consistently across workplaces. Nevertheless, it is clear from the findings in the previous data chapter that, according to participants, there is no consistent means of assessing the competence of regulated health professionals at the hospital. Thus, from this participant’s response, it seems as though unionization offered the promise of a standardized assessment, even if this was not being actualized in practice.

In addition to impacting competency assessment, unionization also impacted how organizational processes unfolded in response to challenges to the collective agreement, in the form of grievances and arbitrations. For example, a manager-level participant provided insight into some of the details of labour relations from their standpoint, and described the hospital’s involvement in arbitration, citing practical reasons why a party might lose a grievance:

“So it’s not just that arbitration is stupid expensive and it’s not so much the fear of arbitration, it’s the fear of losing and setting a precedent and so then we don’t try. And
then if you do lose – so the one thing we’ve heard from our internal people more than once is: If you go to arbitration and the arbitrator has four cases they’re trying to solve in one day, you’re not going to win them all. So if there are four, it doesn’t matter what they are or how egregious the incompetence is, the arbitrator is not going to give the employer or the union all of them. So you know you’re going to lose one or two of them for sure and so if that’s actually the practice, regardless of what’s going on, you can’t let the employer or union win all of them; that’s insane. [Interviewer prompt: It’s not a fair or just process.] No because there should be times when the union loses all of them and there should be times when the employer loses all of them. And so they’re not being decided upon the actual merits of the particular grievance. It’s more about ‘I have to give them one today; which one? I’d better give them this because I haven’t given them any so far.’ So it’s just frightening.” (M2)

This participant described what they perceived to be a “frightening” process that determines which particular cases are won and which are lost in arbitration: the arbitrator seems to want to appear ‘fair’ and thus, each side is granted at least one ‘win’. While these may be entirely normal processes in labour relations and employment legal proceedings, this manager was concerned that the outcomes of these arbitrations created a particular organizational expectation and had the potential to set a “precedent” within the hospital around tolerance for incompetence. This manager-level participant implied that these outcomes might impede future corrective action to manage incompetence if there was the threat of a grievance. Similarly, it would be difficult to assess competence if the actions were in violation of the collective agreement.

This same manager later elaborated on the process of a grievance in the case of a regulated health professional who had committed an egregious practice-related error that resulted in the death of a patient:

“For the one that it took four years, it wasn’t my employee but it was in the program I worked at, at that time. Somebody had actually died because of the error this person made which they denied making but the evidence was there and the person was still here four years later before they were finally gone.” (M2)

Although this participant did not explicitly state that this example pertained to a unionized employee, this was implied because they were discussing the employee’s termination as being the outcome of a grievance. For this manager, unionization seemed to impede effective strategies
for dealing with errors and “egregious” “incompetence” (M2) by preventing the dismissal of unionized employees. Yet, this is likely also an example of the union protecting the employee’s rights while the employer continued to follow its due process with respect to the termination.

For another director-level participant, the union’s procedures were perceived as delaying organizational decisions for employees in difficulty:

“But there are times, I also think when we might act more swiftly after having given someone lots of feedback and opportunity and they’ve had difficulty changing their practice.” [INTERVIEWER PROMPT: So is that in the area of incompetence or questionable [practice]?] “No, no at that level we’re talking about incompetence; we’re not going to let somebody go unless we’re sure.” [INTERVIEWER PROMPT: So and the union sort of helps – like are you saying the union kind of helps keep them here longer?] “For sure the union helps keep them here longer. I think the other place the union can be helpful for is having an appropriate process; so it’s not subject to individuals’ whims.” (D3)

While this director-level participant referred to the union retaining the employee in difficulty, it is in fact the hospital that bears that responsibility. It is possible that the union provides a means to prevent dismissal and, in this participant’s experience, also “an appropriate process” (D3) and standardized approach to employee assessment. However, it is also possible that the union offered those within the organization a means of deflecting accountability for the assessment of its unionized regulated health professional workforce. For this participant, it was also clear that the union’s due processes seemed to impede the organization’s ability to handle matters “more swiftly” (D3). This participant’s response does, in fact, provide a somewhat veiled response to the second research question (i.e. How is competency assessment understood in the context of a Canadian academic hospital?). This director-participant was reticent about speaking of the union in terms that might have been perceived as unfavourable, even when referring to problematic, questionable or incompetent practice. They needed to be prompted several times throughout the interview to ensure their response was clearly understood.
A manager-level participant clearly described the impact of hospital processes related to unionization from the point of view of the public:

“... the hospital won’t push it because they don’t want to arbitrate it. If I was an arbitrator and somebody said to me “Do you want your mother looked after by somebody who only works once every six months” I would be like “No, get her out of here.” Or if the public knew if whether it was through the college processes or not taking peoples’ licenses because we’re giving them chance after chance, after chance or if they knew because of labour rules we couldn’t get rid of people who were endangering peoples’ lives because of their incompetence, people would not tolerate that and yet we do. We just sort of go “Oh well, we can’t do anything about it [because of the unions].” ” (M2)

This participant echoed the view of others that accurate and effective organizational competency assessment processes were “hamstrung” (D3) by unionization. In effect, they described “labour rules” as creating undue opportunities for an incompetent person to continue to practice, regardless of the nature of errors committed and potential or actual threat to patient safety. As a manager, it is highly likely that the assessment of unionized employees would be a major part of their role; their response and example of the public’s perspective seems to provide some indication of their level of frustration in dealing with the union.

Unionization was also perceived as playing an important role in the hospital’s ability to deal with issues of incompetence and unsafe practice. One director-level participant inferred that protection from the union only went so far before disciplinary measures were inevitable:

“What ends up happening sometimes is that behaviour is tolerated and not really addressed in the proper manner. But then as I said, the chickens come home to roost some day and then you have these errors being made and so forth.” (D7)

Here, the accountability of managers in addressing behaviour “in the proper manner” is a key element required for safeguarding against incompetent practitioners. The juxtaposition of this participant’s discussion of managing incompetence with other participants’ discussion of excellence is notable.
It is clear that unionization created a significant difference between regulated health professionals at the study hospital, including a distinction between the unionized workforce of nurses and other non-unionized regulated health professionals. Yet, even participants with no unionized employees reporting to them had strong opinions about unionization, even if they were incorrect and even if they themselves did not interface with unionized employees in their everyday work. Unionization created a barrier among the professions separating those who were unionized from those who were not. For example, one executive-level participant who referred to “hierarchical type of considerations” (E2) when citing incongruences in the structure of work for physicians and nurses, repeatedly compared these two professions and showing a personal conviction that “nursing doesn’t do itself any favours by all these union rules” (E2). The participant then elaborated, stating that unionization stifles creativity. They described physicians as having a more entrepreneurial and creative mindset focused on individual advancement as a result of their non-unionized status in the hospital (E2).

There is no doubt that unionization of various professions divides a workforce by creating separation among those who belong to one union, those who belong to another union, and those who are not unionized at all. Participants acknowledged that the union standardized and created equitable processes, but also cited examples of unionized employees remaining in the organization despite committing egregious errors. It seemed as though the union offered a means of organizational protection and impacted competency assessment in various ways. Participants who had no involvement with unionized employees also had something to say about the union, often providing contradictory information to others who were more directly involved. It is clear that the union played a significant role in impacting organizational competency
assessment practices, and was divisive among the professions. The obvious divisions between physicians and nurses were made particularly apparent by nurses’ unionized status.

The particularities of medicine

“A bit of a ruckus and brouhaha with certain physicians not being brought into line”

A major feature that set apart health professionals from one another was whether they were hospital employees, such as nurses, social workers, and physiotherapists, or appointed staff, such as physicians. Physicians at the study site were primarily appointed staff with hospital privileges as opposed to employees. Several physicians who participated in the study also held administrative responsibilities in addition to their physician role and were therefore both employed and appointed staff. The unique position of physicians within the hospital set them completely apart from all other regulated health professionals and impacted professional dynamics and competency assessment within the hospital in various ways.

Physician and non-physician participants commented on the appointed status of physicians and impact of this non-employee hospital role on professional dynamics. For example, one executive participant described physicians as follows: “So they’re appointed; they’re not paid” (E4). Another executive participant remarked similarly: “So it’s quite different for appointed staff, for appointed physicians versus the regulated health professionals who are staff.” (E2). Earlier in the interview, this same participant detailed the appointment process at the hospital for bringing in a new physician:

“So I would say to start from the very beginning before someone joins us as a professional staff. So the competency assessment usually means that whoever is coming in has to have the proper regulatory college license as well as certification or a fellowship or whatever. So I will give you an example; if someone has been appointed to work in the Department of Family Medicine, then that person needs to meet the requirement which is not only the local Provincial College license to be practicing in the area and then they also have to have National, which is the Canadian Family Practice...
College Fellowship or certification. We usually accept that as sort of the professional standard to say that they’ve met the training requirement; they have the necessary competency to practice within that space.” (E2)

This participant described how the licensure requirements for physicians include both a regulatory and specialty certification. They also implied that these are considered components of a physician’s competency assessment from the outset, before they are appointed to the hospital.

A physician participant also described the process of academic appointment:

“I mean to be a physician at [organization name] you also have to be appointed to the [university name]. So all of our appointments are essentially academic appointments as well. So you’re being assessed as an academic physician. So that assessment doesn’t even involve your [clinical] practice. That’s entirely academic. Your practice assessment is basically, as we are discussing, you’re pretty much on your own.” (P1)

For this participant, the academic appointment seemed to add an extra layer to a physician’s assessment. Since the academic appointment did not include a practice assessment, they considered the appointment process to be a completely separate process and one that was not part of other formalized assessment processes (i.e. “you’re pretty much on your own”).

Others disagreed with the perspective that practical or clinical assessments were excluded. One executive-level participant described the recruitment and selection of a physician who was being recruited to the organization. From their perspective, the assessment included clinical competence, excellence and academic performance and might also consist of training, research, education or quality, depending on the physician’s past experience (E3). These criteria would be in addition to a physician’s licensing and fellowship requirements. For this participant, practice assessment was included in an assessment of clinical competence or excellence. From these two examples, it remains unclear whether the assessment of physicians’ competence includes a practical component before being appointed to the hospital.
Participants also described ongoing processes for physician assessment, in addition to selection and recruitment processes. For example, a physician participant described the process that occurs within the organization after a physician’s appointment to the hospital:

“And we are all on probation for one year. After one year you could be asked to leave if you’re not, according to your [administrator]; if you’re not competent, you’re not going to be appointed.” (P4)

The year of probation following one’s hospital appointment added an opportunity for the organization to adjudicate the fit and/or competency of a physician new to the organization. This same participant described the hospital’s assessment process as one that relied largely on an activity report as a key component required for a physician’s reappointment:

“Every year the [physician administrators] usually will see that your activity report is reviewed and will see that you have fulfilled all the requirements for your position. And then it goes to the re-appointment. You cannot be re-appointed unless all those are met. That activity report is something that is – Standard [INTERVIEWER PROMPT: And it’s self-reporting by the physician or –] Yes – occasionally we have surveys from our patients on the wards and the clinics and you fill out these forms and then we get reports. ... every physician had a score. Was he on time; did they do their job; did they spend time with them. But that’s very random. We don’t have that regularly. [INTERVIEWER PROMPT: And then you can see how you rank in a way. It’s almost a peer calibration process.] We are trying now – because you’re talking about how the competency is rated – we try to do; our associations are mandating certain things right now, for example, competency in [specialty procedure]. We have guidelines for this one here. We don’t have anybody to monitor that yet so we are trying to do that among ourselves. I will check my next door neighbour so we’re going to see if we are meeting the standards.” (P4)

This participant described a process of “self-reporting” in order to assess whether a physician was meeting their position requirements. For this participant, the extra requirement of the “associations” added a reassuring extra-organizational assessment and monitoring process, in addition to the hospital’s annual credentialing process that is required for reappointment.

An executive participant provided their perspective on how physician competency assessments are completed, as follows:
“So it’s not an annual event; it happens less frequently than that. So that was introduced a few years ago and physician leaders are also now getting 360 feedback and there is also a timeline for that. It’s not an annual event so a [medical administrator] for example would have that in his or her first year and then maybe at the end of third year or in their fourth year because it would be a consideration whether they would be appointed again for a second.” [INTERVIEWER PROMPT: So it’s related to the appointment schedule?] “Yes but it’s not clinical behaviours; it’s competencies associated with leadership.” (E1)

Here it is clear that the participant’s description of 360 assessments for physician leaders is a reference to the organizational competency assessment. This process differs from physicians’ annual credentialing process which is required for reappointment. This example is reinforced by another executive participant who delineates the annual organizational appointment process from the 360 and other regulatory assessments:

“We don’t really necessarily have an annual one in terms of practice assessment. I think the annual one is more to make sure that some of your eLearning courses or refreshers and so on, are all up to date. The annual one is probably logging all your personal continuing education, those would be annual. Then the 360 one would be every three to five years. …. we have an annual reappointment process where people can upload their CV or whatever thing that they have done. Now it turns out for a lot of the colleges we belong to, The Royal College, the College of Family Practice and so on, we have to upload our continuing education to our Colleges to maintain our certification. So technically, there is an accountability that you have to go to your college, so therefore if the chief ever asks for it as I say ‘Just show me your log for the last three years’ which I can download; anyone of us can download. ” [INTERVIEWER PROMPT: And I would assume that if it wasn’t uploaded then that certification wouldn’t be achieved.] “You wouldn’t get certified. You’re expected to do four hundred hours in five years and if you don’t meet those four hundred hours, you cannot renew your membership and if you don’t renew your membership, it will affect your provincial license so you have to. And then the College periodically will ask you to provide all source documents that you did all those courses; that kind of stuff. So it’s quite different for appointed staff, for appointed physicians versus the regulated health professionals who are staff.” (E2)

The above excerpt from this executive participant’s interview highlights the nature of assessment for physicians who are appointed staff with hospital privileges and physician leaders (e.g. 360), and distinguishes the organizational assessment from external, regulatory requirements. From these examples, it seems as though physicians’ regulatory and professional practice assessment
required for licensure and specialty certification is often what physicians think of when discussing competency assessment. Several participants talked about practice or clinical assessment and remarked that it was not part of existing organizational assessment processes within the hospital.

Another executive participant described physicians’ annual report as being tied to a financial value based on their achievements and academic merit (E3). They said that physicians with leadership roles within the hospital participated in annual 360 degree evaluations that involved a peer assessment and was based on the administrative aspects of their job (E3). As stated by other participants (i.e. P4), this executive participant also suggested that the clinical assessment was conducted based on the annual activity report to the division head but its main focus was on academic outputs rather than clinical performance (E3).

In addition to detailing physician assessment, participants readily provided examples of what happens when physicians are not performing. This physician participant lamented the apparent lack of corrective opportunities for “regular feedback” (P1) regarding physician performance:

“... what tends to happen with physicians is they can do a lot of bad things before somebody addresses it because there isn’t a regular feedback. So they can do a lot of bad things and often when it’s addressed, it’s a very heavy handed you know ‘You’ve done this bad thing fifteen times in the past and we’re coming at you’ which may mean a reprimand. It may mean actually losing your hospital privileges, depending how bad it is. If we were regular hospital employees, I would like to think that my manager would have pulled me aside before I did it fifteen times and talked to me about it and so give me the opportunity to change before I sink myself.’” (P1)

For this participant, poor or “bad” performance could be so severe as to imply losing one’s hospital privileges. This same participant later referred to physicians’ “... enormous power to mess things up or to do great things.” (P1). From these examples, it seemed as though the
participant was suggesting that there may be drawbacks inherent in physician autonomy. As appointed staff with certain privileges within the hospital, typically there may not be regular opportunities for formative feedback, unlike in a traditional supervisor-employee relationship.

An executive level participant distinguished between the hospital’s standard assessment process for physicians and assessment of those “who really have problems” as follows:

“What is I mean by ‘practice review’ is we only do one or two a year for people who really have problems. I would rather that we don’t have to do it at all but I think the multi-source feedback is the one we apply to everyone. This is how we probably have the way to identify opportunity for individuals to improve without any threat. The ones who will ignore that and who don’t improve, eventually there will be some critical incidents and when there is a critical incident, it will then lead to practice review.” (E2)

Here, this participant was careful to delineate practice assessment from the hospital’s annual re-appointment process (i.e. which was also described earlier by participant P4) whereas the “practice review” was described as being reserved strictly for physicians in difficulty.

Other participants remarked how assessment was different for physicians and how physicians might be appointed into a particular position based on their academic or clinical merit alone, in contrast to others who might have acquired the requisite leadership skills through experience. This director-level participant discussed the consequences of having particular expectations for physicians:

“We appoint physicians into leadership positions without ever saying “What are the core basic competencies of leadership skills do we require for them to be successful in the organization” and then we’re surprised when there is a bit of a ruckus and brouhaha with certain physicians not being brought into line or performing based on some core expectations.” (D1)

This participant suggested that the process to appoint physicians to leadership positions differs from the processes used for other regulated health professionals. These differences may also result in consequences related to the performance management of physicians when they are not
meeting organizational role expectations.

Nevertheless, participants were keen to talk about a new process of physician feedback since this was something that was being implemented at the time of data collection. A new organizational initiative was being implemented, called “coffee conversations”, as described in detail below:

“They are better at [organization name] now in that as a result of moving towards, this so called, [different organization name] model, the one with the ‘coffee conversations’. As part of that, we’ve developed this system whereby some of the senior physicians have volunteered to kind of be case workers. So they’ll go out and chat with the doctor when they hear about something. So there is a semi-formal plan there. That being said, you have to assume that most of the feedback, nobody ever hears about that. It’s just happens one-on-one. So, I think opportunities are there if you ask for it. I think it’s still rare for a physician to come to you and say – like I can think of a circumstance where there was one physician I was chatting with who was getting into some trouble with colleagues that I actually sat down and talked with and that’s not my job. I just thought it was the right thing to do; I’ve been here longer; I know what it’s like to start in a place like this and if you’re just starting out, you can get kicked in the head multiple ways before you know what’s going on. And just giving some off the cuff, informal advice to people; I think that’s an important thing to do. I just think people would readily do it if people asked. I don’t think we live in a culture where most people would volunteer it without being asked because it’s seen as a threat.” (P1)

This participant described, rather candidly, the nuances of providing physician feedback. They did not finish their sentence about what they considered to be “rare” but it was understood to imply that it was unusual for physicians to solicit feedback on their performance. This participant was forthcoming about difficulties physicians face, such as the example of getting “kicked in the head multiple ways before you know what’s going on” (P1). They spoke about the promise of “coffee conversations” as, effectively, formalizing a new process of physician feedback within the organization.

Much of the corrective feedback was aimed at getting physicians to function well with other members of the healthcare team. A director-level participant referred to ongoing initiatives to change the interactions between physicians and other regulated health professionals. This
participant referred to the need for physicians to function in a different manner, in order to work
more collaboratively in a team-based interprofessional care environment:

“\textit{This is actually going to be quite interesting. So one of the things that we’re also asking}
\textit{and we’re going to be telling our physician colleagues that they have to hear ... they}
\textit{need to inform the team about the patients. So they have to fit into this. So then a}
\textit{surgeon cannot show up in the middle of nurse shift report or huddles and expect in-}
\textit{charge to step away and round with them or they round by themselves and then leave}
\textit{and don’t communicate to anybody. So they have to really have to shift about when they}
\textit{come on the unit, when they round, when do they share about their patients. So they}
\textit{have to do it here, with the team.} (D5)

Interestingly, this director described physicians fitting in to the team environment as a seemingly
\textit{new} initiative. This change implied that physicians’ privilege to take priority was formerly
tolerated, even if it disrupted the practice of other regulated health professionals.

A manager-level participant explained that differences between physicians and others
within the hospital context provided a salient learning opportunity:

\textit{“When you’re talking about the physicians, they have such a different dynamic and we}
\textit{need to learn from them every time we interact with them. We need to learn from them.}
\textit{Because again, they have different balances, different authority games, different politics,}
\textit{different needs, different things in their mind. I know competencies now are being}
\textit{developed for the physicians at [organization name].”} (M3)

This participant saw physician difference as an opportunity to learn and suggested that
organizational competencies specifically designed for physicians were one potential step forward
on this path.

In summary, physicians were in a class of their own when it came to competency
assessment processes. Differences between physicians and other regulated health professionals
originated in physicians’ appointed status which played a major role in the manner in which
competency assessment was conducted (or not). For example, participants provided ambivalent
responses as to whether or not a physicians’ assessment included a clinical or practice assessment. Key differences permeated to organizational strategies for managing poor performance or physicians in difficulty, including ways in which formative feedback was provided.

From physician and non-physician participants’ descriptions, it is clear that physicians enjoy a privileged status in the hospital. Participants shared examples of the implementation of targeted organizational imperatives aimed at bringing physician behaviour into alignment with the rest of the team. Yet, they did not talk about physician conflict that might have preceded these initiatives, the intent of which was to foster team-based interprofessional practice and regularize collaboration across the professions.

The role of professional practice

“Although we have an infrastructure in place, it’s irregularly activated”

Professional practice departments are a common feature of Canadian health care organizations. They are generally designed as a department within a hospital, for example, with several leaders who work throughout the organization in collaboration with clinical operations to support education, professional development, quality improvement initiatives, and human resources to support things like orientation, training, and remediation. Typically, these organizational structures consist of various regulated health professionals working in a leadership capacity to harmonize the practice of regulated health professional employees. These departments act as a central practice “hub” and resource designed to unite health professionals within the organization, with the exception of physicians due to their appointment process and different status in the organization. They are frequently structured as a means of promoting collaboration, enhancing education and fostering interprofessional team-based practice,
particularly in a large hospital with a diverse workforce such as the study hospital. They have slightly different names depending on the organization. In the interest of de-identifying the study hospital, this department is referred to generically as a professional practice department throughout the chapter.

Participants described the professional practice department as a structure within the hospital that was designed to handle issues of competency assessment. For these study findings, it was largely director-level participants who talked about the professional practice model in key informant interviews, speaking from their standpoint both as a leader and regulated health professional within the organization. For example, this director referred to the professional practice structure in equivocal terms when asked about competency assessment within the hospital:

“But occasionally it’s clear there are competency issues with an individual’s practice and I think we’re challenged as an organization to articulate how we assess that; how we’ve evaluated; how we’re consistent, what our markers and measures are and how their process unfolds; who gets involved. So because we have a professional practice structure at [organization name], each of the [lists several professional practice leadership team members] reporting up to them are given jurisdiction over a number of different profession groups. So as an example, one Director may have physiotherapy, kinesiology, etc. under their jurisdiction and they would be the senior go-to around issues relating to practice. However they’re not always the ones who are involved in discussions around competency. So although we have an infrastructure in place, it’s irregularly activated.” (D1)

This participant referred to the processes, structure, and members of the professional practice department, suggesting that its members are not part of “discussions around competency” (D1). So, in this case, even though the professional practice department is intended to be an organizational structure to look at competency assessment, this intention is not realized in practice.

Throughout the interview, this same director-level participant explained how the
professional practice department works to influence practice without direct reporting relationships. Later in the interview, this participant provided a description of an organizational “subculture” that involved avoiding engagement with the professional practice department. They also alluded to the potential consequences of this disengagement:

“... interestingly there is another subculture from a practice perspective that does not report into [professional practice department] necessarily. So in a lot of the clinical areas, there will be a [professional practice leader] who might be, again using social work as an example, I might be a [professional practice leader] and have a number of social workers under my jurisdiction but I don’t have a direct link to [professional practice department]. So these are folks who report into their local managers which is fine but what’s the dialogue that we have back and forth as [professional practice department] to inform that individual about what the emerging best practices are and how to determine competency. So those individuals are often brought in for performance related issues and again may or may not be communicating with the [lists several professional practice leadership team members]. So I think we have some work to do to try and knit those infrastructure positions together a bit more to make sure that we’re not first of all duplicating effort but also make sure that we are not leaving any major gaps behind.” (D1)

Here, the participant described the professional practice department as offering an opportunity to engage in discussions about competency and best practices. Yet, despite this this organizational “infrastructure”, these discussions often did not take place or if they did occur, the professional practice team was excluded. This participant referred to the possibility of “duplicating effort” or leaving “gaps” however, there is also the possibility either that the professional practice department did not serve its intended purpose and that other departments or teams within the hospital handled these conversations. In this case, it is perhaps not surprising that formal reporting relationships may trump the professional practice infrastructure which generally attempts to influence practice through leadership rather than formalized structures or processes.

The seemingly disparate camps between the professional practice department and clinical services teams, particularly with respect to determining who is responsible for assessment, was echoed by another director-level participant as follows: “That’s on the operational side and the
[professional practice leader] intersects with the professional practice side of the house, where there are two, what I would call, generic [professional practice leaders] (D3). This reference to operations and professional practice each belonging to a different “side of the house” was reiterated several times throughout the interview and by other participants. Given this apparent division of responsibility within the hospital, it is possible that conversations about competency that were thought to occur on one side or another were never occurring at all. Participants also referred to different sides of the “house” when discussing unionization. Therefore, this metaphor resonated with participants as a means to describe clear divisions within the organization, between clinical operations and professional practice and between unionized and non-unionized regulated health professionals.

The delineation of clinical practice/operations and professional practice created the sense that there were, in fact, many structures and resources in place for assessing competence, as described by this director:

“There are the policy people who have identified policies and procedures. There is the operations structure and leaders; there is a professional practice structure and leaders. Oh yes. So there are lots of places if you think about it within the Organization – I’m thinking about human factors – there are lots of places where people can go to try and identify, not an individual’s performance but how are we performing as an Organization. Again if you think about ‘falls’ which is very interprofessional, there are multiple ways we come at that. When I think performance, I think about the individual but you could also talk about performance of a team, all of that sort of thing .... There are lots of places where we look at performance. At the beginning it’s team based but in the end, it always filters down to the individual. Did the individual walk into the room; see a chair and garbage can in a place where someone can trip, and move it or not.” (D3)

According to this participant, there were various hospital structures and people that bore responsibility for competency assessment within the organization. The professional practice structure in particular seemed to be a rich resource that offered the opportunity to explore interprofessional, team-based practice. However, according to this participant, team-based
practice in particular seemed to be an almost illusory concept due to professional accountability residing in the individual. Despite the attempts of professional practice to unite the professions, it is not surprising that uniprofessional conversations are still occurring due to the differences in practice and regulation of regulated health professionals.

Another director-level participant described a significant amount of work being done at the professional practice level on interprofessional collaboration:

“So we’ve been doing a lot of this work for many years. So some of the work we’ve been doing more recently, because several of the [academic hospitals] were starting to identify a need to explicate a competency framework profile to support their clinicians working from the point of care in the area of interprofessional collaboration. So what does it mean for me, as an individual, to be professionally competent? And several of the regulatory colleges, of course, it’s been integrated in some. It’s been extremely well integrated and others it’s been a lot less. So we have people who are having different understandings of what we mean by interprofessional collaboration.” (D6)

Here, this participant references an interprofessional framework as a means of remedying siloed individual practice around professional competence. At the time the data were collected, this participant saw notable differences in individuals’ understanding of interprofessional collaboration despite a longstanding history of organizational supports as follows: “So we’ve been doing a lot of work for well over a decade now in the area of building competence for interprofessional care, interprofessional education leadership, interprofessional practice leadership, interprofessional research” (D6). Thus, in this participant’s experience, there had been vast investment in interprofessional practice. However, it is not clear whether physicians are included in interprofessional conversations since they are not hospital employees.

Another director provided a concrete example of processes enacted following a critical incident where a patient had deteriorated and the bedside emergency medical equipment was not accessible (D5). This participant described how members of the professional practice team participated in a safety “huddle” and “rounding” activities as a means of alleviating future errors:
“That is an ‘near miss’ and then so we have a site huddle and then we go into a focused huddle which is where the interprofessional team come together and we talk about complex wounds, pain, complex care needs as the interprofessional team needs to inform it and then that gets built into the plan and it gets adjusted and then they repeat it. But in there we have hourly rounding and care provisions and adjustments to the care plan based on it.” (D5)

According to the participant, this example seemed to elucidate an everyday occurrence where clinical and professional practice teams had the opportunity to come together to improve safety and inform care delivery. From this example, it remains unclear whether professional practice initiatives offer proactive strategies aimed at mitigating errors and enhancing quality or whether they serve as more a band aid solution to a “near miss” situation.

The lack of clarity between clinical operations and professional practice and at times, lack of engagement with the professional practice department in practice-related issues, created various challenges when it comes to assessing competence. Participants described an unclear division of responsibility, which has the potential to create duplication or leave the organization vulnerable to gaps in assessment. The professional practice structure was utilized only in an irregular fashion to support competency assessment within the organization.

Summary

The main aim of the study was to explore organizational competency assessment processes. In addition to the array of responses about existing processes and practices within the hospital, including the ambiguity around definitions, participants also offered important details about the organizational context and, in particular, about important differences in the status of health professionals. Participants described contextual features about the regulated health professional workforce and impact of these differences on professional dynamics and organizational competency assessment. These differences acted as key separations between regulated health professionals who were unionized employees (i.e. namely point of care/bedside
care provider nurses), regulated health professional employees who were not unionized (i.e. nurses in non-bedside positions and other regulated health professionals), and appointed staff who were not hospital employees, such as physicians. The ways in which these differences played out was in the formation marked distinctions between the professions and within the organization, which fostered inequity and impeded collaboration.

Among regulated health care professionals at the study site, a major distinguishing feature was the unionization of nurses, which separated unionized point-of-care nurses from all other regulated health professionals, including other non-unionized nurses. Regardless of their relationship to unionized employees, many participants had opinions about the unionization of nurses, since nurses formed the largest group of health professionals at the study hospital. Unionized nurses also greatly outnumbered non-unionized nurses. Having a majority of regulated health professionals whose employee relations were determined by a collective agreement was bound to have a strong influence on organizational assessment practices.

Participants who were involved in grievances or arbitrations based on their organizational role, had particularly strong opinions about unionization that ranged from pragmatic to ideological. One participant in particular described how the union creates complexity within the hospital, citing examples of needing to use different language governed by the collective agreement for unionized employees and of unionization impacting the strategic capacity of human resources practices. Another participant spoke about managers’ fear of grievances and of losing arbitrations. Participants shared examples that demonstrated the impact of unionization on assessment, such as the collective agreement stipulating who could participate in assessment and provide feedback to the employee and restricting the method of assessment including the ability of the employee to set annual individual goals or performance targets. In more egregious
examples, participants spoke about the union impeding the management of incompetence by protecting those who are unionized to remain in the organization, shuffled around from position to position, rather than be terminated. Others championed the labour goals of unionization and described it as a means of creating equity and standardized organizational practices. The range of responses provided several opposing perspectives about the union’s impact on organizational assessment practices.

Another important source of separation was the appointed status of physicians, whereby they were granted privileges to be able to practice in the study hospital. The appointed status alone created a key element of differentiation between physicians and all other regulated health professionals, impacting everything from physician selection/recruitment, annual/ongoing assessment, to the processes for remediating physicians, providing feedback, improving interprofessional collaboration, and dealing with incompetence. For physicians, selection and ongoing assessment processes were largely paper-based academic endeavors (i.e. a review of one’s updated curriculum vitae and the regulatory requirements for continuing education and quality assurance). When it came to annual assessment, only the physician leaders who held both employee and appointed staff positions engaged in organizational assessment processes that were also common to other, non-physician employees. Otherwise, the assessment process for physician reappointment included one’s regulatory and academic requirements. Participants were generally undecided about the adequacy of these assessments and highlighted the inherent downfalls of excluding a physician’s clinical performance.

The unique status of physicians granted them relative autonomy within the hospital. The privilege, authority and appointed status of physicians seemed to create a void of routine organizational processes for performance management, especially including opportunities for
corrective feedback. Nevertheless, participants shared details of new organizational efforts aimed at changing the culture of problematic physician behaviour by providing corrective feedback over coffee or “fireside” conversations. It seemed that these opportunities were intended to harmonize physician behaviour with that of other health care professionals and improve physician collaboration with others within the hospital, including other regulated health professionals. Notwithstanding these new organizational efforts targeting physician behaviour to bring it into alignment with the performance expectations of other regulated health professionals, it is clear that the appointed status of physicians alone created real separations between physicians and everyone else within the hospital.

The professional practice department was described as an organizational structure aimed at uniting regulated health professional employees (i.e. frontline or point-of-care clinicians, not including physicians) within the hospital. However, participants described an irregular engagement of professional practice, particularly for issues related to competence and competency assessment. Both the clinical operations and professional practice teams shared responsibility for competency assessment however in most cases, participants described this as being managed mostly by clinical operations. When and how the professional practice department was engaged was unclear to participants and, from their descriptions and examples, somewhat haphazard. At times, professional practice was not engaged in discussions about competence at all, even when there were practice concerns. In other examples, the professional practice department only participated when the performance concern was egregious enough to warrant disciplinary measures and/or a report to the health professional employee’s respective regulatory body.
The professional practice department was designed as a means of harmonizing practice and education across the professions, yet participants were unsure if it had achieved that aim. In addition, despite a significant organizational investment in interprofessional practice both within professional practice and beyond, it is unclear if this has contributed towards a resultant change in more team-based collaborative care. In other words, while the professional practice department was intended to eliminate separate professional estates by promoting interprofessional practice and promoting conversations about competency, these outcomes did not seem to be part of the organizational reality.

Conclusion

When asked about organizational competency assessment processes and practices, participants described following three major contextual features that contributed to the separation and inequality among regulated health professionals within the hospital:

1) Unionized regulated health professional employees (e.g. nurses)
2) Non-unionized regulated health professionals
3) Appointed staff (e.g. physicians)

Distinctions between these three groups of regulated health professionals implied separate processes for employee selection, assessment, termination and means of handling incompetence. The presence of such strong delineations between regulated health professionals hinders the standardization of assessment processes. It also limits the organization’s ability to harmonize processes across the professions, including dictating how regulated health professionals work within the hospital.

These separations promote professional hierarchies which also impede teamwork by reinforcing inequity between and within the professions (i.e. between physicians and nurses and
among nurses who are unionized and nurse educators and others, for example, who are not unionized). A key organizational feature was the appointed status of physicians in the hospital, which fractured their relationship with the organization and other health professionals, when it comes to assessment and interprofessional collaboration. Participants were unclear whether existing assessment practices included a clinical or practical component for physicians. In addition, competency assessment seems to be more difficult and cumbersome for unionized employees, despite its intended goals of standardizing assessment. These findings imply that the assessment of a significant number of regulated health professionals within the hospital are imperiled, questionable, and problematic.

Although intended to harmonize the professions, the professional practice model was described by participants as a structure that, in most circumstances, was not utilized for organizational competency assessment. Participants described an additional divide or separation between clinical operations and professional practice that impeded collaboration and interprofessional team-based care. Taken together, these findings contributed to uniprofessional practice, despite the hospital attempting to unify the professions within its organizational context through the professional practice model. The consequences of these findings will be further discussed in relationship to the literature in the Discussion chapter that follows.
Chapter 7: Separate Estates and the Impossibility of Organizational Competency Assessment

Introduction

Interviews with participants in management and leadership positions from a wide range of disciplines and backgrounds revealed a disconnected organizational structure. The regulated health professional workforce was separated by differences in employment status, which included unionized regulated health professional employees, non-unionized regulated health professional employees and appointed physicians who were not hospital employees. These divisions created fissures among the professions which impeded interprofessional and cross-organizational collaboration. Additionally, each professional group operated within its distinct jurisdiction as ‘separate estates’, which made discussions about competency assessment across the regulated health professions problematic. These features of the regulated health professional workforce and hospital structure made conversations about competency assessment at an organizational level very difficult.

In Chapter 5, I presented data about participants’ understanding of the term ‘competence’, focusing on their respective vantage points within the organization, and presented participants’ perspectives on organizational competency assessment processes. In Chapter 6, I analyzed findings along dividing lines of unionized, non-unionized and physician members of the regulated health professional hospital workforce. I also explored data concerning the hospital’s professional practice department which, although designed as an organizational structure to handle issues of competency assessment, was not effectively utilized for this purpose according to the study participants. In this final chapter, I revisit these findings, reconsider the study purpose and research questions used to frame the analysis and return to the Boyatzis model
to consider its theoretical contribution to the study. Lastly, I examine the findings in the context of the literature and conclude with study limitations, recommendations and conclusions.

Discussion

This qualitative case study aimed to reveal participants’ understanding of competency assessment processes and practices within an academic hospital. In constructivist research, participants’ answers do not reveal an unquestionable ‘truth’ but rather, contribute towards a better understanding of the phenomenon of interest (i.e. competency assessment within an academic hospital). I was particularly interested in how the process of individual health professionals’ competence was enacted (research question #1), and how administrators and other regulated health professions understood, perceived and experienced competency assessment (research questions # 2 and 3). Moreover, I was deeply interested in the impact of context on competency assessment.

I asked regulated health professionals, hospital executives, senior leaders and human resources professionals for their perspective on competence and competency assessment. Participants’ responses were based on their opinions and professional roles and/or position experiences. Hospital documents also corroborated and augmented information from the interviews and focus groups, in keeping with Yin’s (2018) approach to case study data sources.

As elaborated in Chapters 5 and 6, participants ranged from being candid and honest to guarded in their responses. When participants were more evasive, it was not because of a lack of enthusiasm for the study. On the contrary, all participants seemed to share a genuine interest in the study topic and were keen to participate. Nevertheless, participants may have been reluctant to respond, wanting to provide a normative response that was consistent with the organizational values, processes and practices of their hospital. At times, participants were hesitant in their
responses as they struggled to answer the question and situate competency assessment within the hospital context. As a result, they often defaulted to the individualist regulatory understanding of competence and in many instances, I needed to probe to either clarify or confirm their responses. Data collection was an iterative process involving back and forth dialogue with and among participants in the interviews and focus groups, respectively.

I used the Boyatzis (1982) model of effective performance as a theoretical organizing framework to initially orient the study. This model was helpful in conceptualizing the study and crafting the key informant interview and focus group guides. The interviews and focus group discussions were based on semi-structured interview guides that were followed in a more structured manner in early interviews and focus groups and in a less structured way once I became more familiar with the data and more experienced in the data collection process. In addition, once I had achieved saturation in the process of data collection, I tended to veer away from a more discernable use of the Boyatzis model and used additional interviews and focus groups as opportunities to explore contradictions both in the data and in the organizational discourse in participants’ responses.

The Boyatzis model was productive in anchoring the study towards organizational, rather than individual assessment practices at the study hospital, and in trying to glean a contextualized understanding of competency assessment. Boyatzis saw competencies as being entirely contextual. He also viewed an individual’s behaviour or performance as being influenced by their individual competence, job demands and the organization (i.e. setting and environment) in which they work. Accordingly, Boyatzis (1982) views the results of specific behaviour or actions as closely related to the environment and setting in which they occur, following in the tradition of models from psychology that look for person-environment fit. I set a priori theoretical study
propositions to guide where to look for relevant evidence, in accordance with Yin’s (2018) suggestions for components of a case study research design. The propositions were strongly influenced by the Boyatzis model (i.e. theoretical proposition #2 and 3) and the initial literature review (i.e. Chapter 2; theoretical proposition #1). Use of the Boyatzis model to design the study resulted in the theoretical propositions guiding data collection by being reflected in the interview and focus group questions and prompts.

This exploration of competency assessment processes and practices aimed to penetrate the organizational level understanding of competency assessment. Through the participants and related organizational documents, I examined who is responsible for assessment; what is assessed; how the assessment is enacted and operationalized; whether the assessment includes competence (and whether this is within the organization’s mandate); and why things are the way they are within the organization. What participants said and did not say are equally interesting as they both point to real and potential gaps in hospital processes and/or participants understanding of the same. In other words, what is both present and absent from participants’ explanations of organizational assessment processes and practices informed my analysis and discussion. Rhetorician Lorelei Lingard (2009) refers to the notion of presence and absence as aspects of a concept that are being both attended to and avoided. The findings contribute to an overall understanding of organizational assessment processes and practices at the study hospital.

Several participants referred to the organization as having a reputation, value, goal and aspiration of excellence. Excellence was such an important organizational concept that participants brought it up in several interviews and focus groups when discussing competence. In some instances, participants rejected competence as being too low of an organizational benchmark or juxtaposed competence with incompetence and excellence. In these cases,
excellence was considered the organization’s primary concern, unless there were egregious issues that indicated incompetence. These findings demonstrate how the organization both valued and placed a significant amount of weight on the achievement of excellence, at times in place of competence. Excellence was used as a filter for organizational processes, practices and expectations.

The absence of a common language was evident across the professions, which manifested in the substitution of organizational discourse, such as ‘caring safely’, ‘organizational excellence’ or ‘interprofessional practice’, in place of competence. Participants automatically responded by using examples of these strategic organizational initiatives when asked about competence. A consequence of this strong organizational rhetoric around excellence is that it may have eclipsed competence in the hospital’s vernacular. Participants seemed to be in want of an available organizational reference for competence which resulted in a great deal of ambiguity when I asked them to define the term and made clarity a challenge.

The lack of an organizational vocabulary for competence also meant that participants questioned what type of competence I was asking about. Participants pondered whether competence was related to any of their hospital-based performance assessments or strategic initiatives, as though they were actively trying to identify places where discussions about competence occurred. This unfamiliarity gave the impression that competence was not often discussed within the organization. This finding contradicted Hodges and Lingard’s (2012) description of the idea of competence as ubiquitous in a multitude of settings and domains, including academic hospitals. In their book entitled The Question of Competence, Hodges and Lingard (2012) recognized medical competencies as a common language for “universities and their affiliated teaching hospitals [to] recognize that attention to patient safety, team-based
practice, lifelong learning, and the ability to understand and navigate systems are crucial to the delivery of safe and effective care” (p. 3). Hodges and Lingard (2012) generally referred to individualist, as opposed to organizational, ideas about competence but also problematized individualist conceptualizations of competence. They suggested that there is a great deal of rhetoric around competence/competencies underpinning “investments in centres for research and development in health professions education around the world” (p.4).

Although competence was, at times, absent from participants’ everyday organizational vernacular, the concept of excellence seemed to be much more readily available. It is difficult for regulated health professionals to comprehend the performance expectations if there is no common organizational language around competency assessment - the rhetoric of excellence appeared to serve this purpose. In fact, participants often referenced excellence as a key component of assessment and of the organizational strategy and values.

Excellence is a laudable goal for any organization, especially a healthcare organization concerned with practice improvement, research and innovation, and this is especially true for academic hospitals such as the study organization. The Excellent Care for All Act, which came into place in 2010, also foregrounds excellence in healthcare, while reorienting the structures and governance models of organizations to focus on quality patient care (Queen’s Printer for Ontario, 2008b). The Excellent Care for All Act established a normative neoliberal agenda comprised of mechanisms to account for excellence in healthcare service delivery.

In response to the Act, excellence is featured prominently in the mandate of the Council of Academic Hospitals of Ontario (CAHO, 2019b) which represents Ontario’s research or academic hospitals. CAHO (2019b) highlights the need for these hospitals to play a systems role
by contributing to excellence and innovation in patient care, education, and research and also suggests that research hospitals should prioritize cutting-edge research to make advancements in care (CAHO, 2019b). Fiscal constraints in healthcare may place additional pressure on hospitals to ensure operational efficiency and financial health (Hundert, 2003), in addition to the mandates of organizational improvement and ground-breaking research.

Boyatzis described competencies in relation to job performance, suggesting that competencies were, in fact, the solution for organizations concerned with multiple, competing organizational priorities, beyond simply effective human resource management, as follows:

If you are part of the scientific management tradition, you may view competencies as the specifications for the human machinery desired to provide maximum organizational efficiency and effectiveness. If you are part of the humanistic management tradition, you may view competencies as the key that unlocks the door to individuals in realizing their maximum potential, developing ethical organizational systems, and providing maximum growth opportunities for personnel. If you are one of the people who work in organizations and/or one of the people who studies, thinks about, and tries to help organizations utilize their human resources effectively, the findings and this model should provide a needed relief from the eclectic cynicism or parochial optimism concerning management that many of us have developed (Boyatzis, 1982, pp. 258-259).

In other words, Boyatzis saw his contextualized understanding of competencies as a pragmatic way of effectively utilizing human capital and possibly even as a means of encouraging excellence (e.g. “unlocks the door to individuals in realizing their maximum potential” and “providing maximum growth opportunities for personnel”). Boyatzis (1982) viewed behaviour as a function of the person and environment and congruence between competencies, the organizational context, and job demands (i.e. the elements of his model) as key towards effective individual behaviour or performance.

Boyatzis conceptualized competence as contextually situated within the organization and shaped by organizational factors that impact an individual’s behaviour. Throughout the
interviews and focus groups, participants described job demands when discussing existing organizational practices including selection and assessment measures. Almost all participants also described the organizational context, citing examples of salient organizational initiatives that were popularized at the study hospital at the time of data collection, such as ‘caring safely’ and ‘organizational excellence’. Thus, use of the Boyatzis model to initially design the study helped to tease apart these contextual features, particularly what occurred at the level of the individual regulated health professional versus at the organizational level.

In this study, participants were generally unable to describe an individual’s competencies, except when defaulting to a regulatory version, and had difficulty identifying how competencies contributed towards effective behaviour or performance within the organization. At times, participants questioned whether job demands were congruent with the individual competency expectations for a particular profession and were generally unable to define competence in a coherent manner. Overall, the organizational allure of excellence seemed to silence discussions about individual competencies. In fact, the discourse of organizational excellence and incompetence may have been what Boyatzis (1982) referred to as “parochial optimism” and “eclectic cynicism” (p.258-259) while also claiming that his research findings and model would provide relief from these afflictions.

Participants were however, able to describe instances where individual competence was lacking by citing examples of *incompetence*. The juxtaposition between competence and incompetence may have implied that participants considered the opposite of competence to be either incompetence or excellence (i.e. as opposed to incompetence being the *absence of* competence and excellence indicating superlative performance). Participants also may have been expressing their tendency towards the extremes of performance (i.e. excellence and
incompetence). Individuals often find extremes salient and gravitate towards the poles on a continuum, rendering the middle absent in the process. Although this “missing middle” is where the average performer sits, and arguably where competence lies, it can be forgotten by those who favour the polarity of the extremes. Since the organizational rhetoric around excellence was so strong, it may have prompted participants’ affinity to a discussion of performance extremes and forced a rejection of competence, or the ‘missing middle’, in the process.

It is interesting to consider the consequences that are implied if the organizational imperative for excellence is so strong that participants dismiss competence as an unworthy focus of discussion. Health regulatory colleges consider competence to be the accepted standard required for licensure (see Chapter 1). Post-licensure, regulated health professionals become employed or appointed staff in healthcare organizations where the bar of acceptable performance may be ostensibly higher. Yet, regardless of the organizational performance expectation, these same individual health professionals are required to maintain competence for licensure with their respective regulatory body. Therefore, it is unclear both where and how individuals gain sufficient experience and/or continuous learning opportunities to become excellent.

Participants discussed selection and assessment but did not mention (and were not asked about) training, which is often considered a third pillar of organizational human resource management practices (i.e. selection, training and assessment). Given participants’ pride in organizational excellence, there seemed to be an implicit assumption that those working at the hospital become excellent practitioners by default. In other words, there is an assumption of excellence, unless proven otherwise, as though regulated health professionals who are employed or appointed to work at this hospital are automatically excellent by virtue of their association with this organization. Based on participants’ responses, it was clear that those within the
organization considered the hospital to be excellent and also expected excellence among those working or appointed there. In this sense, it was difficult to untangle whether excellence was a strategic priority, organizational value, and/or staff expectation or all of these things at once.

The importance participants placed on excellence raises questions about the priority-setting of healthcare organizations that are responsible for patients’ lives. On one hand, participants seemed to normalize the hospital’s expectation of superlative care and excellent performance; for example, participants contrasted excellence with competence as a minimum safety threshold and cited the reputational value of working in a hospital known for providing excellent care. On the other hand, participants seemed to expect an individual regulated health professional’s competence to be governed by their respective regulatory colleges. Yet, several participants critiqued regulatory competency expectations for being decontextualized and irrelevant in their everyday work and in particular, too low of a standard.

A regulated health professional’s relationship with their regulatory body occurs regardless of where they are employed or appointed. This leaves other strategic priorities such as excellence to be the primary concern of the workplace. Participants suggested that the existing model under which they worked consisted of these two separate worlds, the organization and the regulatory body. The requirements for regulatory competency assessment varied greatly among the different health professions (see Chapter 1 for examples) however there was an underlying assumption that whatever was assessed by the regulator was adequate. In other words, the respective regulatory bodies require regulated health professionals to renew their registration annually, but how this is done varies greatly by profession. For example, nurses in Ontario have no mandatory continuing education requirement with their annual registration renewal with the
College of Nurses of Ontario\textsuperscript{1} (CNO, 2019a; 2019b). This requirement is in contrast to many other professions such as physicians in Ontario who are required to participate in continuing professional development through their provincial regulator and maintain their specialty certification with a national body (i.e. the Royal College of Physicians and Surgeons of Canada) (CPSO, 2019c; RCPSC, 2019c). Similarly, nurses in other jurisdictions such as Quebec are required to maintain a register that is comprised of proof of their continuing education annually (College of Nurses of Quebec, 2019). The regulated health professional participants described renewing their registration for annual licensure with their regulatory body and also participating in the hospital’s requisite assessment processes. The regulatory bodies generally collect information on where an individual works but this information does not impact the health professional’s regulatory (or organizational) assessments. In addition, a manager-level participant described verifying the registration status of their unionized nursing staff on an annual basis however this process was less clear for other professionals at the hospital.

It is almost as though the hospital relied entirely on the competency assessment of the respective regulatory bodies – an \textit{outsourcing} of accountability for competency to an extra-organizational body. This arrangement allowed the hospital to assess their regulated health professional employees against a set of organizational values and leave competency assessment to the regulators. In a similar fashion, the hospital’s assessment had little to do with the regulatory standards of practice and other requirements beyond licensure.

\textsuperscript{1} In July 2018, the College of Nurses of Ontario announced a new Quality Assurance program aimed at integrating a new learning plan requirement with nurses’ annual membership renewal. This new program is expected to be implemented by 2023 and is intended to enhance existing processes (CNO, 2019c) but does not appear to include mandatory continuing education in its current format.
Nevertheless, this regulatory-organizational relationship is problematic mainly because there is virtually no dialogue between these organizations unless there are issues of incompetence, unethical practice or misconduct (e.g. sexual assault or abuse of a patient). Participants described the regulatory model being enacted in a very different way when the hospital deemed someone to be incompetent. In the case of incompetence, the organization was directly involved in reporting the regulated health professional to their regulatory body. In fact, the organizational responsibility for reporting incompetent practitioners sparked a communication conduit between these two separate worlds. Although I asked participants about competence and competency assessment, many were quick to identify examples of when assessment occurred for a regulated health professional who was deemed incompetent, in which case, there was generally a coordinated approach between the hospital and regulatory body. Yet, participants also described a lack of coordination in initially managing the incompetence within the bounds of the hospital, indicating either the absence of established processes and procedures or an implementation failure.

The lack of communication between regulatory bodies and organizations is particularly problematic when considering the recent case of a registered nurse serial killer in Ontario, Elizabeth Wettlaufer. In 2016, Wettlaufer confessed to murdering eight residents of long-term care homes, in addition to other attempted murders and assaults, while working at a number of locations (Tilley, Devion, Coghlan & McCarthy, 2019). Although this is an extreme example, one known feature of healthcare serial killers is their inclination to move from one setting to another through various employment changes (Tilley, Devion, Coghlan & McCarthy, 2019). The lack of dialogue between regulatory bodies and the hospital that participants described is particularly concerning in light of the tendency for those committing egregious acts to move
amongst organizations without detection. Even when managing something as concerning to patient safety as incompetence, which requires reporting to the relevant regulatory body, organizational processes at the study hospital were, at times, not implemented in a coordinated manner. While this study pertained to competency assessment, not serial killers, the Wettlaufer case provides a glaring example of the potential for grave problems if there is a lack of communication between healthcare organizations and regulatory bodies.

Participants also criticized existing organizational assessment strategies as being devoid of context within the hospital itself. This idea was described in the medical education literature by Lingard (2009) who critiqued individual competence as being seemingly context-free and untied to time and space. In the hospital, regulated health professionals were individually assessed based on organizational values or leadership attributes (i.e. using the CCHL LEADS framework), depending on their position in the organization. This organizational assessment has no bearing on a health professional’s status with their regulatory college, unless the organization has grave concerns about their conduct or capacity, or if they are deemed to be incompetent.

Nevertheless, it is also conceivable to envision alignment in regulated health professionals’ organizational and regulatory assessments. This level of coordination would require regular, ongoing, and clear communication between these two processes in issues of continuing competence, instead of only when incompetence arises. It is entirely possible that there are other hospitals that have a more coordinated approach, where there is an assessment of an individual’s competence within their organizational setting and that offer a more individualized and contextualized assessment. Regulatory bodies have different requirements for annual continuing competency assessments of their respective health professionals. It is entirely reasonable to see how coordination between these two systems might streamline and harmonize
two distinct processes both designed to assess regulated health professionals and assure the public of their competence. In addition, a harmonized approach might offer a more tailored assessment of individuals in the unique environments in which they work.

Lorelei Lingard has written extensively about how competent individuals can and do make errors in healthcare due to systemic issues (e.g. Espin & Lingard, 2001; Lingard et al., 2004; Lingard et al, 2008). Lingard (2009) cautioned that focusing on the individual when exploring competence shifts the focus away from bigger clinical and educational problems such as when “competent individuals can—and do, with some regularity—combine to create an incompetent team” (p. 626). Errors occur in healthcare with alarming frequency, however, in many cases, these errors occur due to issues within the healthcare system, including communications failures and not because of substandard, incompetent or even mediocre practice. According to Dixon-Woods (2010), safety is an intractable problem in healthcare because it is not a technical issue, but rather, it is a practice embedded in organizational and professional politics.

Lingard (2012) cautions against the exclusion of context in an individualist notion of competence since it “deflects our attention from relational issues, such as power dynamics, as well as from sources of incompetence” (p. 52). In other words, the current ways of conceptualizing competence as individualist and decontextualized are problematic and may contribute to gaps in assessing individuals’ performance in hospitals and other organizations. In addition, the hospital’s discourse around excellence effectively eliminated a discussion of competence from participants’ language in a concerning manner. Organizational excellence, in the context of this study, could be considered akin to what Lingard (2009; 2012) refers to as a God term, a term that is a “rhetorical trump card, regularly played as the last word in debates
about how health professions education should function” (Lingard, 2009, p.625). Moreover, focusing on excellence at the expense of a discussion of competence may make healthcare organizations and those who work in them even more vulnerable to errors.

The impossibility of organizational competency assessment

A key goal of the study was to tease apart competency assessment(s) that occurred in the context of the hospital from those that were extra-organizational, such as health professionals’ regulatory assessment. Although I was able to appreciate the assessments that did occur within the organization, I also found significant differences in the assessment of the hospital’s many regulated health professionals. These differences made organizational cohesion among regulated health professionals difficult, even amongst participants who shared the same profession (i.e. unionized nurses and non-unionized nurses; physicians and physician-administrators). These differences gave a strong impression that there were ‘separate estates’ among the regulated health professional workforce. While it may be inevitable that separations exist among different regulated health professionals in any organization, ‘separate estates’ at this hospital – and likely at others – impeded interprofessional collaboration and made conversations about organizational-level competency assessment difficult.

All regulated health professionals were expected to perform as members of the healthcare team but there were marked differences in the ways in which their performance was assessed within the hospital². There were additional differences for regulated health professionals who are unionized, which created another division in the assessment of the hospital’s healthcare

² Following the completion of data collection for this study, the hospital initiated a process to change its organizational assessment processes to focus more on assessing competencies, and less on organizational values. Nevertheless, it is not clear if this new assessment is more consistent among the professions, or whether differences in assessment for the various categories of health professional employees remain.
workforce. Furthermore, the assessment of physicians differed significantly from that of all other regulated health professionals. It was clear from the outset that the physician role was one of privilege within the hospital: their recruitment process, employment status and assessment were different and these things contributed to their relative organizational power.

Physicians are typically the best paid of any regulated health professional and this is especially true in Ontario where, in addition to being the best paid across Canada, Ontario physicians also receive additional government support and other benefits (Queen’s Printer for Ontario, 2016). Arguments in favour of physician compensation typically cite physicians’ wide range of responsibility and legal authority for care delivery, as the health care providers with the most access to Controlled Acts (i.e. physicians are authorized to perform 13 of the 14 controlled acts) (CPSO, 2019d). These issues are especially relevant in the hospital setting where physicians admit and discharge patients, perform lifesaving operations, cease resuscitation efforts and declare a patient to be dead. Despite their heightened level of responsibility, physicians are still expected to function as team players yet differences in authority, responsibility, and compensation only exaggerate disparities between physicians and all other regulated health professionals with whom they are expected to collaborate.

Participants described efforts to remedy physician incivility by bringing their performance management into closer alignment with that of other regulated health professionals and more in tune with organizational expectations. When participants described the hospital’s newly implemented “fireside” coffee conversations between physicians and their respective chief-of-practice, they seemed optimistic that this initiative would harmonize physician behaviour with the expectations of all other regulated health professionals. These “fireside” coffee conversations were unique to physicians within the study hospital. It is unclear how these
discussions would address obvious issues of physicians’ ‘special care’ within the hospital. These differences impeded a consistent assessment of the hospital’s regulated health professional workforce.

Notwithstanding the clearly privileged standpoint of physicians in the hospital system, in some ways, physician assessments could be considered a model worth emulating in other health professions. Participants described physician assessments as involving existing assessments already occurring outside of the bounds of the organization, including annual monitoring of continuing education and professional development for regulatory licensure as well as professional and academic credentialing. Furthermore, physicians who held both clinical and administrative roles seemed to have the best of both worlds when it came to assessment: their regulatory, professional and academic assessment occurred annually and they also had an opportunity to participate in a hospital-based 360 degree assessment with multiple raters. In fact, the dual role of physician-administrator seemed to provide opportunities for additional assessments and feedback in formal organizational assessments processes. These opportunities seemed to differ from those provided to others such as unionized nurses, for example, whose assessment feedback might be limited to their formal appraisal because of the rules of the collective agreement.

In an Australian study of nurse clinicians, Fereday (2006) highlighted participants’ desire for more opportunities for feedback beyond performance assessments, however, at the study hospital, this only seemed to be realized in a formal way for physicians. In 2012, the Council of Academic Hospitals of Ontario (CAHO) launched a Physician Quality Improvement Initiative (PQII) which was designed as a means of providing physicians feedback within the organizations in which they are appointed (CAHO, 2012). The implementation of this initiative was planned in
a phased approach across select hospitals (CAHO, 2012). Thus, it seems as though the need for physician feedback is a dynamic issue for which solutions are being actively sought.

The inclusion of multiple means of assessment and even multi-rater feedback for physician-administrators, while commendable, is not as comprehensive as it may appear. Physicians working solely as clinicians participated only in extra-organizational assessments, such as those required for regulatory, professional and academic licensure and credentialing, respectively. This meant that their assessment had very little to do with the hospital in which they were appointed to work. It seems logical that efforts to regularize behavioural and performance expectations at the hospital would need to start by addressing fundamental differences that elevated the status of physicians from all other regulated health professionals.

**Interprofessionalism vs. uniprofessionalism**

I deliberately sought an interprofessional sample for the key informant interviews and focus groups in order to develop an understanding of organizational competency assessment from a representative sample of the hospitals’ health professionals. Although the study participants included a diverse group of health professionals, I learned very little about hospital-based competency processes and practices that were specific to the individual professions. Participants spoke in vague generalities about hospital-based competency assessment for regulated health professionals unless they were talking about cases where the assessment was different (i.e. unionized nurses and physicians) or in relation to incompetence. Instead, participants spoke in generic terms about themselves as health professionals working at the hospital and abiding by existing organizational assessment requirements (i.e. the hospital’s performance assessment system).
The organizational-level discussion with participants seemed to almost overlook uniprofessional practice in favour of collective, interprofessional practice. Lingard (2009; 2012) has advocated for a ‘collectivist discourse of competence’ to “reflect growing attention in the social and organizational spheres to healthcare’s nature as a complex system” (2009, p.626). While participants were focused on interprofessional or collectivist, team-based practice, it is clear that the hospital’s assessments were still focused on individuals.

Participants described the professional practice department as an organizational structure meant to handle issues related to competency assessment and offer a broad perspective about education and practice. Yet, they also described several instances where this department was not always used in this way. Participants described the professional practice department being absent from discussions where they might have offered an important perspective, for example, on issues such as recruitment and selection, performance difficulties, competency expectations and assessments, and incompetence. In several examples, participants were unsure if the recruitment of a regulated health professional was aligned with their regulatory standards of practice, even though the job description may have been perfectly matched to the organization’s expectations. In cases of incompetence, the professional practice department did, at times, act as a liaison between the organization (e.g. on behalf of the clinical practice department/team) and regulatory body, but participants felt this was not always effectively coordinated.

Although the professional practice department was intended to address regulated health professionals’ competency assessment, in general, it did not claim detailed knowledge about the individual professions per se. Rather, it seemed to rely on a distributed model for comprehensive knowledge of the individual professions, by way of professional practice representatives spread throughout the hospital. It is also worth noting that the hospital’s professional practice structure
did not include physicians. The professional practice department was designed as a means of harmonizing practice and education across the professions and this often involved leadership for collaborative practice. However, these efforts did not include appointed physicians and instead focused on those regulated health professionals who were hospital employees.

Considerable organizational resources were devoted to interprofessional practice in addition to the hospital’s professional practice department. This is, perhaps, not surprising since collaborative practice is considered essential to the optimal functioning of the health care system for its impact on reducing medical error; improving efficiency, patient safety and provider satisfaction; reducing health care costs; and generally leading to improved health outcomes (Frenk, Chen, Bhutta et al, 2010). Patient safety is also a unifying concern across the health professionals and is linked conceptually with efforts devoted to interprofessionalism (Rowland & Kitto, 2014; Paradis & Whitehead, 2018). However, participants freely provided examples where collaboration had failed, especially between regulated health professional employees and physicians. Furthermore, participants seemed unclear whether existing organizational strategies to promote interprofessional practice had resulted in more collaborative, team-based care or if the ‘separate estates’ rendered the organizational structure impermeable to interprofessional practice.

At times, the professional practice team had difficulty penetrating clinical operations with initiatives aimed at regulated health professionals’ practice and education, including conversations about competency assessment. Instead, the professional practice department engaged in broad, organizational-level discussions about interprofessional practice and collaborative, team-based care. This is, of course, a good thing since care provision is a team endeavour and expert teams are critical to clinical mandates (Lingard, 2012). However, the
specifics of how the work of the professional practice department was enacted for individuals or
groups of regulated health professionals was more nebulous. Unlike in profession-specific
models which might define roles and include professional values, relationships and a care
delivery model (Dimitroff, Tydings, Nickoley, Nichols & Krenzer, 2016), an interprofessional
professional practice model has to be inclusive of all of the regulated health professional
employees within the organization. In the case of this hospital, the organizational-level
discussion about collaborative, interprofessional care trumped uniprofessional conversations and
resulted in a lack of clarity about the professional practice department as an organizational
structure. Besides the impenetrability of uniprofessional practice, part of the problem here may
be the naivety of the goal of interprofessional practice as a harmonizing strategy. Paradis and
Whitehead (2015) suggest ironically that the aim of interprofessional collaboration is to “enable
health professionals to enact their respective parts in cheery collaborative harmony” (p.405),
without engaging in necessary discussions about power and conflict.

Although the phenomenon of interest for this study was competency assessment, this
topic uncovered more fundamental issues about organizational processes and practices related to
interprofessional collaboration and practice; hospital-based performance assessment processes;
and competency assessment in a hospital context. In many ways, the standardization of
organizational assessment processes and practices is an impossibility when there are so many
obvious divisions between the hospital’s workforce of health professionals, including the
unionization of nurses and appointed status of physicians. Participants favoured broad
organizational-level discussions about the collective (i.e. interprofessional practice) and
dismissed discussions about individual, uniprofessional practice. Participants were also
equivocal about whether the organizational discourse around interprofessional practice actually
made practice more collaborative and interprofessional. Though reluctant to condemn organizational initiatives, participants could not produce evidence of success.

**Study Limitations**

Lingard (2015) suggests that study limitations be considered using a reflective approach, which offers “a considered argument about the sources of uncertainty in the research and what they mean for how a particular knowledge contribution should be taken up by others” (p.137). Here, I consider the methodological and conceptual study limitations reflexively, pondering them against the study findings and this study’s contribution to scientific knowledge production.

**Methodological Considerations**

A common study limitation raised in qualitative research is its ability to apply the research findings to other settings. Firestone (1993) proposed different ways of conceptualizing generalizability, moving away from a statistical conceptualization towards a framework that is more amenable to qualitative research. Specifically, Firestone (1993) suggested that qualitative researchers consider analytic generalizations and case-to-case transfer. For analytic or theoretical generalizability, the researcher aims to generalize local findings by developing a theory, contributing to a pre-existing theory, or developing new constructs (Polit, 2010; Firestone, 1993). This process involves “specifying the conditions under which a study is done and their relevance to multiple theories” (Firestone, 1993, p.18). Similarly, Eakin & Mykhalovskiy (2003) submit that what is most critical in qualitative research is how the sampling process and sample itself bear on the data collected and interpretations made of them, so that “the sampling process becomes a window on other elements of the research process” (p.191). To gain an in-depth understanding of the phenomenon, qualitative researchers deliberately seek individuals or groups who fit the bill (Greenhalgh & Taylor, 1997).
I utilized purposive sampling to interview key informants (n=19) and conduct focus groups (n=32); I also examined organizational documents related to performance appraisal processes and, where available, competency assessment. Recruitment was done via email and I had the advantage of being granted a hospital email account and phone number for research purposes, which lent credibility to data collection processes. I also wore a hospital-identification badge to the interviews which gave the impression that I was an organizational insider. These things might have assisted not only in the data collection process, but also in participants’ willingness to be forthcoming in their responses. While I had difficulty reaching point-of-care providers from all regulated health professionals, in the end, I was able to engage participants who were point-of-care clinicians and who also had accountability for shared governance or organizational leadership.

I used the Boyatzis model of effective performance, a model from organizational behaviour and human resource management, as an organizational theory to design and orient the study, to develop theoretical propositions and to analyze the findings (Yin, 2009). Although Boyatzis tested his model empirically as a management model in banks, it has broad applicability in a health care context since it emphasizes the assessment of procedures and processes “thought to be important to the organization” (p.11). When participants discussed hospital processes and practices related to competency assessment, I was able to decipher how their responses fit with the components of the Boyatzis model. Boyatzis’ model was particularly helpful in illustrating the hospital’s structures and processes for participants in leadership positions, although several participants were not in formal managerial or administrative roles. While I did not engage in theory testing or development, which is appropriate in case study research (Yin, 2009), I was able to utilize this theory to contextualize competency assessment in the study organization.
Firestone (1993) also proposes case-to-case transfer which occurs when “a person in one setting considers adopting a program or idea from another” (p.17). Case-to-case transfer is facilitated by a rich, thick description of the case that “allows assessment of the applicability of study conclusions to one’s own situation” (Firestone, 1993, p. 18). Flyvbjerg (2011) adds to Firestone’s (1993) reconceptualization by debunking the myth that “one cannot generalize on the basis of an individual case” (p. 304), suggesting that transferability is underestimated and offering considerations for scientific development via generalization in case study research. While Firestone (1993) suggests that the transfer of findings from case-to-case is done by the reader, transferability is better understood as a “collaborative enterprise”, by readers and consumers of research (Polit, 2010, p.1453).

This investigation was a qualitative, explorative case study in two sites of a large academic hospital in southern Ontario. The staffing complement of the hospital’s regulated health professional workforce, consisting of non-unionized employees, unionized nurses and appointed physicians, are familiar features in most Ontario hospitals. In addition, organizational structures (i.e. the professional practice department; clinical operations; human resources) are common in many hospitals. Other hospitals may have different organizational goals and professional practice mandates; a non-unionized nursing workforce; and diverse means of managing their regulated health professional workforce and competency assessment. Nevertheless, the design features of this study and the hospital’s contextual attributes support the applicability of the study findings beyond the organization in question.

**Conceptual Considerations**

Participants were keen to discuss incompetence, which was unanticipated, since I asked about competence. This led to questions about whether participants misunderstood competence,
or whether there was a lack of clarity about the phenomenon of interest. I also purposely framed the study in such a way as to explore post-licensure clinicians and regulated health care professionals working in a hospital, as opposed to trainees and pre-licensure health professional students where discussions of competence are more common. I was especially interested in examining how competency assessment functioned in practice within an organizational setting. I also wanted to explore how hospital-based competency assessment was enacted using a theoretical and conceptual orientation to human resources management practices (i.e. the Boyatzis model of effective performance). While these were study design features, participants seemed to have difficulty understanding how competency assessment related to them. In an academic hospital setting where teaching and training of clinicians is an integral part of its mandate, it may have been difficult for participants to disentangle assessment of trainees/leaders from the assessment of staff/clinicians. Thus, this may have been more related to a lack of conceptual clarity than an issue with the study design, however, it is worth noting when considering the contributions of this study.

**Recommendations**

This study raises several issues that have relevance for organizations, such as hospitals, as well as regulatory bodies, universities, professional unions, and even accrediting organizations and health care funders. The ideas that follow are aimed at systems improvement and towards better collective understanding and implementation of competency assessment of health professionals in health care organizations. I also include recommendations for research in order to further knowledge development on this topic.

First, it was clear from the data that competence and competency assessment did not register for participants in the organizational context of the study hospital. In general, there was a
lack of a common language for competency assessment among participants across the hospital’s regulated health professional workforce. Organizations may favour the use of performance assessment over competency assessment. However, it seems illogical that the means of assessing regulated health professionals in all other contexts besides the workplace (i.e. education, training, pre-licensure, post-licensure, continuing education/continuing professional development, quality assurance/continuing competence) is focused on competence.

In the Canadian Academy of Health Sciences assessment entitled *Optimizing Scopes of Practice: New Models of Care for a New Health Care System*, key informants raised important issues in regards to the disconnection between education and practice contexts (Nelson et al., 2014, p. 47) which differences in language and assessment strategies perpetuate. A recent (2017) evidence brief titled *Modernizing the Oversight of the Health Workforce in Ontario* suggests that competencies be the focus of oversight for health professionals (Waddell, Moat & Lavis, 2017). If competencies were to supplant scopes of practice and controlled acts as the focus of health-workforce oversight as this evidence brief suggests (Waddell, Moat & Lavis, 2017), it would be imperative for healthcare workplaces and regulatory bodies to use a common language for assessment. Healthcare workplaces would be wise to consider alignment of their language and processes for regulated health professionals. Congruence of competency assessment processes would breed familiarity for regulated health professionals under an organization’s employ and ensure that everyone is singing the same tune, with respect to competency assessment.

Second, there was virtually no dialogue between the study organization and respective regulatory bodies, unless there was an issue of incompetence. The 2016 Elizabeth Wettlaufer confession to serial murder of long-term care residents was a sobering moment in healthcare, especially in Ontario but also across the country and even globally. Despite ongoing attempts at
enhancing healthcare safety that have persisted since the Institute of Medicine’s *To Err is Human* report (IOM, 2000), the Wettlaufer case shone a spotlight on the vulnerabilities in regulatory and organizational processes. As a result of this case, the College of Nurses of Ontario (CNO) established Employer Reference Groups comprised of nurse employers from across the province (Tilley, Devion, Coghlan & McCarthy, 2019). The purpose of this group is to share information and collaborate on nursing regulatory issues of mutual interest, providing opportunities for enhanced professional collaboration, improved education and discussion and consultation related to regulatory issues and accountability (CNO, 2019d).

Criminal actions may be a far cry from an assessment of incompetence. Nevertheless, greater dialogue between regulators and organizations that employ regulated health professionals ought to occur, particularly when they share common goals of protecting the public and providing an assurance of safe, effective care delivery. Employer reference groups are but one example from one profession, developed in response to an egregious case. Communication between healthcare organizations and regulatory bodies may enhance mutual goals of safe, effective care delivery, especially when focused on issues related to competency assessment and health human resource management. Organizations may aspire to superlative goals of excellence, however, ensuring congruence between organizational and regulatory assessments of competence might help ensure the “missing middle” of competence is not forgotten.

Third and finally, this study involved a contextual exploration of competency assessment processes in a hospital. And yet, the study findings uncovered that, according to most participants, competency assessment does not occur within the bounds of the hospital and competence is not even on the radar of most participants. A key feature of the study hospital was its interprofessional, team-based environment. Participants generally talked about their work as
being interprofessional however, this was juxtaposed with the individual nature of their assessments. Additionally, the organizational assessment of regulated health professionals that did occur consisted of a self- and supervisory evaluation of how the individual measured up against the organization’s values. Participants in management and leadership positions described their multi-rater assessments as an entirely different process from that of other regulated health professionals.

It would be prudent to implement what we know about best practices in assessment, including concerns around validity and reliability with self-assessment. A component of the new Quality Assurance program that is being phased in by the College of Nurses of Ontario (CNO, 2019c) includes the implementation of multisource feedback by the year 2022 (i.e. the new program will be in full effect in 2023) (CNO, 2019c). This will be a significant departure for nurses in Ontario away from self-assessment (although it remains unclear at this point whether reflective practice will remain a part of CNO’s implementation of a new learning plan). The steadfast reliance on self-assessment for many organizations and regulatory bodies has been particularly problematic because the adage, “you don’t know what you don’t know”, tends to ring true in many instances. This expression exemplifies the seminal work about cognitive bias by psychologists Kruger and Dunning (1999) which demonstrated that people of low ability tend to overestimate their capabilities. Low performers are particularly dangerous and may elude traditional competency assessment processes, which is why enhanced organizational and regulatory processes are needed.

A concept analysis by nursing regulators on the terms ‘competence’ and ‘competency’ determined that “competency is an element of competence, which is contextual to a setting or role” (emphasis added) and can be evaluated by assessing indicators of content knowledge,
behaviour, and/or decision-making outcomes” (Moghabghab, Tong, Hallaran & Anderson, 2018, p.56). Additionally, a recent review of the history of performance management highlighted the importance of the context in which evaluation occurs and recommended further exploration of the impact of ‘context factors’ on the design and effectiveness of performance management (Pulakos, Mueller-Hanson, & Arad, 2019). The influence of contextual elements on competency assessment in this study, such as the professional practice structure, academic hospital setting and organization’s excellence mandate, emerged as key findings. Additional research to explore competency assessment further in other organizational contexts is warranted.

Nevertheless, any efforts to harmonize assessment processes and enhance interprofessional practice at the cross-organizational level are undone when considering physicians, who are not hospital employees. Everything for physicians was described as being different (i.e. unless they were also hospital employees in addition to their appointed status). These significant differences make it hard to fathom how they might be considered part of the mix of regulated health professionals within a hospital, rather than an organizational wild card. Similarly, it is difficult for professional practice to have any organizational valence when their work excludes one prominent group of health professionals (i.e. physicians). While this study does not attempt to deconstruct the power dynamics inherent in physicians’ privileged status in health care organizations, it is worth noting this as a significant barrier to organizational competency assessment, interprofessional, team-based care and professional practice initiatives.

In organizations where nurses are not unionized and physicians are employees, this study could be replicated in order to explore the topic of competency assessment and perhaps, better understand the “separate estates” in a different setting. Since these organizational features were so prominent in this study, it is unlikely that they are idiosyncratic, however, it would be
worthwhile investigating whether they are features of the professionals themselves, the organizational context at the study hospital, or both. The Boyatzis model of effective performance, or another model from organizational behaviour and/or human resource management, may be productive to apply to a healthcare setting in order to try to better understand the impact of the organizational context on assessment practices.

**Conclusion**

The topic of how to assess the competence of health professionals in the workplace is a lively issue. As clinical practice changes, professional and organizational roles in healthcare also shift to meet the demands of care delivery. Political leaders who look for efficiencies in the healthcare system may threaten changes to scopes of practice, which too impact health professionals’ competence and its operationalization in the workplace. While this study provided an in-depth exploration of hospital-based competency assessment processes and practices within an academic hospital context, it uncovered other fundamental issues about professional dynamics, power and hierarchies, and health care regulation. These issues are often in flux, which makes their examination at a particular point in time difficult.

Examining the topic of competency assessment practices at the study hospital also uncovered how organizational structures create “separate estates” among the professions. The expression of “separate estates” is intended to illustrate the marked divisions that were revealed through the data and capture the most salient study findings, especially those related to professional dynamics, interprofessional practice and organizational competency assessment processes. Yet, separations existed within the organization (i.e. between different members of the regulated health professional workforce) as well as outside of the bounds of the organization, such as between the respective health professional regulatory bodies and the hospital. In some of
the participants’ examples, these “separate estates” were so glaring that it makes one wonder how care delivery is able to work around these separations to provide a reasonable level of care.

I started this study, and indeed my doctoral program, with a deep and unrelenting interest in the relationship between healthcare organizations and regulatory bodies, particularly related to the assessment of competence - my proverbial ‘intellectual itch’. This study permitted a deep dive into hospital-based competency assessment practices. The lack of unity among the professions was an unanticipated finding and something that continues to trouble me. Yet this lack of unity extends beyond the hospital setting. If regulatory bodies had unified processes to assess the continuing competence of their members, for example, organizations might follow suit in implementing homogeneous processes to assess the competency assessment of the regulated health professional workforce. As an antidote to the lack of regulatory unity, health regulators who all share a common legislation, might standardize their processes, despite differences in access to controlled acts among the health professions. So, in some ways, although this was a hospital-based study, the findings point to extra-organizational solutions to mend divisions within the workplace. This boundary spanning work and thinking is necessary.

Collaboration among the regulatory colleges might even engender interprofessional collaboration in the workplace, by dissolving the professional hierarchies that promote “separate estates” and impede interprofessional practice. In addition, the hospital could develop structures or tailor existing structures to better support organizational competency assessment processes and practices. Together, these changes might create a more unified health professional workforce and stimulate greater collaboration in healthcare service delivery. This study suggests that there is more work to do in marrying organizational and regulatory processes to ensure care is delivered by health professionals in a competent and collaborative fashion. The risk of not doing
more is clear, given the perils inherent in incompetent practice which often eludes assessment in the workplace. Conversations about competency and means of assessing competence must become a routine part of our workplace lexicon, because the hazards of not having these conversations are far too great.
References


Hodges, B., Regehr, G. & Martin, D. (2001). Difficulties in recognizing one’s own incompetence: Doctors who are unskilled and unaware of it. Academic Medicine, 76(10 Suppl), S87-S89.


### Table 1: Competency definitions and descriptions

<table>
<thead>
<tr>
<th>Competency definitions and descriptions</th>
<th>Source/Context</th>
<th>Reference</th>
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</thead>
<tbody>
<tr>
<td>• <em>Competence</em> consists of knowledge, skill and judgment</td>
<td>Health professions regulation</td>
<td>CNO, 2014; CPSO, 2012</td>
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<td>• <em>Competencies</em> and outcome-based education are measures that the profession has adopted to better regulate itself in the context of public concerns about patient safety, differential access to care, and the medical profession’s struggle with the increasing complexities of practice (p.2)</td>
<td>Health professions education</td>
<td>Hodges and Lingard, 2012</td>
</tr>
<tr>
<td>• <em>Competence</em> is seemingly context-free and untied to time and space</td>
<td>Health professions education</td>
<td>Lingard, 2009</td>
</tr>
<tr>
<td>• <em>Competence</em> reflects our individualist healthcare system and education culture</td>
<td>Health professions education</td>
<td>Reeves, Fox and Hodges, 2009</td>
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<tr>
<td>• <em>Competency</em> can also be best understood as a discourse</td>
<td>Health professions education</td>
<td>Whitehead, Austin, &amp; Hodges, 2013</td>
</tr>
<tr>
<td>• <em>Discourses of competence</em> comprise “all of the current linguistic (speech and text), behavioural (performance and appearance) and material (architectural, institutional) representations of what it is to be a competent professional at a particular time in history or in a particular place” (p.24)</td>
<td>Health professions education</td>
<td>Hodges, 2012</td>
</tr>
<tr>
<td>• <em>Competency</em> refers strictly for the skill itself whereas <em>competence</em> implies the ability to perform the skill as well as the attribute of the person performing the skill</td>
<td>Medical education</td>
<td>Khan and Ramachandran, 2012</td>
</tr>
<tr>
<td>• <em>Competence</em> implies having the ability to make satisfactory and effective decisions or to perform a skill in a specific setting or situation</td>
<td>Medical education</td>
<td></td>
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<tr>
<td>• Competence is what an individual is able to do in clinical practice</td>
<td>Medical education</td>
<td>Boursicot et al., 2011</td>
</tr>
<tr>
<td>• <em>Competence</em> entails more than the possession of knowledge, skills and attitudes; it requires the ability to apply</td>
<td>Medical education</td>
<td>ten Cate, Snell and Carraccio, 2010</td>
</tr>
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</table>
these in the clinical environment to achieve optimal results (p.669)

- *Competence* in medical education is intended to convey something that is integrative and context-dependent as opposed to a strictly behaviourist approach and decontextualized abstraction of knowledge, skills and attitudes

- *Competence* refers to the array of abilities across multiple domains or aspects of physician performance in a certain context.
- *Statements about competence* require descriptive qualifiers to define the relevant abilities, context, and stage of training.
- *Competence* is multi-dimensional and dynamic. It changes with time, experience and setting (p.641)

- *Competence* has been described as a holistic term that refers to a person’s overall capacity or ability to do something successfully

- *Competency* is focused on an individual’s ability to perform activities related to work, life skills or learning and *competence* refers to actions or skills the person should be able to demonstrate

- *Competence* is also considered to be a quality or state of being

- *Clinical competence* is also considered an outcome of personal skills developed through professional training courses

- 1) a behaviourist or task-specific approach that is assessed by observation or performance for evidence;
- 2) an attribute or generic skills-approach and general attributes that are crucial to effective performance, based on general competences already learned; and
- 3) an integrated or task-attribute approach

- *Competencies* are a critical differentiator of performance
- *Competencies* include rather traditional cognitive ones involving reading, writing

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<tr>
<th>Source</th>
<th>Medical education</th>
<th>ten Cate and Scheele, 2007; ten Cate et al., 2010</th>
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<tbody>
<tr>
<td></td>
<td>Medical education</td>
<td>Frank et al., 2010</td>
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<tr>
<td></td>
<td>Medical education</td>
<td>ten Cate and Scheele, 2007</td>
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<tr>
<td></td>
<td>Nursing education</td>
<td>Anema and McCoy, 2010</td>
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<td></td>
<td>Nursing education</td>
<td>Pijl-Zieber et al., 2014</td>
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<tr>
<td></td>
<td>Nursing education</td>
<td>Tzeng, 2004</td>
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<tr>
<td></td>
<td>Health professions education</td>
<td>McLelland, 1973</td>
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</table>
and calculating skills and others which involved what traditionally were called personality variables, “although they might better be considered competencies” (p.10)

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<th>Statement</th>
<th>Resource Management</th>
<th>Reference</th>
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<tr>
<td>A competency is “an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation” (p.9). A competency predicts behaviour in a number of situations and job tasks. Underlying competency characteristics include motives, traits, self-concept, knowledge and skill whereby knowledge and skill competencies are considered ‘surface’ competencies that are visible and easy to develop through training. Conversely, ‘core’ competencies such as motive, trait and self-concept are more central to personality, hidden, and difficult to develop and assess.</td>
<td>Industrial Organizational Psychology/Human Resource Management</td>
<td>Spencer and Spencer, 1993</td>
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<tr>
<td>A competency consists of any measurable characteristic of a person that differentiates a level of performance in a given job, role, organization or culture; they are learned capabilities that are observable and measurable.</td>
<td>Industrial Organizational Psychology</td>
<td>Araujo and Taylor, 2012</td>
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<tr>
<td>Competencies are characteristics or abilities of a person which enable him or her to demonstrate the appropriate specific actions and also as the capabilities that he or she brings to the job situation. A competency is a capability or ability and as a set of related but different sets of behaviour organized around an underlying construct or “intent” (p.6) An individual’s competencies are necessary but not sufficient for effective performance in a job.</td>
<td>Industrial Organizational Psychology/Human Resource Management</td>
<td>Boyatzis, 1982</td>
</tr>
</tbody>
</table>
- For Boyatzis, *competencies* are held to be causally related to effective or superior job performance

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<th>Industrial Organizational Psychology/Human Resource Management</th>
<th>Stewart, 1983</th>
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- In their five-stage model of the mental activities involved in directed skill acquisition, *competence* is placed second on a linear continuum that spans from novice to mastery (i.e. novice, *competence*, proficiency, expertise and mastery)

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<tr>
<th>Educational Psychology</th>
<th>Dreyfus and Dreyfus, 1980</th>
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- *Competence* is achieved after considerable experience in which the learner copes with real situations (i.e. situational components) and his/her instructor identifies recurrent meaningful component patterns (i.e. aspects)

- The *achievement of competence* is linked to emotions as the result of a new experience and depends on the learner’s responsibility for following rules and adoption of a plan or perspective

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<tr>
<th>Educational Psychology</th>
<th>Dreyfus, 2004</th>
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- At the stage of *competence*, successful task completion or skill acquisition can either lead to confusion and failure or elation, depending on the learner’s choice of perspective

- The *competent performer* seeks rules and reasoning procedures to avoid mistakes and decide which plan or perspective to adopt

- As the *competent student* becomes more and more emotionally involved in the task, it becomes increasingly difficult to draw back and adopt the detached maxim-following stance of the advanced beginner (p.178)
<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>Population</th>
<th>Country</th>
<th>Type of study</th>
<th>Instrument</th>
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<td>One group pre- and post-test</td>
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<td>Social psychologists</td>
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<td>USA</td>
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<td>Inter-laboratory Survey and evaluation first study</td>
<td>n/a</td>
<td>Howanitz, Valenstein and Fine, 2000</td>
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<tr>
<td>Pathologists (post-mortem toxicology)</td>
<td>USA</td>
<td>Evaluation study (proficiency testing)</td>
<td>n/a</td>
<td>Chaturvedi, 2000</td>
<td></td>
</tr>
<tr>
<td>Study Title</td>
<td>Occupation</td>
<td>Country</td>
<td>Study Type</td>
<td>Methodology</td>
<td>Author(s)</td>
</tr>
<tr>
<td>-------------</td>
<td>------------</td>
<td>---------</td>
<td>------------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Critical care nurses</td>
<td>UK</td>
<td>Qualitative descriptive</td>
<td>n/a</td>
<td>Stewart and Rae, 2012</td>
<td></td>
</tr>
<tr>
<td>Clinicians in Illness Management and Recovery (IMR)</td>
<td>USA</td>
<td>Evaluation study Quality improvement Competency tool validation</td>
<td>IMR competence scale</td>
<td>McGuire et al., 2012</td>
<td></td>
</tr>
<tr>
<td>Psychiatric nurses</td>
<td>Sweden</td>
<td>Correlational study - self-assessment of competencies</td>
<td>n/a</td>
<td>Ewalds-Kvist, Algotsson, Bergstrom and Lutzen, 2012</td>
<td></td>
</tr>
<tr>
<td>Entry level nurses working in Justice Health</td>
<td>Australia</td>
<td>Pilot testing of online self-report survey</td>
<td>Core Competencies Survey of Justice Health nurses</td>
<td>Cashin, Chiarella, Waters and Potter, 2008</td>
<td></td>
</tr>
<tr>
<td>Residents in physical medicine and rehabilitation</td>
<td>USA</td>
<td>Prospective, longitudinal feasibility study self-assessment exam</td>
<td>Self-assessment Examination for Residents (SAER)</td>
<td>Webster, 2009</td>
<td></td>
</tr>
<tr>
<td>Phase</td>
<td>Country</td>
<td>Method</td>
<td>Measurement Instrument</td>
<td>Authors</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------</td>
<td>---------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td>Prelicensure pharmacy students</td>
<td>Australia</td>
<td>Participatory action research</td>
<td>Graduated (Pharmacy) competency descriptors tool</td>
<td>Stupans, Owen, McKauge, Pont, Ryan and Woulfe, 2012</td>
<td></td>
</tr>
<tr>
<td>Occupational Physicians</td>
<td>The Netherlands</td>
<td>Evaluation study of an educational intervention</td>
<td>n/a</td>
<td>Hugenholtz et al., 2008</td>
<td></td>
</tr>
<tr>
<td>Human resource professionals</td>
<td>USA</td>
<td>Survey</td>
<td>Marlow-Crowne Social Desirability Scale</td>
<td>Fertig, 2011</td>
<td></td>
</tr>
<tr>
<td>Peer assessment</td>
<td>UK</td>
<td>Prospective Correlational</td>
<td>Objective Structured Assessment of Technical Skills</td>
<td>Evans, Leeson and Petrie, 2007</td>
<td></td>
</tr>
<tr>
<td>Clinical pharmacists</td>
<td>USA</td>
<td>CQI – protected peer review</td>
<td>n/a</td>
<td>Haines et al., 2010</td>
<td></td>
</tr>
<tr>
<td>Multisource feedback (MSF) and 360 degree evaluations</td>
<td>Canada</td>
<td>Systematic review</td>
<td>n/a</td>
<td>Andrews, Violato, Al Ansari, Donnon and Pugliese, 2013</td>
<td></td>
</tr>
<tr>
<td>Physicians</td>
<td>UK</td>
<td>Systematic review</td>
<td>n/a</td>
<td>Miller and Archer, 2010</td>
<td></td>
</tr>
<tr>
<td>Study Type</td>
<td>Group</td>
<td>Location</td>
<td>Study Method</td>
<td>Data Analysis Method</td>
<td>Reference</td>
</tr>
<tr>
<td>------------</td>
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</tr>
<tr>
<td>Senior managers in a police organization</td>
<td>Canada</td>
<td>Correlational</td>
<td>Multi-trait multi-method (MTMM)</td>
<td>Darr and Catano, 2008</td>
<td></td>
</tr>
<tr>
<td>Beginning secondary school teachers</td>
<td>The Netherlands</td>
<td>Descriptive</td>
<td>Questionnaire on Teacher Interaction (QTI)</td>
<td>Nijveldt, Beijaard, Brekelmans, Verloop and Wubbels, 2005</td>
<td></td>
</tr>
<tr>
<td>Psychiatry residents</td>
<td>Canada</td>
<td>Survey</td>
<td>CanMeds roles</td>
<td>Grujich et al., 2012</td>
<td></td>
</tr>
<tr>
<td>Leaders from different industries</td>
<td>USA</td>
<td>Secondary data analysis</td>
<td>CheckPoint 360° Competency Feedback System</td>
<td>Bradley, Allen, Hamilton and Filgo, 2006</td>
<td></td>
</tr>
<tr>
<td>Peruvian oil refinery staff</td>
<td>Peru</td>
<td>Secondary data analysis</td>
<td>Emotional Competence Inventory</td>
<td>Araujo and Taylor, 2012</td>
<td></td>
</tr>
</tbody>
</table>
**Table 3: Case study protocol**

<table>
<thead>
<tr>
<th>Case study components</th>
<th>Procedural guide for this case study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of analysis/phenomenon of interest</td>
<td>Competency assessment</td>
</tr>
<tr>
<td>Case context</td>
<td>Canadian academic hospital</td>
</tr>
<tr>
<td>Theoretical framework</td>
<td>Boyatzis model of effective performance (1982)</td>
</tr>
<tr>
<td>Case boundaries</td>
<td>Boyatzis model of effective performance (1982)</td>
</tr>
<tr>
<td><strong>Conceptual, including a definition of concepts included in the research questions and unit of analysis or case (Yin, 2014; 2018)</strong></td>
<td>Boyatzis’ (1982) definition of competencies (i.e. personal characteristics or abilities which enable an individual to demonstrate appropriate specific actions and which represent the capability of the individual with respect to the job situation)</td>
</tr>
<tr>
<td></td>
<td>Boyatzis’ view of assessment as “the appropriate execution of procedures and processes” (p.11)</td>
</tr>
<tr>
<td>Spatial (Yin, 2014; 2018)</td>
<td>• Contemporary setting of a Canadian academic hospital</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Temporal (Yin, 2014; 2018 | • Contemporary setting of a Canadian academic hospital  
|                          | • Annual performance appraisals (e.g. Cashin, Chiarella, Waters & Potter, 2008; Fereday, 2006; Howanitz, Valenstein & Fine, 2000; Rothschild Ewald & McCallum, 1989) |
| Concrete (e.g. a real-life phenomenon with a concrete manifestation) (Yin, 2014; 2018) | • Performance appraisals  
|                          | • Competency assessment processes and practices (e.g. may be related to staff education and development, human resource management, etc.) |
| Contextual (Yin, 2014; 2018) | • Includes elements of the organizational environment: the mission, purpose or corporate strategy; physical, financial and technical resources; tradition and culture; and other elements of the internal organizational environment (Boyatzis, 1982)  
|                          | • Policies and procedures related to the process of competency assessment and reflected in the internal structure and systems of the organization (Boyatzis, 1982) |
| Research Questions | **Exploratory research question; theory testing of model for relevance and feasibility; explores performance at the** |
|                        | 4. Using Boyatzis’ model as a theoretical framework, how is the performance of regulated health professionals enacted in the context of a Canadian academic hospital? |
organizational and individual level

**Exploratory – explores conceptualization of competency at the organizational and individual level**

5. How is competency assessment understood in the context of a Canadian academic hospital?

**Exploratory – explores competence at the level of the individual**

6. How do regulated health professionals perceive and experience competency assessment in the context of a Canadian academic hospital?

**Theoretical Propositions**

<table>
<thead>
<tr>
<th>Theoretical Proposition #1</th>
<th>Theoretical Proposition #2</th>
<th>Theoretical Proposition #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A Canadian academic hospital will show the dominance of behaviourism in its approach to competency assessment and performance appraisal</td>
<td>2. The Boyatzis model of effective performance will elucidate the organizational influences on a regulated health professional employee’s behaviour in a contemporary hospital context</td>
<td>3. Individual regulated health professionals demonstrate specific actions or behaviour and performance that result from congruence between the critical components of the Boyatzis model of effective job performance</td>
</tr>
<tr>
<td>Data Collection Sources</td>
<td>Documents, Reports</td>
<td>• administrative documents, performance appraisal forms, competency assessment tools and policies and procedures</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------</td>
<td>-------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td><strong>Key Informant Interviews</strong></td>
<td>• open-ended key informant in-depth interviews with Executive Leaders (n=4), Directors (n=7); Physician Leaders (n=4) and Managers (n=3)</td>
</tr>
<tr>
<td></td>
<td><strong>Focus Groups</strong></td>
<td>• 5 focus groups with regulated health professionals</td>
</tr>
<tr>
<td>Sampling strategy</td>
<td><strong>Purposive sampling</strong></td>
<td>For key informant interviews and focus groups</td>
</tr>
<tr>
<td></td>
<td><strong>Snowball sampling</strong></td>
<td>For key informant interviews and focus groups</td>
</tr>
<tr>
<td>Analytic approach</td>
<td><strong>Thematic analysis</strong></td>
<td>Theoretical thematic analysis i.e. seeking patterns in the data that are theoretically bounded (Braun &amp; Clarke, 2006) Directed content analysis (Hsieh &amp; Shannon, 2005)</td>
</tr>
<tr>
<td>Data quality (Yin, 2014; 2018)</td>
<td>1) <strong>use of multiple sources of evidence</strong></td>
<td>Multiple sources of evidence (documents, key informant interviews, focus groups)</td>
</tr>
<tr>
<td></td>
<td>2) <strong>creation of a case study database</strong></td>
<td>1) the data or evidentiary base using NVivo, in addition to word-processing tools such as Word or Excel files 2) the researcher’s case study report (Yin, 2014; 2018) 3) inventory of the entire dataset (Merriam, 2009; 2015) using word processing software to capture the field notes and case study documents</td>
</tr>
<tr>
<td></td>
<td>maintaining a chain of evidence</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>3)</td>
<td>Use of a table of data collection sources (Creswell, 2013)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) Case study report refers to specific documents, interviews and focus groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Specific sources should contain actual evidence and details about the circumstances under which the evidence was collected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) These circumstances should be consistent with the specific procedures and questions contained in this case study protocol to show links between the case study protocol and research questions (Yin, 2014; 2018)</td>
<td></td>
</tr>
</tbody>
</table>

|   | exercising care when using data from electronic sources | n/a for this study |
Appendix A: Study Information Email

**Email Title:** Introductory Email: Competency Assessment Study

**Email Sender:** [Organizational Principal Investigator]

The purpose of this email is to introduce a study about competency assessment practices in a Canadian academic hospital. As the [title] at [organization name], I am the Principal Investigator for this study. The study is being conducted by the study delegate, Leigh Chapman, as part of her doctoral dissertation research and the study aim is to develop a detailed picture of competency assessment practices of regulated health professionals in context. Three sources of data – organizational documents, key informant interviews and focus group interviews – will be collected from [two hospital sites] at [organization name]. Please note that your participation in this study is voluntary. You may leave the study at any time without affecting your employment status or relationship with [organization name].

**If you are interested in participating in this study or have any questions, please contact Leigh Chapman via email at leigh.chapman@mail.utoronto.ca or [alternative organizational email] or by phone at XXXXXXXXXX.**

**DISCLAIMER:**
Please note that the security of e-mail messages is not guaranteed. Messages may be forged, forwarded, kept indefinitely, or seen by others using the internet. Do not use e-mail to discuss information you think is sensitive. Do not use e-mail in an emergency since e-mail may be delayed.
Appendix B: Study Information Email [Organization Name] Practice Committee Co-Chairs

Email Title: Introductory Email: Competency Assessment Study
Email Sender: [Organizational Principal Investigator]

The purpose of this email is to introduce a study about competency assessment practices in a Canadian academic hospital. As the [title] at [organization name], I am the Principal Investigator for this study. The study is being conducted by the study delegate, Leigh Chapman as part of her doctoral dissertation research and the study aim is to develop a detailed picture of competency assessment practices of regulated health professionals in context. Three sources of data – organizational documents, key informant interviews and focus group interviews – will be collected from [two hospital sites] at [organization name].

Leigh would like to involve the [Organization Name] Practice Committee in this study in two ways. First, she would like to pilot the focus group guide with you, as [Organization Name] Practice Committee co-chairs, in order to obtain your feedback on the focus group questions. Second, Leigh would like to involve the participants from the [Organization Name] Practice Committee in a focus group at a time that is convenient (e.g. immediately following one of the scheduled [Organization Name] Practice Committee meetings). Please note that your participation in this study is voluntary. You may leave the study at any time without affecting your employment status or relationship with [organization name].

If you are interested in participating in this study or have any questions, please contact Leigh Chapman via email at leigh.chapman@mail.utoronto.ca or [alternative organizational email].ca or by phone at XXXXXXXXXX

DISCLAIMER:
Please note that the security of e-mail messages is not guaranteed. Messages may be forged, forwarded, kept indefinitely, or seen by others using the internet. Do not use e-mail to discuss information you think is sensitive. Do not use e-mail in an emergency since e-mail may be delayed.
Appendix C: Study Follow-up Email

Email Title: Follow-up re: Competency Assessment Study
Email Sender: Leigh Chapman, RN, PhD Candidate

The purpose of this email is to follow-up with you regarding my doctoral dissertation study about competency assessment practices in a Canadian academic hospital. The study aim is to develop a detailed picture of competency assessment practices of regulated health professionals in context. **You are being sent this email to request your participation in this study.**

Three sources of data – organizational documents, key informant interviews and focus group interviews – will be collected from [two hospital sites] at [organization name]. Ten (10) key informants at the organizational level (i.e. Executive Leaders, Directors and Chiefs) and approximately twenty (20) key informants at the clinical/departmental level (i.e. Managers and Educators) will be interviewed. Regulated health professionals (i.e. between 6-10 participants) will also be interviewed in two separate focus groups. Interviews will be audio recorded and transcribed and participants will be anonymized and identified using a study code. Participation is voluntary and, deciding not to participate will not affect participants’ employment status/relationship with [organization name] in any way.

All study data collected during the study will be kept private and confidential. Extensive measures will be undertaken to ensure participants’ confidentiality and anonymity is protected at all times.

The Study Information Letter is attached for your review. **If you are interested in participating in this study or have any questions, please contact Leigh Chapman via email at leigh.chapman@mail.utoronto.ca or [alternative organizational email] or by phone at XXXXXXXXXXX.**

**DISCLAIMER:**
*Please note that the security of e-mail messages is not guaranteed. Messages may be forged, forwarded, kept indefinitely, or seen by others using the internet. Do not use e-mail to discuss information you think is sensitive. Do not use e-mail in an emergency since e-mail may be delayed.*
Appendix D: CONSENT FORM TO PARTICIPATE IN A RESEARCH STUDY:
Key Informants Interviews

Study Title: A case study analysis of competency assessment processes in a Canadian academic hospital

Principal Investigator: [Organizational Principal Investigator]

Contact Information: XXXXXXXXXX

Introduction:
You are being asked to participate in a research study. Please read the information about the study presented in this form. This form includes details on the study’s risks and benefits that you should know before you decide if you would like to take part. You should take as much time as you need to make your decision. You should ask the study investigator to explain anything that you do not understand and make sure that all of your questions have been answered before signing this consent form. Before you make your decision, feel free to talk about this study with anyone you wish including your friends, family and family doctor. Participation in this study is voluntary.

Background/Purpose:
The purpose of this research is to explore competency assessment practices in a Canadian academic hospital. Current ideas about competence focus on the individual practitioner and have been criticized for failing to account for the practice context of healthcare workplaces. This study aims to develop a detailed picture of competency assessment practices of regulated health professionals in context. Understanding a hospital’s competency assessment practices may assist in tailoring performance assessment, professional development and quality assurance processes for regulated health professionals. This study aims to explore the perspectives of administrators (i.e. Executive Leaders, Directors, Chiefs, Managers and Educators) and regulated health professionals at [organization name]. Eligible participants must be fluent in English and willing to share their personal views about competency assessment and performance appraisal practices at [organization name]. As key leaders at [organization name], you are being asked to participate in this key informant interview because you represent the administrators that are needed for this key informant interview on competency assessment and performance appraisal practices at [organization name]. Up to a total of 50 people will be invited to participate in the study and the data collection will last approximately one year.

Study Design:
This study will use an embedded qualitative case study design.

Study Procedures:
Should you agree to participate in this study, you will be invited to attend one (1) in-person interview with the student investigator, Leigh Chapman, at a time and place at [organization name] that is convenient to you. The interview will take approximately 1 hour, be audio recorded and transcribed verbatim. A digital data recorder will be used to audio record the interview and the student investigator will take notes throughout the interview. You will be asked to describe your role and/or department at [organization name]. During the interview, you will be asked to share your perspective on competency assessment and performance appraisal practices at [organization name].

Following the interview, you will be asked if you would like to participate in an optional second meeting where you will meet with the student investigator to review preliminary data and/or key themes from your interview, where appropriate. It is anticipated that this second meeting (i.e. referred to as member checking in qualitative research) will take no more than twenty (20) minutes. You can refuse to participate or withdraw from the study at any time.

**Risks:**
Participants may find questions related to competency assessment and performance appraisal practices at [organization name] to be sensitive. You may choose not to answer any questions that you do not want to answer.

The decision to participate or not will have no effect on your employment at this hospital at this time or in the future. You may choose to avoid responding to a question during the interview, stop the interview or withdraw from the study at any time.

**Benefits:**
There are no anticipated benefits of participating in this study, however, participants may develop a greater awareness of competency assessment and performance appraisal practices at [organization name] as a result of participating in this study. Understanding a hospital’s competency assessment practices may assist in tailoring performance assessment, professional development and quality assurance processes for regulated health professionals.

**Reminders and Responsibilities:**
Participants should remember the following things during the study:

- Ask your study team about anything that concerns you
- Tell your study team if you change your mind about being in this study

**Confidentiality:**

**Personal Health Information:**
If you agree to join this study, the study team will look at your personal health information and collect only the information needed for this study. Personal health information is any information that could identify you and includes your name, email address and role within the organization.

If you participate in this study, information about you from this research study may be stored in the [organization name] computer system. The following people may look at the study records and at your personal health information to check that the information collected for the study is correct and to make sure the study is following proper laws and guidelines:
• Representatives of the [organization name] including the [hospital] Research Ethics Board

The data obtained during your interview will be kept private and confidential. Extensive measures will be undertaken to ensure your confidentiality and anonymity is protected at all times. The study investigator will keep any personal health information about you in a secure and confidential location for 10 years as required. A list linking your study number with your name will be kept by the study investigator in a secure place, separate from your study file. All information collected during this study, including your personal information, will be kept confidential and will not be shared with anyone outside the study unless required by law. To protect your anonymity and privacy, the [organization name] Principal Investigator and student’s doctoral supervisory committee members will not have access to the names and roles of participants or unaltered study data. Although direct quotes from key informant interviews may be used in presentations and/or publications, there will not be any identifying information provided to connect the quotes to study participants.

Voluntary Participation:
Your participation in this study is voluntary. You may decide not to be in this study, or to be in the study now and then change your mind later. You may leave the study at any time without affecting your employment or relationship with [organization name]. We will give you new information that is learned during the study that might affect your decision to stay in the study.

Withdrawal from the Study:
If you decide to leave the study, you have the right to request withdrawal of information collected about you. Let the study team know.

Costs and Reimbursement
There are no costs associated with participation in this study. As a gesture of appreciation for your time and participation, a $20 coffee gift card will be provided at the end of the interview.

Conflict of Interest:
Researchers have an interest in completing this study. Their interests should not influence your decision to participate in this study.

Questions about the study:
If you have any questions, concerns or would like to speak to the study team for any reason, please call XXXXXXXXXX. If you have any questions about your rights as a research participant or have concerns about this study, call the Chair of the [hospital] Research Ethics Board ([organization name] REB) or the Research Ethics office number at XXXXXXXXXX. The REB is a group of people who oversee the ethical conduct of research studies. The [organization name] REB is not part of the study team. Everything that you discuss will be kept confidential.

Consent
This study has been explained to me and any questions I had have been answered. I know that I may leave the study at any time. I agree to the use of my information as described in this form. I agree to take part in this study.
You will be given a signed copy of this consent form.

☐ By checking this box, I consent to the use of my direct quotes from the key informant interview in presentations and/or publications without any identifying information provided to connect the quotes to me as a study participant.

☐ By checking this box, I consent to participating in the optional second meeting with the student investigator.

Participant Name (please print) ____________________ Participant Signature ____________________ Date _____________

My signature means that I have explained the study to the participant named above. I have answered all questions.

Print Name of Person Obtaining Consent ____________________ Signature ____________________ Date _____________
Appendix E: CONSENT FORM TO PARTICIPATE IN A RESEARCH STUDY:
Focus Group Guide PILOT

Study Title: A case study analysis of competency assessment processes in a Canadian academic hospital

Principal Investigator: [Organizational Principal Investigator]

Contact Information: XXXXXXXXXXX

Introduction:
You are being asked to participate in a research study. Please read the information about the study presented in this form. This form includes details on the study’s risks and benefits that you should know before you decide if you would like to take part. You should take as much time as you need to make your decision. You should ask the study investigator to explain anything that you do not understand and make sure that all of your questions have been answered before signing this consent form. Before you make your decision, feel free to talk about this study with anyone you wish including your friends, family and family doctor. Participation in this study is voluntary.

Background/Purpose:
The purpose of this research is to explore competency assessment practices in a Canadian academic hospital. Current ideas about competence focus on the individual practitioner and have been criticized for failing to account for the practice context of healthcare workplaces. This study aim is to develop a detailed picture of competency assessment practices of regulated health professionals in context. Understanding a hospital’s competency assessment practices may assist in tailoring performance assessment, professional development and quality assurance processes for regulated health professionals. This study aims to explore the perspectives of administrators (i.e. Executive Leaders, Directors, Chiefs, Managers and Educators) and regulated health professionals at [organization name]. Eligible participants must be fluent in English and willing to share their personal views about competency assessment and performance appraisal practices at [organization name]. As co-chairs of [Organization Name] Practice Committee, you are being asked to participate in this focus group guide pilot because you represent the regulated health professionals that are needed for this focus group on competency assessment and performance appraisal practices at [organization name]. Up to a total of 50 people will be invited to participate in the study and the data collection will last approximately one year.

Study Design:
This study will use an embedded qualitative case study design.

Study Procedures:
Should you agree to participate in this study, you will be invited to attend a focus group guide pilot with the other [Organization Name] Practice Committee co-chair and student investigator, Leigh Chapman, at a time and place at [organization name] that is convenient to you. The pilot will take approximately 1 hour, be audio recorded and transcribed verbatim. Please note that no identifying information such as names will be transcribed from the audio recordings. A digital data recorder will be used to audio record the pilot and the student investigator will take notes throughout the pilot. You will be asked to describe your role and/or department at [organization name]. During the pilot, you will be asked to share your perspective on this study’s focus group guide. You can refuse to participate or withdraw from the study at any time.

Risks:
Participants may find questions related to competency assessment and performance appraisal practices at [organization name] to be sensitive. You may choose not to answer any questions that you do not want to answer.

The decision to participate or not will have no effect on your employment at this hospital at this time or in the future. You may choose to avoid responding to a question during the interview, stop the interview or withdraw from the study at any time.

There is no guarantee that the information you share in the focus group pilot will be kept private between individuals participating in the focus group pilot session (i.e. [Organization Name] Practice Committee co-chairs). However, everyone in the focus group pilot will be asked to keep the information shared within the focus group pilot session private and not share it with anyone outside the group or study team.

Benefits:
There are no anticipated benefits of participating in this study, however, participants may develop a greater awareness of competency assessment and performance appraisal practices at [organization name] as a result of participating in this study. Understanding a hospital’s competency assessment practices may assist in tailoring performance assessment, professional development and quality assurance processes for regulated health professionals.

Reminders and Responsibilities:
Participants should remember the following things during the study:

- Ask your study team about anything that concerns you
- Tell your study team if you change your mind about being in this study

Confidentiality:

Personal Health Information:
If you agree to join this study, the study team will look at your personal health information and collect only the information needed for this study. Personal health information is any information that could identify you and includes your name, email address and role within the organization.

If you participate in this study, information about you from this research study may be stored in the [organization name] computer system. The following people may look at the study records
and at your personal health information to check that the information collected for the study is correct and to make sure the study is following proper laws and guidelines:

- Representatives of the [organization name] including the [hospital] Research Ethics Board

The data obtained during this pilot will be kept private and confidential. Extensive measures will be undertaken to ensure your confidentiality and anonymity is protected at all times. The study investigator will keep any personal health information about you in a secure and confidential location for 10 years as required. A list linking your study number with your name will be kept by the study investigator in a secure place, separate from your study file. All information collected during this study, including your personal information, will be kept confidential and will not be shared with anyone outside the study unless required by law.

To protect your anonymity and privacy, the [organization name] Principal Investigator and student’s doctoral supervisory committee members will not have access to the names and roles of participants or unaltered study data. Although direct quotes from the focus groups may be used in presentations and/or publications, there will not be any identifying information provided to connect the quotes to study participants.

**Voluntary Participation:**
Your participation in this study is voluntary. You may decide not to be in this study, or to be in the study now and then change your mind later. You may leave the study at any time without affecting your employment or relationship with [organization name]. We will give you new information that is learned during the study that might affect your decision to stay in the study.

**Withdrawal from the Study:**
If you decide to leave the study, you have the right to request withdrawal of information collected about you. Let the study team know.

**Costs and Reimbursement**
There are no costs associated with participation in this study. As a gesture of appreciation for your time and participation, a $20 coffee gift card will be provided at the end of the focus group.

**Conflict of Interest:**
Researchers have an interest in completing this study. Their interests should not influence your decision to participate in this study.

**Questions about the study:**
If you have any questions, concerns or would like to speak to the study team for any reason, please call XXXXXXXXXXX. If you have any questions about your rights as a research participant or have concerns about this study, call the Chair of the [hospital] Research Ethics Board ([organization name] REB) or the Research Ethics office number at XXXXXXXXXXX. The REB is a group of people who oversee the ethical conduct of research studies. The [hospital] REB is not part of the study team. Everything that you discuss will be kept confidential.

**Consent**
This study has been explained to me and any questions I had have been answered. I know that I may leave the study at any time. I agree to the use of my information as described in this form. I agree to take part in this study. You will be given a signed copy of this consent form.

☐

By checking this box, I consent to the use of my direct quotes from the focus group in presentations and/or publications without any identifying information provided to connect the quotes to me as a study participant.

Participant Name (please print)_________________________ Participant Signature_________________________ Date_________________________

My signature means that I have explained the study to the participant named above. I have answered all questions.

Print Name of Person Obtaining Consent_________________________ Signature_________________________ Date_________________________
Appendix F: CONSENT FORM TO PARTICIPATE IN A RESEARCH STUDY: Focus Group Participants

Study Title: A case study analysis of competency assessment processes in a Canadian academic hospital

Investigator: [Organizational Principal Investigator]

Contact Information: XXXXXXXXXX

Introduction:
You are being asked to participate in a research study. Please read the information about the study presented in this form. This form includes details on the study’s risks and benefits that you should know before you decide if you would like to take part. You should take as much time as you need to make your decision. You should ask the study investigator to explain anything that you do not understand and make sure that all of your questions have been answered before signing this consent form. Before you make your decision, feel free to talk about this study with anyone you wish including your friends, family and family doctor. Participation in this study is voluntary.

Background/Purpose:
The purpose of this research is to explore competency assessment practices in a Canadian academic hospital. Current ideas about competence focus on the individual practitioner and have been criticized for failing to account for the practice context of healthcare workplaces. This study aim is to develop a detailed picture of competency assessment practices of regulated health professionals in context. Understanding a hospital’s competency assessment practices may assist in tailoring performance assessment, professional development and quality assurance processes for regulated health professionals. This study aims to explore the perspectives of administrators (i.e. Executive Leaders, Directors, Chiefs, Managers and Educators) and regulated health professionals at [organization name]. Eligible participants must be fluent in English and willing to share their personal views about competency assessment and performance appraisal practices at [organization name]. You are being asked to participate in this focus group on competency assessment and performance appraisal practices at [organization name] because you are regulated health professionals currently working at [organization name]. Up to a total of 50 people will be invited to participate in the study and the data collection will last approximately one year.

Study Design:
This study will use an embedded qualitative case study design.

Study Procedures:
Should you agree to participate in this study, you will be invited to attend one (1) in-person focus group with the student investigator, Leigh Chapman, at a set time and place at [organization name]. The focus group will take approximately 60-90 minutes, be audio recorded and transcribed verbatim. A digital data recorder will be used to audio record the focus group and the student investigator will take notes throughout the focus group. You will be asked to describe your role and/or department at [organization name]. During the focus group, you will be asked to share your perspective on competency assessment and performance appraisal practices at [organization name]. You can refuse to participate or withdraw from the study at any time.

**Risks:**
Participants may find questions related to competency assessment and performance appraisal practices at [organization name] to be sensitive. You may choose not to answer any questions that you do not want to answer.
The decision to participate or not will have no effect on your employment at this hospital at this time or in the future. You can choose to avoid responding to a question during the focus group, stop the focus group or withdraw from the study at any time. There is no guarantee that the information you share in the focus group will be kept private between individuals participating in the focus group. However, everyone in the focus group will be asked to keep the information shared within the focus group private and not share it with anyone outside the group or study team.

**Benefits:**
There are no anticipated benefits of participating in this study, however, participants may develop a greater awareness of competency assessment and performance appraisal practices at [organization name] as a result of participating in this study. Understanding a hospital’s competency assessment practices may assist in tailoring performance assessment, professional development and quality assurance processes for regulated health professionals.

**Reminders and Responsibilities:**
Participants should remember the following things during the study:
- Ask your study team about anything that concerns you
- Tell your study team if you change your mind about being in this study

**Confidentiality:**
**Personal Health Information:**
If you agree to join this study, the study team will look at your personal health information and collect only the information needed for this study. Personal health information is any information that could identify you and includes your name, email address and role within the organization.

If you participate in this study, information about you from this research study may be stored in the [organization name] computer system. The following people may look at the study records and at your personal health information to check that the information collected for the study is correct and to make sure the study is following proper laws and guidelines:
- Representatives of the [organization name] including the [hospital] Research Ethics Board
The data obtained during your focus group will be kept private and confidential. Extensive measures will be undertaken to ensure your confidentiality and anonymity is protected at all times. The study investigator will keep any personal information about you in a secure and confidential location for 10 years. A list linking your study number with your name will be kept by the study investigator in a secure place, separate from your study file. All information collected during this study, including your personal information, will be kept confidential and will not be shared with anyone outside the study unless required by law.

To protect your anonymity and privacy, the [organization name] Principal Investigator and student’s doctoral supervisory committee members will not have access to the names and roles of participants or unaltered study data. Although direct quotes from the focus groups may be used in presentations and/or publications, there will not be any identifying information provided to connect the quotes to study participants.

Voluntary Participation:
Your participation in this study is voluntary. You may decide not to be in this study, or to be in the study now and then change your mind later. You may leave the study at any time without affecting your employment or relationship with [organization name]. We will give you new information that is learned during the study that might affect your decision to stay in the study.

Withdrawal from the Study:
If you decide to leave the study, you have the right to request withdrawal of information collected about you. Let the study team know.

Costs and Reimbursement
There are no costs associated with participation in this study. As a gesture of appreciation for your time and participation, a $20 coffee gift card will be provided at the end of the focus group.

Conflict of Interest:
Researchers have an interest in completing this study. Their interests should not influence your decision to participate in this study.

Questions about the study:
If you have any questions, concerns or would like to speak to the study team for any reason, please call XXXXXXXXXXX. If you have any questions about your rights as a research participant or have concerns about this study, call the Chair of the [hospital] Research Ethics Board ([organization name] REB) or the Research Ethics office number at XXXXXXXXXXX. The REB is a group of people who oversee the ethical conduct of research studies. The [hospital] REB is not part of the study team. Everything that you discuss will be kept confidential.

Consent:
This study has been explained to me and any questions I had have been answered. I know that I may leave the study at any time. I agree to the use of my information as described in this form. I agree to take part in this study.
You will be given a signed copy of this consent form.

☐

By checking this box, I consent to the use of my direct quotes from the focus group in presentations and/or publications without any identifying information provided to connect the quotes to me as a study participant.

Participant Name (please print) ___________________________ Participant Signature ___________________________ Date               

My signature means that I have explained the study to the participant named above. I have answered all questions.

Print Name of Person Obtaining Consent ___________________________ Signature ___________________________ Date               

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Appendix G: Key Informant Interview Guide

Date and Time of Interview: ______________________________________
Location: ______________________________________________________

Thank you for agreeing to participate in this study. The purpose of this dissertation research is to explore competency assessment in context, with the aim of developing a detailed multi-professional picture of competency assessment practices of all regulated health professionals at [organization name]. During this interview, you will be asked to share your perspective on competency assessment and performance appraisal practices at [organization name]. I will also ask more specific questions about competency assessment, job demands, the organizational environment, self-assessment, and performance appraisal processes. This interview will be audio recorded and later transcribed, however, no identifiers such as names will be included in the transcribed data. Throughout the interview, please do not state your name in order to further protect your privacy and confidentiality.

What questions (if any) do you have for me before we begin?

I am interested in hearing your perspective on the competency assessment processes and practices at [organization name].

1. How do you define competence? (PROMPTS: as an administrator; from the point of view of regulated health professionals)

2. How is competency assessment understood in this hospital? (PROMPTS: from an administrator’s perspective; from the point of view of regulated health professionals; describe [organization name]’s traditional and culture related to competency assessment?)

3. How does [organization name] currently assess the competence of regulated health professionals? (PROMPTS: What methods are used? What are the assessment strategies used? Are methods such as self-assessment, peer assessment or multi-rater feedback used? Are other strategies such as the use of feedback, experts, SMEs, or audit reports used?)

4. Describe the performance appraisal processes used for regulated health professionals at [organization name]. (PROMPTS: What methods are used? What are the assessment strategies used? Are methods such as self-assessment, peer assessment or multi-rater feedback used? Are other strategies such as the use of feedback, experts, SMEs, or audit reports used? What factors influence different organizational performance appraisal processes?)

5. Are the strategies/methods different for regulated health professionals working at the point of care vs. managers/educators/administrators? If yes, describe. (PROMPTS: What performance appraisal strategies are consistent across the organization? What strategies are used only for a specific group of employees such as managers or executive leaders?)
6. When hiring individuals for a given position and evaluating them in that role, how does the organization ensure there is a fit between an individual’s competencies, the organization and job demands (i.e. functional requirements of the particular job, situational demands, or specific demands emerging from day-to-day events on the job)? (PROMPTS: How do you know when there is a good fit? How do you know when there is a bad fit?)

7. What are the physical, financial and technical resources in the organization (i.e. could include assets and/or products) related to competency assessment?

Closure and Next Steps (Member Checking)

Thank you for participating. The data obtained during this interview will be kept private and confidential. In the near future, I will contact you to offer you the opportunity to meet briefly with me to review preliminary data and/or key themes from your interview, where appropriate. It is anticipated that this second meeting (i.e. referred to as member checking in qualitative research) will take no more than twenty (20) minutes. Please let me know if you would like to participate in this subsequent meeting (Yes/No response). You can refuse to participate or withdraw from the study at any time.
Appendix H: Focus Group Guide PILOT

Date and Time of Meeting: _______________________________________
Location: _____________________________________________________

[Circulate hard copy of Focus Group Guide]

Thank you for allowing me to meet with you to review my focus group guide with you to determine its relevance and feasibility. The purpose of my dissertation research is to explore competency assessment in context, with the aim of developing a detailed multi-professional picture of competency assessment practices of all regulated health professionals at [organization name].

Since one of my research questions pertains to how regulated health professionals perceive and experience competency assessment, I plan on conducting two focus groups each with between 6-10 regulated health professionals at [organization name] ([two hospital sites] only) using purposeful (Creswell, 2013) and criterion sampling (Patton, 2002). Both focus groups will be conducted with a sample of regulated health professionals at [organization name]. One focus group will be comprised of representatives from [organization name]'s [Organization Name] Practice Committee council. The second focus group will be comprised of regulated health professionals from various clinical units at [two hospital sites]. The purpose of the focus group is to obtain participants’ perspective on competency assessment and performance appraisal processes at [organization name]. I will also ask more specific questions about how they, as regulated health professionals perceive and experience competency assessment. I plan to facilitate the focus groups and have a student transcriptionist assist by transcribing the dialogue that occurs during the focus group interview. As a reminder, this focus group pilot session will be audio recorded however, no identifying information such as names will be transcribed from the audio recordings.

1. Do you have any questions about the nature and/or purpose of the study?
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

2. Do you have any questions, comments or suggestions about the focus group guide questions and/or prompts?
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

3. How likely is it that regulated health professionals will be able to respond to the questions listed?
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

4. How feasible is it that participants will be able to respond to the questions listed in a group interview format?
5. Are there any questions that should be eliminated and/or added?

6. Do you have any additional suggestions about the focus group guide?

Thank you for taking the time to provide this feedback and assist me in my study. It is greatly appreciated.
Appendix I: Focus Group Guide

**Date and Time of Focus Group:** __________________________________________

**Location:** ____________________________________________________________

Thank you for agreeing to participate in this study. The purpose of this dissertation research is to explore competency assessment in context, with the aim of developing a detailed multi-professional picture of competency assessment practices of all regulated health professionals at [organization name]. During this focus group, you will be asked to share your perspective on competency assessment and performance appraisal practices at [organization name]. I will also ask more specific questions about how you, as regulated health professionals at [organization name] perceive and experience competency assessment. Please do not share any information discussed during the focus group session with anyone outside of the focus group or study team. This is to further support everyone’s privacy. As a reminder, this focus group session will be audio recorded however, no identifying information such as names will be transcribed from the audio recordings.

**What questions (if any) do you have for me before we begin?**

I am interested in hearing your perspective on the competency assessment processes and practices at [organization name].

1. How do you define competence? *(PROMPTS: as a regulated health professional at [organization name]; from your point of view; in your role; as an individual; as part of a team; organizationally)*

2. What special or unique issues are there in your profession related to competency assessment? *(PROMPTS: related to competence or competency assessment; at [organization name] as a regulated health professional)*

3. How do you understand competency assessment at [organization name]? *(PROMPTS: from the point of view of regulated health professionals; describe [organization name]’s traditional and culture related to competency assessment; how do you experience and perceive competency assessment?)*

4. Has there been a time when your behavior was observed by someone for the purposes of assessment/appraisal? If so, describe.

5. From your perspective, how do you think [organization name] currently assesses the competence of regulated health professionals? *(PROMPTS: What methods are used? What are the assessment strategies used? Are methods such as self-assessment, peer assessment or multi-rater feedback used? Are other strategies such as the use of feedback, experts, SMEs, or audit reports used?)*
6. Describe the performance appraisal processes that you think are used for regulated health professionals at [organization name]. (PROMPTS: What methods are used? What are the assessment strategies used? Are methods such as self-assessment, peer assessment or multi-rater feedback used? Are other strategies such as the use of feedback, experts, SMEs, or audit reports used? What factors influence different organizational performance appraisal processes?)

7. Tell me about the process of receiving feedback on your performance. (PROMPTS: Who provides the feedback? When is it provided? How is it provided?)

8. Are the strategies/methods different for regulated health professionals working at the point of care vs. managers/educators/administrators? If yes, describe. (PROMPTS: What performance appraisal strategies are consistent across the organization? What strategies are used only for a specific group of employees such as managers or executive leaders?)

9. What are your thoughts on the relationship or “fit” between your role, the organization and your job description? How do you think the organization ensures there is a fit between an individual’s competencies, the organization and job demands (i.e. functional requirements of the particular job, situational demands, or specific demands emerging from day-to-day events on the job)? (PROMPTS: How do you know when there is a good fit? How do you know when there is a bad fit?)

10. What are the physical, financial and technical resources in the organization (i.e. could include assets and/or products) related to competency assessment?

**Closure and Next Steps**

Thank you for participating. The data obtained during this focus group will be kept private and confidential. Please do not share any information discussed during the focus group session with anyone outside of the focus group or study team. This is to further support everyone’s privacy. You can refuse to participate or withdraw from the study at any time.
Appendix J: Letter of Appreciation

Thank you for participating in my study. Your participation is invaluable in advancing our understanding of competency assessment processes in a Canadian academic health sciences centre. As a gesture of appreciation for your time and participation, please find enclosed a $20 coffee gift card. Once again, thank you for your time and contribution to this important work.

Sincerely,

Leigh Chapman, RN, PhD Candidate

Lawrence S. Bloomberg Faculty of Nursing

University of Toronto, 155 College

Research Fellow, The Wilson Centre
Appendix K: University of Toronto Research Ethics Board Approval

PROTOCOL REFERENCE # 32635

February 5, 2018

Dr. Sioban Nelson  M. Leigh Chapman
OFC OF V-PRES & PROVOST  OFC OF V-PRES & PROVOST
DIVN OF V-P & PROVOST  DIVN OF V-P & PROVOST

Dear Dr. Nelson and M. Leigh Chapman,

Re: Administrative Approval of your research protocol entitled, "A case study analysis of competency assessment processes in a Canadian academic health sciences centre"

We are writing to advise you that the Office of Research Ethics (ORE) has granted administrative approval to the above-named research protocol. The level of approval is based on the following role(s) of the University of Toronto (University), as you have identified with your submission and administered under the terms and conditions of the affiliation agreement between the University and the associated TAHN hospital:

- Graduate Student research - hospital-based only
- Storage or analysis of De-identified Personal Information (data)

This approval does not substitute for ethics approval, which has been obtained from your hospital Research Ethics Board (REB). Please note that you do not need to submit Annual Renewals, Study Completion Reports or Amendments to the ORE unless the involvement of the University changes so that ethics review is required. Please contact the ORE to determine whether a particular change to the University's involvement requires ethics review.

Best wishes for the successful completion of your research.

Yours sincerely,

Daniel Gyewu
REB Manager