## EXAMINING THE DYNAMICS AND IMPACTS OF HR CLIMATE AND MEANINGFULNESS OF WORK IN PUBLIC HEALTHCARE

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# EXAMINING THE DYNAMICS AND IMPACTS OF HR CLIMATE AND MEANINGFULNESS OF WORK IN PUBLIC HEALTHCARE

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### **Dedication**

To Love, thanks. What are you doing the rest of your life? To Gogi, I'll try not to get a big head

#### Abstract

Human Resource (HR) Climate is emerging as a new explanation for how high performance work systems affect employee and organizational performance. HR Climate is the understanding employees share of the conduct and actions expected in the workplace. This understanding is based on policies and practices, influenced by internal and external contextual factors such as the size of the organization, or level of competition in the market, as well as cultural norms. Using mixed method case study research, the concept of HR Climate was investigated over 14 months within eight units of a regional health authority in Western Canada. Management interviews collected data on HR policies and outcome metrics while nurses and community health workers were surveyed for their perceptions of HR Climate. Results of the study support the HR Climate argument that a consistent set of practices will result in a positive HR Climate benefiting employees and the organization.

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#### **List of Abbreviations**

B.C. British Columbia

BCNU British Columbia Nurses' Union CHW Community Health Worker

Emergency Room ER

GLOBE Global Leadership and Organizational Behaviour

HR Climate Human Resource Climate

HPWS High Performance Work Systems

ICU Intensive Care Unit

LOG Largest Occupational Group

#### **Chapter 1: Introduction**

Despite a large and growing body of research evincing the benefits of human resource (HR) management systems on employee performance, important questions remain. Are the practices universally applicable, and what processes moderate their effects on employee outcomes? This study seeks to shed light on these questions by examining the constructs of HR Climate and Meaningfulness of Work in a public healthcare organization.

Human resource management scholars generally agree that a set of practices known as high performance work systems can improve performance. High performance work systems takes the basic tenets of HR management – recruitment, development and management of employees, and organizes them to work together synergistically with the aim of producing a reliable, competitive workforce. The system works by recruiting and selecting qualified candidates, who will complement the workgroup, develop employee knowledge and skills, and incentivise discretionary effort towards organizational goals.

Decades of research now demonstrate a positive correlation between high performance works systems (HPWS) and various organizational outcome metrics, such as turnover and productivity (Kehoe & Wright, 2013; Messersmith, Patel, Lepak, & Gould-Williams, 2011). However, inconsistent effects across firms and sectors have caused researchers to examine the possible underlying processes or mechanisms moderating the effects of HPWS on firm performance. Growing out of this research are three theories: the resource-based view of the firm (RBV) (Becker & Gerhart, 1996), contingency theory, (CT) (Rondeau & Wagar, 2001), and the abilities, motivation, opportunities (AMO) framework (Marin-Garcia & Tomas, 2016) that attempt to explain the effects of HPWS at the organization-level. When these theories failed to explain all the divergent

results, scholars began using them in combination in an attempt to more fully explain the effects of HPWS (Boselie, Dietz, & Boon, 2005). Researchers also began to recognize the need to understand how employees experience the system of practices and the intent they attribute to it (Boselie, 2010; Harley, Sargent, & Allen, 2010). To that end, this study examines the constructs of HR Climate and Meaningfulness of Work as moderating variables between HPWS practices and various performance outcomes within a public health authority in Western Canada.

HR Climate is the understanding employees share of what is expected in regard to their actions and conduct in the workplace. This collective understanding is based on HR policies and practices but also influenced by structural and contextual factors such as the size and age of the organization and level of competition or market volatility. Using dimensions of climate such as Support and Welfare, drawn from organizational climate research (Patterson et al., 2005), HR Climate explains *how* HPWS practises are perceived and thus how they affect behaviour. HR Climate is a construct that was developed over two previous phases of research relating to this study, across multiple countries within the industries of manufacturing, finance, and healthcare (Dastmalchian & Steinke, 2017). The previous phase found support for the argument that a consistent set of practices, resulted in a positive perception of the HR Climate and as a result, positive performance outcomes (*ibid*).

In addition to HR Climate, this study adds the concept of Meaningfulness of Work to the conceptual model. This concept is used to explain *why* HPWS affect employee performance. Meaningfulness of work explains that employees find work personally meaningful because it is an outward expression of an idealized sense of self, improves the lives of others, and engenders a sense of belonging (Pratt & Ashforth, 2003).

High performance work systems practices have the ability to foster

Meaningfulness of Work. For example, HPWS practices designed to increase employees' range of skills, and allow input into decision-making, cultivate a sense of ownership with the organization and make the work self-referential. Therefore, any "products" of the work become more meaningful. Identifying with the organization and having a sense of ownership also facilitates feelings of group membership and belonging (Pratt & Ashforth, 2003).

Finally, this study is also unique because it takes a relatively rare look at these concepts within a public healthcare organization located in Western Canada. Public healthcare poses a unique set of challenges for traditional HR management. Policies and practices normally the responsibility of human resources may be dictated by operational requirements, or terms of a collective agreement.

The choice to conduct the study within this large public organization was made for two reasons. First, although previous phases of the HR Climate research involved some healthcare organizations, they were a mix of public and private, and outcome measures were aggregated obscuring the evidence and possible nuances of HR Climate within this industry. Secondly, British Columbia is facing a severe nursing shortage that has already resulted in consequences to patient care – a topic that will be covered in more detail in Chapter 2.

Therefore, the intent of this study was to examine the character of HR Climate and Meaningfulness of Work within a healthcare organization to determine if these concepts could shed light on employees' experience of the workplace and by extension, reasons for employee and organizational outcomes.

#### Methodology

This research used a mixed method, embedded case study design. The individual case studies were eight units within the public health organization referred to as *Island Health*. The case study design allowed for an in-depth examination of each unit within the broader context of Island Health, which is located on Vancouver Island in Western Canada. A mixed-methodology was used to allow for the collection of data from multiple sources and to enrich and confirm findings. Information about policies and practices, organizational structure and context, and employee and organizational outcomes was collected through interviews and document analysis. Employee perceptions of the HR Climate dimensions were collected through a survey of the largest occupational group of each unit (for example, nurses) and examined using quantitative data analysis. This study also consisted of two identical phases of data collection conducted between October 2016 and December 2017. This step was added in an attempt to capture any changes to the HR Climate and perceptions of Meaningfulness of Work experienced by employees on each unit.

#### **Thesis Overview**

This thesis consists of six chapters. Chapter 1 serves as a brief overview of the purpose, significance, and methods of this research. Chapter 2 introduces the reader to the background and context of the study. Chapter 3 is an in-depth review of the literature of high performance work systems, HR Climate, and Meaningfulness of Work. Chapter 4 presents the conceptual framework and explication of the development of HR Climate. Chapter 5 explains the methodology and results in multiple sections. In the first section, the methods of data collection and analysis are explained, including a detailed account of

how participants were recruited, the setting, and sample. The next section defines the variables collected through the employee survey (quantitative data), followed by an explanation of the variables collected through interviews and document analysis (qualitative data). This section is followed by an explanation of the ethical considerations and approvals obtained before beginning data collection. This research received approval from the Human Subject Research Committee (HSRC) at the University of Lethbridge, and the Human Research Ethics Board (HREB) of Island Health. The last sections of this chapter detail the findings of the qualitative and quantitative analysis. Finally, Chapter 6 discusses the implications of the findings followed by limitations of the study, implications for practice and recommendations for future research.

#### **Chapter 2: Background Information**

#### **Global Nursing Shortage**

In 2003, the World Health Organization (WHO) stated, "the most critical issue facing health care systems is the shortage of people who make them work" (The World Health Organization, 2003). By 2014, the global deficit was 7.2 million, predicted to reach 12.9 million by 2035 (The World Health Organization, 2014). Ten years later in 2013, the WHO expounded on the health-related human resource problems faced by most nations with the most serious being, a critical shortage of various healthcare professionals including physicians, nurses, and midwives. Of these three groups, nurses are most consistently and intimately involved in patient care; required not only to provide care directly related to illness or injury, but also the needs of daily life. Nurses must have the skills to provide medical care, and the disposition to see patients at their most vulnerable and treat them with dignity. Due to this regular interaction, in hospitals and long-term facilities, nurses often serve as a primary source of information for physicians. Additionally, as the only round-the-clock patient care, nurses are often called upon to make critical decisions in the absence of physician instruction. Therefore, well-trained, engaged nurses are the cornerstone of quality care in the complex, high-stress environments of hospitals and long-terms care facilities. The fundamental role of nurses draws into focus the consequences of the increasing shortage.

#### **Canadian Nursing Shortage**

Canada faces many of the same problems with a nursing shortage predicted to reach 60,000 by the year 2022 (Chachula, Myrick, & Yonge, 2015). Major factors contributing to the shortfall in Canada are an aging population and high rates of turnover. In Canada nurses retire, on average, by age 56 (*ibid*). In 2016, the average age of a

registered nurse was 43.8, and the average age of a licensed practical nurse was 41.2 (Canadian Institute for Health Information, 2017). Turnover among nurses is also high, between 20 and 27 percent compared to 7.3 percent in the general population (Canadian Institute for Health Information, 2017). Turnover among nurses is even higher for new graduates. One Canadian study found 18 to 39 percent of nurses leave the profession within a year of graduating, jumping to as high as 57 percent by year two (Laschinger, Grau, Finegan, & Wilk, 2012).

Voluntary turnover is a complex problem involving individual, environmental, and organizational components. However, job dissatisfaction is a leading predictor of intention to quit among nurses (O'Brien-Pallas, Murphy, Shamian, Li, & Hayes, 2010). Studies of job dissatisfaction cite role ambiguity, lack of managerial support, low pay and benefits, high patient-to-nurse ratio, lack of unit cohesion, and stress as leading contributors of nurse dissatisfaction (Kalist & Okoye, 2011; O'Brien-Pallas et al., 2010). A review of 68 studies found turnover intention among nurses was often associated with an unmanageable workload caused by increased patient complexity and acuity resulting in nurses feeling a lack of control over the work and fears of inadequate patient care. Staffing shortages as a result of high turnover naturally lead to heavier workloads, higher nurse-to-patient ratio, increased stress, and recruitment problems. Furthermore, decreased job satisfaction, and organizational commitment are associated with a decline in the quality of patient care (McHugh, Kutney-Lee, Cimiotti, Sloane, & Aiken, 2011). The cost of replacing a registered nurse is approximately \$27,000 depending on years of experience and area of specialization (Rondeau & Wagar, 2016). Direct costs are attributed to hiring and training new employees, and paying temporary replacements, or increasing overtime (O'Brien-Pallas et al., 2010; Rondeau & Wagar, 2016). Indirect costs

of high turnover include longer patient stays, increased likelihood of medication errors and even death. Consequences to nurses include, increased stress and burnout, decreased mental health, and lower job satisfaction, which in-turn increase the likelihood of turnover (O'Brien-Pallas et al., 2010).

#### The Crisis in British Columbia

The shortage of nurses is particularly acute in British Columbia (B.C.), which has the lowest number of registered nurses per 100,000 population in Canada (Registered Nurses' Association of Ontario, 2016). The BC nurses' union called the shortage of nurses in B.C. a crisis citing approximately 1,000 vacancies in intensive care units (ICU), emergency and operating rooms (Weekes, 2015). One consequence of this shortage is the closure of two operating rooms at B.C. Children's hospital resulting in dozens of postponed surgeries (Johnson, 2016). Increasing demand is compounding the shortage. For example, Victoria hospitals report patients being housed in hallways, closets, and dining halls (Aronson, 2017). Gayle Duteil, president of the British Columbia Nurses' Union, described Abbotsford Regional Hospital emergency room as a "war zone" brought about by a persistent nursing shortage of nearly one-third (Luymes, 2017). Not unique to Abbotsford, nurses across the province are reporting heavy workloads and high stress accelerating turnover.

#### **Vancouver Island Health**

Island Health is one of five health authorities within the B.C. Ministry of Health.

It includes Vancouver Island, islands within the Georgia Straight, and some communities on the mainland between Powell River and Rivers Inlet.

Island Health is an integrated health network of hospitals, primary and residential care. Divided into four geographic regions, Island Health operates a community-based

model of care with a focus on meeting the needs of each local population (Island Health, 2015). This level of integration allows care to be optimized and individualized for each patient.

Island Health employs nearly 20,000 healthcare professionals and manages over 6,000 volunteers. The organization also has a contract relationship with 1,900 physicians and operates a budget of \$2.2 billion (Vancouver Island Health Association, 2013).

The nursing shortage within Island Health is caused by the same problems faced across Canada - an aging workforce and aging population, deficit of registered nurse graduates, and retention problems (Naylor, 2014). Statistics Canada's 2016 census reported that 18.3 percent of B.C.'s population is 65 or older, falling just under the 19 to 20 percent of the three Atlantic provinces, which currently top the list for the oldest populations per capita in the nation (Grant & Agius, 2017). Focusing on B.C., four of the ten cities with the eldest populations in the province are on Vancouver Island. These four cities, Qualicum Beach, Parksville, Nanaimo, and Cowichan Valley report 34 to 52 percent of their populations are over 65 (Carman, 2016).

Retention problems within Island Health have been attributed to staffing shortages, inadequate staffing levels, and involuntary overtime (B.C. Nurses Union, 2016) Regarding the current nursing workforce, B.C. is in-line with the rest of the nation, with an average age of 44.5. Remembering that nurses typically retire at age 56, and the high rate of new graduate attrition, these statistics, along with the aging population portend a growing crisis in the region.

The following chapter will examine the concepts explored in this study in attempt to understand the experience of nurses in relation to the HR policies and practices of Island Health.

#### **Chapter 3: Review of the Literature**

#### **Human Resource Management**

Human resource (HR) management refers to practices intended to recruit, manage and develop qualified, motivated staff (Wall & Wood, 2005). The study of the link between HR policies and organizational performance began in the 1980s when the role of HR management expanded from personnel management - with a focus on recruitment and payroll, to include employee development and training, health and safety, as well as discrimination and grievance procedures (Powell, Dawson, Topakas, Durose, & Fewtrell, 2014). This change was a reaction to global manufacturing competition - particularly Japanese manufacturing firms which had adopted a flexible, lean production system characterized by continuous improvement and sufficient, as opposed to excess supply (Boxall, 2012; Boxall & Macky, 2009; MacDuffie, 1995). By the 1990s multiple researchers began pointing to a positive relationship between HR practices such as training and development, decentralized decision-making (Arthur, 1994; MacDuffie, 1995), performance pay, flexible job assignments, employment security (Ichniowski, Shaw, & Prennushi, 1997), team-based working groups (MacDuffie, 1995); and positive employee and organizational performance outcomes (Arthur, 1994). Instead of relying on patents, technology, and capital, researchers such as Lado & Wilson (1994), MacDuffie (1995), Becker and Huselid (1998), began advocating for investment in systems of practices - arguing that while competitors may see the benefits of a particular HR system, implementation involves time and resources, and may never be fully realized (Becker & Gerhart, 1996). For example in 1990, the National Center on Education and the Economy published "America's Choice: High Skills or Low Wages!" (The National Center on Education and Economy, 1990). In the article, the authors argued that declining growth

and productivity were due to a shortage of knowledgeable, skilled workers. They argued that to stay competitive, American manufacturers had to stop relying on technology, which low wage countries could also obtain, patents that expire, and access to capital, which was becoming increasingly available. Instead they advocated for investing in the skills and knowledge that would allow firms to quickly innovate to meet shifting consumer demands. The authors acknowledge the increased cost in wages, but said it would be offset by higher productivity. This report was one of the first to use the term, "high performance work system" (HPWS).

#### **High Performance Work Systems**

High performance work systems is a term used to describe a set of interconnected practices optimized to improve efficiency and performance by enhancing employee knowledge and skills, while increasing motivation and opportunity (Huselid, 1995; S. Lee, Lee, & Kang, 2012; Leggat, Bartram, & Stanton, 2011; Zacharatos, Barling, & Iverson, 2005). The standardization and consistency of HPWS also elicits trust in managers and among colleagues (Lepak, Liao, Chung, & Harden, 2006; Powell et al., 2014).

A seminal study by Mark Huselid (1995) marked the first significant attempt to "evaluate" the effects of a comprehensive system of HR practices on organizational performance. As Huselid (1995) noted, prior research had focused on single HRM practices or categories of practices such as training programs (Bartel, 1994). Huselid (1995) addressed this problem by developing an instrument capable of evaluating the interactive effects of a set of practices on employee and organization level outcomes. He deemed these practices High Performance Work Practices and included those involved in selective recruitment, performance evaluation, incentive pay, training and development

opportunities, and decentralized decision-making. Using data from nearly 1,000 U.S. firms of varying industries and sizes, Huselid concluded that High Performance Work Practices increase discretionary effort and productivity while decreasing voluntary turnover resulting in improved financial performance.

Over the next few decades critiques and refinements have taken place. Several authors (Becker & Gerhart, 1996; Delery, 1998; Lee et al., 2012) note a lack of consistency across studies in the type and number of HR practices (independent variable) under investigation calling into question the generalizability of results. Studies have also used a multitude of outcome measures (dependent variable) such as turnover, productivity, safety, patient mortality, and financial performance (Combs, Liu, Hall, & Ketchen, 2006; Way, 2002; West, Guthrie, Dawson, Borrill, & Carter, 2006; Zacharatos et al., 2005), although financial performance is the most common (Boselie, 2010). Boselie et al. (2005) also found that employee-related outcome measures generally focus on quality or productivity as opposed to job satisfaction. While many of these discrepancies remain, consensus did solidify around the idea that consistency across a set of practices has more impact than any individual HR practice (Becker & Gerhart, 1996; Bowen & Ostroff, 2004; Delery, 1998).

These sets of practices or "systems" began to be referred to as high involvement work systems (HIWS), high commitment work systems (HCWS), or high performance work systems (HPWS). The current study adopts the term high performance work systems, which Zacharatos et al. (2005) stated encompasses the components of HIWS and HCWS. Practices in these systems are grouped into categories of selective recruitment, development, and motivation. The practices are thought to improve performance and productivity by working together synergistically. This simply means the benefits of an

individual practice are dependent upon its interaction with the other practices in the system resulting in the total effects of the system being greater than the sum of the individual practices (Ichniowski et al., 1997). As an example, the freedom to make work-related decisions (autonomy) requires the necessary knowledge and skills. Requiring more knowledge and skill necessitates investment in training and development. Finally, a training and development program will achieve better results when the recruitment program uses tools such as competency and attitude tests to select the best employees for the program (Becker, Huselid, Pickus, & Spratt, 1997; Delery, 1998).

A large body of empirical research now affirms the effects of HPWS on multiple organizational and employee outcomes measures. Common outcome measures include financial performance (Riki Takeuchi, Lepak, Wang, & Takeuchi, 2007), turnover (Kehoe & Wright, 2013), job satisfaction (R. Takeuchi, Chen, & Lepak, 2009), and productivity and performance (Messersmith et al., 2011). However, scholars have also demonstrated the efficacy of HPWS on a broader range of outcome measures such as absenteeism (Bonias, Bartram, Leggat, & Stanton, 2010; Kehoe & Wright, 2013), workplace safety (Zacharatos et al., 2005), and decision-making (Combs et al., 2006; West et al., 2006).

#### **High Performance Work Systems in Healthcare**

Healthcare practitioners, policy makers, administrators, and other stakeholders increasingly acknowledge that effective human resource management must be at the heart of any plan for a sustainable healthcare system. Despite evidence of a positive correlation between HPWS and improved employee and organizational outcomes the prevalence of these studies in healthcare is relatively recent (Bartram, Casimir, Djurkovic, Leggat, & Stanton, 2012; Boselie, 2010; Etchegaray, John, & Thomas, 2011). Most research

remains focused on private or for-profit industries such as manufacturing, finance or the services industry with an eye toward understanding how HPWS can increase profits, or improve competitiveness and productivity (Powell et al., 2014). This focus further limits comparisons to public healthcare organizations.

Assuming models of HPWS from these industries can be transposed onto healthcare is problematic, particularly in a publicly funded system. Performance measures such as staff per patient bed, secondary infections, post-surgical complications, needlestick injuries, medication errors, and mortality are unique to healthcare (Buchan, 2004; Powell et al., 2014). Measures of productivity may also greatly differ. As Eaton (2000) noted, unlike manufacturing, the 'product' in healthcare is intangible and achieved in concert with the patient. Furthermore, the cost of service may be paid by a third party, such as a private insurer, a federal government, or family member. This creates a situation in which the 'customer' may not be viewed as the person directly accessing the services (Eaton, 2000). Research also questions the efficacy of some HPWS practices in the delivery of healthcare. For example, two systematic reviews of the effects of pay for performance on patient care, and cost effectiveness indicated no consensus (Eijkenaar, Emmert, Scheppach, & Schöffski, 2013; Van Herck et al., 2010). Both reviews report mixed results for clinical and preventive care, while cautioning against unintended consequences such as negative outcomes for patients with conditions not covered by incentive programs. The reviews also report that evidence of cost savings or cost effectiveness of pay-for-performance is inconclusive. One of the reviews even found examples of pay-for-performance questions being cut from longitudinal studies after initial rounds of data analysis revealed this practice was absent or prohibited within the organization (Powell et al., 2014). This brings up another important distinction, unlike

most private-sector industries, public healthcare is invariably institutionalized - including municipal, state or provincial, and federal governance as well as local and national labour unions. This system often restricts the ability of individual organizations or managers to make changes to - or implement new HR policies and practices.

Additionally, the U.S. origins of HPWS mean the inclusion of some practices may need to be evaluated for efficacy in the Canadian system. Boxall and Macky (2009) point out that while grievance procedures for employees may be considered a high-performance practice in the U.S., in the United Kingdom, they are required by law and therefore could not be used to differentiate systems of HR management. Finally, the efficacy of HPWS on employee and organizational outcomes in healthcare is also in question. In a meta-analysis on the ability of HPWS to improve organizational performance in the manufacturing and service sectors, Combs et al. (2006), reported the effect was nearly double in manufacturing compared to services. Citing these results, Guest (2011) suggested the effect size might depreciate further in "highly complex services such as large hospitals" (p. 7). This reinforces why it is critically important to study the impact of HPWS within the context of public health.

Although underdeveloped, research on the effects of HPWS in healthcare shows benefits to organizations, practitioners, and patients. Benefits of HPWS to practitioners include reduced emotional strain (Bartram et al., 2012), burnout (Fan et al., 2014), and increased job satisfaction (Harmon, Scotti, Behson, & Farias, 2003; Leggat et al., 2011).

Given the critical shortage of nurses, the ability of HPWS to reduce voluntary turnover is a prominent topic in this field. As stated previously, job dissatisfaction is the number one predictor of intention to quit and thus inextricably linked to studies of nursing turnover (Hayes et al., 2012). When asked, nurses most often cite heavy workloads, lack

of support from managers and coworkers, psychological and emotional strain of patient care and interactions with family members; and lack of support and development opportunities as causes of dissatisfaction (Hayes et al., 2012; Laschinger, 2012; O'Brien-Pallas et al., 2010; O'Brien-Pallas et al., 2006).

High performance work systems are uniquely equipped to address these issues through the various categories of practices that work together synergistically to recruit qualified staff, advance employee knowledge and skill through education and development programs, facilitate participation and communication within and among departments, and decentralize decision making. Education and development programs not only build on nurses' technical capability but may also provide training regarding caring for challenging patients and communicating with family members. This results in decreased stress because nurses feel they have the knowledge and skill to care for diverse clinical needs, as well as the interpersonal and emotional challenges of the job (Bartram et al., 2012). In addition, a set of Australian studies (Harley, Allen, & Sargent, 2007; Harley et al., 2010) that surveyed nurses and care aides employed in nursing homes challenged arguments that HPWS practices would offer greater benefits to high-skilled workers who generally have more autonomy and flexibility than low-skilled workers. One of these studies (Harley et al., 2007) found that care aides were just as likely to report greater job satisfaction, organizational commitment, reduced stress and intention to quit as nurses in the same facilities. An exception was the practice of team membership, in which the level of reported commitment was higher for care aides (considered a lowerskilled position) working in teams than nurses.

Policies governing operational requirements related to nurse-to-patient ratio often limit the ability of healthcare organizations to offer flexible work practices including the

ability to switch from full- to part-time, shift swap, or work only part of the year. As such, these practices are often excluded from the list of HPWS examined in healthcare (Atkinson & Hall, 2011). However, there is evidence to suggest that flexible work practices may improve employee and organizational outcomes. These studies included nurses employed in Danish and Australian hospitals and seniors' homes (Pryce, Albertsen, & Nielsen, 2006; Weale, Wells, & Oakman, 2017). Participants reported greater job satisfaction and improved health and wellbeing, while organizations recorded fewer absences and lower turnover as a result of implementing these practices.

High performance work systems provide benefits to healthcare organizations through reductions in voluntary turnover, unpaid absences, sick leave, injury and violence claims, and strikes; as well as increases in discretionary effort (Harmon et al., 2003; Rondeau & Wagar, 2016). There is also, at least, anecdotal data suggesting HPWS result in reduced costs of service. In a study that included 146 veterans' healthcare centres in the U.S., Harmon et al. (2003) found HPWS were negatively correlated with turnover, unpaid absences, sick leave, and disability claims. The authors calculated that savings from these reductions would offset and even exceed the costs of implementing a high performance work system. Furthermore, facilities in the study serving more patients benefited from economies of scale - in that, cost effectiveness increased with patient volume.

Finally, patients benefit from HPWS through fewer medical errors, reduced patient mortality, and increased satisfaction (S. Lee, D. Lee, & Kang, 2012; Leggat, Bartram, Casimir, & Stanton, 2010). As Leggat et al. (2010) report, the most significant predictor of patient satisfaction is job satisfaction among nurses - possibly due to perceived quality of patient care. Surveying nurses employed in a public health unit in Australia, the authors found participants who reported high job satisfaction as a result of

HPWS practices, also reported providing high quality patient care. This finding is bolstered by Lee et al., (2012) who report that HPWS improve levels of engagement among healthcare professionals having regular interactions with patients, which in turn, improves patient satisfaction.

Decreases in medication errors and mortality may be due to improved quality of information made possible by the integrative practices of high performance work systems (Preuss, 2003; West et al., 2006). Preuss (2003) argued that HPWS promote "broad task responsibility" (p. 593) whereby employees are encouraged and aided in developing new skills with the expectation that they will take on responsibilities beyond their job description. Training and first-hand experience performing a diverse set of tasks, and regular contact with colleagues outside the primary unit improves knowledge and the quality of information. In turn, these benefits improve decision-making by giving employees the range of knowledge necessary to interpret equivocal information in a time-sensitive manner leading to fewer medical errors.

#### **Theoretical Frameworks**

Despite decades of evidence demonstrating the effects of HPWS on various outcome and performance measures, a lack of consensus remains regarding the theoretical or conceptual framework underlying this process. Theoretical and conceptual frameworks explain the relationship and interaction between variables. They are the basis for the research question(s); determine the independent and dependent variables; and provide the structure for explaining how the results may be generalized. Theoretical frameworks also elucidate the researcher's ontological, and epistemological assumptions, which may reveal bias or presupposition of results. In the HR management literature, theoretical and

conceptual frameworks differ depending on if the study is focused at the organizational or individual level. Despite approximately three decades of research, there is still not an agreed upon framework used to explain why HPWS affect employee and organizational performance. In part, this is because no consensus exists as to what practices compose a HPWS (Boxall & Macky, 2009; Datta, Guthrie, & Wright, 2005; Delery, 1998), therefore definitions of the independent variables differ. Since performance measures also differ across industries so too do measures of the dependent variable (i.e. financial performance, versus patient mortality). Further confounding the problem are HR publications that make no reference to a theoretical or conceptual framework. In a review of the literature, Boselie et al., (2005) note that theory was rarely used to develop a hypothesis or set of research questions. Instead, theory was more often used in discussion sections to draw conclusions about the results. Boxall and Macky (2009) challenge this convention, stating that a set of practices cannot be used to define a HPWS because no definitive set of practices exists. Therefore, it is necessary to "go beyond the construction of lists of practices and seek to identify the processes and mediating variables which a set of practices is supposed to influence" (Boxall & Macky, 2009, p. 7).

According to Boselie et al. (2005), the most common theoretical or conceptual frameworks used are: contingency theory (CT) (Rondeau & Wagar, 2001), resource based view (RBV) (Becker & Gerhart, 1996), and the abilities, motivation, and opportunities (AMO) framework (Marin-Garcia & Tomas, 2016). Contingency Theory posits that the ability of HPWS to affect outcomes is contingent upon (or will be moderated by) various external factors, which are outside the control of management. These factors include a firm's age, size, whether ownership is private or public, extent of union involvement, level of market competition, and societal culture (Boxall & Macky, 2009; Buchan, 2004;

Datta et al., 2005; Paauwe, 2004). For example, the ability of HPWS to increase performance will be moderated by the overall growth of the industry in that area. Resource-based view (RBV) explains the effects of HPWS on performance through a human-capital perspective - people as a unique resource. This theory suggests that HPWS are a source of competitive advantage as a result of the synergistic effects of the system, which are valuable and difficult to imitate (Boselie et al., 2005). A competitor may see the benefits a system provides, but implementation requires time and resources (Becker & Gerhart, 1996). In the review, Boselie et al. (2005), note that while CT, RBV, and AMO are the most common, AMO is increasingly taking centre stage - featuring in more than half the articles referencing a conceptual framework since 2000. Macky and Boxall (2007) affirm this view stating, "the basic theory of performance being assumed in HPWS research, either implicitly or explicitly...[is] AMO theory" (p. 539). The AMO framework assumes HPWS improve performance by ensuring employees have the knowledge and skills (ability) to do the work, the motivation to exercise discretionary effort, and opportunity to participate in decision-making (Boselie, 2010). The Abilities, Motivation, Opportunity framework also explains the synergistic aspect of high performance work systems. It should go without saying that an employee who lacks knowledge and skill could be detrimental to performance. However, an employee who has the necessary knowledge and skill but lacks motivation or opportunity will not contribute to performance. Likewise, employees who have the knowledge, skill, and motivation to participate, but not the opportunity may leave the organization.

A central component of any conceptual framework is the mechanism(s) linking HR practices to outcomes. As Boselie et al. (2005) describe, this mechanism explains, how and why HR affects individual and organizational outcomes. This understanding is

based on empirical evidence that has shown different combinations of HPWS can lead to similar results, both positive and negative, in organizations (Rondeau & Wagar, 2001). Despite the importance, there is no consensus among management scholars as to what processes link HR practices to outcomes (Huselid & Becker, 2011; Messersmith et al., 2011). In fact, so little is known about how HR policies and practices are translated into performance measures that the question has become known as the 'black box' of HRM research (Boselie et al., 2005).

Increasingly, scholars have begun to examine what purpose and intent employees ascribe to HPWS practices. Boselie et al. (2005), and Hyde et al. (2006) note that not only is the understanding limited, but many authors neglect the topic entirely. In one systematic review of the literature, only three of 97 articles included moderating variables (Hyde et al., 2006). Boselie et al. (2005) found similar results with only 20 mentions out of 104 articles reviewed. The authors further note that many of these references are not explicit but must be inferred from statistical analyses such as structural equation modeling, further obscuring the understanding of the black box.

#### **Limitations of Past Research**

An increasing number of studies examine the effects of HPWS in healthcare organizations. However, important limitations remain. The most significant being the lack of studies exclusively focused on healthcare. Hyde et al. (2006) note that out of 97 articles analyzed in a systematic review, nearly 50 percent examined the effects of HPWS in multiple industries without differentiating between performance measures. This is problematic because, as previously alluded to, patients are not widgets. Put another way, performance measures in manufacturing and healthcare are different enough to warrant separate studies. Similarly, public and private organizations are often analyzed together in

healthcare-related studies without controls for sector differences (Hyde et al., 2006). Some authors have tried to suggest that benefits of HPWS realized in the service industry could be obtained in healthcare, assuming similarities such as the role of the customer (patient), and uncertainty regarding work-volume and flow (Guest, 2011; Harris, Cortvriend, & Hyde, 2007). This comparison is also deficient because it disregards the complex interdependence often required of healthcare professionals. Many multi-sector studies also use financial performance indicators as the dependent variable (Boselie et al., 2005) further limiting comparisons with healthcare organizations - particularly public healthcare. Even not-for-profit firms cannot offer one-to-one comparisons with public healthcare organizations, which are generally beholden to a complex web of stakeholders including federal and local governments, tax payers, collective bargaining units, professionals, and patients (Harris et al., 2007). National context is also a confounding factor with the majority of studies on the effects of HPWS within healthcare located in the U.S. or United Kingdom (U.K.) (Hyde et al., 2006).

Additional problems already mentioned include the lack of agreement regarding what or even how many practices constitute a high performance work system (Boxall, 2012). While most lists include practices related to selective hiring, training, teamwork, decentralized decision-making, and performance-related pay (Leggat et al., 2011), additional practices include transformational leadership (Bartram et al., 2012; Leggat et al., 2010; Leggat et al., 2011) and quality of work (Bartram et al., 2012). Although authors seldom defend their selection of practices, context-dependent factors may play a role in these decisions. For example, the U.K. government requires employers to have a written policy for managing employee grievances. So, while having a grievance procedure may be considered a HPWS practice in some countries, in the U.K. it is simply

standard practice (Boxall & Macky, 2009). There is also no agreed upon instrument to measure the effects of HPWS on employee and organizational outcomes further limiting the generalizability of these studies (Huselid & Becker, 2011).

Finally, current models used to explain the effects of HPWS on employee and organizational outcomes are inadequate. Although the AMO framework is a common mechanism used to link HPWS to performance, it presupposes "how" employees will respond to practices in the system. Additionally, in the context of public health, practices such as performance pay and sophisticated recruitment may be prohibited by collective agreements (Bonias et al., 2010; West et al., 2006). If the effects of HPWS are directly correlated with abilities, motivation, and/or opportunity, and outcomes are dependent upon synergistic effects within the system, then eliminating practices may disrupt the system. The Ability, Motivation, Opportunity framework also does not account for the market, or societal context of the organization. In an attempt to compensate for this deficiency, Boselie et al. (2005) note that several authors have begun incorporating aspects of CT, RBV, and AMO into one overarching theory in order to account for the organizational and individual-level effects of HPWS while acknowledging environmental influences and the context of the organization.

#### **Human Resource Climate**

Researchers increasingly acknowledge that understanding how employees perceive HR practices is critical for predicting employee and organizational outcomes. The current study proposes HR Climate as an intervening construct that better explains the effects of HPWS on employee and organizational outcomes by accounting for employee perceptions of HR management practices. HR Climate is a broader, more holistic explanation taking into account policies and practices, societal culture, and

employee perceptions of human resource practices. This work builds on the growing body of research that links HR policies and practices to employee outcomes.

HR Climate is defined as the interpretation employees share of what actions and behaviours are expected (and rewarded) in the workplace (Dastmalchian & Steinke, 2017). This perception or understanding is influenced by multiple factors including the age and size of the organization, HR policies and practices, as well as the local culture. For these reasons HR Climate is considered an intervening construct that moderates the effects of HPWS practices (independent variable) on employee and organizational outcomes (dependent variable).

HR Climate has its origins in organizational climate which has been defined as "a summary perception derived from a body of interconnected experiences with organizational policies, practices, and procedures (e.g. from leadership and HR practices, and so forth) and observations of what is rewarded, supported, and expected in the organization" (Schneider, Gonzalez-Roma, Ostroff, & West, 2017). This 'summary perception' is developed over time and results in less uncertainty and more dependable conduct. Although organizational climate takes time to develop and is therefore relatively stable, it should not be conflated with organizational culture. Organizational culture is formed over many years and composed of the fundamental beliefs and values of the organization (Schneider et al., Bellot, 2011; 2017); it is embedded and resistant to change.

The definition of organizational climate, as an overarching agreement of what is expected in the workplace, proved too broad when tested - showing limited association with outcome measures (Schneider, 1975). This prompted Schneider, White, & Paul (1998) to argue that in order for the concept of climate to be effective in shaping

employee perceptions and behaviours, it must align with a strategic objective of the firm, such as a climate for safety, service, or innovation.

A climate for human resources, or HR Climate encompasses all policies and practices relevant to the recruitment, development, and management of employees (HPWS) while also taking into consideration contextual and cultural factors that may shape perception and influence behaviour. To this end, HR Climate is divided into eight dimensions taken from organizational climate research shown to reliably predict employee perceptions of the policies and practices in the workplace (Patterson et al., 2005). These dimensions are Welfare, Autonomy, Involvement, Integration, Support, Development and Training, Innovation, and Family Orientation. (For a list of the eight HR Climate Dimensions, see Table 1)

Table 1. HR Climate Dimensions

Climate	Explanation
Dimension	
Welfare	The organization demonstrates care and is fair in its actions toward employees
Autonomy	Relates to how much control employees feel they have over work-related decisions
Involvement	Relates to how involved employees feel they are able to be in decisions that directly impact their work
Integration	Relates to the level of collaboration and information sharing among departments
Support	Relates to how much support and understanding employees feel from their direct supervisor or manager
Training and	The organization provides enough training in relations to equipment
Development	and processes and encourages employees to develop new skills
Innovation	Relates to how quickly the organization spots problems and
	responds when change is necessary
Family	Management creates a family/community-like atmosphere
Orientation	

# **Societal Culture**

Finally, aspects of societal culture are expected to influence the perception of HR Climate. Therefore, this study includes dimensions drawn from the GLOBE (Global, Leadership, and Organizational Behavioural, Effectiveness) study, GLOBE is a multiphase, international research study with the goal of understanding the impact of culture on "societal, organizational, and leadership effectiveness" (House, Hanges, Javidan, Dorfman, & Gupta, 2004, p. 29). Culture is defined as the "shared motives, values, beliefs, identities, and interpretations or meanings of significant events that results from common experiences of members of collectives and are transmitted across age generations" (House, Javidan, Hanges, & Dorfman, 2002, p. 5). The study built on the seminal work of Hofstede who identified five dimensions representing distinct cultural values (Hofstede, 2011). The original dimensions are: Power Distance, Collectivism versus Individualism, Femininity versus Masculinity, Uncertainty Avoidance, and Longversus Short-term Orientation. The GLOBE study expanded on this understanding by employing a cohort of 170 social scientists to gather qualitative and quantitative data in 62 societies resulting in nine distinct dimensions of culture. The GLOBE dimensions are: Performance Orientation, Uncertainty Avoidance, Humane Orientation, Institutional Collectivism, In-Group Collectivism, Assertiveness, Gender Egalitarianism, Future Orientation and Power Distance (Javidan & Dastmalchian, 2009).

The study included over 17,000 managers from nearly 1,000 organizations representing the industries of telecommunications, food processing, and financial services (Javidan & Dastmalchian, 2009). Organizational practices and dimensions of societal culture were viewed as independent variables in the study, while expectation and effectiveness of leadership were dependent variables. The authors concluded that

organizational culture is a microcosm of society, including the style and perception of leadership. Take for example, the dimension of Human Orientation - defined as, "the degree to which individuals in organizations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring and kind to others" (House et al., 2002). People in societies scoring high on this dimension value empathy and supportive relationships over power and material possessions. In local organizations the dimension is manifest for example, in the expectation that management will generally be egalitarian and tolerant of mistakes.

Cultural dimensions from the GLOBE study expected to affect HR Climate perceptions are, Power Distance, Institutional Collectivism, and In-group Collectivism. Power Distance refers to the expectation of inequality within an organization or society, and its tacit acceptance by members (Javidan, Dorfman, De Luque, & House, 2006). Jung, Su, Baeza & Hong (2008) found that Power Distance is the dimension that has the most impact on the culture and operation of an organization. In high power distance organizations, decision-making takes place in a hierarchy of management, and information is tightly controlled. Questioning leadership is deterred by formal policies, as well as societal and organizational norms of strict deference to authority (Daniels & Greguras, 2014; Kirkman, Chen, Farh, Chen, & Lowe, 2009). Meanwhile, in low power distance societies and organizations, employees are more likely to insist on democratic, representative forms of decision-making, challenge decisions made by superiors, and report incidents of discrimination (Daniels & Greguras, 2014; Javidan & Dastmalchian, 2009). High power distance cultures engender feelings of loyalty (Daniels & Greguras, 2014), while low power distance cultures promote innovation through policies and practices that facilitate information sharing, ensure collaboration, and by creating a

climate where employees feel empowered to share new ideas (Daniels & Greguras, 2014). The key notion is that the dominant cultural dimensions within each society will influence leadership styles, as well as employee perceptions of, and reaction to leadership and policies and practices (House et al., 2002). For example, extrinsic rewards have a greater effect on job satisfaction in high power distance societies; and, despite outward inequality, employees in high power distance countries express more satisfaction with leadership (Daniels & Greguras, 2014; House et al., 2002).

Institutional Collectivism refers to the degree to which organizations encourage teamwork, value the 'collective' well-being of the group, and "encourage and reward distribution of resources" over individual benefit (Brewer & Venaik, 2011; House et al., 2004). In societies that value institutional collectivism, organizations that promote teamwork and offer development opportunities engender organizational commitment while employees view training as an investment and an opportunity to increase information sharing and collaboration. In societies that place less value on institutional collectivism, employees perceive training as a means for the organization to increase performance and profit. At the same time, employees view it as an opportunity to improve their own "marketability" (Rode, Huang, & Flynn, 2016).

Similar to institutional collectivism is, in-group collectivism. In societies with high in-group collectivism, individuals express solidarity and pride in their "in-group," most often represented by family, or close friends, but also organizations (Javidan & Dastmalchian, 2009; Naor, Linderman, & Schroeder, 2010). Employees in these societies often identify with the organization in which they work. Identification, in turn, generates feelings of loyalty and discretionary effort because employees are more likely to view the accomplishments and reputation of the organization as self-referential (Naor et al., 2010).

The three cultural dimensions: power distance, institutional collectivism, and ingroup collectivism, are considered antecedents to the HR Climate construct due to their influence on perceptions of HR policies and practices. These dimensions and their implications highlight the need to understand cultural sensitivities, predispositions, and motivations when implementing a set of organizational policies and practices.

# **Meaningfulness of Work**

The above section examined the concept of HR Climate as it has existed in previous phases of this research. The HR Climate dimensions aim to explain *how* employees perceive organizational policies and practices, for example, as integrative or supportive, while questions about the 'societal culture' as discussed above, partially touch on *why* employees perceive organizational practices to be beneficial. However, it is this author's contention that HR Climate would more fully illuminate the contents of the black box by adding the concept of Meaningfulness of Work. Several studies now indicate that meaningful work is a better predictor of job satisfaction and commitment than salary or benefits (Hu & Hirsh, 2017; Judge, Piccolo, Podsakoff, Shaw, & Rich, 2010).

The concept of Meaningfulness of Work as it is presented here was developed by Pratt and Ashforth (2003), and explains what makes work meaningful to individuals. Meaningful work is work that is viewed as aligning with one's core identity, as significantly beneficial to others, and adding value and purpose to one's life. Meaningfulness may be derived from the work itself, its ability to serve the greater good, or because of supportive relationships and a sense of group membership in the workplace (Pratt & Ashforth, 2003). Finding work meaningful is associated with several positive employee and organizational outcomes such as increased job satisfaction, motivation, physical and psychological well-being; reduced stress, intention to quit, and absenteeism;

as well as better work-group cohesion, and career development (Pratt & Ashforth, 2003; Rosso, 2010; Steger, Dik, & Duffy, 2012). Benefits to nurses who report finding work meaningful are higher job satisfaction, engagement, organizational commitment, less burnout, and intention to quit (Pavlish & Hunt, 2012). One study that surveyed nurses and patients found that patients in units where nurses reported finding work meaningful were more satisfied with the judgment, responsiveness, skill, and effectiveness of their nursing care (Leiter, Harvie, & Frizzell, 1998). A study that included physicians reported that finding work meaningful led to higher work performance and better patient outcomes (Shanafelt, 2009). These findings are important as several studies involving healthcare professionals have shown extrinsic motivation has limited ability to increase discretionary effort or improve performance long-term (Lee, 2015; Morrison, Burke III, & Greene, 2007). Despite these benefits, little empirical research exists to explain how employees find meaning in their work. Research has shown that goal achievement, role difficulty, and task enjoyment are not required for finding work meaningful, and for some employees, meaningful work may even be more important than salary (Pratt & Ashforth, 2003). Returning to the concept of Meaningfulness of Work, Pratt and Ashforth divide this concept into Meaning in Work and Meaning at Work. Meaning in Work is the result of experiencing the work as significant because it confers a sense of purpose, reflects a person's preferred identity, and serves a greater good. It acknowledges the fundamental role work often plays in the delineation of one's identity. This becomes apparent when we answer a question about what we do for a living with, "I am a", and so, doing becomes being. In this regard, Meaning in Work is often described as a "calling" (Wrzesniewski, McCauley, Rozin, Schwartz, 1997).

Calling has been defined as a "meaningful beckoning toward activities that are morally, socially, and personally significant" (Wrzesniewski, Dekas, & Rosso, 2009). The word calling has religious origins, stemming from the belief that people are "called" to proselytize, and devote their lives to a social good (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). While scholars of work orientations have abandoned the religious connotation, the idea of serving a greater purpose remains. People with a calling orientation are driven by the idea that work makes a positive difference in the lives of others. This is in contrast to people who view work as a job with a focus on financial means, or a career with a focus on promotion and title. People who see themselves as having a career are devoted to their work, but see it as a means of personal advancement and enjoy the power and status accorded by promotion. People who see themselves as having a job, view it as a means of affording necessities and/or funding activities outside of work (Wrzesniewski et al., 1997).

Benefits to employees who perceive work to be a calling (or who find meaning *in* work) include job satisfaction, a greater sense of personal fulfillment and meaning in life. Wrzesniewski et al. (1997) found that people who viewed their work as a calling reported higher job satisfaction even when controlling for occupation and income. Organizational benefits include increased discretionary effort, greater trust in management, fewer absences, improved team operation, and organizational commitment (Rosso, Dekas, Wrzesniewski, 2010; Steger et al., 2012; Wrzesniewski et al., 1997).

As stated above, Meaning in Work occurs when the job role reflects one's desired identity (Dik, Byrne, & Steger, 2013), the organizational mission aligns with one's values, and the job conveys a sense of purpose and is seen to serve a greater good.

Hackman and Oldham (1975), argue that there are key characteristics of a job that

contribute to experiencing the work itself as meaningful. Specifically, the authors cite, skill variety, task significance, feedback, and autonomy.

Skill variety refers to the need to use diverse knowledge and experience on an assortment of tasks. Task identity refers to the degree an individual works on a task from start to finish and knows the outcome. Task significance focuses on the purpose of the work and its perceived benefit to others. Viewing one's work as outwardly useful or helpful increases feelings of efficacy and meaningfulness. Individuals who view their work as a calling often perceive high task significance (Pratt & Ashforth, 2003).

Responsibility is the autonomy and support to make significant decisions about the operation and/or scheduling of one's work. This level of discretion often leads to feelings of efficacy as employees successfully meet challenges. Knowledge of results refers to information about the impact of the work from the work itself, colleagues, supervisors, or clients.

Practices supportive of meaning in work foster a sense of pride in and identity with the job role. Policies and practices critical to this process are sophisticated recruitment, standardized orientation conducted by a senior employee, and those that offer development and autonomy (Pratt & Ashforth, 2003). Sophisticated recruitment and selection involve practices such as attitude and competency tests allowing organizations to select the most qualified applicants as well as those most likely to maintain work-place cohesion. Training increases organization-specific knowledge and skills deepening the association with the organization. Training may also increase an employee's range of knowledge and skill beyond the primary job role allowing for greater functional flexibility. The opportunity to employ a diverse skill set and the discretion to determine how and when (autonomy) results in feelings of self-efficacy as employees see

themselves as capable and in control of their work. Self-efficacy in turn contributes to the experience of meaningful work (Rosso, 2010). Finally, leaders also play a role by framing the importance of the work in relation to the organizational mission (Rosso, Dik et al., 2013; 2010).

Meaning at Work acknowledges job role, but emphasizes relationships and group membership in the creation of identity and meaning. Specifically, Meaning at Work is the result of identification with work role; supportive and inclusive leadership; and a sense of belonging within one's workplace unit. The importance of group membership stems from the common desire for a sense of belonging. Belongingness has been defined as the desire to obtain abiding, positive relationships. This desire is especially prevalent in social settings such as work where full-time employees spend approximately one-third of their waking hours and communication and collaboration with others is critical (Rosso, Dik et al., 2013; 2010). Membership in workplace units conveys a sense of collective identity that will feel especially significant when the group is integral to the goals of the organization and membership is exclusive (Rosso, 2010). Meaning at work is associated with a sense of self-worth and fulfillment derived from affirmation and support indicative of strong interpersonal relationships.

Organizations can foster Meaning at Work by having leaders highlight how the work contributes to the greater good, and by employing practices that necessitate collaboration and information sharing (Pratt & Ashforth, 2003). Employees will naturally form relationships with colleagues, supervisors, and other stakeholders of the organization. Policies and practices give organizations the opportunity to craft the circumstances and characteristics of these interactions in order to increase the likelihood that they will be experienced as meaningful (Dik et al., 2013). As in Meaning in Work,

recruitment, selection, and socialization play a part in the creation of Meaning at Work (Pratt & Ashforth, 2003). Recruitment and selection attempt to ensure new hires have the proper skills and disposition for the workplace or unit. Socialization, refers to a standardized orientation program conducted by an experienced employee to indoctrinate new hires into the culture, frame the attributes of the unit, and provide instruction on policies and practices. Team-based work groups and practices designed to include information sharing, and interdepartmental integration are also supportive of meaningful relationships. At a higher level, organizations can foster Meaning at Work by employing practices that establish a workplace community of mutual support and respect, and by recognizing employees' lives outside work. Often referred to as family-like dynamics, these practices are associated with higher job satisfaction, work-group cohesion, proficient teamwork, solidarity among members, and organizational commitment (Pratt & Ashforth, 2003; Rosso, 2010). Practices that facilitate a family-like atmosphere at work center around a style of leadership that: demonstrates an understanding of employee problems and needs, encourages and supports the development of new ideas, involves employees in decision-making, provides constructive feedback, and is impartial toward members (Pratt & Ashforth, 2003). Practices that show respect for employees' family lives cause employees to feel valued and cared for. These practices include flexible work schedules or arrangements such as allowing parents to work only during school terms, the ability to swap shifts, or paid leave to be with family in an emergency. Management can further blur the lines between work and family life by inviting family to social functions, and recognizing celebratory or commemorative moments in employees' lives. As in Meaning in Work, this blending of work and identity contributes to a meaningful experience (Pratt & Ashforth, 2003).

Membership in a work group also aids in the cultivation of meaning through interpersonal sense-making. Some scholars argue that meaning is primarily a social construct that is the product of individual, social, and institutional influences (Dik et al., 2013; Rosso, 2010). Although meaning isn't limited by occupation, "there are likely a limited number of meaning archetypes in a given society" (Pratt & Ashforth, 2003). Ideas about which work roles are meaningful will be shared among group members who have a personal stake in reinforcing this understanding.

### **Summary of the Literature**

The central theme of this chapter was the development and function of HR Climate. HR Climate reveals how HPWS can benefit employee and organizational performance by explaining that employee's experience of the policies and practices of an organization will affect their actions and behaviours; and that these experiences will be affected by internal and external contextual factors as well as societal culture. HR Climate specifically looks to explain the effects of HPWS on employee and organizational outcomes.

HPWS are a set of interconnected HR management practices focused on the recruitment, development, and management of employees. This system of practices has been shown to improve measures of performance such as productivity, financial performance, and quality of service. Developed in the manufacturing industry, relatively little research has explored the efficacy of HPWS in healthcare. Studies that have been conducted argue that HPWS have organizational, practitioner, and patient-level benefits. Benefits to healthcare professionals include decreased stress and burnout, and increased job satisfaction (Bartram et al., 2012; Fan et al., 2014; Harmon et al., 2003; Leggat et al., 2011), while organizations may see decreased costs of service and lower turnover

(Harmon et al., 2003). Finally, studies of HPWS in healthcare organizations report benefits to patients in the form of decreased medication errors and mortality (Lee et al., 2012; Leggat et al., 2010).

Despite evidence of benefits there is no agreed upon theoretical framework accounting for how HPWS practices affect performance. The problem is due to inconsistent results across industries, no definitive list of practices, and differing antecedents and outcome measures. In addition many papers on the results of HPWS fail to mention a theory, further clouding the ability to form a consensus. When theories are used, three are most commonly mentioned: resource based view (RBV), contingency theory (CT), and the abilities, motivation, opportunity (AMO) framework. Resource based view uses a human-capital perspective to equate employees with a valuable resource who can be developed to provide an advantage that will be difficult for competing firms to quickly adopt. Contingency theory states that the ability of HPWS to improve performance is "contingent" on internal and external contextual factors such as a firm's size and age, market volatility, and competition. The abilities, motivation, opportunities framework says HPWS improve performance by enhancing employee's knowledge and skill, improving motivation, and opening up opportunities to contribute ideas, collaborate with colleagues, and make decisions. Acknowledging the impact of both organizational- and employee-level effects, scholars have begun amalgamating these three theories into one comprehensive framework.

HR Climate improves on these theories by accounting for employees' perceptions of the policies and practices and acknowledging the influence of internal and external contextual factors. The HR Climate model also takes into account the influence of the societal culture. Specifically, whether a society is very deferential to authority or more

inclined to demand democratic forms of decision-making (Power-Distance). It considers how highly team membership is valued along with the equal distribution of resources (Institutional-Collectivism), and how likely people are to identify with and express solidarity to a particular group (In-group Collectivism).

An addition to the original model of the HR Climate research is the concept of Meaningfulness of Work, which explains why people find meaning in- and meaning at work. Meaning in work expresses a sense of identity with the job role because it is considered to benefit others and to be an outward representation of how the individual sees his or herself. Meaning at work looks at what makes the work itself meaningful, such as the tasks and responsibilities, but also considers the role of group membership. The basic difference between the concepts of meaning in- and at work in this study is:

Meaning in Work asks participants if being a nurse is personally meaningful, whereas,
Meaning at Work, asks participants if the tasks and/or work group where they are currently employed provide a sense of meaning. Benefits of finding Meaningfulness of Work include reduced stress and intention to quit, and increased job satisfaction and personal fulfillment.

Meaningfulness of Work can be fostered by the same sets of practices that comprise a high performance work system. For example, sophisticated recruitment helps ensure employees have the knowledge and skills to do the work, and that they will contribute to work-group cohesion. Development and training increases firm-specific skills - helping employees further identify with the position.

These two concepts, HR Climate and Meaningfulness of Work are used in this research to explain how and why HPWS practices affects performance. This model will now be discussed in detail.

### **Chapter 4: Conceptual Framework**

The conversation regarding HR management is slowly evolving from one about which practices improve outcomes to one about systems and processes. However, as stated in Chapter 3, relatively few studies attempt to uncover the processes through which HPWS improve employee and organizational outcomes (Boselie et al., 2005; Messersmith et al., 2011). In a systematic review of the literature, Boselie et al. (2005) found that since 2000, more than half of the articles that specifically reference the 'black box', employ the Abilities-Motivation-Opportunities (AMO) framework as a causal mechanism. The AMO model explains the effects of HPWS practices by arguing that the system increases employees' ability to do the work (their knowledge and skills), intrinsic motivation, and opportunity to participate (Marin-Garcia & Tomas, 2016). Two other commonly referenced frameworks are contingency theory and the resource based view (RBV) of the firm. Contingency theory fills a gap in the AMO framework by accounting for the influence of internal and external contextual factors. According to contingency theory, in order to be successful, HPWS practices must align with the strategic goals of the organization, which will be dependent upon multiple contextual factors such as the level of competition in the market (Rondeau & Wagar, 2001). The RBV at its most fundamental level, sees employees as a valuable resource that can be further developed and leveraged into a competitive advantage through HPWS practices (Messersmith et al., 2011). The RBV and AMO models focus on employee-level effects of HPWS practices, while contingency theory focuses on the organization and its context. Recognizing that separately these theories fail to explain the comprehensive effects of HPWS, Boselie et al., (2005) identified a growing trend among HR management scholars of combining RBV, contingency theory, and AMO into a broader framework to better account for the

individual- and organizational level effects. The authors also argued that in order to truly understand the mechanisms and circumstances of the HPWS - performance link, researchers must be willing to incorporate 'multilevel' research and include methods borrowed from the field of organizational behaviour in order to understand the impact of HR practices on employees. This approach is supported by Takeuchi, Chen, and Lepak (2009); and Li, Frenkel, and Sanders (2011) who recognized the need to understand how workplace policies and practices are perceived by employees. Thus, Boselie et al. (2005) conclude that 'climate,' may be the best explanation of the black box.

This thesis is guided by a conceptual framework in which Human Resource (HR) Climate along with Meaningfulness of Work are used to explain how and why HR policies and practices lead to performance outcomes. The current research constitutes phase III of larger program of research that proposes HR Climate as the missing link between HPWS practices and performance. The construct of HR Climate is a product of two previous phases of research and is a recent addition to the HR management literature. As such, its conceptualization and development will be explained below.

#### **Development of the HR Climate Construct**

HR Climate grew out of research on organizational climate which has been defined by Tagirui, Litwin, and Barnes (1968 p. 25) as, "the relatively enduring quality of the total organizational environment that is a) experienced by the occupants, b) influences their behaviour, and c) can be described in terms of the values of a particular set of characteristics". However, this conceptualization proved too broad to explain how HR practices enhance performance. This deficit prompted Schneider et al. (1998) to conclude that climate must have a specific focus that aligns with an organization's strategic objectives. In other words, the policies, practices, and values of the organization must

support its goals - creating a climate 'for something (Schneider et al., 1998). For example, a manufacturing firm may want to create a climate for safety or innovation.

Building on this idea, Dastmalchian et al., (2015) began the first phase of this research in 2008 with the aim of conceptually and empirically developing the construct of HR Climate and to determine how HR Climate affects employee perceptions of HPWS practices. HR Climate is comprised of dimensions drawn from organizational climate research (Patterson et al., 2005) and is defined as, "the shared perceptions of organizational members concerning the HR practices, behaviours, and procedures that are rewarded and supported in the workplace" (Dastmalchian & Steinke, 2017, p. 5). As stated in Chapter 3, HR Climate is considered an intervening construct that is affected by HPWS practices, and societal culture; and, in turn, affects employee and organizational outcomes. This definition emphasizes the roles perception and experience have on employee responses to HR management.

Phase I of the current study began in 2011 with researchers from Canada, Turkey, and Australia looking at how HR Climate moderates the effects of HPWS practices on performance outcomes. Using a qualitative, exploratory approach, the team was able to draw out dimensions of organizational climate specific to human resource management. The goal of this phase was to establish a conceptual framework of HR Climate that explains the effects of HPWS practices on employee and organizational performance. Relying on insights from important studies of societal culture such as the 62-country GLOBE study (mentioned in Chapter 2), the team also compared results among the three nations. Data collection involved interviews with a random sample of 50 HR managers drawn from a variety of industries including, health, education, recreation, accommodation, and finance (Dastmalchian et al., 2015). Participants were asked to

answer questions regarding factors demonstrated in the literature to affect employees' perceptions of climate; these included: contextual data such as age, history, and whether the organization is public or private; and questions related to HPWS practices affecting the largest occupational group including recruitment, training opportunities, salary, and benefits. Managers were also asked about current challenges facing human resource management. Finally, HR managers were asked to define and explain how specific aspects of HR climate are defined and measured in their organization. Thus the conceptualization of the HR Climate construct originated with working HR practitioners (*ibid*).

Results of this initial phase of research revealed that some HR Climate dimensions are universally supported. For example, a majority of managers emphasized the importance of practices designed to increase employee engagement. Interview responses could also be categorized along four dimensions of the competing values framework (Quinn & Rohrbaugh, 1983) (CVF): 1) Control, characterized by a focus on compliance, strict formalized rules and procedures, and tightly managing employee performance; 2) Collaboration and Creation, characterized by innovation, flexibility, and teamwork indicative of 'open systems' or 'human relations' dimensions of the CVF; 3) competition, characterized by a focus on efficiency and productivity; and 4) Family-orientation characterized by an atmosphere of care, concern and a pedagogical relationship between staff and management.

Results also revealed cultural differences based on the prominence of individual dimensions within each country. For example, in line with results of the GLOBE study, Turkey placed more importance on practices that promote a family-orientation among

staff and management, while Canada placed higher value on competition, and Australia favoured control (Dastmalchian et al., 2015).

The conceptual model that resulted from phases I and II, argues that HR Climate accounts for the processes in the black box. In this model, HR Climate is considered an intervening construct that is shaped by HPWS practices and organizational context including the history, structure, and framework of the organization; and influences employee and organizational outcomes. HR Climate explains how HPWS practices are viewed (i.e. as Supportive, or Innovative) and, together these dimensions create a climate in which the organization is perceived as: 1) concerned with employees' well-being; 2) investing in their development; and 3) encouraging participation.

Like RBV, and Contingency Theory, HR Climate is situated at the organization level between practices and outcomes, and, as just stated, the concept explains, how HPWS practices improve outcomes, but only partially explains why by adding the effects of societal culture and organizational context.

It is this author's contention that Meaningfulness of Work addresses a gap in the HR Climate model by accounting for *why* HPWS practices result in positive employee and organizational outcomes. Meaningfulness of Work, also addresses individual-level perceptions of HPWS practices. As discussed in Chapter 3, work is experienced as meaningful and significant when it is thought to serve a greater good, reinforces a positive self-image, and is a part of a supportive community. Pratt and Ashforth (2003, p. 311) distinguish meaning derived from group membership from meaning derived from the "intrinsic qualities of the work" as Meaning at - and Meaning in Work. Together these two components form the concept of Meaningfulness of Work. The authors argue that HR practices can be evaluated based on the extent to which they foster Meaning in- or

Meaning at Work. As alluded to in Chapter 3, practices that best contribute to the experience of meaningful work are HPWS practices. High performance work systems practices create meaning in and at work by engendering a sense of belonging and community, and/or identity with the organization (Pratt & Ashforth, 2003). The practices involve selecting candidates with the ability to do the work, developing organization-specific knowledge and skills, and explaining how the work benefits the wider society. High performance work systems practices also promote a sense of community and family through selection of candidates most likely to maintain work-group cohesion, allowing for flexible work schedules, and acknowledging employees' family and involving them in work functions. These practices "foster flow experiences that dissolve barriers between self and work" making the experience of work more meaningful (Pratt & Ashforth, 2003, p. 320). Coupled with HR Climate, these concepts explain how and why HPWS practices results in positive employee and organizational outcomes.

As in previous phases of this research, input and output variables were gathered using interviews and document analysis (qualitative), while information regarding the perception of HR Climate and Meaningfulness of Work were gathered through the employee survey (quantitative). Consequences of this method mean independent and dependent variables could not be analyzed using the same technique. Therefore, the model has not been formally tested, but rather, inferences are made based on previous research of the HR Climate dimensions (Patterson et al., 2005), results of the GLOBE study (R. J. House et al., 2004), and Pratt and Ashforth's explanation of Meaningfulness of Work (Pratt & Ashforth, 2003).

As illustrated by the model below (Figure 1), HR Climate and Meaningfulness of Work are considered intervening variables that are affected by HPWS practices, and the

context and history of the organization. In turn, it is assumed that HR Climate and Meaningfulness of Work influence employee and organizational outcomes.

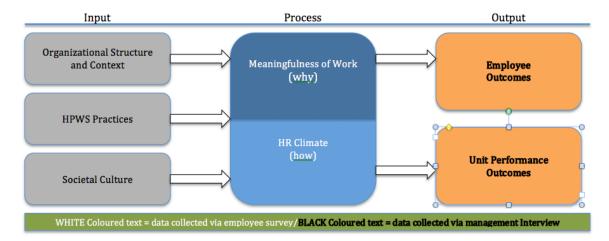


Figure 1: Conceptual Framework

# **Chapter 5: Research Design**

The primary objective of this research is to examine how the constructs of HR Climate and Meaningfulness of Work are affected by HR policies and practices; the structure and context of the organization and how, in turn, these constructs influence employee and organizational performance outcomes in healthcare. This research comes at a critical time for public health across Canada, which like many other nations is facing a growing shortage of nurses. Therefore, understanding what policies and practices attract and retain caring, qualified staff is an important step in preserving the quality of the healthcare system.

#### Research Method

The research uses a mixed method case study design following Yin (2014) with data collection over 14 months. Case study design is chosen when the researcher wants to answer the questions of 'how and/or why' a particular phenomenon occurs while acknowledging the effects of its contemporary context (Yin, 2014, p. 4). In this instance, the context includes political, social, and organizational factors. The organization under study is Island Health, which is one of five regional health authorities within the province of British Columbia. The researcher has chosen to conduct a mixed method case study of eight different units within the organization, which may be referred to as 'cases' (N=8).

The strength of case study research lies in the use of multiple sources of evidence. Yin (2014) recommends collecting data from relevant historical and contemporary documents, interviews, observation, and 'physical artifacts,' (p. 83). This method can also follow multiple, well-tested paths. For example, an explanatory or exploratory design, and focus on single or multiple individuals, organizations, or processes (Yin, 2014). In addition, multiple units may be analyzed using a holistic or embedded design. In holistic

design, data from multiple units is aggregated and examined as a whole 'case'. In contrast, an embedded case study examines multiple subunits within a larger 'main' unit of analysis. This study uses an embedded design in which the main unit of analysis is the organization of Island Health and the subunits are the eight individual workplaces. Multiple cases are preferred when a variety of outcome variables will be included in the study (Yin, 2013). An embedded design also enables multiple levels of analysis by allowing the researcher to look for common themes, examine the differences among subunits, and aggregate the data to view systemic effects of a process or protocol on the main unit of analysis. Given the nature of multi-level analysis, embedded case study designs may also employ qualitative and quantitative techniques.

Exploratory case study research is used when the researcher wants to investigate the causal relationships between a specific set of input and output variables. The current study investigates the effects of HPWS practices and contextual variables on the constructs of HR Climate and Meaningfulness of Work, and, in turn, the moderating effect of these constructs on specific employee and organizational outcome variables. When case studies attempt to explain a phenomenon, usually with the help of qualitative methods, the researcher must address issues of internal validity and reliability. Adopted from quantitative research methods, these concepts don't strictly refer to statistical protocols for the number of required participants and formulas for ensuring construct validity. Instead, ensuring validity in exploratory case research begins with clearly and thoroughly defining the constructs, and choosing measures that have been shown in the literature to accurately reflect those constructs. Triangulation further bolsters results by confirming similar findings across an array of data such as documents, interviews and

artifacts. Finding similar results across multiple sources of data also adds credibility to construct validity.

A final method used in this study to improve validity is pattern matching. Pattern matching compares the empirical findings of a study with pre-defined propositions and is considered the ideal method of data analysis in case study research (Yin, 2014). The more closely the findings 'match' the propositions, the stronger the argument for internal validity. Additionally, as Yin (2014, p. 4) states, "if for each outcome, the initially predicted values have been found, and at the same time alternative patterns of predicted values have not been found, strong causal inferences can be made".

The main propositions of this research are:

- A consistent set of practices will result in a similar perception of HR Climate across units;
- 2. Similar HR Climate perceptions will result in similar employee outcomes within the units;
- A consistent set of practices will contribute to positive perceptions of Meaningfulness of Work across units; and
- 4. Positive perceptions of Meaningfulness of Work will contribute to positive employee outcomes within each unit.

In social science research, (such as the current study), it is unlikely that all findings will precisely match the propositions. Therefore, it is incumbent upon the researcher to explain how slight variations to the independent or dependent variables could explain the discrepancy and likewise, convincingly argue that without these variations, outcomes would reflect predictions. Case study research is uniquely equipped

to account for the effects of 'outside forces' on the variables due to its inclusion of contextual factors and multiple sources of data collection.

Reliability refers to the integrity of the methods used as assessed by the likelihood that an outside researcher could reproduce the study. To be clear, the reliability does not depend on the reproducibility of results, but only the methods of research. Like validity, reliability in case research requires detailed documentation of the measures and procedures.

In addition to these methods, two more considerations were made during the planning stage of this research, 1) to use a mixed methodology and 2) to conduct a semilongitudinal study. Mixed method research combines quantitative and qualitative data collection and analysis methods allowing the researcher to take advantage of the strengths and offset some of the weakness of the individual methods. For example, quantitative research cannot claim to explain how or why input variables affect output variables, while qualitative research restricts the ability of the researcher to generalize findings. In the current study, a mixed method approach was also necessary to ensure the most accurate information was collected for each variable. The Conceptual Model (See Figure 1 reproduced below) illustrates how data collection was divided among the various sources of information.

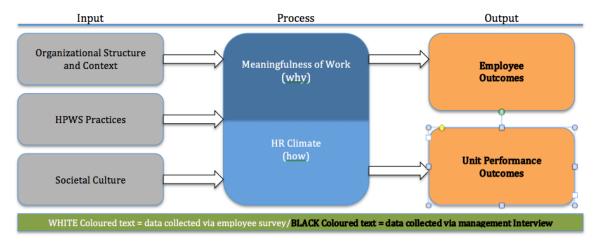


Figure 1: Conceptual Framework

Finally, longitudinal research involves gathering data at multiple points in time "from the same units of observation (the units could be individuals, teams, organizations, etc.)" (Ployhart & Vandenberg, 2010). Although data was gathered from the same units at two points in time, this study cannot be classified as longitudinal in the strictest sense. Due to requirements for maintaining confidentiality, the researcher was unable to guarantee the same members of the LOG for each unit participated in both phases of research.

Data collection occurred at two points over a 14-month period. This step was added to assess the impact of any major changes affecting the units and thereby any change to the perception of the HR Climate. It also reduces the likelihood of reverse causality. In the current study, one of the objectives is to understand how HR Climate affects outcomes. In a cross-sectional study, the author cannot be sure current HR policies are responsible for past employee and organizational outcomes. Several authors have argued that the preponderance of cross-sectional studies make equivocal any claims that HPWS improve performance measures (Boselie et al., 2005; Harris et al., 2007; Wright & Boswell, 2002).

#### **Data Collection**

This study was funded by a grant from Island Health. Once ethical approval was obtained, the Human Resource Project Manager for Island Health distributed an email to the clinical directors and department heads (managers) across the organization informing them of the objectives and requirements of the study and asking for an expression of interest. Interested parties were given contact information for the author (Ms. Ruth Ann Rebutoc). At this point an email with several attachments was sent explaining the purpose and premise of the study including the Employee Survey Invitation to Participate, the Interview Participant Letter of Information and Consent, a copy of the Employee Survey, a data flow diagram (refer to Appendices A through D), a copy of the ethical approvals from the University of Lethbridge and Island Health, and the Conceptual Model. The email also explained that data collection would include an interview with a director, department head, and HR consultant for each unit (lasting 45 to 60 minutes), in addition to a survey of the largest occupational group. If the director and department head continued to express interest, dates and times were set for the interview portion of data collection. Once a director and department head for each unit agreed to participate, a similar introductory email was sent to the HR consultant (including the same attachments) asking if he or she would like to participate. A department head, director and HR consultant were interviewed for each unit.

Upon completion of the interview, department heads were sent an email that constituted the "employee invitation to participate" (See Appendix C). The email was designed so that it could be forwarded directly to staff via a distribution list of the largest occupational group (LOG). The email explained the premise of the study, how anonymity would be maintained, and the participation requirements (i.e. time commitment and

request to participate in two phases of research). The email also included a link to the survey, hosted by the online survey platform Qualtrics. Some paper copies of the survey were also made available with individual sealed envelopes. Paper copies were deposited into a secure box by the participant and collected by the author.

# **Setting**

The study was conducted within eight (N=8) individual units of Island Health, one of five regionally based health authorities in British Columbia. Island Health operates as an integrated health network connecting family physicians, hospitals, and primary and residential care. This integration allows care to be optimized for each of the more than 765,000 residents within the Island Health network including Islands in the Georgia Strait, and some communities between the Powell River and Rivers Inlet (Vancouver Island Health Association, 2013). Operating a budget of \$2.2 billion, Island Health employs nearly 20,000 healthcare professionals, contracts with 1,900 physicians, and manages over 6,000 volunteers.

### Sample

Participating units included: i) an intensive care (ICU) unit; ii) an urgent care and support clinic; iii) a surgical services unit; iv and v) two community services units; vi) a palliative care unit; vii) an acute care unit; and viii) a medical relief pool. Units ranged in size from 31 to 532 total employees and from 27 to 354 members of the largest occupational group. Response rate by unit ranged from 10 to 50 percent of the LOG (N=170) in phase one, and from 10 to 52 percent of the LOG (N=189) in phase two. Members of the LOG for the community services units are "community health workers" (CHW) in all other units, members of the LOG are "nurses" including Registered Nurses (RN), Licensed Practical Nurses (LPN), and nurses' aides. The decision to categorize

RNs, LPNs, and nurses' aides as nurses for the purpose of this study was made for a few specific reasons. Registered nurses, LPNs, and nurses' aides have different responsibilities but all play a critical role in the continuum of patient care. More practically, RNs and LPNs are members of the British Columbia Nurses' Union and covered by the same collective agreement – meaning the same policies, practices, and procedures apply. Nurses' aides and community health workers are not members of the same union or covered by the same collective agreement. However, their individual collective agreements mandate or preclude the same HPWS practices under study. Additionally, during data collection, it was learned that the organization of Island Health ostensibly treats these two categories of healthcare professionals as interchangeable, meaning if a community health worker chooses to move from community services to a facility, that person would be considered a nurses' aide.

Demographic information revealed that in both phases roughly 90 percent of survey participants were female and between 40 and 49 years of age. These data are inline with current healthcare literature that points to a majority female workforce, of about 43 years of age (Canadian Institute for Health Information, 2017). Questions regarding employment were also similar in both phases revealing the mean amount of time participants had been employed as nurses was between five and ten years. Further detail revealed the average time employed with the health site and unit were both between two and five years.

In an effort to see how many people participated in both phases, two questions were added to the survey in phase 2:

- "Did you participate in the first round of this research by completing the same survey in the fall of 2016?
  - Yes

- No
- I don't remember/I'm not sure
- If you previously completed this survey in the fall of 2016, were you working in the same unit?
  - Yes
  - No
  - I did not previously complete a survey

Only 26 percent of staff participated in both phases, and of those, an average of only 55 percent were members of the same unit in phase one.

# **Data Analysis**

As stated above, this research used a mixed method design. Quantitative data consisted of the employee survey and was analyzed using the Statistical Package for Social Statistics (SPSS). Descriptive statistics, Multivariate Analysis of Variance (MANOVA), and Analysis of Variance (ANOVA) were used to assess participants' perception of the study constructs along with some outcome variables, and to determine if significant differences existed among units. Reliability analysis and factor analysis were also used to identify the latent variables of each scale and determine if the scales were dependable representations of the constructs they were supposed to measure.

Qualitative data included interviews with directors, department heads, and HR consultants (N=18) as well as document analysis and was used to collect information on the independent and some dependent variables of this study. Independent variables include information on decision-making, the structure and context of the organization, and the presence of HPWS practices. Qualitative data was analyzed using triangulation of data, thematic analysis, and pattern matching.

Documents analyzed included collective bargaining agreements, employee handbooks of the policies and practices in place in Island Health, organizational charts,

results of past employee surveys, information regarding the electronic record system known as IHealth, and documents detailing the reorganization of the leadership hierarchy. Triangulation of information across these sources of data was used to increase internal reliability. For example, when asked about hiring practices, almost all interviewees said the practices were prescribed by collective agreements between nurses or community health workers and the organization. Specifically, interviewees said the collective agreements mandate that the most senior, internal applicant fill open positions. This information was then confirmed through analysis of the respective collective agreements.

Thematic analysis was used to analyze the open-ended interview questions. It is a more flexible technique for analyzing qualitative data as it does not require adherence to a theoretical framework or large volumes of text. It is considered a reliable technique for finding themes, discerning meaning, and establishing categories from textual data (Alhojailan, 2012; Vaismoradi, Turunen, & Bondas, 2013). Ryan and Bernard (2003) use eight indicators to establish themes, these are: repetition, indigenous typologies (jargon), metaphors and analogies, transitions, contrasts and similarities, linguistic connectors indicating a spatial or time-dependent relationship, missing data (information that is missing because it is assumed or intentionally omitted), and theory-related material. Given the small amount of information provided for each question, the most common indications of a theme were repetition, metaphor, and similarities and contrast. Although examples of linguistic connectors and indigenous typologies were also present. Results of these questions are discussed below.

As stated above, pattern matching was also used to compare the empirical findings of this research with pre-defined propositions.

### **Instruments and Measures: Survey (Quantitative)**

Staff were surveyed regarding their perceptions of the various dimensions of HR Climate. The employee survey (See Appendix D) was divided into six sections with a total of 55 questions. Completion time was approximately 20 minutes. An explanation of each measure is provided below.

**Demographic Questions.** The first section asked participants to identify their job title and unit followed by nine demographic questions including age, sex, time on the job, and level of education.

HPWS practices. Participants were asked about the presence or application of 17 HPWS practices such as performance appraisals, training and development opportunities, the frequency of meetings with managers or supervisors, attitude surveys, problem solving or quality councils, and flexible work practices.

HR Climate. The next section focused on the construct of HR Climate (Cronbach's alpha phase one: .87; phase two: .86). This section asked questions aimed at understanding staff perception of the HR Climate in their unit. HR Climate is a construct composed of eight dimensions that assess key aspects of human resource management. For example, the dimension of *Involvement* asks employees if they feel they are able to participate in the decision-making process, and if their input is taken into account when changes are made that directly affect their work. The questions for each dimension are aimed at understanding participant's *perception* of the issue. For example, "People feel decisions are frequently made over their heads". The scales used to assess these measures were developed by Patterson et al. (2005), are well established in the literature on organizational climate, and were used during previous phases of this research. Items for each measure are rated using a four-point Likert scale from one (1=definitely true) to four

(4=definitely false). The description of each dimension along with results of reliability and exploratory factor analysis are provided below. Factor Analysis was conducted using a varimax rotation with maximum likelihood procedure. For results of reliability and factor analysis for phases one and two, refer to Tables 2 and 3. (Factor loadings displayed in Appendix H.)

*Welfare*. Welfare is a four-item measure (Cronbach's alpha .89) that asks if the organization attempts to be fair and caring in its actions toward staff. Factor analysis revealed a single factor solution with an eigenvalue of 2.68 that explained 67 percent of the variance. In phase two the measure (Cronbach's alpha .91) again revealed a single factor solution with an eigenvalue of 2.89 that explained 72 percent of the variance.

Autonomy. Autonomy is a five-item measure (Cronbach's alpha .76) that tries to understand the level of control employees feel they have over work-related decisions. Although reliability was acceptable, factor analysis revealed too many items with low communality (below .4). Therefore, this measure was dropped from the analysis.

*Involvement*. Involvement explores how 'involved' employees feel they are able to be in decision-making and if there is collaboration and information sharing among departments. Involvement was assessed using a three-item measure (Cronbach's alpha .82). The original scale has six items, but three were dropped due to low communality (below .4). Factor analysis revealed a single factor solution with an eigenvalue of 1.88 explaining 63 percent of the variance. In phase two the measure (Cronbach's alpha .84) revealed a single factor solution with an eigenvalue of 1.94 that explained 65 percent of the variance.

*Integration*. Integration is a five-item measure (Cronbach's alpha .81) that asks participants if there is cooperation and collaboration or suspicion and mistrust between

departments. Although reliability was acceptable, factor analysis revealed too many items with low communality (below .4), and therefore, this measure was dropped from the analysis.

Support. Support refers to how approachable and helpful management are perceived to be by staff. Specifically, are managers easy to approach, do they understand the problems faced by staff, and give good advice? Support was assessed on a five-item measure (Cronbach's alpha .89). Factor analysis revealed a single factor solution with an eigenvalue of 3.14 that explained 63 percent of the variance. In phase two the measure (Cronbach's alpha .91) revealed a single factor solution with an eigenvalue of 3.32 that explained 66 percent of the variance.

Training and Development. Training and Development asked participants if they feel the organization provides enough training when introducing new "equipment, systems or processes", and if the organization encourages staff to "develop new skills". Training and Development Climate was assessed using a three-item measure (Cronbach's alpha .74). The original measure uses a four-item scale, but one item was dropped due to low commonality (below .4). Factor analysis revealed a single factor solution with an eigenvalue of 1.49 that explained 50 percent of the variance. In phase two the measure (Cronbach's alpha .78) revealed a single factor solution with an eigenvalue of 1.66 that explained 55 percent of the variance.

*Innovation*. Innovation was assessed using a five-item measure (Cronbach's alpha .86) that asks employees if the organization is flexible, quick to adapt, and encourages new ideas. The original scale has six items, but one was dropped due to low communality (below .4). Factor analysis revealed a single factor solution with an eigenvalue of 2.75 explaining 55 percent of the variance. In phase two the measure (Cronbach's alpha .88),

revealed a single factor solution with an eigenvalue of 3.00 that explained 60 percent of the variance.

Family Orientation. Family Orientation (Cronbach's alpha .92) asks employees to what extent managers foster a family-like atmosphere in the workplace. This scale is a modification of a measure developed by Aycan et al. (2006; 2000). Family Orientation is a five-item measure also developed by Aycan et al. (2006; 2000) but only three items were used in this study in order to be consistent with previous phases of the HR Climate research. Factor Analysis was conducted using varimax rotation and maximum likelihood procedure with one factor extracted. One factor with an eigenvalue of 2.41 explained 81 percent of the variance. In phase two, the measure (Cronbach's alpha .95) revealed a single factor solution with an eigenvalue of 2.59 explaining 86 percent of the variance.

**Employee Related Outcomes**. The survey also measured three individual-level, and four-unit level outcomes. At the individual level, participants were asked about their level of Job Satisfaction, Engagement, and Work-Life Integration.

**Job Satisfaction.** Job Satisfaction was measured as a single item: "Taking everything into consideration, how satisfied are you with your job?" that participants were asked to rate on a five-point Likert scale with options ranging from one (1=very dissatisfied) to five (5=very satisfied).

**Engagement.** Engagement used two items (Cronbach's alpha phase one .89; Cronbach's alpha phase two .88) to ask employees how often they felt enthusiastic or energetic at work. These items were measured on a seven-point Likert Scale from one (1=always) to seven (7=never) with a mid-point of four (4=sometimes).

*Work-Life Integration*. Work-Life integration was measured using a single item: "Nowadays, I seem to enjoy every part of my life equally," that participants were asked to rate on a four-point Likert scale from one (1=definitely true) to four (4=definitely false).

Participants were also asked about four unit-level outcome or performance measures. These four measures, Efficiency, Effort, Pressure, and Quality were developed by Patterson et al. (2005). Each measure originally had five items, however, consistent with previous phases of the HR Climate research, only three items were used in this survey. The measures use declarative statements about each concept, such as, "Management require people to work extremely hard," and then ask participants to evaluate the statement on a four-point Likert scale from one (1=definitely true) to four (4=definitely false.)

*Efficiency*. Efficiency (Cronbach's alpha .85) uses a three-item scale and focuses on the economical use of time and money. The scale produced a one-factor solution with an eigenvalue of 1.983 explaining 66 percent of the variance. In phase two the measure (Cronbach's alpha .83) again revealed a single-factor solution with an eigenvalue of 1.89 explaining 63 percent of the variance.

*Effort*. Effort (Cronbach's alpha .79) uses a three-item scale with statements to evaluate the levels of discretionary effort and enthusiasm of colleagues. Factor analysis produced a one-factor solution with an eigenvalue of 1.72 explaining 57 percent of the variance. In phase two the measure (Cronbach's alpha .84) revealed a single-factor solution with an eigenvalue of 1.91 explaining 64 percent of the variance.

**Quality**. This measure, (Cronbach's alpha .87) seeks to understand if individuals and the organization place emphasis on quality performance. This scale originally had three items. However, one was dropped due to low communality (below .4) resulting in a

two-item scale. Factor analysis revealed a one-factor solution with an eigenvalue of 1.77 and explained 89 percent of the variance. In phase two the same item had to be dropped from the measure (Cronbach's alpha .87). Factor analysis revealed a one-factor solution with an eigenvalue of 1.77 that explained 89 percent of the variance.

**Pressure**. The items in this scale ask about pressure in relation to individual workloads, demands from management, and the pace of work. The majority of the items in this scale had low communality (below .4). Therefore, this scale was dropped from the analysis.

Table 2. Results of Reliability and Factor Analysis Phase 1

Variable	Mean	SD	KMO	alpha	eigenvalue	% Variance
Welfare	2.54	.63	.81	.89	2.68	67.00
Involvement	2.87	.60	.69	.82	1.88	62.75
Support	2.36	.59	.88	.89	3.14	62.79
Training	2.64	.63	.68	.74	1.49	49.52
Innovation	2.84	.57	.83	.86	2.75	54.93
Family	3.02	.65	.77	.92	2.41	80.45
Orientation						
Efficiency	3.18	.62	.72	.85	1.99	66.45
Effort	1.97	.50	.70	.79	1.72	57.45
Quality	2.19	.68	.50	.87	1.77	88.72

Table 3. Results of Reliability and Factor Analysis Phase II

Variable	Mean	SD	KMO	alpha	eigenvalue	% Variance
Welfare	2.57	.63	.83	.91	2.89	72.27
Involvement	2.92	.65	.71	.84	1.94	.65
Support	2.47	.60	.88	.91	3.32	66.36
Training	2.68	.60	.68	.78	1.66	55.42
Innovation	2.86	.56	.85	.88	3.00	59.96
Family	3.13	.64	.76	.95	2.59	86.29
Orientation						
Efficiency	3.23	.61	.71	.83	1.89	62.96
Effort	1.77	.61	.72	.84	1.91	63.55
Quality	2.31	.73	.50	.87	1.77	88.69

Meaning in Work. As previously stated, Meaning in Work contributes to greater job satisfaction and work performance because it is an outward expression of how the individual wishes to see his or herself. It is associated with conveying a sense of purpose and often seen as serving a greater good. Meaning in Work was evaluated using the Work-Life Questionnaire developed by Wrzesniewski et al. (1997). This portion of the survey used three separate paragraphs to determine whether participants viewed their work as a Job, Career, or a Calling. Without using these monikers, a person is described in each paragraph as 1) using the job as a means to an end (Job); 2) viewing the job as a wrung in the ladder to a better position (Career); or 3) an integral part of the person's life and identity (Calling). After reading each paragraph participants were instructed to rank each one based on how closely they could relate to each individual on a four-point Likert scale of 1: "very much," 2: "somewhat," 3 "a little," or 4 "not at all". Following Wrzesniewski et al. (1997), the paragraph each individual rated the highest was used as his or her response for Meaning In Work, while the other responses were discarded.

Meaning at Work. Meaning at Work was evaluated using the "Experienced Meaningfulness" section of the Job Diagnostic Survey (JDS) developed by Hackman and Oldham (1975). This measure (Cronbach's alpha .62) uses four items on a seven-point Likert scale from one (1=strongly disagree) to seven (7=strongly agree) with a mid-point of four (4=neutral). The first two items assess how meaningful the respondent feels his or her work is, while the second two items ask if the respondent thinks his or her colleagues also view the work as meaningful. The reliability score for this scale is below the general standard of .7. Low reliability of the sub-scales is not an uncommon finding. Hackman and Oldham suggest the problem is moderate inter-correlation among the items because aspects that make a job good or bad are also correlated. However, the authors argue that

this level of inter-correlation does not diminish the information provided by the scales (Hackman & Oldham, 1975).

Unfortunately, the items in this scale also had low communality, and therefore could not be evaluated using statistical analysis. However, dimensions of HR Climate also examine qualities of Meaning at Work as defined by Pratt and Ashforth (Pratt & Ashforth, 2003), therefore this concept will still be discussed in Chapter 6.

Societal Culture. Finally, employees were asked about the construct of Societal Culture. Societal Culture, as presented in this research, is a product of the Global Leadership and Organizational Behaviour (GLOBE) Study (Javidan & Dastmalchian, 2009). This research took place in nearly 1,000 organizations across 62 societies in an effort to determine how culture affects the behaviour and expectations of organizational leadership. This study defined culture as "shared motives, values, beliefs, identities, and interpretations or meanings of significant events that results from common experiences of collectives and are transmitted across age generations" (House et al., 2002, p. 293). The GLOBE study concluded that organizational culture is a microcosm of society including the style and expectations of leadership. As stated in Chapter 4, these dimensions of societal culture help reveal why HR inputs lead to employee and organizational outcomes because they explain how these inputs are perceived. For example, in a high-power distance society, the inability of staff to participate in decision-making is likely to be perceived less negatively than in a low-power distance society.

The GLOBE study defined nine dimensions of culture, from which the HR Climate construct uses the dimensions of Power Distance (Cronbach's alpha .40), Institutional Collectivism (Cronbach's alpha .37) and In-group Collectivism (Cronbach's alpha .19). Unfortunately, the scales used for measuring aspects of societal cultural had

low reliability or communalities (below .4) making them invalid. In the previous phase of this research, these items were also found to have low reliability in Pakistan and Japan. There is likely an effect of culture on the perception of HR Climate in Island Health as seen in studies such as GLOBE, which found significant effects of culture on the expectations and implementation of leadership (Daniels & Greguras, 2014; Javidan & Dastmalchian, 2009). However, these effects cannot be measured in this study.

### **Instrument and Measure: Interview (Qualitative)**

Semi-structured interviews with department heads directors, and an HR consultant were used to gather information on input variables expected to affect HR Climate and organizational outcomes These variables are: Context, Structure, and HPWS practices. Based on research by Bartran et al. (2007), a decision was made to place more emphasis on the responses of department heads when responses among directors, department heads, and HR consultants differed about any of these variables (although all responses contributed to the qualitative results of this thesis). Bartram et al. (2007) found that managers and CEOs held differing views on the effectiveness of HRM practices and that these differences were positively correlated with the size of the organization. The authors reported, managers directly responsible for staff gave responses more in-line with staff perceptions, leaving the authors to conclude that the effects of HRM systems may become "lost in translation" as the size of an organization increases and the role of senior management becomes less interactive with staff (Bartram et al., 2007, p. 37). This argument is bolstered by authors such as Wright et al. (2001) and Boselie, Dietz, and Boon (2005), who cautioned that management may be too far removed from policies directed at staff, or may bias answers due to a desire to project a positive image of the organization. In an effort to minimize this problem, Wright et al. (2001), argue that

management are best positioned to answer questions about the implementation of specific HRM practices, and the employee and organizational outcome metrics, but employees are the best source of the effectiveness of these practices.

Interviews required approximately 45 minutes to an hour, were conducted in person or over the phone, and responses typed into the interview guide (Appendix F). The interview guide was divided into four sections with questions (N=50) about the internal and external context of the organization, the level of employee involvement in decisions, the presence of HPWS and standards for adoption, and finally questions about specific unit outcome metrics. The majority of the questions had multiple choice response options, although interviewees were encouraged to elaborate with any relevant background and contextual information. An example of a multiple-choice question dealt with external context asking, "How would you describe the degree of demand or pressure in your external market?" with options of "very low", "neither high nor low", "high", and "very high". These options enabled units to be grouped into categories from low to high. Multiple-choice options for questions regarding HPWS were used to establish if the practice was in place and if the standard for adoption had been met.

There were only three truly open-ended questions. These questions asked about the unit's relationship with the larger organization of Island Health, how the organization provided human resource support to the unit, and about any significant changes currently affecting the unit or expected to in the near future. Thematic analysis following Ryan and Bernard (2003) was used to analyze the open-ended questions.

**Context.** Context refers to the level of competition, volatility and demand in the external market. Previous research has shown that organizations in highly competitive, and volatile markets often respond by decentralizing decision-making resulting in a more

flexible, innovative workforce. The variable of Demand is an addition to this phase of the research and was added due to an expectation that it would be a significant contributor to the HR Climate in healthcare.

**Structure.** Structure is simply the number of levels in the hierarchy, and the number of units and departments.

**Decision-making**. Interviewees were also asked about specific decisions expected to affect the unit. These questions sought to determine the number and type of levels in the employee hierarchy involved in decisions and the most junior level in the hierarchy with the authority to make decisions or give significant input. Decisions included those regarding hiring and dismissals, salaries and promotions, and policies and procedures. For a complete list of decisions asked about in the interview, as well as the levels of the hierarchy, see Appendix F. Although a list of generic organizational levels or positions was taken to the interviews, this list was refined during phase one of data collection based on input from department heads and directors.

High performance work systems practices. Interviewees were asked about the existence of 17 HPWS practices. As previously stated HPWS practices are those involved with the recruitment, management, and development of employees. These practices are expected to enhance performance by improving knowledge and skill, while also increasing commitment and motivation. For a list of practices included in the study, the definitions and standards for adoption, see Table 4.

Table 4. High Performance Work Systems Practices

Category		Practice	Adoption Rate
	1	Sophisticated Recruitment: use of attitude of competency tests during recruitment	*
Skill Enhancing	2	Induction Program: A standardized orientation program with a minimum of 16 hours	100%
	3	Off-the-job Training: for more than 60% of the largest occupational group (LOG	87%
	4	Internal Labour Markets: Internal applicants given preference	100%
	5	Performance-Related Pay: At least 60% of employees receive merit or performance pay. Merit pay rewards performance by increasing the employee's salary on a long-term basis. Other forms of pay for performance are more closely related to bonuses that do not increase salary.	*
	6	Performance Appraisal: Formal performance appraisal with a manager for at least 60% of the staff in the last two years	0%
Motivation	7	Benefits: At least 3 non-pay benefits such as sick pay, more than 28 days paid annual leave, private health insurance, car or gas allowance, pension schemes	100%
Enhancing	8	Guaranteed Job Security: a formal policy of job security or no compulsory redundancies	100%
	9	Flexible Work Schedules: At least 3 family-friendly or flexible work options: working only during school terms; ability to change set hours; compressed hours; ability to reduce hours; job sharing; flexible start and stop times; working from home	25%
	10	Equal Opportunity Practices: monitoring recruitment and promotion for discrimination against age, gender, ethnic background, religion, sexual orientation, or disability	100%
	11	Team Work: At least 60% of staff work in formal teams	75%
	12	Functional Flexibility: At least 60% of the LOG are formally trained to do jobs other than their own	0%
	13	Team Briefing: At least weekly meetings between managers and staff	62%
Omm to the	14	Quality Circle: At least 60% of the LOG participate in groups focused on quality improvement	0%
Opportunity Enhancing	15	Employee Attitude Survey: Formal survey in the last two years	62.5%
	16	Grievance procedures: a formal procedure for dealing with grievances, requiring grievances to be written down, formal meeting with a manager, the right to appeal a decision	100%
	17	Consultation Committee: Committees of managers and employees that work in the organization as a compliment to provincial or national labour organizations	0%

Finally, interviewees were asked to rate their unit's **Financial Performance**, **Labour Productivity**, and **Quality of Service** with response options of:

- 1) Relevant data not available;
- 2) No comparison possible;
- 3) A lot below average;
- 4) Below average;
- 5) About average for industry;
- 6) Better than average; and
- 7) A lot better than average

**Employee outcomes**. The Human Resource department provided information about employee outcomes over the previous 12 months for each unit. These outcomes included, resignations, absences (i.e. sick leave), and overtime. The statistics were obtained for the total number of employees in each unit and the largest occupational group.

#### **Ethical Considerations**

Ethical approval for this study was obtained from the Human Subject Research Committee (HSRC) at the University of Lethbridge and the Health Research Ethics Board (HREB) of Island Health. The project was also reviewed and approved by the University of Victoria. Risks to survey participants were minimal. Emails containing the survey link were sent through a bulk distribution list by the department head for each unit. The online survey company Qualtrics hosted the survey. For Canadian institutions and participants, Qualtrics stores data on servers located in Ireland. Demographic information was limited to age, sex, job position, and level of education, any of which the participant could choose not to answer. Finally, the results were aggregated at the unit level. The staff email

(Appendix A) and the opening page of the survey (Appendix C) explained the purpose of the study, that participation was voluntary, and participants could withdraw their consent at any time by not completing the survey.

Risks to interviewees were also considered minimal. Written informed consent was obtained prior to each interview explaining that participation was voluntary, could be withdrawn at any time, and participants could decline to answer any questions. (See Appendix E for a copy of the consent form.) The consent form also explained that all data would be coded and aggregated at the unit level. In addition, although the sample size was small, the name and location of each unit are not reported together in order to minimize risks to participants.

### **Quantitative Results**

### HR Climate

**Phase One.** Multivariate Analysis of Variance (MANOVA) was used to determine if the perception of HR Climate differed significantly between the eight participating units. The HR Climate dimensions with reliable scales were aggregated and entered as the dependent variables, while a grouping variable for the units was entered as the factor. In phase one the reliable dimensions were Welfare, Involvement, Support, Development, Innovation and Family Orientation. The MANOVA revealed a significant main effect of unit, Pillai's Trace F(42, 936)=1.54, p=.017. Follow-up tests of univariate ANOVA revealed significant differences among units on their perceptions of Innovation, Pillai's Trace F(7, 156)=2.40, p=.02. Further post hoc tests revealed the palliative care unit (M=2.49, SD=.35) reported more positive perceptions of Innovation than the ICU (M=3.10, SD=.56). Table 5 displays the means, standard deviation, coefficient alpha, and

correlation among the dependent variables of the measure for phase one. Table 6 follows with results from the MANOVA for this phase.

Table 5. Phase 1 Means, Standard Deviation, Coefficient Alpha, and Correlation (Aggregated Measures N=164)

Variable	M	SD	α	1	2	3	4	5	6
Welfare	2.55	.64	.88						
Involvement	2.87	.60	.82	.63					
Support	2.36	.60	.89	.66	.56				
Development	2.64	.64	.74	.42	.5	.34			
Innovation	2.84	.57	.86	.64	.61	.63	.45		
Family Orientation	3.02	.65	.92	.60	.42	.54	.27	.52	

All Correlation were significant at the .001 level (2-tailed)

Table 6. *MANOVA for Main Effects of Unit (N=164)* 

HR Climate	Sum of	df	Mean Squares	F	р
Dimensions	Squares		_		
Welfare	2.04	7, 156	.29	.71	.67
Involvement	3.11	7, 156	.44	1.23	.29
Support	2.54	7, 156	.36	1.03	.42
Development	5.54	7, 156	.79	2.03	.05
Innovation	5.22	7, 156	.75	2.40	.02
Family Orientation	1.78	7, 156	.26	.59	.77

**Phase Two.** In phase two the same dimensions were valid, however, a word must be said about the dimension of Innovation. One item was dropped from this measure in each phase due to low communality. However, it was not the same item - calling into question the significant result in phase one. The MANOVA in phase two revealed a significant main effect of unit, Pillai's Trace F(36, 894)=1.78, p=.004. Follow-up tests of univariate ANOVA revealed significant differences among units on their perceptions of Support, Pillai's Trace F(6,149)=2.17, p=.04. Further post hoc tests on Support revealed the acute care unit (M=2.14, SD=.44) reported a more positive perception of Support than the palliative care unit (M=2.86, SD=.64). (For reference, Innovation was approaching

statistical significance: Pillai's Trace F(6, 149)=2.10, p=.056.). Table 7 displays the means, standard deviation, coefficient alpha, and correlation among the dependent variables of the measure for phase two, followed by Table 8 with the MANOVA results for phase two.

Table 7. Phase 2 Means, Standard Deviation, Coefficient Alpha, and Correlation (Aggregated Measures N=156)

Variable	M	SD	α	1	2	3	4	5	6
Welfare	2.57	.70	.91						
Involvement	2.91	.67	.84	.57					
Support	2.47	.66	.91	.65	.52				
Development	2.68	.66	.78	.46	.41	.44			
Innovation	2.86	.62	.88	.57	.54	.65	.45		
Family	3.14	.70	.95	.53	.43	.68	.32	.57	
Orientation									

All Correlation were significant at the .001 level (2-tailed)

Table 8. *MANOVA for Main Effects of Unit (N=156)* 

HR Climate Dimensions	Sum of Squares	df	Mean Squares	F	p
Welfare	2.68	6, 149	.45	.91	.49
Involvement	3.58	6, 149	.60	1.36	.24
Support	5.43	6, 149	.90	2.17	.04
Development	4.03	6, 149	.67	1.60	.15
Innovation	4.61	6, 149	.77	2.10	.06
Family Orientation	5.04	6, 149	.84	1.77	.11

# **Employee Outcome Metrics**

Analysis of Variance was used to determine if significant differences existed among units on six employee and unit outcome metrics. Employee-related outcomes included job satisfaction, employee engagement, and work-life integration; while perceptions of unit performance included efficiency, effort, and quality. Tables 9 and 10 summarize results of these tests.

Table 9. Phase 1 ANOVA Results of Unit and Employee Outcome Metrics

Variable	Sum of	df	Mean Squares	F	p
	Squares				
Job Satisfaction	7.08	7, 162	1.01	1.12	.35
Employee Engagement	7.82	7, 162	1.12	1.02	.42
Work-Life Integration	5.69	7, 162	0.81	.84	.56
Efficiency	5.71	7, 162	.82	2.77	.01
Effort	1.37	7, 162	.20	.76	.62
Quality	3.77	6, 162	.63	1.41	.22

Table 10. Phase 2 ANOVA Results of Unit and Employee Outcome Metrics

Variable	Sum of Squares	df	Mean Squares	F	p
Job Satisfaction	9.61	6, 182	1.60	1.78	.11
Employee Engagement	21.75	6, 182	3.63	3.25	.01
Work-Life Integration	7.39	6, 182	1.23	1.22	.30
Efficiency	6.37	6, 182	1.06	3.04	.01
Effort	6.38	6, 182	1.06	3.04	.01
Quality	3.55	6, 182	0.59	1.12	.35

### Job Satisfaction.

**Phase One.** An (ANOVA) revealed no significant differences among units F(7, 162)=1.12, p=.35 with mean scores in both phases suggesting participants were neither satisfied nor dissatisfied with their job.

**Phase Two.** An ANOVA revealed no significant differences among units F(6, 182)=1.78, p=.11.

## **Employee Engagement.**

**Phase One.** An ANOVA revealed no significant differences among F(7, 107.83)=1.02, p=.42. On average employees reported "often" or "very often" being full of energy and enthusiasm at work.

**Phase Two.** An ANOVA revealed significant differences between units F(6, 182)=3.25, p=.005. Post hoc tests revealed one community services unit (M=2.93, SD=1.06), and the palliative care unit (M=2.86, SD=.86), had a higher perception of

employee engagement than the surgical services unit (M=3.98, SD=1.25). However, all three units still reported positive responses with participants from surgical services reporting "often," while participants from community services and palliative care reporting "very often" having energy and enthusiasm at work.

# Work-Life Integration.

**Phase One.** An ANOVA revealed no significant differences among units F(7, 162)=.84, p=.56.

**Phase Two.** An ANOVA revealed no significant differences among units F(6, 182)=1.22, p=.301. This item used a declarative statement of, "Nowadays, I seem to enjoy every part of my life equally". Mean scores in both phases indicate participants neither agree nor disagree with this idea.

# Efficiency.

**Phase One.** An ANOVA revealed significant differences among units *F*(7, 132.67)=2.77, p=.01. Post hoc tests revealed participants in the palliative care unit (M=2.69, SD=.51) had a more positive view of the efficiency of their unit than participants in the ICU (M=3.28, SD=.43) and one community services unit (M=3.28, SD=.72).

*Phase Two.* The ANOVA was also significant in phase two revealing significant differences among units F(6, 182)=3.04, p=.007. In this phase post hoc tests revealed participants in the ICU (M=2.82, SD=.66) had a more positive view of the efficiency of their unit than participants in the surgical services unit (M=3.46, SD=.57), or one community services unit (M=3.30, SD=.57). Interestingly, it was the same community services unit with responses in both phases indicating participants feel "time and money could be saved if the work was better organized".

## Effort.

**Phase One.** An ANOVA revealed no significant differences among units F(7, 96.35)=.76, p=.62.

**Phase Two.** In this phase the ANOVA was significant revealing differences among units F(6, 182)=3.04, p=.007. Participants in the ICU (M=2.18, SD=.66) had a less positive perception of their colleagues' work ethic and enthusiasm than participants in the surgical services unit (M=1.54, SD=.57) or one community services unit (M=1.7, SD=.57). However, all units reported a positive view of this unit-level outcome.

### Quality.

**Phase One.** An ANOVA revealed no significant differences among units F(6, 155)=1.41, p=.22.

**Phase Two.** An ANOVA revealed no significant differences among units F(6, 182)=1.12, p=.35.

## **Meaningfulness of Work**

**Meaning at Work.** As stated on page 61 of this thesis, the scales used to measures Meaning at Work were unreliable and had low communality. Therefore, this concept was dropped from Quantitative analysis.

### Meaning in Work (Job, Career, Calling).

**Phase One.** Multivariate Analysis of Variance (MANOVA) was used to determine if participants in the eight units differed on viewing their work as a job, a career, or a calling. The MANOVA revealed a significant main effect of unit, Pillai's Trace F(21, 486)=2.06, p=.004. Follow-up tests of univariate ANOVA revealed significant differences among units on their view of the Job category, Pillai's Trace F(7, 486)=2.06, p=.004.

162)=3.31, p=.003. Further post hoc tests revealed participants in the urgent care unit (M=2.15, SD=1.11) consider their work more of a job than the palliative care unit (M=3.20, SD=.88), and the medical relief pool (M=3.71, .452).

**Phase Two.** In phase two the MANOVA also revealed a significant main effect of unit, Pillai's Trace F(18, 509)=2.14, p.004. Follow-up tests of univariate ANOVA revealed significant differences among units on their view of the Job category Pillai's Trace F(6, 182)=2.18, p=.047, and Career Pillai's Trace F(6, 182)=2.17, p=.048. Further post hoc tests revealed participants in the intensive care unit (M=3.36, SD=.736) viewed their work as less of a career than participants in the medical relief pool (M=2.41, SD=1.05).

# **High Performance Work Systems**

Staff were also asked questions about the existence of a few, specific HPWS practices. These questions were originally part of three separate scales. However, because the scales were measured using different intervals and formats (i.e. 1=Yes, 2=No; and 1=10 days or more, to 6=None) the reliability was low. The same problem was found in the previous phase of this research. However, in an effort to retain some information, ANOVAs were run on five of the items.

**Performance Appraisals**. Participants confirm statements by management that they have not been given a performance appraisal in the previous 12 months.

**Phase One.** An ANOVA F(7, 73.83)=2.23, p=.056 revealed no significant differences among units with 84 percent of participants answering in the negative.

**Phase Two.** In phase two one unit had no variance with all participants responding that they had not received a performance appraisal in the previous 12 months. Overall 76 percent of participants answered in the negative.

**Quality Circles**. A majority of staff had not attended any meetings to discuss quality.

**Phase One.** An ANOVA F(7, 124.70)=.66, p=.707 indicated no significant differences among units.

**Phase Two.** The ANOVA F(6, 94.62)=1.44, p=.206, again revealed no significant differences among units.

**Training**. When asked about training opportunities, the mean score indicated that most staff received one to two days of training.

**Phase One.** An ANOVA F(7, 161)=.98, p=45 revealed no significant differences among units.

**Phase Two.** The ANOVA was significant F(6, 159)=2.56, p.022. Further post hoc tests revealed significant differences between the acute care unit (M=3.48, SD=1.53), which reported two to five days of training compared to the ICU (M=4.94, 1.62), which reported only one to two days of training.

**Attitude Survey**. In contrast to management responses, staff indicated that they had not been asked for their views in a formal attitude survey.

**Phase One.** One unit had no variance with all participants reporting that they had not been surveyed in the past two years. Overall 80 percent of participants responded in the negative.

**Phase Two.** The ANOVA was not significant F(6, 182)=.62, p=.72 revealing no significant differences among units. In this phase 60 percent of participants responded in the negative.

**Meetings with Management**. Staff responses also disagreed with management on the question of meetings with a supervisor or manager, in both phases indicating that on average these meetings occur once a month rather than once a week.

**Phase One.** An ANOVA F(7, 88.32)=1.64, p=.13 indicated there were no significant differences among units.

**Phase Two.** An ANOVA F(6, 89.56)=1.18, p=.32 revealed no significant differences among units.

**Flexible Work Practices**. Participants were asked about seven family-friendly or flexible work practices. Unfortunately the scale was unreliable (Cronbach's alpha .54) in phase one and phase two (Cronbach's alpha .46) and therefore had to be dropped from the analysis. Removing items did not improve reliability.

## **Qualitative Results**

### **Context and Structure**

Context. Directors and department heads described the external market as highly demanding but lacking in competition. Volatility was variably rated as low to very high. However, responses indicate that interviewees were equating volatility with changes in the volume of demand. "I would probably rate [volatility] as high. We serve a very aged population that is growing". One department head even made a direct connection stating volatility is, "all based on demand".

**Structure**. The leadership hierarchy within Island Health was recently restructured. In 2013 Island Health personnel, physicians, and community stakeholders met to determine how to better meet the needs of Island residents. It was determined that the health authority should move from a program-based structure to one based on

population density and need, the location of staff, and the distance between health sites. The reorganization officially took effect in 2015 and divided the Island into four geographic regions each led by an Executive Director and an Executive Medical Director. The "Geographies" are further divided into community hubs with local Clinical- and Medical Directors who take responsibility for assessing and planning for the needs of the community, as well as supporting staff. Finally, Department Heads are responsible for program-specific units, such as surgical services, community, and palliative care within each health centre (i.e. Campbell River). The geographic realignment resulted in a homogenous leadership structure for each unit that includes a department head, director, and an executive director. Most units also utilize a clinical nurse lead functioning as a supervisor and reporting to the department head.

A combination of interview responses and document analysis indicated the age and size of each unit varied dramatically ranging from three to more than 100 years, and from 27 members of the largest occupational group to 354.

#### **Human Resource Support**

Interviewees were also asked to explain how the organization provides human resource support to the unit. In these responses, human resource (HR) consultants were often described as colleagues or "business partners," a moniker they had until a recent switch to the title "HR consultant". An HR consultant supports each unit, and both managers and directors referred to "having" an HR consultant with whom they could ask questions or discuss issues. Human resource consultants provide support on all matters related to the employer-employee relationship including recruitment, retention, interpretation of collective agreements, and employee grievances. Human resource consultants also help department heads navigate problems such as employee performance

issues, conflict, or as one department head described, "complex employees". Experiences with the availability of HR consultants and the level of support were split. Department heads for four units described high rates of turnover, including one unit that had four different HR consultants over an 18-month period. Two department heads also described the HR consultants as "overwhelmed" with heavy workloads making interaction difficult, leading one to conclude, "they answer questions related to collective agreement interpretation, but otherwise, [support] is pretty limited". Another department head complained that questions about problems are often met with barriers and responses about what is not allowed. She attributed this to the multitude of departments within human resources, which she thinks create layers of over-lapping regulations. She stated she wished she could "have more interactions [with HR] that are solution focused". In contrast, interviewees representing the four other units described a close working relationship with the HR consultant for their unit. These HR consultants were considered valuable members of unit management, available by email, phone, or meeting and able to answer or find the answer to all employee-related questions.

## **Relationship of the Unit to Island Health**

Interviewees overwhelmingly discussed a collaborative relationship with other departments, describing Island Health as a single, integrated care network and their units as, "one small piece of a larger, more complex system". For example, one department head stated, "we are on a continuum of care" receiving patients from other departments or facilities before treating and transferring them to higher or lower levels of care. Several interviewees reiterated this description, describing "working in partnership" with other departments and strategizing about how to provide the best care for each patient. To illustrate the idea of a single system, several department heads and directors also pointed

out that all units, regardless of size or location, are subject to the same board and ministry mandates.

Although all units are critical to the healthy function of this system, some interviewees acknowledged greater degrees of responsibility in terms of patient care and decision-making. For example, directors in larger facilities discussed the responsibility of taking in overflow and complex cases from smaller tertiary or community facilities, along with setting the "standards, protocols, and guidelines" for the delivery of care.

Tying these ideas together, one department head used the illustration of an umbrella to describe this single system of care. She stated the board and chief executive officer represent the top of the umbrella, setting the goals and direction for the organization. Units represent pieces of the ribs, with each rib being an entire facility. In turn, facilities and units are made up of the people of Island Health who hold together the network of patient care that covers the island.

Interviewees also stated that this sense of collaboration and connectedness was further strengthened by the reorganization, which homogenized and streamlined the hierarchy, dividing the island into four geographies of localized care within the larger system. Prior to this change, units in some sites would report to directors in others, creating a sense of disconnect among departments operating out of the same facility. For example, department heads of community services units reported feeling underfunded, overlooked or even, "in competition" with other units prior to the reorganization. Since the change, department heads now report feeling like, a "more valued part of the health region," demonstrated by closer collaboration with other departments and budget increases.

Similarly, interviewees for a smaller community site commented that prior to the reorganization, the facility felt like "an island unto itself," cut off from facilities and programs in surrounding cities. However, since the reorganization, this facility has become more interconnected, sharing resources and better coordinating the transfer of patients requiring higher levels of care.

One unit did reveal a contrast to this idea of a harmonious system of care. The department head for the palliative care unit said the "pressures and flow of acute care are different than end-of-life care causing a bit of tension between palliative care and the rest of the building". She explained that since the focus of acute care is restoring health, "there's sometimes resistance to admit [a patient to the unit] because the feeling is the patient isn't suitable or ready for our unit". However, this disconnect doesn't refute the theme of a collaborative system. Interviewees overseeing the palliative care unit recognize the importance of the unit within the system. It is more a problem of needing to change the perspective of other units in an acute care facility to recognize that palliative care is part of an integrated system, because palliative care is patient care.

## **Decision-Making**

While acknowledging that decisions often come from the ministry, board, or program level, management stated that they make a concerted effort to involve staff in decisions that will affect their work. Specifically, nearly all department heads said they engage front-line staff in decisions about protocols, programs, services, or policies. A common, sentiment was that, depending on the issue, "they may have some decision-making power". Even when the decisions comes from above the workplace, "they may be involved in actually designing" how it will function in the unit. Engagement often takes

place in staff meetings, or daily huddles, but if pressed for time, some units have even used mass emails or surveys to solicit feedback.

Human resource decisions. Human resource decisions are dictated by the terms of the collective agreements. A supervisor or department head would be involved in hiring all contract positions. However, the BCNU collective agreement dictates that seniority will be the determining factor when choosing between equally qualified candidates (British Columbia Nurses' Bargaining Association, 2016). According to the collective agreement, promotions are equivalent to vacant positions, in that, if a more senior, contract position becomes available, interested staff must apply for it, and like any open position, seniority determines the successful candidate.

Dismissals are a rare occurrence according to every department head with one stating it, "never happens". When someone must be dismissed the process involves the department head, director, persons from HR, and the executive director for the unit. Prior to this point, several steps are taken to avoid a dismissal including creating an individualized learning plan, using buddy or shadow-shifts, and mentoring. One department head noted, "We give 150 percent trying to help someone who's struggling".

Training needs. Persons involved in training decisions vary based on the initiative or need. There are organization-wide directives around training such as violence prevention and confidentiality, and patient-related initiatives such as safe patient handling. These initiatives are directed from the organization level. At the unit level supervisors often make decisions around staff training needs. However, both department heads and directors indicated that staff are also responsible for self-identifying their own training needs.

**Purchasing Equipment**. If a unit needs a new piece of equipment, staff make that need known to the department head who, according to organizational policy, has the authority to make purchases under \$5,000. If a purchase is over \$5,000 it must be approved at the director level.

The final three unit-related decisions are determined at the director level and above. As one department head explained, "Staffing needs are based on an algorithm of patients per staff member so there is a baseline. Although supervisors and staff are very involved in making recommendations". The organization of departments is the responsibility of the chief operating officer and executive director. Finally, changes to HR policies and practices occur within that department and under the direction of directors and executive directors.

# **High Performance Work Systems Practices**

Seventeen practices were considered to compose a HPWS in the current study. The practices with 100 percent adoption rate (highlighted in blue in Table 4) are mandated by the collective agreement. Two more practices, sophisticated recruitment (including attitude and competency tests), and performance-related pay are precluded. In the case of sophisticated recruitment, the most recent collective agreement, states, "the parties [being the Union and Island Health] recognize the potential benefit of expediting the filling of vacancies by agreeing to enable a nurse...to apply on vacancies without the need for a formal interview and based on seniority" (British Columbia Nurses' Bargaining Association, 2016, p. 99). When asked if performance or competency tests are utilized in the selection process, department heads and directors, almost invariably referenced the terms of the collective agreement, echoing some form of, "The contract is pretty clear, if all else is equal, you have to use seniority". Qualifications and certifications required for

the position would be detailed in the job posting with the most senior, qualified candidate selected for the position. In light of this policy, some department heads noted that the standard orientation period is now used to assess competency with "learning plans created if there are concerns". Several also lamented the policy using statements similar to "Sometimes it's pretty hard. Even if someone has applied that you think would be awesome, if they don't have seniority, it's pretty hard to get them into those positions".

A department head for one of the community services units stated there must be a constant "re-education" of the union and HR that, "a nurse is not a nurse, is not a nurse," meaning different departments require knowledge and skills that go beyond basic certification and degrees. To illustrate this idea she recounted a request from HR to accommodate a nurse with a disability who previously worked in a pediatric unit. The department head was sure the disability and inexperience with in-home patient care would make the work impossible for the nurse and unsafe for patients. She highlighted the fact that this work often requires lifting patients and helping care for people living with dementia. The situation was only resolved when the candidate withdrew her application after several lengthy conversations with the department head about the physical requirements of the position.

Of the remaining nine practices, the standards of only four are met by a majority of units: team briefing, attitude survey, teamwork, and off the job training.

Off-the-job training. With regard to off-the-job training, the standard for meeting the HPWS practice excludes health and safety training. In this study, most directors and department heads referenced other forms of mandatory training such as confidentiality, or training for the new electronic health system IHealth. When department heads differentiated between mandated training versus optional courses or certifications,

responses came down on two different sides of the spectrum with a few noting a lack of funds and others noting sufficient funds, but a lack of interest.

Team briefings. The units meeting the HPWS requirement of at least weekly meetings between a manager or supervisor and the LOG, most often occurred during one of the daily huddles when incoming staff were updated on patient conditions. Two department heads who had been with their unit for less than one year attended daily, but admit, "a lot of staff are missed because of their rotation". Department heads of units not meeting weekly reported monthly or bi-monthly staff meetings to discuss changes or concerns.

Attitude survey. Although management for only 63 percent of the units said staff had been surveyed in the past two years, this number may actually be closer to 100 percent. Several department heads who said "yes" referenced the nation-wide Gallop Poll conducted approximately two years prior to this study, which is an accreditation standard. In addition to the Gallop poll, some units have also implemented more formal surveys. One unit recently completed a survey asking staff how well they think they communicate with each other individually, as a team, and with management. Questions included those related to work-oriented communication as well as matters of conflict and bullying. Multiple units in one facility were also surveyed as part of an initiative to create a healthy workplace culture. The purpose of this survey was to ask staff "what do you want the culture to be, and how are we going to get there"?

**Team work.** Nearly all department heads consider their units to function as single or multiple teams. Department heads for community services noted the interdisciplinary nature of their work - involving occupational therapists, physical therapists, clinicians, dieticians, RNs, LPNs, and community health workers to serve the needs of the clients.

Additionally, these units were in the process of transitioning into "neighbourhood teams". As the name suggests, in this arrangement, staff are assigned not just to schedules, but the same specific neighbourhood. This is an island-wide initiative that began in Victoria, and has proven to increase job satisfaction among community health workers. No unit meets the requirements for four of the remaining five practices: performance appraisals, functional flexibility, and consultation committee.

**Performance appraisals.** No unit met the standard for performance appraisals, and every department head said time was the critical factor. "Realistically I told upper managers I won't get through a couple hundred in a year". Interviews with directors suggest they understand the problem, as one demonstrated in reference to the question responding, "managers don't have the time".

Functional flexibility. An example of Functional Flexibility would be a nurse in surgical services with wound care training, or an ICU nurse with nephrology training. Although nurses must have a wide range of knowledge and skills, most units reported only between 20 and 39 percent of the LOG had training beyond what was required for the unit. One unit reported that around half (40 to 59 percent) of staff had specialty training and this percentage was considered high by the department head.

Consultation committee. Although there are no official committees, every department head described meetings and mechanisms designed to allow staff to bring forward and resolve problems. Several department heads described both formal and informal monthly meetings staff were invited to attend. A department head in community services discussed a format in which single problems facing the unit are described on paper and placed on tables throughout a meeting room. Staff are then invited to select a problem that most concerns them and discuss solutions with other staff at the table.

Participants may stay at one table, or visit multiple tables throughout the meeting. Two department heads described less formal meetings in which staff were invited to discuss any frustration in an agenda known as "what's bugging you?" Another director recounted a situation that required a more unstructured, evolving process. Given responsibility for this unit after the reorganization, the morale was low and patients were complaining of rude, abrupt staff. In an effort to address the underlying issues and improve morale, the director began with very unstructured meetings in which staff were encouraged to "vent" their frustrations. These meetings progressed into luncheons and team-building events, and finally more formal meetings where staff are still able to candidly discuss problems. As a testament to this effort, the department head for this unit stated that, "I feel like I have the golden job. My group is good; it's stable".

Flexible work schedules. The standard of at least three family-friendly or flexible work practices is only met by the community services units whose department heads discussed being able to offer their staff more flexible start and stop times. Subject to availability, job sharing is a benefit guaranteed by the BCNU collective agreement, and any employee has the opportunity to switch from full- to part-time by applying for an open position.

Quality circles. Every program (i.e. palliative care) has a quality council made up of staff and management used to monitor and improve quality. In addition, every department head and director talked about purposeful meetings and discussions around quality that are held in the units. Both the unit meetings and some program meetings are open to staff, but according to department heads only around 20 percent of staff participate. A few department heads even discussed small teams of three to six people

who monitor various aspects of patient care and quality on the unit. However, these meetings and teams would not meet the standard of "quality circles" as defined in HPWS.

# **Employee-related Outcome Measures**

Tables 11 and 12 list the results of employee outcome metrics for the 12 months preceding each phase of data collection. The results are a percentage of either all of the employees in the unit, or the largest occupational group. As can be seen, there is very little difference between phases providing evidence against reverse causality. The coloured rows list results from the two community services units, highlighted because of the dramatic difference between the percentage of employees who resigned compared to other units. This difference and the cause will be discussed in Chapter 6. Grievance numbers were also collected for phase 1 (See Table 13). The number of grievances listed for each unit is the total number of grievances for all employees or the LOG (not a percentage). One unit reported an extremely high number of grievances, which will also be discussed in Chapter 6.

Table 11. Employee Outcome Metrics Phase 1

Unit	All	LOG	All	LOG	All	LOG
	Resigned	Resigned	Days Lost Due to	Days Lost Due to	Retirements	Retirements
			Sickness or	Sickness or		
			Absence	Absence		
1	1.12	1.24	2.34	1.91	1.12	.93
2	1.88	2.78	2.07	1.53	0	0
3	1.44	2.47	3.81	2.18	0	0
4	7.60	32.50	3.68	5.03	1.72	3.23
5	5.10	15.61	3.77	3.81	2.15	1.80
6	0.30	0.75	3.20	2.47	.60	.75
7	1.42	2.29	3.26	1.88	1	1
8	0.73	1.28	13.66	7.60	0	0

Table 12. Employee Outcome Metrics Phase 2

Unit	All	LOG	All	LOG	All	LOG
	Resigned	Resigned	Days Lost	Days Lost	Retirements	Retirements
			Due to	Due to		
			Sickness or	Sickness or		
			Absence	Absence		
1	0.45	0.53	2.40	2.50	.70	.50
2	2.60	1.89	2.15	1.90	.70	0
3	1.63	2.53	3.71	3.56	0	0
4	5.48	17.46	3.42	3.47	1.43	2.40
5	5.10	15.82	3.02	3.09	1.87	.85
6	0.56	0.60	2.77	2.64	.6	.6
7	1.05	1.62	3.34	3.00	0	0
8	2.78	1.62	13.19	13.30	0	0

Table 13. Grievances by Unit Phase 1<sup>1</sup>

Unit	All Grievances	LOG
		Grievances
1	4	4
2	3	3
3	61	50
4	4	1
5	3	2
6	2	1
7	*	*
8	*	*

<sup>\*</sup>Information not given

# **Unit Performance Measures**

Directors and department heads struggled to evaluate these measures based on the requirement to compare their unit to similar ones in the same industry. There was no consensus or distinction related to Financial Performance with responses ranging from No Comparison Possible to Above Average. Labour Productivity was rated as About Average by all but one department head who responded that No Comparison was

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<sup>&</sup>lt;sup>1</sup> Grievances could only be obtained for Phase 1

Possible. Quality of Service was most often rated as Above Average with one department head saying again that, No Comparison was Possible.

# Change

Finally, as mentioned, the longitudinal nature of this study was used to capture any changes that might affect the units and their perceptions of the HR Climate. The interviews revealed three units had recently or were beginning to go through changes that would affect staff. The ICU had recently added three beds to increase patient capacity. Additional staff were also hired to accommodate the additional patient load and improve the workload. In addition, the department head for this unit had only been in the position for three months prior to the start of data collection. Survey results for this unit reveal a slight increase in job satisfaction (phase 1 M=3.27; phase 2 M=3.67) among participants, and a nearly identical perception of the HR Climate (phase 1 M=2.8; phase 2 M=2.7). Results of the employee survey metrics also showed no discernable negative effects between phases.

A major change affecting two facilities with participating units was the introduction of an electronic health record system known as IHealth. In one facility the introduction had taken place the previous year and the process was smooth, improving the flow of information and patient care. In the second facility the implementation began in March 2016 – seven months before the start of data collection. Poor training and software complications marred the rollout in this facility. The problems led to a dramatic standoff between physicians who refused to use the \$174 million system and hospital leadership who threatened to revoke physician privileges at the facility (Smart, 2017). Much of this turmoil played out in the press through anonymous interviews and leaks of information and misinformation. Ultimately the conflict led to three external reviews in which surveys

and/or interviews were conducted with executives, managers, supervisors, physicians, nurses, technicians, and other staff. These reviews found the problems were most severe in the emergency room and intensive care unit where physicians, nurses, and other healthcare professionals had not received enough training to properly use the system, in addition to IHealth's inability to handle the unpredictable, fast moving nature of patient care in these units. One also described a "toxic culture" where management valued budgets over people and excluded physicians from decision-making (Ernst & Young LLP, 2017; Garcha, 2017). Obviously, the present study does not reflect the results of these external reviews. The author speculates this is predominantly for three reasons. First, the survey may have included staff from the ER and ICU, units from this facility who chose not to participate in the present study. Second, the company that conducted the external review surveyed parties outside the scope of this study including physicians who, as independent contractors with the organization, are not subject the HPWS in place. These parties registered the greatest dissatisfaction with IHealth. Third, in regard to HR Climate and HPWS, there is evidence to suggest that a set of consistent practices will create a sense of stability and trust in management that will help insulate staff against negative effects of system change. Indeed, the previous phase of this research found organizations with a positive HR Climate experienced fewer negative outcomes in the wake of significant structural change (Dastmalchian & Steinke, 2017).

## **Chapter 6: Discussion**

There is a nursing shortage across Canada that is so dire in British Columbia it has been called a crisis. The problem is most severe in specialty areas such as surgical services, emergency rooms and intensive care units with upwards of 1,000 vacancies (Weekes, 2015). As a result of this shortage, operating rooms are closing (Johnson, 2016), emergency room wait times are increasing (Miljure & Mangione, 2017), and some patients are dying in waiting rooms (Cooper, 2017).

As already stated, this crisis is the result of multiple factors. The province of British Columbia is home to one of the eldest populations in Canada (Grant & Agius, 2017). In addition, nurses retire an average of ten years earlier than in non-healthcare related industries with the average age of a nurse in B.C. between 43 and 45 (Canadian Federation of Nurses Unions, 2012; Canadian Nurses Association, 2016). On the opposite end of the workforce, there are too few open seats in specialty programs at the British Columbia Institute of Technology for training nurses in areas such as intensive care or surgical services, and not enough provincial funding to train current staff (Azpiri, 2015). Compounding these problems, as previously referenced, nurses are leaving the profession at a rate of 20 to 27 percent annually (The Conference Board of Canada, 2016). Results on the question of job satisfaction suggest participants in this study are apathetic about their jobs – responding that they are neither satisfied nor dissatisfied with the work. Therefore, it is critical that we understand how policies and practices can improve job satisfaction and contribute to an environment that will attract and retain talented, dedicated nurses

The purpose of this study was to explore the constructs of HR Climate and Meaningfulness of Work within a public healthcare organization. The study used a mixed

method, case study design to understand the impacts and dynamics of these constructs within this industry. HR Climate explains *how* HPWS practices affect employee and organizational outcomes by focusing on how the practices are perceived by employees. HR Climate also acknowledges the role of organizational structure, internal and external context, and societal culture on the perception of these practices. Meaningfulness of Work explains *why* HPWS affect employee and organizational outcomes by increasing employees' sense of identity with the role of the job, and sense of community among staff. Inferences about these concepts drawn from the results of this research will now be discussed.

## Meaningfulness of Work as an Explanation of Why HPWS Affect Performance

Meaningfulness of Work was added to this research to address a gap in the HR Climate model by accounting for *why* HPWS contribute to employee and organizational outcomes. This concept, developed by Pratt and Ashforth (2003), and explains what makes work meaningful to employees. The concept is divided into Meaning in Work and Meaning at Work, which have separate but cooperative roles in the creation of meaning. Results of finding work meaningful are increased job satisfaction and motivation, and decreased stress, absences, and turnover (Pratt & Ashforth, 2003; Rosso et al., 2010; Steger et al., 2012).

**Meaning in Work**. Meaning in Work is derived from a sense that the work serves a greater good and projects an ideal sense of self. As stated in Chapter 3, it acknowledges the fundamental role work plays in one's identity. Practices that foster Meaning in Work are part of a high performance work system. Sophisticated recruitment is used to select candidates with the best person-job "fit". Orientation practices indoctrinate employees to the culture and expectations of the organization and help ensure work group cohesion. As

stated in Chapter 3, training and development practices hone employees' job, and organization-specific skills increasing a sense of association with the organization. Development practices may also expand an employees' functional flexibility creating value outside the original role. These practices, along with those that allow for greater involvement in decision-making and autonomy cause employees to take greater ownership of the work further reinforcing a sense of identity with the role and organization. Meaning in Work was measured using the Work-Life Questionnaire (Wrzesniewski et al., 1997), which divides perceptions of the work into Calling, Career, and Job orientations. People who view their work as a Calling associate it with serving a greater good and personal significance. This is opposed to people with a Career orientation who view the job as another step on a ladder to more power and recognition, and people with a Job orientation who largely view the work as a means to an end.

Results of the survey were not the same between phases. However, some inferences, supportive of the argument for Meaning in Work may still be drawn.

Referring to results of the survey detailed in Chapter 5, we might intuitively expect that employees in the palliative care unit would view their work as less of a job than those in urgent care. In Island Health, palliative care nurses provide physical, emotional, psychological, and spiritual care for patients with life-limiting illness and their families.

They see the physical and emotion effects of dying on a daily basis. In contrast, nurses in the urgent care unit provide treatment for patients with conditions that require immediate medical or emergency care that are *not* life threatening. Likewise, we might expect employees in the medical relief pool, who move from unit to unit to fill absences, to view their work as more of a job than employees in acute care who treat patients dealing with short-term illness requiring hospital admission or recovering from surgery. Finally,

continuing this logic, it seems to make sense that nurses in the ICU, who care for patients with critical or life-threatening conditions, would view their work as less of a career than employees in acute care. These results support Pratt and Ashforth's (2003) conclusion that the paradigms of meaningful work are limited in each society. Extending this argument further, there may be hierarchies of meaning within professions.

Partially supportive of the argument for Meaning in Work, employees in the ICU require specialty training and certifications increasing employees' unit-specific knowledge and skill and making membership more exclusive. More convincingly, employees in the medical relief pool are tasked with filling in for absences in other units. Therefore, the work is constantly changing resulting in no opportunity to cultivate a sense of identity with the role. Leading in to the next section, having no consistent team also restricts the ability to foster meaning at work.

Meaning at Work. Meaning at work is associated with the role itself, but also the sense of community and belonging that come with a cohesive work group. As stated in Chapter 5, the items from the Job Diagnostic Survey used to measure Meaning at Work had low communality, therefore the measure could not be examined quantitatively. However, simply looking at the individual questions in the Meaning at Work scale reveal a majority of participants feel the work is meaningful both personally and to their colleagues. In phase one, 64 percent of participants agreed that the work is personally meaningful. When asked to speculate for their colleagues the response was similar with 64.7 percent agreeing their colleagues also found the work meaningful. In phase two the responses were slightly more positive with 70 percent of participants agreeing the work has personal meaning and is meaningful to colleagues.

The qualities of Meaning at Work are also evaluated by some HR Climate dimensions and can be fostered by HPWS practices. As defined by Pratt and Ashforth (Pratt & Ashforth, 2003), finding Meaning at Work is the result of identifying with the job role and feeling a sense of community with the work group. This feeling is enhanced when roles are integral to the goals of the organization, and require specialized skills limiting group membership – a scenario that fits both nurses and community health workers.

To summarize information on Meaning at Work from Chapter 3, Pratt and Ashforth (2003) argue it is the result of feeling leadership makes a concerted effort to involve employees in decision-making, provide constructive feedback, is responsive and understanding toward staff, and supports the development of new ideas. Meaning at Work is further fostered by policies and practices that create team-based work groups, encourage interdepartmental collaboration and show respect for employees' personal and family lives through flexible work practices such as paid emergency leave and job sharing.

Results from the interviews reveal HPWS practices that support Meaning at Work, and are in place in Island Health are, team-based work groups, and some flexible work practices such as job sharing, paid emergency leave, the ability to shift swap, and switch from full- to part-time. Performance appraisals are supposed to be in use, though department heads reported not having time to implement this practice.

As already noted, aggregate results of the survey reveal, participants feel management is understanding, easy to approach and gives good advice (Support), that collaboration and information sharing between departments is good (Integration), and that management generally attempt to involve employees in decision-making (Involvement).

However, although some flexible work practices are available, participants did not feel that managers create a family-like atmosphere. Participants also felt the organization could be slow to respond to necessary changes (Innovation).

Therefore, given that participants feel the work is meaningful, and HR Climate dimensions can evaluate qualities of Meaning at Work - some of which were viewed positively by participants, the author argues there is support for the argument that Meaning at Work partially explains why HPWS practices affect employee outcomes.

The rationale for including Meaningfulness of Work was to address a gap in the HR Climate model. Meaningfulness of work explains that HPWS can nurture employees' innate belief that the work is meaningful through practices that instil a sense of ownership and identity with the organization and create community among employees. In turn, finding work meaningful is associated with positive employee and organizational outcomes such as job satisfaction and commitment. Results based on the measures used in this study make it difficult to draw firm conclusions about the relationship of HPWS with Meaningfulness of Work. Although some of the arguments seem to be supported - particularly for Meaning at Work, which had qualities that could be evaluated by dimensions of HR Climate. Therefore, it is perhaps more likely that different measures should be used to evaluate Meaningfulness of Work in general, or among healthcare professionals. However, simply because the measures were unreliable or inconsistent does not mean the argument is invalid.

#### HR Climate in Healthcare

Results of this study, which took place within eight units of Island Health, support the fundamental argument of HR Climate - that a consistent set of policies and practices will result in shared perceptions of the actions and behaviours that are expected and

rewarded resulting in more dependable outcomes. For example, if policies and practices are seen as encouraging autonomy, staff are more likely to take initiative for work-related decisions. Additionally, the results support the idea that these perceptions are influenced by internal and external contextual factors making HR Climate a more comprehensive explanation of how HPWS practices affect outcomes.

However, evidence from employee outcome metrics, interview and survey data suggest adjustments must be made to the construct to better explain the effects of HPWS practices on performance in a public healthcare organization. Specifically, HR Climate must be amended to include questions related to the influence of unions on terms of employment such as salary and minimum hours per shift. The construct must also use a different set of HR management practices, or a set of HPWS practices that have been customized for use in healthcare, for example, removing performance pay and lowering standards of adoption. This idea will be elaborated on under implications for practice.

**Similar input variables.** Structure and external context are similar across units. As described in Chapter 5, the reorganization of Island Health resulted in identical reporting structures for each of the eight units that participated in the study. External context is also similar with management reporting low competition and high demand.

In regard to HPWS practices, although all of the standards are not met, adoption rates are similar across units due to terms of the collective agreements, operational requirements, and issues of efficiency and practicality. As can be seen in Table 4, six practices are mandated by the collective agreements and therefore have adoptions rates of 100 percent. Two practices are also precluded by the collective agreements. As in similar research on HPWS in healthcare, pay-for-performance practices were not in use (Powell et al., 2014). Sophisticated recruitment practices were implicitly precluded by terms of

the collective agreement, which requires that seniority be the deciding factor between equally qualified candidates (British Columbia Nurses' Bargaining Association, 2016).

Four other practices not mandated by the collective agreements are met by a majority of units: teamwork, off-the-job training, attitude surveys, and team briefing. No unit meets the HPWS standards for the remaining five practices (quality circles, consultation committee, performance appraisals, functional flexibility, and flexible work practices) with the exception of the community services, which offer more flexible work schedules. These adoption rates constitute another similarity among units.

**Similar HR Climate perceptions.** The results of the survey revealed a relatively uniform HR Climate throughout the units, in other words, a relatively uniform perception of the policies and practices affecting the largest occupational group. In regard to the organization, participants agree that actions towards employees are generally fair and caring (Welfare). Although no unit was described as being 'like a family' (Familyorientation), management were viewed as easy to approach, to make an effort to understand problems faced by staff, and to provide good counsel (Support). Participants also agreed interdepartmental collaboration is effective (Integration), staff are properly trained and the organization provides adequate training around new systems, equipment or processes. Although, the training provided is viewed as the minimum necessary and staff do not feel encouraged to develop new skills (Development). Regarding Innovation, staff feel the organization responds slowly when change is necessary and rarely looks for new and innovative solutions. Finally, staff reported that there are often breakdowns in communication and work-related decisions are made without sufficient consultation with staff (Involvement).

The overall positive responses only differ significantly on perceptions of Innovation and Support, and even in these cases the differences are a matter of degree as all units still report a positive perception of Support and a somewhat negative perception of Innovation. Similar perceptions are what we should expect based on the similarity of input variables if the HR Climate argument is accurate. The counter argument would be supported if very dissimilar inputs still resulted in similar perceptions of HR Climate or similar inputs resulted in dissimilar perceptions.

With regard to outcomes, the unit with the highest percentage of sick days is a medical relief pool, literally a set of substitute nurses used to fill general absences in the facility. The fact that this unit has the highest percentage of sick days is supportive of the HR Climate argument because, as substitutes, there is no consistent team, and therefore no opportunity to foster perceptions of integration or family.

Evidence HR Climate should be amended for use in healthcare. The dramatic divergence, of course, is apparent in the outcome variables. Two units (units 4 and 5 in Tables 11 and 12) report nearly six times the percent of resignations as the next highest unit. These units are the two community services units. As mentioned in Chapter 5, the organization ostensibly treats CHW and nurses' aides as equivalent positions. However, they are represented by different collective bargaining associations and therefore have different collective agreements with Island Health. Although the collective agreements of CHW and nurses' aides mandate the same benefits (examined in this study), there is a sharp contrast in terms of employment related to scheduling and compensation. With regard to pay, nurses' aides are paid a salary, while CHW are paid hourly. This disparity is most problematic due to the number of hours the organization is required to provide each category of employee. Specifically, nurses' aides working in a facility (i.e. surgical

services), would be guaranteed at least an eight-hour shift as mandated by their collective agreement. In contrast, CHW may only be offered one hour of work in a day (Health Employers Association of British Columbia, 2014). The problem was explained by a department head for one CHS unit, "First community health workers come on as casual with scheduling based on seniority, which means some may only get one hour of work. They have to make themselves available for six hours a day - they have to be available, but they may only get one hour. So if they have a job somewhere else, they cannot take a shift on a day they're [scheduled] with us''. The obvious benefit of working in a facility means facilities create competition for this category of worker and higher turnover among community health workers. As the same department head concluded, "I think it's a big collective agreement problem that needs to be addressed quickly".

More subtly, the standards for adoption of some HPWS could cause the actual existence and importance of these practices to be discounted. For example, no unit meets the HPWS standard of 60 percent attendance by the LOG for quality circles or consultation committees. As stated in Chapter 5, in addition to program-level quality councils, management in every unit discussed processes for evaluating and maintaining or improving quality. Additionally, management stated many of these meetings are open to nurses, or community health workers. However, it would be unrealistic to expect more than 60 percent of nurses, many of whom would be starting or finishing a 12-hour shift, to attend a meeting on quality. Moreover, in many units, meeting the 60 percent standard would mean hundreds of staff at a meeting, which would render any discussions impractical and ineffective.

Consultation committees would run into similar efficiency problems in order to meet the 60 percent HPWS standard. Therefore, although there are no consultation

committees as defined by HPWS, there are iterations of this idea in every unit. As noted in Chapter 5, department heads discussed flexible, and evolving mechanisms used to allow employees to deliberate problems and offer solutions. Formal meetings had an agenda based on issues brought to management by staff or through grievances. Less formally, some meetings were held simply to allow staff to vent frustrations about issues or unpleasant conditions in the unit.

On the opposite end of this spectrum, HPWS include practices such as flexible work schedules that are precluded by operational requirements of nurses per patient. The relevant question regarding these practices is, in an occupation that does not usually permit flexible schedules, does not having these options negatively affect perceptions of the HR Climate, and by extension employee outcomes? If the answer is no, these practices should be removed from the set of HPWS practices for healthcare organizations.

The outcome measures used to evaluate the effectiveness of HPWS will also have to be amended for use in public health. While job satisfaction is a valid measure evaluated by the employee survey, financial performance, and labour productivity should be modified. One department head offered the cost of a patient per day as compared to the target cost set by the Ministry of Health as a measure of financial performance for each unit. However, she noted these targets would need to be regularly evaluated and updated to reflect changing patient demand and acuity.

Finally, the dramatic difference in the number of grievances for one unit highlights the need for the measures of the HR Climate dimensions to more precisely differentiate between levels of the hierarchy, specifically, the organization, as opposed to direct supervisors or managers. Participants in the unit with 51 grievances from the LOG

reported positive views of the HR Climate, including for the dimension of Support, which asks participants if managers understand employee problems, are easy to approach, and give good advice. The positive responses indicate staff were not attributing the problem to the department head. The explanation for the problem came during an interview with the HR consultant for the unit. She explained the grievances were caused by a vacancy that was difficult to fill because it was budgeted as an eight-hour shift in a unit where all other shifts were 12-hours. The shift had been vacant for 12 months, during which time the department head had been working to obtain the necessary funds to increase the shift to a traditional 12-hours. In the meantime, the employees were flooding the organization with grievance to express frustration about being short-staffed for a year.

Data from this study evince that the HR policies and practices of Island Health are contributing to a consistent, positive perception of the HR Climate. However, as stated, in order to more fully understand the impetus behind employee outcomes, the construct must be adjusted to include aspects of HR management that can be dictated by the unions, such as benefits, hours, and salary. Standards for meeting some HPWS practices such as consultation committees and quality circles should also be adjusted to better reflect the optimal iteration of these practices in a public healthcare organization. If these adjustments are made, HR Climate has the potential to help the organization understand the experience employees have of the workplace and what changes can be made to improve employee outcomes.

#### **Limitations of the Research**

The study was designed to be longitudinal in order to assess the impact of any significant changes on the perception of HR Climate and employee outcomes. However,

due to the strict requirements for maintaining confidentiality, the researcher was unable to guarantee the same staff participated in both phases of research. Thus any comparisons between phases must be made with some caution.

As stated in Chapter 5, management are best positioned to answer questions about what policies and practices are in place in the organization. This study found anecdotal evidence to support this claim. In the employee survey, participants were asked about the existence of a few HPWS practices such as job sharing (part of flexible work schedules). Despite being guaranteed as part of the collective agreement, some staff responded that the practice was "not available to me". This may be due to current operational requirements in their unit or a misunderstanding by the employee. Additionally, without the qualitative interviews with department heads for community services the reason behind the high percentage of resignations among community health workers would have been missed.

However, because input variables expected to influence HR Climate were gathered during the qualitative portion of the study, they could not be analyzed alongside data from the survey using quantitative analysis. Therefore, assumptions about the influence of HPWS should be considered within the context of the whole argument.

There is also limited ability to generalize outside the context of the study. As noted by Yin (2014), case studies can be used to make analytic generalizations when a theoretical or conceptual framework is applied. In other words, unlike strictly quantitative research, case studies are not generalizable to populations but can "shed empirical light [on] some theoretical concepts or principles" (Yin, 2014, p. 40). Although the qualitative data provided important insight, it limits the ability to generalize to other public healthcare organizations that a strictly quantitative study would be expected to provide.

Finally, given the fact that department heads had to volunteer their units to participate, there is a risk that only units with positive relations among staff and management opted in to the study.

## **Implications for Practice**

Overall the policies and practices in place have resulted in a generally uniform perception of the HR Climate across units. However, included in this perception was a feeling among staff that they are often left out of decisions directly affecting their work. While management conveyed a genuine attempt to include staff in decisions, a few acknowledged these attempts were probably seen as insufficient. A department head with community services discussed a decision to mandate all employees take a revised version of the confidentiality training. The mandate came from the ministry after a breach of confidentiality in a facility in Victoria (Island Health, 2016). The department head said the specifics of the new program were not applicable to community health workers, and community services was given no time to customize the program but was still required to ensure staff completed the training at time and expense to the unit. This is just one example of the broader sentiment expressed by staff but it highlights the possibility that not being allowed input could send a signal that staff knowledge of and contribution to patient care is not valued. Therefore, management in Island Health should look for more ways to solicit feedback from staff and involve them in decisions that will directly affect their work. Benefits of involving nurses in decision-making has been shown to benefit both nurses and patients in the form of improved job satisfaction and patient outcomes (Houser, ErkenBrack, Handberry, Ricker, & Stroup, 2012; Scherb, Specht, Loes, & Reed, 2011).

In line with work-related decisions are staffing decisions. Favouring internal candidates for vacant positions is considered a high performance work systems practice. However, the most recent collective agreement between the BCNU and Island Health mandates that certification and seniority be the only determining factors for filling vacant positions (British Columbia Nurses' Bargaining Association, 2016). While nurses must still have all the necessary certifications for each unit, department heads expressed concerns about not being allowed to interview potential candidates. As mentioned above one department head spent hours trying to dissuade a candidate she felt was unqualified. Another referred to the specialty certifications required for her unit as "saviours" when they eliminated candidates she felt were unqualified. Department heads are in the best position to understand the requirements of patient care and nuances not covered by certifications for their units. As interviews with management suggested, not being allowed to interview risks compromising unit cohesion and more importantly, patient care. Union leadership were outside the scope of this study, but it seems clear they should be made aware of management concerns and a compromise sought that would maintain internal hiring practices while ensuring the most qualified candidates are selected for each unit

The most serious implication of this research concerns community health workers. Island Health recently instituted a "Home is Best" philosophy with the goal of supporting clients in their homes, even those with complex care needs, for as long as possible. The benefits of this practice are increased quality of life, fewer secondary infections, and decreased pressure on acute care facilities. In order for this program to succeed it will need a qualified, stable contingent of community health workers. Therefore it is critical

that terms of employment for community health workers and nurses' aides be equalized to reduce the migration of this class of employee from community services to facilities.

#### **Directions for Future Research**

Future research of HR Climate in healthcare organizations should include focus groups with the largest occupational group in each participating unit. The focus groups should take place once survey responses have been analyzed in order to obtain a more complete picture of the perceptions of HR Climate. These groups may also be useful for understanding what changes could be made to improve the perception of individual HR Climate dimensions.

Building on this idea, focus groups composed of members of the LOG in community services could also be used to understand what policies and practices could be put into place to better support staff and increase retention. Collective agreements are usually negotiated with the terms set to remain in place for multiple years. If the current collective agreement cannot be amended to equalize pay and benefits between community health workers and nurses' aides for the next few years, a case study could determine if any policies or practices apart from pay and benefits would improve job satisfaction and increase retention.

A related, more ambition option involves using a grounded-theory, case study approach to begin evolving the idea of what defines HPWS practices in public healthcare. Although questions remain about the efficacy of all HPWS practices in healthcare, as noted in Chapter 3 some studies suggest HPWS have the potential to decrease medication errors and patient mortality through practices that encourage skill development and information sharing (Buchan, 2004; Powell et al., 2014). Increased knowledge, skill, and

integration among staff have also been shown to decrease stress and increase job satisfaction (Harley et al., 2007; Harley et al., 2010). Finally, there is even some anecdotal evidence that HPWS can improve efficiency and reduce costs (Harmon et al., 2003). The shortage of nurses in Canada is only predicted to worsen and has already resulted in dire consequences for some patients. Therefore, developing a system of HPWS practices specific to healthcare is a critical step toward reversing this trend and preserving our system, because in the words of the WHO, "there's no health without a workforce" (The World Health Organization, 2014).

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## **Appendix A: Employee Email**

Dear potential Survey Respondent

You are being invited to participate in research regarding the Human Resource Climate in your workplace.

The survey you're being asked to complete is designed to examine the impact of the HR Climate in your organization. This concept acknowledges the fact that the success of any organization depends on its people - its "human resources". The Climate is created by the history and context of the organization, the structure (i.e. whether it's public or private), as well as the policies and practices. Understanding how these components affect employees is particularly important due to the increasing shortage of healthcare professionals in Canada.

This study is actually part of a larger, international study involving 14 countries. However this phase, involving your organization and others across Island Health, is the first time it has focused on public health care. The survey is an opportunity for you to tell us about the HR Climate in your organization and also help us understand the concept within a public health care setting. The information will ultimately be used to create learning opportunities and to improve the Climate for employees.

This research is being conducted in conjunction with researchers from Simon Fraser University, Island Health, and the University of Lethbridge, Alberta. Your participation consists of a survey that should take 15 to 20 minutes to complete. Your responses are completely anonymous, and your participation voluntary. I have attached a more detailed letter (Employee Invitation to Participate 2016) explaining the survey and protection of your anonymity with this email. If you could complete the survey by December 15, 2016, that would be greatly appreciated.

We would like to thank you in advance for your time.

Survey Link:

# **Appendix B: Letter of Information from Island Health Human Resources**



## Human Resource Climate Project

## Employee Survey



October 26, 2016

You have recently been contacted by researchers from the University of Lethbridge and invited to participate in a study focused on, "Human Resource Climate: Assessing their Impacts on Organizations and Employees."

In the initial invitation, a few key pieces of information were missed and we would like to provide that information to you now for your knowledge:

Sandy Bjola, Corporate Director of Human Resources, is the senior leader within who has been consulted directly about this climate study work

As mentioned in your initial invite, all responses to this survey are completely anonymous and data will be aggregated to represent overall scores.

We'd also like you to know that all information collected throughout the course of this study will be reviewed and used solely for the purposes of creating learning opportunities for staff and leadership to improve HR climate in your workplace unit.

As such we thank you for your time and continued interest in making Island Health such a great place to work and learn.

Regards,

Island Health Human Resources

# Appendix C: Survey Participant Letter of Information and Explanation of

#### Consent





Dear Survey Respondent:

Island Health has agreed to participate in a research project on "Human Resource Climate: Assessing their Impacts on Organizations and Employees." The aim of this research is to develop the construct of Human Resource Climate (or HR Climate) in organizations and to examine the ways in which they can be developed and sustained to achieve positive results for the workplace. HR Climate refers to the norms, assumptions and work atmosphere in relation to the organization's HR activities. This is a highly topical and important area given the current debates on the role of HR practices.

To undertake our research, we have interviewed Sandy Bjola, Corporate Director Human Resources, as well as your immediate supervisor and are now in the process of collecting employee HR Climate surveys in your workplace. You, along with a number of other colleagues, have been selected to respond to this short survey. **The survey will ask questions about your job and the atmosphere in which you work.** The study is designed to allow us to survey participants twice over a six month period (October 2016 and April 2017). The same survey will be used each time.

In the first phase of data collection, we ask for your participation in completing the survey available at the following link: <a href="https://uvicbusiness.eu.qualtrics.com/SE/?SID=SV\_b1Jl7VYeOa9zJ09">https://uvicbusiness.eu.qualtrics.com/SE/?SID=SV\_b1Jl7VYeOa9zJ09</a>. The survey should take between 15 and 20 minutes to complete. If you could complete the survey by **December 15, 2016,** that would be greatly appreciated.

Your response is completely anonymous. Responses for each workplace unit will be aggregated to represent the overall average scores. In the final analysis, names of the participating workplaces units will not be revealed. A report will be prepared for each participating workplace unit and distributed back to the leaders in that workplace unit. In addition, a broader summary report will be provided to the Island Health organization. The information collected will be reviewed and used solely for the purposes of creating learning opportunities for staff and leadership to improve HR climate in your workplace unit.

The Island Health Research Ethics Board, the University of Victoria Human Research Ethics Board, and the University of Lethbridge Human Subject Research Committee have approved all aspects of this research.

Please feel free to contact us directly should you have any questions or concerns.

Thank you in advance for your time.



## Ali Dastmalchian, PhD

Professor and Principal Investigator Dean of the Beedie School of Busisness Simon Fraser University bizdean@sfu.ca



## Paul Hasselback, Md, MSc, FRCPC

Medical Health Officer Vancouver Island Health Authority and Co-Investigator Paul.hasselback@viha.ca

#### Claudia Steinke R.N., M.Sc., Ph.D.

Associate Professor and Co-Investigator Faculties of Health Sciences and Management University of Lethbridge Claudia.steinke@uleth.ca

#### **Ruth Ann Rebutoc**

Student Investigator Faculty of Health Sciences University of Lethbridge a.rebutoc@uleth.ca

## **Appendix D: Employee Survey**

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#### **Human Resource Climates Project**

English 😊

#### **Default Question Block**

#### PREAMBLE

This study is part of a larger international program of research that has been going on since 2008 that explores the climate for human resources (i.e. HR Climate) in organizations. HR Climate may be defined as the shared perceptions among organizational members concerning the HR practices, behaviours and procedures that are rewarded and supported in the workplace.

The current study is a survey of health care providers on Vancouver Island and the environment in which they work. We are interested in *your views* about your job and workplace and learning more about the conditions in healthcare under which particular HR practices translate into effective performance and the desired outcomes. This is important given the role of HR practices and policies on performance measures and work outcomes established in the literature and the need for meaningful measures of HR in healthcare

We hope that you are interested in this topic and in participating in our survey. The survey should take between 15 and 20 minutes to complete and all of your responses will remain anonymous and confidential. The data will be analyzed and presented in aggregated form.

The study is designed to allow us to survey participants **twice** over a six-month period (e.g. survey in October 2016 and again in March or April 2017). The second survey will be identical to the first. We have designed the study in this way because we are interested in assessing the perceptions of the environment where you work over a six-month period of time to see if perceptions change, and if so how and why. For this first round of data collection, we ask that all surveys be completed and submitted online by **October 26, 2016**.

Thank you for your time and consideration.

#### Letter of Informed Consent

The purpose of this study is to further a conceptual framework and measure for assessing Human Resource Climates (HR Climate) in organizations. The concept of organizational climate has been studied in the field of organizational studies for the last three decades, and it is generally related to the performance of the organization.

You are being asked to participate in this research because you are an employee of a healthcare organization under study. The benefit is for you to have a voice in informing us of the current state of the climate for HR in your organization. Your participation in this study is completely voluntary, your anonymity and confidentiality will be maintained at all times. There are no known or anticipated risks to you by participating in this research. If you choose to participate, your involvement requires completion of this survey on two occasions over a six month timeframe. The survey assesses the HR Climate in your organization. There are no right or wrong answers. It is important that you answer the questions candidly. It's anticipated that the survey should take approximately 15 to 20 minutes to complete.

You may withdraw from the study at any time without consequence or explanation. If you decide to withdraw your data (by not clicking on the "Submit" button at the end of the survey), your responses will be discarded. However, please be advised that your data cannot be removed once you have anonymously submitted your survey. You may also decline to answer any question(s) in the survey. The data collected will be aggregated for analysis and no personally identifiable information will be published. Your confidentiality and the confidentiality of the data will be protected: (i) by keeping data secure at all times; (ii) by restricting access to data to the principal investigator and co-investigators; and (iii) by the researchers' commitment to destroying all data after its use and the analysis is completed.

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It is anticipated that the results of this study will be shared with others in the following ways: reports sent directly to participating sites and the larger health organization, and a summary of the findings presented in scholarly/industry presentations and publications.

Completion of this survey constitutes your informed consent to participate in the research on two separate occasions. Thank you in advance for your participation.

Principal Investigators: Ali Dastmalchian (bizdean@sfu.ca), Dean of the Beedie School of Business at Simon Fraser University, is conducting this research in collaboration with Dr. Paul Hasselback from Island Health (paul.hasselback@viha.ca), Dr. Claudia Steinke from the University of Lethbridge (claudia.steinke@uleth.ca), and Ms. Ruth Ann Rebutoc (graduate student/researcher; a.rebutoc@uleth.ca) from the University of Lethbridge.

The Island Health Research Ethics Board, the University of Victoria Human Research Ethics Board, and the University of Lethbridge Human Subject Research Committee has approved all aspects of this research. You may verify ethical approval or raise any concerns you might have by contacting any of the above people or the Island Health Research Ethics Office in Victoria at (250) 370-8620 or email: researchethics@viha.ca

Name of the workplace where you are employed:	
Name of the unit of department where you work:	
	_
Location (city or town):	
	_
In what sector is your workplace?	
O Private	
O Public	
○ Non-profit	
Other:	
PART I: ABOUT YOU	
1.1 What is your job title? (e.g., Registered Nurse, Licensed Practical Nurse, Healthcare Aide, Laboratory Technician, etc	.)
1.2 Please describe what you do in your job. Please describe as fully as possible.	

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Please answer the following questions by selecting the appropriate box.
1.3 How long have you worked in this job?
Cless than 1 year
1 or more year but less than 2 years
2 or more years but less than 5 years
○ 5 or more years but less than 10 years
10 years or more
1.4 How many years in total have you been employed at this workplace? (By "workplace", we mean the site or location at or from which you work.)
Cless than 1 year
1 or more year but less than 2 years
2 or more years but less than 5 years
○ 5 or more years but less than 10 years
10 years or more
1.5 How long have you worked for this department?
Cless than 1 year
1 or more year but less than 2 years
2 or more years but less than 5 years
○ 5 or more years but less than 10 years
10 years or more
1.6 What is the total number of employees in your current department?
Cless than 5 employees
○ 5 to 9 employees
10 to 49 employees
○ 50 to 99 employees
○ 100 to 499 employees
○ 500 or more employees
1.7 How old are you?
16 to 20 years old
21 to 29 years old
0

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30 to 39 years old	
40 to 49 years old	
50 to 59 years old	
60 to 64 years old	
○ 65 years old or older	
1.8 Are you	
○ Male	
Female	
1.9 How many years of post-secondary (college or university) education do you have?	
1.5 Now many years or post secondary (conege of university) education to you have:	
1.10 If you had an educational major or area of specialization, what was it?	
PART II: ABOUT YOUR WORKPLACE	
Please choose the response most applicable to you and your current work situation.	
2.1 We would like to begin this section by asking about performance appraisals. In the last year, have you had your performance formally appraised (usually in a one-on-one meeting with your manager)?	
○ Yes	
○ No	
2.2 Apart from health and safety training, how much training have you had during the last 12 months, either paid for organized by your employer? (Please only include training where you have been given time off from your normal daduties to undertake the training.)	
10 days or more	
○ 5 days to less than 10 days	
2 days to less than 5 days	
1 day to less than 2 days	
Cless than 1 day	
○ None	
2.3 How frequently do employees here have organized meetings with their unit managers or supervisors? (These a sometimes known as briefing groups or team briefings.)	re
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Less than daily but at least once a week Less than weekly but at least once every two weeks Less than once every two weeks, but at least once a month Less than monthly, but at least once every three months Less than once every three months No such meetings  2.4 Have you been asked for your views in a formal attitude survey about this workplace seeking your opinions during the past two years (excluding this survey)? Yes No  2.5 In the past year have you attended any groups at this workplace that solve specific problems or discuss aspects of performance or quality that are held in addition to standard departmental meetings? (These are sometimes known as problem-solving groups, quality circles, or continuous improvement groups.) Yes No  2.6 In the last 12 months, have you made use of any of the following arrangements, and if not, are they available to you if you needed them? (Please select one item in each row below.)  I have used this arrangement Available to me but I arrangement Not available to me Don't Know  a) Flexi-time (ability to vary start and stop times) b) Job sharing (sharing a full lime job with someone else) c) The chance to reduce your working hours (ke. from full-time to part-time) d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days) 9) Working at or from home in normal working hours (i) Working at or from home in normal working hours (ii) Working only during school term times g) Paid leave to care for dependents in an emergency	Qualtrics Survey Software				2016-10-11, 3:03 PM
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Less than once every three months  No such meetings  2.4 Have you been asked for your views in a formal attitude survey about this workplace seeking your opinions during the past two years (excluding this survey)?  Yes  No  2.5 In the past year have you attended any groups at this workplace that solve specific problems or discuss aspects of performance or quality that are held in addition to standard departmental meetings? (These are sometimes known as problem-solving groups, quality circles, or continuous improvement groups.)  Yes  No  2.6 In the last 12 months, have you made use of any of the following arrangements, and if not, are they available to you if you needed them? (Please select one item in each row below.)  I have used this arrangement Available to me but 1 do not use Not available to me Don't Know  a) Flexi-time (ability to vary start and stop times)  b) Job sharing (sharing a full time job with someone else)  o) The chance to reduce your working hours (i.e. from full-time to part-time)  d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days)  e) Working at or from home in normal working hours  f) Working only during school term times  g) Pald leave to care for	Less than once every two we	eeks, but at least once	a month		
2.4 Have you been asked for your views in a formal attitude survey about this workplace seeking your opinions during the past two years (excluding this survey)?  Yes  No  2.5 In the past year have you attended any groups at this workplace that solve specific problems or discuss aspects of performance or quality that are held in addition to standard departmental meetings? (These are sometimes known as problem-solving groups, quality circles, or continuous improvement groups.)  Yes  No  2.6 In the last 12 months, have you made use of any of the following arrangements, and if not, are they available to you if you needed them? (Please select one item in each row below.)  I have used this arrangement do not use Not available to me Don't Know  a) Flexi-time (ability to vary start and stop times)  b) Job sharing (sharing a full time job with someone else)  c) The chance to reduce your working hours (i.e. from full-time to part-time)  d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days)  e) Working at or from home in normal working hours  f) Working only during school term times  g) Paid leave to care for	Less than monthly, but at lea	ast once every three mo	onths		
2.4 Have you been asked for your views in a formal attitude survey about this workplace seeking your opinions during the past two years (excluding this survey)?  Yes  No  2.5 In the past year have you attended any groups at this workplace that solve specific problems or discuss aspects of performance or quality that are held in addition to standard departmental meetings? (These are sometimes known as problem-solving groups, quality circles, or continuous improvement groups.)  Yes  No  2.6 In the last 12 months, have you made use of any of the following arrangements, and if not, are they available to you if you needed them? (Please select one Item in each row below.)  I have used this arrangement Available to me but I arrangement do not use Not available to me Don't Know  a) Flexi-time (ability to vary start and stop times) b) Job sharing (sharing a full time job with someone else)  C) The chance to reduce your working hours (i.e. from full-time to part-time) d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days) e) Working at or from home in normal working hours f) Working only during school term times g) Paid leave to care for	Less than once every three i	months			
two years (excluding this survey)?  Yes  No  2.5 In the past year have you attended any groups at this workplace that solve specific problems or discuss aspects of performance or quality that are held in addition to standard departmental meetings? (These are sometimes known as problem-solving groups, quality circles, or continuous improvement groups.)  Yes  No  2.6 In the last 12 months, have you made use of any of the following arrangements, and if not, are they available to you if you needed them? (Please select one item in each row below.)  I have used this available to me but I arrangement do not use Not available to me Don't Know  a) Flexi-time (ability to vary start and stop times) b) Job sharing (sharing a full time job with someone else) c) The chance to reduce your working hours (i.e. from full-time to part-time) d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days) e) Working at or from home in normal working hours f) Working only during school term times g) Paid leave to care for	<ul><li>No such meetings</li></ul>				
performance or quality that are held in addition to standard departmental meetings? (These are sometimes known as problem-solving groups, quality circles, or continuous improvement groups.)  Yes  No  2.6 In the last 12 months, have you made use of any of the following arrangements, and if not, are they available to you if you needed them? (Please select one item in each row below.)  I have used this arrangement do not use Not available to me Don't Know  a) Flexi-time (ability to vary start and stop times)  b) Job sharing (sharing a full time job with someone else)  c) The chance to reduce your working hours (i.e. from full-time to part-time)  d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days)  e) Working at or from home in normal working hours  f) Working only during school term times  g) Paid leave to care for	two years (excluding this survey)  Yes		ude survey about this wo	orkplace seeking your op	inions during the past
I have used this arrangement  Available to me but I do not use  Not available to me  Don't Know  a) Flexi-time (ability to vary start and stop times) b) Job sharing (sharing a full time job with someone else) c) The chance to reduce your working hours (i.e. from full-time to part-time) d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days) e) Working at or from home in normal working hours f) Working only during school term times g) Paid leave to care for	performance or quality that are he	eld in addition to standa	ard departmental meetin		
start and stop times)  b) Job sharing (sharing a full time job with someone else)  c) The chance to reduce your working hours (i.e. from full-time to part-time)  d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days)  e) Working at or from home in normal working hours  f) Working only during school term times  g) Paid leave to care for	Yes No  2.6 In the last 12 months, have ye	ou made use of any of t		ents, and if not, are they a	available to you if you
time job with someone else) c) The chance to reduce your working hours (i.e. from full-time to part-time) d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days) e) Working at or from home in normal working hours f) Working only during school term times g) Paid leave to care for	Yes No  2.6 In the last 12 months, have ye	ou made use of any of t e item in each row belou I have used this	w.)  Available to me but I		
your working hours (i.e. from full-time to part-time)  d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days)  e) Working at or from home in normal working hours  f) Working only during school term times  g) Paid leave to care for	Yes No  2.6 In the last 12 months, have you needed them? (Please select one a) Flexi-time (ability to vary	ou made use of any of t e item in each row belou I have used this	w.)  Available to me but I		
of hours per week across fewer days (e.g., working 37 hours in four days instead of five days)  e) Working at or from home in normal working hours  f) Working only during school term times  g) Paid leave to care for	2.6 In the last 12 months, have you needed them? (Please select one a) Flexi-time (ability to vary start and stop times)  b) Job sharing (sharing a full	ou made use of any of t e item in each row belou I have used this	w.)  Available to me but I		
in normal working hours f) Working only during school term times g) Paid leave to care for	No  2.6 In the last 12 months, have your needed them? (Please select one as a) Flexi-time (ability to vary start and stop times) b) Job sharing (sharing a full time job with someone else) c) The chance to reduce your working hours (i.e. from	ou made use of any of t e item in each row belou I have used this	w.)  Available to me but I		
term times  g) Paid leave to care for	2.6 In the last 12 months, have youngeded them? (Please select one)  a) Flexi-time (ability to vary start and stop times) b) Job sharing (sharing a full time job with someone else) c) The chance to reduce your working hours (i.e. from full-time to part-time) d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of	ou made use of any of t e item in each row belou I have used this	w.)  Available to me but I		
	2.6 In the last 12 months, have youngeded them? (Please select one)  a) Flexi-time (ability to vary start and stop times) b) Job sharing (sharing a full time job with someone else) c) The chance to reduce your working hours (i.e. from full-time to part-time) d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days) e) Working at or from home	ou made use of any of t e item in each row belou I have used this	w.)  Available to me but I		
	2.6 In the last 12 months, have you needed them? (Please select one a) Flexi-time (ability to vary start and stop times) b) Job sharing (sharing a full time job with someone else) c) The chance to reduce your working hours (i.e. from full-time to part-time) d) Working the same number of hours per week across fewer days (e.g., working 37 hours in four days instead of five days) e) Working at or from home in normal working hours f) Working only during school	ou made use of any of t e item in each row belou I have used this	w.)  Available to me but I		

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2.7 Now thinking about your commitments, both at this workplace and outside of work, do you agree or disagree with the following statements? (Please select one item in each row below.)

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
a) I often find it difficult to fulfill my commitments outside of work because of the amount of time I spend on my job.	0	0	0	0	0
<ul> <li>b) I often find it difficult to do my job properly because of my commitments outside of work.</li> </ul>	0	0	0	0	0

#### PART III: YOUR VIEWS ABOUT WORKING HERE

3.1 We would now like to ask you about the organization you work for. Please note that for consistency we may use the term "organization" by which we mean "your workplace". Do you feel the following statements about your organization are true or false? (Please select one item in each row below.)

	Definitely True	Mostly True	Mostly False	Definitely False
a) This organization pays little attention to the interests of employees.	0	0	0	0
b) This organization tries to look after its employees.	0	0	0	$\circ$
c) This organization cares about its employees.	0	0	0	$\circ$
d) This organization tries to be fair in its actions towards employees.	0	0	0	0
e) This organization lets people make their own decisions much of the time.	0	0	0	0
f) Management trusts people to make work-related decisions without getting permission first.	0	0	0	0
g) Senior management tightly controls the work of those below them.	0	0	0	0
h) Management keeps too tight a reign on the way things are done around here.	0	0	0	0
i) It's important to check things first with management before making a decision.	0	0	0	0

3.2 The next questions ask about how decisions are made in your organization. Do you feel the following statements about
your organization are true or false? (Please select one item in each row below.)

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	Definitely True	Mostly True	Mostly False	Definitely False
a) Management involves employees when decisions are made than affect them.	0	0	0	0
b) Changes are made without talking to the people involved in them.	0	0	0	0
c) Employees don't have any say in decisions which affect their work.	0	0	0	0
d) People feel decisions are frequently made over their heads.	0	0	0	0
e) Information is widely shared.	0	0	0	0
f) There are often breakdowns in communication here.	0	0	0	0
g) People are suspicious of others' departments.	0	0	0	0
h) There is very little conflict between departments here.	0	0	0	0
i) People in different parts of the organization are prepared to share information.	0	0	0	0
j) Collaboration between units is very effective.	0	0	0	0
k) There is very little respect between some of the departments here.	0	0	0	0

3.3 The next questions ask about the support you receive from managers. Do you feel the following statements about your organization are true or false? (Please select one item in each row below.)

		,		
	Definitely True	Mostly True	Mostly False	Definitely False
a) Senior managers here are really good at understanding employees' problems.	0	0	0	0
b) Managers show that they have confidence in those they manage.	0	0	0	0
c) Senior managers here are friendly and easy to approach.	0	0	0	0
d) Management can be relied upon to give good guidance to people.	0	0	0	0
e) Managers show an understanding of the people who work for them.	0	0	0	0

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f) People here are not properly trained when there is new equipment, systems, or processes.	0	0	0	0
g) Employees receive enough training when it comes to using new equipment, systems, or processes.	0	0	0	0
h) The organization only gives employees the minimum amount of training they need to do their jobs.	0	0	0	0
<ul> <li>i) People are strongly encouraged to develop new skills around here.</li> </ul>	0	0	0	0
3.4 The next questions ask abou are true or false? (Please select			ollowing statements abo	out your organization  Definitely False
a) New ideas are readily accepted here.	O O	O	O	O
b) The organization is quick to respond when changes need to be made.	0	0	0	0
<ul> <li>c) Management here are quick to spot the need to do things differently.</li> </ul>	0	0	0	0
<ul> <li>d) This organization is very flexible; it can quickly change procedures to meet new conditions and solve problems as they arise.</li> </ul>	0	0	0	0

3.5 The following questions explore the extent to which managers create a family environment in your workplace. Do you feel the following statements about your organization are true or false? (Please select one item in each row below.)

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	Definitely True	Mostly True	Mostly False	Definitely False
a) Overall, managers treat their employees like family members.	0	0	0	0
b) Overall, managers create a family atmosphere in the workplace.	0	0	0	0

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e) Assistance in developing new ideas is readily

f) People in this organization are always searching for new ways at looking at problems.

available.

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c) Overall, managers feel responsible for employees as if they are their own family members.	0		0		0		0
0.071	Less Constitution		20	0			
3.6 Taking everything into consid	deration, how	satisfied are yo	u with your	Job?			
Very Dissatisfied							
Dissatisfied							
<ul> <li>Neither Satisfied Nor Dissat</li> </ul>	isfied						
Satisfied							
<ul><li>Very Satisfied</li></ul>							
3.7 How often do you feel the fol	lowing about	your job? (Plea	se select o	ne item in each	row below.)		
	Always	Very Often	Often	Sometimes	Rarely	Almost Never	Never
a) I am full of energy at work.	0	0	0	0	0	0	0
b) I am enthusiastic about			0		0		0
my job.	0	0	0	0	0	0	0
Agree Neither Agree nor Disagree Disagree Strongly Disagree  PART IV: THE OPERATION AN		IANCE OF YOU	IR WORKI	PLACE			
In this part of the survey we will a					your workpla	ce.	
4.1 Do you feel the following stat	tements are to	rue or false abo	ut your wo	rkplace? (Pleas	e select one	item in each	row below.)
	Definite	ly True	Mostly Tr	ue M	ostly False	Defini	tely False
a) Time and money could be saved if work was better organized.			0		0		0
b) Poor scheduling and planning often result in targets or desired outcomes not being met.	C		0		0		0
c) Productivity could be improved if jobs were organized and planned			0		0		0
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better.		

4.2 Do you feel the following statements are true or false about your workplace? (Please select one item in each row below.)

	Definitely True	Mostly True	Mostly False	Definitely False
People here always want to perform to the best of their ability.	0	0	0	0
b) People are enthusiastic about their work.	0	0	$\circ$	0
c) People are prepared to make a special effort to do a good job.	0	0	0	0
d) In general, peoples' workloads are not particularly demanding.	0	0	0	0
e) Management require people to work extremely hard.	0	0	0	0
f) The pace of work here is pretty relaxed.	0	0	0	0
g) This company is always looking to achieve the highest standards of quality.	0	0	0	0
h) Quality is taken very seriously here.	0	0	0	0
i) People believe the company's success depends on high quality work.	0	0	0	0

#### PART V: MEANINGFULNESS OF WORK

This section of the survey will ask question related to the meaning you derive in at work.

For the first three items, 5.1, 5.2, 5.3, please choose the response that best identifies with how you feel and/or if you can related to the person described in this scenario. For items 5.4, 5.5, 5.6 please drag the bar to the number that best identifies with your level of agreement.

5.1

Ms. A works primarily to earn enough money to support her life outside of her job. If she were financially secure, she would no longer continue with her current line of work, but would really rather do something else instead. Ms. A's job is basically a necessity of life, a lot like breathing or sleeping. She often wishes the time would pass more quickly at work. She greatly anticipates weekends and vacations. If Ms. A lived her life over again, she probably would not go into the same line of work. She would not encourage her friends and children to enter her line of work. Ms. A is very eager to retire.

$\bigcirc$ $\lor$	ery Much
0 8	Somewhat
$\bigcirc$ A	little
O N	lot at all

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on to a better, higher-level hold. Sometimes her wood order to move on. Ms. B	er work, but does not expect to be in her citel job. She has several goals for her futurerk seems like a waste of time, but she known can't wait to get a promotion. For her, a protition with her coworkers.	e pertaining to the positions she wows she must do sufficiently well in h	uld eventually like to ner current position in
Very Much			
Somewhat			
A little			
O Not at all			
she does for a living is a her work home with her a to several organizations she thinks it makes the v	the most important parts of her life. She is we vital part of who she is, it is one of the first and on vacations, too. The majority of her and clubs pertaining to her work. Ms. C feworld a better place. She would encourage she were forced to stop working, and she is	t things she tells people about hers friends are from her place of emplo els good about her work because s her friends and children to enter he	elf. She tends to take syment, and she belongs he loves it, and because er line of work. Ms. C
Di	isagree Strongly	Neutral	Agree Strongly

Disagr	Disagree Strongly			Neutral	Agree Strongly		
	1	2	3	4	5	6	7
5.4 The work I do on this job is very meaningful to me							

Disagre	e Strongly		Neutral			Agree Strongly		
	1	2	3	4	5	6	7	
5.5 Most of the things I have to do on this job seem useless or trivial								

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Disag	ree Stron	gly		Neutral	Agree Strongly		
	4	5	6	7	8	9	10
5.6 Most people on this job find the work very meaningful.							

Disag	Disagree Strongly			Neutral	Agree Strongly		
	4	5	6	7	8	9	10
5.7 Most people on this job feel that the work they do is useless or trivial.							

#### PART VI: YOUR COUNTRY/SOCIETY

As mentioned earlier, this study is being conducted in many countries to understand the impact of different cultures on your experience at work. Therefore, in this part of the survey, we would like to ask about your view about some of the practices and behaviours in your country/society. The term society is used to refer to the country in which your workplace operates in and where you reside. There are no right or wrong answers. As mentioned earlier, your responses are anonymous and confidential and no individual respondents will be identified.

For each question, please drag the bar to the appropriate rating.

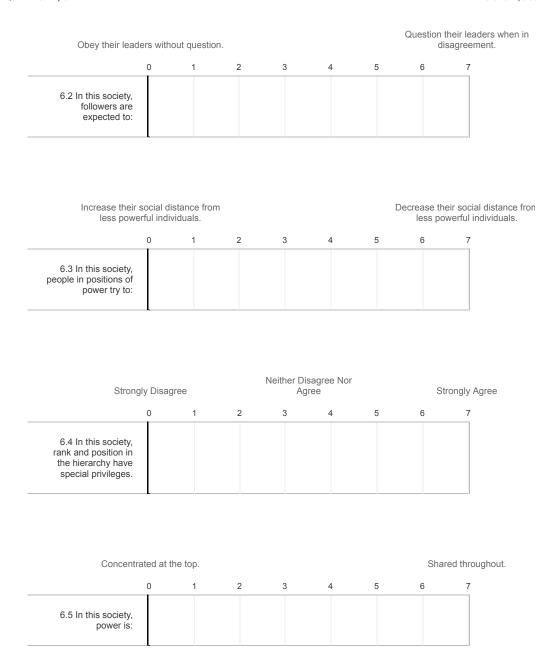
The authority of one's position.

One's ability and contribution to society.

	0	1	2	3	4	5	6	7
6.1 In this society, a person's influence is based primarily on:								

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Strong	ly Disa	gree			isagree nor gree		St	rongly Agree
	0	1	2	3	4	5	6	7
6.6 In this society, leaders encourage group loyalty even if individual goals suffer.								

Individu	ual intere	ests.					Colle	ective interests.
	0	1	2	3	4	5	6	7
6.7 In this society, the economic system is designed to maximize:								

Strong	gly Disa	gree			isagree nor gree		Si	trongly Agree
	0	1	2	3	4	5	6	7
6.8 In this society, being accepted by other members of a group is very important.								



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6.9 In this society:								
----------------------	--	--	--	--	--	--	--	--

Stron	gly Disa	gree			isagree nor gree		S	trongly Agree
	0	1	2	3	4	5	6	7
6.10 In this society, children take pride in the individual accomplishments of their parents.								

Strong	gly Disa	gree			isagree nor gree		S	trongly Agree
	0	1	2	3	4	5	6	7
6.11 In this society, parents take pride in the individual accomplishments of their children.								

Strongly	/ Disagree		Neith	er Disagre Agree	e nor		Strongly	/ Agree
	0	1 2	3	, 4	4 5	5 6	7	7
6.12 In this society, aging parents generally live at home with their children.								

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Strong	gly Disa	Neither Disagree nor y Disagree Agree						trongly Agree
	0	1	2	3	4	5	6	7
6.13 In this society, children generally live at home with their parents until they get married.								

## **Appendix E: Interview Invitation to Participate and Informed Consent**

## **Background and Purpose of the Study**

You are invited to participate in a research study. Your participation must be free and voluntary. You are free to withdraw at any time. The purpose of this study is to examine the role of HR Climate as a factor that intervenes impacting the relationship between human resource practices and employee and organizational outcomes. The study will also assist us in acquiring a better, more in-depth and dynamic understanding of the role of HR Climate for health care providers, HR practitioners and organizational leaders.

You are being asked to participate in this study because you are an employee of Island Health. The benefit is for you to have a voice in informing us of the current state of the climate for human resource management in your organization.

#### **Location of Research**

This research study will be conducted within six different sites (healthcare facilities) of Island Health [names of the sites to be included once confirmed].

## **Number of Participants**

One hundred and twenty six participants will be included in this study including approximately 21 participants from your facility.

# **Project Funding**

This project is being funded by Vancouver Island Health Authority (Island Health).

## What is Required if I Participate?

Your participation in this study is completely voluntary, your anonymity and confidentiality will be maintained at all times. There are no known or anticipated risks to you by participating in this research. If you choose to participate, your involvement requires either participating in an interview or completing an online survey questionnaire that assesses the climate for human resource management in your organization.

Interview: If participating in an interview, your involvement requires participating in an approximate 45 minute interview that will consist of a series of semi-structured interview questions. The interview will take place at your workplace during a mutually agreed upon date and time. We will work with you to determine a time to conduct the interview that will not affect your work responsibilities. You will not be paid for taking part in the interview. You may withdraw from the study at any time without consequence or explanation up until the point of data analysis. This is because during the data collection process, the researcher will maintain a record of participants by substituting individual names with individual code numbers. The interview will not be recorded, rather your responses to the interview questions will be documented on a hard copy (paper) interview schedule, or typed onto a file on a password protected laptop and the responses then be inputted into the Qualtrics

database for the interview portion of the study. This means that at any time prior to data analysis, the researcher can remove a participants' data should they choose to withdraw from the study. If you do withdraw, your data will be discarded completely and not used in the analysis. You will have opportunity to validate your transcribed interview prior to it being analyzed. The data collected will be aggregated for analysis and no personally identifiable information will be published, confidentiality will be maintained at all times by: (i) keeping the data secure at all times; (ii) restricting access to data to the principal investigator and the co-investigators; (iii) committing to destroying all data after its use and the analysis is completed. Please note there are some limits to confidentiality due to context, selection, and methods used. If you require further information regarding this please contact one of us and we will be happy to explain these limitations to you. As this is a longitudinal study, we are asking for your commitment to be interviewed twice during the course of the project. One interview to take place during the fall of 2016 and the second follow up interview to take place during the spring of 2017. Please note: We ask that you sign the last page of this document to indicate that you understand the conditions for participation in this study, in the interview portion of the study. You also have had the opportunity to have your questions answered by a member of the research team.

**Survey:** If participating in the online survey portion of the study, your involvement requires completing a questionnaire that assesses the climate for human resource management in your organization. There are no right or wrong answers, it is important that you answer the questions candidly. This online, web-based survey should take approximately 25 minutes to complete and may be completed either at home or at work wherever and whenever you have some available time. The website (link) for which to access the survey is attached [insert link to survey]. You may withdraw from the study at any time without consequence or explanation. If you do withdraw your data will be discarded, however, please be advised that your data cannot be removed once you have submitted your survey anonymously and/or the data has already been included in the analysis. You may also decline to answer any question(s) in the survey. The data collected will be aggregated for analysis and no personally identifiable information will be published. Your confidentiality and the confidentiality of the data will be protected by: (i) keeping it secure at all times; (ii) by restricting access to data to the investigators; (iii) by committing to destroying all data after its use and the analysis is completed. Please note there are some limits to confidentiality due to context (the nature size or size of the sample), selection (the procedure for recruiting participants), and methods used (survey plus some interviews) used. These limitations are mainly the result of surveying participants in the workplace. If you require further information please contact a member of the research team and will be happy to explain these limitations to you. As this is a longitudinal study, we are asking for your commitment to be surveyed twice during the course of the project (one survey to take place during the summer of 2016 and the second survey to take place during the winter of 2016; the same questions will be asked). Please note: By completing and submitting the survey, your free and informed consent is implied and indicates that you understand the conditions for participation in this study. You also have had the opportunity to have your questions answered by a member of the research team.

What are the Possible Risks or Inconveniences of Participating?

We view this research as "minimal risk" research as the probability and magnitude of possible harms implied by participation in the research is no greater than those encountered by participants in those aspects of their everyday life that relate to the research. An inconvenience known to participants is the time devoted for participating, which may vary from 20 to 60 minutes (on two occasions) depending on the component involved (interview or survey). Also we realize that some questions may reveal and trigger significant feelings of being unsupported and dissatisfied with your work situation. If this should occur, please feel free to access the Employee and Family Assistance Program, which is a confidential counseling and information service sponsored by Island Health. Their telephone number is 1-800-663-1142, or you can access this service by calling the Human Resources department at 1-888-296-3963.

## What are the Possible Benefits of Participating?

Participants will benefit from this study as it will provide an opportunity for individuals to voice their opinions and perceptions in regard to the current HR Climate in their organization. The state of knowledge will benefit as we will develop a framework to better understand the causes and consequences of HR Climate in organizations. This is particularly important given the role of HR practices and policies on work outcomes and performance that has been established in the literature.

#### Do I Have to Take Part?

You are free to participate or not. If you decide not to participate employment status will not be affected in any way. By consenting, you have not waived any rights to legal recourse connected to research-related harm. If you do decide to participate and then change your mind later, you can withdraw without any consequences or explanation.

## Will I be Paid for Taking Part?

You will not be provided with any payments or coverage of costs for participating in this study. As you will not be paid for participating in the study, we will work with you to determine a time to conduct the interview that will not impose on your work responsibilities. We also ask that you complete the survey during a time that will not affect your work responsibilities.

#### **On-Going Consent**

As this project takes place over a longer period of time, participants will be asked for their signed consent at both time periods (1 and 2) of the study. If new information becomes available, we will ask you to renew your consent to participate.

## Confidentiality & How my Personal Information will be Used

Your anonymity will be protected at all times along with the confidentiality of your data. Your confidentiality will be protected within the limits of the law. Your

consent to collect your information for the purpose of this research project will expire when you complete the study.

All survey and interview data will be stored in the study database located on a Qualtrics server. For researchers at Canadian institutions, Qualtrics stores their data in Ireland. Thus the data is not subject to the US Patriot Act. For information that is stored or accessed from outside of Canada, Canadian & BC privacy laws may not apply. All communications to/from the Qualtrics servers are encrypted using TLS (Transport Layer Security). Data at rest is also encrypted. For additional security, surveys are password protected or obfuscated using a difficult to guess survey ID. The Qualtrics servers are protected by Web Application Firewalls and Qualtrics employs an Intrusion Detection System (IDS) to monitor system access for unauthorized uses. A white paper published by Qualtrics that speaks to the Security measures put in place by the company is available on the following link: http://ehe.osu.edu/downloads/oit/qualtrics-security-whitepaper.pdf

#### **Future Use of Data**

It is anticipated that the results of this study will be shared with others in the following ways: directly to participants upon their request, published articles and presentations at scholarly meetings.

## **Disposal of Data**

Five years from the data of official study closure, the data will be thoroughly and completely destroyed. Effective data destruction will ensure that information cannot be extracted or reconstructed. Paper records will be destroyed/disposed of in a manner that leaves no possibility for reconstruction of information. Appropriate methods for destroying/disposing of paper records include shredding then cross shredding, pulping, and pulverizing. Online survey data will be destroyed by Qualtrics, the company hosting the survey, as they offer onsite secure destruction of electronic records. The investigators (Dr. Claudia Steinke and Ms. Ruth Ann Rebutoc) will be responsible for ensuring the effective and completed destruction of the data.

## **Sharing of Study Results**

A summary of the study results will be provided to you upon request. The practical implications of the study will also be interest to health care executives and administrators and we will work to publish in journals such as Health Care Management Forum (Canada's leading journal for health care executives, etc.), present at conferences such as BC Health Leaders Conference, and develop both a report and summary for distribution to stakeholders (i.e. Island Health organization and study participants). A presentation of the study findings to Island Health and the participating sites will also be delivered. Ms. Ruth Ann Rebutoc and Dr. Claudia Steinke will take the lead in publication and presentation of the results and all team members that have contributed to the work will be acknowledged accordingly.

## **Commercial use of Results**

This research will not lead to a commercial product or service.

## Who Should I Contact if I Need More Information or Help?

The contact information for members of the research team is provided on the first page of this Letter of Information/Informed Consent Form.

For questions or concerns about your rights as a research participant, please contact the Island Health Research Ethics Office in Victoria at (250) 370-8620 or email: researchethics@viha.ca.

#### **CONSENT**

Your signature below indicates that:

All sections of this Consent form have been explained to your satisfaction You understand the requirements, risks, potential and responsibilities of participating in the research project, and;

You understand how your information will be accessed, collected and used. All of your questions have been fully answered by the researchers.

## **Appendix F: Interview Guide**

#### **Interview:**

## Part I Context and Organizational Structure:

- 1. Could you estimate how many years this workplace has been in operation?
- 2. Which of the things listed on this card have happened to this workplace in the past 6 months?
  - a. Change of name?
  - b. Change of Address?
  - c. Change of activity:
  - 3. What are the key activities of this workplace/unit?
  - 4. How would you assess the degree of competition in this market?
    - a. Very low
    - b. Neither high nor low
    - c. High
    - d. Very high
- 5. How would you assess the degree of change and volatility in your external? (i.e. IHealth)
  - a. Very low
  - b. Neither high nor low
  - c. High
  - d. Very high
- 6. How would you assess the degree of demand and pressure experienced in your?
  - a. Very low
  - b. Neither high nor low
  - c. High: High
  - d. Very high
  - 7. Regarding the workplace's organizational chart:
    - a. Number of levels in the hierarchy?
    - b. Number of units and departments
  - 8. Regarding the organizational chart:
  - a. Who normally receives the organizational chart for this workplace (either printed or online)?
    - b. What is the amount of employees who receive the chart?
      - i.No one
      - ii. A few people
      - iii. Many employees

# iv. All employees

- 9. Regarding job descriptions
- a. Do employees normally receive written job descriptions here (either printed or online?
  - b. Do all employees receive them?
  - c. Do unit Department Heads receive them?
  - d. Do staff (non-line/admin) receive them?
  - e. Do Directors receive them?
- 10. Do you have written procedures for various job categories/job descriptions (either printed or online)?
- 11. Do some people have written operating instructions/protocols (either printed or online)?
  - a. Please explain or provide some examples:
  - 12. Are organizational policies written (either printed or online?)
- 13. Do you normally give information booklets to new employees (either printed or online)? Note: this question refers to not only policies and procedures, but also information on vacation and sick leave, pension information, etc.
  - a. How many of these booklets do you have?
    - i.None
    - ii One
    - iii.Two
    - iv.Three
    - v.Four or more
  - b. Can you explain what types of booklets these are?
  - 14. Regarding job schedules:
  - a. Are there written schedules (schedules for work, for tasks) (online or hard copy)?
    - b. Are there written research reports (online or hard copy)?
    - c. Are there written project reports (online or hard copy)?
- 15. In this section, we are interested in the way in which some of the important decisions are made in your workplace. Can you please tell me: (1) who gets involved in the following decisions; and (2) who is the most junior person with authority to make determinations about each of the decisions (even though it may be ratified later at some higher level)? (If there is a committee, consider the level of the chair of the committee.)

Options:

- 8. Above the workplace [Ministry/Union]
- 7. Board
- 6. Executive Director

- 5. Chief Operations Officer
- 4. Director
- 3. Department Head
- 2. Supervisor (including clinical Nurse Supervisor)
- 1. Staff and specialists (RNs, LPNs)

0. Front line (i.e. care aids, community health workers)

	Who gets involved	Most
	(breadth)	junior
		level
		(depth
a. Introduction or adoption of new protocols,		
programs or services		
b. Reduction or elimination of protocols,		
programs or services		
c. Changes or modification in protocols,		
programs or services		
d. Introduction or adoption of new policies		
e. Changes in allocation of budgets		
f. Hiring of new employees		
g. Promotion of employees		
h. Dismissal of employees		
i. Number of people required/staffing levels		
j. Salaries of employees		
k. Training needs for employees		
1. Purchasing new equipment		
m. Organization of departments and people		
n. Changes in HR practices and procedures		

# Part II: Relationship to Island Health, HR support, Change

16. Can you describe the relationship of this workplace with the larger organization of Island Health?

a.

i. Note: how do you fit? What's the relationship like?

17. Can you explain how the larger organization provides support in the area of human resources to the local unit/workplace.

a.

18. Can you tell me about any change initiative that is currently taking place or will be taking place soon at the local level that will affect this workplace in some way

#### Part III: HR Policies and Practices:

19. Overall, how easy is it for you to fill vacancies that arise in nurses?

- a. Very difficult:
- b. Difficult:
- c. Neither difficult nor easy
- d. Easy
- e. Very easy
- 20. Overall, how easy is it for you to retain nurses in the unit?
  - a. Very difficult:
  - b. Difficult:
  - c. Neither difficult nor easy
  - d. Easy
  - e. Very easy
- 21. When filling vacancies at this workplace for nurses, do you ever conduct any type of personality or attitude test?
- 22. When filling vacancies do you ever conduct any type of performance or competency test?
- 23. Is there a standard orientation/induction program designed to introduce new nurses to this workplace (Do not include probation periods.)
- 24. How much time do nurses spend in orientation/induction activities? (hours/days)
- 25. What portion of nurses have been given time off from their normal daily work duties to undertake training over the past 24 months?
  - a. Don't know
  - b. None (0%)
  - c. Just a few (1-19%)
  - d. Some (20-39%)
  - e. Around half (40-59%)
  - f. Most (60-79%)
  - g. Almost all (80-99%)
  - h. All (100%)
- 26. Approximately what proportion of nurses is formally trained to be able to do jobs other than their own?
  - a. Don't know
  - b. None (0%)
  - c. Just a few (1-19%)
  - d. Some (20-39%)
  - e. Around half (40-59%)
  - f. Most (60-79%)
  - g. Almost all (80-99%)
  - h. All (100%)

- 27. Which of these statements best describes your approach to filling vacancies at this workplace?
  - a. Internal applicants are our only source; no external recruitment
  - b. Internal applicants are given preference, other things being equal, over external applicants
  - c. Applications from internal and external applicants are treated equally
  - d. External applicants are given preference, other things being equal, over internal applicants
  - e. External applicants are our only source; no internal recruitment.
  - 28. Regarding Performance Pay:
  - a. Do nurses in this workplace get paid by results? [yes, no, no response]
  - b. Do nurses in this workplace receive merit pay? [yes, no, no response]
- 29. What proportion of nurses at this workplace are paid in this way/in either of these ways?
  - a. Don't know
  - b. None (0%)
  - c. Just a few (1-19%)
  - d. Some (20-39%)
  - e. Around half (40-59%)
  - f. Most (60-79%)
  - g. Almost all (80-99%)
  - h. All (100%)
  - 30. Do nurses have their performance formally appraised? [no, yes]:
- 31. What proportion of nurses at this workplace have their performance formally appraised?
  - a. Don't know
  - b. None (0%)
  - c. Just a few (1-19%):
  - d. Some (20-39%)
  - e. Around half (40-59%)
  - f. Most (60-79%)
  - g. Almost all (80-99%)
  - h. All (100%)
- 32. What proportion, if any, of nurses at this workplace work in formally designated teams?
  - a. Don't know:
  - b. None (0%)

- c. Just a few (1-19%)
- d. Some (20-39%)
- e. Around half (40-59%)
- f. Most (60-79%)
- g. Almost all (80-99%)
- h. All (100%):
- 33. How frequently do you have meetings between unit managers or supervisors and nurses for whom they are responsible? These are sometimes known as 'briefing groups' or 'team briefings'?
  - a. No such meetings (1)
  - b. Less than once every three months (2):
  - c. Less than monthly, but at least once every three months (3)
  - d. Less than fortnightly, but at least once a month (4)
  - e. Less than weekly, but at least once a fortnight (5)
  - f. Less than daily, but at least once a week (6)
  - g. Daily (7):
- 34. Are there any committees of managers and employees among nurses at this workplace, primarily concerned with consultation, rather than negotiation? These committees may be called joint consultative committees, works councils or representative forums. [no, yes]
- 35. Have you or a third party conducted a formal attitude survey of nurses views or opinions during the past two years? [no, yes]
- 36. Do you have groups of nurses at this workplace that solve specific problems or discuss aspects of performance or quality? They are sometimes known as problem-solving groups, quality circles or continuous improvement groups. [no, yes]
- 37. In the last 24 months, roughly what proportion of nurses has been involved in these groups?
  - a. Don't know
  - b. None (0%)
  - c. Just a few (1-19%)
  - d. Some (20-39%)
  - e. Around half (40-59%)
  - f. Most (60-79%)
  - g. Almost all (80-99%)
  - h. All (100%)
  - 38. Regarding non-pay benefits
  - a. Are nurses entitled to sick pay in excess of statutory requirements? [no, yes, no response]:
  - b. Are nurses entitled to more than 28 days of paid annual leave (including public holidays)? [no, yes, no response]:

- c. Are nurses entitled to private health insurance? [no, yes, no response]
- d. Are nurses entitled to a company vehicle or vehicle allowance? [no, yes, no response
  - i. If yes, who specifically?
- e. Are nurses entitled to employer contributions to a pension scheme? [no, yes, no response]
- 39. Do you provide nurses with any of the following working times arrangements at this workplace?
  - a. Working only during school terms? [no, yes, no response]
  - b. The ability to change set working hours (including changing shift pattern) [no, yes, no response]
  - c. Compressed hours (e.g. working standard hours across fewer days) [no, yes, no response]
  - d. The ability to reduce working hours (e.g. switching from full-time to part-time employment) [no, yes, no response]
  - e. Job sharing schemes (sharing a full-time job with another employee) [no, yes, no response]
  - f. Flexi-time (where an employee has no set start or finish time but an agreement to work a set number of hours per week or per month) [no, yes, no response]
  - g. Working from home in normal working hours? [no, yes, no response]
- 40. Do you monitor recruitment and selection by any of the following characteristics?
  - a. Religion or beliefs? [no, yes, no response]
  - b. Sexual orientation? [no, yes, no response]
  - c. Age? [no, yes, no response]
  - d. Disability? [no, yes, no response
  - e. Ethnic background [no, yes, no response]
  - f. Gender [no, yes, no response]
  - 41. Do you monitor promotions by any of these characteristics? :
    - a. Religion or beliefs? [no, yes, no response]
    - b. Sexual orientation? [no, yes, no response]
    - c. Age? [no, yes, no response]
    - d. Disability? [no, yes, no response
    - e. Ethnic background [no, yes, no response]
    - f. Gender [no, yes, no response]
- 42. Is there a formal procedure for dealing with individual grievances raised by any employee nurses at this workplace? [no, yes]
- 43. In raising grievances, are nurses required to set out in writing the nature of the grievances?

- a. No
- b. Yes, sometimes, depends on the issue
- c. Yes always
- 44. Are nurses asked to attend a formal meeting with a manager to discuss the nature of their grievance?
  - a. No
  - b. Yes, sometimes, depends on the issue
  - c. Yes, always
- 45. Do nurses have a right to appeal against a decision made under the procedure?
- 46. Is there a policy of guaranteed job security or no compulsory redundancies for this group of employees? [no, yes]:

### **Part IV: Unit Outcomes**

- 47. Compared with other workplaces in the same industry, how would you assess your workplace's financial performance?:
  - a. Relevant data not available
  - b. No comparison possible
  - c. A lot below average
  - d. Below average.
  - e. About average for industry
  - f. Better than average
  - g. A lot better than average
- 48. Compared with other workplaces in the same industry, how would you assess your workplace's labour productivity?
  - i. Relevant data not available
  - ii. No comparison possible
  - iii. A lot below average
  - iv.Below average
  - v. About average for industry
  - vi.Better than average:
  - vii. A lot better than average
- 49. Compared with other workplaces in the same industry, how would you assess your workplace's quality of service?
  - i. Relevant data not available
  - ii. No comparison possible
  - iii. A lot below average
  - iv.Below average
  - v. About average for industry:
  - vi.Better than average
  - vii. A lot better than average

- 50. Which, if any, of the forms of industrial action on this card have taken place at this workplace during the last 2 years?
  - a. Strikes/stoppages of less than a day? [no, yes, no response]:
  - b. Strikes/stoppages of a day or more? [no, yes, no response]:
  - c. Overtime ban or restriction by employees? [no, yes, no

# response]:

- d. Work to rule?
- e. Other industrial action [no, yes, no response]:

## Appendix G: Data Flow Diagram

#### **Data Flow Diagram**

Primary data collection #1a: Interview senior or site manager from each case organization (n=6)

Primary data collection #1b:

Survey 20 employees from the largest occupational group (i.e nurses) ( $20 \times 6 = 120$ ) from each case organization (n=120)

Secondary data collection #1c:

Collect public documents, reports and statistics pertaining to each case organization to shed light on the context and history of the organization and its HR practices, organizational structure, design, change process, and policies.

Data cleaning
Data decoding
Data aggregation
Data analysis

Primary data collection #2a:

Interview the same senior or site manager from each case organization (n=6)

Primary data collection #2b:

Survey the same 20 employees from the largest occupational group (i.e nurses) ( $20 \times 6 = 120$ ) from each case organization (n=120)

Data cleaning Data decoding Data aggregation Data analysis

Secondary data collection #2c

Collect further (if applicable) public documents, reports and statistics pertaining to each case organization to shed light on the context and history of the organization and its HR practices, organizational structure, design, change process, and policies.

Interpretation of case specific and Island Health organization (aggregated) findings

Report of findings

# **Appendix H: HR Climate Factor Loadings**

Table 14. HR Climate Dimensions Factor Loadings Phase 1

Items	Welfare	Involvement	Support	Development	Innovation	Family
1. Interest of employees	.76					
2. Looks after employees	.91					
3. Cares for employees	.85					
4. Fair toward employees	.74					
Changes without talking to employees		.67				
2. No say in decisions		.89				
3. Decisions made over employees' heads		.81				
1. Managers understand unit problems			.79			
2. Managers show confidence in employees			.78			
3. Managers are friendly			.74			
4. Managers give good guidance			.77			
5. Managers understand employees			.88			
Employees are properly trained				.71		
2. Training is sufficient				.76		
<b>3.</b> Organization only provides minimum training				.63		
1. Organization quick to change					.75	
2. Management quick to spot need to change					.70	
3. Organization is flexible					.77	
4. Develops new ideas					.78	
<b>5.</b> Organization searches for new solutions					.70	
Employees treated like family						.90
2. Managers create a family atmosphere						.89
<b>3.</b> Managers fee responsible for employees						90

Table 15. HR Climate Dimensions Factor Loadings Phase 2

Items	Welfare	Involvement	Support	Training	Innovation	Family
1. Interest of employees	.74					
2. Looks after employees	.90					
3. Cares for employees	.92					
4. Fair toward employees	.83					
1. Changes without talking to employees		.73				
2. No say in decisions		.89				
3. Decisions made over employees' heads		.78				
Managers understand unit problems			.80			
2. Managers show confidence in employees			.77			
3. Managers are friendly			.75			
4. Managers give good guidance			.88			
5. Managers understand employees			.86			
1. Employees are properly trained				.83		
2. Training is sufficient				.77		
<b>3.</b> Organization only provides minimum training				.61		
1. New ideas accepted					.71	
2. Organization quick to change					.78	
3. Management quick to spot need to change					.70	
4. Organization is flexible					.81	
5. Develops new ideas					.86	
1. Employees treated like family						.93
2. Managers create a family atmosphere						.96
<b>3.</b> Managers fee responsible for employees						.90