Lean and In-between:
Culture and Discourse in a Health-Care System Improvement Story

by

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Abstract

Background: Lean is a process improvement methodology born in automobile manufacturing and since applied to other manufacturing sectors and, more recently, the public sector. As the Government of Saskatchewan applies lean to its provincial health-care system, emerging literature debates the effectiveness, questions the financial investment, and suggests that employees may not support the changes. The purpose of this research is to explore the communicative meanings and discourses within the employee experiences of lean.

Methods: This research moves from interpretive to critical analysis of institutional texts, interview data, and participant observation of one key lean ritual: the rapid process improvement workshop. Semi-structured interviews focus on phenomenological employee experiences with an appreciative inquiry lens to generate recommendations for lean implementation. Employee and manager narratives are analyzed critically to explore key characters, syllogisms, and themes, while data is categorized into themes derived from research in England's National Health Service, and coded to produce an ethnographic account of the Saskatchewan lean experience.

Results: Results revealed key institutional and organizational discourses of necessary change, eliminating waste, and improving the patient experience. Process improvement workshops are shown to generate and perpetuate a unique organizational culture, with emergence of a counterculture of non-lean-favouring networks. Narratives focus on health-care providers as key characters who either support or do not support lean, or who gain meaningful patient perspective and experience that drive improvements. Institutional and managerial sources of power are discussed as both driver of organizational discourse and factor in employee dissatisfaction. Recommendations discuss improvements to training, lean components, employee engagement, patient experience, communication, and interpersonal team building.

Conclusion: Organizations implementing or considering lean must recognize communication and culture as key success factors in the employee experience of lean, with attention to the recommendations that will better represent provider voices and enable longer-term system change in the interest of health-care recipients.

Keywords: lean, health care, organizational discourse, culture, ethnography, Saskatchewan

Table of Contents

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Lean is a management philosophy and continuous improvement regime designed to help organizations eliminate waste and improve product or service quality based on customer needs. Developed by Japanese automakers after World War II and gradually implemented as variations of the Toyota Production System across the international manufacturing sector (Ohno, 1988, p. xiii), lean has more recently been introduced in the Canadian public sector, particularly to reform a health-care system struggling to keep up with the demands of a growing and aging population, failing infrastructure, and rising costs.

Yet, despite a list of organizations that have implemented lean in some form across the country, the Conference Board of Canada (2014) states that "relatively little is known about lean in the Canadian health care system. Saskatchewan is the only province that has made a commitment to implement lean consistently and comprehensively across its entire health system" (Lean at Work, para. 4). Saskatchewan's implementation of lean, however, extends beyond health care into education, justice, and other government ministries that provide services to residents. With a financial investment of at least $33 million (Canadian Broadcasting Corporation, 2015), the government's website claims "employees around the province are embracing the lean way of thinking to improve systems and processes, and to streamline their work" (Government of Saskatchewan, 2014). However, literature emerging from England's health-care system suggests that employees may not embrace the lean way of thinking as readily as an organization might hope (Radnor, Holweg & Waring, 2012; Waring & Bishop, 2010).

With a significant investment in its health-care sector, and with troubling literature emerging from the United Kingdom, Saskatchewan offers an important setting to explore the

implementation of lean, particularly with an eye to communication, organizational culture, and the employee experience. This will add to existing literature and open a window for organizations implementing or considering lean to leverage communicative and cultural drivers to engage employees and improve outcomes. Therefore, the main research question in this study is: What meanings and discourses have emerged from the implementation of lean in Saskatchewan's health-care system, and how could they change to improve public sector service delivery? The research will also explore several sub-questions: 1. How do employees, managers, and leaders feel about and perceive their experiences with lean in health care, and what values, behaviours, and messages caused those feelings and perceptions?; 2. What is the relationship between one's role in lean (employee, manager, and leader) and the sociocultural meanings and organizational discourses that have emerged for each?; 3. How do the rapid process improvement workshop and report-out construct and communicate lean culture and shape subculture within the organization?; 4. How does lean culture or communication in the provincial health-care sector perpetuate hegemonic or managerial belief systems, and what is the effect on the implementation of lean?; and, 5. What values, behaviours, and messages would most improve the human experience in public sector lean implementation and service delivery?

These research questions aim to grow the currently sparse discourse-oriented communications research on lean in organizations, and focus on values-based ideas to improve lean implementation. With organizational culture and human communication at the core, the objectives of this research are three-fold. The first is to determine through ethnography the meanings, discourses, and culture that have emerged from the implementation of lean in one regional health care organization amongst a larger provincial system. The second objective is to critically analyse the role of a lean ritual—the rapid process improvement workshop—in creating

and recreating lean improvement narrative, organizational subculture, and institutional ruling relations. Third, I will use a framework of appreciative inquiry to ask employees about the underlying values of health care improvement, and how the communicative processes of lean could change to improve service delivery in any public organization considering or implementing lean.

Theories of organizational culture, power, and discourse serve as the theoretical framework for this research. Michael Pacanowsky and Nick O'Donnell-Trujillo's (1983) theory of organizational culture offers a way to examine lean's repeated rituals as communicative performances that define and recreate the culture—or at least a subsection of the culture—inside the organization. Dennis Mumby (1988) presents power-as-domination as a critical and omnipresent force in groups of people organizing, which provides a theoretical space to explore lean from the perspective of dominant organizational power structures and discourse. Further, David Grant and Robert Marshak (2011) provide an updated lens through which to analyse organizational discourse, where dominant themes about change and hierarchy may emerge from the implementation of lean. These three theories together build a strong foundation to ask questions about the effect of lean on its systems, organizations, and most importantly, people.

This research moves between interpretive and critical paradigms to further the body of work on human experience, meaning making, and power relations in individual organizational settings within a system-wide lean implementation. The methodologies I will draw on to study Saskatchewan's provincial health-care system include appreciative inquiry-based phenomenological research and ethnography. Data collection will include observation of a public lean ritual, interviews with participants and organizational leaders, and a review of key documents from various levels of the health-care system. Textual and critical narrative analysis

will provide a relevant foundation on which to make sense of the data. The resulting ethnography will reflect the theoretical and practical organizational culture, power and discourse emerging from this Canadian health-care improvement story.

An overarching goal of this research is to contribute to the body of knowledge on the communicative and cultural processes of lean in organizations, and offer possible frameworks for implementers, leaders, and decision-makers to optimize human values and discourse as key contributors to the success of lean in an organization or system. The research methods presented here, in this specific provincial site of study in Canadian health care, are deployed to determine which communicative dynamics, values, and behaviours of lean are aligned or misaligned with its purpose, and which could ultimately help lean—and the people who encounter it—succeed.

Literature Review

Lean was first developed to eliminate waste in auto manufacturing, and is now applied to a variety of industries to improve value delivered to its customers (Womack, 1990). As such, there are several viable arenas of literature on which to focus. This literature review begins with a broad scan of the lean journey from its Japanese manufacturing roots to public sector application and eventually health care, particularly in England, where lean has been adopted in a variety of health services and settings. A more specific body of literature emerged from this broad scan, in which scholarship narrows in on the sociocultural aspects of lean, from organizational communication and culture to actor networks and discursive power relations inherent in the implementation of lean as a highly prescribed and often contentious management philosophy. I also review literature related to organizational culture, managerial power structures, and the organizational discourse of change to employ a theoretical and critical lens, and understand how these processes affect, and are affected by, organizational roles and

structures. This context also helps identify a framework to explore the main research question: What meanings and discourses have emerged from the implementation of lean in Saskatchewan's health-care system, and how could they change to improve public sector service delivery?

Lean: From Manufacturing to Public Health Care

A significant portion of academic research on lean focuses on its historical evolution, effectiveness, and measurable factors for success or failure—mostly in automotive and manufacturing settings. Taichi Ohno (1988) is credited with the creation of the Toyota Production System, upon which lean is based, intended "to increase production efficiency by consistently and thoroughly eliminating waste" (p. xiii). The principles of lean quickly spread to a variety of organizations and sectors across the globe, and have been promoted and studied repeatedly in North American production environments (Womack & Jones, 1996; Womack & Jones, 2005; Womack, Jones, & Roos, 1990). Jens Dahlgaard and Su Mi Dahlgaard-Park (2006) reiterate lean's principles—which include identification of product value, uninterrupted flow of value for the customer, and mistake-free perfection—and argue that they are consistent with similar management philosophies of total quality management (TQM) and Six Sigma, and therefore have similar organizational outcomes and effects on corporate culture. However, Sanjay Bhasin (2012) acknowledges that only a small percentage of manufacturing organizations are able to successfully implement lean because they do not consider human factors and the need for a change strategy. Bhasin (2012) claims that "lean thinking based on the Toyota way involves a far deeper and more pervasive cultural transformation that what most organisations had anticipated" (p. 454), thus opening the door for further literature and research on the sociocultural aspects of lean implementation beyond manufacturing.

Public sectors began applying lean principles in the late 20th Century to improve public service delivery, particularly in England, where the National Health Service (NHS) continues to be a key adopter of lean in various clinics and hospitals. Burgess and Radnor (2012) compare the adoption of lean in three NHS hospitals to highlight the complexities and tensions in lean's financial and target-based drivers, as well as the need for stable leadership and a long-term vision. Through a phenomenological case study approach, they claim the often-urgent implementation of lean can create a "foundation of sand" rather than a solid base on which managers and employees can sustain long-term improvement (Burgess & Radnor, 2012, p. 605). Zoe Radnor, Matthias Holweg, and Justin Waring (2011) conducted a case study with rigorously coded interviews to ask if lean in health care is an unfilled promise. They claim that implementation of lean in the NHS often hits a "low-lying glass ceiling" where one-time tool-based process improvements are the norm, rather than a long-term, culturally sustained system of improvement with a clear definition of customer value (Radnor et al., 2011, p. 369). They also assert that the purchaser of said value differs between public and private sectors, and this is a significant factor in the success or failure of lean in the public sector (Radnor et al., 2011). These examinations reveal a suite of challenges in lean's application to health care, and a possible disconnect between lean principles and the values inherent in the public delivery of human services, thus opening the door for further research on the human experience of lean. This literature leads to several subsequent research questions that will further explore this, including how people feel about their experiences with lean, how the improvement workshop affects organizational culture, and how values, behaviours, and messages can improve the human experience of lean for the provider and customer.

Despite the known challenges of applying lean in the public sector, the Government of Saskatchewan hired U.S. lean consultant John Black and Associates to implement lean system-wide for the first time, in an effort to improve health-care service delivery, quality, and safety, and reduce growing health-care budgets (Goodridge et al., 2015; Marchildon, 2014; McIntosh, 2016;). Richard Holden and Greg Hackbart (2012) claim that "in the nascent literature on Lean in healthcare settings, there is now evidence that "Lean works"" (p. 199). As such, the Government of Saskatchewan's based its direction on other model organizations who have implemented lean, including: Virginia Mason Medical Center in Seattle, Washington; Park Niccolet Health Services in Minnesota; and, ThedaCare in Wisconsin. Holden and Hackbart (2012) contend that ThedaCare's lean system, "first implemented in 2003, is one of the best known and most success (error in the original) implementations of Lean in healthcare" (p. 191). Saskatchewan's Tom McIntosh (2016), however, is less optimistic about Saskatchewan's lean journey, recalling "increased suspicion that Lean was about cuts and cost-saving and not really about 'patient centredness' and 'empowered workers'" as it originally claimed" (p. 7). McIntosh asserts that the top-down implementation and multiple centres of organizational decision-making in Saskatchewan's health-care system prevents lean from improving the system in any tangible way, and that government must start to "pay attention to those voices inside the system" to mitigate the tensions and conflicts that have taken hold (p. 8). Research on lean in Saskatchewan's health-care sector is only now just emerging, and communication, culture, and the experiences of health-care employees are coming to the forefront as key factors that have impaired or stalled lean in Saskatchewan to date. Based on this body of literature from lean's origins to its more recent appearance in Canada's health-care sector, my research proposes an appreciative exploration of those voices inside the system, to supplement the emerging discourse

in Saskatchewan literature and look for themes similar to those from the NHS; this approach starts from an interpretive space and peers over the paradigmatic fence into critical research.

From Interpretive to Critical Research in Lean

Similar to the themes emerging in Saskatchewan, researchers have already studied communicative processes of lean in England's public sector, stretching across methods and qualitative paradigms. Justin Waring and Simon Bishop (2010) anchor an ethnographic study of a hospital operating department on the pillars of rhetoric, ritual, and resistance. Their study focuses on the interplay between management and professional practitioners to determine how lean values are expressed and interpreted, and how lean is applied in practice with varying degrees of authenticity or effectiveness. Interviews were transcribed and coded with a common frame that led to several themes, including managerial discourse of "waste" and "delays" as binary or oppositional forces to "value" and "patient care," and lean's series of rituals as events that represent compliance and reinforce cultural norms and professional expectations (p. 1336). Their findings reveal a translation problem of sorts in modifying a manufacturing improvement system for health services, and they identify a gap in sociocultural research around lean implementation (Waring & Bishop, 2011, p. 1339). Thanos Papadopoulos, Zoe Radnor, and Yasmin Merali (2011) conducted a case study based on actor-network theory as a lens for successful implementation of lean over time. Papadopoulos et. al argue that a lean-favouring network must continually translate and influence the lean-opposing network to shape new beliefs and behaviours, but the argument may neglect the discourse and power relations inherent in the process. Papadopolous et. al identify an important communicative process that occurs between networks of people in lean organizations, but it largely focuses on the act of translation and visibility of purpose and results rather than the exercise of organizational power and the change

discourses leveraged to turn employee skepticism into support. These interpretive examples are significant in their acknowledgement of communication and culture as significant factors in the implementation of lean, considering much research prior to this focuses more on operational and business metrics as outcomes; however, a review of additional literature is needed to support a critical approach to lean research.

Other scholarship from England recognizes the need for critical research in lean organizations by acknowledging the role of managerial and organizational influence on staff experiences. Leo McCann, John Hassard, Edward Granter, and Paula Hyde (2015), in a three-year ethnographic study of Milltown Hospital in the U.K., determined that staff perceive lean as a managerial fad that cannot apply to the complex field of human health care. They conducted a participation observation of daily lean work, four training events, 14 in-depth interviews, and a textual analysis of organizational presentations, newsletter and intranet content (p. 1564). Extensive field notes were developed into full research accounts, and both textual and observational analyses generated "passages of data that most clearly explained and illuminated . . . three central research questions on how lean was promoted at the hospital, the way in which mid-managers/clinicians claimed to have adopted and interpreted lean, and staff views on how the lean journey was progressing over time" (McCann et al., 2015, p. 1564). They claim that lean has superficially passed through a fad life-cycle from ritualistic to obscure, indicating that organizational messages and values are as important as the principles of lean itself in shaping employee beliefs and behaviours.

Further research adds to these themes of employee perception through even deeper assertions of employee oppression at the hand of managerial power. Peter Hines, Matthias Holweg, and Nick Rich (2004) claim that lean in its original manufacturing form may exploit

and dehumanize employees because it lacks respect for people (p. 998). They assert that "lean should be regarded as more than a set of mechanistic hard tools and techniques" because "the human dimensions of motivation, empowerment and respect for people are very important" (pp. 998, 1000). In turn, the authors suggest that lean is, and must continue, evolving, but they do not offer specific ways to address the historic lack of human regard in much of lean. Bob Carter, Andy Danford, Debra Howcroft, Helen Richardson, Andrew Smith, and Phil Taylor (2011) claim that "all they lack is a chain"—a tongue-in-cheek assertion that employees in the British public financial management sector are slaves to the authoritative, managerial implementation of lean. Their narrative discourse analysis argues that a new style of "macho" management has emerged, where the workforce is pitted against management and consultants who impose private-sector principles and neglect worker skill and negotiation. These critical approaches mark an important turn in lean research, in which power dynamics are studied and understood as a key element of organizational change and communication. The collective lean scholarship from England jumps from interpretive to critical research to acknowledge that human communication, managerial influence, and organizational discourse are power-laden phenomena that can help or hinder lean implementation, and acts as a launch pad to grow the body of knowledge specific to Saskatchewan's health-care system and its discourse. As such, these communicative phenomena will anchor this particular research proposal to study health-care improvement teams in Saskatchewan and discover the values deemed necessary to improve public service delivery from the employee perspective.

Organizational Culture and Discourse as a Theoretical Framework

Organizational culture and discourse literature provides a theoretical framework to begin the research and storytelling journey of lean in Saskatchewan. Michael Pacanowsky and Nick

O'Donnell-Trujillo (1983) argue "that most theorizing about organizational culture presents us with a rather static notion of culture and communication" and that ""communicative performance" allows us to exploit more fully our understanding of communication as a process and culture as a social construction reconstructed" (p. 128). Pacanowsky and O'Donnell-Trujillo's *communicative performances* are either acts of theatricality, such as a manager's dramatic outburst, or acts that bring organizational reality into being (p. 129). Of particular importance to the theorists are *corporate stories*, or "narratives which represent the management ideology and are used to substantiate organizational procedures or pass on the unrecorded-but-managerially-favored customs of organizational life" (p. 139). They urge researchers to look at the "variety of episodes" that constitute an organization's performances and how they have played out historically to create "the meaning of the culture" (p. 146). Dennis Mumby (1988), in his foundational work *Communication and Power in Organizations: Discourse, Ideology and Domination*, explores symbolism, power, and hierarchical interest in the process of organizing. Mumby is not as concerned with the legitimate functions of power exercised in an organization as he is with the relationship between power and ideology, and how they manifest in organizing. Mumby claims that "cultures do not arise spontaneously and consensually, but are often the product of certain power distributions which, in turn, are reproduced by particular organizational ideologies" (p. 56). In this way, Mumby believes that a culture does not form, for example, because a manager defines and dictates it, but rather through longer-term organizational systems, such as decision-making processes, behavioural norms, or influential corporate narratives. Lean—which could be argued as an ideological catalyst for a distinct corporate culture in an organization or system—can be examined through Mumby's lens and explored as both producer and product of hegemonic power-as-domination.

A more recent incarnation of organizational discourse theory comes from David Grant and Robert Marshak (2008, 2011), who present a framework to analyze organizational discourse and alter the dominant discourse to enable effective change. They argue that dominant discourse favours certain ways of talking about change and discredits others, suggesting that discourses are constructed and framed, and can therefore influence change outcomes. The framework's "core premise is that basic assumptions about organizing and organizational change are created, sustained, and over time, transformed through discourse" (Grant & Marshak, 2011, p. 211), and includes interrelated and iterative processes such as "change narratives … constructed and disseminated via conversations" and "power processes [that] shape the dominant discourse about change" (p. 212). Grant and Marshak cite an example in which a new CEO faces difficulty out-sourcing services because the founder and former leader had engrained a pre-existing mantra in the company's leadership narrative, which was contrary to the principles of out-sourcing. In the example, other leaders questioned the CEO's effectiveness because he was collaborative rather than directive, contrary to the founder's known decision-making style. Their framework lends itself to the research question at hand—what meanings and discourses have emerged from the implementation of lean in Saskatchewan's health-care system?—and will help me explore and understand the struggles and hegemonic power constructs that shape the dominant discourse of lean at the research site, as a microcosm of the broader provincial system's discourse. This is intended to reveal the change narratives that wield power over expected and actual employee behaviour within the constraints of lean implementation.

Summary

The literature explored here follows the path of lean's implementation from auto manufacturing to its recent emergence in public sector administration and health care,

specifically in England's National Health Service and now system-wide in Saskatchewan. A specific portion of this academic work explores the role of communication, culture and discourse in this often problematic organizational improvement system. While the literature in this journey acknowledges culture and communication as critical success factors in the effective translation of lean in new sectors and organizations (Bhasin, 2012), critical research studies on the NHS suggest that these success factors are not always managed well, resulting in disengaged staff, bureaucratic power struggles, and discourses contrary to the stated values and intentions of lean itself. Theoretically, the literature also points to specific organizational phenomena that can be directly applied to lean in Saskatchewan—or elsewhere—including approaching the report-out as Pacanowsky and O'Donnell-Trujillo's (1983) communicative performance, the implementation as manifestation of Mumby's (1988) corporate power, or as Grant and Marshak's (2011) organizational discourse of change. In this way, this research proposal focuses on the narrowed literature of lean in health care and applies these theoretical lenses to determine the organizational cultures and discourses emerging in Saskatchewan's unique system-wide lean implementation, as a way to determine how to simply make it better.

Methods

Research Design

The communicative human elements of lean presented here are best researched qualitatively in a design that crosses the boundaries of interpretive and critical paradigms, by moving from appreciative inquiry-based interviews into a critical analysis of lean discourse and narrative. Stanley Deetz (1982) argues that interpretive research in organizations is "to analyze organizational reality — what is presumed as real — as well as its social reality — consensually shared subjective interpretations" (p. 134), while the critical paradigm suggested in this research

design offers a perspective on power that explores how dominant meanings are shaped and perpetuated by social processes (Grant & Marshak, 2011; Mumby, 1988). According to Grant and Marshak (2011), "many discursive studies of organizations have adopted a critical perspective seeking to show how different groups use their power to shape the social reality of organizations in ways that serve their interests" (p. 207). To accomplish this, ethnography was selected as an overarching research methodology because it often "bridges the interpretative and critical paradigms for communication research" (Merrigan, Johnston, & Huston, 2012, p. 200). Appreciative inquiry and interpretive phenomenological research will be integrated into this ethnography to capture key elements of the cultural story, including personal and professional experiences and values, and a vision for better health care. This paradigmatic and methodological approach will allow the research to critically explore the underlying power structures affecting the implementation of lean, while also providing a space for employee reflection on how lean has made them feel and what personal values they believe are the most significant improvement levers in health-care.

Van Maanen (2011) describes *ethnography* as "the stuff of culture" or "fieldwork" that asks the researcher "to share firsthand the environment, problems, background, language, rituals, and social relations of a more-or-less bounded and specified group of people" (p. 3), which is an appropriate way to capture Saskatchewan's story of meaning-making in lean's unique language, rituals, and discursive texts. Because of the methods available under the ethnographic umbrella, and because of the organizational culture, discourse and power theories revealed in the literature review, ethnography serves as a suitable approach to answer the research question: What meanings, and discourses have emerged from the implementation of lean in Saskatchewan's health-care system, and how could they change to improve public sector service delivery?

Institutional ethnography is a notable complementary approach in this research, to "begin from the everyday and aim to investigate policies and social practices in institutional contexts" (Taber, 2010, p. 9). This is particularly useful in exploring the discourse of a lean health-care process team nestled amongst a problematic system-wide public sector transformation. Marie Campbell and Frances Gregor (2002), building on the foundational work of Dorothy Smith, claim institutional ethnography begins in "personal experience" but is "always about how the subject's experience is organized" (p. 40), and they present two key levels of data needed to accomplish this institutional view of ruling relations. First, the researcher must collect entry-level data by speaking to people at the centre of analysis, which, in this proposal, are the lean project improvement team members. Second, the researcher must "move from local accounts and local action to the social relations of ruling" (p.81), by analysing "data at sites beyond local experiences, outside the boundaries of what informants at the local level know" (p. 81). This research will pay particular attention to texts collected from provincial sources related to the implementation of lean and health-care system transformation, to demonstrate their impact on the organization of work and discourse. This ethnographic approach, which nods to Smith's institutional ethnographic approach, provides a research framework to inquire about subjective employee experiences from their perspective, then turn to critical narrative analysis to reveal the micro and macro discourses and power structures of lean and begin to improve the provincial lean story.

To start from an interpretive and phenomenological research space, this design will incorporate appreciative inquiry (AI) to enhance the interpretive phenomenological flavour of participant interviews, with the goal of eliciting stories that can shed light on how positive personal experiences and values can improve lean in health care. Jan Reed (2006) claims that

"the purpose of making sense of information in AI is to organize it in ways that will help researchers understand what people feel they have achieved and how this might be helped to happen again" (p. 139). Reed (2006) asserts that this can be accomplished with questions using the 4 Ds: discovery ("appreciating what gives life"), dreaming ("envisioning what might be"), designing ("determining what will be"), and delivery ("planning what will be") (pp. 32-33), where the purpose is "building on positive experiences for future development" (p. 144). Reed (2006) argues that narrative themes are often extracted through and "reflect the features of AI research and the centrality of social constructionist thinking in lived environments—that the stories people tell about their achievements can be complex and rooted in the dimensions of place, time, and person that make up their experiences" (p. 145).

In this description of appreciative inquiry, the connection to ethnography and phenomenology becomes clear. Frances Maggs-Rapport (2000) asserts that "interpretive phenomenology concentrates on the need to study human consciousness by focusing on the world that the study participants subjectively experience" to "deeper insights into human nature" (p. 221). Maggs-Rapport, while comparing and contrasting interpretive phenomenology and ethnography, also argues that through ethnography, "the researcher aims to explicate the ways that people understand and account for their day-to-day situations" (p. 220). In addition, Joanne Mayoh and Anthony Onwuegbuzie (2015) present a framework for phenomenological research, defining the objective of phenomenology as "to develop a greater understanding of individuals' experiences through the consciousness of the experiencer" (p. 92). According to Frances Maggs-Rapport (2000), ethnography also has many phenomenological aspects: "They are both exploratory, they both use the researcher as the data collection instrument and they both emphasize the need to take a self-conscious approach to research" (p. 219). Maggs-Rapport

(2000) argues "that through a more multidimensional approach to research, the researcher may come closer to understanding both his/her own personal interpretation of the research phenomenon and the experiences of research participants" (p. 224). The marriage of ethnography, phenomenology and appreciative inquiry proposed here will position this research to reveal the values, behaviours and messages that would best describe and improve the human experience and culture in public sector lean implementation and service delivery.

Definitions

Lean is based on the Toyota Production System (Ohno, 1988) and "has its origin in the philosophy of achieving improvement in most economical ways with special focus on reducing . . . waste" (Dahlgaard & Dahlgaard-Park, 2006, p. 264). The term *lean* is often interchanged with the Japanese word *kaizen*, which means good change or continuous improvement. In health care, lean refers to a management system adopted "to enhance quality, capacity and safety, while simultaneously containing or reducing costs" (Goodridge, Westhorp, Rotter, Dobson & Bath, 2015, p. 1).

Value, in the context of lean, has three dimensions in health care: "1. Clinical value (achieving the best possible patient outcomes); 2. Operational value (efficiency, accessibility and continuity of care); and 3. Experiential value (experiences of patients and providers and reflected in patient satisfaction and employee work life)" (Goodridge, Westhorp, Rotter, Dobson & Bath, 2015, p. 3).

In Japanese, the term *muda* means *waste*, which is "everything that increases cost without adding value for the customer" (Dahlgaard & Dahlgaard-Park, 2006, p. 267), including excess inventory, waiting, over-processing, unnecessary transport and motion, overproduction, and defects.

A *rapid process improvement workshop, or RPIW,* is a key activity within a lean organization, "focused on a particular process in which the people who do the work are empowered to eliminate waste and reduce the burden of work" (Regina Qu'Appelle Health Region, 2016). Improvement workshops are "a participatory, weeklong, problem-solving session that resembles both the "kaizen" method of Lean/[Toyota Production System] and the Plan-Do-Study-Act cycle of Six Sigma" (Holden & Hackbart, 2012, 191). The teams generally comprise approximately eight to 12 "senior leaders, staff members and patient advisors, and are supported by Kaizen [lean] specialists" (Regina Qu'Appelle Health Region, 2016).

A *report-out* is a 20-minute presentation during which rapid process improvement workshop teams share "the results of their work" (Health Quality Council, 2014). Each team member presents a portion of the report-out to an openly-invited audience often comprising organizational leaders, employees, patients, and sometimes members of the public.

Site and Setting

The research focuses on two process improvement projects and report-outs in two of 12 Saskatchewan health regions legislated by the Government of Saskatchewan's Ministry of Health to provide health services in hospitals, clinics and community settings. The week-long process improvement project takes place where the work of that process occurs, while the report-out is conducted on the final day in a health region boardroom or auditorium. The process improvement project teams and settings will be accessed ethically through the researcher's personal and professional contacts, while the report-out is an open event to which public and staff audiences are invited. Supplemental organizational and provincial documentation is located online, on the websites of the Government of Saskatchewan, Ministry of Health, provincial Health Quality Council, and health region itself.

Data Collection

Figure 1 depicts the research design framework, along with data collection and analysis methods employed in this ethnography of lean. First, participant observation of lean report-out rituals generated data in the form of researcher field notes collected in a notebook, as well as a transcribed recording of the results and narratives presented by team members from one of the report-outs. Second, semi-structured interviews with system leaders and workshop team members were conducted and recorded after the week-long process improvement workshops, and then transcribed. Third, ruling relations further come to life through textual analysis of publicly available institutional documents described in more detail below.

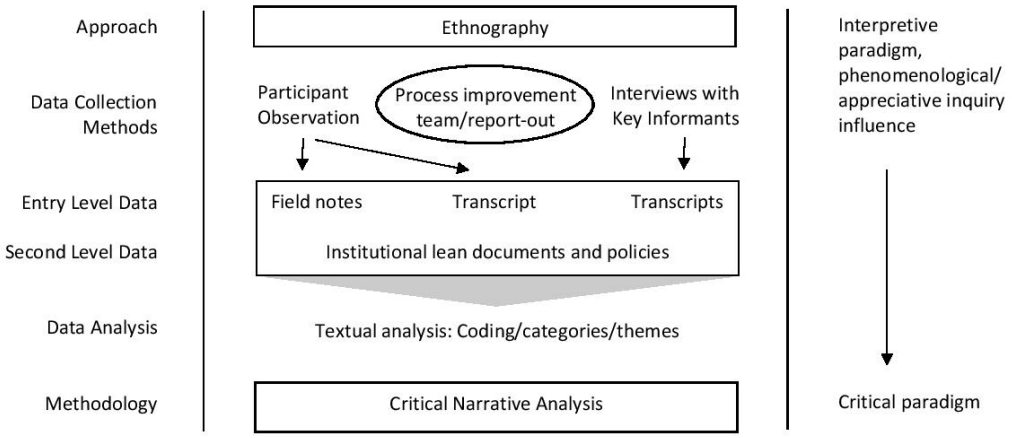

Figure 1. Lean process improvement research design.

First, participant observation as a report-out audience member allow for notebook and tablet field notes with rich, thick descriptions, including the stories told by participants, presentation tone, language choices, characteristics of the physical setting, participant roles, dynamics, and any audible audience reaction. This aligns with Waring and Bishop's (2010) research, where observations "were recorded in individual field journals comprising 'rich descriptions' of events, interactions and statements, together with personal reflections" (p. 1335).

The report-out event includes a 20-minute presentation from an improvement project team of approximately eight to 12 people each, which serves as both communicative performance and venue for corporate stories worthy of data collection in this way, and analysis.

Second, semi-structured interviews with each health region's chief executive officers and one or two team member informants from each organization, for a total of five people, supplemented report-out transcripts and event field notes by probing further into individual values, team culture, and the narrative meanings created and recreated by the project, and their relationship to the broader ruling structure. These interviews were held after the process improvement workshop, and conducted with a phenomenological appreciative inquiry (AI) stance (see sample questions in appendix). Jan Reed (2006), in discussing the merits and pillars of appreciative inquiry, claims that "perhaps the most obvious data collection tool is the AI conversation, the face-to-face discussion of an issue or phenomenon" (p. 125). Reed says that open-ended AI questions, based on the 4D framework, "encouraged the participants to tell us stories about their experiences, resulting in narratives rich in detail and insights" (p. 125), hence the semi-structured interviews designed here. In this lean research, appreciative inquiry offers a foundation with which to explore the research sub-question: What values, behaviours and messages would most improve the human experience in public sector lean implementation and service delivery?

Third, publicly-available institutional documents from the Government of Saskatchewan and the Ministry of Health, such as the Government of Saskatchewan's 2009 visionary health system planning document (*For Patient's Sake: Patient First Review Commissioner's Report to the Saskatchewan Minister of Health)*, and the provincial Health Quality Council lean website were collected as second level data as part of the ethnography's goal to connect the social

relations of employees to the broader institutional influence. Four documents were collected to represent various levels within government and organizational structures involved in the implementation of lean, to achieve data that reveals the ruling relations of the overarching discourse and narrative.

Data Analysis

Entry and second level data underwent both textual and critical narrative analysis to connect the social relations of local and extralocal lean cultures. As an example of textual analysis, Radnor, Holweg and Waring (2011) pursued an exploratory social science case study of four separate health organizations within the NHS that had implemented lean, including interviews and focus groups with front-line and clinical staff. The authors explicitly used a rigourous six-step procedure of coding and classification: topic ordering; constructing categories; reading for content; completing coded sheets; generating coded transcripts; and, analysis to interpretation. Radnor et al. (2011) claim "this method of interpretation permits rigourous searching for patterns, building of theories or explanations and grounding them in data" (p. 367). This analytical procedure led the researchers to key themes about hierarchical relationships and discursive language formations in the organizational communication of lean. Field notes, transcripts and institutional documents in this study were subject to a similar textual analysis by providing text for open coding into significant categories (Given, 2008, p. 86), with attention to themes of employee and managerial values and narrative, the shared meanings and experiences of lean, and sources of organizational discourse and power, as revealed in similar NHS studies in the literature review. This analysis follows the rigourous coding model of Radnor et al., while exploring themes generated in the specific Saskatchewan context and contributing appreciative inquiry-based data to improve the health-care system.

To accomplish health-care system improvement, this research relies on the stories told about the system itself through interviews and lean activity. Narrative analysis complements many key characteristics of lean, such as the report-out storytelling ritual and the layers of institutional structure involved in the implementation of lean. Martha Feldman, Kaj Skodberg, Ruth Nkole Brown, and Debra Homer (2004) claim stories are subsets of overarching narratives. They contend that "stories are instantiations, particular exemplars, of the grand narrative" (p. 149), which suits the purpose of exploring employee experiences and ruling relations in ethnography. Feldman et al. (2004) conducted a narrative analysis based on three levels: identifying the story line, identifying the implicit oppositions in the story, and identifying the argument in an inferential, logic form via syllogisms and enthymemes (p. 153). In this way, the researchers could analyse elements of the story, because they "often have meaning based on what they are implicitly contrasted with, in other words, what they are *not"* (p. 151). This provides a framework to analyse the stories told in both the report-out and participant interviews to see how they fit in with the grander narrative of the organization and provincial health system.

Data coding pays particular attention to messages repeated across texts and narratives that express individual and managerial values, hegemonic structures, elements of dominant discourse, and beliefs about more effective approaches to lean implementation, paying further attention to themes from literature about the National Health Service. This procedure is used to discover how the process improvement workshop and report-out construct and communicate lean culture and shape subculture within the organization, how lean culture or communication in the provincial health-care sector perpetuates hegemonic or managerial belief systems, and the subsequent effect on lean implementation. Data coding underwent a peer inter-rater reliability test to validate the results of similar coding and categorization.

To move from an interpretative space into critical research, and with organizational discourse and power as key themes from the literature review, critical narrative analysis also emerged as a key methodological approach for analyzing the data collected. Critical narrative analysis is a form of critical discourse analysis that offers a unique approach to explore research questions through the lens of stories experienced and repeated in the organization. Souto-Manning (2012) asserts that critical narrative analysis "unites critical discourse analysis and narrative analysis in a mutually beneficial partnership that addresses both theoretical and methodological dilemmas in discourse analysis" (p. 162) and that critical narrative analysis "allows for the critical analysis of narratives in the lifeworld—the everyday stories people tell—within the context of institutional discourses" (p. 163). Souto-Manning adds that critical narrative analysis offers a "mechanism by which institutional power discourses enter everyday lives through everyday narratives" (p. 1643). Merrigan, Huston, and Johnston (2012) discuss a study by Dennis Mumby, who "studied the political nature of storytelling in organizations" (p. 237). Mumby showed that "stories told over and over in organizations create and maintain power relations and usually perpetuate the interests of the dominant group, management" (Merrigan et al., 2012, p.237). A critical narrative analysis lens will reveal how larger organizational discourses shape the report-out narrative, and how values, stories and discursive formations are expressed and repeated in interviews. This rounds out a qualitative ethnography of lean that moves from interpretive appreciative inquiry into the critical realm to answer the research questions presented here. Therefore, this research adheres to the following steps of analysis: 1. **Textual analysis** of entry and second-level data by coding key terms, categories and themes as per Radnor et al.'s coding process, in a master spreadsheet; 2. **Narrative analysis** of report-out and interview transcripts, field notes, institutional documents, and subsequent coding themes.

Narratives are analysed with attention to key characters, oppositions, syllogisms, and themes from the literature review, categorized into a spreadsheet; 3. **Critical narrative analysis** to correspond the textual and narrative analysis with the ruling relations and dominant organizational discourse, resulting in a table of key narrative themes, story elements, key actors, and related connections to institutional ruling relations; and, 4. The results are written into a rich, narrative-based **ethnography of lean** in Saskatchewan's health-care system. This procedure will result in a health-care improvement story about lean, focused on the communication and culture in between its rituals and practices. This guides lean decision-makers, practitioners, supporters, and skeptics to a model that considers values and organizational discourse as key factors—if not foundational—in successful lean implementation and health-care improvement.

Ethical Considerations

Consent, data protection, and privacy of personal health information are key ethical considerations in this research design. No real names are used in this document, and no last names are used in field notes or transcripts. Any last names recorded in the report-out event or interview recordings will be edited out and not included in the electronic transcripts. Informants were required to provide free and informed consent to participate in this research. Electronic data is kept in a password-protected personal computer and hard-copy data in a locked personal home cabinet when not in use. Participants were advised they could withdraw their consent at any time up to one week following the data collection phase, and that all data related to the withdrawing participant would be deleted and/or destroyed within one week of withdrawal. Data collection in no way interfered with any patient or health-care process encountered during observation or participation. Further, patient information is bound by Saskatchewan's *Health Information Protection Act* and all legislation and regulations will be respected and strictly adhered to in all

elements of this research. In addition, the health-care organizations required their own ethical review once the proposal gained ethical clearance from Royal Roads University.

As a current Government of Saskatchewan employee and a trained lean leader who once participated in lean activities with a former health-care employer, reflexivity is key to this ethnography. It is important to mindfully allow the collected data of participant experiences to take precedence over the researcher's own feelings and personal experiences. This is accomplished through rich description, rigorous coding, verbatim quotes that capture participant experiences, and clear separation between data and personal reflection. This pragmatic approach lets the data and descriptions tell the story of lean in Saskatchewan's health-care system and explore how various perspectives and discourses have shaped the emerging culture of lean in the public sector.

Limitations, Exclusions, Challenges, and Reflections

This ethnography focuses on only a small sample of process improvement teams in one health-care organization among several in a larger system. Other process improvement teams and organizations might reveal additional data, discourses, and cultural elements, and this is acknowledged as both a limitation and an avenue for future research. However, although the research question is being asked specifically of two sites in Saskatchewan's health care sector, its learning and output is hoped to provide valuable knowledge to any public organization implementing lean to improve service.

Results

Data collected through ethnography of lean culture, consisting of entry-level or local interviews, observation, and second level or extra-local communication and policy documents, aimed to answer the main research question in this study: What meanings and discourses have

emerged from the implementation of lean in Saskatchewan's health-care system, and how could they change to improve public sector service delivery? Anchored in themes from England's National Health Service as explained in the literature review, this research revealed several corresponding themes of organizational power dynamics, managerialism, and dominant employee, organizational, and institutional discourses of change, but also revealed a uniquely provincial experience in which lean—if implemented differently—is believed by some employees and leaders working in the system to be an effective health-care improvement methodology.

The discourses of change and eliminating waste

Change is a key discourse presented in the 2009 *For Patient's Sake: Patient First Review Commissioner's Report to the Saskatchewan Minister of Health*. Referred to as the *Patient First Review*, this provincial health system's review and recommendation document has been accepted by the health system and used as a guiding philosophy for health region planning and reform. An example of how the *Patient First Review* frames the need for change includes the rhetorical question: "Must changes be made to Saskatchewan's health system? Absolutely" (Dagnone, 2009, p. 1). In presenting several recommendations for the health system—which include embedding 'Patient First' as a core value, functioning as a cohesive system, and empowering providers to offer patient- and family-centred care—the report states, "These are the transformative changes that make other changes possible and which will bring about progressive change" (Dagnone, 2009, p.8). Similarly, all employee entry level interviews conducted in the research, which included two regional chief executive officers, one supervisor involved in a rapid process improvement team, and two employees involved in rapid process improvement teams, discussed 'change' or 'improvement' as necessary in the current health-care environment,

not only for financial sustainability but also to better the patient and family experience when receiving service. The repeated use of 'change' and its rationale in the *Patient First Review* document—toggling mainly between improved patient experiences and improved financial outcomes—supports the existence of a dominant systemic discourse of how change should be understood and discussed in the health system. This discourse has trickled from provincial sources into a continually repeated mantra at the local level, suggesting an institutional ideology intended to frame and enable specific change. In other words, the provincial health system's most important guiding documents communicate a discourse of necessary change based mainly on improvements of financial and patient experience, now accepted and repeated with ease by leaders, employees, and patients throughout the health-care system.

Further, the discourse of change repeated in the *Patient First Review* and employee interviews supports Marshak's (2008, 2011) argument that dominant discourse favours certain ways of talking about change and discredits others to influence change outcomes. Marshak's theory suggests that change narratives are expressed via organizational conversation and repetition, of which rapid process improvement workshops and report-outs are frequent tools in lean organizations. The *Patient First Review* states, "this waste, redundancy, and ineffectiveness means increased cost to the patient (and to society) … not to mention the risk from harm" (Dagnone, 2009, p. 3), creating a binary relationship between the concept of waste or inefficiency and safety or financial value. The phrase 'eliminating waste' itself traces back to the literature review, where Ohno (1988) is discussed as the engineer of eliminating waste in the manufacturing origins of the Toyota Production System.

The discourse surrounding lean in Saskatchewan is similar. Provincial Health Quality Council (2015) website material frames and reinforces these ways of speaking about change:

> Lean is a patient centred approach to managing and delivering care that continuously improves how we work. There are many processes involved in health care. Lean is about finding and eliminating waste in these processes. Waste is defined as anything that does not add value from the patient's perspective.

The Government of Saskatchewan's (2015) ThinkLean website further reinforces a potential source for this organizational ideology:

> Lean is a business technique used to improve the way we work. The Lean approach identifies and eliminates unnecessary steps, streamlines processes for employees and ultimately improves value for our clients and customers;
>
> Employees around the province are embracing the Lean way of thinking to improve systems and processes, and to streamline their work.

In questioning the employee meanings and values that have emerged from the implementation of lean in Saskatchewan, all interviewees presented 'eliminating waste' as a primary goal or definition of lean—where waste is inherently oppositional to 'value' for patients and the health-care system. Other examples from interview data include 'getting rid of waste', 'streamlining processes', and a 'basic principle of lean is eliminating waste', collectively forming a theme of meaning around lean, in which change—to employees—is equivalent to eliminating waste, and eliminating waste (which is referred to in the data as waiting, unnecessary steps, and overstocked or expired supplies) is equivalent to health-care improvement. Waring and Bishop's (2010) research revealed a nearly identical theme of 'waste' and 'delay', which they present as a managerial discourse.

The discourse of improving the patient experience

Improving the patient (or client or family) experience emerged in a similarly institutionally constructed discourse within entry and second level data. Repeated discussions of the patient among health-care providers are expected, as patients are the recipient of the service they provide. However, the way in which the patient was presented in the interviews was significant in understanding the shared meanings and discourses of lean, the values of health-care providers, and the extra-local sources of patients or clients as part of the lean discourse. Data from the rapid process improvement workshop report-out show that employees truly learn from and appreciate the input from clients during their participation in the workshop. In one report-out, a staff member said:

> The patient family rep on our team was actually going through the long-term care process. Thank you . . . your information and input was invaluable. What we looked through is the patient lens, so that we got through and made it what it needed to be.

Another staff member in the same report-out remind the audience of the importance of the patient representative's role in the workshop:

> Thank you … to the client representative. We always learn so much from our client reps in RPIWs. And he did say at our meet-and-greet last Friday, "I'm not an expert." But I would disagree with that. You are an expert on what the family expects. We really do appreciate that.

Interviews with employees reiterated similar findings in the same category of patient discourse, with an emphasis on the "patient perspective" or to "see from their perspective." Several statements reflected upon the health-care provider's "tunnel vision" that often develops over time, which prevents them from understanding the patient experience. Interviews acknowledged the important role that lean process improvement workshops play in bringing that perspective to

the forefront—perspectives that may not have otherwise been heard or sought out. Further, a health-care employee recalled a happenstance opportunity during a workshop to fully play the role of the patient receiving service, wearing what they are asked to wear and walking the path they are forced to walk. The experience, which is also present in the narrative analysis section of these results, aroused significant feelings described by the employee as "awful" and "horrible", resulting in decisions in how to improve processes to avoid those feelings for the patient. A second narrative highlighted the disbelief of a care provider as he waited for hours during a lean workshop with a patient in the emergency room, who had no contact or communication from their care provider. These narratives indicate that phenomenological experiences, in which providers have an opportunity to feel what patients feel, are crucial in creating empathy and making improvements that truly benefit the patient.

The need for patient empathy and perspective has been communicated throughout the health-care system through provincial and organizational texts since before—and most certainly during—the system-wide introduction of lean in Saskatchewan. The *Patient First Review* quotes health-care opinion leader Donald Berwick:

> ". . . we have built a system around clinicians that makes it impossible to customize care the way it needs to be. We don't have a standard of services or processes that are comfortable for patients. We have built a technocratic castle, and when people come into it, they are intimidated" (Dagnone, 2009, p. 11).

Health Quality Council's (2014) website states, "We are committed, as an entire system, to using Lean methodology to ensure the care we deliver is compassionate and patient- and family-centred, with no harm to patients and no waiting." The discourse of improving the patient experience has filtered from institutional origins to organize the work and shape the everyday

meanings and beliefs of employees in multiple health regions across the province, and this research goes on to suggest that employees have recognized that phenomenologically experiencing life as a patient further develops provider empathy to strengthen health-care improvement.

The process improvement culture machine

In addition to the major discourses present in interview data, employees and leaders also expressed themes and cultural artifacts related specifically to rapid process improvement workshops. Following Van Maanen's (2011) ethnographic theory that languages and rituals of a bound group of people are among the indicators of culture, the data coding in this research paid particular attention to the vocabulary used by process improvement workshop participants. A key observation in interviews and the workshop report-outs themselves was the use of a shared lexicon of lean-specific terms and phrases. Participants repeated Japanese words such as *kaizen*, *kanban* and *kaikaiku*—lean concepts used in the organization—as well as translated phrases such as *daily visual management*, *5S*, *mistake proofing*, *value stream map*, and *standard work*—also elements of lean methodology. All interviews contained some combination of these terms, often repeated multiple times. Interviews and participant observations also supported the presence of communicative performances and corporate stories, as per Pacanowsky and O'Donald-Trujillo's (1983) production processes of organizational culture. The report-outs used consistent methods of presenting data and telling stories about process improvements to audiences of interested parties; although two specific workshops were observed in this research, these report-outs occur regularly in many health regions and provide a venue to repeatedly disseminate cultural information to pockets within each organization.

Participants also indicated several common themes emerging from their process improvement workshop experience. In addition to repeated discourses of change and elimination of waste as a primary goal, they also indicated: they learned about and understood the role of other departments and care providers; the patient voice was consistently prioritized and integrated into decisions and improvements; and, workshops can positively impact the culture of a work site through enhanced relationships and collaboration. Participants also felt that the mandatory report-out to an audience could be stressful even though often rehearsed, and that the workshop format, materials, and processes were prescribed and rigid. These repeated experiences also become part of the organization's culture and shared understanding of this lean ritual.

The stories of lean

In addition to the corporate storytelling routine of workshops and report-outs, interviews generated nine key narratives from five different subjects across two health regions. All stories contained data related to one or more National Health Service theme discussed in the literature review, most dominantly forms of criticism or opposition to lean, and the formation and influence of lean-favouring networks. All narratives included a health-care provider as a character, with key implicit oppositions including support for lean versus dissent, and change versus status quo. Four stories also included a patient in the storyline, as told by the provider, with more experiential implicit oppositions of shame and discomfort versus dignity and comfort, and provider/system actions versus patient/family needs.

As explored earlier in the results, one storyline contained an employee realization, through an unexpected opportunity to play the role of a patient during a rapid process improvement workshop, of how a patient feels exposed and uncomfortable when forced to don an inadequately-sized dressing gown and walk through public areas of the health-care facility.

This deeply phenomenological experience was relayed and used to help other providers understand the patient perspective, and influenced decisions to improve the patient experience in a process improvement workshop. This story contains a revealing enthymeme. The major premise of 'patients are forced to do certain things during care' and the minor premise of 'the role-playing care provider felt awful and horrible doing those things' leads to an unstated conclusion that the health system makes patients feel awful and horrible during care.

Two storylines included references to a component in lean training, in which either toy building blocks or paper airplanes are used in an exercise to explain lean improvement methodology. Both stories contained enthymemes with a major premise of 'lean uses toys', an unstated minor premise of 'toys represent juvenile silliness', and a conclusion that lean is juvenile and silly—an assumption held by many employees throughout the health-care system, particularly those who have not received training or exposure to lean methodology.

Another narrative portrayed a regional leader in a meeting with an external vendor, who relayed to the leader that they believed lean failed at improving health care in Saskatchewan, implying a negative public reputation of lean. The vendor had not heard any positive stories about lean in the public domain. The leader disagreed with the vendor and felt it necessary to explain that lean may have opportunities for improvement, but that it has not failed, and has actually significantly improved many parts of the health-care system for patients. The narrative contains implicit oppositions of failure versus success and perception versus reality, demonstrating the complex discourses and mixed beliefs about the efficacy of lean, and how the communication of lean—internally and externally—may have negatively impacted its implementation.

Institutional and managerial sources of power

Further to narratives expressed by participants, the data revealed examples of power-as-domination closely aligned with organizational theory from Mumby (1988) and more recently, Burgess and Radnor's (2012) assertions about the complexities and tensions in the National Health Service's lean "foundation of sand" (p. 605). In recalling the initial stages of lean in the health-care system, one participant criticized the methods of external consultant John Black and Associates, stating, "the training program that was designed was very regimented, structured to the point of ridiculousness, and the learning tools and learning objectives . . . were poorly crafted." The participant believed the implementation of lean was driven by the consultant's contract with the provincial government, which focused on quantities of lean events such as process improvement workshops, rather than solid theories of lean system transformation. This institutional rigidity, according to the interviewee, negatively affected organizational culture and prevented people from learning about lean through effective adult learning principles. Further, two other process improvement participants recalled a lack of consultation from a manager who had made decisions about the scope, timing, and goals of a workshop without input from the people who work in the area. One employee said:

> When it came to that week, I had a little bit of frustration because we would suggest, it's almost like it felt like the people who the RPIW was for had an idea already where they wanted it to go and how they wanted it to look, and we were steered towards that. The ideas that we would come up, they didn't really develop there. We felt like we were steered to the way they think it should have been.

Another employee reiterated this theme of managerial direction:

> Personally, I think it wasn't as wide open as it could've been. I think a few people, not myself, myself included, I guess, would be . . . like at the beginning, we thought we sort

> of, in the RPIW, we had free reign to determine certain things, and it was sort of free reign within a box, I guess, how you want to do things. There were definitely some parameters put on our thought processes.

These examples illustrate how "complexities and tensions" may arise in a large, bureaucratic, and hierarchical organization where finances, measures and goals are often pre-determined by managerial groups.

Right care at the right time

Interview and report-out data revealed a notable pattern indicative of a shared discourse and institutional influence threaded through lean and health-care improvement in Saskatchewan. During a report-out, a speaker said, "And what we also often don't value and understand is the power of information, and making sure that we have the right information at the right time and the right place for the right person." When asked what good health care means, the same person said, "Getting the right service at the right time, in the right place by the right provider." An interviewee in a separate health region, when asked about value in health care, stated, "I think value is about the right person doing the right job and working to their full of scope of practice on a regular basis." Finding these phrases remarkably similar, the research included an online search for variations of this phrase, first leading to the Saskatchewan Ministry of Health Plan for 2015-16, which contains the following key actions:

> Ensure that patients and families receive the right care at the right time and are actively involved in the creation of the care plan and goal setting;
>
> Ensure that patients receive the right care at the right time in the right setting by the right provider by implementing standardized Transfer of Care strategy across all tertiary sites.

The online search also led to the Canadian Medical Association's (2015) *Appropriateness in Health Care Policy*, which repeats a resolution adopted at their 2013 General Council: "The Canadian Medical Association adopts the following definition for appropriateness in health care: It is the right care, provided by the right providers, to the right patients, in the right place, at the right time, resulting in optimal quality care" (p. 2). While these two institutional documents are not specifically about lean, they identify an emerging national and provincial discourse about health-care improvement repeated by health-care providers at the local level.

Discussion

This research into culture and discourse in Saskatchewan's health-care improvement story supports similar themes of 'eliminating waste' and 'adding value to the customer' (or patient, in health care) as revealed in foundational lean research (Ohno, 1988; Womack, 1990), and reveals a key discourse of necessary change, aligned with theories of organizationally-framed ways of talking about and enabling change over time (Grant & Marshak, 2008, 2011). Further, the narratives and data provided by health-care leaders and employees who participate in lean and rapid process improvement workshops present themes of managerially-driven goals, employee criticism and opposition to lean, and rigid implementation reminiscent of England's lean experience by Burgess and Radnor (2012), Papadopoulos, Radnor, and Merali (2011), and Waring and Bishop (2010).

Where the research conducted here adds to the nascent literature on lean in the public sector is in its critical and ethnographical approach to exploring the discursive roots of local lean culture, which I assert is the product of institutional, provincial decisions, texts, and discourses rather than solely managerial influence. The entry level and second level data collected here suggest the sources of discursive power are systemic and institutional before they are managerial

and subsequently adopted locally as ideology. In this way, a distinct culture of lean is certainly emerging in Saskatchewan's health-care organizations—supported by a unique lean vocabulary, and shared experiences, narratives, and understandings about process improvement workshop rituals. However, results indicate that perhaps several competing cultures and discourses have emerged, including a lean-favouring network of trained and involved employees, the lean-questioning network of employees that may have felt suppressed or subjected to pre-determined change outcomes, and the non-lean-favouring network who have not received training, have heard negative stories about lean, or have not seen firsthand any benefits of lean. Evidence of these various perspectives are found in the stories about toys and paper airplanes used in lean training, recollections of negative feelings about managers determining the outcome of a workshop without welcoming new ideas, and concerns about the "ridiculousness" of the initial rigid training program. These competing cultures and discourses developed in part from the regimented implementation style overlaid by one external consultant onto a large and complex multi-region health-care system—with its many existing identities, facilities, leaders, and existing organizational cultures—and have impeded the system's ability to fully adopt, or realize the benefits of, lean.

The sources of organizational culture, meaning, and discourse discussed here can also be traced through institutional roots that have organized the way health-care employees across the province are now indoctrinated to do their work—evidence of textually-mediated social organization—that follows a prescribed process improvement methodology determined by provincial policy. In addition, the exploration of the phrase "right care, right time" points to discourse that starts beyond provincial origin, in national health-care communication networks and frames. Taking this institutional view of health care is important because it reveals how the

organizing of health-care employees at the local facility level is bound by external, extra-local sources of power—in this case, a set of provincial documents, tools, and methodology provided by lean consultant—and how the rationale for change has been engrained as a powerful ideology that permeates the health-care system. It also disparagingly points to examples where the new expected way of organizing does not always welcome new ideas or ways of making improvement decisions collaboratively. Mumby (1988) claimed that "stories told over and over in organizations create and maintain power relations and usually perpetuate the interests of the dominant group, management" (Merrigan et al., 2012, p.237). The stories of change, eliminating waste, and improving the patient experience are clearly repeated in provincial texts, rapid process improvement workshops, and employee discourse, but the methods for achieving those goals to date have been inflexible. This recognition takes a critical view beyond simple organizational communication models and information flow, and raises new questions for employees to recognize the power systems they exist within, ensure their voices are heard, and influence the future of health-care to benefit employees and patients alike.

Because this research was designed with appreciative inquiry at its core, these findings are not intended as a mere warning, but rather as a guide for organizations implementing or considering lean. The findings, which led to six categories of recommendations to improve and implement lean, also point to key learnings from the Saskatchewan experience worthy of further description here. First, true understanding of patient value and perspective was better gained from phenomenological experiences rather than solely patient input or representation in a workshop. As indicated by one informant, when she had to wear a patient gown and walk around the facility as the patient would have to, she felt "awful" and could empathize in a new and appreciative way. This role playing should be a mandatory part of the health-care provider's

improvement methodology. Second, the rollout and style of lean training should be based on effective adult learning styles and should also consider the subculture it creates. Those who received early lean training—mostly leaders and managers—became part of a perceived subculture that were not only decision makers, but now had access to the cultural privileges of the lean-favouring network. Organizations could consider alternate training distribution models to create more democratic and balanced support for lean, such as staff by department or facility rather than by hierarchical status in the organization. Lastly, recommendations need to address cautionary comments from Bhasin (2012), who urges organizations to develop a change strategy to address the human and cultural factors of lean, and McIntosh (2016), who asserts that health-care organizations must "pay attention to those voices inside the system" (p. 8). Echoed in the findings here, genuine employee consultation is key to the success of lean and health-care improvement. Leaders should seek the input and involvement of employees who do the work, without a pre-determined outcome for change; this includes the development of a culture, change, and communication strategy continually revised in consultation with health-care providers of diverse roles and professions. Lean communication should include the use of patient-driven stories that better explain lean in terms of patient benefit, rather than only process maps and data measurement currently featured in the rigid framework of the report-out ritual.

Campbell and Gregor (2002) claim that "Getting to an account that explicates *the social relations* of the setting is what an institutional account is about" (p. 90). The rapid process improvement workshops in Saskatchewan's health-care system offered a rich setting to observe, describe, and inquire within, leading me through a search for the institutional texts and sources of power that have spread from the provincial level to regions to localized employees and lean participants. Three ethnographic descriptions, based on Van Maanen's (2012) models of realist

and structural tales, and written from the researcher's experience and perspective, are offered in Appendix B to complement the findings and discussion here.

Recommendations

To answer the research question, What values, behaviours, and messages would most improve the human experience in public sector lean implementation and service delivery?, interview subjects provided data that formed six distinct categories of recommendations: 1. improve lean training; 2. focus on communication, culture, and education; 3. improve lean components; 4. ensure employee engagement and consultation; 5. build teams and relationships; and, 6. pursue the phenomenological patient experience. The remainder of this section describes recommendations within each of the six themes, as found in the data and interpreted by the researcher.

Improve lean training

Research participants felt the training program was regimented and the learning tools and learning objectives were poorly crafted, including memorization that does not work for adult learners. Future models should be experientially-based, including classroom and facilitated learning, and different learning times. Learning should be competency-based rather than memorization, and should ensure the learner has the right attributes to learn that competency. Training examples should focus on real health-care scenarios and metrics, rather than paper airplanes or other symbolic examples. Training was rolled out to health system executive and directors before other managers and staff members, which reinforced hierarchical divisions within the organization. Training could potentially be rolled out by unit, department or facility to build broader lean support among professions and get more non-managers involved in training, during the early stages of implementation.

Focus on communication, culture, and education

The research revealed significant recommendations related to the themes of communication, culture, and education. Employees and patients should be asked what types of communication would most resonate with them. Communication to staff should emphasize that improvement is everyone's job, and everyone's responsibility. Patients should tell their own improvement stories to have more of an impact on the audience and better demonstrate the benefits to patients. Participants felt that cross-departmental successes and lean progress should be better shared across the organization. Often they are only posted on executive visibility walls and not shared beyond that. Successes should be celebrated more. Rationale for specific changes should be communicated clearly. Communication should focus on positive patient impact, not money or space or other measurements. How does it change the lives of those served and improve the quality of care, and how does it eliminate and add value? There are opportunities to better educate patients on the role of each provider and department, so they understand what part they play in the service and care experience. Open communication channels are recommended for work groups to share ideas. An example was an email group for a process improvement team to send and discuss ideas throughout the weeks before and after the process improvement workshop, which was particularly useful for patient and client representatives and part-time staff. Participants recommend email and regular meetings with staff as communication tools to explain process improvements, and department members should be accountable for attending and reading the information. Improvement teams should consider attending existing huddles and meetings to communicate about what they are working on and how it could affect other people and departments. Regarding post-workshop communication, a website is recommended to share stories about improvements to a broader audience.

Improve lean components

Regarding the lean system itself, rapid process improvement workshops should be understood and integrated as just one element of an effective lean system. Lean should start with a vision and strategic plan, and a foundation should be built on those elements to support process improvements and complementary lean methods. Lean requires the right leadership, the right resources, and the right vision. Rapid process improvement workshops need to be scoped properly to ensure success, justify the resources dedicated to it, and ensure it fits into the broader system goals and needs. They also require the right executive sponsors to address issues and break down barriers if needed. Adequate space is required to conduct process improvements and lean events. Engaging employees fully in the process improvement helps to ensure success. This includes spending time with them, communicating effectively, and understanding the data as part of the process improvement. Some lean elements such as RPIWs and report-outs use rigid templates and forms. There is opportunity for more flexibility here to reflect local organizational cultures and improve the ability to tell patient improvement stories with less focus on data and measurement.

Ensure employee engagement and consultation

Employee engagement and consultation are critical to the success of change initiatives such as lean. Informants assert that ideas need to come from the employees. When employees feel empowered to speak up, they will generate both patient experience improvements and financial savings. Lean should engage people in conversations so they feel part of the activity and can actively contribute to it. Lean should also enlighten them in terms of their enjoyment and understanding. Managers should only guide and support the work, while staff should be empowered to generate ideas and drive change. Further, there is often a perception that people

don't want to change. Participants felt that is untrue. People do want to change, contribute, and be consulted, but they need to engaged from the beginning of the discussions. Outcomes and agendas for improvements should not be pre-determined. Employees and participants should be consulted on the details and timing of a process improvement workshop, as it can be disruptive for a workplace and may impact other milestones and schedules. When faced with fiscal challenges, employees should be asked for their ideas before decisions are made.

Build teams and relationships

A theme of team building and interpersonal relationships emerged from interview data. Process improvement workshops should help create teams centred around the work, engaging the entire team and reinforcing the idea that everyone is there together to accomplish a common goal. Several participants agreed that the workshop weeks worked best when everyone got along and could have fun while working constructively together. Combined knowledge and expertise from team members are key contributors to success. Rapid process improvement workshop participants should have an open mind and a desire to change in the best interest of patients. Rapid process improvement workshops should aim to bring new people and departments together, and build lasting relationships that facilitate collaboration, friendship, and appreciation for each other's role. Process improvements are easier to implement when departments and care providers have existing and positive relationships.

Pursue the phenomenology of the patient experience

Lastly, lean leaders and process improvement participants should pursue the phenomenology of the patient experience to drive improvements to health care. Talking to patients isn't necessarily enough to fully understand their needs and journey, or how the system could improve their experience. Providers need to feel what their experiences feel like. Providers

would benefit from fully shadowing or role playing the patient role. If a patient is asked to wear a certain outfit or walk a certain path, the provider should do the same. The phenomenological experience is critical to understanding what change is necessary. One participant said, "because we lived it, we changed it."

Conclusion

The implementation of lean and, more specifically, its rapid process improvement workshops are undoubtedly disseminating shared culture and meanings about health-care improvement rituals and language into distinct enclaves of people who participate in a workshop, observe a report-out, or take some level of lean training. But there is evidence in the data presented here of a schism that subsequently develops between those privy to lean training and exposure, and those without.

The managerial and institutional discourses that shape the ideology of how employees should change processes can create both employee support and dissent, and this should not be a surprise. Lean is a systematic improvement methodology selected *by* provincial health system leaders and prescribed to regional executives and managers who have adopted and implemented it locally with varying degrees of success. When employees are consulted and brought fully into creating the solutions, and when process improvement teams are faced with the same phenomenological experiences and sensations of patients during their health-care service, true improvement can emerge. In the absence of those factors, lean is and may continue to be a managerial inventory of process steps and dollars saved that cannot sustain long-term change.

For organizations in any stage of implementing or considering lean or similar improvement regimes, it is important to remember that continuous improvement itself is not exempt from continuous improvement. Organizations must continually review the impacts and

effects of its change efforts and consult with those doing, and affected by, the work to determine how to simply make experiences better for all involved. The appendices to the findings presented here suggest some principles for effective lean implementation, but are no means exhaustive, universal or—again—immune to ongoing review and improvement to reflect the needs and goals of the organizational cultures at hand.

As expressed in the ethnographic tales written to reflect the subcultures of lean in Saskatchewan researched here, Saskatchewan's health system is about to undergo even more transformation as it transitions from 12 to one administrative organization. Whether lean methodology or improved patient experience is part of that future or not, change certainly is.

Limitations and Future Research

This research only explored a small section of Saskatchewan's provincial health system, and focuses on one type of lean event—the rapid process improvement workshop—within a much larger system. Future research in this field might include other lean events and tools, other areas within the health system, research focusing on patients or specific health-care professions, or an examination of the cultural and communicative disparities and perspectives of lean-favouring and non-lean-favouring networks.

Appendix A – Questions for Semi-Structured Informant Interviews

Introductory Questions

1. What is your role in the organization?
2. What experience have you had with lean in your organization? Is this the first, or have you been involved in other ways?
3. What is lean?
4. What are some common words or phrases associated with lean?
5. What are some of the most common stories or beliefs about lean?

About the Workshop

6. Tell me about the rapid process improvement workshop you participated in.
7. Why did this process need to change?
8. What were some common words or phrases used throughout the workshop?
9. How effective was the rapid process improvement workshop?
10. Tell me about the report out.
11. How did decisions get made during the week? Who made them?
12. What were the best or most effective parts of the workshop?
13. Do you feel differently about lean after participating in this process improvement?

Values and Appreciative Inquiry (discovery, dreaming, designing, delivery)

14. What are the best parts of lean in your experience?
15. What parts of lean need to be improved or done differently, and why?
16. What does *value* mean in health care?
17. Why do you work in health care? What matters most to you?
18. What do you believe creates good health care?
19. What would make lean better in your organization?

Appendix B – Ethnographies

Ethnography 1 – Improving the Appointment Process for a Children's Clinic

I travelled to the public health clinic with a member of the health region's Office of Quality and Strategy Management (formerly known as the Kaizen Improvement Office), who explained on the 10-minute drive that this region isn't holding as many rapid process improvement workshops as they once did. Today's report-out—a 20-minute team presentation to explain the results of a week-long process improvement workshop—would feature only one team, right in the clinic where the specific process was improved, rather than the usual three presentations in a larger boardroom or auditorium.

Entering with the employee through the clinic's back door, I was introduced to an executive director responsible for this organizational portfolio. She was there to provide introductory remarks, show support, and hear about the results of the week. We could all easily identify where the report-out was to be held, as staff had started to gather inside and outside the room. There was an excited buzz as employees of the clinic talked to one another, as process improvement participants prepared for their part in the report-out, and as health region staff from other departments greeted one another.

I was one of two identifiably male attendees among two dozen females; the other was the health region's chief executive officer, who upon hearing about my research invited me to speak with him at his office in the future. Although this was a public event, advertised on the health region's website, I could also sense that most of the people in the room noticed a stranger in their company—me. Aside from me and one patient representative, everyone else worked at the clinic or somewhere else in the region. And despite the public invitation and benefits to the clinic's clients, this report-out seemed primarily an exercise for staff, and a ritual for the health region.

The room, approximately 15 feet by 20 feet, felt small and hot. The process improvement team, comprising eight employees and one patient representative, entered the room to show their prescribed set of slides—templates provided by former health system consultant John Black and Associates, common in all rapid process improvements across the province—to the room of interested region employees and leaders (and one graduate student of professional communication). Each team member explained their work using a slide or more, showing the current state (a map of all steps in the process in question), the future state (a redesigned map showing the vision for reduced steps in the future), the measurements used to rate the improvements, and the kaizen improvement idea sheets (pieces of paper with an idea illustrated by a team member to improve something in the work or patient space). This rapid process improvement workshop was intended to improve the timeframes in which clients can book appointments for their young children. Current information technology systems only allow for appointments to be booked in less than a three-month window before the appointment, even though clients are required in the clinic only every six months. The new process requires technology changes to allow appointments to be booked at greater distances apart, so the appointment can be booked when the parent and child are already at the clinic six months prior. The team communicated that these changes would be made in several months once software changes were facilitated, but that other improvements were indeed made during this improvement workshop week, including improved patient waiting areas, decluttered bulletin boards, and patient communication processes such as voicemail and reminders.

The patient representative—a parent who attends this clinic with her young child—is tasked with presenting some of the team's work alongside the employees. This is a rehearsed and regular feature of a rapid process improvement workshop, but one that employees say can be

stressful. The mom struggles as she begins to present the proceedings of her input that week, emotion swelling into her words and body language. She begins to cry. An employee team member comforts her and tells her it's okay to stop. The team moves on, and each team member finishes presenting the ideas implemented as part of the new process and environment.

The report-out concludes with words from health region managers, who commend the team for their work and suggest that the recommended outcome was already clear, but the team had not been granted the time or resources to make it happen in the past. The room of employees and observers applaud the process improvement team, and the positivity in the room is palpable—the team had facilitated a new process that would eventually improve the patient appointment process and physical environment.

The room dispersed and employees went back to their usual roles, while some involved in the process improvement stayed to discuss sustaining their change into the future and ensuring the software changes are pursued. I left the clinic having spoken with several managers and health region leaders, all of whom were eager to speak about the clinic's process improvement, or lean in general. I made a note to follow up on the chief executive officer's invitation to speak more about the lean culture in this region, and left the clinic with my employee host.

Ethnography 2 – Improving the Long-Term Care Entry Experience

Despite the cold February temperature, the sun was bright and the highways were clear as I embarked on a road trip to one of Saskatchewan's 12 health regions, approximately two hours from my urban home base. Being a weekday, the prairie roads were busy with trucks transporting goods, and residents travelling between spread-out communities in this geographically large and primarily rural farming province.

After reaching out to the chief executive officer in that health region, I was invited to speak to her about lean and continuous improvement at the administrative office located in the region's main hospital, which serves a city of about 16,000 residents, in addition to a larger regional population comprising small towns, farms and rural communities. After our visit, we would drive an additional 30 minutes to a long-term care home in one of the region's smaller towns of 2,200 residents, to attend a rapid process improvement workshop, or RPIW, intended to address the process and experience for patients and their families as they begin the transition to living in long-term care.

This health region hasn't slowed its pace of holding RPIWs, with capacity to support six each year. It also focuses on other elements of a lean system, including mistake proofing (techniques that prevent errors and improve quality), visual management (making work and measurements visible so team members can identify problems and successes in goals and processes), and kanban (a Japanese word for improving supply systems to avoid overstock, understock or expired supplies). Most health regions in Saskatchewan are at some level of implementing some or all of these lean methods.

The RPIW was held in an open common area of the long-term care home. Staff at the home had set up rows of comfortable seating for those attending the event—the first of its kind in this facility. Attendees included the chief executive officer, regional health authority board members, facility staff and residents of the home who had either intentionally or inadvertently ended up in the common area to see what was happening.

The common area was reminiscent of a grandparent's home. A piano stood against the wall and a painting of an older woman smiled at the crowd now gathering for the report-out—a 20-minute culmination of the week-long workshop, designed for the improvement team to

systematically share the results of the week, following a strict outline and document list from former Seattle-based provincial consultant John Black and Associates.

Similar to the RPIW I previously attended in a larger health region, an executive director provided opening remarks. Each team member explained their work using a slide or more, showing the current state (a map of all steps in the process in question), the future state (a redesigned map showing the vision for reduced steps in the future), the measurements used to rate the improvements, and the kaizen improvement idea sheets (pieces of paper with an idea illustrated by a team member to improve something in the work or patient space). This rapid process improvement workshop was intended to improve the internal and external processes through which patients and their families are accepted and oriented into a long-term care home. The ideas included new processes for gathering client information to avoid duplication, standard discharge worksheets to ensure proper forms, and enhanced information packages and web information to help clients and their families understand what they needed to know as they transition to long-term care. The client representative—a community member who had moved his mother into this long-term care home—spoke about the new information packages, which he felt would be better and more accessible to families in his recent situation, as well as his experience on the team:

> When I agreed to do this, of course, I looked at it as sort of an obligation because my mother was here. And it still is for that matter. Once I got involved on Monday morning, I definitely felt like a fish out of water. But as you go on in the week, you soon learn that the patient is first. Always first in anything that we discuss.

His words were met with applause from the audience of approximately 60 people, followed by remarks from two managers—about how positive these changes will be for the patient. They both thanked the client representative, one saying:

> He thought that he had little to contribute to the process. Your input has been invaluable. Thank you. To the rest of the team, your expertise is hearing the good ideas that made these incredible outcomes possible.

The other speaker continued that theme, adding:

> We always learn so much from our client reps at RPIW. And he did say at our meet and greet last Friday, "I'm not an expert." But I would disagree with that. You are an expert on what the family expected. We really do appreciate that.

The chief executive officer of the health region closed the report-out with gratitude to the staff and the patient representative. Her words summarized her belief of the purpose of health-care improvement:

> Our job in all of this every day is to understand the journey of the patient, and the family, and to improve for the client. And I think that's exactly what this change did today. And what we also often don't value and understand is the power of information, and making sure that we have the right information at the right time and the right place for the right person. And we heard how that improved for almost everybody. It's beyond powerful, so thank you very much to everybody.

The event concluded after a participant of the workshop received a lean leader certificate, marking the end of that individual's regional lean training program, which can take months or years to complete. After the formal program ended, smiling long-term care staff in scrubs and hairnets served cake and coffee to everyone in attendance, insisting if people declined the first

time. The room was boisterous and celebratory, with friendly visits and greetings between familiar faces throughout the room. I returned to my vehicle and began the two-hour drive home to reflect on my day inside this rural health-care culture.

Ethnography 3 – Tracing the Culture, Communication and Ruling Relations of Saskatchewan's Health Care Story

Two lean process improvement report-out events that seemed so different upon observation became undeniably similar after speaking with participants and tracing the path of communication into the roots of its institutional family tree. Where one report-out offered a rural celebration with cake and community members visiting in a public space, the other was in a small back office in an urban clinic, attended almost exclusively by employees of one department.

Yet, upon closer look, these two rituals were indeed eerily similar in process and execution. Employees working in separate organizations, hours apart from each other, used the same templates and forms to present the results of their week, spoke the same lean language, and applied identical methodologies to eliminate waste and improve the experience for their patients and clients. The way they organized their work and lives—at least for the duration of the workshop—was determined not only by explicit sources of managerial influence and texts that dictated their procedures, but also by textually-mediated discourses of organizational change planted years before. These ruling relations were defined by several competing and simultaneous extra-local texts, only some of which were examined in-depth in this study. They include the 2009 *Patient First Review* conducted to create recommendations for the future of Saskatchewan's provincial health-care system, Ministry of Health and Health Quality Council guiding documents and plans, a $40 million contract with American consultant John Black and

Associates, and region-specific lean communication and rapid process improvement workshop requirements. And if one accepts and acknowledges the significant role of institutional texts presented here, the complex web of provincial and national health care organizations, networks, governments, interest groups, and research provides a seemingly endless supply of policies and decisions at all levels that are constantly creating, reinforcing, and recreating new discourses in health care that eventually land at the foot of the health-care employee, in one facility in one organization providing one health service.

Through this perpetual institutional and organizational communication and cultural production process, a shared culture and discourse of lean has emerged in Saskatchewan. As employees receive lean training, participate in a lean event, or even just observe a report-out in their organization, they begin hearing and using a new language to describe the tools and concepts that eliminate waste—a shared meaning about lean. They start to view health care as a series of steps that either add or subtract value for the provider or patient—a shared experience of all process improvement workshops. They may begin to see and feel through the perspective of someone else, either another health-care provider or a patient in the system. Many speak with passion about the need to change, to improve the patient experience using lean and continuous improvement. They work together in like-minded groups and start to reproduce the lean and patient-first ideology through conversation, ongoing organization of work, and through the repeated rituals of lean.

In speaking with a variety of informants, I learned that there is—as within many societies and social groups—a counterculture that simultaneously emerges in response. There are those that do not receive lean training, or those who hear and repeat stories about lean's inability to improve health-care. There are some who hear messages only about the need to save money,

reduce staff or do more with less. And there are others who have been forced to implement ideas without consultation or further discussion. This counterculture has created an oppositional discourse within the health-care community and its clients—one that questions the efficacy and value of lean and its top-down implementation. In response, and fuelled by political opposition, references to the word "lean" across the public sector have diminished in favour of "quality improvement" or "continuous improvement", links to former provincial lean websites have disappeared, and fewer formal lean events and methods are used in some areas of the province.

My quest to observe and describe Saskatchewan's lean culture comes on the eve of more significant change to the health system. In January 2017, the Government of Saskatchewan announced that "the province will consolidate the 12 existing Regional Health Authorities (RHAs) into one single Provincial Health Authority" (Government of Saskatchewan, 2017). Although this decision is based on recommendations from the Saskatchewan Advisory Panel on Health System Structure, the concept can be traced to the 2009 *Patient First Review*, which suggests "the health system needs to operate as one virtual entity with consistent policies that have one primary objective: to put the patient first" (Dagnone, 2009, p.7). Whether health system leaders continue to use lean methodology to support that objective or not, the institutional forces of change continue, as do the inherent communicative and cultural forces that shape and are shaped by health-care providers.

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