Building Organizational Change Capacity in Health Care: A Study of Five Ontario Acute Care Hospitals
Brigida Scholten
Applied Project in Fulfilment of the Requirements for EMBA
Word Count: 17,981
Date: March 8, 2012
Academic Supervisor: Teresa Rose, PhD
ABSTRACT

Managing change is a challenge that faces most organizations today. Driven by growing external pressures and forces, the rate of change is increasing. Yet, typically organizations do not manage change successfully. With a focus on reform and improvement imposed by the Provincial Government, the Ontario hospitals need to develop or enhance their change processes and build change capacity. William Osler Health System (Osler), the author’s employer, represents one example of a hospital seeking to accomplish this.

Osler is ready to move forward and launch a Project Management Office structure as a vehicle to become more organized and nimble in responding to pressures for organizational change. Osler acknowledges the need to build organizational capacity, but does not have a clearly defined strategy or method to accomplish and support this. This study explores three research questions including: 1.) What organizational strategies, structures, processes, and systems that support organizational change are being used by a few Ontario acute care hospitals that have been progressive in creating change? 2.) What organizational strategies, structures, processes, and systems will be effective in supporting organizational change at Osler? 3.) How can Osler build a capacity for organizational change?

The research design for this study includes a combination of primary data collection (interviews) for the sole purpose of this study, publically-available secondary data, and observations based on the author of this paper’s 22 years of experience in the hospital environment. Senior management personnel from five Ontario hospitals that are known to have implemented change management strategies were interviewed. Additional interviewees undertaken for this study include, a leader from Manitoba eHealth who discussed the decision and impact of implementing a standardized Provincial change management methodology, and a subject matter expert on organizational change with extensive experience consulting in hospitals.

Literature used in the study includes a number of works of reputable authors on organizational change. Some examples include Beer and Nohria (2000); Kerber and Buono (2005); Burnes (2004); Meyer and Stensaker (2006); Kotter (1995); and Burke (2008). Additionally, the study explores change management methodologies such as Prosci’s ADKAR model, IBM’s change diamond, Experience Point and Lean. Specific aspects of the change process such as change capacity, change resistance, change readiness, continuous improvement and sustainability are reviewed.

The findings indicate the use of a central group, reporting directly to senior management, to lead and manage organizational change in the study hospitals is
essential. Another indication is the importance of embedding change directly into the hospitals’ overall strategy. The study also emphasizes the importance and impact of active, visible leadership on the change process. As well, the findings indicate a relationship between strategy, culture, leadership, structure, and supporting systems, as there is a systemic interdependence of all these elements necessitating consideration of each within the context of the other in designing the change process. All of these organizational attributes contribute to building organizational change capacity. Despite the employment of a variety of tactics to identify and manage resistance to change and ensure sustainability, the study identified these aspects of change to be an ongoing challenge. The physician stakeholder group is highlighted as complex and vital in moving forward with most change yielding a clinical impact. The study findings also indicate a gap in assessing readiness to change and suggest this practice would improve the overall change process.
Table of Contents

INTRODUCTION..................................................................................................................5

RESEARCH PURPOSE AND RESEARCH QUESTIONS.............................................6

LITERATURE REVIEW.................................................................................................7

    Change Theories/Models.........................................................................................8
    Change Management Methodologies.................................................................12
    Change Capacity................................................................................................15
    Change Resistance..............................................................................................19
    Change Readiness..............................................................................................20
    Continuous Change and Sustainability..........................................................23

    Studies: Indicators of Organizational Change Management Effectiveness........24

RESEARCH DESIGN AND DATA COLLECTION.........................................................25

FINDINGS.....................................................................................................................28

    Hospital Study..................................................................................................28
    Manitoba eHealth Leader Interview...............................................................37
    Subject Matter Expert Interview.....................................................................39

DISCUSSION...............................................................................................................41

RECOMMENDATIONS...............................................................................................48

CONCLUSION.............................................................................................................51

APPENDICES.............................................................................................................52

    Appendix A: Glossary of Terms.......................................................................52
    Appendix B: Study Interview Protocols...........................................................55
    Appendix C: Hospital Study Findings Summary.............................................57

REFERENCES.............................................................................................................59
INTRODUCTION

Managing change is a challenge that faces most organizations today. “Change, in its broadest sense, is a planned or unplanned response to pressures and forces,” according to Jick and Peiperl (2003, p.xvi). Burke (2008) indicates that “the rate of change is becoming faster and faster and the demands on organizations to adapt and change themselves is becoming greater and greater” (p.19). In fact, Daft and Armstrong (2009) state that the most prevalent problem of managers and organizations is coping with rapid change, indicated by surveys of top executives. In a recent four-year study by LeadershipIQ.com, mismanaging change surfaced as the top reason for CEO termination. The study stated that all organizations interviewed reported having gone through a recent change initiative which, according to their board members, did not go well. They attributed failure to the CEO as being unable to motivate managers and employees by not effectively articulating the need for change and a short fall of the CEO's understanding of how to sustain gains (Murphy, 2009).

The Ontario Health Care industry is not exempt from these pressures and demands. Additionally, the complexity of the organizational composition of acute care hospitals (featuring characteristics of functional, divisional, geographical, horizontal, and network structures) adds another layer of challenge to managing change.

Increasing costs, a growing/changing population demographic, the scarcity of professional/clinical personnel, and frozen/decreasing government funding are all driving the need for change. Specifically, in 2010, the Ontario Government passed the Excellent Care for All Act which aims to improve the Provincial health care system, emphasizing quality of the patient experience. The Act mandates that all Ontario hospitals develop and publish an annual Quality Improvement Plan or QIP (see Appendix A) that identifies each organization’s improvement priorities, defines improvement targets, and describes its strategy for achievement. The QIP is, essentially, an agenda for change.

On February 15, 2012, the chair of the Commission on the Reform of Ontario’s Public Services, Don Drummond, released the Commission’s report, which highlights the Province’s health system and further emphasizes the pressure for change:

There are only hard answers and difficult solutions. We must reform the health care system to make it operate more efficiently and give us greater value for the money we now spend on it. This is not easy. The public debate has been poisoned in recent decades by a widespread failure to comprehend the trade-offs that must be made; by knee-jerk reactions to worthy but complex ideas for change; by politicians (and media outlets) who have been too willing to pander to fear-mongering; by stakeholders in the health care system who, wishing to cling
to the status quo, resist change; and generally by a lack of open-minded acceptance of the reality that change is needed now and that money alone will solve nothing (Government of Ontario, 2012, p. 15).

William Osler Health System (Osler) is an 803-bed, multisite, acute care community hospital corporation serving the diverse and growing population of Brampton and Etobicoke, and adjacent geographical areas in Ontario, Canada. At its two facilities, Brampton Civic Hospital (BCH) and Etobicoke General Hospital (EGH), Osler provides a variety of elective, urgent, and emergent services for inpatients and outpatients. A third facility in Brampton, The Peel Memorial Centre for Integrated Health and Wellness (PMC), is currently under redevelopment. As the largest hospital constituent in the Central West Local Health Integration Network or LHIN (see Appendix A), Osler serves as a regional referral centre for over a million area residents. A non-profit healthcare provider, Osler receives its operating and growth funding from the Province of Ontario and employs approximately 4,300 staff. Osler is also associated with over 900 physicians and more than 1,000 volunteers.

Osler’s priorities for 2011-12, most of which are largely contingent on effective change management include:

- Achieve service excellence
- Improve quality and safety
- Continue to implement clinical priorities plan
- Advance redevelopment agenda
- Maintain a balanced budget

Based on the 22 years of experience as a formal leader at Osler, the author of this paper has an analysis of Osler's organizational effectiveness (see Appendix A) that indicated the hospital is lacking in its ability to implement and sustain organizational change (Scholten, 2011). While the organization applied a project management approach and methodologies to isolated initiatives, only the tactical activities of implementation are evident. In the absence of a “department” structure and organizational change management framework, the hospital has yet to account for and address the people aspects of change (adoption/resistance).

**RESEARCH PURPOSE AND RESEARCH QUESTIONS**

Osler is ready to move forward and launch a structure as a vehicle to become more organized and nimble in responding to pressures for organizational change. Osler is currently in the early stages of establishing a Project Management Office (PMO) through which major corporate initiatives are to be funnelled. To date, although change
management has been acknowledged as a component of the PMO, a change management framework or methodology has not been evaluated or formally integrated into the PMO model. Additionally, although Osler acknowledges the need to build organizational change capacity (see Appendix A), it does not have a clearly defined strategy or method to accomplish and support this endeavour.

This study explores three primary research questions:

1. What organizational strategies, structures, processes, and systems (see Appendix A) that support organizational change are being used by a few Ontario acute care hospitals that have been progressive in creating change?
2. What organizational strategies, structure, processes, and systems will be effective in supporting and sustaining organizational change at William Osler Health System?
3. How can William Osler Health System build a capacity for organizational change?

LITERATURE REVIEW

Organizational change has been a complex topic of study for decades. A number of authors who made noteworthy contributions to the subject of organizational change were reviewed and are herein discussed.

Change can be classified as incremental or radical, depending on its scope (Daft & Armstrong, 2009). Daft and Armstrong define incremental change (see Appendix A) as “a series of continual progressions that maintains an organization’s general equilibrium and often affects only one organizational part;” and radical change (see Appendix A) as “a breaking of the frame of reference for an organization, often creating a new equilibrium because the entire organization is transformed” (p. 374).

It is important to differentiate between a change management model, and a change management methodology. Turner, Hallencreutz and Haley (2009) state: “Change management models are typically a way of representing and describing through a series of steps, or stages a theoretical understanding of the change process (Rothwell & Sullivan, 2005; Kezar 2001; Mento et al., 2002)” (p. 26), and therefore aim to explain this complex happening. Turner et al. (2009) describe change management methodology as representing “a set of structured activities or procedures that define the completion of an event or task” (p. 26).

According to Turner et al. (2009), both models and methodologies can support organizational change efforts as they inform and guide an understanding of the “why,
how and what” of change, and offer structured processes for planning and implementation of change.

**Change Theories/Models**

With over 40 years of studying the nature of corporate change, Beer and Nohria (2000), while acknowledging the uniqueness of every organization’s change initiatives, suggest there are essentially two archetypes of change: Theory E and Theory O. Each archetype is based on distinctly different premises. Based on economic value to an organization, Theory E change is also referred to as the “hard” approach to change in which “shareholder value is the only legitimate measure of corporate success” (Jick and Peiperl, 2003, p. 484). Theory E change tends to be managed from the top down and emphasizes structure and systems, focusing largely on change initiatives that rely on cost cutting measures such as lay-offs, downsizing, and restructuring. Consultants are often used for problem analysis and solution design. The process is usually planned, from which programs are established and executed. Theory E also tends to use financial incentives to motivate.

Based on an organization’s capability, Theory O is also referred to as the “soft” approach to change, as “the goal is to develop corporate culture (see Appendix A) and human capability, through individual and organizational learning—the process of changing, obtaining feedback, reflecting, and making further changes” (Jick and Peiperl, 2003, p.484). Leadership (see Appendix A) with Theory O promotes bottom-up participation and emphasizes corporate culture, focusing largely on change initiatives that build on or leverage employee behaviours and attitudes. The role of consultants is one of support to management with solution design. The process involves experimentation from which plans and programs evolve. Theory O also tends to motivate by inspiring employee commitment to their organization.

While both archetypes drive achievement of some organizational goals, Beer and Nohria (2000) state that most companies use a combination of the two. They have also concluded that successful integration of both is difficult, as the companies studied have struggled with reconciling the tension (the simultaneous achievement of rapid economic improvements and the development of an open, trusting culture) between the two theories. Those that have, however, have done so with “a constant willingness and ability to develop their organization for the long term combined with a constant monitoring of shareholder value” (Jick and Peiperl, 2003, p.492).

West (1998) describes change in hospitals in similar terms, suggesting a conflict may exist between those viewing the organization through a financial lens, or the cost of patient care and those viewing the organization through a clinical lens, or quality of care. He also aligns with Beer and Nohria’s (2000) view of integration of Theories E
and O and its positive impact on the change process, stating that the degree of reconciliation of the financial and clinical views (when in conflict) will impact change implementation success.

Daft and Armstrong (2009) discuss four types of strategic change: product and service changes, strategy and structure changes (involving the supervision and management of the organization, usually “top-down”, mandated by top management), culture changes, and technology changes (involving operational processes “…including knowledge and skill base that enable distinctive competence;” (p. 376-377) often coming from the bottom up). It is important to understand the type of change, as it should influence the approach to change an organization should apply, according to Kerber and Buono (2005).

In their article, Rethinking Organizational Change: Reframing the Challenge of Change Management, Kerber and Buono (2005) describe three approaches to change. “Directed change is driven from the top of the organization, relies on authority and compliance, and focuses on coping with people’s emotional reactions to change” (p.25). Planned change, involving executive sponsorship, is driven from any level in the organization, and employs project management. “Guided change emerges from within the organization and people’s commitment and contributions to the purpose of the organization” (p.27).

Planned change is “…the key to resolving social conflict” according to Kurt Lewin (Burnes, 2004, p.311), as it facilitates change through learning. His theory considers field study [understanding the current state (see Appendix A)], group dynamics [assessing stakeholders (see Appendix A)], action research (data collection and discovery), and a 3-step model (unfreezing; moving; refreezing). Lewin’s theory integrates all four of these components.

Schein further elaborated on the Lewin’s 3 steps, ascertaining that they are not discrete; rather they are overlapping stages. Additionally, Schein’s stage 2, changing, indicates that individuals undergo cognitive restructuring before change is instilled in their behaviour. This is contradicted by Burke (2008) who acknowledges that this can happen, but more often the case is behaviour first, cognition second: “We act and then attribute meaning to that action” (p. 128).

Lippitt, a student of Lewin, along with his colleagues Watson and Westley, further expanded Lewin’s 3-step model (Lippitt, Watson and Westly, 1958). Consistent with Schein’s interpretation in terms of the overlapping stages, Lippitt et al. (1958) included two additional phases: Formation of a relationship between the change agent and the client organization (after stage 1, unfreezing) and ending this relationship or “change contract” (Burke, 2008, p.144) after the refreezing stage.
Kerber and Buono (2005) concluded that there are four contingencies in any change situation that should be assessed in determining the most effective approach to organizational change. These include “(a) the complexity of the business environment and (b) the socio-technical uncertainty of the task or problem, along with (c) the change capacity of the organization and (d) the risks associated with either no or slow change” (p.34).

In these contexts then, an organizational structure should include defined criteria and a method of assessing the appropriate approach as part of its change management planning methodology.

Another well known change theorist, John Kotter (1995), suggests an 8-step process for managing organizational change (p.61):

1. Establishing a sense of urgency
2. Forming a powerful guiding coalition
3. Creating a vision
4. Communicating the vision
5. Empowering others to act on the vision (including removal of obstacles to change)
6. Planning for and creating short-term wins
7. Consolidating improvements and producing still more change
8. Institutionalizing new approaches

Based on Kotter’s (1995) theory, change is a process; therefore, it can be proactively managed to ensure support and ensure the effectiveness of change initiatives.

Other theorists have suggested similar elements for successful change. James O’Toole (1995), based on his examination of leaders with a history of successful change outcomes, cites eight commonalities (Burke, 2008, p. 279-280):

1. Change had top-management support.
2. Change was built on the unique strength and values of the organization.
3. The specifics of change were not imposed from the top.
4. Change was holistic.
5. Change was planned.
6. Changes were made in the guts of the organization.
7. Change was approached from a stakeholder viewpoint.
8. The capacity to change in response to the demands of the external environment was built into the organization.

Regardless of the change management process, Daft and Armstrong (2009) suggest there are five elements needed for a successful change process which includes implementation. These include ideas or new ways of doing things; needs (reason for
change); adoption of the change; implementation (the new idea, technique or behaviour is put into practice); and resources of both time and energy to create and implement the change. Daft and Armstrong (2009) state: “If one of the elements is missing, the change process will fail” (p. 379).

While all identified theories, processes, and characteristics are important considerations in designing an organizational structure and change process to enable and support change implementation and sustainment, the common critical themes of leadership and resistance barriers are evident and must be thoroughly explored and contemplated. For example, in Conner’s work, *Managing at the Speed of Change* (1992), it is the leader’s responsibility to establish commitment to change (Daft & Armstrong, 2009, p. 397-398). Conner (1992) suggests that they do so through a 4-stage process of preparation, acceptance, commitment, and institutionalization.

Identifying and managing resistance to change is a consistent aspect of all the organizational change theories reviewed. Burke (2008) suggests that an assessment of the degree of organizational readiness for change will indicate the level of resistance anticipated from those who will be directly impacted by the proposed change. Daft and Armstrong (2009) state that resistance to change is natural and organizations should therefore develop plans to overcome it. Burke (2008) further discusses resistance at various organizational levels including the individual, group, and system. It is important to note that an understanding of the source and nature of resistance at various levels is helpful in determining how to address it. However, the scope of this paper will be limited to discussion of resistance at the individual level.

In terms of an organizational structure for managing change, three concepts are discussed by Daft and Armstrong (2009). First, a switching structure involves the creation of an organic structure on an ad hoc basis which is viewed as an effective response to dynamic environments by Burns and Stalker (Daft & Armstrong, 2009). Such an organic structure would exist for the time required to create and implement a change initiative. Second, a separate creative department is organically structured which initiates change ideas or solutions on behalf of user departments of a more mechanistic nature. The third is an ambidextrous approach which involves a structure that both generates ideas for change (or solution design) and facilitates implementation. In all scenarios, a coordinated approach and methodologies for effective change management would be essential. However, in the switching structure scenario, governance and change management competency may be problematic and is therefore a significant consideration in this analysis as an organizational structure in this context serves to support the change process.
**Change Management Methodologies**

Using an organizational methodology or framework to manage change provides consistency and some standardization so that effective processes will be replicated. A review of four distinctly different frameworks that focus primarily on implementation tactics (ExperiencePoint’s change theory, IBM’s change diamond, Prosci’s ADKAR (Awareness, Desire, Knowledge, Ability, Reinforcement) model, and Canada Health Infoway’s framework and toolkit for managing eHealth change) identified several commonalities that are aligned with the theoretical literature reviewed.

All the frameworks utilize a planning phase in advance of launching any change initiative. Elements of the planning phases included activities such as establishing project governance and leadership, defining a change management strategy, and selecting and preparing a change team. None of the frameworks reviewed considered which approach would be most suitable (i.e. directed change, planned change, guided change, as per Kerber and Buono, 2005).

All the frameworks emphasized the people/behaviour aspects of change, indicating the importance of proactively assessing them. For example, ExperiencePoint’s change theory essentially focused on maximizing commitment and minimizing resistance (see Appendix A) to change. There is significant consideration given to planning for change from a people perspective including evaluating leadership attributes in order to select an effective and appropriate change leader. Ideally, change leaders should be skilled at motivating, visioning, empowering and managing. Similarly, the change team should include members who possess or demonstrate position power, subject matter expertise, credibility earned from past organizational accomplishments, leadership and management skills. The framework also emphasizes mapping stakeholders to select the change team members as well as identify change champions and resisters.

A component of each framework, excluding IBM, was the identification of resistance. Prosci’s ADKAR model is progressive; suggesting that a person cannot move to the next characteristic if they scored below a 3 in the previous one. For example, a person who was well aware of a change initiative may have scored a 4 for “A”, but had low desire to change (perhaps having scored a 2 for “D”); therefore, desire is a barrier point for that person. There is no point to invest effort or resources to move the person to the “K” characteristic because their lack of desire will be a source of resistance to change. Rather, special tactics should be contemplated to address the lack of desire. This seems to be a simplistic yet practical tool that may help change managers contend with resistance at the individual level in a health care setting.

With the exception of the IBM change diamond, all the frameworks have some form of structured assessment tool(s). In addition to assessing individuals, the frameworks also
emphasize assessing groups and the organization at large in terms of readiness for change.

Canada Health Infoway’s framework is highly specialized and is aimed primarily at supporting change management practitioners within eHealth. The framework is, however, also suggested as a useful resource for project implementation by clinicians and leaders in a health care setting, as well as an introductory resource for those who are required to manage change within their role yet have had no formal change management training/education. The framework and tools are sophisticated and complex and may not be practical for all levels of projects or change managers. It is likely the authors assumed a planned approach, as it may be difficult to adapt this model to directed and guided changes as they are described by Kerber and Buono (2005).

IBM’s change diamond places considerable emphasis on the use of formal change management methods and suggests that every change initiative be integrated with an organization’s project management methods and aligned with its project management approach. In its purest interpretation, this may not be practical in a health care setting, as the formal project management approach could impede incremental change and continuous process improvement efforts that emerge from front line staff. For example, the level of structured communication and adherence to project timelines may present challenges with employee participation, as a considerable number of front line staff rotate through shifts and are stretched to remove themselves from their operational routines. It may, however, be effective to integrate some adaptation of project methodology for all change initiatives.

All of the models include steps, processes and/or templates to facilitate communication and link the model’s effectiveness to establishing employee engagement and building commitment.

Except for IBM, all the frameworks specifically include some form of sustainment piece. The IBM model does, however, acknowledge the need to “build and execute plans to address the ‘soft stuff’ well beyond the formal end date of the project to deliver business value” (“Making Change Work Study”, 2008, p.21), thus supporting the need for organizations to build change capacity.

A fifth framework, Lean, leverages the advantages of a structured methodology within a systems thinking context, that defines organizational culture. In his book *Lean Hospitals*, Mark Graban (2009) defines Lean as “an organization culture that develops from an integrated system of tools, management practices, and philosophy” (p. 32). It is the emphasis on culture that sets this framework apart. Referred to as “The Toyota Triangle”, a Lean culture has as its centre human development. The technical tools
(what we do), managerial tools (how we manage), and philosophy (what we believe) make up the three sides of the triangle (Graban, 2009). According to Graban (2009), while the technical tools to implement change are important, they represent only about 10-20% of the challenge. The remainder of the challenge of implementation lies with the people and their acceptance of change (change process).

The managerial tools define the role of managers, emphasizing neither “dictatorial nor extreme delegators who are hands-off leaders” (Graban, 2009, p. 179). Rather, Lean managers inspire their followers to join in problem solving together, yielding employee engagement, ownership, and innovation (see Appendix A). Communication is bi-directional; as leaders provide vision and set direction, employees validate. Additionally, as employees present ideas for improvement, "managers may question and challenge ideas, testing the thought process involved in the solutions" (Graban, 2009, p.179). The third side of the triangle, philosophy, represents the organization’s beliefs and values which are the cornerstones of its culture.

Graban (2009) also discusses the challenge of balancing daily operational work with improvement efforts. This view is also supported in other literature. Meyer and Stensaker (2006) emphasize that the challenge of finding this balance between change and stability is a key task for management, as long term superior performance depends on it.

The formation of a dedicated, full-time process improvement team is one approach that has worked well in hospitals. Typically, such teams include a project leader and a coach. The coach could be an external consultant or a Lean leader within the organization who can devote time to providing training and guidance to the project team. Graban (2009) further suggests that team members need to be individuals who are identified as change agents with strong influencing skills, as they need to work well with their colleagues and peers.

Lean appears to integrate the two archetypes previously discussed, Theories E and O (Beer and Nohira, 2000). In the two pillar view, the emphasis is on the elimination of waste (Theory E) and respect for people (Theory O). Graban (2009) states: “Lean teaches us to see quality improvement as a means to cost reductions, a better approach than focusing directly and solely on costs” (p.10). Further, Graban (2009) quotes Bill Douglas, Chief Financial Officer at Riverside Medical Centre (Kankakee, Illinois), “Lean is a quality initiative. It isn’t a cost-cutting initiative. But the end result is, if you improve quality your costs will go down. If you do the right thing with regard to quality, the costs will take care of themselves” (p.10).

As per Turner et al. (2009), in order for organizations to leverage the benefits of a change management methodology, managers need to develop “an understanding of the
underlying mechanisms driving the techniques and tools within the methodology” (p.31). Additionally, applying systems thinking forces managers to consider the organization as a whole which is important because change does not happen as an event independent of the total organization. Turner et al. (2009) further state the value of the methodology comes from an understanding of the psychological underpinnings that drive the need for it. To truly leverage this value and successfully facilitate organizational change, managers need to translate soft systems thinking (change model: organizational context) to hard systems thinking (change management methodology: specifies an approach and structure). Through a sequence of steps and activities change management models translate to define a methodology. This thinking aligns with Beer & Nohria (2000) who state, “Practically speaking, leveraging a change management methodology requires organizational leaders to understand and apply synergistically the hard and soft systems of the organization” (Turner et al., 2009, p. 31).

Change Capacity

It is important to explore change capacity as it contributes to an organization’s ability to successfully implement and sustain change. In a recent article by Helen Bevan from the National Health Service Institution for Innovation and Improvement, she describes this importance in the context of the health care industry, “Global analysis of healthcare systems that deliver outstanding performance in cost and quality shows their most common characteristic is a systematic approach to capability building for improvement” (Bevan, 2011, p. 140). In their article, Organizational change-key to capacity building and effective health promotion, Heward, Hutchins and Keleher (2007) further support this premise, “Health promotion specialists and practitioners, wherever they are located, should be building organizational change into their practice and their capacity-building frameworks because without it, effectiveness and sustainability (see Appendix A) are at risk” (p. 177). Meyer and Stensaker (2006) further state, “There is wide agreement among researchers that organizations need to develop their capacity for rapid adaptation, flexibility, and innovation (Levinthal and March, 1993; Pettigrew and Whittington, 2003; Van den Bosch et al., 1999). Moreover, practitioners are equally concerned with developing change capacity: ‘experiments to increase the capacity to adapt and learn are carried out in large companies all over the world’ (Achtenhagen et al., 2003)” (pp. 218, 219). In order to explore change capacity and how to build it, the definition is considered. Several variations or interpretations of what is meant by change capacity from the literature sources reviewed include:

- “The allocation and development of change and operational capabilities that sustains long term performance” (Meyer and Stensaker, 2006, p.220).
- “A significant investment of time, resources and leadership effort is required to create the capacity and capability for large-scale change needed to transform an
entire healthcare system (Staines, 2007). By ‘capacity’ we mean having the right number and level of people who are actively engaged and able to take action. ‘Capability’ means that those people have the confidence and the knowledge and skills to lead the change” (Bevan, 2011, p. 140).

- “A tangible approach to the development of sustainable skills, organizational structures, resources and commitment for health improvement necessary for health gain (Hawe et al., 2000),” (Heward et al., 2007, p. 172).
- “The degree to which aspects of an organisation and aspects of a change process contribute to or hinder change” (Gravenhorst, Werkman, and Boonstra, 2003, p. 86).
- “Organizational capacity for change (OCC) is defined as a broad and dynamic organizational capability that allows the enterprise to adapt old capabilities to new threats and opportunities as well as create new capabilities (Judge and Elenkov, 2005, p. 894).

Seven articles or studies that discuss change capacity have been reviewed, in which a number of common elements that contribute to change capacity are apparent. Five of the sources suggest a correlation between building change capacity and organizational strategy, workforce/skills building, systems, and culture. Four of the sources emphasize specific roles dedicated to organizational change processes, while two of the sources highlight the importance of the impact that timing has on organizations’ ability to build change capacity, and one source cites structure as an essential element.

In Developing Capacity for Change, Meyer and Stensaker (2006) emphasize three main prescriptions for developing sustainable change capacity including a systemic element of “routinizing”, or “…using structures and processes that are already in place in the organization, or to try to institutionalize structures and processes that can be applied in multiple change processes” (p. 226). Additionally, these authors stress the workforce/skills and role elements in the “recruiting” prescription, which suggests that an organization may acquire permanent resources for ongoing change implementation and/or designate current operational employees for this purpose. Pacing and sequencing (timing) is also discussed as a slower paced implementation may allow for more effective change adoption/absorption. These prescriptions are important in the context of building change capacity as the appropriate application will help to balance daily operations with change implementation.

Bevan’s analysis “…highlights the importance of skill building to underpin an integrated strategy for transformation”, in her article (How can we build skills to transform the healthcare system? p. 141). Bevan indicates that “…capability building strategies need to be highly focused rather than diffuse” (p. 143) and “…need to take account of how change spreads in complex adaptive systems, how skills relate to daily work and how
far systems, organizations, teams and individuals have already come in their own development journey” (Bevan, 2011, p. 143). Bevan also mentions prioritizing focus for change skills development first on senior clinical and managerial leaders, as well as on existing improvement leaders. There is also a strong emphasis on systems enablers such as workforce development, talent management, performance management, and incentive systems.

Heward et al. (2007) list five key action areas to guide change capacity building including organizational development (culture), workforce development, resource allocation (structure), leadership and partnership strategies.

In their article, Organizational capacity for change and environmental performance: An empirical assessment of Bulgarian firms, Judge and Elenkov (2005) suggest there are eight distinct dimensions associated with organizational change capacity. These dimensions fit into the identified common elements as follows:

- **Culture/Strategy**: trustworthy leadership and trusting followers
- **Culture**: innovative culture and accountable culture
- **Systems**: communications and thinking (approach to problem solving)
- **Specific Roles**: involved middle management and capable champions

In their study Performance Improvement Capability: Keys to Accelerating Performance Improvement in Hospitals, Adler et al. (2003) address change capacity specifically in terms of performance improvement. As such, they suggest that performance improvement capability (PIC) "reflects the state of five key components of the organization: skills, systems, structure, strategy, and culture" (p. 13). Amongst the study participants' (seven paediatric hospitals across the United States), efforts to strengthen these five components in order to optimize their PIC was noted.

In 2008, leaders in three Ontario hospitals identified three pillars of sustainable transformation. Operating systems address improvement from a process perspective and employ methodologies such as Lean. Management infrastructure discusses the appropriate alignment of individuals in specific roles as well as role definition and measurement. Learning organization speaks to the culture fabric of the organization and skill/knowledge transfer. While the authors acknowledged the significant challenge of changing behaviours across large and complex health systems, they stated the bigger challenge lay with the sustainment of change efforts over time (MacLeod, Bell, Deane and Baker, 2008). The article suggests the importance of accounting for sustainability from the start of the change process including an emphasis on performance management, skill building and cultural change.
Gravenhorst et al. (2003) stand out as their work includes an assessment of organizational change capacity based on aspects of the organization and aspects of the change process. The assessment considers elements of strategy, systems, culture, specific roles, and timing. Based on the assessment, an organization is placed into one of five categories: Innovative, Longing, Aged Technology, Clumsy Change Approach, and Cynical. Each of these categories is associated with a level of change capacity from both an organizational aspect perspective and a change process perspective. As a result, different organizations will need to employ different tactics to build change capacity. The table below draws on the work of Gravenhorst et al. (2003) and summarizes the organizational and change process characteristics associated with each category, as interpreted by this paper's author:

<table>
<thead>
<tr>
<th>Organization Category</th>
<th>Evaluation</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation</strong></td>
<td>+ Organization + Change Process</td>
<td>&gt;Familiarity with org strategy and goals; &gt;Flexible structure; &gt;Innovative culture; &gt;Modern technology; &gt;Job satisfaction; &gt;Good political relations; &gt;Clear process change goals and agreement; &gt;Technology changes with ease; &gt;Ample time provisioned for change process/employee acceptance; &gt;Clear and pervasive communication of change goals and progress; &gt;Active senior management involvement in change process; &gt;Line Managers skilled change leaders; &gt;Positive employee engagement/expectations of change.</td>
</tr>
<tr>
<td><strong>Longing</strong></td>
<td>- Organization + Change Process</td>
<td>&gt;Organizational state likely reason for change process; &gt;Change process handled well; &gt;Understanding of the need to change; &gt;Clear process change goals and agreement; &gt;Employees eager to participate in change; &gt;Tension; &gt;Groups and individuals pursue their own interests; &gt;Line Managers struggle with the change.</td>
</tr>
<tr>
<td><strong>Aged Technology</strong></td>
<td>+/- (Neutral) Organization + Change Process</td>
<td>&gt;Organization runs smoothly; &gt;Poor technology the reason for change; &gt;Technology change complex and taxes employees and managers; &gt;Tension; &gt;Negative expectations of outcomes; &gt;Little attention paid to information supply; &gt;Little attention paid to support for technological change.</td>
</tr>
<tr>
<td><strong>Clumsy Change Approach</strong></td>
<td>+ Organization - Change Process</td>
<td>&gt;All aspects of change process criticized; &gt;Goals of change unclear; &gt;Insufficient information supply; &gt;Lack of change support; &gt;Inadequate change management; &gt;Lack of employee desire to participate in change process.</td>
</tr>
<tr>
<td><strong>Cynical</strong></td>
<td>- Organization - Change Process</td>
<td>&gt;Unclear org strategy and goals; &gt;Conservative culture; Groups and individuals pursue their own interests; &gt;People unwilling to change; &gt;Job dissatisfaction; &gt;Goals of change unclear; &gt;Insufficient information supply; &gt;Line Managers unskilled with change; &gt;Low expectations from change; &gt;Lack of employee desire to participate in change process.</td>
</tr>
</tbody>
</table>

*Note. Adapted from Gravenhorst et al., 2003, p. 98-100*
The Judge and Elenkov (2005) definition complimented with part of the Meyer and Stensaker (2006) definition of change capacity are informative for this study: “…a broad and dynamic organizational capability that allows the enterprise to adapt old capabilities to new threats and opportunities as well as create new capabilities (p. 894) …that sustain long term performance” (p. 220).

**Change Resistance**

While resistance to change can negatively impact the change process if not effectively addressed, Burke (2008) states that it is not necessarily a bad thing, claiming it is a sign that people care about something. “Apathy is worse,” according to Burke (2008, p.93), who further states that “…resistance is a natural human response and, like one’s defense mechanisms, should be respected” (p. 93).

West (1998) states behavioural and organizational factors are likely to be impacted by innovations and, as such, resistance should be expected. Argyris and Kaplan (1994) suggest that fear about the uncertainty suggested by change is a possible source of resistance. West and Pitzer (1997) further argue that resistance may be a means of self-protection from perceived threat of disruption anticipated as a result of innovation.

Burke (2008) contends that resistance to change is a phenomenon, more accurately described as “a resistance to losing something of value to the person—loss of the known and tried in the face of being asked, if not forced, to move into the unknown and untried” (p. 91). Burke (2008) adds that associated anxiety is normal.

Levinson (1976) concurs with the view of change as a loss experience; specifically a loss of familiar routines, adding that the importance of what is perceived to be lost is directly proportional to the degree of resistant behaviour in those impacted by the change. According to Burke (2008), Levinson further claimed that with loss comes the need to mourn. Without an opportunity to process their feelings of loss, people will struggle to fully return to their pre-loss effectiveness. Burke (2008) discusses loss in terms of choice, suggesting resistance may be a result of having change imposed or forced upon.

Hambrick and Cannella (1989) categorized three different kinds of resistance and suggest useful responses to each. The following table draws on the work of Burke (2008) and displays each type of resistance, the correlating description, and responses as interpreted by this paper’s author:
Additionally, Bridges (1986) suggests three steps to help people cope with change:

1. Provide guidance to help understand what they are feeling and why.
2. Help people to achieve closure; disengagement from the past/old.
3. Enable employee participation in the change; “involvement leads to commitment” (Burke, 2008, p. 95).

An implication of their study on change capacity, Gravenhorst et al. (2003) however, offer a contrasting view of resistance, stating rather that resistance is essentially related to an ineffective change process. Their study results showed no evidence to indicate that resistance is a normal human reaction to change, as there is no resistance to change in an “innovation” or “longing” organization. Patterns noted from their study “suggest that people do not want to put effort into a process that is badly designed and managed” (p.102).

**Change Readiness**

According to Holt, Armenakis, Field and Harris (1993 & 1999), “readiness is arguably one of the most important factors involved in employees’ initial support for change...
initiatives” (p.234). Armenakis, Harris and Mossholder (1993) further suggested a relationship between readiness and resistance, indicating readiness as a predictor of adoption behaviours. Smith (2005) points out that change readiness (see Appendix A) does not inherently exist in an organization. Smith (2005) also connects readiness to resistance, suggesting that organizations need to assess their readiness at an organizational and individual level as a strategy to minimize the time and effort needed to mitigate resistance. Holt et al. (2007) further explain that “readiness collectively reflects the extent to which an individual or individuals are cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo” (p. 235).

Specifically, the purpose of an assessment is to provide an indication of how ready employees are for an intended change in advance of implementation, through the identification of possible discrepancies between their expectations of the proposed change and those of the organization’s leaders (Holt et al., 2007). Once identified, the development and execution of action plans or tactics to bridge the gaps will assist in mitigating expected resistance, thus supporting change implementation.

Both qualitative and quantitative methods can be used to assess change readiness (Holt et al., 2007). Holt et al. (2007) suggest that readiness is simultaneously influenced by four factors which should therefore be considerations of an effective readiness assessment model. These factors include “the content (i.e., what is being changed), the process (i.e., how the change is being implemented), the context (i.e., circumstances under which the change is occurring), and the individuals (i.e., characteristics of those being asked to change)” (p. 235).

To assess change readiness in a healthcare setting, West (1998) suggests using a change readiness matrix as it illustrates the synergies resulting from the integration of the clinical and financial perspectives in the context of the change process. The matrix places administrative and clinical constituencies into one of four quadrants (p. 49):
The highest level of readiness is the outcomes-focused quadrant, indicating a partnership between administrators and clinicians as both cost and quality are emphasized in tandem. The high and low dimensions are typically measured through surveys and observation (West, 1998).

Smith (2005) discusses a simpler, 3-step assessment method (as per Palmer, 2004):

1. List all current major activities that compete for resources.
2. Estimate required level of effort for each and compare to estimated level of effort required for said change initiative.
3. Assess overall load on the organization vs. organizational resource capacity.

If the results of an assessment indicate a lack of readiness, efforts to create or enhance readiness should be made as the return on such an investment is two-fold, according to Smith (2005). “Positive energy goes into creating preparedness for changes and, in turn, there can be a significant reduction in the need for management of resistance once organizational revival is underway” (p.408). Holt et.al (2007) report that it is the resolution of desire and expectation discrepancies between leaders and employees that creates change readiness. Smith (2005) supports this view, adding that such activity
addresses change readiness on both individual and enterprise levels. Smith (2005) also suggests three key steps to accomplish this including the creation of a sense of urgency for change; communicating the change message and ensuring involvement in the change process; and providing a base for change such as training which can be leveraged for future change. All three steps align with common change management tactics previously discussed.

**Continuous Change and Sustainability**

Based on 15 years of study and observation of organizational change in various industries, Lawrence, Dyck, Maitlis, and Mauws (2006) profess that continuous change (incremental) is more prevalent than episodic change (radical). Their understanding of continuous change is cyclical, unlike the linear nature of project-based planned change. They describe the cycle of continuous change as consisting of four phases that, when provided with the necessary resources and champions, true and sustained change is achievable. Phase One requires an evangelist, an individual with exceptional influencing skills, to inform employees and stakeholders about the change idea. The evangelist must be able to inspire and ignite the change process. Phase Two requires an autocrat, an individual with legitimate authority and credibility in the organization, for whom there is respect and loyalty. Autocrats must also possess good timing, so as not to impose authority too early, hence preventing evangelists to build momentum; and not too late which could delay the change process. Additionally, Lawrence et al. (2006) state that “…autocrats must have ‘practical imagination’—the ability to identify and provide the resources necessary to implement new ideas” (p.62). Autocrats need to ensure that leaders have the ability to translate big picture concepts in terms that are relatable and relevant at the organization, group and individual level. Phase Three requires an architect, whose focus is on organizational structures and systems, ensuring that they are positioned to institutionalize change. Phase Four requires an educator, whose focus is on the creation of learning and innovation opportunities for employees. Lawrence et al. (2006) suggest this final phase may be the most crucial of all, as it provides the foundation for a culture that encourages innovation and is future focused. Such a culture also supports the development of staff capabilities needed for the initial change and beyond, and motivates them to participate in current and future change processes. This requires the establishment of a perpetual cycle of improvement and learning. Educators help employees to develop “…strategic intuition: insights that connect employees’ work to the strategic direction of the company” (Lawrence et al., 2006, p. 64), which takes time to accomplish and is key to the creation of an environment that supports continuous improvement. Imbalances between individuals, systems, doing and thinking can disrupt the cycle of continuous change. In short, organizations need all four types of champions in order to effectively manage continuous change (Lawrence et al., 2006).
Regarding sustainability, Burke (2008) suggests organizations need to consider four concepts: unanticipated consequences, momentum, successors, and launching new initiatives. Unanticipated consequences could involve resistance from perceived supporters, unique interpretations of the change initiative by different departments, or unrealized outcomes. Maintaining momentum will help to curtail digression to the previous processes. The introduction of some degree of new personnel may be a helpful succession strategy, ensuring the infusion of fresh thinking. Launching new initiatives ensures the perpetuation of the ongoing change process.

In his article “How can Lean Users Sustain Gains” (n.d.), Lonnie Wilson, author of How to Implement Lean Manufacturing (2009), suggests there are four cultural principals that support sustainability. First, Lean organizations need a clear statement of their business purpose. Second, there must be a clear distinction between Lean leadership and Lean management. In other words, what managers do and how they behave must both be defined (Graban, 2009). Third, the business philosophy of a Lean organization must be based on respect for people. Finally, the continuous improvement process must be fully functioning.

**Studies: Indicators of Organizational Change Management Effectiveness**

(Effectiveness is defined as “the degree to which an organization achieves its goals” per Daft and Armstrong, 2009, p. 21).

There is recent data that supports and validates a number of the theoretical concepts discussed. Three studies on organizational change management effectiveness were reviewed, in which factors for successful change were highlighted. In 2008, IBM conducted a *Making Change Work* study involving 1,500 participants worldwide. In July, 2008, McKinsey Quarterly conducted a global survey, *Creating Organizational Transformations* which involved 3,199 executives from industries and regions around the world. In 2009, Prosci conducted a *Best Practices in Change Management* benchmarking study involving 575 participants in 65 countries. Although there was some variation in order, the author found that three of the top four success factors were consistent amongst the three studies. These factors included:

- Active and visible leader/executive sponsor
- Frequent, open, honest communication
- Employee involvement/engagement/commitment

The fourth success factor for each study was unique. McKinsey Quarterly listed a well defined target or objective. IBM listed a corporate culture that motivates and promotes change. Prosci listed a structured approach to change management. All six of these success factors should be considered and accounted for in designing an organizational structure and technologies for supporting change implementation and sustainment.
Another interesting concept from the IBM study is the “change gap”, or the disparity between the CEO’s expectation of the need for change and feeling the organization is able to manage it. The study reported that between 2006 and 2008, the change gap nearly tripled. This presents a strong indication that organizations in general need to increase their change management capabilities in order to respond to external and internal pressures driving change.

The IBM study also emphasized the fact that the top success factors were contingent upon the softer, less tangible aspects of change management. Additionally, the study reported that the most significant challenges of change implementation are people-oriented.

As change management models and methodologies are explored in an effort to recommend strategies, structures, systems and processes for Osler, it is important to acknowledge and account for this very important characteristic: the “people” aspect of change.

**RESEARCH DESIGN AND DATA COLLECTION**

The research design for this study includes a combination of primary data collection (interview-based) for the sole purpose of this study, publically-available secondary data, and observations based on the author of this paper’s experience in the hospital environment. Therefore, the author has constructed a qualitative (i.e. responses to the personal interviews, personal observations, and results of theory exploration) paper.

1. *Primary data collection*: The author interviewed informants from hospitals that are known to have implemented change management strategies. Specifically interviewed were senior management personnel from five Ontario hospitals who have participated in ED-PIP. Funded by the Ontario Ministry of Health and Long Term Care, ED-PIP is “a structured program to support improvements in ED Length of Stay (LOS) metrics and build capabilities within hospitals for long term sustainable change through Lean methodologies. The program focuses on creating sustainable process improvements within the hospital to improve patient flow” (“Emergency Department Process Improvement”, n.d.). Amongst the four ED-PIP waves (since 2008), several of the hospital participants are seen to be progressive and are known to have had notable success with change implementation and sustainment. These reference hospitals were identified by a key designer of the ED-PIP program who is familiar with each hospital’s results and continuing progress over the past four years and is therefore a credible source for advisement of hospitals to include as appropriate candidates for this study.
According to Canada Health Infoway’s “Framework and Toolkit for Managing eHealth Change: People and Processes”, the Province of Manitoba is the only Canadian jurisdiction that has adopted a standardized change management approach to support eHealth solution implementation and adoption. The author interviewed a Manitoba eHealth leader to understand what drove the organization to seek a standardized change management model, the criteria it used to make its selection, and the impact this approach has had on the effectiveness of change implementation and sustainment.

Additionally, the author interviewed an independent consultant as a subject matter expert (SME) who has worked extensively with hospitals, helping them to develop change management capabilities.

Ethics approval for the study was granted by Athabasca University’s research ethics committee.

Potential hospital study informants were recruited by the aforementioned key designer of the ED-PIP program. Through email, the designer formally introduced the author; purpose and intent of the study; and context of the proposed study to the potential informants and invited them to participate. Interested informants responded to the author who then provided a letter of information and consent via email. The letter provided more details about the author and the study, confirmed participation anonymity, and provided the option of recording (or not) to the interviewees, and specified the measures to ensure confidentiality of data collected as well as the process and time frame for disposal of the data. Four hospital representatives agreed to be recorded and one did not. All five informants returned a signed letter to the author, who then proceeded to schedule telephone interviews.

The duration of interviews ranged from approximately 60 to 90 minutes, and all interviews were conducted in Ontario between January 19th and February 3rd, 2012.

The Manitoba eHealth leader was recruited by a colleague whom the author came to know during a change management training session. The process of introduction, expression of interest and all other terms was identical to that of the hospital study informants. The author had a pre-existing professional relationship with the SME and therefore launched the invitation to participate directly. All other process details were consistent with those already described. The duration of these two interviews was approximately 60 minutes and they were conducted in Ontario between February 9th and 24th, 2012.

Based on information gleaned from the literature review, interview protocols were developed (Appendix A).
Recorded interviews and hand-written interview notes were electronically transcribed into tables. The hospital study information was sorted by hospital and by theme. Four themes had been identified through the literature and four new themes emerged from the interviews. The author printed the detailed tables and taped them together to form one consolidated paper document that provided a global view of all information collected and sorted. The commonalities and differences amongst and between the study hospitals were noted by hand, then summarized and reported as findings.

The other two interviews were also tabulated, sorted by themes informed by the literature, printed, studied, summarized and reported as findings.

2. Personal experience and observation: The author has been employed at Osler in a leadership capacity for over 22 years. During this time the author led numerous organizational change initiatives including departmental restructuring, service model delivery design and implementation, business process redesign, and information technology implementations. Having been an active participant in a leadership capacity of two relatively recent change initiatives (ACTION and ED-PIP), the author’s personal observations about the gaps in change management at Osler further served to support/validate critical attributes necessary for an effective change management strategy, structure, processes, and systems in Osler’s acute care community hospital environment. The author also referred to her previous analysis of Osler’s organizational effectiveness (May, 2011) and Transitional Change: Operating Room Booking (October, 2010).

3. Publicly available secondary literature and information: A variety of theoretical perspectives on change management was collected to validate the author’s findings and support recommendations. These secondary data sources include textbooks, articles, and studies obtained from the AU digital library (yield from a thorough search of both business and health databases, employing key search words such as change management, change sustainability, change implementation, change capability/competency) and reference material/studies from credible Web sites such as Canada Health Infoway, The Ontario Ministry of Health and Long Term Care, ED-PIP (Patient flow toolkit), Prosci, IBM, and McKinsey Quarterly, and journals such as “Journal of Change Management” and “Health Care Quarterly”.


FINDINGS

For the purpose of the hospital study, interviews with the Manitoba eHealth leader and SME, and the analytical discussion, the Judge and Elenkov (2005) definition complimented with part of the Meyer and Stensaker (2006) definition of change capacity is used: “…a broad and dynamic organizational capability that allows the enterprise to adapt old capabilities to new threats and opportunities as well as create new capabilities (p. 894) …that sustain long term performance” (p. 220).

Hospital Study

Five Ontario hospitals, identified as being progressive with their organizational change, were studied. Each hospital’s change process is at a different stage of development. The study results from interviews with informants (senior management personnel) from the five subject hospitals are summarized within eight distinct themes: strategy, structure, processes, leadership, stakeholders, sustainability, systems (human resources), and culture. These themes are based on the literature and were reinforced as they emerged from the study interviews. In the following summary, hospitals are referred to by number to respect confidentiality and anonymity as agreed upon.

Strategy

Daft and Armstrong (2009) define strategy as “the current set of plans, decisions, and objectives that have been adopted to achieve the organization’s goals” (p. 606). According to Grant (2008), an organization’s vision “is an aspirational view of what the organization will be like in the future” (p. 21). As such, review of the vision statements of the subject hospitals offers some insight into each organization’s overall strategy. The vision statements for hospitals 1, 2, 3 and 5 either directly state or imply alignment with an organizational change agenda, emphasizing effectiveness and optimal performance. Hospitals 2-5 have the word innovation (defined as “something newly introduced, such as a new method or device” (“Innovation”, n.d.)) embedded within their vision statement and/or their strategic directions. The CEOs of hospitals 2, 3 and 4 are leaders and prominent advocates of their respective organization’s change agendas. In fact, in these hospitals, said individuals introduced their transformation strategy. The informant at hospital 1 indicated that the organization is currently in the process of refreshing its strategy, and that there has been acknowledgement that alignment with the change agenda is necessary. Additionally, hospital 1’s informant emphasized the importance of clarifying what strategy means in terms relatable to front line staff: how their work shapes the organization’s ability to achieve its goals; as well as the need to make connections and alignments across and from top to bottom of the organization. Hospitals 2-5 stress continuous improvement in their strategic plans and directions. Hospitals 2-5 also describe their strategies in terms of financial stewardship as well as
culture, emphasizing people development. All hospital informants cited culture as a significant strategy driver. The informant for hospital 4 acknowledged a shift of focus from operational change to culture change (though both are present) because the organization has recognized that in order to drive operational excellence, it needs to define and leverage desired behaviours as well as improving operational processes. As stated by one of the interviewees: “There has been a recognition that, in order to drive operational excellence, you have to have the basics in place; not just how to yield results, but also the behaviours we want to see.”

**Structure**

Daft and Armstrong (2009) define structure as “the formal reporting relationships, groupings, and systems of an organization” (p. 606). Every one of the subject hospitals has a central group whose mandate is to lead and manage improvement (change) initiatives. All informants reported the existence of a central group “lead” who reports directly to a Vice President. All informants stated that this is important to ensure that efforts, issues and challenges don’t get lost in layers of reporting structure, especially at the start-up stage. The hospitals vary in terms of each team’s scope of focus. Hospitals 2, 3, and 5 focus on the broader enterprise, including both clinical and non-clinical initiatives. While hospitals 1 and 4 presently focus exclusively on clinical initiatives, they intend to extend the team’s focus more broadly in the future. The informant from hospital 4 further indicated that the central group’s role of “change management” is not widely understood across the organization; rather, it is viewed as more of a vehicle to administer and facilitate a process improvement methodology and tools. There is variation in terms of central group size and composition. A ratio of central group resources to hospital size (measured by number of beds and staffing) is as follows:

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Central Group : Beds</th>
<th>Central Group : Staffing (Employees + Physicians + Volunteers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0230</td>
<td>0.0019</td>
</tr>
<tr>
<td>2</td>
<td>0.0133</td>
<td>0.0011</td>
</tr>
<tr>
<td>*3</td>
<td>0.0104</td>
<td>0.0013</td>
</tr>
<tr>
<td>4</td>
<td>0.0062</td>
<td>0.0007</td>
</tr>
<tr>
<td>*5</td>
<td>0.0104</td>
<td>0.0012</td>
</tr>
</tbody>
</table>

*Central group includes a full time analyst role.
Each organization’s central group consists of at least two members. Hospitals 1 and 2 are relatively small in relation to hospitals 3, 4, and 5 which are comparable to each other in size.

While hospital 2’s central group composition does not include an analyst role, the informant confirmed a close inter-dependency between the central group and the hospital’s central analytics group.

All informants concurred on the important skill sets needed for the central group’s members such as communication (especially listening), facilitation, comfort with ambiguity, relationship management and the ability to build trust at all levels of the organization, influencing, and conflict management/negotiation skills. The informants for hospitals 3 and 5 specifically emphasized the latter as key in managing resistance.

All informants further stated credibility as another critical skill needed for central group members, however there is some variation in interpretation. Informants for hospitals 1 and 4 viewed credibility in terms of clinical knowledge/experience, and reported that the organization recruited its central group members from within. Informants for hospitals 2 and 5 viewed credibility in terms of both clinical and change management/process improvement knowledge/experience. These two informants emphasized the value of a fresh perspective associated with one who is “new” to the business, to constructively challenge the status quo; both informants indicated their central groups are comprised with a combination of clinical and business experts as well as blended recruitment (from within and external).

A commonality expressed by informants from hospitals 1-3 is the organization’s use of external consultants as coaches/trainers for central group members and hospital leaders. Their use has evolved over time and while their presence and scope has gradually diminished from the inception of the central groups, the hospitals continue to leverage these “expert resources” as one means of building change capacity. The informant for hospital 4 did not comment on the use of consultants; the informant for hospital 5 stated that external consultants are not used at all.

Processes

Daft and Armstrong (2009) define processes as “organized group of related tasks and activities that work together to transform inputs into outputs that create value for customers” (p. 604). The three approaches to change as defined by Kerber and Buono (2005) were reviewed with each informant and discussed in the context of their respective organizations. While all informants reported multiple approaches to change, they acknowledged the need to shift. Hospitals 3-5 reported their most prominent approach to change is directed but needs to evolve to more of a guided approach. Hospital 3’s informant views the guided approach as a means of building change
capacity; hospital 5’s informant associated a guided approach with a culture where everyone is a problem solver; hospital 4’s informant acknowledged the need for all three approaches, but suggested a blend of planned and guided would be most advantageous as it would leverage front line ideas and engagement while providing a structure to avoid overwhelming staff—ensuring activities are aligned with the organization’s strategic directions and priorities and the allocation of appropriate resources. The informants for hospitals 1 and 2 differed in their views, preferring the planned approach within their organizations. The informant for hospital 1 also indicated the need for a directed approach for change initiatives at times if the change initiatives present significant challenges or barriers.

Hospitals 1-4 have all adopted a Lean management strategy as their standard for their improvement and change management activities, as it addresses the people/culture aspects and provides a standardized methodology and tools [such as value stream maps, current state analysis or “Gemba”, Plan-Do-Study-Act or PDSA cycles, Kaizen events, idea boards, A3 problem-solving, root cause analysis, standardized work (see Appendix A) and daily stand up team meetings]. The informant for hospital 5 indicated that Lean is one of several methodologies used. The informant for hospital 2 reported that Lean added needed structure to the management of change initiatives. The informant for hospital 3 reported that Lean was chosen as the standard because it addressed the full array of challenges (financial, morale, operations/process efficiencies) simultaneously. Additionally, the informant for hospital 3 emphasized that the integration of Lean into employees’ daily work has had a positive impact on their ability to balance operational work with quality improvement work.

Leadership

Lam (2008) defines leadership as “a process whereby intentional influence is exerted by one person over other people to guide, structure, and facilitate activities and relationships in a group or organization” (p. 59). All hospital informants confirmed the use of sponsors for change initiatives in some fashion, and most viewed this as an improvement opportunity. Informants for hospitals 1, 2, 4, and 5 reported the engagement of sponsors at the executive level, responsible for providing coaching and support to the central group, managers and staff of the areas impacted by a particular change initiative; monitoring progress; allocating resources; and removing barriers. The informant for hospitals 1, 2 and 4 also reported variability in the sponsor role and commented that it requires greater definition and structure, and clearly articulated expectations. Noting that leadership is a key predictor of success, hospital 2’s informant further commented on the need to evolve accountability processes. Informants for hospitals 4 and 5 reported existing challenges of leadership due to workload demand, and shifting, competing priorities which can hinder improvement momentum. Hospital 4’s informant further commented that improving how one
manages is just as important as managing, but the organization is still evolving its leadership model and has not yet addressed these challenges.

The informant for hospital 3 reported the use of sponsors for larger improvement initiatives. As part of the Lean management philosophy with its foundation of continuous improvement and value placed on team engagement, however, department leaders are expected to champion change within their portfolios daily.

All informants concurred that active, visible leadership is necessary from the executive level and down the management hierarchy. Informants from all hospitals indicated that some form of rounding is currently in place. Rounding (see Appendix A), or “making rounds”; involves leaders routinely visiting designated units or departments with considerable regularity and is viewed by all as a powerful vehicle for leaders to inspire, encourage, and engage front line staff in two-way dialogue. It signals respect and value of the work and ideas of the front line. It is also a two-way learning mechanism for leaders and staff. Rounding has been defined as an element of leader standard work and has been an effective training tool for all participants, teaching new behaviours, and encouraging a new way of thinking. The structure has also been effective in keeping leader visits focused and manageable. All informants described their improvement process as front line driven, indicating a shift away from a directive management model towards a more participative management model.

Stakeholders

Daft and Armstrong (2009) define stakeholders as “any group within or outside an organization that” (p. 606) impacted by the change initiative. All hospital informants confirmed a process for identifying and assessing stakeholders of change initiatives. Based on the assessments, project team members are designated. Informants for hospital 1 and 3 further indicated that the assessment specifically considers stakeholders’ impact on the change initiative, which informs the development of the communication strategy in terms of frequency, level of detail and mode; acknowledging the need to tailor communication to each stakeholder group. Informants for hospitals 1 and 2 emphasized the importance of including patients as stakeholders and involving them in the change process, if possible.

There was significant variability in terms of how resistance is identified and addressed. Hospital 1’s informant commented that vocal resistors are typically not chosen for project teams. Rather, once a change initiative has gathered momentum, resistance is revisited. Hospital 1’s informant also reported that sometimes resistors are right to resist and PDSA cycles help to mitigate resistance through a structured process to rationally explore concerns and build consensus. Hospital 2’s informant described a number of methods to identify resistance including the stagnation of performance
metrics, feedback gathered during rounding, management meetings, feedback from the central group, and queues during performance “huddles” (daily stand up team meetings). The informant for hospital 5 reported that the project team typically identifies resistance which is mitigated by challenging the resistors to own the issues and outcomes, using stories framed in benefits to patients (emphasizing the need for change), and leveraging engagement by implementing staff ideas as much as possible. Hospital 3’s informant stated that past history is a reasonable predictor of resistance. Additionally, both hospital 2 and 3’s informants discussed the importance of a change readiness assessment as an effective means of identifying potential resistance. The informant for hospital 3 considers change readiness plus a supportive, enthusiastic leader to be critical success factors of effective organizational change.

Physician stakeholders present a challenge to all five subject hospitals and they tend to be resistant to change, according to the informant from hospital 3. Hospital 1’s informant has had some success with soliciting physician buy-in to change initiatives through the tailored communication approach, observing that physicians tend to operate not as a group of stakeholders, but rather independently as individual stakeholders. The informant from hospital 2 further indicated the challenge of garnering physician participation in improvement initiatives, as they are not hospital employees, thus time spent away from their clinical practice is not compensated and project teams made allowances to accommodate the physicians’ schedules. The informant from hospital 4 reported some success with physician engagement in cases where physicians assumed the responsibility for solving a problem related to an issue they cared about, provided they were given the necessary resources and support. Similarly, hospital 2’s informant reported some success with physician engagement by assigning a leadership component to their participation on the team such as priority setting. The informants from hospital 2 and 3 reported some success from involving physician leaders in their hospital’s governance and committee work, and hospital 3’s informant also indicated that physician leaders are members of its senior management team. The informant from hospital 3 also reported tactics such as involving physicians in Kaizen events and a standing change initiative agenda item at monthly and annual medical staff meetings were somewhat effective in earning physician buy-in and support. The informant from hospital 4 offered insight about why physicians tend to be resistant, suggesting their resistance is not to change itself, rather to “being” changed. In other words, physicians may perceive a loss of autonomy with change that is imposed upon them. Additionally, the barrier is the physician “mindset”; viewing their relationship with the hospital as one of customer (physician) where the hospital enables them to be a service provider to their customer (patient) rather than viewing themselves as a part of the overall organization. Increasing their understanding of the overall hospital system and how it affects their patients is necessary. Greater success with gaining physician participation and buy-in has been observed with physician groups such as radiologists, emergency
doctors and anaesthetists who spend most of their clinical practice time at the hospital and likely feel more a part of the organization.

**Sustainability**

Sustainability, as discussed with the study hospital informants, refers to the capability to maintain and consolidate the gains of the change initiative. All hospital informants cited performance measurement as a foundation of sustainability. Daily discussion of performance measures between managers and front line staff during department based huddles is practiced in all subject hospitals. Additionally, as part of their standard work when rounding, senior leaders openly audit and discuss departmental performance with managers and their staff. Hospital 1’s informant also reported weekly and monthly report out sessions amongst leaders during which transparency and individual leader accountability for how their departments impact overall organizational performance are emphasized.

All hospital informants noted recognition programs and activities to provide positive reinforcement of desired behaviours, participation and results including individual and team praise at huddles, awards, newsletters, town hall forums, promotional videos and public presentations featuring improvement initiative achievements. All hospital informants also acknowledged the PDSA cycle tool as a means of sustainability in that compliance to standard work is monitored and reasons for deviations are explored and addressed on a continuing basis. Additionally, all hospital informants viewed the management of resistance as a contributor to sustainability.

Informants for hospitals 1 and 4 suggested that leveraging expert power to influence employee buy-in promotes sustainability, holding that although it takes more time than prescribing a solution, establishing a genuine understanding of the drivers of change and the rationale behind solutions encourages adoption. Informants for hospitals 1, 2, 3 and 5 further stated the value of evaluating the effectiveness of the central group and discussed measures such as change initiative results and stakeholder surveys and interviews. Hospital 3’s informant stressed the importance of modeling continuous improvement efforts by the central group, while informants for hospitals 2 and 4 cited succession planning for the central group and hospital leaders as a contributor to sustainability.

Hospital 1’s informant emphasized the importance of considering sustainability at the start of the change process. Informants for hospitals 1 and 3 acknowledged that despite all the tactics and measures in place, sustainability is still a challenge, noting it would falter if they were to “take their eye off the ball.” In other words, performance needs to be diligently monitored by hospital leaders. Hospital 1’s informant further
described sustainability as a function of organizational culture, indicating that sustainability thinking is not yet hard-wired into it.

**Human Resource Systems**

System is defined as a connection of activities; “a group or combination of interrelated, interdependent, or interacting elements forming a collective entity” (“System”, n.d.). The human resource systems considered in this study include performance management and recognition, recruitment, training and development, and succession planning. Informants from hospitals 1, 2, 4, and 5 all acknowledged the importance of congruence between their change management strategies and these strategic human resource systems, yet reported they are currently under revision, each in various stages of development. Informants for hospitals 4 and 5 described a coordinated approach to their revision efforts; informants for hospitals 1 and 4 noted direct participation of the central group leads in their revision efforts.

Informants for hospitals 1, 2, 3, and 5 described some form of formal training in place, emphasizing the importance of reaching employees at all levels and facilitating joint attendance by leaders and staff.

The informant for hospital 2 described a succession planning process for the central group to build leadership capacity, organizational change capacity, which is expected to promote and support sustainability. The importance of this is underscored by the informant for hospital 4, who described the disadvantage of the absence of succession planning. As leaders have moved in and out of the hospital, there has been some digression of change initiative gains, as well as organizational change capacity.

As per the informant of hospital 3, this organization stands out as furthest in its development to align its human resource systems with its change management strategies. The hospital’s change management strategy is reflected in its leadership competencies, all recruitment ads, orientation sessions for new hires, and is integrated with other corporate training programs. This organization has also redefined the role of the manager to reflect its expectations with respect to its change management agenda. While it has made significant progress, its informant acknowledged the timing was not ideal and provided a lesson learned: human resource systems alignment with a change management strategy should be considered very early in the strategy/planning stage.

**Culture**

Daft and Armstrong (2009) define culture as “the set of values, guiding beliefs, understandings, and ways of thinking that are shared by members of an organization and are taught to new members as correct” (p. 598). All five subject hospitals discussed the importance of culture for supporting the change process and building
change capacity. All five subject hospitals have four common explicit values: compassion/caring, continuous improvement, innovation and respect. Hospitals 1, 2, 3, and 5 explicitly value high performance or excellence. While hospital 4’s strategy clearly emphasizes excellence, it is not an explicit value. Hospitals 1, 2, and 3 explicitly value continuous learning. Hospitals 4 and 5 do not explicitly value continuous learning, but it is woven into their strategic directions. Additionally, hospitals 2, 3, and 4 explicitly value resource accountability. In all cases, hospital culture, framed by formal organizational values, aligns with organizational strategy.

Informants from hospitals 1, 2, and 3 reported strong cultures. Hospitals 4 and 5 reported evolving their cultures to support change. The informant for hospital 4 further discussed culture as the starting point for building change capacity; that the organization needs to build time and space into the culture and continue to evolve supporting systems in order to further build change capacity. The informant for hospital 5 further commented on evolving culture as the journey takes a long time. Aside from aligning culture with the hospital’s change strategy, no other tactics for evolving the culture in hospital 5 were discovered. All hospital informants indicated physicians represent a strong sub-culture that is further sub-divided by specialty in many cases, adding another level of complexity to this stakeholder group thus contributing to the challenge of garnering their engagement.

Informants for hospitals 1, 2, and 3 either directly or implied change readiness as an element of culture. Hospital 3’s informant further commented on the value of regularly assessing leadership’s ability to lead change, especially at the senior level, noting significant progress on this aspect resulting in more team cohesion.

Hospitals 2, 3, and 4 reported CEO acknowledgement and support of investment in their organization’s culture. All informants commented on the impact leadership has on organizational culture. Leadership stability, especially at the senior level, was acknowledged by all as important to evolve culture. Informants for hospitals 1, 2, and 3 emphasized the impact Lean has had on their organizational cultures in terms of promoting an environment where:

- staff feel respected and valued;
- staff initiation and participation in continuous improvement efforts is becoming imbedded in their standard work;
- organizational change capacity is growing.

Informants estimated their respective organization’s level of change capacity (on a scale of 1-5, with 5 being the highest) before and after the initial formation of the central group:
It is important to note the reason for the decline in change capacity at hospital 4. The informant reported recent leadership transitions which, in the absence of succession planning, allowed for some digression with respect to process improvement initiatives as they lost momentum and attention. The informant expects, as some new leaders become further invested in the organization and adhere to the leadership model along with the continued evolution of systems to support leaders and staff, change capacity will increase.

A table summarizing the hospital study findings is provided in Appendix C.

**Manitoba eHealth Leader Interview**

In their Framework and Toolkit for Managing eHealth Change, Canada Health Infoway cited Manitoba eHealth as one jurisdiction which has selected a standardized change management methodology. Responsible for strategic planning, goal setting, and implementation, Manitoba eHealth is the information and communications technology arm of health care in Manitoba. The organization’s business strategy is standardization (build technology solutions once, then implement across the Province). Prior to 2007, in the face of increasing demand, the Province had only a small number of information technology (IT) project managers who led and facilitated technology initiatives. There were no standards in place and the customer community (i.e. hospitals) were dissatisfied with the level of quality in services they received. In 2007, Manitoba eHealth amalgamated ten different organizations comprised of approximately 140 staff representing multiple and often conflicting cultures, and formed its Project Management Division. As a result, the organization recognized the need to improve processes and push for standardization that would impact not only Manitoba eHealth internally, but also its customer community and vendor partners. Manitoba eHealth leaders sought the benefits of standardization such as consistency, integrated and repeatable processes, and common terminology (Nick and Atkin, 2012).

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Change Capacity Before Central Group</th>
<th>Change Capacity Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.0</td>
<td>3.0-3.5</td>
</tr>
<tr>
<td>2</td>
<td>2.0</td>
<td>3.5</td>
</tr>
<tr>
<td>3</td>
<td>1.0</td>
<td>4.0</td>
</tr>
<tr>
<td>4</td>
<td>2.0</td>
<td>1.0</td>
</tr>
<tr>
<td>5</td>
<td>(No frame of reference)</td>
<td>2.5 (represents some improvement)</td>
</tr>
</tbody>
</table>
A standard project management methodology (Prince2) and process improvement approach (Capability Maturity Model Integration or CMMI) were selected as they were recognized by the Project Management Division as internationally respected best practices. The change management methodology (Prosci), which integrates with the other standards, seemed to be the best fit with the organization’s business strategy of standardization. Providing a logical series of steps and actions that have been integrated into project delivery, the Prosci methodology offers a structure and tools to manage the soft (people) side of change. Of particular importance is the sponsorship model along with role clarity for sponsors and stakeholders, defining accountabilities. This was seen as important as often there is the desire to participate in change initiatives, but people don't always know how. Additionally, the benefits of the methodology’s stakeholder analysis process and templates were emphasized, highlighting the value of identifying sources of resistance and strategies for managing it. The methodology also offers an approach to coaching and training, practical skills for introducing change (as project managers become teachers during the change process) that are transferrable to other leadership activities. As a standardized method suggests repeatability, knowledge transfer and capacity building emerge as a result.

The Project Management Division has increased its change capacity since adopting standardized methodologies, measured by the shorter time to produce the expected benefits of change initiatives and the progression to level 2.5/5.0 on the CMMI scale.

Lessons learned to date from the eHealth experience include:

- Ongoing support structures are very important. Organizations have to build operational capabilities to sustain change, as it is very easy to slide back into former processes or habits. An example provided is the project assurance function which involves an assessment of compliance to the Prosci standards.
- Organizational culture must be safe (an environment that emphasizes understanding rather than blame); encourage risk taking and tolerate mistakes as they represent learning opportunities. People need to be comfortable talking about mistakes early in the process, which will minimize rework and improve implementation effectiveness.
- Physicians yield greater participation and adoption once they see the benefits of change to their practice, as observed with the implementation of computerized physician order entry (CPOE). This lesson is illustrated by the 92% utilization rate of this technology in one hospital.
- The most important success factor for implementing systemic organizational change is active, visible senior leadership.
**Subject Matter Expert (SME) Interview**

An independent consultant who has worked extensively with hospitals, helping them to develop change management capabilities was interviewed as a subject matter expert (SME). According to the SME, the acute care hospital environment presents two distinct challenges to organizational change as compared to other industries. First, the level of process integration is very high and hospitals typically fragment the efforts required to manage quality improvement initiatives. Activities are often split amongst different roles or departments related to quality such as organizational development, risk, transformation, finance and IT, making the coordination of the change process difficult. This typically results in siloed programs that don’t link together and the change process comes across as haphazard. Second, hospitals generally struggle with how to ensure physician support of change initiatives, as they are essentially “independent contractors” who play such an important role in hospital clinical processes which represent the organization’s core business.

Hospitals that are more successful with managing change, as observed by the SME, tend to have a central group to lead and manage change and avoid a siloed approach by having clear linkages with other groups who support or contribute to the overall change process. It is important to define the main activities of the central group, which, according to the SME, includes four principle areas. First, the central group should provide training and education to staff on the tools, approaches and rationale for change. Second, the central group should provide a coaching function, providing support for change teams and developing expertise across the organization. Third, the central group should be responsible for tracking the performance of initiatives at defined intervals (i.e. 6 to 12 months post implementation) as well as identify when initiatives go off track and quickly raise sustainment issues. Lastly, the central group should cultivate knowledge throughout the organization, creating an improvement system rather than adopting individual initiatives or disjointed programs; moving ahead with creating an improvement approach over time.

One effective tactic observed in hospitals that are successfully managing change is rotational learning which involves the secondment of central group members for defined tours (i.e. 6 months, 12 months, 24 months). This tactic spreads some of the learning and skill development throughout the organization over time. At the conclusion of secondment tours with the central group, an incumbent returns to their original department or moves on to a new area where they share their change management experience and skills, thus facilitating the transfer of knowledge and further building change capacity.

With respect to the challenge of engaging physicians in change initiatives, the SME reported hospitals vary in their approach. There is often hesitation to engage
physicians early in the process. However, hospitals that are successfully managing change typically clearly define the role of physicians at the start of the change process. As well, the relationship between hospitals and physicians (as supported by the organization’s culture) is well understood and considers the issue of compensation for significant effort and time spent engaged in and supporting the change process.

The SME has observed two emerging trends within hospitals that are successfully managing change. There is a shift from viewing improvement work as a set of projects to the view of continuous daily improvement. Additionally, the balancing of projects that address large system problems (such as a scheduling system or patient flow for patients admitted to hospital through the emergency department) with incremental improvements on a daily basis is on the rise.

Based on professional experience and observation, the SME discussed the top three success factors for managing change in hospitals. First, senior leadership commitment and alignment with change initiatives (not delegating down the chain of command) was emphasized. This includes clearly defining sponsor expectations (including structured time with project teams and front line staff to lend support and offer encouragement), and sponsorship team composition (including physician leaders). Secondly, the SME stressed the importance of maintaining discipline to stay the course of change initiatives and with the organization’s change methodology over time. The third success factor indicated was embedding improvement into the approach to training, roles and capabilities, and management asserting the importance of hospitals moving beyond the view of operational improvement towards a systems view.

Also highlighted as incredibly important by the SME is organizational culture, emphasizing that it needs to reinforce the connection of staff to the organization’s goals and improvement work going on. In hospitals that are successfully managing change, employees are made to feel their input and participation is valued.

Effective employee engagement strategies have included front line involvement on improvement teams, value stream mapping sessions (bringing together different stakeholders from various departments to form and understanding of each other’s perspective), and aligning stakeholders to a common purpose or focus: the patient. This is consistent with study hospital 5’s use of storytelling as a means of mitigating resistance,

Effective communication strategies have included the use of multiple communication modes and channels (including one-on-one, face-to-face contact with individuals directly impacted by change) and the direct interaction of the CEO with small groups of staff. The findings from the hospital study validate these points.
The SME also noted that long term success in managing change in hospitals has not been observed without active CEO involvement beyond support. With active CEO leadership, change is not approached as a finite project impacting parts of the organization. Rather, such CEOs equate improvement or change as a strategy defining how the organization achieves its goals.

Lastly, the SME reported that assessing change readiness can be powerful in building an understanding of where strengths and gaps exist, which in turn, helps to shape change management strategies and activities. The SME further reported that typically, as a group, hospitals do not do this well.

**DISCUSSION**

The following discussion will focus on cultural changes and technology changes as previously defined by Daft and Armstrong (2009).

For all study hospitals, change is either the thrust of or is a prominent component of overall organizational strategy. At the strategic level, the hospital study participants appear to be leveraging a combination of Theories E and O (Beer and Nohria, 2000): four out of five study hospitals emphasize both financial stewardship and people development or culture in their strategies. This observation aligns with Beer and Nohria’s (2000) suggestion that change is most often successful in cases where organizations address both the financial and people aspects of change.

At the operational level, there is further evidence that suggests the study hospitals are trying to blend Theories E and O (Beer and Nohria, 2000). For example, the adopted standard “methodology” for change/improvement, Lean, is designed to integrate the two theories. Specifically, Theory E strategies such as setting direction from the top, emphasizing performance measurement and structured, standard work are applied in tandem with Theory O strategies such as engaging the front line and experimentation as evidenced by the use of PDSA cycles. Additionally the use of external consultants as coaches for skill and capacity building in hospitals 1-3 demonstrates a blending of the two theories. The study hospitals are also investing in training and skill development of change leaders and front line staff.

Further, employee participation in the design, implementation and sustainment of improvement initiatives is valued and deemed necessary for a successful change process. These activities align closely with Theory O and are balanced by the daily attention given to performance metrics during huddles, which aligns with Theory E.
With the alignment of organizational attributes and this blended strategy, the study hospitals reported progress with their change/improvement process resulting in gains towards achieving their performance improvement targets. This suggests they are successfully balancing the two theories and are therefore positioned for long-term organizational development and acceptable financial performance (Jick and Pieperl, 2003) as defined by their respective LHINs. Emphasis on the soft approach or Theory O (Beer and Nohria, 2000), however, appears to be greater than on the hard approach or Theory E in all hospitals studied and is actually shifting from Theory E to Theory O in hospital 4. This is a point of interest in the Ontario hospital industry and hospitals will need to monitor this very closely in order to maintain an effective balance between the two archetypes.

As Daft and Armstrong (2009) assert, the essential elements for a successful change process include the resources of time and energy to create and implement the change. All study hospitals and Manitoba eHealth have created a formal structure or central group through which this is accomplished, thus applying an ambidextrous approach (Daft and Armstrong, 2009) to deliver on their respective organizational strategies. The generation of improvement ideas stems from both the end user departments and change team members. The change team members then leverage their expert power and further assist by facilitating the development and validation of the ideas. Additionally, the central group provides the resources and methods to support change implementation. These methods, as they are repeated in subsequent change efforts over time, will become embedded into the organization’s culture and thus support change capacity growth.

Hospitals are challenged by the very nature of their organizational structure (assuming Osler’s structure is representative of Ontario hospitals) as they typically are hybrid organizations consisting of a blend of designs including divisional, horizontal, functional, geographic, and network structures (Scholten, 2011). This overall structure presents challenges as described by the SME as it is not conducive to a coordinated change process across the enterprise. The formation of a new structure to establish linkages with other departments that support aspects of the change process and centrally coordinate the change process appears to be effective in delivering on a strategy of change. All study hospitals emphasized the importance of the central group’s direct reporting relationship with senior management, which further underscores its alignment with organizational strategy. The central group’s effectiveness is impacted by the degree of support and alignment with the organization’s culture and systems. This view is supported by the hospital study findings, interviews with eHealth and the SME, and Graban (2009).
There is variation in terms of the amount of resources within the study hospitals’ central
groups. However, it is unclear if or how this impacts the overall effectiveness of each
hospital’s change process.

With an emphasis on credibility, people skills and leadership skills, members of the
central group in all study hospitals appear to fulfil the Phase Four role in Lawrence et
al’s. (2006) continuous change cycle, the educator. The SME’s description of the
activities that should be undertaken by the central group further supports this
designation. This draws attention to the central group’s impact on shaping
organizational culture. Two of the study hospitals’ central groups include a full time
analyst to support the data/performance measurement of change initiatives. This
appears to be a sound strategic design considering the importance of measurement as
a means of identifying resistance, sustainability, and persuading physicians to engage
and participate in change initiatives.

Assuming all hospitals are similar, in that they have a high degree of complexity in their
business environment and assuming they all face a high level of socio-technical
uncertainty (as I have observed in my experience at Osler), either a planned approach
or guided approach to change seems most suitable (Kerber and Buono, 2005). While
all study hospitals include continuous improvement (leveraging front line staff) in their
strategies, there is variation with respect to their intent to shift their approach to change.
Three study hospitals recognize the need to shift to a guided approach which aligns well
with staff driven continuous improvement and two study hospitals prefer a planned
change approach. Kerber and Buono (2005) suggest that a misaligned change
approach results in resistance and can prevent change success. Nevertheless, guided
change requires a high level of organizational change capacity which all study hospitals
are working towards through means such as imbedding continuous improvement into
their cultures, implementing a central group to manage change, and developing the
human resource systems needed for the support and reinforcement of change.

The trend observed by the SME of hospitals shifting from a project approach to
continuous improvement aligns with the desire expressed by the study hospitals to shift
to a guided approach. Similarly, the SME’s observation of a greater balance between a
project approach for large, systemic change and continuous daily improvement is
consistent with the study hospital findings.

Only one of the study hospitals has not settled on a standard methodology for the
change process, but there is no evidence in the findings to indicate this as a
disadvantage. The four study hospitals that have adopted a standard methodology
(Lean) however, appreciate the benefits of its structure. Applying the benefits of a
standard methodology (as described by the Manitoba eHealth leader) of consistency,
integrated and repeatable processes, and common terminology to the role of the central
group members as educators (previously discussed), one can deduce that their ability to transfer knowledge and train employees on the change process would be enhanced. As such, building change capacity would likely occur more quickly, thus advancing more efficiently towards successfully applying a guided change approach.

The adoption of Lean as a change management methodology in whole or in part aligns with the study hospitals’ continuous improvement change strategies. The optimization of its benefits is contingent on the synergies resulting from harmonious relationships between elements of culture and supporting systems (i.e. performance management, training and development).

The consistent and powerful theme of organizational culture that emerged from the study and interviews clearly stands out as a key enabler for an effective change process and building organizational capacity. The hospital study and interviews suggest that in addition to organizational strategy (previously discussed) and values, culture is largely determined by leadership. This emphasis on the relationship between culture and leadership is consistent with the literature as highlighted in Connor’s work (Daft and Armstrong, 2009), Heward et al. (2007), and Judge and Elenkov (2005). Additionally, as Graban (2009) discussed, leadership and culture are co-dependent and integral in a Lean environment. Further, the studies on organizational change management effectiveness, the Manitoba eHealth leader, and the SME all list senior leadership as the most important success factor of organizational change.

For the most part, however, the study hospitals reported the need to improve the alignment of leadership (both at the senior and middle management levels) with their change and culture strategies. Noted by three study hospitals and the SME, having a CEO visibly supportive of and engaged in the change agenda appears to be compelling. In the context of the continuous change cycle (Lawrence et al., 2006), such CEOs would fulfill the role of evangelist, influencing and inspiring the change process. During my experience leading Osler’s ED-PIP change initiative, I observed the tremendous positivity that was ignited in the unit staff when the CEO visited the unit to discuss the project and provide encouragement. Staff commented to me afterwards how they felt, indicating they enjoyed the interaction. They felt respected, that he listened to them, and that their improvement work was important to the hospital and was appreciated. This observation is consistent with the SME’s comment about a culture that values employee participation. While such reinforcement from the CEO is likely the most impactful, leaders at all levels can also reinforce organizational culture in a similar fashion during performance huddles and through rounding, as discussed by the study hospitals.

The role of autocrat (Lawrence et al., 2006) is typically filled by operational managers and program directors. However, this concept may be perceived as somewhat in
conflict with the Lean management philosophy and needs to be well defined and understood in order to be in harmony with hospital’s culture and values. The study hospitals all discussed how operational leaders need to engage with the front line, as participative leaders supporting change driven by employees. Operational leaders need to assert their authority at times to address barriers such as resistance, in a manner and style consistent with organizational values. Therefore, it is expected that performing as an autocrat will be situational rather than the norm.

There is also a relationship between organizational culture and resistance to change. Considering the Manitoba eHealth leader’s view of mistakes as learning opportunities in a “safe” culture, along with the numerous references to the importance of stakeholder participation and staff engagement (i.e. Bridges, 1986; all change methodologies discussed; study hospitals; SME), this relationship is evident. Further, all study hospitals view the management of resistance as one means towards achieving sustainability, which highlights another dependency. The Lean culture strategy depends on staff participation and as such, appears to have hard-wired this resistance mitigation feature.

As per the study hospitals, stakeholder assessment tools used in the change planning phase appear to be useful in identifying potential resistance, but there is no evidence to suggest these assessments consider the type of resistance (Hambrick and Canella, 1989) anticipated. Therefore, the basis for the determination of appropriate mitigation strategies is unknown, suggesting further study of resistance at different levels. Such a study should explore how to identify sources of resistance, mitigation strategies, and measurement.

All study hospitals reported challenges with physician resistance to change. This stakeholder group is vital in moving forward with most change with a clinical impact. The SME noted the relationship between physician and the organization’s culture. However, in consideration of the existence of sub-cultures that exist within the physician stakeholder group and the observation of hospital 1’s informant that physicians tend to operate as individuals rather than groups, the relationship between organizational culture and physicians can be highly complex and may be an area for further study.

While all study hospitals have expended considerable effort to develop tactics for sustaining change, they unanimously view sustainability as an ongoing challenge. This view is consistent with other hospitals (MacLeod et al., 2008). Tracking improvement initiative measurements and engaging in PDSA cycle reviews maintains front line staff awareness of how their daily work impacts departmental and organizational performance. This is one way of maintaining the momentum of change discussed by Burke (2008). “Routinizing” (Meyer and Stensaker, 2006) this practice appears to be somewhat effective in sustaining change provided other aspects are present such as
regular and frequent dialogue with leadership in a culture that values and encourages front line participation in problem solving. The Manitoba eHealth leader further supports the value of regularly assessing compliance to standards and the necessity of a supportive culture that encourages two-way dialogue.

According to Burke (2008), succession planning is a concept that affects sustainability. Two of the study hospitals have considered this and included succession planning as a means of sustainability for their central groups. The SME further commented on the value of a rotational succession planning system, which also contributes to capacity building, as new skills acquired during the secondment period will be deployed back into operations upon the return of employees from their tour in the central group.

All the change management methodologies explored address communication, employee engagement and commitment. This emphasizes their importance in the change process. Further, the studies on organizational change management effectiveness list communication and employee engagement and commitment as two of the top three success factors. All study hospitals reported the use of numerous vehicles as sustainability tactics, yet still see sustainability as a challenge. All study hospitals are in relatively early stages of advancing their organizational change strategies. As such, perhaps the sustainability challenge is a factor of the continuous improvement process, one of the four cultural principles that support sustainability in a Lean environment (Wilson, n.d.). Burke (2008) further supports the view that an on-going change process promotes sustainability. As their continuous improvement process and cultures evolve, it is reasonable to expect sustainability thinking to become more intuitive in the study hospitals.

The study hospitals’ view of the importance of human resource systems is consistent with the findings in the literature such as Turner et al. (2009) who discuss change as phenomena that impacts organizations on a systems level. Additionally, Bevan (2011) specifically refers to human resource systems as enablers for building change capacity. In all of the change management methodologies explored and studies of change management effectiveness, there was particular emphasis on people. Further, one study hospital informant stated, “Organizations don’t change, people do.” Most study hospitals reported that their human resource systems are either under review or in development. As such, their architects (Lawrence et al., 2006) are collaborating with the hospitals’ change leaders to ensure alignment of the human resource systems with their change strategies. Despite the lag of progress with the human resource systems in four of the five study hospitals, they have managed to somewhat advance some training programs aimed at building change capacity. It is reasonable to expect a considerable increase in change capacity once these revised systems take hold, assuming the established synergies from the relationships between the other elements discussed are maintained.
The hospital study did not yield any findings pertaining to physicians in the context of systems. There is an entirely different infrastructure through which their “employment” relationship with hospitals is facilitated. A future study focusing on this relationship and its impact on hospitals’ change processes may provide valuable insight and considerable contribution to this field of study.

The hospital study and interviews with the Manitoba eHealth leader and SME illustrate how the integrated dependencies between an organization’s strategy, culture, structure, processes, and systems culminate to build change capacity, as discussed in the literature. Heward et al. (2007) specifically link change capacity to effectiveness and sustainability in a health care setting. Change capacity will, therefore, be impacted by the alignment and relationships between these variables. These findings are consistent with the SME’s view of systems thinking as a top success factor for managing change in hospitals. Additionally, it suggests a rationale for the popularity of the Lean framework in hospitals. Further supporting a systems view as it pertains to change capacity is the work of Gravenhorst et al. (2003) which considers the combination of an organization’s overall aspects (i.e. strategy, structure, culture, employee satisfaction) and aspects of its change process to assess change capacity.

The findings from the hospital study indicate a gap amongst the participants in terms of addressing change readiness. The SME concurred on this point, observing it as a generality amongst many hospitals. Change readiness assessment tools are widely available as indicated by the change management methodologies explored and the literature reviewed such as West’s (1998) change readiness matrix. The SME argued that hospitals could benefit greatly by performing an assessment as it would help to identify the gaps within the system that will impede the change process. This view is supported by Holt et al. (2007), Armenakis et al. (1993), and Smith (2005), who further specify these impediments as resistance to change. The SME suggested the results of a change readiness assessment would inform and shape change management strategies. Additionally, the change management methodologies and Smith (2005) offer processes to create or enhance change readiness.

The final point of discussion explores the challenge of balancing daily operations with improvement work which is the crux of change capacity, according to Meyer and Stansaker (2006), and Judge and Elenkov (2005). This challenge was acknowledged by one of the study hospitals as well as Graban (2009). The formation of a central group to manage change aligned with strategy, culture, and systems appears to have enabled the study hospitals to begin building change capacity by acquiring and expanding change management knowledge and skills. However, while a systems approach has been found to be necessary in order to build and support organizational change capability, “time and space” are required from operations to perform improvement work. It will be interesting to revisit the study hospitals in a few years and
observe how this challenge has been addressed and whether or not a “change gap” as described in the IBM study on change management effectiveness exists.

RECOMMENDATIONS

Based on findings from the literature, hospital study, interviews, and the author’s observations and experiences in the health care context and at Osler in particular, the following recommendations are offered to Osler for consideration as the organization further evolves its Project Management Office (PMO).

1. **Strategy:** *Explicitly embed continuous improvement into the organization’s strategic directions, cascading down and across all organizational levels.* Osler is currently in the midst of drafting its annual business plan for the coming year, which, along with the Quality Improvement Plan outlines the organization’s strategic priorities. This timing presents the opportunity for Osler to leverage the experience and success as reported by the study hospitals, and specify the development of a continuous improvement strategy as an Osler priority. This, of course, requires a high profile of importance by the senior leadership team, especially Osler’s CEO.

2. **Structure:** *Invest in an improvement team mandated to implement a model and methodology to facilitate and support continuous improvement across all organizational levels.* While the PMO is in its formation stage, at this point it is focused on a project management approach or planned change approach to support the development and implementation of organizational projects of considerable scope. These projects typically represent radical change. The creation of an Improvement Team at Osler would serve as the central group to manage incremental change. Initially, this ambidextrous structure should report directly to a member of the senior management team in order to signal the strategic profile and importance of continuous improvement as a key enabler of strategy delivery. Over time, as organizational change capacity builds and continuous improvement becomes imbedded into Osler’s culture, this direct reporting alignment should be reviewed, as it may be appropriate to fold the Improvement Team into the PMO.
It is important to emphasize the relationships between the Improvement Team, the PMO, and Organizational Design. Each entity will support the other in terms of engaging the most appropriate change approach (i.e. planned or guided), leveraging standardized methodologies and tools (i.e. applying appropriate elements of project management to support guided change initiatives, applying engagement principles associated with guided change), and supporting change capacity growth through training, development, and the aspects of culture that enable continuous improvement such as leadership.

Based on the central group to beds and central group to staffing minimum ratios reported by the study hospitals, the suggested size of Osler’s Improvement Team is a minimum of 4 to 5 staff members.

<table>
<thead>
<tr>
<th>Osler Beds</th>
<th>Study Hospital Ratio (Minimum)</th>
<th>Osler Improvement Team Size (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>803</td>
<td>0.0062</td>
<td>4.98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Osler Staffing (Employees + Physicians + Volunteers)</th>
<th>Study Hospital Ratio (Minimum)</th>
<th>Osler Improvement Team Size (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,200</td>
<td>0.0007</td>
<td>4.34</td>
</tr>
</tbody>
</table>
In terms of Improvement Team composition, an Improvement Team lead and 2 to 3 improvement specialists, representing a combination of business and clinical experience and expertise is advisable. Considering the emphasis on performance measurement in driving sustainability reported by the study hospitals, a full time analyst to support the data collection, reporting and interpretation needs of the Improvement Team will be key.

Finally, the Improvement Team will want to propose a standard methodology to provide some structure that will guide and support staff and leaders in generating and mobilizing continuous improvement ideas. Ideally, the methodology will also address the people side of change including tools and templates to guide and support the assessment of change readiness, the assessment of stakeholders and their propensity for resistance, and tactics or strategies to promote engagement and buy-in at the individual level, team level, and organizational level. Osler is advised to consider adopting a Lean approach to continuous improvement, which has yielded considerable success amongst the hospital study participants, noting that active, visible commitment and involvement from senior leadership, (especially the CEOs) was considered a critical success factor by all study participants.

3. **Physicians:** *Develop a Physician Engagement Program or “PEP” aimed at optimizing physician involvement and support of continuous improvement activities.* The role of physicians and their relationship with hospitals play an integral part in the change process. As a strategy to actively include physicians in change efforts, Osler should work in collaboration with physicians who are influential amongst their peers to understand the dynamics of their sub-cultures and devise a program to guide and facilitate meaningful physician involvement. Elements of the program will include defining the role of physicians as it relates to continuous improvement with an emphasis on the hospital as a system; guidelines for enabling physician participation as both leaders and team members in change efforts; addressing supports and compensation; and guidelines for effective communication between the hospital and physicians as a group and as individuals.

Osler is currently in the process of reviewing results from staff and physician satisfaction surveys and a survey on organizational communication is in progress. This data will be helpful to inform about Osler’s culture and provide direction in terms of actions the organization may need to take in order to further align culture with a change strategy. Unlike the study hospitals, Osler has already made considerable progress with the
development of its human resource systems and in this regard the hospital is well-positioned to support the building of change capacity.

CONCLUSION

There is considerable prevalence of external pressure driving the need for organizations to adapt. The pressure to improve quality and efficiency in the Ontario health care sector continues to grow and, as such, hospitals need to develop the ability to respond to these pressures and change from within. The business challenge of managing organizational change is a growing area of attention and concern for many Ontario hospitals yet they struggle with their change processes and sustaining their realized improvements.

Organizational change is a complex matter that requires an understanding of both the soft (people) and hard (process) aspects. The literature indicates that organizations reporting change management success tend to leverage both of these aspects concurrently. Change process methodologies are useful for providing structure and tools but require resource capacities of time and expertise in order to apply them.

A study of five Ontario hospitals confirmed that the change process transcends all organizational boundaries and requires a systems-thinking approach. The elements of strategy, culture, leadership, structure, and human resource systems all culminate to build organizational capacity for change. There is a systemic interdependence between these elements necessitating consideration of each within the context of the other in designing the change process. Lean management is growing in popularity amongst Ontario hospitals, as the interdependence of these organizational attributes is inherent in its composition.

Additionally, hospitals are challenged to balance improvement work with operational work. A subsequent study within 2 to 3 years may offer greater insight on this matter. As well, the topic of resistance at the individual, group, and organizational levels suggests further study. Finally, there is much to understand about the physician stakeholder group. The relationship between hospitals and physicians, with this stakeholder group’s associated sub-cultures, represents a complex set of dynamics. Considering the vital impact of physicians in hospital change processes, a study focused on this group specifically could provide valuable insights that would help hospitals hone their ability to successfully manage organizational change and build change capacity.
Appendix A: Glossary of Terms

A3 Problem Solving – “A structured process improvement method based on a team recording the results of investigation and planning in a concise, two-page document—the A3 report—that facilitates knowledge sharing and collaboration” (Leading Edge Group, 2010, Lean Healthcare Yellow Belt: Glossary of Terms).

Change Capacity – “…a broad and dynamic organizational capability that allows the enterprise to adapt old capabilities to new threats and opportunities as well as create new capabilities (Judge and Elenkov, 2005, p. 894) …that sustain long term performance” (Meyer and Stensaker, 2006, p. 220).

Change Readiness – “Collectively reflects the extent to which an individual or individuals are cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo” (Holt et al., 2007, p. 235).

Change Resistance – “The act of opposing or struggling with modifications or transformations that alter the status quo in the workplace” (“Resistance to Change”, n.d.).

Culture – “The set of values, guiding beliefs, understandings, and ways of thinking that are shared by members of an organization and are taught to new members as correct” (Daft and Armstrong, 2009, p. 598).

Current State – “Version of a value stream map that shows how things work today” (Graban, 2009, p. 239).

Effectiveness – “The degree to which an organization achieves its goals” (Daft and Armstrong, 2009, p. 21).

Gemba – “Japanese word that means ‘the actual place’ or ‘the place where the work is done’” (Graban, 2009, p. 240).

Incremental Change – “A series of continual progressions that maintains an organization’s general equilibrium and often affects only one organizational part” (Daft and Armstrong, 2009, p. 374).

Innovation – “Something newly introduced, such as a new method or device” (“Innovation”, n.d.).

Kaizen Event – “A formally defined event, typically 1 week long, with a team that is formed to analyze the current process and to make improvements in a process or value stream, with the team being disbanded after the event” (Graban, 2009, p. 241).
Leadership – “A process whereby intentional influence is exerted by one person over other people to guide, structure, and facilitate activities and relationships in a group or organization” (Lam, 2008, p. 59).

Local Health Integration Network (LHIN) – “LHINs are not-for-profit corporations that work with local health providers and community members to determine the health service priorities of their regions. LHINs are responsible for planning, funding and managing health services in their communities. Created in April 2006, they took on full authority on April 1, 2007. LHINs don’t provide services directly; instead they are responsible for integrating services in each of their specific geographic areas” (“LHINs”, n.d.).

Plan-Do-Study-Act (PDSA) Cycle – “A continuous improvement cycle, similar to the scientific method” (Graban, 2009, p. 241).

Process – “Organized group of related tasks and activities that work together to transform inputs into outputs that create value for customers” (Daft and Armstrong, 2009, p. 604).

Quality Improvement Plan (QIP) – Identifies Ontario hospital improvement priorities, defines improvement targets, and describes its strategy for achievement.

Radical Change – “A breaking of the frame of reference for an organization, often creating a new equilibrium because the entire organization is transformed” (Daft and Armstrong, 2009, p. 374).

Root Cause – “A fundamental cause for a problem, error, or defect in a system. Called a root cause because you often have to look beyond the surface of a problem to find it” (Graban, 2009, p. 242).

Rounding – Involves leaders routinely visiting designated units or departments with considerable regularity and is viewed as a powerful vehicle for leaders to inspire, encourage, and engage front line staff in two-way dialogue (defined as per study hospital discussions).

Stakeholder – “Any group within or outside an organization that” (Daft and Armstrong, 2009, p. 606) is impacted by the change initiative.

Standardized Work – “A Lean method that documents the current one best way to safely complete an activity with the proper outcome and the highest quality. Also refers to the management method for ensuring that standardized work is followed and improved upon” (Graban, 2009, p 243).
Strategy – “The current set of plans, decisions, and objectives that have been adopted to achieve the organization’s goals” (Daft and Armstrong, 2009, p. 606).


Sustainability – The capability to maintain and consolidate the gains of the change initiative (defined as per study hospital discussions).

System – “A group or combination of interrelated, interdependent, or interacting elements forming a collective entity” (“System”, n.d.).

Value Stream Map – “A diagram that shows a value stream, including the process steps, waiting times, and communication or information flows. Also illustrates time elements and value-added or non-value-added designations for activities” (Graban, 2009, p. 243).
Appendix B: Study Interview Protocols

Research Questionnaire: Hospital Participants

1. How is organizational change aligned with your hospital’s overall strategy?

2. Please describe any organizational structures including size (i.e. department, team, individuals) of the central group designated to manage change.

3. Where do these organizational structures or central group designated to manage change report?

4. What was the rationale for this reporting alignment?

5. How do the sponsors of change initiatives support the change process?

6. Please describe the skill set residing within the central group designated to manage change.

7. What general approach to organizational change is applied in your organization?

8. What processes support ongoing change in your hospital?

9. How are stakeholder needs and desires identified and evaluated?

10. How does your hospital identify resistance to change?

11. How does your hospital manage resistance to change?

12. How does your hospital mitigate resistance to change?

13. How is your hospital measuring the effectiveness of the central group designated to manage change?

14. In what ways has the central group increased change management effectiveness?

15. How does your hospital support sustainability of change?

16. Please describe how your hospital’s culture supports building a capacity for change.

17. Please provide examples to illustrate the extent you believe a capacity for change has been created in your organization amongst members within the central group designated to manage change; amongst managers; amongst staff.
**Research Questionnaire: Manitoba eHealth Leader**

1. What drove the Province to seek a standardized change management model?

2. What criteria were used to make your selection?

3. What impact has this change management model had on the effectiveness of change implementation and sustainment?

**Research Questionnaire: Subject Matter Expert**

1. In what ways does a hospital’s organizational environment present unique barriers or challenges to managing change as compared to other industries?

2. From your research and experience, what trends have you observed in hospitals that have successfully progressed in terms of change management?

3. How have successful hospitals defined and implemented the role of the executive sponsor?

4. What communication techniques and vehicles have been most effective in hospitals that have successfully managed organizational change?

5. What methods to ensure employee involvement/engagement have been most effective in hospitals that have successfully managed organizational change?
## Appendix C: Hospital Study Findings Summary

### Hospital Study Findings Summary

<table>
<thead>
<tr>
<th>Theme</th>
<th>Hospital 1</th>
<th>Hospital 2</th>
<th>Hospital 3</th>
<th>Hospital 4</th>
<th>Hospital 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change is Part of Overall Strategy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Vision Statement Includes Innovation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CEO is a Prominent Change Agenda Advocate</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CEO Introduced Transformation as Strategy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Strategic Plans Stress Continuous Improvement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Strategy Blends Financial Performance and Culture</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Group to Manage Change</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Central Group Lead Reports to Senior Management</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Central Group Focus is on Clinical Depts and Processes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Group Focus is Enterprise-wide</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Central Group Size to Bed Ratio</td>
<td>0.0230</td>
<td>0.0133</td>
<td>0.0104</td>
<td>0.0062</td>
<td>0.0104</td>
</tr>
<tr>
<td>Central Group Size to Staffing Ratio</td>
<td>0.0019</td>
<td>0.0011</td>
<td>0.0013</td>
<td>0.0007</td>
<td>0.0012</td>
</tr>
<tr>
<td>Central Group Includes Full Time Analyst</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on Central Group Member Soft Skills</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Central Group Composition is Clinical</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Group Composition is Clinical + Business</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use External Consultants for Coaching</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Processes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shifting to Increased Guided Approach to Change</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Shifting to Increased Planned Approach to Change</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lean Management is the Standard Methodology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Lean is Used with other Methodologies and Tools</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Sponsors to Champion Change Initiatives</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sponsor Role Requires Improvement/Definition</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Leaders Struggle with Changing and Conflicting Priorities</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active, Visible Leadership at All Levels is Necessary</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Regular Rounding is Standard Work for All Leaders</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Improvement Process is Front Line Driven</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Stakeholders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder Assessments are Standard Work</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Patients Included as Stakeholders</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance Mitigation Tactics:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Consensus Building/Engagement/Involvement</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>*Performance Measurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Rounding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>*Storytelling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>*Communication</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>*Change Readiness Assessment Needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenged to Get Physician Participation/Engagement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Resistance Mitigation Tactics for Physicians:</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Customized Communication Methods</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Accommodate Schedules</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Delegate Responsibility/Empower with Supports</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Involve in Governance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Change Agenda is a Regular Focus at Physician Meetings</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Hospital Study Findings Summary

<table>
<thead>
<tr>
<th>Theme</th>
<th>Hospital 1</th>
<th>Hospital 2</th>
<th>Hospital 3</th>
<th>Hospital 4</th>
<th>Hospital 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Measurement Tracking</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Daily Performance Huddles</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Leadership Attendance at Performance Huddles</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Regular Cross-Organizational Reporting Out</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition Programs</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>PDSA Cycles</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Manage Resistance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Influence with Expert Power to Gain Buy-in</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor Continuous Improvement of Central Group</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Succession Planning for Leaders and Central Group</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consider Sustainability at the Start of Change Process</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Systems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR Systems Aligned to Support Change Agenda</td>
<td>In Development</td>
<td>In Development</td>
<td>Yes</td>
<td>In Development</td>
<td>In Development</td>
</tr>
<tr>
<td>Central Group Involved in HR System Development</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Change-related Training for All Levels in Place</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change Strategy Reflected in Leadership Competency</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Lag of HR Systems Development with Change</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explicit Values:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Compassion/Caring</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>*Continuous Improvement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>*Innovation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>*Respect</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>*High Performance/Excellence</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Continuous Learning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Resource Accountability</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicians Have Sub-cultures</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Culture Aligned with Strategy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Strong Culture Overall</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture is Evolving to Support Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Supports Investment in Culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership Stability Important to Evolving Culture</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Link Culture to Leadership</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Link Culture to Change Readiness</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Link Culture to Change Capacity</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Link Culture to Lean and Change Capacity</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change Capacity Before Central Group</td>
<td>1.0</td>
<td>2.0</td>
<td>1.0</td>
<td>2.0</td>
<td>Not Avail.</td>
</tr>
<tr>
<td>Change Capacity Now</td>
<td>3.0-3.5</td>
<td>3.5</td>
<td>4.0</td>
<td>1.0</td>
<td>2.5</td>
</tr>
</tbody>
</table>
REFERENCES


