Physician Engagement and Trust:
A Review and Analysis of Medical Staff Associations Interventions and Activities Within the Facility Engagement Initiative

By

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Acknowledgements

To my mom. Thank you for your relentless support and love, I’m sorry it took so long.

Executive Summary

Introduction

The Facility Engagement Initiative is a collaborative program of the Ministry of Health and Doctors of BC that is funded through the Physician Master Agreement with the aim of enhancing the relationship between physicians and health authorities across British Columbia. To achieve this goal, provincial funding is routed through the Specialist Services Committee to Medical Staff Associations across the province to provide payment for physicians to participate in collaborative non-clinical work at the local and regional level. This initiative has been underway since 2015 and the evaluation of the implementation has noted that the initiative has begun to have a positive effect on this relationship (Lovato et. al, 2019, p.9).

To effectively establish a general understanding of how physicians feel about engagement in their workplaces and the development of their relationship with health authority leadership, the Doctors of BC undertakes an annual survey of its membership using the Accreditation Canada Worklife Pulse survey tool. Within this tool, there are key questions that relate directly to the relationship between physicians and senior health authority leadership about the quality of their relationship. The Memorandum on Local and Regional Engagement (2014) notes that a key outcome of the Facility Engagement Initiative is to support Medical Staff Association physicians to have meaningful interactions with Health Authority leaders as well as input into the development of health authority plans and initiatives (p. 3). Reviewing the quality of the interactions and perceptions between physicians and health authority leadership allows Facility Engagement leadership to have insight into areas where this relationship has grown, where it has struggled, and where it can be improved.

The aim of this project was to isolate specific sites where these scores increased and decreased greater than five percent between the 2018 and the 2019 survey to determine what practices to avoid and to determine smart practices so that they can be considered for adoption to other sites participating in the program.

Methodology and Methods

This project reviewed the Doctors of BC survey data from 2018 and 2019 and identified specific sites that achieved greater than five percent growth and sites that experienced a greater than five percent decline in the senior leadership engagement scores in the Doctors of BC annual survey. The Site Engagement Activity Tracker data, which records the activities and interventions for these sites were categorized using the Cloutier et al. (2015) categories of institutional work. These categories were: relational work, operational work, structural work and conceptual work.

A review of the level of health authority participation in the development and implementation of the recorded activities also took place. A comparative analysis was undertaken to establish smart practices and areas of risk that emerge from the data.

Key Findings

Sites that demonstrated positive growth in the health authority senior leadership scores demonstrated several trends in the activities and interventions the Medical Staff Associations undertook in the period under review. These sites demonstrated an increased level of physician and health authority collaboration and input into the activities and interventions undertaken during the period of review. They had a more balanced spectrum of activities using the Cloutier et al. (2015) categories, with a greater focus on engagement related to operational, structural and relational interventions than sites where the scores declined. The sites also demonstrated a greater volume of interventions and activities and supported financial payments for physicians to participate in regularly scheduled structured meetings with health authority leadership. The higher performing sites placed a greater emphasis on addressing quality improvement activities directly related to clinical care and focused on changes within the clinical setting to improve both patient outcomes and the provider experience.

Sites that showed a decline in the senior leadership scores during the period of review also demonstrated an alignment of activities and interventions undertaken. These sites had a less balanced selection of engagement activities with an increased focus on relational work than sites where the scores improved. In addition, there was a significant emphasis on building physician-to- physician relationships, strengthening relationships with community partners outside the facility, and engaging in social events. Furthermore, these sites showed a lower volume of all activities and interventions undertaken and were less likely to seek health authority collaboration or consultation into the activities and interventions they undertook. Furthermore, these sites demonstrated less emphasis on addressing clinical or workplace issues within their facility although they did engage in quality improvement work over the period under review.

Recommendations

The following recommendations were put forward to the client:

- **Recommendation 1**- Consider capping or phasing out approval for funding to be used for social activities that do not contain a component of participation of health authority partners or seeks to resolve a clinical issue or workplace related concern.
- **Recommendation 2** - Encourage MSAs to fund structured and consistent connections between MSA leadership and health authority leadership at the local level.
- **Recommendation 3** - Flag projects for review and revision that do not seek or consider consultation with health authority leadership as necessary for approval.
- **Recommendation 4** - Utilize Facility Engagement provincial staff to embed recommendations and smart practices into the annual strategic planning process to encourage adoption on a widespread scale.

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1.0 Introduction

This report analyzes the effect of the implementation of the Facility Engagement Initiative against one of the key goals of the program: improving the relationship between physicians and health authority leaders across British Columbia. It can be difficult to analyze a program as large in scale as this initiative and given the high degree of local autonomy, smart practices can be difficult to uncover and support. This report has focused on the analysis of what activities and interventions were undertaken at sites where the relationship between physicians and senior leadership improved, comparing these activities and interventions against sites where these scores declined and linking the analysis of these activities and interventions to the current discourse on physician engagement.

1.1 Defining the Problem

The Facility Engagement Initiative (FEI) emerged from the 2014 Physician Master Agreement between the Doctors of BC and the Ministry of Health and is supported by the 2014 Memorandum of Understanding on Local and Regional Engagement (MOU). The purpose of this initiative is to increase the quality of the relationship between hospital-based physicians and health authority leadership across the BC.

Doctors of BC, the client for this project, conducts an annual survey of physicians that includes key questions that relate specifically to the relationship between health authority senior leadership and physicians. In reviewing the Doctors of BC Work life pulse annual survey, the lowest scores of any category were the scores that related to the relationship between physicians and senior health leaders across the province.

Raising these scores through increased engagement is a key outcome of the FEI. The MOU (2014) states that a key goal of the initiative is to support meaningful interactions between physicians and health authority leadership to ensure that physicians views are represented and physicians contribute to the development and implementation of health authority plans. Without an effective relationship between health authority leaders and physicians, the development and implementation of plans to improve the quality of care and ensure fiscal responsibility within the system can face great difficulty. Establishing what activities were undertaken by Medical Staff Associations (MSA) who are successful at improving this relationship was deemed by the client to be key to the progress of FEI against this key outcome. Therefore, determining the kinds of interventions led by MSAs where engagement scores improved can help FEI leadership support smart practices and lessons learned across the province.

1.2 Project Client

The client for this project is Cindy Myles, the Director of Facility Physician Engagement at Doctors of BC.

The 2014 MOU created the need to hire staff to support the development of local governance structures for physicians, as well as to assist the parties to progress towards the stated goals of increase engagement, skill development and education, and collaboration between the parties. Doctors of BC supports the hiring of staff on behalf of the Specialist Services Committee (SSC), who is responsible for the implementation of the MOU on behalf of the Doctors of BC and the Ministry of Health.

Doctors of BC staff, who co-report to Doctors of BC structures as well as to the SSC, are responsible to support the implementation of FEI across the province. FEI was specifically created to implement the MOU and as such, the sole responsibility of the department is to implement the MOU across the province. The department has provincial staff who provide analytical and administrative support as well as act as Facility Engagement Liaisons (FEL). These regional staff are responsible for providing on the ground support to local and regional parties (health authorities and MSAs) within the structures of the initiative in order to progress towards the goals of the MOU in a grassroots manner determined locally in collaboration with the SSC.

1.3 Project Objectives and Research Questions

The overall project objective is to utilize the Doctors of BC 2018 and 2019 annual member survey, which recorded engagement scores using the Accreditation Canada Work Life Pulse tool (2012), and to then review the actions and interventions of sites collected in the Site Engagement Activity Tracker (SEAT) database. These tools made it possible to examine the impact of FEI at the site level. The senior leadership scores were used as the benchmark to track the effectiveness of MSA actions and interventions against the key performance outcome of improving the relationship between physicians and health authority leadership that was identified by the client.

Sites selected for review were drawn from MSAs that showed a greater than five percent growth in the senior leadership engagement scores. This report compared these sites to MSAs of a similar size and composition that demonstrated greater than five percent decline in the senior leadership scores between 2018 and 2019. This report utilized the Facility Engagement Funding tiers to act as a proxy for size and composition of the sites as the tiers reflect the number of acute care beds and therefor thee size of the facility. This report then conducted a comparative analysis of the inventory of activities that FEI has collected about the actions and interventions undertaken at these facilities by the MSA. The report also reviewed the extent and quality of the health authority collaboration and consultation initiatives at these sites to determine the following:

1. Using the Coultier et al., (2015) Institutional work framework to categorize the activities and interventions of the selected sites, what categories did the activities and interventions of the selected sites fall into.

2. What smart practices can be recommended by comparing the types of institutional work the selected site parings undertook
3. How did the activities and interventions selected by each site related to the physician engagement literature?

1.4 Background

The provision of clinical care in British Columbia hospitals is a complex intersection of the converging interests of the clinical professions, health authority administration, and the binding legal obligations involved both directly and indirectly in producing high level patient care. There are multiple union agreements, complex patient needs, and omnipresent budgetary pressures that shape the relationship between health care workers, health authority administration, and physicians. Within this complex system, physicians hold key clinical roles, which profoundly shape both the costs associated with the provision of care and crucially patient outcomes.

Yet over the past several decades, a professional class of health care administrators, typically staffed by non-physicians has emerged and this group is tasked with ensuring hospitals are effectively managed and that the distribution of resources within a hospital are efficiently dispensed. These decisions regarding the distribution of limited resources can affect physicians asymmetrically. As such, this professional class of health authority administrators' decision-making can have a dearth of physician voices, despite how crucial their role is within the clinical realm. This alienation of administrators and physicians has led to a long-term decline in the relationship between physicians and administrators and an overall decline in engagement with physicians (Trybou, Gemmel and Annemans, 2016, p.76). As Succi, Lee, and Annemans (1998, p. 11) notes this decline in engagement between these parties can directly result in a decline in trust given that physicians perceived greater trust between administrators and physicians where physicians perceived that they had more decision-making authority.

This increasing alienation has its roots within how physicians are compensated for their work within hospitals. The key legal agreement that shapes compensation and a physician's relationship to others in the system is the Physician Master Agreement (PMA) negotiated by the Doctors of BC and the Ministry of Health. Physicians are represented by the Doctors of BC who bargain with the Ministry of Health to produce the PMA that covers almost all elements of physician compensation in the province. Unlike almost all other health care workers within the province, most physicians are not compensated by the health authorities within which they work but an external organization, the Medical Services Commission (MSC). Physicians directly bill MSC for clinical activities and are compensated through this program in accordance with the rates negotiated within PMA (British Columbia Ministry of Health, 2018, p.2). Yet, for work that is collaborative in nature, there has historically been less compensation available. This gap in financial support for hospital-based physicians is the domain of the Specialist Services committee through its initiatives like Facility Engagement. Without compensation through the

SSC, time devoted to collaborative work or participation in administrative decision-making within hospitals and time spent working with health authority administration in health system redesign and quality improvement would be mostly unpaid (Specialist Services Committee, 2019, p. 5). Prior to the development of these programs by the SSC, this lack of compensation has led to low physician participation in administrative tasks outside of those who also work within health authority administration under contract in formal leadership roles.

Subsequently, the PMA contains provisions for remuneration that are outside of direct compensation for clinical services and also recognizes the inherent balance between fair economic reward and the obligations of health authorities and the Government of BC to maintain and improve publicly funded healthcare (British Columbia Ministry of Health, 2014, p. 2). In order to achieve these often divergent aims, the PMA creates Joint Clinical Committees (JCC) to ensure that physicians can work collaboratively with health authorities and government to improve patient outcomes as well as improved provider satisfaction (British Columbia Ministry of Health, 2014, p.25).

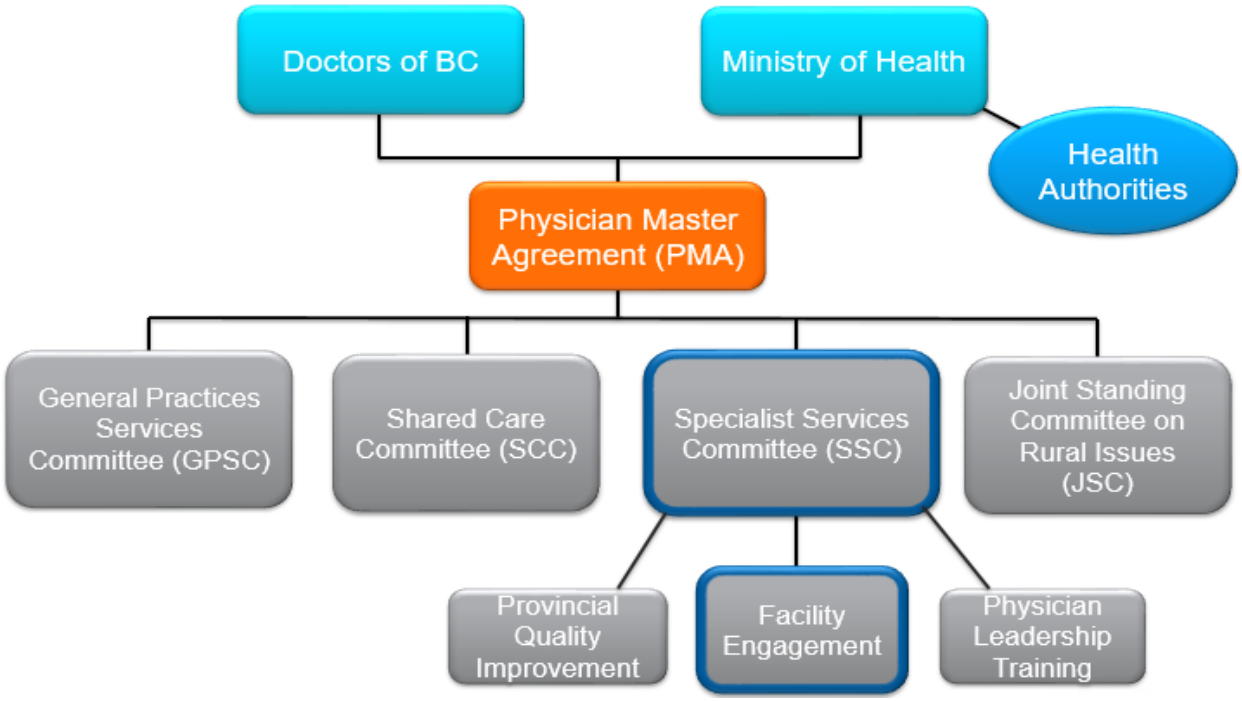
Physicians in BC are generally not employees of health authorities but instead obtain permission from health authority administrators to practice within specific hospitals known as privileges. Yet these privileges do not guarantee compensation and may be revoked by health authority administration under the rules and bylaws that govern clinical practice within each health authority (Hospital Act, 1996). The result of this arrangement is a divided jurisdiction with the medical legal responsibility for patient care the purview of physicians, while the decision-making about how hospitals are managed is made by health authority administration. This disconnect in structures can result in reduced engagement of physicians and leads to issues with the relationship developing between physicians and health authority leadership. Whitlock and Stark (2004) argue that disengaged physicians can frustrate health authority leaders with passivity and non-compliance that reduce the likelihood of successful implementations of strategic aims and negatively impact the quality of care (p.8). However, physicians may point to disengagement of their profession as a symptom of a systemic change that has created real consequences to be addressed through meaningful interactions in order to gain support for health authority led plans that have a significant impact over the working conditions within hospitals.

Using the Accreditation Canada Work Life Pulse tool to focus on the workplace health and satisfaction of care providers (Accreditation Canada, 2012, p.1), Doctors of BC found that the relationship between physicians and health authority leadership contains significant conflict and is a cause for concern. While there had been an increase in general sense of satisfaction of physicians with their workplaces in BC, rising from 35% in 2017 to 46% in 2018, it remains significantly lower than the national benchmark average of 73% (DoBC, 2018, 10). In areas specific to potential conflict between physicians and health authorities, the responses indicate a significant divide between the parties. Only 13% of physicians responded that the decision-making of the senior leadership of health authorities is transparent to physicians and only 23%

felt that physicians were asked by senior leadership for input to the strategic goals of the organization (DoBC, 2018, p.11).

Health authority engagement with physicians is a potential tool to begin to repair this complex relationship by allowing physicians to develop a meaningful relationship with health authority administrators and work towards having influence over decisions that greatly affect physician practice (British Columbian Ministry of Health, 2014, p.3). In 2014, the Government of British Columbia, the health authorities, and the Doctors of BC were signatories to a Memorandum of Understanding for Local and Regional Engagement (MOU). The explicit goals of the MOU were to improve the relationship and communication between senior health authority leadership and physicians by providing governance and financial support at the local level for physicians and develop processes to ensure an improvement in engagement and consultation. Lastly and crucially, this was to provide opportunities to improve physicians experience and skills in looking at the health system as a whole (British Columbia Ministry of Health, 2014, p.3). This is crucial given that physicians training is highly focused on the provision of clinical care and does not typically included health systems analysis training that could be helpful in the work of system change. In order to operationalize the MOU, Doctors of BC created FEI within the Department of Physician and External Affairs. FEI has subsequently hired staff to support physicians to develop the structures and tools to manage the governance of the funding provided by the MOU. These staff have re-invigorated the MSAs across the province by providing funding, support and establishing governance structures at 72 of a possible 75 eligible facilities in BC and has supported thousands of physicians to participate in the program.

The following chart is a map of the interrelationships between the key stakeholders that form the creation of FEI. The above noted MOU is created as a new agreement between the Health Authorities in BC, the Ministry of Health and the Doctors of BC to establish a new relationship. The initiative is the largest of the SSC initiatives and supports the other key programs of the SSC as noted below.



Doctors of BC, 2019.

1.5 Organization of Report

The report is organized into a review of the literature on physician engagement, a description of the methodology used, a description of the data found at the sites under review, a synthesis of the literature on physician engagement and relevant findings in the data, recommendations for Facility Engagement to encourage the spread of smart practices, and a summary of the findings.

2.0 Literature Review

2.1 Introduction

This literature review examines the discourse leading to the development of the physician engagement literature, the current state of the literature and the relationship between physician wellness and engagement. This review will provide a linkage to the value of establishing physician engagement and the review anchors the analysis of the interventions and actions undertaken by MSA's across to establish effective recommendations for the client.

The physician engagement discourse has emerged out of the literature that supports employee engagement and development; however, physician engagement is both structurally different from employee engagement and requires a unique approach to obtain the potential benefits of highly engaged physicians. Physician engagement demands key structural elements in order to create the circumstances where highly engaged physicians have trusting, collaborative and functional relationships with health administration partners. This engagement requires new or adapted forms of physician compensation, leadership opportunities and training for physicians, organizational support and a genuine interest on the part of health authority leadership to collaborate and share decision making where possible in order to achieve the individual and organizational benefits of highly engaged physicians.

The physician engagement literature is an emerging discourse that is relatively limited in the number of sources available. Search terms that were selected were: engagement, physician engagement, physician compensation and engagement, physician wellness, physician burnout, engagement and quality improvement and physician leadership. The bibliographies of quality sources were used to expand the search beyond what was immediately available through the standard journal search engine tools available through the university library.

The key themes that emerged from the review were: the origins of the engagement discourse and the competing definitions of physician engagement, structural supports and targeted interventions required to establish and sustain physician engagement, engagement and physician compensation, engagement and physician wellness and the relationship between physician engagement interventions and trust between physicians and health authority leadership. These categories are relevant to the multifaceted tools and supports required to intervene, sustain and support high levels of physician engagement and therefore provide a useful analytical lens to support the review of MSA activities and interventions within Facility Engagement.

2.2 Origins and Competing Definitions of Engagement with Physicians

Employee engagement, as discussed in the organizational leadership literature, is consistently noted as a way to retain employees, support the implementation of business strategies, and obtain a competitive advantage over other organizations Wellins, Bernethal and Phelps (2005) note that by having a meaningful impact over engagement with employees there are clear business

performance outcomes that are directly related to highly engaged employees. In this engagement model, engagement is commonly viewed to be "the extent to which people enjoy and believe in what they do and feel valued for doing it" (p. 2-4). These authors further note that creating a highly engaged workforce requires dedication to the careful selection of employees, regular measurement of their engagement, and focused efforts to create an environment where employees have an emotional connection to the workplace. Furthermore, Sadeli (2012) notes that these strategies must be devised and implemented with high level leadership support and designed to ensure that organizational culture supports engagement and effective structures can be put in place to sustain the gains associated with engagement (p.196).

While high degrees of employee engagement correlate directly with job satisfaction and employee performance, Anitha (2014) notes that desirable environments are also critical to physical and emotional safety in the workplace. The key relationships identified as drivers of engagement, and therefore performance, are the working environment and the relationships between colleagues. These factors along with compensation, organization leadership, organizational policies were seen to have the highest predictive value on employee engagement (p.311).

Moving beyond employee engagement and into the health care realm, several authors note that the challenge remains how to effectively adapt the existing definition of employee engagement in a way that is relevant to physicians. Despite the number of key contributors to this discourse, there is no clear preeminent or universal definition of physician engagement within the literature. For example, the work of Spurgeon, Barwell and Mazelan (2008) defines physician engagement as "the active and positive contribution of doctors within their normal working roles to maintaining and enhancing the performance of the organization which itself recognizes this commitment" (p.214). They further note that engagement is an individual perception or feeling about the workplace but also requires cultural or organizational opportunities where meaningful engagement can occur. This definition provides a troublingly limited perspective on the relationship between physicians and health administrators, one without consideration for shared areas of decision making or adapted models of compensation which can be key drivers of engagement.

Keller et al. (2019) contributes an alternative interpretation of physician engagement that focuses on the extent to which physicians feel satisfied by their work, are supported by the organization, are inclined to both recommend it as a place to work and committed to continuing to work within their organization. In addition, they argue that physicians who are highly engaged are more productive, make fewer mistakes and are less likely to leave the organization. As such, physician engagement is crucial to any healthcare organization.

The Doctors of BC (2014) definition of engagement is a more comprehensive approach to the challenge of defining physician engagement and they take care to note the full spectrum of opportunities and challenges involved in increasing physician engagement. They consider

engagement to be a force of empowerment where positive and active contributions emerge through the deliberate attempts to shift organizational culture over time supported by financial compensation. Engagement is considered the collective responsibility of physicians and the system as a whole (p.3).

While these definitions consider the organization's responsibility to recognize contributions of physicians, the Doctors of BC (2014) strongly notes that the system itself has a responsibility to participate in organizational shifts in order to create opportunities for shared decision making. In order to achieve the cultural and practical elements of a multifaceted engagement strategy, it is key to build a complex approach to pursuing engagement. Integrating new approaches to leadership and viewing physician leadership as both distributed and collective can increase the quality and complexity of the voices. The cultural shifts that will be required are complex and difficult to achieve (p.5).

This perspective aligns with the concerns surfaced by Keller et al. (2019) who note that as healthcare organizations grew over the past decades, the divergence between administrative leadership and clinical leadership has gradually increased. Yet this trend may be explained by the different challenges faced by these groups in working towards engagement. Physicians seek increased involvement in decision making and have concerns related to a perceived lack of transparency, while administrators note that physicians lack leadership training and the business skills necessary to participate in the complex decision making of large organizations.

2.3 Structural Supports and Targeted Interventions

Denis et al. (2013) note that the intervention and support of professional associations, such as the Doctors of BC, are essential to shape a new deal emphasizing engagement as a key requirement to developing new workplace relationships as demonstrated by the creation of the Memorandum of Understanding on Local and Regional Engagement in 2014. The MOU is designed to allow physicians to help administrators better identify and understand the values and issues involved of the delivery of clinical care in order to create better policy and decision making. In addition, given that any change in one area can result in a series of conflicts, challenges, and unintended consequences given the interconnected nexus that defines healthcare. As decisions increase in importance in relation to physician values, then it would be reasonable for health authority leadership to share greater degrees of influence to the stakeholders involved (Nabatchi, 2012, p.700).

The result of increased efforts towards physician engagement must include a two-way relationship where physicians and systems are mutually accountable and responsible for their relationship (British Columbia Ministry of Health, 2014. p.3). However, there must be a mindful application of the level of engagement and participation that each intervention and action is intended to achieve. An understanding of the desired outcome from the lens of the IAP2 spectrum must inform any attempt to achieve intended outcomes (IAP2, 2007, p.1). While the

application of a public engagement tool may be problematic within the confines of health care, a mindful and transparent application of the tool can lead to improved physician relationships and increasing opportunities for engagement. Many of the noted consequences of a failure to engage effectively with constituents manifests in the cultural conflict within the physicians' relationship with health authorities noted across the literature.

2.4 Engagement and Physician Compensation

The issue of compensation can have a significant impact on the ability and willingness for physicians to engage with health authority administrators (Doctors of BC, 2014, p.5). Given that 72.6% of physicians in Canada receive their compensation through a fee for service model, where payment is provided to practitioners for the services they provide directly to patients, there is a clear and significant economic impediment to physician participation (CIHI, 2019). While there are other models of compensation available within BC that can allow for compensation for indirect care and collaborative work, the vast majority of physicians in the province remain fee for service. (British Columbia Ministry of Health, 2019).

In addition to compensation, the control of costs within the system itself can be a key factor to motivating an organizational focus on physician engagement. Milliken (2014) notes that physicians within the system are the key driver of costs and therefore any effort to control or manage costs must begin with engagement and consultation of physicians. This approach must recognize that physicians and hospital administrators are in a complex but co-dependent relationship. In order to work closely to achieve a sustainable delivery of care a strong alliance must emerge between front line physicians and administrators where positional authority is less important than collaboration with physicians, who are key experts in front line realities and patient outcomes.

2.5 Engagement and Physician Wellness

Swensen, Kabcenell and Shanafelt (2016) describe the benefits that physician engagement has on the individual wellbeing of physicians. Physician burnout is noted as a psychological illness that causes harm to the individual clinicians, potential risk to patients who are treated by physicians in a burnout state and to the organization. By leveraging engagement and creating organizational opportunities for improvement they note that the model of listening to physicians, acting on their concerns and developing leadership training and opportunities can return the focus of the organization back to the needs of the patient. They further note the importance of interprofessional physician relationships as well as physician empowerment to identify key drivers of burnout in order to create and implement solutions to address these drivers. This requires leadership support to create relationships that evoke trust, sincerity and a culture of continuous improvement but they note that significant gains can be made.

Shanafelt and Noseworthy (2017) also consider physician burnout to be directly related to physician engagement and a key consideration for high functioning health care organizations.

Increasing engagement with physicians is a critical element in reducing burnout and increasing individual physicians' productivity and wellbeing. They further emphasize the shared responsibility of an organization and individual physicians to co-create environments of resilience. They note that the key drivers of physician burnout are workload and job demands, meaning in work, control and flexibility, organization culture and values, efficiency and resources, work life integration and social support, and community at work - are also the key drivers of effective physician engagement. They further consider that senior leadership in organizations must be responsive to the above noted drivers and implement strategies to reduce their impact (p.131-135).

2.6 Engagement and Trust between Physicians and Health Authority Leadership

The issue of trust and relationship resilience between physicians and health authority leadership is further explored by Succi, Lee and Alexander (1998) who note that trust between the two parties is crucial to performance within hospitals; however, trust requires an examination of the power dynamics and decision-making structures that exist between the groups in order to create healthy relationships. As further noted by the authors, this examination of decision-making structures must consider opportunities for collaboration. Physicians who are more active in shaping decisions, and who have a greater degree of power within the relationship experience greater perceived trust between the groups. In addition, these new collaborative areas of decision-making and power sharing did not have a negative impact on trust when the physicians or administrators continued to hold unequal power in their traditional decision-making domains. This highlights an opportunity for win-win partnering that can have a limited loss of control on key deliverables and reaping the benefits of increase trust between physicians and health authority administration (p.2-6).

While 'organizational justice' as a principle for engagement and relationship management did not emerge initially from the physician engagement and leadership discourse, its principles have a direct application in physician engagement. Cropanzano, Kirk and Discorfano (2017) describe organizational justice as the employees' belief that an organization acts in a principled fashion based on a model of fairness. These organizational behaviors can have a significant impact on employee engagement and burnout, as organizations who are perceived as fair have more effective staff and reduced workplace conflict. These principles are broken down into three key areas: distributive justice, procedural justice and interactional justice. As the physician engagement literature indicates, shared participation with physicians in key decisions and transparency in leadership are dominant themes leading to increased engagement. As such, health administrators could apply the principles of distributive justices, the fair and equitable distribution of opportunity and resources and informational justice, the timely and transparent access to information such as explanations of key decisions (p. 2-3).

MacLeod (2015) also notes that alongside the interpersonal aspects of physician engagement, organizations need to consider the relative mobility of physicians and must establish organizations that are desirable workplaces in order to attract and retain physicians in an increasing competitive marketplace. A key risk to this culture is the issue of a benign neglect of the importance of workplace culture from senior leadership within organizations. Given that physicians are dependent on organizations both to ensure safe patient outcomes and for their income, a careful approach to distributive justice ensuring clinical resources are equitably distributed plays a significant role in ensuring positive physician relationships; however, this must be supported by transparency from senior leadership and allowing physicians to have a voice in strategic developments of the organization. These factors combined are integral to establishing positive physician administration relationships (p.41-42).

Trybou, Gemmel and Annemans (2016) echo the concerns of many within the literature who note that the relationship between physicians and health care administration has been declining in the past few decades and describe the relationship as lukewarm. Building off concepts of organizational justice, they describe the importance of the psychological contract between physicians and administration as key to understanding the relationship. This contract is described as the belief that each party makes promises and considerations in the creation of a working relationship. When these promises are not followed through with commensurate action there is a breach of this unspoken agreement leading to a decline in the perception of the organization as a whole; however, in cases where Chief Medical Officers play a large and visible role within the organization, some of the damage related to these psychological breaches can be reduced, indicating the importance of physician leadership within the health care setting.

2.7 Summary

The challenges of physician engagement and the overall decline in the relationship between health administrators and physicians are a widely discussed theme within the literature. What emerges is a portrait of engagement that requires health administration leadership to examine these opportunities and ensure physicians are included in key decisions, compensation models are reviewed to empower physician participation and organizations leverage the drivers of engagement to improve both patient outcomes and increase physician job satisfaction and the mental health of the those in the system.

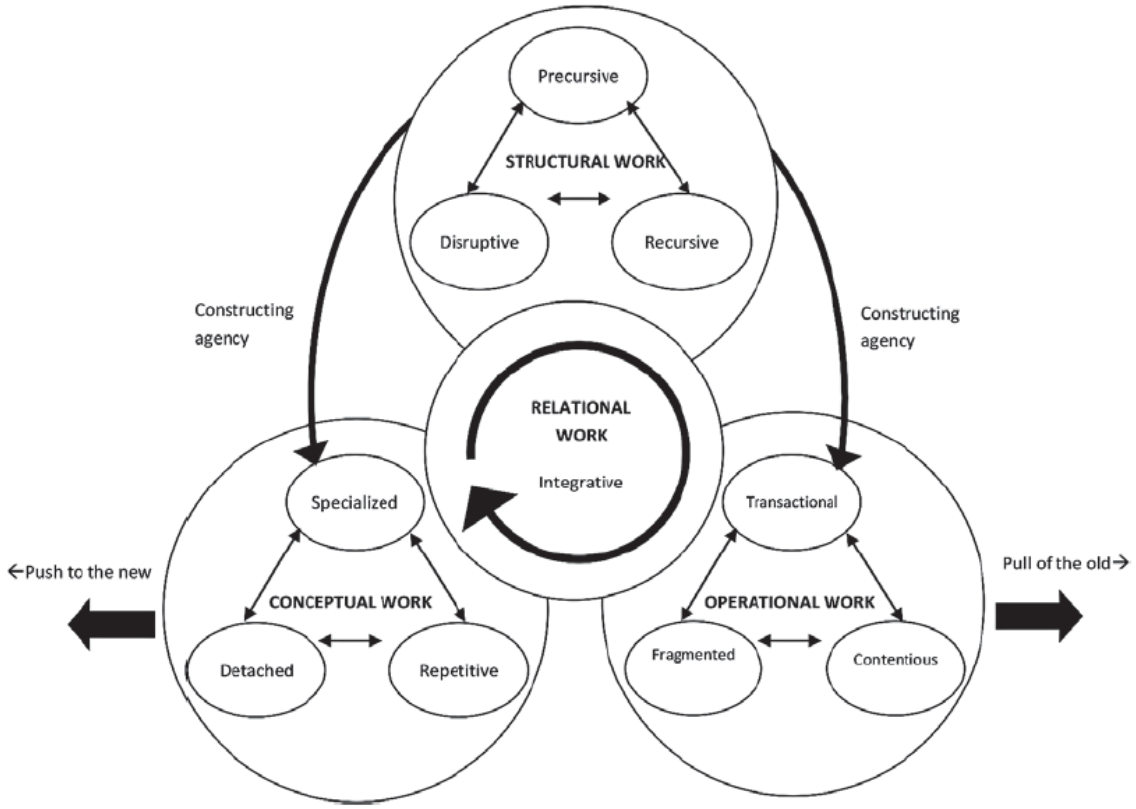
The establishment of highly engaged physicians can be seen to have a significantly positive impact on the wellbeing of physicians, patients and the system within they work. Yet, the literature would indicate that it is a complex problem that requires interventions that are anchored in this understanding to create a positive impact in physician engagement. This indicates that MSA's that undertake multiple approaches to interventions and actions that focus on a broader range of approaches is the approach that is supported by the literature.

2.8 Analytical Framework

The structural examination of progressive change within the public sector is a key to assessing progress within the healthcare setting. Given that Facility Engagement is an initiative that is intended to create a change in the relationship between the two parties finding an analytical approach that can categorize and assess the efforts of local MSAs is key to any analysis of their work. Facility Engagement has utilized the work of Cloutier et. al (2015) as the framework by which the analysis of MSA engagement activities is be undertaken. Cloutier et al produce a framework that focuses on the types of interventions undertaken to alter the public sector systems and aims to categorize them into forms of institutional work (p.2). The four categories of institutional work are:

> **Conceptual work:** Efforts by managers to establish new belief systems, norms and interpretive schemes.
>
> **Structural work:** Efforts to establish formalized roles, rule systems, organizing principles and resource allocation models.
>
> **Operational work:** Efforts to implement concrete actions affecting everyday behaviors of frontline professionals.
>
> **Relational work:** Under pins the above noted types of institutional work and refers to efforts aimed at building linkages trust and collaboration between people involved in reform implementation (p. 11).

The interventions of MSAs when sorted into these categories reveals the structural approach and intended outcomes of each intervention and is crucial to determining a correlation between interventions that impact each of the above categories and the overall engagement scores of physicians.



(Cloutier et al., 2015, p.10)

The primary research question was: using the Coultier et al (2015) institutional work framework to categorize activities and interventions, what categories did the activities and interventions of the selected sites fall into? The other questions that were asked were:

- What smart practices can be recommended by comparing the types of institutional work of the selected parings undertook?
- How do the activities and interventions relate to the current discourse on physician engagement?

3.0 Methodology and Methods

This chapter is a description of the methods and methodology used to support the analysis of the Doctor of BC annual survey and the Site Engagement Activity Tracker data for the selected sites. The purpose of the selected methodology and methods was to effectively select sites and to examine the trends in activities and interventions at both high and low performing sites.

3.1 Methodology

This report took an inductive approach to determine smart practices through a quantitative review of the Doctors of BC survey data and the recorded actions and interventions of specific study sites (Bryman, 2016, p.23). The Doctors of BC annual members survey was used to identify sites that had demonstrated both positive and negative growth in the senior leadership scores. Once the sites were identified for selection using Doctors of BC survey data, the analysis of the actions and interventions of the selected sites was undertaken.

A comparative analysis method was selected for data analysis to establish smart practices and recommendations that can be spread to other sites. The activities and interventions of selected sites were compared using the Cloutier et al,. (2015) categories of institutional work and using the physician engagement literature smart practices emerged.

As noted by Bardach and Patashnik (2019), Smart Practices are the ability to undertake a careful analysis of actions and interventions to seek out opportunities that uncover latent value within current practices and derive recommendations that deliver something of public value relatively cheaply. Within the context of FEI, these practices would be redirecting and focusing the activities and interventions on the practices that appear to result in tangible gains in the key performance metric of the Senior Leadership scores within the Doctors of BC engagement survey. The activities and interventions of sites implementing features and supportive features were crucial to the recommendations (p. 134-138).

3.2 Methods

The Doctors of BC collects survey data on an annual basis using the Accreditation Canada Work Life Pulse tool to allow an annual measurement of physician engagement with health authorities in the province. This data was reduced to a site-specific level and was utilized to represent areas of growth in the senior leadership scores.

In addition, FEI collects summaries and titles of all actions and interventions undertaken by specific sites within its Site Engagement Activity Tracker database (SEAT). The Doctors of BC survey data was reviewed to establish two pairings of MSA's. Each pairing is comprised of an MSA from within the same funding tiers where the senior leadership scores, which is key to determining progress for FEI, rise greater than five percent during the course of a year and declined by greater than five percent. Funding tiers were selected as a proxy to represent the size and composition of the site. FEI funding is provided in tiers using the acute care beds within the

hospital as a proxy for the number of physicians. Therefore, funding tiers represent an effective mechanism to ensure that the sites selected were of the same size and composition of physicians. (Doctors of BC, 2019, p.1-2). The actions and interventions of the MSA, extracted from SEAT, were then categorized using the Cloutier et al. (2015) categories of Institutional work. The SEAT data from the sites were sorted into categories of institutional work and data were then compared to inform recommendations and findings.

The primary research questions guiding the analysis were:

1. Using the Coultier et al (2015) institutional work framework to categorize activities and interventions, what categories did the activities and interventions of the selected sites fall into.

2. What smart practices can be recommended by comparing the types of institutional work the selected parings undertook

3. How does the activities and interventions selected by each site related to the physician engagement literature?

The sites were selected for review using the following criteria:

- Length of participation in the program
- Number of recorded activities within SEAT
- Number of respondents to the survey
- MSA could be matched to a site of similar size and composition using the funding tier as a proxy for size and composition
- MSAs that spanned more than one hospital were not considered as the survey data is site specific

3.3 Data Analysis

Site Engagement Activity Tracker

The primary source of data for this report is the Site Engagement Activity Tracker (SEAT). In order to receive funding through FEI, MSAs must input data quarterly into this tracker. The entries of the sites are then reviewed by the FEI support staff to ensure consistency. This creates a comprehensive listing of all activities undertaken by every active MSA in the province that can be reviewed and sorted by year. The tracker was developed and is supported exclusively by FEI and the data is provided to both MSAs and stakeholders to support cross educational opportunities and allow MSAs to have the ability to access a summary of activities and interventions undertaken by all MSAs across the province.

The data contained in SEAT is:

- name of the society
- relevant health authority
- title of the activity or intervention
- a description of the activity
- strategy undertaken to implement
- areas of impact
- physician specialties involved
- health authority input
- milestones
- progress
- risks
- next steps
- approach
- mitigation
- contact information.

The SEAT data that will be used will be collected from the 2018 year and sorted using the Cloutier et.al (2015) Institutional work framework determining the categories of the activities and interventions.

Doctors of BC Annual Survey

The Doctors of BC annual survey is an annual review of the engagement metrics of physicians in British Columbia. The survey is conducted and administrated by Accreditation Canada to ensure that the inherent bias of a professional association is mitigated to ensure that the data is valid. The Worklife pulse tool is an independently verified tool that can effectively predict health workplace environments and accurately represent the psychosocial health of both a work environment and the employee experience (Sounan et al., p.58). This tool, developed by Accreditation Canada and the Ontario Hospital Association, utilizes a Likert scale to represent the respondents self-reported perception of a number of key indicators of engagement.

This tool is grounded in the Accreditation Canada healthy workplace framework to provide a validated snapshot of the work environment (Sounan et al. p. 52). The Doctors of BC (2018) selected nine questions that most accurately align with physician engagement and the performance of the organization to reflect areas of success and opportunities for growth. These are:

- I am satisfied with this organization as a place to practice medicine
- I feel I belong to a collaborative, patient centred team/unit

- I have access to the facilities, equipment, and other resources I require to meet patients' needs
- I have adequate opportunities to improve patient care, quality, and safety
- I have meaningful input into changes affecting my practice environment
- Senior leaders communicate the organizations plans to physicians in a clear and timely way
- Senior leaders seek physicians input when setting the organization's goals
- Senior leaders' decision-making is transparent to physicians
- This organization values physicians' contributions (p.11)

The data was selected from the 2019 survey (collected in the first quarter of 2019) and is expected to reflect any growth in engagement that occurred in 2018. The key metric that was examined is the area of the Work Life Pulse survey specifically addressed the relationship between physicians and health authority leadership. As such, the results of the following three questions were the benchmarks of progress used to review and select the site pairings to determine the effectiveness of MSA engagement activities and interventions:

- Senior leaders communicate the health authority plans to physicians in a clear and timely way
- Senior leaders seek physicians input when setting the health authorities goals
- Senior leader decision-making is transparent to physicians

An analysis to determine the activities and interventions of the sites followed their selection and were compared to the current discourse on physician engagement to provide smart practices for potential implementation.

The selected site pairings for review were Richmond Hospital, Lions Gate General Hospital, Shuswap Lake General Hospital, and Powell River General Hospital.

3.4 Project Limitations

The physician world has numerous significant limitations that can affect the senior leadership engagement scores in a specific site. Although the sites have been selected with consideration of outside forces, the number of survey respondents, the size and composition of the site, and the number of applicable engagement activities, there are factors outside of FEI and the available data that could impact the senior leadership scores. For example, high levels of conflict in a site the implementations of significant tools or workplace changes, staffing and physician burden level, individual leadership styles, and personalities of the physicians and health authority administrators involved can affect these general scores.

In addition, there are issues related to regional clinical practice, resource distribution conflicts, economic conflicts, and behavioral and cultural issues within specific physician groups within a hospital that could significantly affect engagement scores but will not be found within the data.

It has been seen within the delivery of FEI that the size and geolocation of a facility has a significant impact on the relationship both locally and regionally and can impact the perception of the availability and transparency of senior leadership. Given the nature of the public system some physicians are strictly limited to practicing within hospitals and therefore their lack of choice within the system may have an impact on their perception and relationship with health authority partners.

4.0 Findings: Survey Analysis

4.1 Introduction

This chapter conducts a comparative analysis of the activities and interventions of the selected MSAs. Two pairs of sites were selected for analysis, Richmond Hospital (RH) and Lions Gate Hospital (LGH) and Shuswap Lake General hospital (SLGH) and Power River General Hospital (PRGH). These pairings are similar in size and physician composition and meet the criteria of large number of survey respondents, sufficient length of participation in FEI and each pairing has senior leadership engagement scores that have improved by greater than 5% and declined by greater than 5%.

This chapter begins with a review of the data set of leading to site selection, which is followed by a description of the selection process. The third section of this chapter describes the interventions of the MSA's sorted into types of institutional work for comparison. This section is followed by a description of the characteristics of high performing sites and lower performing sites. The senior leadership questions that were selected are:

- Senior leaders communicate the health authority plans to physicians in a clear and timely way
- Senior leaders seek physicians input when setting the health authorities goals
- Senior leader decision-making is transparent to physicians

Sites that were selected were then examined to determine:

1. Using the Coultier et al (2015) institutional work framework to categorize activities and interventions, what categories did the activities and interventions of the selected sites fall into?
2. What smart practices can be recommended by comparing the types of institutional work the selected parings undertook?
3. How do the activities and interventions selected by each site related to the physician engagement literature?

4.2 Doctors of BC Work Life Pulse Survey

Following an examination of the 2018 and 2019 Doctors of BC engagement survey data using the above noted three key questions the following sites (See Table 1) had gains in their engagement scores. Sites were only considered for review and noted below if the change in their engagement scores was greater 5% than and had a site in a corresponding funding tier that had declined greater than 5% during the review period.

The Doctor of BC engagement survey (2018) is conducted by the Health Standards Organization and is sent to 11,153 physicians in 2018 and had 2657 respondents (p.5). The Doctors of BC

engagement survey (2019) was sent to 11, 504 physicians and had 2928 respondents in 2019 (p.5). The following table represents sites that demonstrated the highest growth in the senior leadership questions. The sites were reviewed and selected to have the highest degree of growth or decline in the senior leadership scores. A key factor in selecting a site for review was: highest possible number of respondents to ensure the highest possible validity of the data, ensuring that the site selected had a corresponding site of the same size that declined and the site had a sufficient number of years of participation within the program to provide valid data. Although other sites demonstrated greater growth or decline in the Senior Leadership scores, the selected sites met the above criteria and were therefor selected for review and analysis. As noted, the respondents are taken only from the 2019 year. Given that the survey is anonymous there is no way of establishing that the respondents were the same and this column is included to demonstrate that the selected sites have a high degree of similarity in both the size of the facility but also the number of respondents to the 2019 survey.

Site Name	**Funding Tier**	**Percentage change**	**2019 Respondents**
Richmond Hospital	5	+7%	107
Penticton Regional Hospital	4	+5%	36
Mission Memorial Hospital	2	+16%	13
Shuswap Lake General Hospital	2	+9%	20
Creston Valley Hospital and Health Centre	2	+20%	13
G.R. Baker Memorial Hospital	2	+6%	6
Sechelt Hospital	2	+7%	30
Elk Valley Hospital	1.3	+10%	14
Lady Minto Hospital	1.3	+14%	14
South Okanagan Hospital	1.3	+6%	6

Table 1: Positive Growth in Senior Leadership Scores

As represented in the above table there were 10 sites that demonstrated greater than 5 percent growth in the senior leadership scores between the 2018 and 2019 survey. These sites represent only a portion of the possible funding tiers and no sites in the top tier were eligible for review. Creston Valley Hospital achieved the highest growth rate within the category and Penticton Regional Hospital with the lowest growth rate. These sites demonstrated an average growth of 10 percent across the measured years. The following sites (see Table 2) received the largest decrease in scores in the three key leadership questions:

Site Name	Funding Tier	Percentage change	2019 Respondents
Royal Columbian Hospital	6	-7%	135
Peace Arch District Hospital	5	-17%	32
Royal Inland Hospital	5	-8%	72
Lions Gate Hospital	5	-10%	117
Delta Hospital	3	-11%	19
Kootenay Boundary Regional Hospital	3	-15%	38
Saanich Peninsula Hospital	3	-15%	28
Fort St. John Hospital	1.3	-21%	11
Powell River Hospital	1.3	-9%	11
Bulkley Valley	1.3	-17%	12
Boundary Hospital	1.2	-20%	9
Queen Victoria Hospital	1.2	-10%	5

Table 2: Negative Growth in Senior Leadership scores

As represented above there were 12 sites that demonstrated negative growth of greater than 5 percent in the senior leadership scores during the period measured. These sites represent portion of the possible funding tiers with tiers 4, 2, and 1.1 failing to provide a site for review. Fort St. John Hospital demonstrated the largest decline at 21 percent while Royal Columbian Hospital had the smallest decline at 7 percent. On average these sites showed a decline of 13.34 percent.

4.3 Site Selection

Sites were reviewed and selected to ensure that the groups under review were selected for the highest validity of the comparison. As such, criteria were applied to rule out the above noted sites and determine the best candidates for review. Criteria that was applied to review sites were:

- Length of participation in the program
- Number of recorded activities within SEAT
- Number of respondents to the survey
- MSA could be matched to a site of similar size and composition
- MSAs that spanned more than one hospital were not considered as the survey data is site specific

4.4 MSA Interventions and Activities

Using the Cloutier et al. (2015) types of institutional work, the activities and interventions of the selected sites have been categorized for review and analysis. The selected sites have been sorted

into pair for analysis to support smart practice recommendations and a review of the alignment of the activities and interventions in relation to the physician engagement discourse. In addition, to provide a further lens on the activities to build relationship between physicians and health authority leadership, participation of health authority leaders in the development and planning of activities and interventions are also considered.

In the review of the first selected pairing, some there is a significant divergence in the activities selected.

Richmond Hospital Medical Staff Association

As noted in Figure 1.1, Richmond hospital's interventions were heavily weighted towards operational, structural and relational work. In the activities that were reviewed there were no interventions or activities that were categorized as conceptual, a finding that was consistent across all of the sites reviewed. The most frequent category of intervention and activity for Richmond Hospital was operational work with 13 of the 30 activities and interventions falling into this category. Following this was structural work with 12 activities and in the relational category, 5 activities and interventions were noted. As noted, 83.34 percent of the activities and interventions at Richmond Hospital were operational and structural, a significant majority with 43.34 percent being operational and 40 percent were structural. Relational work comprised 16.67 percent of the activities and interventions during the period measured.

In the category of Health Authority Input, noted in figure 1.2, the activities and interventions, Richmond Hospital had 24 activities and interventions that were either conducted collaboratively with health authority leaders or sought their input. One activity proceeded without health authority leadership input, one activity and intervention were considered not applicable for input and the remaining 4 were in the process of receiving health authority input.

Pairing 1

Richmond General Hospital Medical Staff Association (RGH)

Funding Tier 4

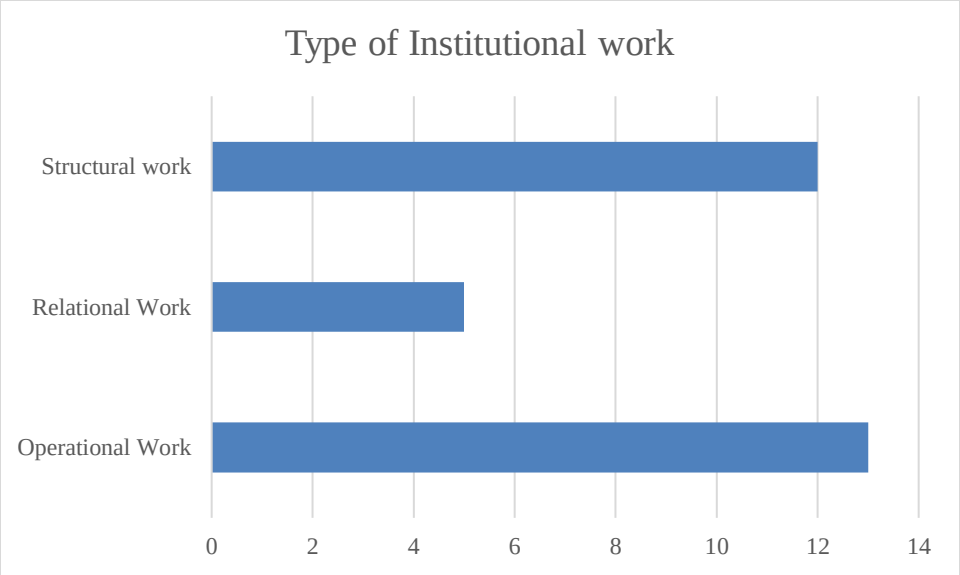


Figure 1.1: Type of Institutional Work

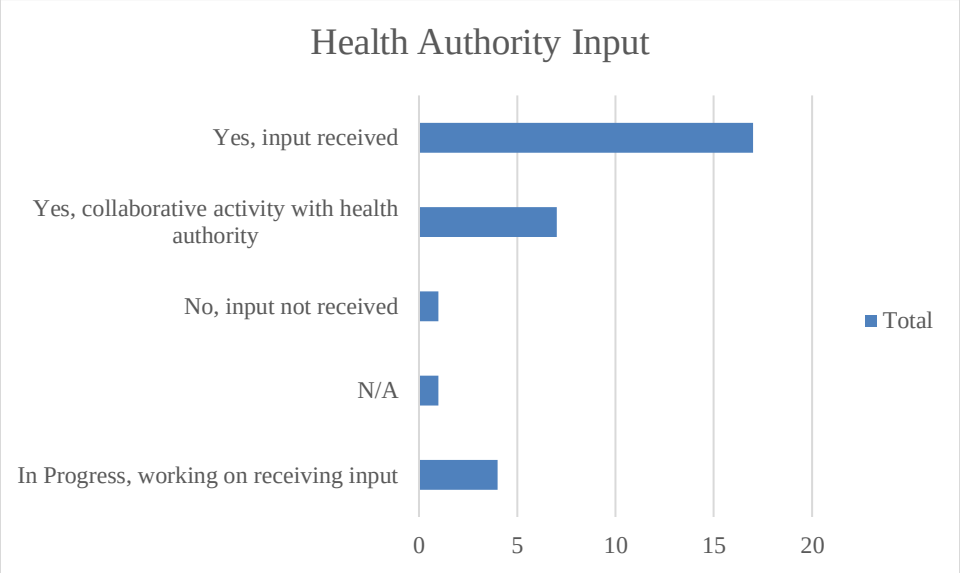


Figure 1.2: Health Authority Input

Lions Gate Hospital Medical Staff Association

During the period of review as noted in figure 2.1, Lions Gate Hospital undertook 13 activities and interventions noted in SEAT. Of these activities 6 were considered relational work, 5 were categorized as operational work and 2 were noted as structural work. This MSA also undertook no conceptual work during the period measured. Lions Gate Hospital selected relational work

for 46 percent of their activities, operational work comprised 38.5 percent and structural work activities and interventions were 15 percent of the activities.

In figure 2.2 the Health Authority input scores noted five activities were considered not applicable for input, 5 activities were undertaken collaboratively with health authority leaders, 2 activities were in progress and 1 activity had received health authority input. Lions Gate Hospital Medical Staff Association (LGH)

Funding Tier 4

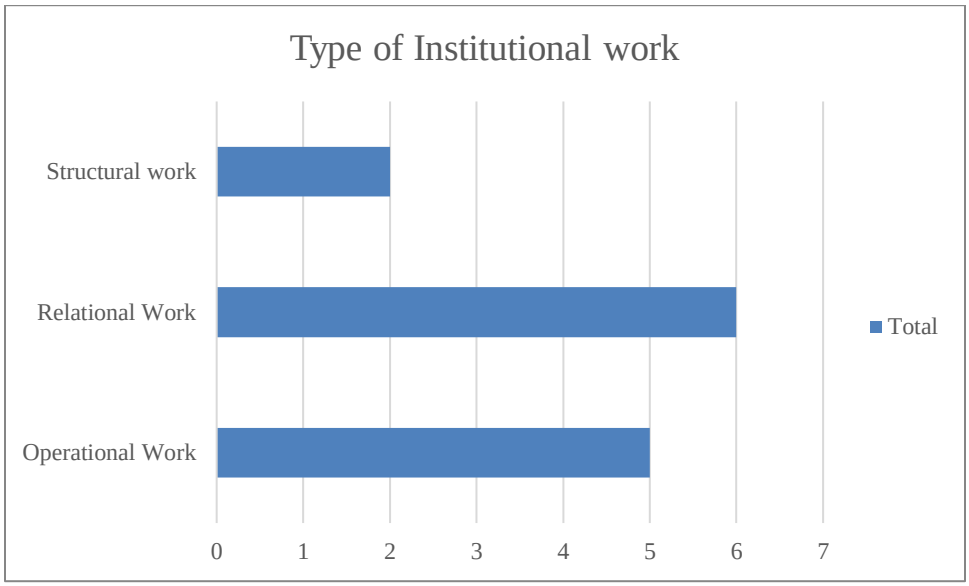


Figure 2.1 – Type of Institutional Work

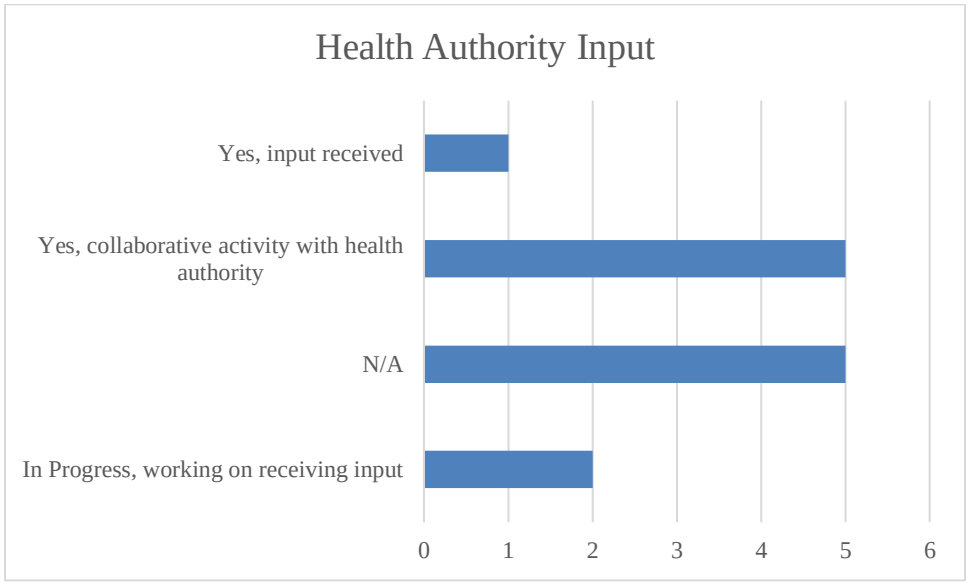


Figure 2.2 – Health Authority Input

Pairing 2

Shuswap Lake General Hospital Medical Staff Association (SLGH)Funding Tier 2

During the period of review, as noted below in figure 3.1, Shuswap Lake General Hospital undertook 18 activities and interventions. Of these activities, 9 were consider operational work, 6 were considered structural work and 3 were considered relational work. These sites conducted no activities that were categorized as conceptual work. SLGH selected to support 50 percent of activities that were operational work 33.34 percent structural work and 16.67 relational work. This percentage of relational work is identical to that of Richmond Hospital.

In figure 3.2 it is noted that all activities undertaken by SLGH were conducted with input or in collaboration with health authority leadership with 14 (77.78 percent) activities that were collaborative and 4 (22.22 percent) received health authority input.

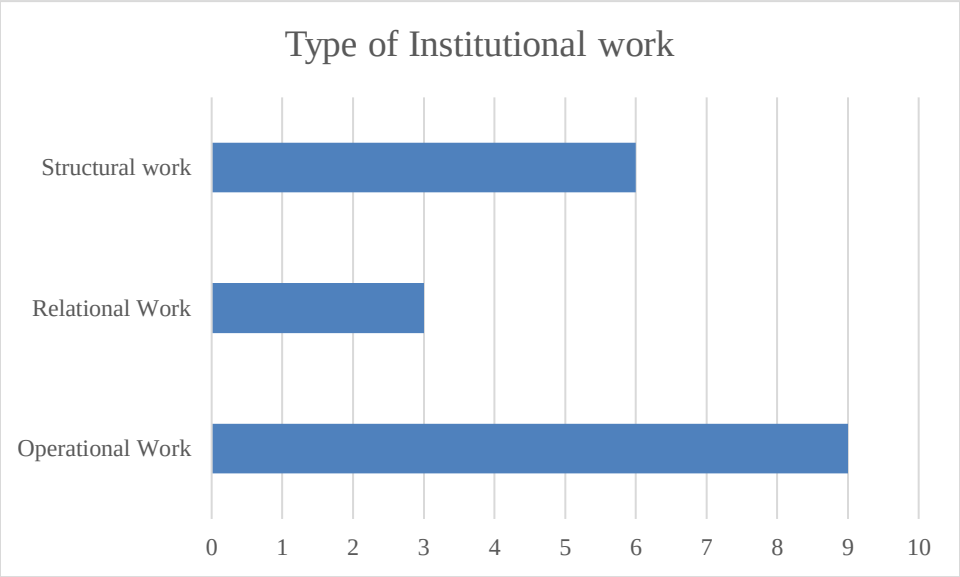


Figure 3.1 – Type of Institutional Work

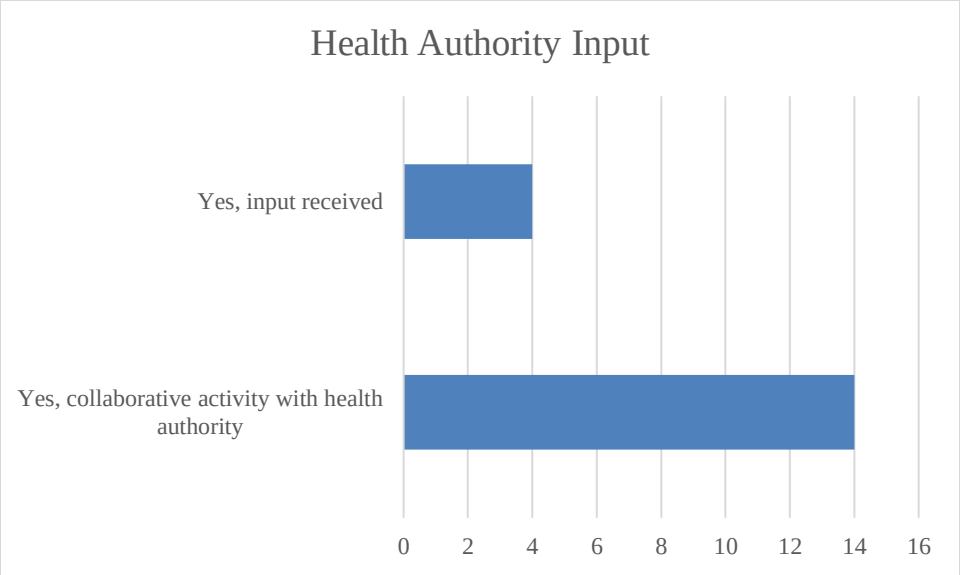


Figure 3.2 – Health Authority Input

Powell River General Hospital Medical Staff Association (PRGH)

Funding Tier 2

During the period of review, as noted below in figure 4.1, PRGH conducted 11 activities and interventions. Of these, 5 (45.45 percent) were considered Relational work, 4 (36.36 percent) were categorized as Operational work and 2 (18.18 percent) were categorized as Structural.

As noted in figure 4.2, 5 (45.45 percent) of these activities were conducted collaboratively with health authority leaders, 3 (27.27 percent) of these activities received health authority input, 2 (18.18 percent) received no input from health authority leaders and 1 activity was awaiting a response from the health authority.

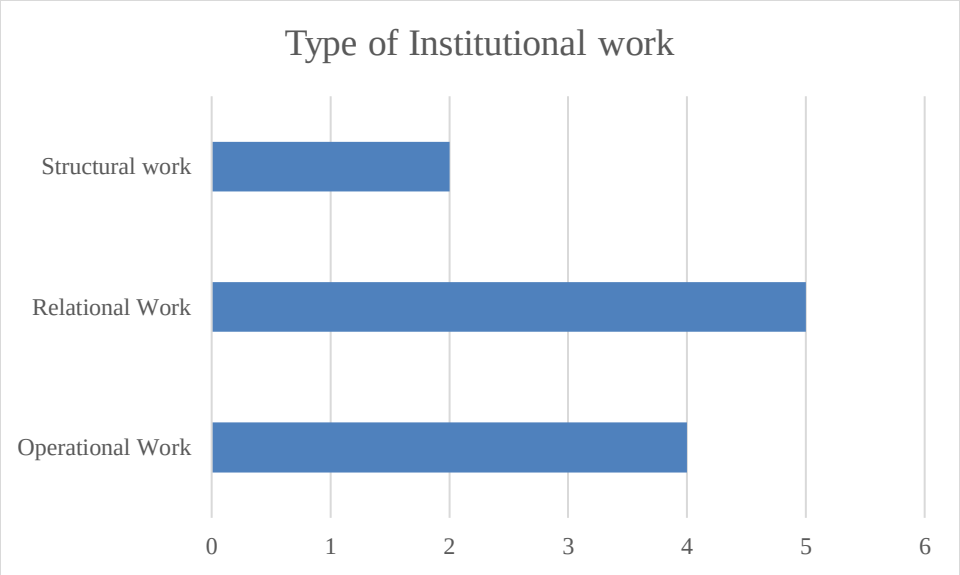


Figure 4.1 – Type of Institutional Work

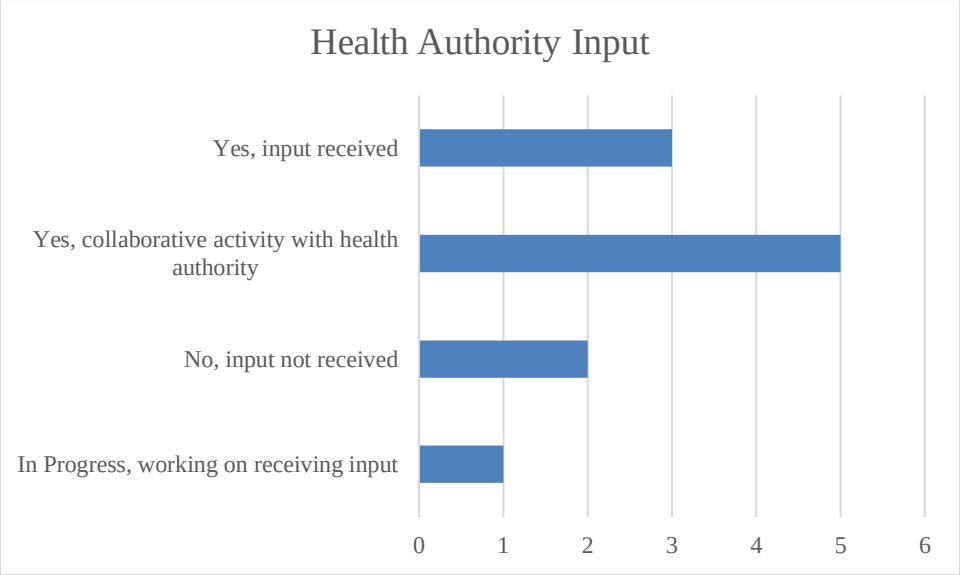


Figure 4.2 – Health Authority Input

4.5 Characteristics of High Performing Sites

A number of consistent themes emerged from the SEAT data that applied to high performing sites.

Greater volume of engagement activities

The selected sites had a greater volume of recorded activities within SEAT leading to a higher number of involved physicians in engagement activities. There were 30 recorded activities and interventions for RGH whereas LGH recorded only 13 activities in the relevant time period (Figure 1.1, 2.1). This increase in volume of activities was mirrored in the second pairing where SLGH recorded 18 engagement activities whereas PRGH recorded 11 in the relevant period measured (Figure 3.1, 4.1).

Greater complexity and focus on clinical priorities for quality improvement or systems level change

RGH, in addition to the greater volume participated in a more advanced set of clinical and systems level interventions intended to affect the clinical working environment as well as the relationships between operational and senior leadership within the health authority. Some clear examples of this high complexity work are:

- Anesthesia Crisis Management Simulation, aimed at improving overall communications between physicians and allied health in critical clinical situations,
- Diabetes Strategy Development, aimed at creating a physician led strategy to serve a complex patient population after the departure of a key clinical specialist,
- Specialized surgical pathway, a physician led initiative to improve patient outcomes through an optimization and greater understanding of the patients journey through a complex system (SEAT, 2019).

This focus of activity was also found within the activities of SLGH who demonstrated a clear focus on clinical priorities and systems engagement. Some clear similar examples of this focus are:

- Cardiology and Respiratory services projects, aimed at coordinating and improving patient outcomes by reviewing the intersection of Laboratory medicine and Cardiology at both the site and regional level, which is developing opportunities for improvement in clinical care,
- Sexual Assault Patient Improvement Project, aimed at reviewing the complex intersection of RCMP, allied health and physician clinical care and improve clinical care provided to victims of sexual assault,

- OR improvement project, aimed at meeting with Senior health authority leadership to provide feedback on opportunities to improve surgical outcomes and improve patient care (SEAT, 2019).

Reduced focus on relational work

The RGH had a low number of projects that were categorized as relational. Only 5 of the recorded 30 activities and interventions in SEAT were in this category (Figure 1.1). In addition, when RGH undertook relational work, this work was targeted to develop collaboration with senior leadership, mentoring new physicians and interdisciplinary journal club, which is focused on opportunities to discuss new developments in the medical literature and how they pertain to improving clinical care within the facility. Activities and interventions at SLGH also mirror this trend. Of the 18 recorded activities and interventions, 3 were found to be in the relational category. In addition, these activities were focused on the connecting with health authority leadership, improving relationships between physicians and midwives and managing conflict between physician departments.

Compensation directed to support structured ongoing discussions with Health Authority leadership

The SEAT data recorded activities by both groups that were intended to support physicians with compensation to attend meetings with health authority leadership. RGH established a collaboration committee to meet regularly with senior health authority leadership and provided compensation for physicians to attend pre-existing meetings with health authority leadership. SLGH provided compensation specifically for the MSA leadership to meet regularly with staff and health authority leaders to represent the views of physicians.

Higher percentage of HA consultation and collaboration in QI work

Of the 30 recorded activities for RGH only 2 activities did not receive any consultation with Health Authority partners (Figure 1.2). These activities, Psychiatry Grand Rounds and the Medical Education Committee were seen as the domain of the MSA and pertained strictly to physicians or not applicable for Health Authority partners consultation. In the case of Shuswap, all activities and interventions were undertaken with Health Authority input and collaboration (Figure 3.2).

4.6 Characteristics of Lower Performing Sites

A consistent pattern of activities and interventions in the sites where engagement scores fell were:

Lower volume of activities

In comparison to the higher performing sites, LGH MSA participated in 13 engagement activities, less than half of the similarly sized RGH (Figure 2.1, 1.1). This pattern was also true, though less pronounced at PRGH where there were 11 recorded activities and interventions compared to 18 in the similarly sized SLGH (Figure 4.1,3.1).

Fewer activities that require engagement with HA structures and clinical priorities

The activities and interventions selected by both LGH and PRGH showed lower engagement with HA structures and clinical priorities. Of the 13 recorded activities only 2 required interaction and engagement with HA structures and clinical priorities. These activities were:

- Pre-Anesthetic Clinic Redesign, aimed at providing a mechanism and compensation for physicians to provide input to clinical and administrative management of the Pre-Anesthetic Clinic,
- Sepsis Protocol Activation Review, aimed at improving patient care by meeting with HA Senior Medical Directors and provide clinical recommendations for implementation (SEAT, 2019).

While this trend is not as pronounced at PRGH, only 3 of the 11 recorded activities focused on these priorities. There were:

- Emergency Room Mental Health Access Improvement Project (phase 1), aimed at reducing barriers to access to mental health services
- Rural Anesthesia Project, aimed at improving communication between rural and tertiary sites
- Breast Diagnostics Project, aimed at reducing delays in treatment resulting in negative patient outcomes (SEAT, 2019).

Greater number of activities that are relational

Of the activities measured, LGH and PRGH demonstrated a greater focus on relational work than that of the higher performing sites. At LGH 6 of the 13 activities and interventions were noted to be relational (Figure 2.1). In addition to this, these relational activities were largely focused on socializing and physician to physician relationship. As such, LGH relational events were:

- Physician Health Talk in Collaboration with the North Shore Division of Family Practice, aimed at improving relationships with a community physician society,
- Coffee Project for Physician's Lounge
- Physician Appreciation Lunches
- Physician Gala Auction Item and Evening Entertainment
- LGH Emergency Department Physicians Retreat

- Dr. Dike Drummond Event, collaborative event for physicians planned in conjunction with the North Shore Division of Family Practice (SEAT, 2019).

The PRGH group also targeted physician to physician relationship work and undertook a higher percentage of relational work. Of the 11 recorded activities and interventions 5 were relational in nature (Figure 4.1). While 3 of these activities were targeted towards physicians to physician relationship development and socialization and there were no activities that were purely social in nature, two of the five engaged with groups or activities unrelated to HA or clinical work. These activities were:

- Collaborative Services Committee (CSC), aimed at improving relationships between hospital physicians in community and their community partners
- Hospital Garden Project, aimed at building raised beds at PRGH (SEAT, 2019).

Less integration of Health Authority input on MSA activities and interventions

The activities reported by the lower performing site noted a greater number of activities that where either not applicable for health authority consultation and collaboration or none was undertaken. For LGH 5 of the activities and intervention were deemed not appropriate for consultation (Figure 2.2) and at PRGH 2 activities were undertaken with no HA input or collaboration (Figure 4.2).

4.7 Summary

The interventions and activities of the high performing sites were largely focused on optimizing the care provided within their facilities. In addition, preexisting or structured meetings between MSA leadership and HA leadership were present in the interventions of both high performing sites. Although relational work was a feature of high performing sites the types of activities supported were fundamentally different. When these sites engaged in relational work they focused on mentorship, building relationships with health authority leadership and intentional intervention into dysfunctional workplace dynamics.

While the lower performing sites studied also worked to build relationships, these were more focused on physician to physician relationships, such as participation at Collaborative Service Committee with community partners, focused on developing inter hospital relationship between physicians and physician community development through social events. The fewer activities in total at these sites had less focus on development of relationship between physicians and allied health or health authority leadership, a reduced focus on engaging with health authority leaders and a reduced focus on clinical priorities.

5.0 Discussion and Analysis

This chapter will review the themes that emerged from the analysis of the SEAT data in sites where there was significant change in the senior leadership scores in the Doctors of BC survey. These activities will be connected to the key themes of engagement that are supported by the literature to establish areas of opportunity to support the growth in physician engagement and support MSAs to undertake activities that will grow the key senior leadership scores in future surveys.

5.1 Relationship is Important but Must be in Balance

Physician to physician relationship is important in improving collegiality amongst physicians but does not appear to significantly contribute to the improvement of relationships between physicians and health authority administrators. One of the key attributes of the characteristics that differentiated the groups where senior leadership scores rose was a reduced focus on relational work relative to the less successful sites. RGH and SLGH both noted a greater balance of activities related to the Cloutier et al (2015) categories of institutional work who note that relational work is "aimed at building linkages, trust and collaboration between people involved in reform implementation" (p. 17). These linkages can create powerful connections to drive change and underpins the implementation of the other categories of work.

Yet between whom this relationship is built has a significant impact on the ability to create change within a system. It is crucial to note that when sites with positive growth did engage in relational work it was targeted at two key professional categories of mentorship and working directly with senior health authority leadership in structured meetings. Both RGH and SLGH compensated physicians to represent the interests of the MSA with senior leadership or provided compensation to physicians who were participating in previously structured meetings. These activities and interventions led to increased exposure to health authority leadership within the context of the clinical and administrative setting and it is possible that this increased exposure in the formalized workplace setting could influence the senior leadership scores increasing within the Doctors of BC survey.

This stands in contrast to the relational work undertaken in the negative scoring sites. These sites targeted predominantly physician to physician relationship development and many of these events were social in nature. Kaissi (2012) notes that trust is constructed in part by a willingness to engage with the other party and develop mutually satisfactory outcomes (p.6). A factor that is shared among the lower performing sites is a demonstrated lack of interest or willingness to engage with health authority leadership to the same degree and this lack of intersection could be noted as a warning sign that the parties are less interested or able to engage meaningfully. These senior leadership questions are largely framed around the development of trust between physicians and health authority leadership and a failure to engage in meaningful activities that could build this trust can be seen as a problematic development and it is reasonable identify a

link between a lack of engagement between the parties and the decline in leadership scores at these sites.

5.2 Activities to Empower Physicians in the Clinical Setting

In order to increase the number of engaged physicians, creating a greater number of opportunities to support engagement across of diverse number of clinical and relational areas can be an effective method of supporting engagement. Perreira, Perrier and Prokopy (2018) note that physician engagement involves both personal factors but also crucially a number of key environmental factors. Of these, influence at work, development opportunity, degree of freedom at work, job control, supervisory support and organizational support can be seen to have been influenced by physicians partaking in clinically relevant interventions to improve patient care (p.973). Subsequently, it is noted that sites where senior leadership scores improved (RGH, SLGH) they participate in a higher percentage of meaningful collaborative interventions into clinical work with a noted goal of increasing the quality of care.

Although, LGH and PRGH did also participate in this kind of work it was not to the same extent and it was not undertaken with the same degree of health authority input or collaboration and this could be a factor in the reduced influence over the senior leadership scores. This perception of physician control over their working environment is further supported by Succi, Lee and Alexander (1999) who note that in hospitals where physicians were given greater control over their working environments, indicators of trust between physicians and administrators rose (p. 6).

Swensen, Kabcenell and Shanafelt (2016) further emphasize a relationship between reducing physician burnout and increasing physician engagement and note that a key driver in increasing engagement is empowering physicians to address key clinical issues that are driving burnout (p.110). The relationship between an increased volume of clinical work interventions, increased trust between physicians and administrators and reduced physician burnout could be a key factor at RGH and SLGH where they have undertaken activities and interventions that align with this strategy to greater extent than at the lower performing sites.

In addition to building trust through empowering physicians to have influence over their clinical working environment, the increased interaction with health authority leadership appears to lead to greater understanding of the distribution of resources. Organization justice indicates that when there is a greater transparency in decision making then the perceived sense of fairness increases. By increasing the exposure and volume of interactions physicians are able potentially experiencing an increase in their perceived organizational justice leading to an improvement in the senior leadership scores. By engaging in a greater number of more complex projects, physicians intersect with higher level health authority planning and strategy.

Although these physicians do not necessarily directly intersect with health authority leadership by engaging in a greater number of more complex projects they must engage with the system as a whole in order to effect change. The effect of these encounters leads to a greater number of

physicians with a more complex understanding of health authority priorities and may be at least partially responsible for the corresponding rise in engagement score for health authority leadership for the sites with the higher volume of interactions. Trybou, Gemmel and Annemans (2015) note a relationship between increased contact with health authority leadership and physicians' perception of organizational justice. This suggests that by increasing the connections between physicians, both in formal leadership roles and leading projects increases the number of the physician and health authority leadership touch points leading to an overall increase in trust between the groups. The development of this trust could be a factor in the increase in senior leadership scores at RGH and SLGH.

A further issue noted across the literature is the disconnect between the administrative group and the clinically focused physician group. Keller et al. (2019) notes that humans tend to segregate themselves into likeminded groupings. Where limited interaction occurs between these likeminded groups, stereotyping and othering can occur. The greater the distance between the groups the more stereotyping behavior occurs leading to conflictual relationships and misunderstandings between the two parties (p.9). It is possible that where a larger number of quality improvement projects occur, a greater mixing is forced between physicians and health authority administration.

This interaction challenges the assumptions made by either party and can lead to a greater understanding of the intentions of the other groups. It is possible that this could account for the noted increase in the engagement scores studied. Furthermore, this could also explain that in the sites studied where the scores declined there was a significant emphasis on physician to physician socialization. This focus did not lead to the mixing and interactions that could disrupt stereotyping behavior and could act to reinforce the group cultural assumptions physicians hold of health administration leadership.

5.3 Limitations of Analysis and Further Research

One of the fundamental challenges in reviewing the nature of the relationship between physicians and senior health authority leadership is controlling for outside forces that have an influence on the quality of that relationship. Senior health authority leaders are subject to the requests and requirement of the Ministry of Health in implementing health care in BC. As such, decisions that are made at the highest levels of government that are political in nature can have an influence on the relationship as physicians are not always aware of the power and influence the Ministry of Health has over the implementation of care within hospitals. This absence of awareness can lead to a perception that senior health authority leaders have greater control over their funding than is the actual case. In addition, health care is a highly politicized and high profile activity undertaken by the government and can be heavily influenced by macro-economic forces as they have an effect on provincial budgets. These external trends can have a significant impact on the relationship between physicians and health authority leaders.

In addition to these limitations, this project identified some key areas for further research. It would be useful to repeat the analysis undertaken in 2020 to establish if the sites showing positive growth were able to maintain their baseline or demonstrate further growth in their relationship with senior leaders. A second possibility would be to review the 2018 and 2019 data to establish a baseline score for each site in the province to assist Facility Engagement staff to identify the direction that MSAs were trending in this relationship. Lastly, it would be useful to follow up with the MSA and senior health authority leaders at the selected site pairings to conduct qualitative interviews to establish their experience of Facility Engagement.

5.4 Summary

The review of the activities and interventions undertaken at sites that demonstrate both growth and decline in the senior leadership scores in the 2019 Doctors of BC membership survey indicate themes at both higher and lower performing sites. While Perreira, Perrier and Prokopy (2018) note that collegiality amongst physicians is a key factor to physician engagement it can be seen that groups that place a greater emphasis on physician to physician relational work are at risk of missing the opportunities to engage meaningfully with health authority leadership to create new relationships that can drive an increase in shared understanding (p.973). This lack of participation and engagement between the parties is a challenge to engagement and it appears to be an indicator that the relationship is poor and there is a lack of appetite to engage. In addition, it would appear that having a number of clinically based interactions where health authority and physicians work together to create opportunities for improved clinical care is an indication of an increasingly trusting relationship between the parties and provides a platform for a greater number of physicians to interact with health authority leadership leading to an increased awareness of the challenges each group face in the delivery of clinical care. These increased intersections can be key to building a greater empowerment for physicians over their working environment and increased trust between physicians and health authority administration.

6.0 Recommendations

6.1 Introduction

This chapter provides a number of recommendations for the client to consider in how best to translate the practices of higher performing sites and to use the data captured in the lower performing sites to analyze risk and support sites to adopt best practices.

6.2 Recommendations

6.2.1 RECOMMENDATION 1

Consider capping or phasing out approval for funding to be used for social activities that do not contain a component of participation of health authority partners or seeks to resolve a clinical issue or workplace related concern.

While it has been noted in the literature that physician to physician collegiality is an important element of physician engagement it can be seen that groups that demonstrate a lack of interest in relational work outside of the professional categories do not see as great an impact in the senior leadership scores. A potential option for the provincial program would be to consider a program wide funding guideline that would restrict the number of purely social activities that can be undertaken in a single year and/or over the course of a number of years to curb social activities that are strictly limited physicians in the non-clinical setting.

6.2.2 RECOMMENDATION 2

Encourage funding structured and consistent connections between health authority leadership and physicians

A strong commonality between the higher performing groups was that relational work was done across the professional categories and these sites created meaningful opportunities to discuss important clinical issues with their health authority colleagues. These opportunities help to break down the cultural barriers and create opportunities for shared interests to emerge and should be widely adopted at sites across the province.

6.2.3 RECOMMENDATION 3

Flag projects for review and revision that do not seek or consider consultation with health authority leadership as necessary for approval

A consistent theme that emerged from the lower performing sites was a reduced element of health authority participation in the development of interventions and activities undertaken by these sites. A potential provincial recommendation would be to utilize the SEAT data to flag for review sites that have this characteristic. During this review, it is further suggested that the activities and interventions of the sites be categorized using the Cloutier et al. (2015) framework for Institutional work looking for activities and interventions at sites that fit the above pattern of: reduced volume of activities, lower percentage of health authority consultation and a greater

focus of relational work. Sites that demonstrate this pattern should be targeted for intervention by provincial staff during their annual strategic planning to influence the site to adopt activities and interventions that are aligned with the activities and interventions of higher performing sites.

6.2.3 RECOMMENDATION 3

Utilize Facility Engagement provincial staff to embed recommendations and smart practices into the annual strategic planning process to encourage adoption on a widespread scale.

The Facility Engagement Liaisons have a position of influence within the MSAs given that they are the direct linkage between the funding body for the program and the MSAs. In addition, these liaisons lead an annual strategic planning and reporting process referred to as the SRRP. During these conversations it is recommended that the liaisons embed the recommendations of this report into their strategic planning sessions to encourage the adoptions of the smart practices identified in this report.

6.3 Implementation Strategy

MSA's across the province all participate in the annual strategic planning process to ensure that the activities and interventions of the site can fall within the available budget and meet the criteria to be approved uses of funding under the MOU. During this process there is a key opportunity to leverage the relationship between each MSA and the FEL that supports them to apply the lessons learned and best practices found in this report. Despite the fact that the FEL cannot force the sites to undertake specific activities, FELs can have significant influence over the course of action undertaken at each site. The implementation strategy will leverage this relationship to achieve maximum impact.

In order to adequately prepare the FEL team to spread best practices and the recommendations of this report it is crucial to adequately train the FEL team on the findings of both the literature on physician engagement and the specific findings of this report. Secondly, it is key to co-create with the team consistent messaging to ensure that the key highlights of the report can be shared effectively with MSAs during the strategic planning process. It is further recommended that FEI undertake the recommended changes in the funding guidelines for social activities to align with the strategic planning session so that the activities that are selected during this process align with the findings of this report.

Lastly, in order to find opportunities to support structured meetings with health authority leaders, it is necessary to prepare the FEL team to undertake informational meetings with health authority leaders to share the findings and recommendations of this report to increase the potential interest in creating structured meetings with physicians. It is crucial that the FEL teamwork with both sides of the relationship to ensure that both parties see value in their collaborative activities.

7.0 Conclusion

During the course of the review it became clear that there is a significant alignment between the physician engagement literature and the reported experiences of physicians who have participated in FEI within British Columbia. A clear trend that emerges is the alignment between physician empowerment over their workplace and an increase sense of autonomy to address clinical issues with health authority leadership leads to an overall improvement in the relationship between physicians and senior leaders. In the reviewed sites there was a noted growth in the relationship between physicians and health authority leadership where the activities and interventions were aimed at addressing key issues facing physicians. An area where physicians and health authority leadership have a clear alignment is the quality of the care provided and the corresponding patient outcomes of the system.

Perhaps unsurprisingly, the sites that demonstrated growth focused a greater volume on of their efforts at collaboratively designed interventions aimed at improving this key factor. In addition, the sites that demonstrated positive growth focused their activities in the professional setting with financial compensation for non-clinical work, such as structured meetings with health authority leadership. These interventions closely align with the overall factors of engagement found within the literature. It should be noted that despite this close alignment, the small sample size of the selected sites makes the process of determining key recommendations challenging as there may be external factors that influence the relationship between physicians and health authority leadership that are not found within the data. Yet compensation for physicians to participate in health authority non-clinical work and the autonomy to self-select the activities that are important appears to make an impact on the strained and challenged relationship between physicians and health authority leaders.

Lessons Learned

During the course of this project some key lessons emerged from the analysis. The primary observation was that there is a tight connection between the physician engagement literature and the implementation of Facility Engagement in BC. The actions and policies that have emerged during the implementation, as well as the activities and interventions of the sites that were analyzed for this project, align with expected outcomes defined in the literature. Secondly, as noted by Keller et al., (2019) there can be significant instances of othering that occurs between physicians and health authority leaders, especially noted in sites where these scores declined (p.9). Sites where the senior leadership scores decline demonstrate a lack of interest in breaking down this tribal tendency and appear to prefer to stay within their groups even when engaging in social activities. It would appear that groups that engage in high levels of in group activities could be at an elevated risk for a decline in engagement and these activities could be a tool that Facility Engagement could use to identify sites at risk. Lastly, a clear lesson is to raise the awareness amongst the participants in the program that engagement does not equal agreement. By engaging with each other physicians and senior leaders can learn to identify key interests of

each party to build a better understanding that clinical care is a shared focus but also to expect that by increasing the contact between these parties you are not necessarily creating a low conflict environment. It is through improving the delivery of care for the patients in hospitals can these two groups build a relationship of trust and mutual shared interest.

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Appendix A

Richmond Hospital

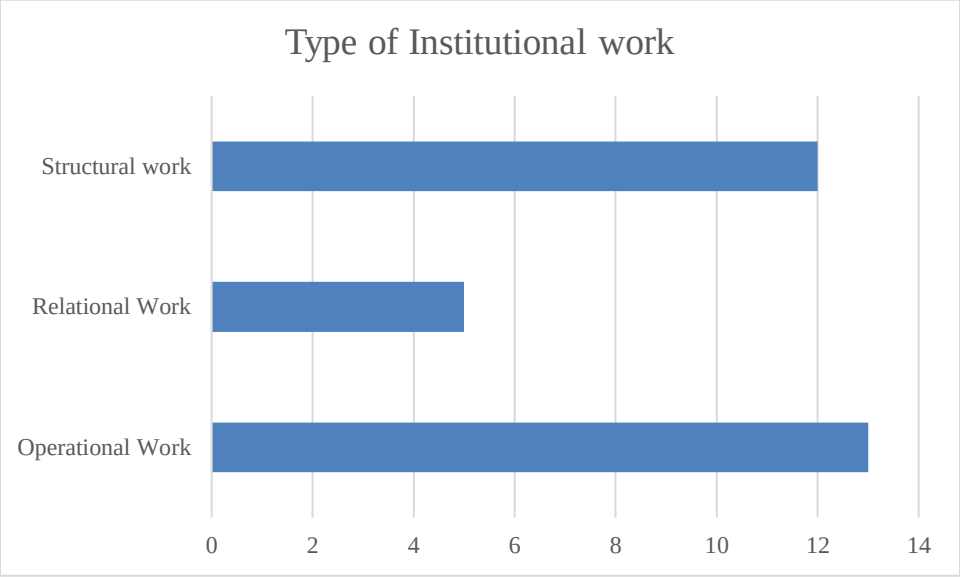

Figure 1.1: Types of Institutional Work (Richmond Hospital)

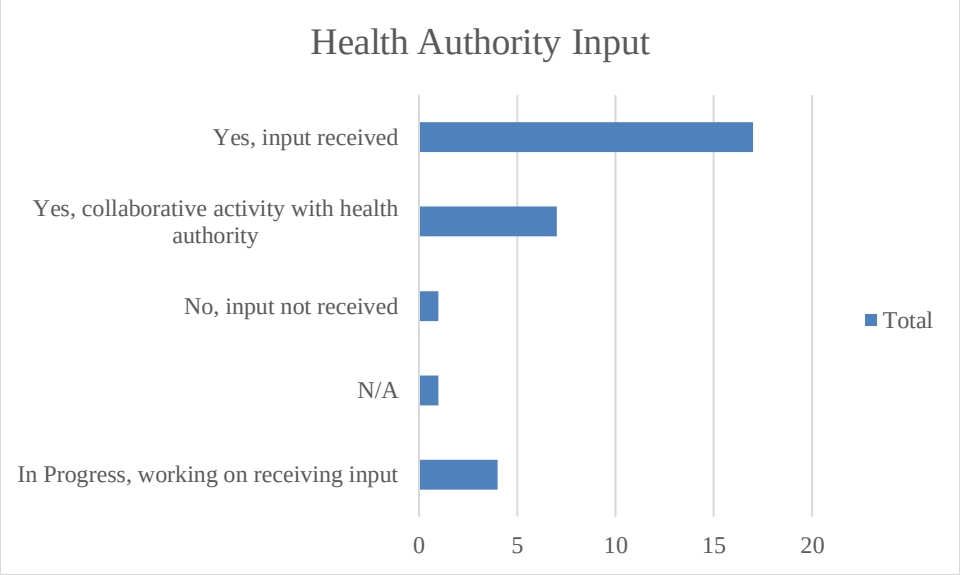

Figure 1.2: Health Authority Input (Richmond Hospital)

Appendix B

Lions Gate Hospital

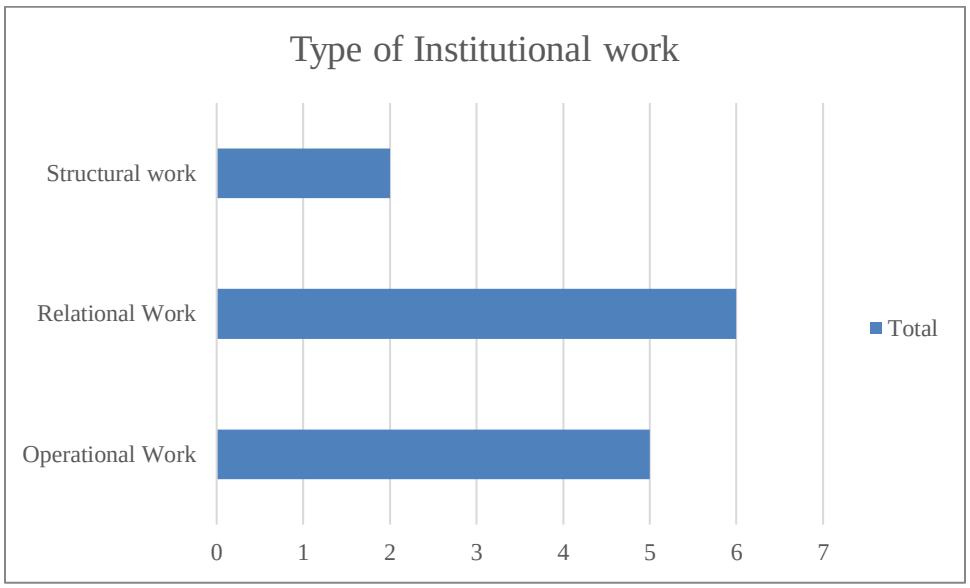

Figure 2.1: Types of Institutional Work (Lions Gate Hospital)

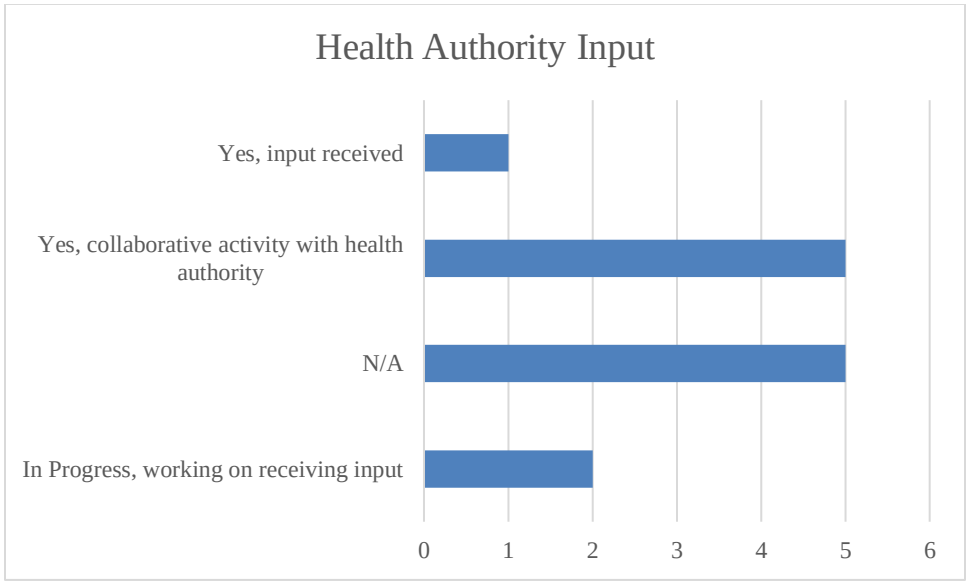

Figure 2.2: Health Authority Input (Lions Gate Hospital)

Appendix C

Shuswap Lake General Hospital

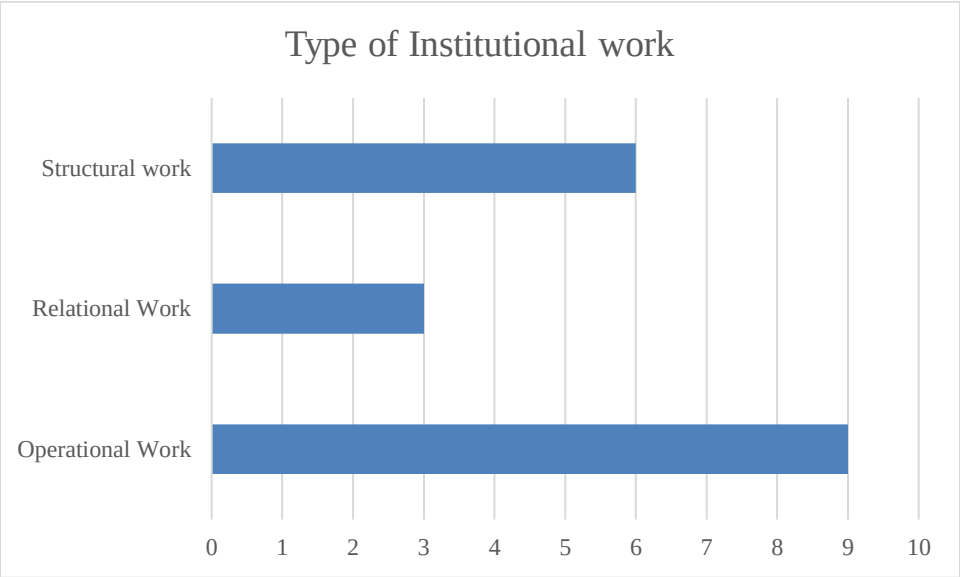

Figure 3.1: Types of Institutional Work (Shuswap Lake General Hospital)

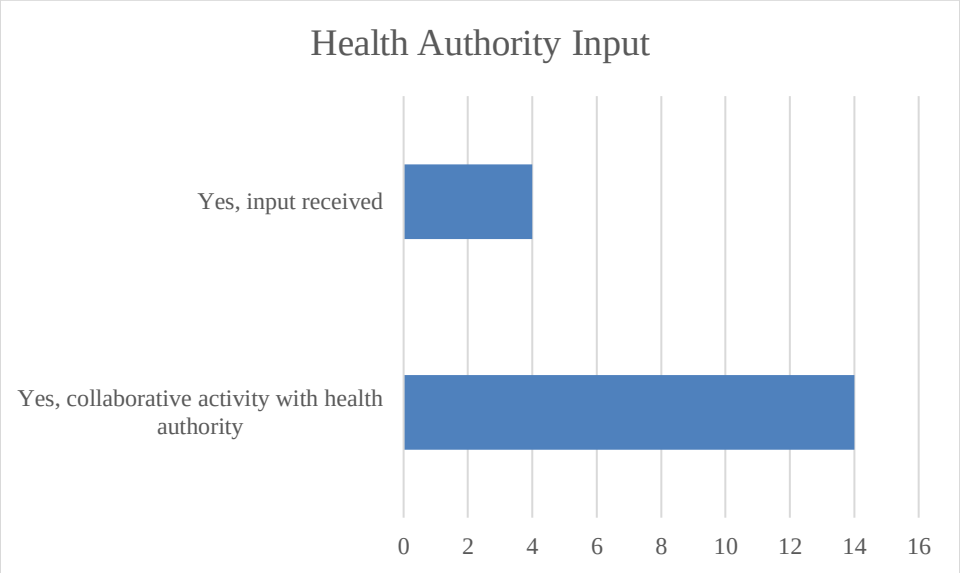

Figure 3.2: Health Authority Input (Shuswap Lake General Hospital)

Appendix D

Powell River Hospital

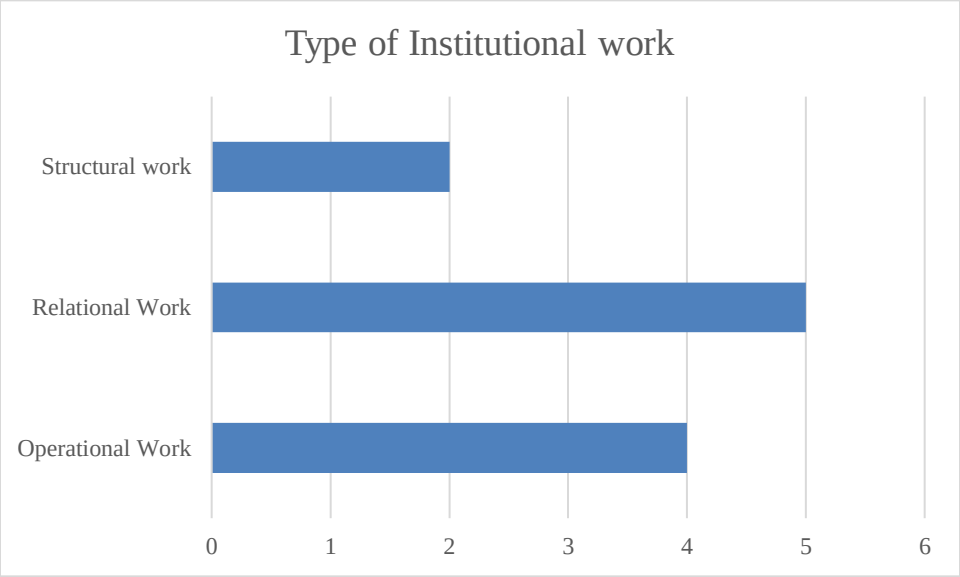

Figure 4.1: Types of Institutional Work (Powell River Hospital)

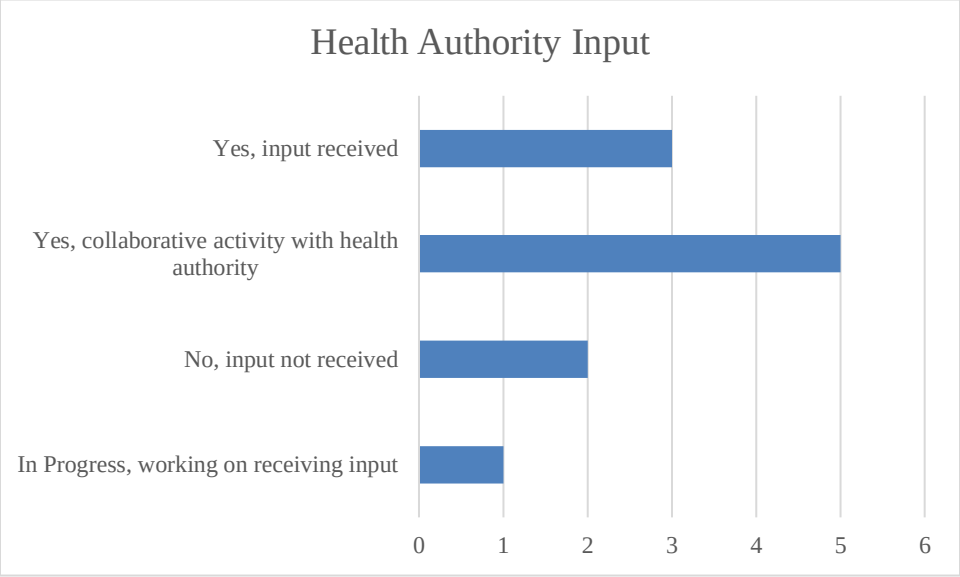

Figure 4.2: Health Authority Input (Powell River Hospital)

Appendix E

Doctors of BC 2018-19 Positive Growth Senior Leadership Scores Sites

Site Name	Percentage change	2019 Respondents	Funding Tier
Richmond Hospital	+7%	107	5
Penticton Regional Hospital	+5%	36	4
Mission Memorial Hospital	+16%	13	2
Shuswap Lake General Hospital	+9%	20	2
Creston Valley Hospital and Health Centre	+20%	13	2
G.R. Baker Memorial Hospital	+6%	6	2
Sechelt Hospital	+7%	30	2
Elk Valley Hospital	+10%	14	1.3
Lady Minto Hospital	+14%	14	1.3
South Okanagan Hospital	+6%	6	1.3

Table 1: Positive Growth in Senior Leadership Scores

Appendix F

Doctors of BC 2018-19 Negative Growth Senior Leadership Scores Sites

Site Name	Percentage change	2019 Respondents	Funding Tier
Royal Columbian Hospital	-7%	135	6
Peace Arch District Hospital	-17%	32	5
Royal Inland Hospital	-8%	72	5
Lions Gate Hospital	-10%	117	5
Delta Hospital	-11%	19	3
Kootenay Boundary Regional Hospital	-15%	38	3
Saanich Peninsula Hospital	-15%	28	3
Fort St. John	-21%	11	2
Powell River Hospital	-9%	11	2
Bulkley Valley	-17%	12	1.3
Boundary Hospital	-20%	9	1.2
Queen Victoria Hospital	-10%	5	1.2

Table 2: Negative Growth in Senior Leadership Scores

Appendix G: Facility Engagement Funding Tiers

Funding Tiers	# Acute Care Beds	Full Funding per Year	Start-Up Funding	Health Authority	Facility/Hospital
Tier 6 – *9 Facilities*					
**	301+	$500 000	$75 000	FHA	Burnaby Hospital
				PHSA	Children's and Women's Hospital and Care Centre
				IHA	Kelowna General Hospital
				VIHA	Nanaimo Regional General Hospital
				FHA	Royal Columbian & Eagle Ridge Hospitals
				VIHA	Royal Jubilee & Victoria General Hospitals
				VCH	St. Paul's and Mount Saint Joseph Hospitals
				FHA	Surrey Memorial Hospital
				VCH	Vancouver General & UBC Hospitals & GF Strong
Tier 5 – *10 Facilities*					
**	151 to 300	$400 000	$75 000	FHA	Abbotsford Regional Hospital and Cancer Centre
				PHSA	BC Cancer Agency
				FHA	Langley Memorial Hospital
				VCH	Lions Gate Hospital
				FHA	Peace Arch District Hospital
				VCH	Richmond Hospital
				FHA	Ridge Meadows Hospital and Health Care Centre
				IHA	Royal Inland Hospital
				NHA	University Hospital of Northern BC
				IHA	Vernon Jubilee Hospital
Tier 4 – *5 Facilities*					
**	101 to 150	$300 000	$75 000	FHA	Chilliwack General Hospital
				VIHA	Cowichan District Hospital

Funding Tiers	# Acute Care Beds	Full Funding per Year	Start-Up Funding	Health Authority	Facility/Hospital
				PHSA	Forensic Psychiatric Services
				VIHA	North Island Hospital Comox Valley
					(St. Joseph's Hospital)
				IHA	Penticton Regional Hospital
Tier 3 – *7 Facilities*					
**	51 to 100	$200 000	$35 000*	PHSA	BC Centre for Disease Control
				FHA	Delta Hospital
				IHA	East Kootenay Regional Hospital
				IHA	Kootenay Boundary Regional Hospital
				VIHA	North Island Hospital Campbell River
					(Campbell River District General Hospital)
				VIHA	Saanich Peninsula Hospital
				VIHA	West Coast General Hospital
Tier 2 – *13 Facilities*					
***	21 to 50	$150 000	$35 000*	IHA	Cariboo Memorial Hospital
				NHA	Dawson Creek and District Hospital
(Con't next page)				NHA	Fort St. John General Hospital
				NHA	GR Baker Memorial Hospital
				IHA	Kootenay Lake Hospital
(2)* **	21 to 50	$150 000	$35 000*	NHA	Mills Memorial Hospital
				FHA	Mission Memorial Hospital
				VIHA	Port McNeill and Port Hardy Hospitals
					(Mount Waddington)
				VCH	Powell River General Hospital

Funding Tiers	# Acute Care Beds	Full Funding per Year	Start-Up Funding	Health Authority	Facility/Hospital
				NHA	Prince Rupert Regional Hospital
				VCH	Sechelt Hospital
				IHA	Shuswap Lake General Hospital
				VCH	Squamish General Hospital
Tier 1 – *31 Facilities*					
1.3 – *8 Facilities*					
****	14 to 20	$65 000	$35 000*	IHA	100 Mile District General Hospital
				NHA	Bulkley Valley District Hospital
				IHA	Creston Valley Hospital & Health Centre
				IHA	Elk Valley Hospital
				NHA	Kitimat General Hospital
				VIHA	Lady Minto/Gulf Island Hospital
				IHA	South Okanagan General Hospital
				NHA	St. John Hospital
1.2 – *13 Facilities*					
	8 to 13	$50 000	$35 000*	VCH	Bella Coola General Hospital
				IHA	Boundary Hospital
				NHA	Fort Nelson General Hospital
				FHA	Fraser Canyon Hospital
				IHA	Golden & District Hospital
				NHA	Haida Gwaii Hospital and Health Centre
					(Queen Charlotte Islands General Hospital)
				IHA	Invermere & District Hospital
				NHA	Lakes District Hospital and Health Centre
				IHA	Nicola Valley Hospital and Health Centre
				IHA	Queen Victoria Hospital

Funding Tiers	# Acute Care Beds	Full Funding per Year	Start-Up Funding	Health Authority	Facility/Hospital
				VCH	RW Large Memorial Hospital
				VIHA	Tofino General Hospital
				NHA	Wrinch Memorial Hospital
1.1 – *10 Facilities*					
	0 to7	$35 000	$35 000*	IHA	Arrow Lakes Hospital
				NHA	Chetwynd General Hospital
				VIHA	Cormorant Island Health Centre
				IHA	Dr Helmcken Memorial Hospital
				IHA	Lillooet Hospital & Health Centre
				NHA	Mackenzie and District Hospital
				NHA	McBride and District Hospital
				NHA	Northern Haida Gwaii Hospital and Health Centre
				IHA	Princeton General Hospital
				NHA	Stuart Lake Hospital