

Evaluation Plan for the Facility Engagement Initiative for Doctors of British Columbia

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March 4, 2016

M File 46133



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Executive Summary

The Facility Engagement Initiative for Physicians (FEI) is an initiative of the Specialist Services Committee, under the terms of a Memorandum of Understanding between Doctors of BC, the six Health Authorities, and the Ministry of Health. It is designed to give facility based physicians a more meaningful voice in improving patient care and their working environment. The purpose of this evaluation is to assess the process, outcomes, and cost relative to benefit of the FEI. The knowledge generated by this study will be used for purposes of accountability, and to facilitate the success and ongoing improvement of activities that engage physicians in health care administration decision making.

This evaluation looks at the development of physician engagement in terms of both the system level consisting of the evolution of relations between the Ministry of Health, Health Authorities, Doctors of BC and local organizations representing facility-based physicians, as well as specific facility initiatives developed in the context of the FEI. An evaluation plan has been developed that assesses two primary stages: (1) the work being conducted to move interested sites to the stage of incorporation and fund transfer; and (2) the implementation and effectiveness of strategies in which funded sites prioritize and implement specific actions to increase engagement.

The key evaluation questions for Stage 1 of FEI are:

What proportion of interested sites succeeds in moving to the Fund Transfer Agreement? What are important facilitators and barriers for individual Physician Societies in moving from interest to incorporation?

What is the present state of physician engagement in facilities?

How effective were supports provided by Doctors of BC in facilitating the infrastructure development process? To what degree were Physician Societies satisfied with these supports?

What are the costs, by site, to reach the stage of signing the Fund Transfer Agreement for each FEI?

The evaluation of Stage 2 will collect data both on a province-wide basis (through the planned performance management system and a province-wide physician survey) and through approximately 10-12 detailed case studies. The case study component will employ a principle-based evaluation model. Key evaluation questions include:

To what extent have sites chosen and implemented actions that accord with the literature on what leads to successfully increased physician engagement (e.g., to what extent are structural, conceptual, operational and relational work addressed)? (Provincial)

To what extent have each of the partners been able to carry out the obligations to which they committed themselves under the Memorandum of Understanding? (Provincial)

What do provincial and regional stakeholders perceive to have been the successes, challenges, and lessons learned from the implementation of the FEI? What are the results relative to the money invested? (Provincial)

What are the total costs for each site included in the FEI? (Provincial)

What is the impact of the FEI (both in intended and unintended)? (Case Study)

Were programs implemented as intended, that is, are they consistent with the principles underlying the initiative? (Case Study)

What are the important facilitators and barriers in implementing local initiatives? (Case Study)

What are the costs of the implemented activities relative to achieved outcomes? (Case Study)

The evaluation team's overall orientation is toward maximizing the utility of the evaluation to the funder and stakeholders. Thus key decisions about the final evaluation plan will be made collaboratively. There will be on-going regular communication with Doctors of BC through a joint Evaluation Management Committee and an Evaluation Advisory Committee which will provide feedback through all major phases of the study. The evaluators will produce an interim report in Summer 2017, a final report in Fall 2018, as well as informal reports at key points throughout the implementation of the project.

Evaluation Plan for the Facility Engagement Initiative (FEI) Doctors of British Columbia

Introduction

The purpose of this evaluation is to assess the process, outcomes, and cost relative to benefit of the Facility Engagement Initiative (FEI). Key stakeholders include FEI participants, the facility engagement executive lead, Specialist Services Committee (SSC) Facility Engagement Working Group, the SSC itself (which represents Doctors of BC), Health Authorities and the BC Ministry of Health. The evaluation will provide them information that will facilitate the success and ongoing improvement of activities. The knowledge generated by this study will be used for dual purposes of accountability and decision making. It will inform the project as it continues to unfold, including the variation in needs and priorities across facilities. The results will also contribute to knowledge related to physician engagement, including best practices.

The FEI is funded by the Ministry of Health through the Specialist Services Committee under a 2014 Memorandum of Understanding between the Ministry of Health, the six provincial Health Authorities, and the Doctors of BC. The purpose of the Memorandum is to strengthen the governance and accountability of BC's health system by strengthening the relationship between Ministry and Health Authorities and physicians at provincial, regional, and local levels. The FEI is designed to give facility based physicians a meaningful voice in improving patient care and their working environment and is the first of its kind in Canada. This initiative reflects both the overall BC Ministry objective of improving physician engagement in the system and the importance placed on physician engagement in the 2015-16 Doctors of BC Strategic Plan. Funding is requested for the proposed evaluation project.

This document outlines a proposed evaluation plan for FEI that was developed with input from FEI staff. The work will be completed in three major phases: (1) Development (January – June, 2016), (2) Implementation (July 2016 – March 2018), and (3) Reporting and Dissemination (April – September 2018). This proposal reflects our current understanding of the plan guiding this initiative and the priorities for evaluation. It is subject to input from the SSC and the Evaluation Advisory Committee that will be appointed to provide feedback on all aspects of the evaluation.

Supporting Evidence

Physician leadership and physician engagement have been identified as essential elements of high-performing healthcare systems, contributing to higher scores on a range of quality indicators (Denis et al, 2013). Physician engagement and leadership refers to the role of physicians in formal executive positions and the engagement of doctors in activities “within their normal working roles [aimed at] maintaining and enhancing the performance of the organization which itself recognises this commitment in supporting and encouraging high quality care” (Spurgeon et al, 2008:214). Leadership is necessary for broader physician engagement, while engagement refers to the active interest and participation of physicians in organizational (as well as individual professional) activities.

Economic pressures and growing accountabilities for quality of care are forcing health systems to adopt a more collective approach to medical leadership and to work in a more integrated fashion with all professionals including physicians (Berenson et al, 2006; Singer and Shortell, 2011). Inadequate clinical governance, poor management and lack of clinical staff engagement have been identified as key contributing factors to failures of health care management (Dwyer, 2010).

Approaches to addressing this deficiency include the participation of doctors in managing risks and quality; the evaluation of programs or technologies at organizational or system levels; the involvement in strategic committees that influence the development of the organization; or the involvement of physicians in executive roles (Spurgeon et al., 2008). Hospital performance has been increasingly associated with medical specialists taking up tasks beyond direct patient care and developing co-operation with executive boards (Pronovost et al, 2009; Botje et al, 2014; Goodall, 2011). Recent works in the science of improvement reveal that high-performing organizations have taken a multidimensional approach within which physician leadership and engagement is part of a broader set of strategies (Baker and Denis, 2011; Spurgeon et al, 2011; Bate et al, 2008).

Description of Facility Engagement Initiative

The FEI, officially launched January 1, 2015, has been designed to give facility-based physicians a greater and more meaningful voice in collaborating to improve both patient care and their own working environments which will lead to physician engagement, and over the long term, result in a higher performing healthcare system. The initiative aims to provide opportunities for physicians and Health Authorities to identify and work collaboratively on issues affecting medical staff. They will engage in locally prioritized actions as a means to strengthen engagement, participation, and collaboration.

The logic model shown in Appendix B (provided by FEI staff) shows the general intervention approach. Desired outcomes include increased communication, physician participation, cohesion amongst facility staff, and improved communication with health authority administrators that will be reflected at both a local and provincial level. It is expected that increasing engagement, communication and participation of physicians in decision making will result in better health care and lower health care costs. We expect that the logic model, and underlying program theory, will continue to evolve as lessons are uncovered during the course of the evaluation.

It is important to note that this intervention approach uses a developmental perspective that takes into consideration a facility's status and progression through steps that lead to a functioning and sustainable Physician Society. This individualized approach means that the program plan and the evaluation must take into consideration variation in the stages (and steps) represented by facilities. In this type of approach there is no definitive starting and stopping point to stages and there will be considerable overlap in implementing the stages.

Based on the documents provided and our conversations with staff, at this point in time, there appear to be two main stages in this initiative:

- (1) **Infrastructure development** focuses on supporting facilities that lead to the incorporation of Physician Societies (or similar agreed upon structure) that will use resources to implement strategies, and the signing of the Fund Transfer Agreement. The Physician Societies are the corner stone of this initiative and are the key channel through which the initiative will be delivered (See Readiness Assessment Checklist p.11).
- (2) **Implementation of local strategies** by Physician Societies who will develop and implement locally relevant actions that will enhance physician engagement and leadership in decisions related to patient care and their work environment.

The first stage of FEI focuses on ensuring the infrastructure needed for successful implementation of locally driven initiatives is in place. This involves working to establish organizations that have the resources and support needed to launch initiatives that will promote physician engagement and build stronger relationships with health authority administration. The framework that has been developed by FEI staff involves a series of practical steps that will bring all the facilities being targeted to the same level of readiness to develop, implement, and sustain an initiative that meets their local needs. Appendix C shows the “Steps to Participate” which are supported by FEI staff. Our evaluation plan will use these steps to track progress and frame results.

In the second stage, FEI focuses on delivery of actions in specific target areas, identified in the Memorandum of Understanding, that will guide Physician Societies. For example, Medical Staff Bylaws and Rules, the working environment for physicians, issues of importance to the medical staff, and quality and cost improvement opportunities. In addition, a long term goal of FEI is to increasing physician engagement and participation at two main levels: (1) a system level addressing the evolution of relations between (1) the Ministry of Health, Health Authorities, Doctors of BC and local organizations representing facility-based physicians, and (2) specific facility initiatives developed and implemented at the local level in the context of the FEI. Thus, Stage 2 of the evaluation project will by necessity have a systems level focus and a facility level focus.

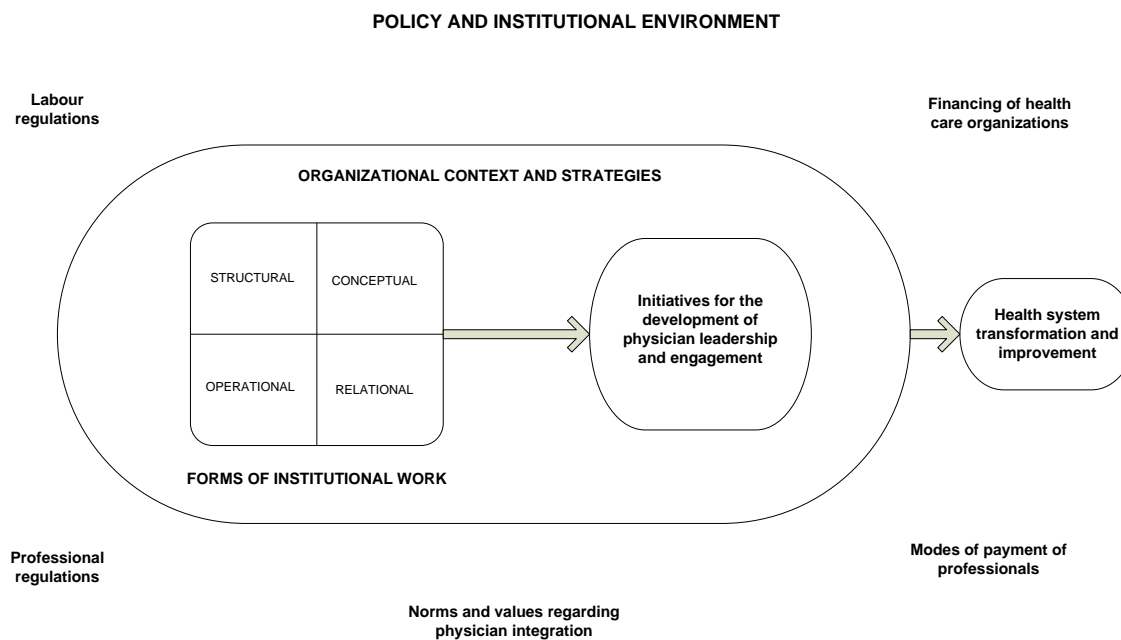
At this second stage, we propose using the past work of Co-Investigator Dr. Jean-Louis Denis on implementing reforms in health care systems to understand the development and impact of local facility-initiatives (Cloutier, Denis, Langley and Lamothe, 2015) (see Figure 1). The model proposed by Denis and colleagues identifies four types of institutional work that support health system transformation, described below:

1. **Structural work** refers to efforts to establish formalized roles, rule systems, organizing principles and resource allocation models that support an institutional template. Structural work could refer to such elements as the creation of formal positions for physician managers, the decision-making process for physician representatives, and economic incentives.
2. **Conceptual work** refers to efforts to establish and communicate new belief systems, norms and interpretive schemes consistent with a given change. Conceptual work may include such elements as vision statements that incorporate physician engagement and leadership as a key strategic asset for health system improvement.
3. **Operational work** refers to efforts to implement concrete initiatives and actions that are believed to be compatible with the new institutional template. In the current proposal, operational work refers to day-to-day activities and initiatives to develop and sustain physician leadership roles and capacity within the organization like training programs, team development at executive and clinical levels and quality improvement initiatives.
4. **Relational work** refers to effort aimed at building linkages, trust, and collaboration between the medical profession and the managerial and policy worlds. Relational work is a key ingredient contributing to the success of the other forms of institutional work.

Our evaluation plan presumes, on the basis of existing literature, that organizations that are successful in developing and sustaining physician engagement for improvement must make investments in these four categories of institutional work. Investment in institutional work is likely to generate or reveal contradictions that require further investment to support the development of physician leadership and engagement. Efforts by actors to implement the new institutional templates (i.e., the FEI initiative) will

have impact on changes in the policy and institutional environment. The capacity of an organization to invest in the various forms of institutional work is also influenced by external factors in the policy and institutional environment (see Figure 1).

Figure 1: Conceptual framework for the analysis of the “Facility Engagement Initiative for Physicians”



Evaluation Approach/Design

The evaluation will be organized around the stages comprising the FEI. Evaluation of the first stage focuses on the identified outputs, facilitators, and barriers of working with existing MSAs and establishing new Physician Societies (or a similar local structure) which form the basic infrastructure for the initiative. A mixed-methods approach using administrative data and selected interviews will be used to determine if the aims of infrastructure development are being achieved, and to capture lessons learned that may generalize to emerging, interested, or active facilities, as well as other similar initiatives.

During the second stage the evaluation will focus on the initiatives implemented by the Physician Societies and will address questions related to implementation and outcomes. There are two sets of evaluation questions for this stage. First are **provincial** or province-wide questions. These questions focus on all Physician Societies in every Health Authority and will provide an indication of provincial level change and costs relative to benefit. Quantitative data for these questions will be accessed through project management software being developed by Bayleaf Consultants (i.e., Physician Application, Web-based Project Management System, and Accounting Application), as well as a provincial level survey. This set also includes questions related to the roles, actions and perceptions of the Memorandum of Understanding partners.

The second set of questions will be embedded in a detailed **case studies** approach and answered using mixed methods. In this component of the study we will identify and study Physician Societies consistent with an approach called “Principle-focused Evaluation” (Patton, 2015). Established principles drawn from the literature on physician engagement will give direction for local activities/projects and allow for common evaluation questions to be asked. This evaluation model is ideal for complex interventions using a bottom-up approach in which different organizations prioritize and implement actions that uniquely addresses their needs.

As a first step toward developing an appropriate evaluation framework, we have identified a draft set of “driving principles” that can be conceived as a basis for Stage 2 of the FEI. This starting point is provided in Appendix D, and will be further developed in collaboration with Doctors of BC and other key stakeholders as appropriate.

Each facility-based project would seek to accomplish its own engagement-related objectives in ways according with these principles through a variety of intervention approaches, identified by them and suited to their context. Thus, the principles (1) are designed to provide direction (not a prescription), (2) are based on evidence about how to engender engagement, (3) point to outcomes, and (4) are feasible to evaluate. Once solidified, they will be used to identify a set of intended improvements to physician engagement (indicators), for example, governance/decision-making structures that represent doctors within HA facilities, increased sense of trust and work satisfaction, collaboration/participation in key areas, increased sense of alignment by physicians and health authority personnel, enhanced mutual accountability. We will draw as a starting point from previous work completed by Doctors of BC to identify indicators of success.

There is a commitment to align this evaluation study with the strategic evaluation framework of the Specialist Services Committee.

Evaluation Questions

The evaluation of Stage 1, Infrastructure Development will collect data on a province-wide basis (through the planned performance management system, interviews, and surveys). We propose the following key questions for this component of the evaluation:

- a. What proportion of interested sites succeeds in moving to incorporation? What are important facilitators and barriers for individual Physician Societies in moving from interest to incorporation? (Provincial)
- b. How effective were supports provided by Doctors of BC in facilitating the infrastructure development process? To what degree were Physician Societies satisfied with these supports? (Provincial)
- c. Describe physician engagement at present.
- d. What are the costs, by site, to reach the stage of incorporation for each FEI? (Provincial)

To evaluate Stage 2, Implementation of Local Strategies, we will collect data both on a province-wide basis (through the planned performance management system and a physician survey) and through

approximately 10-12 detailed case studies. The case study component will employ a principle-based evaluation model.

- a. To what extent have sites chosen and implemented actions that accord with the literature on what leads to successfully increased physician engagement (e.g., to what extent are structural, conceptual, operational and relational work addressed)? (Provincial)
- b. To what extent have each of the partners been able to carry out the obligations to which they committed themselves under the Memorandum of Understanding? (Provincial)
- c. What do provincial and regional stakeholders perceive to have been the successes, challenges, and lessons learned from the implementation of the FEI? What are the results relative to the money invested? (Provincial)
- d. What are the total costs for each site included in the FEI? (Provincial)
- e. What is the impact of the FEI (both in intended and unintended)? (Case Study)
- f. Where programs implemented as intended, that is, are they consistent with the principles underlying the initiative? (Case Study)
- g. What are the important facilitators and barriers in implementing local initiatives? (Case Study)
- h. What are the costs of the implemented activities relative to achieved outcomes? (Case Study)

An Evaluation Matrix (Appendix E) outlines additional supplemental evaluation questions in each area, along with proposed data collection methods, keyed to the Project timeline. We have also provided examples of secondary evaluation questions which will be negotiated with the Advisory Committee.

Data Collection

Data for the evaluation of Stage 1 -- the steps involved in moving sites from interest to incorporation -- will be collected from all Physician Societies for which funds are approved as of the end of March 2017. Data collection will begin in July 2016 and continue through June 2017.

We propose two means of collecting data at local sites. First, we will carry out individual interviews with 1-3 key informants at each site, individuals who have played major roles in leading the effort to join the FEI and incorporate the local site. These individuals will be able to describe the processes used, discuss the relevant background and context for the initiative, and comment upon the value of supports offered for the incorporation process by Doctors of BC staff. Items from the 'Readiness Assessment' (see Sidebar) can be adapted for this purpose. Second, we will review relevant documents (e.g., local Physician Society minutes, project proposals, correspondence, etc.) for additional insight into the local process. Third, we will interview Doctors of BC staff who provide supports to local sites through Stage 1, to understand their experiences and identify suggestions for improvement.

Readiness Assessment Checklist (Work in Progress)

1. Capacity for accepting funding
 - a. Incorporated as a Physician Society – Certificate of incorporation
 - b. Post-Incorporation Checklist
 - c. Liability insurance; Accountant/Bookkeeper; Financial Accounts; CRA Registration & Filing requirements; Records
2. Capacity for managing funding
 - a. Accept the use of standardized general ledger
 - b. Budget – details of which can vary - according to ledger, plan, etc. – we could develop a customizable template
 - c. Plan (strategic, work, etc.) – details of which can vary - customizable template – 1 page, 20 minutes – already have sample goals, etc.; how is group going to work together
 - d. Either have in place or a plan in place for a dedicated human resource (admin, manager, physician, etc.) responsible for managing funding
3. Capacity for reporting on expenditures
 - a. Either sign up for Bayleaf Business Solution or can prove that they have sourced a solution that does the exact same thing as Bayleaf
4. Demonstrate a representative composition
 - a. Membership list of privileged physicians (renewed once a year prior to notice being sent out for AGM of Physician Society)
 - b. At least one seat on Working Group available for a representative to be appointed by each of the departments and divisions
 - c. Made the effort to have a representative composition - Process of invitation?
5. Governance and Decision making structure
 - a. Terms of Reference for Working Group (or other decided-upon structure for representative body)
6. Effectively representing members' interests
 - a. Motion has been passed at an MSA meeting that there has been a representative composition and a governance and decision making structure developed
7. Work closely with the Health Authority
 - a. Joint letter of intent
 - b. Meetings - Phone, face-to-face, email
8. Developing a representative structure
9. To facilitate effective interactions with HA operational leaders
 - a. Title of Health Authority point person for Facility Engagement initiative

Stage 2 data will be collected in three ways. First, we will access and analyze data from the project management system being developed by Bayleaf Consultants. Second, we will access and analyze data from the planned province-wide physician survey, which was committed to by the FEI partners (Doctors of BC, Ministry of Health, Health Authorities) in the 2014 Memorandum of Understanding. Third, we will carry out detailed case studies of approximately 10-12 sites around the province.

Our current understanding of the project management system is that it will contain:

- A physician app that will be linked to “session payment” that identifies the different activities related to FEI for which physicians receive reimbursement. Physicians may be able to comment on whether they perceived value in each activity and/or if it contributed to their increased engagement.

- A web project management system to track implementation at the local level: where they are with their plan, what has been implemented, and what is planned for the future. This may contain an “end of activity” survey disseminated electronically through the web-management system.
- An accounting component including specific codes for different types of FEI activities.

These software products will enable us to describe on a province-wide basis the types of activities undertaken and the associated costs.

Details of the physician survey will be developed during the startup period of the evaluation. It is our current understanding that it will contain a range of questions related to physician satisfaction, potentially based upon the Accreditation Canada Worklife Pulse Tool (see Box). Ideally we will be able to compare this data to a baseline of similar questions asked prior to or at the beginning of the FEI.

Questions from the Accreditation Canada - Physician Worklife Pulse Tool
Possible question for inclusion in Doctors of BC Member Survey

1. I have meaningful input into changes affecting my practice environment.
2. I have adequate opportunities to improve patient care, quality, and safety.
3. I have access to the facilities, equipment, and other resources I require to meet patients' needs.
4. This organization values physicians' contributions.
5. I feel I belong to a collaborative, patient-centred team/unit.
6. Senior leaders seek physicians' input when setting the organization's goals.
7. Senior leaders communicate the organization's plans to physicians in a clear and timely way.
8. Senior leaders' decision-making is transparent to physicians.
9. How satisfied are you with this organization as a place to practice medicine.?

Based on the conceptual framework described in section 3 of the proposal, we will develop case studies on the process of implementation of local engagement initiatives and their implications for sustainability. Case studies will be conducted following precepts from Patton (2015) and Yin (2009). By February 2017, approximately 10-12 Physician Societies will be selected for more detailed case study. Sites will be chosen from among those which have as of that date received funds and prioritized and implemented local strategies to increase physician engagement. The team will select information-rich sites, with attention to representing differences on a number of criteria (see Box next page). The final criteria and site selection will be decided in conjunction with the Evaluation Management Committee with input from the Advisory Committee. (See section 9 for a description of these committees.)

Potential Case Study Site Selection Criteria	Rationale
Location: Health Authority	Provides geographic coverage for the province. As the HAs are partners in the project, they would likely want to see some cases in the evaluation which speak to their context. Health Authority might be a proxy for other variables, such as the nature of past physician-administration relations, or institutional relationships between individual hospitals and the HA Executive that would be more difficult to explicitly sample for.
Hospital size/urban-rural-remote	These two items likely overlap substantially. We can imagine that many of the challenges of increasing physician engagement would be quite different in very large hospitals than in small ones.
Type of Project/Scope	We anticipate that sites will choose different types of projects (e.g., to engage physicians in specific quality improvement activities, or in the larger governance of the site as a whole). We can anticipate that different types of projects will face different challenges, and will need different measures of success.
Completion	It would be possible to expand case study selection to include sites where Physician Societies could not be formed, or which were unable or opted not to apply to the initiative. Barriers in this case might be different or more pronounced.

In each case study site, 2-4 key members of the Physician Society will be interviewed. They will be able to describe the activities undertaken, perceived successes, and challenges or barriers identified. We also propose to conduct a focus group(s) that would gather input from the larger physician community at each site. We will consider, subject to feasibility, the use of brief instruments, such as the Medical Engagement Scale (Spurgeon, Barwell and Mazelan, 2008) or similar, as part of this data collection. We will also interview local hospital administrators, to obtain their perceptions and compare these with those of the physicians. Relevant documents (e.g., project plans) will be reviewed.

The two pilot sites (Lions Gate and Prince George), which have been incorporated and already provided start-up funds, will provide an opportunity to examine early wins and anticipate facilitators and barriers that might be relevant to other sites. These sites will also be useful in testing the approach and measures that will be applied to evaluate the remaining sites.

Data Analysis

Mixed method analysis is based on a view that converging data from multiple sources and methods can shed light on clearly- identified questions and provide confidence in findings where no single method would be sufficient (Cresswell, 2014). As described above and in Appendix E, the following data collection methods are used: for Stage 1, individual interviews, document review, and extraction of information from the planned web-based project management system; for Stage 2, individual and group interviews (i.e., focus group), document review, extraction of data from the project management system, and a province-wide physician survey. For systems-level evaluation questions, we will employ a combination of interviews and document review. Our approach to analysis of these materials is summarized below.

Interviews: Interviews will be audio-recorded and transcribed, then coded using open coding in inductive thematic analysis to identify themes. Recurring themes will be considered in relation to the four theoretical aspects of the intervention: structural, conceptual, operational and relational. The primary objective of the analysis will be to provide a comprehensive description of the range of activities and the experiences and perceptions of participants. Counting the number of participants who report similar themes will provide a means of quantifying the extent to which issues are shared across contexts.

Document review and analysis: Analysis of available documentation on developing, promoting and planning FEI and Physician Society action will provide face-value evidence of planning direction. It will also provide a valuable perspective on the focus and priorities of the FEI as it evolves from conception to implementation and execution. Documents will be assembled into a database that can be systematically searched for evidence of emphasis, assumptions, or principles that are either explicit or implicit and to reveal the extent to which documented planning appears to be addressing the structural, conceptual, operational and relational aspects of the intervention. Cross sectional analyses of accumulating FEI documents (at time points) will also provide a means of tracking progress in different health authorities and Physician Society planning.

Quantitative Data from Surveys, Project Management System, including costs: Data obtained from these sources will be analyzed quantitatively using descriptive analysis to provide estimations of the frequency of events, practices, expenditure or engagement ratings in the population and to investigate the relationships between these variables. Aggregated survey data can also be used with similarly aggregated administrative and monitoring data to examine correlations at the level of Physician Societies or Health authorities. Cost data will be assessed in light of perceived engagement outcomes using a standard 'balance sheet' approach.

Communication, Reporting, and Deliverables

In this section we provide an overview of our approach to supporting communication in ways that will enhance the use of evaluation—use being one of the most important criteria for determining the quality of an evaluation. We start with the premise that evaluations should be planned and conducted in ways that support and enhance the use of both the findings and the process to inform decisions and improve the program. This is consistent with “utilization-focused evaluation”, one of the most widely used practice models in evaluation (Patton, 2012).

We know that the most influential factors related to evaluation use are: (1) stakeholder involvement (e.g., quality of communication, commitment, knowing and understanding findings), (2) evaluation implementation (e.g., quality of evaluation approach, quality of communication, timeliness of reports, and evaluator competence), and (3) organizational context (e.g., organizational role of user, commitment, and political climate) (Johnson et al., 2009).

Communication is key, and to support the development of strong communication lines between FEI decision-makers and the UBC Evaluation Team, we are using a participatory approach. In developing this proposal, we have worked with FEI staff to understand the initiative, the context in which it is operating, and the priorities for the evaluation. While the basic approach and key building blocks for the evaluation are detailed in this plan and will guide the study, we also envision this proposal as a “living document” that will be responsive to the emerging needs of the project. We view this as an ongoing and emergent process throughout every stage of the implementation from identifying questions to interpreting and disseminating findings.

We are committed to working collaboratively with Doctors of BC staff at all stages of the evaluation and to involve them in making decisions about the design, implementation, and dissemination of the results as partners. We welcome participation and co-authorship on any publications that result from this project. We will follow the scientific guidelines for authorship by the International Committee of Medical Journal Editors which include: (1) Substantial contributions to the conception or design of the

work; or the acquisition, analysis, or interpretation of data for the work; and (2) Drafting the work or revising it critically for important intellectual content; and (3) Final approval of the version to be published; and (4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

(<http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>)

The UBC Evaluation Team will meet with the FEI Management Team on a quarterly basis to report on progress, discuss emerging issues, and consider adaptations to the evaluation plan if needed. The FEI Management and UBC Evaluation teams will jointly agree upon the evaluation framework and plan at the beginning of the contract; the UBC Evaluation Team will provide an interim report at the half-way point and a final evaluation report in March 2018.

In addition to the mid-term and final reports, there will be ongoing communication at all key points and informal updates on a monthly basis. In addition to working with FEI staff, we anticipate that the Advisory Committee, the membership being jointly agreed upon by the FEI Management Team and the UBC Evaluation Team, will play a key role in providing feedback regarding the processes, measures, interpretation, and recommendations emanating from reports. The timeline provided in Appendix F details the estimated timing of all deliverables; note that this is subject to change based on project needs. Some of the details influencing the communication plan and remaining to be discussed include: identification of timing for interim products so they coincide with the needs of the project; who will be responsible for implementing recommendations; and other ways, unique to Doctors of BC and the Special Services Committee, in which the UBC Evaluation Team can support use.

Project Management

Roles

The two co-Principal Investigators (Drs. Lovato and Mitton) will oversee the project and will meet at a minimum quarterly with the Facility Engagement Evaluation Management Team or EMC (consisting of the two Co-PIs and the two leads from the Doctors of BC). The Co-Investigator (Dr. Denis) will provide input into the conceptual framing of the evaluation and will assist other members of the team in data analysis and interpretation. Co-Principal Investigator, Dr. Chris Lovato, and one Doctors of BC Project staff will be key contacts and will work collaboratively to support optimal communication, input and information exchange throughout the project. The Co-PIs will supervise the Project Coordinator (Shaw) and Research Coordinator (Smith). A Research Assistant will be utilized on a part time basis under the direction of the Research Coordinator. Project administration will be located in Vancouver at the Centre for Clinical Epidemiology & Evaluation (C2E2). The Co-PIs and project staff will collaboratively conduct data collection; a methods consultant will be utilized to provide expert content input related to the analysis of key outcome variables.

The Co-PIs will liaise on an on-going basis with an Evaluation Advisory Committee, to be struck jointly by the UBC Evaluation Team and the Doctors of BC. The purpose of the Advisory Committee is to provide advice and feedback to the Co-PIs and will meet quarterly throughout the project. The Advisory Committee will have representation from Doctors of BC (up to 4 members including the two project leads), at least two additional physician representatives, health authorities (up to 6 members), Ministry of Health (up to 1 member) and one other university-based academic. In the unlikely event that the UBC

research team and Advisory Committee cannot find common ground on a specific issue, the Facility Engagement Evaluation Management Team consisting of the two Co-PIs and two project leads from the Doctors of BC will meet independently to come to a resolution and final decision on the given issue.

A summary of key project stages is provided below; a more detailed timeline is found in Appendix F. This timeline is subject to change, particularly for Stage 2, and is contingent upon the timing of Physician Society initiatives at the local level.

Development (January-June 2016)

A Project Coordinator will undertake the logistical work of setting up the evaluation. The UBC Evaluation Team and the Advisory Committee (to be struck) will agree upon the final framework and plan for the evaluation. Necessary data collection tools will be developed and pilot tested. We will use the currently funded pilot sites (Prince George and Lions Gate) to pilot test the methods proposed. Ethics approval will be obtained from the UBC Behavioural Research Ethics Board; this will provide additional verification of the scientific content of the proposed evaluation, and will facilitate future publication of peer-reviewed manuscripts in accordance with pre-set guidelines and agreement with the Doctors of BC.

Implementation (July 2016-March 2018)

Data collection for the evaluation will begin between July 2016 and June 2017; consequently, data will be gathered at all sites for which funds are approved as of the end of March 2017. For evaluation of Physician Society initiatives (Stage 2), we will conduct in-depth case studies, as well as conduct analysis of data from the provincial performance management system, and the province-wide survey. Approximately 10-12 Physician Societies will be selected for case study by February 2017; data will be collected between January and December 2017. We will draw upon data from a survey of physicians conducted by Doctors of BC, which will contain several items related to physician engagement.

Reporting and Dissemination (April-September 2018)

Members of the evaluation team will be available during this period to present findings to the stakeholders, answer questions, and collaborate in developing recommendations for the FEI going forward. A plan for disseminating results will be developed and agreed upon by July 2016 with input from the Evaluation Advisory Committee.

Evaluation Team

Dr. Chris Lovato (Co-Principal Investigator) is a Professor in the School of Population and Public Health in the Faculty of Medicine, UBC. She will oversee conceptual development of the evaluation approach and methods. She will serve as the primary liaison between Doctors of BC and the evaluation team on all matters related to the implementation of the evaluation. Dr. Lovato's primary areas of expertise are in program evaluation, population health and health promotion. Her research has focused on evaluating the impact of health programs and policies, particularly in the areas of cancer prevention and health services. She is currently conducting research to evaluate the impact of medical school initiatives implemented in response to health care professional shortages in rural, remote and northern regions of Canada. She is an active member of the Canadian Evaluation Society and the American Evaluation Association and is serving as co-chair of the Canadian Evaluation Society's 2017 conference in

Vancouver. She was founding director of the UBC Faculty of Medicine Evaluation Studies Unit and served in that capacity from 2008 to 2015. Dr. Lovato teaches graduate level evaluation courses at UBC and has extensive experience in working with government and nongovernment agencies as an external evaluator.

Dr. Craig Mitton (Co-Principal Investigator) is a Senior Scientist at the Centre for Clinical Epidemiology and Evaluation and a Professor in the School of Population and Public Health in the Faculty of Medicine at UBC. He will oversee conceptual development and implementation of the economic evaluation and participate in data analysis, interpretation and write-up. Dr. Mitton held a Michael Smith Foundation for Health Research Scholar Award from 2006-2012 and from 2005-2009 was at UBC Okanagan where he held a Canada Research Chair in Health Care Priority Setting. The focus of his research is in the application of health economics to impact real-world decision making in health organizations. He is a member of the International Society of Priorities in Health Care and co-chaired the Society's 2012 conference in Vancouver. He has published a book entitled *The Priority Setting Toolkit: A Guide to the Use of Economics in Health Care Decision Making* and has authored or co-authored over 120 peer reviewed publications. He has presented internationally on health economics topics in many different forums and is widely recognized as a leader in the field of health care priority setting.

Dr. Jean-Louis Denis (Co-Investigator) is Full Professor at the École Nationale d'Administration Publique (ÉNAP) and holds a Canada Research Chair (Tier I) on governance and transformation of health care organizations and systems. He is a visiting professor at the Department of Management, King's College London. Before joining ÉNAP, he was full professor of health care management and director of the Research Institute of Public Health at the Department of Health Administration, Université de Montreal. He was the lead principal investigator of a Canadian Institutes of Health Research team grant on Health system reconfiguration (2008-2013). Between 2000-2010 he held a CHSRF/CIHR Chair on health system transformation and governance. His current research looks at integration of care and services, health care reforms and health system transformation, medical compensation and leadership, clinical governance, and the role of scientific evidence in the adoption and implementation of clinical and managerial innovations. In recognition of his contribution to the field of health policy and management, he was nominated member of the Academy of Social Sciences of the Royal Society of Canada in 2002 and fellow of the Canadian Academy of Health Sciences in 2007. He was chair of the advisory board of CIHR's Institute of Health Services and Policy Research (2009-2012). From 2003 to 2007, he was the founding academic coordinator of the FORCES/EXTRA initiative, a training program which aims at developing Canadian health managers' competencies in research use. Recent papers have been published in *Journal of Health Politics, Policy and Law*; *Organization Science*; *Academy of Management Annals*; *Milbank Quarterly*; *Administration and Society*; *Implementation Science*; and the *Journal of Public Administration Research and Theory*.

Graham Shaw (Project Coordinator) is a PhD Candidate at UBC currently conducting case study research about evidence use in policy to support healthy childhood development. Prior to enrolling with UBC, he worked as a registered psychologist in Australia for 10 years. During this time he participated in research, program planning, service delivery and evaluation in programs with the Queensland State Ambulance Service, Corrections, Education, and The Department of Communities. He managed a family counselling service (1999-2003) and was project manager of a three-year research project at the University of Queensland (2003-2006) that investigated the capacity of primary schools to contribute to increased resilience in children. He has worked with Dr Lovato since 2013 in the delivery of a course in program planning and evaluation for graduate students at UBC's School of Population and Public Health.

Neale Smith (Research Coordinator) is a member of the Centre for Clinical Epidemiology, Vancouver Coastal Health Research Institute, and an Adjunct Assistant Professor in the University of Alberta School of Public Health. He is a social scientist by training, with Masters' degrees in Political Science and Urban & Regional Planning, and extensive experience with qualitative research methods. He worked for eight years as a Research/Evaluation specialist with the former David Thompson Health Region in Alberta, providing support to public health staff in program planning and evaluation. He has been principal investigator on research grants from Health Canada and the Alberta Heritage Foundation for Medical Research, and has lead or co-lead evaluation projects for public health programs in Vancouver Coastal Health Authority and Interior Health Authority. He has been a member of both the Canadian and American Evaluation associations since 1997, and has published evaluation-related research in the *Canadian Journal of Program Evaluation*, and *Journal of Health Organization and Management*, along with 40+ additional peer-reviewed publications.

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