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Communicating Effectively with Vaccine Hesitant Patients

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Communicating Effectively with Vaccine-Hesitant Patients

by

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Abstract

Vaccine hesitancy is a multifaceted and complex public health issue, and a plethora of research has been conducted on patients' vaccine knowledge, attitudes, and beliefs that contribute to decreased public confidence in vaccines which then decreases vaccine uptake, which ultimately has resulted in an increase of vaccine-preventable disease outbreaks (for example, measles). Research also illustrates that health care providers (HCP) are patients' primary source of vaccination information and that HCPs who can communicate effectively with these patients are more likely to encourage adherence to medical advice and the adoption of preventative health behaviours, such as vaccination. Unfortunately, the communication training resources for HCPs are limited and conflicting, and thus, there is no communication training plan for immunization HCPs at a public health unit in Ontario. This OIP presents a pathway to develop and implement a training plan for HCPs to learn motivational interviewing (MI) and presumptive language so they can communicate effectively with vaccine-hesitant patients. By demonstrating Leader-Member Exchange (LMX) and Servant Leadership behaviours encompassed in public health leadership practice, the author combines the ADKAR Model of Change and Kotter's Eight Stage Change Process, as well as utilizes Duck's Five Stage Change Curve to manage the inevitable emotions that affect the change process, to guide the pathway in an effort to decrease vaccine hesitancy in a community and improve overall vaccine coverage rates.

Key words: vaccine hesitancy, health care providers (HCP), motivational interviewing (MI), presumptive language, problem-based learning, public health

Executive Summary

Vaccine hesitancy is a multifaceted and complex public health issue with online and social media misinformation, and lack of knowledge about diseases and vaccines as the main contributing factors to its escalating trend. Fortunately, research illustrates that health care providers (HCP) continue to be patients' primary source of vaccination information and that HCPs who can communicate effectively with vaccine-hesitant patients have a greater effect on improving their confidence in vaccination and supporting them in vaccinating themselves and their children. Communicating effectively means that HCPs listen, empathize, and educate patients, helping them sift through the fiction and facts related to vaccines; however, the resources available to train HCPs in communicating effectively are limited and have conflicting methodologies. Ergo, there is no communication training for Immunization HCPs at an Ontario public health unit (PHU).

This OIP provides an evidenced-based pathway to address the organizational problem of practice (PoP): *What training is needed to ensure HCPs are capable to communicate effectively with vaccine-hesitant patients*. The focus is on building capacity and changing behaviour in HCPs by developing and implementing a training plan to learn motivational interviewing (MI) and presumptive language using PBL activities (developing case scenarios and role playing) so they can communicate effectively with vaccine-hesitant patients in an effort to decrease patient vaccine hesitancy and improve overall vaccine coverage rates in the public health unit's (PHU) community.

This OIP is divided into three chapters. Chapter 1 provides context for the reader by explaining the organizational context, including the statutory provisions that guide public health practice in Ontario. Focusing on one of the 35 PHUs in the province, the author uses a P.E.S.T

Analysis to uncover the external contextual factors and Bolman and Deal's (2013) Four Frame Model to uncover the internal contextual factors that contribute to the PoP. Five change drivers are identified that will assist the author in moving the change forward, supported by the philosophical underpinning of the Constructivist paradigm, and Leader-Member Exchange (LMX) and Servant Leadership behaviours encompassed in public health leadership practices. Additionally, the author presents the ADKAR Chang Readiness Assessment tool to help assess HCP change readiness, as well as identifies the internal and external forces that may impact the change initiative.

Chapter 2 presents an overlap of three theoretical leadership approaches to change: the ADKAR Model of Change to help guide the individual-level change, Kotter's Eight-Stage Change Process to help guide the community-level change, and since emotions cannot be ignored in any change initiative, and since this OIP focuses on changing behaviours in the emotional context of vaccine hesitancy, Duck's Five Stage Change Curve is also included to help address emotions and guide change forward. These change models are included and presented in an overarching framework to help ensure that the right leader establishes the right environment by using the right models and tools to help implement the change (The Three Rights). Chapter 2 also presents four solutions to address the PoP, with a final choice of HCPs learning the elements of motivational interviewing (MI) and presumptive language through problem-based learning (PBL) activities so they can communicate effectively with vaccine-hesitant patients.

Chapter 3 begins with describing the strategy to move the change from a current state to a future state with more in-depth description of why the author is the right leader and how she will establish the right environment. Using the right models and tools encompasses the monitoring and evaluation (M&E) section of this OIP with a description of the Behaviour Change

Counselling Index (BECCI) tool to evaluate HCPs' communication capacity, a logic model to illustrate the M&E pathway, and PDSA cycles to test the components of the logic model as the change is being implemented. The M&E logic model is then augmented to include other sections that support communicating the need for change. Four main stakeholders are presented as the communication recipients that are necessary in moving this change initiative forward. Finally, four limitations are described that generate next steps for future consideration.

As the number of vaccine preventable outbreaks increase, such as measles which was once almost eradicated, HCPs are being confronted with more questions and concerns from patients. In a recent statement by Canada's Chief Medical Officer of Health, Dr. Theresa Tam, she pleads,

> Healthcare providers are on the front lines of this battle between truth and misinformation. We must support parents as they tease apart fact from fiction. How we talk to parents who have questions about vaccines can have a direct effect on improving their confidence and supporting them in getting their children vaccinated. (Tam, 2019, n.p.)

Dr. Tam's statement supports the importance of this OIP and that developing and implementing a training plan for HCPs to learn MI and presumptive language will help ensure that they can communicate effectively with vaccine-hesitant patients. Ultimately, how HCPs talk to vaccine-hesitant patients is more important than what they say, which supports the ideology that patients do not care what you know until they know that you care.

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First, I am truly blessed to have an amazing network of family and friends in my life who support me in everything I do, and completing this EdD was no exception. I want to acknowledge the support I have received over these three years from my dear family and friends. My two sisters, parents, and my closest friends all understood that school was a top priority in my life, and regularly asked about my progress. I specifically want to acknowledge my co-worker, Lisa, who has continuously supported me over the years. She is always willing to help me and always willing to listening to my trials and triumphs. I also want to acknowledge an amazing partner who came into my life mid-program. He understands the meaning of hard work and dedication, and provided me with so much love and support.

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Finally, I want to acknowledge my bias. I believe that vaccines are safe and effective, and for those who are immunized, protect themselves and others around them from serious illness and possibly death that vaccine-preventable diseases can cause. I have seen babies, children, and adults unnecessarily suffer and/or pass away from diseases that could have been prevented with a vaccine. As a public health nurse for 20 years, I have learned that patients do not care what you know until they know that you care. Therefore, in this unfortunate time in life where vaccine-preventable disease outbreaks are increasing, I believe it is my job as an immunization leader to role-model and ensure that my staff understand the impact and the direct effect they can have on improving patient and community confidence in vaccines, and that how they communicate with their patients is more important than what they communicate. Through researching and writing

this OIP, I have become even more passionate about my work in public health and my leadership role, not only in my organization, but also as an expert communicating effectively about vaccines in an effort to support the safety and health of my patients, my community, my province, and my country.

Dedication

I am dedicating this OIP to my two sons, Tyson and Owen, who have inevitably supported me throughout this journey. As their mother, I hope they observed the hard work and dedication that I committed to this journey and use it as an exemplar in their own lives. Also, I hope that they come to appreciate the importance of education and life-long learning as they move along the path of life and progress in their own life journey.

I am also dedicating this OIP to my dear staff. They are a passionate group of professionals who love their job and work hard to make a difference in their patients' lives and our community. Throughout my journey they always understood that I was not always on my game, who asked me regularly how school was progressing, who listened to me rhyme of facts and statistics, and ultimately, who this OIP is for. I look forward to implementing the plan with them and I know they are anxious to begin as well.

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Glossary of Terms

Health Care Provider: Statistics Canada (2017) defines a health care provider (HCP) as a "health professional that a person sees or talks to when they need care or advice about their health" (n.p.). For the purposes of this OIP, HCP refers to Registered Nurses (RN), and Registered Practical Nurses (RPN) who work at the PHU.

Immunity or Immune: Protected from a disease.

Vaccination and Immunization: the act of administering a vaccine where a person becomes protected against a disease(s). These terms will be used interchangeably throughout this OIP.

Vaccine: a substance that is injected (can be administered by mouth or sprayed in the nose) into a person to stimulate their immune system to produce immunity to protect them from a disease(s).

Vaccine Coverage Rates: Public Health Ontario (PHO) provides the province's vaccination coverage surveillance using the provincial immunization registry, Panorama. Vaccine coverage "refers to the proportion of a specific population that has received the recommended number of doses of a certain vaccine or vaccines by a certain age (Public Health Ontario, 2019a).

Vaccine Hesitancy: Dubé, Bettinger, Fisher, Naus, Mahmud and Hilderman (2016) define vaccine hesitancy as a "reluctance to receive recommended vaccination because of concerns and doubts about vaccines that may or may not lead to delayed vaccination or refusal of one, many or all vaccines" (p. 246).

Vaccine Uptake: When a patient receives a vaccination from a HCP

List of Acronyms

AAP – American Academy of Pediatrics

ADKAR – Awareness, Desire, Knowledge, Ability, Reinforcement

A.S.K Approach – acknowledge, steer the conversation, and knowledge (know the facts well)

ASP – Annual Service Plan

BC – British Columbia

BCC – Behaviour Change Counselling

BECCI – Behaviour Change Counselling Index

C.A.S.E Framework - Corroborate, About Me, Science, Explain/Advise

CNO – College of Nurses of Ontario

CNO/PPL – Chief Nursing Officer/Professional Practice Lead

CQI – Continuous Quality Improvement

Epi - Epidemiologist

EPIC - Education Program for Immunization Competencies

GM – General Manager

HCP - Health Care Provider

ISPA – Immunization of School Pupils Act

LMX – Leader-Member Exchange

M&E – Monitoring and Evaluation

MI – Motivational Interviewing

MOH – Medical Officer of Health

MOHLTC – Ministry of Health and Long-Term Care

OIP – Organizational Improvement Plan

PBL – Problem-Based Learning

PDSA – Plan, Do, Study, Act

P.E.S.T – Political, Economical, Social, Technological

PHAC – Public Health Agency of Canada

PHO – Public Health Ontario

PHU – Public Health Unit

PoP – Problem of Practice

RN – Registered Nurse

RPN – Registered Practical Nurse

QA – Quality Assurance

WHO – World Health Organization

Chapter 1: Introduction and Problem

Vaccines have saved more lives than any other public health initiative in the world (Williams, 2014). In fact, diseases such as smallpox have been eradicated and polio has been eliminated from entire regions of the world because of vaccines (Williams, 2014). Unfortunately, provincial vaccine-preventable disease outbreaks, such as pertussis, are starting to increase and are impacting the safety and health of individuals and communities (Advisory Committee for Ontario's Immunization System Review, 2014; Busby, Jacobs, & Muthukumaran, 2018). This increase in vaccine-preventable disease outbreaks is attributed to the fact that people are becoming more resistant towards vaccination, which is defined as vaccine hesitancy (Advisory Committee for Ontario's Immunization System Review, 2014; Busby et al., 2018; Government of Canada, 2016). According to Dubé, Bettinger, Fisher, Naus, Mahmud, and Hilderman (2016), vaccine hesitancy is a "reluctance to receive recommended vaccination because of concerns and doubts about vaccines that may or may not lead to delayed vaccination or refusal of one, many or all vaccines" (p. 246). Choosing to delay or refuse vaccination puts individuals and communities at increased risk of serious illness and possible death from vaccine-preventable diseases; therefore, it is vital that health care providers (HCP) administer recommended vaccines on time and at the appropriate age.

More importantly, it is vital that HCPs have high quality communication skills so they can communicate effectively with vaccine-hesitant patients. Research indicates that a HCP's ability to communicate effectively with their patients has a profound effect on patients' adherence to medical advice and the adoption of preventative health behaviours (Duffy et al., 2004; Goldstein, 2018; Institute for Healthcare Communication, 2019). Ergo, for the purposes of this OIP, communicating effectively means that HCPs have the ability to listen, empathize, and

educate vaccine-hesitant patients in an effort to decrease their patients' vaccine hesitancy and improve vaccination uptake.

The purpose of this organizational improvement plan (OIP) is to address the Problem of Practice (PoP), *What training is needed to ensure HCPs are capable to communicate effectively with vaccine-hesitant patients.* This OIP is divided into three chapters. Chapter 1 will provide context for the reader by explaining the organizational context, the PoP, the author's leadership statement and paradigm, framing of the PoP, identify the leadership-focused vision for change, assess the organization's readiness to change. Chapter 2 will address solving the PoP and describe change planning and development that relates to the OIP, and Chapter 3 will describe the OIP's implementation plan, monitoring and evaluation process, the communication plan that will be used by the author, as well as limitations and next steps for future consideration.

Organizational Context

In the province of Ontario, public health units (PHU) are public-sector healthcare organizations that employ professionals (such as Registered Nurses and Public Health Inspectors) who strive to protect the public from disease and illness, and promote health and wellness among communities through "individual clinical service delivery, education, inspection, surveillance, and policy development" (Ministry of Health and Long-Term Care [MOHLTC], 2018c, p. 5). There are 35 PHUs in Ontario governed by the MOHLTC's *The Ontario Public Health Standards: Requirements for Programs, Services, and Accountability, 2018* (Standards), in accordance with Section 7 of the Health Protection and Promotion Act.

The Standards consist of four Foundational Standards and nine Program Standards, each with a goal and program outcomes that PHUs are responsible for implementing (MOHLTC, 2018c). The Foundational Standards, such as Effective Public Health Practice, describe the

requirements that support all of the Program Standards (MOHLTC, 2018c). The Program Standards provide the requirements for assessing, planning, delivering, managing, and evaluating programs and services that include related stakeholders, such as school boards, and include all ages across the lifespan (MOHLTC, 2018c). For example, one of the Standard's Program Standards is Immunization and the goal of the Immunization Program Standard is "to reduce or eliminate the burden of vaccine preventable diseases through immunization" (p. 39). Each PHU is obligated to uphold all the Foundational and Program Standards and adhere to and implement the prescribed protocols, and legislation, such as the the *Immunization of School Pupils Act, 1990.*

Although each PHU is governed by the MOHLTC's Standards, each PHU operates independently. This OIP will reflect one PHU and will be referred to as the PHU going forward.

Organizational Structure

The organizational structure for the PHU follows a traditional hierarchical organizational structure. This means that power flows vertically and upward, and employees are departmentalized and follow a chain-of-command (Galbraith, 2014; Huebsch, 2018; Hunter, 2002). The PHU's organizational structure can also be referred to as a "functional" structure (Galbraith, 2014, p. 25; Hunter, 2002, XIII-XIV) as the organization is divided into departments that are employed by specialized staff. Figure 1 illustrates the PHU's organizational structure with the General Manager (GM) and the Medical Officer of Health (MOH) at the top of the organization, with the Chief Nursing Officer/Professional Practice Lead (CNO/PPL) and the Epidemiologist (Epi) reporting to the GM and MOH, followed by three Managers, then six Supervisors, and front-line staff at the bottom. Three Managers each manage a department, and these departments are further divided into six programs. These programs are managed by a

Supervisor who leads the day-to-day operations performed by staff. Staff consist of multidisciplinary teams among the six programs with 60 percent HCPs, and 40 percent other public health professionals. The CNO/PPL and Epi are consultants for the organization and lead some of the Strategic working groups and projects; for example, the CNO/PPL leads the Organizational Capacity working group and the Epi develops community research surveys used to provide evidence that can support program changes.

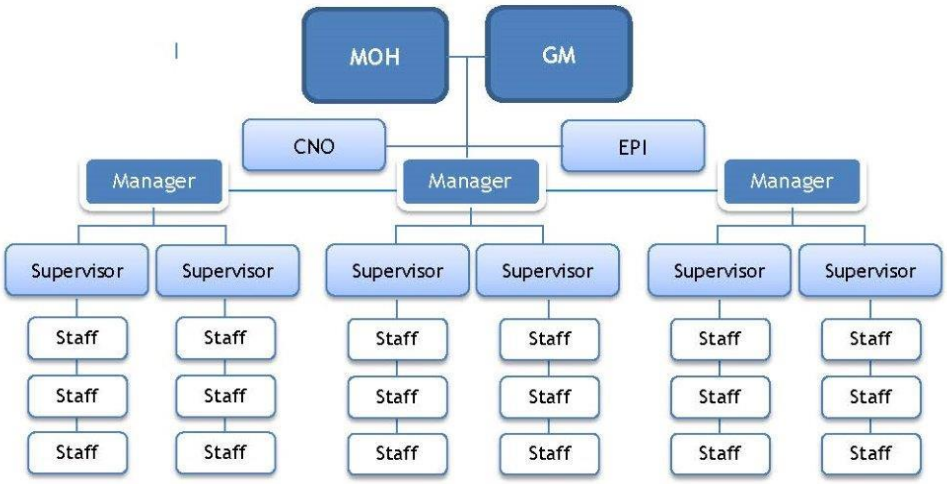

Figure 1. The PHU's traditional hierarchical organizational structure

A benefit to the PHU's organizational structure is that staff and management have a clear understanding of their organizational role and responsibilities, and that departmental and programmatic decision-making is guided by standardized policies and procedures (Galbraith, 2014; Huebsch, 2018; Hunter 2002). Staff and management are hired for a specific department/program, and are guided by governmental statutory provisions.

Conversely, the organizational structure is known to slow communication, stagnate innovation, and decrease internal engagement and collaboration (Galbraith, 2014; Morgan, 2018). At the PHU, the traditional hierarchical or functional organizational structure has siloed staff in departments and programs, which has resulted in reduced communication and

collaboration. For example, one communication challenge is that staff in one program are not permitted to collaborate with another program without the notification and involvement of their supervisor. This communication and collaboration challenge pose a problem when it comes to knowledge sharing among HCPs at the PHU; however, as identified in the Strategic Plan, the PHU acknowledges this challenge and has identified priorities to address it.

Strategic Plan and Priorities

The Strategic Plan's vision, mission, and values ensure that the work of the PHU is to improve the health of individuals and the community. To describe the Strategic Plan's components, the vision is to support all people in the community to strive for a life of safety, health and well-being (Reference withheld, 2014). The mission is to work with the community to assess, promote and protect health, to prevent disease and injury, and to advocate for public health policy (Reference withheld, 2014). With a goal of health for all, the PHU values collaboration, leadership, equity, accountability, and respect (Reference withheld, 2014). Ultimately, the Strategic Plan is an important component of this OIP as management and staff are required to link the vision, mission, and values to all existing and any proposed program or service changes.

As described, the organizational structure has created communication and collaboration challenges. Specifically, the Strategic Plan recognizes these challenges and states that the organization has work to do in three areas: Governance, Communication, and Organizational Capacity (Reference withheld, 2014). Governance refers to improving the governance model and ensuring all elements are functioning and successful in order to help management be leaders in public health (Reference withheld, 2014). Figure 2 illustrates the PHU's governance model.

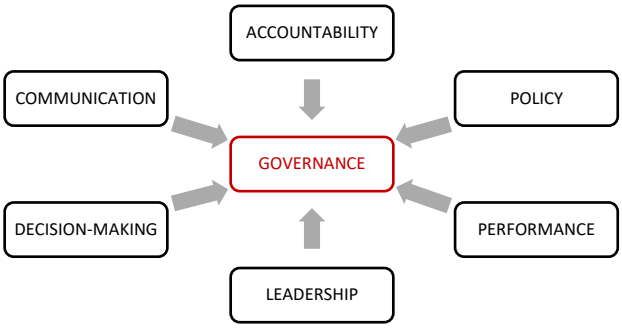

Figure 2. The PHU's Governance Model

The Strategic Priority of Communication refers to improving communication internally among departments as well as improving communication with the community in order to remain a trusted voice for public health information (Reference withheld, 2014). The Strategic Priority of Organizational Capacity refers to supporting internal staff's professional development, continuous education, building core competencies, and by "facilitating internal knowledge sharing and collaboration" (Reference withheld, 2014, p. 11). However, although there is a communication and collaboration challenge, the PHU espouses public health leadership to develop strategies and a plan in an effort to address the three internal Strategic Priority areas as well as implement and adhere to the Strategic Plan's vision, mission, and values.

Public Health Leadership

Public health is defined as "the science and art of preventing disease, prolonging life, and promoting health through the organized efforts and informed choices of society, organizations, public and private communities, and individuals" (Centers for Disease Control and Prevention, 2017, n.p.). The author of this OIP believes that the science of public health involves the scientific evidence that supports the development of programs and services, and the organizational structure that informs and guides public health decisions and practice. The art of public health is in the leadership practices of staff and management. According to Betker and

Oickle (2018), "leadership can occur at all levels of the public health system and apply across organizational positions and professions…, and as such, leadership responsibility and accountability are not simply formalized in job descriptions or organizational plans" (p. 6). For example, staff represent the PHU at different community coalitions and leadership groups, such as the community homelessness initiative and with a local hospital's infection control team.

Additionally, the Public Health Agency of Canada's (PHAC) (2007) states that public health leadership:

> relates to the ability of an individual to influence, motivate, and enable others to contribute towards the effectiveness and success of their community and/or the organization in which they work. It involves inspiring people to craft and achieve a vision and goals. Leaders provide mentoring, coaching, and recognition. They encourage empowerment, allowing other leaders to emerge (Canadian Public Health Agency, 2016, slide 3)

This definition supports the fact that even though the organizational structure facilitates communication and collaboration challenges, the PHU is using the structure to facilitate positive public health leadership practice. Management was tasked with the responsibility to resolve the three internal Strategic Priority areas and developed a strategy to create internal working groups that consist of management and staff who are currently working together to determine action plans to implement the approved activities generated by the groups.

Additionally, the PHU is currently undergoing an integrated planning process for the entire organization in an effort to improve the collaboration among departments and to improve the overall governance, communication, and organizational capacity of its management and staff. Creating internal working groups and undergoing an integrated planning process illustrates that the PHU is dedicated to public health leadership and aligns to the vision that the PHU supports all people to strive for safety, health, and well-being. Moreover, the Strategic internal working groups and integrated planning process will also provide the author an avenue to be able to

address the problem of practice (PoP) and make a necessary communication change that is needed at the PHU.

Problem of Practice

Vaccines are essential in keeping individuals and communities safe and healthy by protecting them from vaccine-preventable diseases. Research illustrates that patients' primary source of vaccination information are HCPs; however, patients are becoming more hesitant to the idea of vaccination and are more likely to question their HCP about recommended vaccinations (Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson, Meurice, Stanberry, Glismann, Rosenthal, & Larson, 2016; Williams, 2014). In fact, 39 percent of Ontario residents state they are more concerned about vaccine safety than they were five years ago (Advisory Committee for Ontario's Immunization System Review, 2014), and provincial vaccine coverage rates fall short of national vaccine coverage goals with rates varying greatly by vaccine, age groups, and PHU jurisdiction (Bunko, Seo, Lim, Fediurek, Deeks, & Wilson, 2017; Public Health Ontario, 2018). Specifically, according to Public Health Ontario's (2019a) most recent vaccine coverage report, the PHU's jurisdiction has one of the best vaccine coverage rates for childhood vaccines and one of the worst rates for adolescent vaccines. This gap in rates illustrates vaccine hesitancy in that parents may initiate vaccination for their child but as the child grows, they question the necessity or safety and refrain from vaccination.

The reason for vaccine hesitancy is complex and multifaceted. In a comprehensive study conducted by Dubé, Gagnon et al. (2016), vaccine hesitancy is caused primarily by "negative and false information about vaccination online and in social media", closely followed by "misinformation or lack of knowledge about vaccines" (n.p.). Moreover, research shows that an individual's choice to vaccinate or not vaccinate is mainly influenced by their emotional and

social context, not the science and facts that HCPs typically use to educate patients (Browne, Thomson, Rockloff, & Pennycook, 2015; Dubé, Bettinger et al., 2016; Kestenbaum & Feemster, 2015). This means that patients believe stories and anecdotes over the abundance of scientific evidence that HCPs use to support vaccination.

In order to alleviate vaccine hesitancy, research suggests that improving HCP communication skills will help to improve public confidence in vaccination and increase uptake (Austvoll-Dahlgren & Helseth, 2010; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson et al., 2016; Williams, 2014). Unfortunately, the available resources to support the improvement of HCPs' communication skills contain conflicting methods and approaches, and lack the evidence to accomplish this research suggestion (Dubé, Gagnon et al., 2016). For example, the Canadian Pediatric Society encourages HCPs to give scientific evidence and facts to alleviate parental vaccine hesitancy; however, educational interventions used to correct misinformation about vaccines are ineffective and may actually augment negative attitudes (Dubé, Gagnon et al., 2016). Further, Austvoll-Dahlgren and Helseth (2010) identified that HCPs in mandated public health programs tend to offer one-sided information rather than a balanced approach of explaining the benefits and risks. This research is evident at the PHU as patients have complained that HCPs are "too pushy" when providing vaccination education.

Additionally, Paterson et al. (2016) states that HCPs frequently complain about low levels of vaccine awareness and knowledge, and that they often have inadequate training to address patients' questions. This research is also evident at the PHU as there is no formal training for HCPs on how to talk to vaccine-hesitant patients and both novice and veteran HCPs have voiced their fears and frustrations as the number of conversations with vaccine-hesitant patients continue to increase in frequency and complexity.

Due to the fact that vaccines are essential in keeping individuals and communities safe and healthy by protecting them from vaccine-preventable diseases, it is integral that HCPs learn the skills necessary to communicate effectively with vaccine hesitant patents in order to increase patients' confidence in vaccination, improve vaccination rates with increased uptake, and align with the PHU's vision, mission, and values by supporting individuals and the community to strive for safety, health, and well-being.

Leadership Statement and Paradigms

Leadership is foundational to addressing the PoP. The purpose of this section is to provide the reader with a leadership statement or context around the author's position and influence at the PHU, as well as the theoretical and philosophical paradigms that underpin the author's research and the overall OIP.

Position and Influence

The author of this OIP holds the position as Supervisor of the Immunization program at the PHU and for the purposes of this OIP, will be referred to as the Supervisor. The Supervisor is responsible for ensuring that the MOHLTC (2018c) Standards' Immunization Program Standard is implemented, including all 10 Program Outcomes, such as "improved uptake of provincially funded vaccines among Ontarians" and "increased public confidence in immunizations" (p. 39), as well as all 10 Requirements, such as the PHU will "work with community partners to improve public knowledge and confidence in immunization programs and services by" promoting childhood and adult immunization, and by communicating the importance of immunization to the public (p. 40).

These Program Outcomes and Requirements are accomplished through the delivery of the PHU's internal and external Immunization programs and services by eight Immunization

HCPs. These HCPs are responsible for tasks, such as addressing patient questions or concerns through a phone consultation, and administering vaccines at internal and external community vaccination clinics. The Supervisor is responsible for ensuring that these eight Immunization HCPs are trained, competent, and comfortable in communicating with the public about vaccines. Therefore, she has the position and influence to develop and implement a training plan for the Immunization program HCPs.

Additionally, the Supervisor has worked at the PHU for over 20 years. She has worked in all three departments and has successfully led the Immunization program for seven years. Due to this vast experience, she understands and believes that the success in her position and influence, and her ability to make changes in the Immunization program, thus far, is based on the relationships and trust she has built with staff, management, and the community at large. This belief aligns with the public health leadership ideology in that influence is a relationship not a position, and that the quality of the relationship between leaders and followers matters in that the better the relationship, the more influence a leader has to make changes (Betker & Oickle, 2018).

Encompassed within her public health leadership practice, the Supervisor also believes that Leader-Member Exchange (LMX) theory and Servant Leadership theory (Northouse, 2016) are foundational and that these theories will be integral to addressing the PoP by developing and implementing a communication training plan for HCPs so they can learn to communicate effectively with vaccine-hesitant patients.

Leader-Member Exchange (LMX) Theory

Leader-Member Exchange (LMX) theory supports the importance of establishing unique relationships with each individual follower, thus creating a high-quality dyadic relationship that is based on trust, respect, and commitment (Northouse, 2016; Tordera & Gonzalez-Roma, 2012).

In the context of this OIP, LMX theory is two-fold. First, it is integral that the Supervisor establishes a trusted and committed relationship with each HCP. Research demonstrates that leaders who espouse and practice LMX theory see less employee turnover, positive mental health of employees, as well as improved staff job satisfaction and better performance (Avolio, Walumbwa, & Weber, 2009; Northouse, 2016; Tordera & Gonzalez-Roma, 2012). Actively listening and empathizing with the HCPs about their fears and frustrations related to the increasing number and complexity of conversations with vaccine-hesitant patients, and working with them to develop and implement a training plan to support effective communication demonstrates that the Supervisor espouses and practices the LMX theory in her practice.

Second, LMX theory is foundational to establishing relationships between the HCP and the vaccine-hesitant patient. Research illustrates that HCPs are patients' primary resource for vaccination information; however, patients are becoming more resistant to the idea of vaccination and are more likely to question their HCP about recommended vaccinations (Dubé, Gagnon et al., 2016; Paterson et al., 2016). Consequently, it is vital for HCPs to learn effective communication skills so a trusting relationship can be established in order for the patient to feel comfortable, ask questions, and engage in dialogue so they can make an informed decision.

Servant Leadership Theory

LMX theory focuses on individual relationships and Servant Leadership theory focuses on building community relationships (Northouse, 2016). Servant leaders value their community and support building a strong community by putting emphasis on follower development with listening, empathizing, and promoting collaboration (Fahlberg & Toomey, 2016; Northouse, 2016). For this OIP, community refers to the internal community, or group, of HCPs as well as the PHU's external community. Internally, the Supervisor uses Servant Leadership to build a

strong community of HCPs. According to Trastek, Hamilton, and Niles (2014), “Servant leaders can build a community in which team members are committed to putting the patient's interest first and organize team members to achieve the goal of providing high-value patient care” (p. 380). By listening to her HCPs’ needs and working with them to develop and implement a training plan, the Supervisor believes that a strong community of HCPs will help facilitate a successful implementation of this OIP.

Externally, Servant Leadership helps build a strong community by aligning with the PHU’s strategic vision to support the safety, health, and well-being of all people in the community (Reference withheld, 2014). Developing HCPs as Servant Leaders ensures that HCPs “create positive patient outcomes by promoting change in patient health behavior” (Trastek et al., 2014, p. 380). HCPs who practice Servant Leadership behaviours, such as listening and empathizing with patients, demonstrate effective communication in an effort to decrease vaccine hesitancy and increase vaccination uptake to support the safety and health of the community.

Utilizing LMX and Servant Leadership Theories supports the Supervisor in building trusting relationships with individual HCPs in order to facilitate a strong sense of community among HCPs. However, the Supervisor believes that LMX and Servant Leadership need to be encompassed in public health leadership. LMX and Servant Leadership behaviours, such as listening and empathizing are necessary for establishing trusting relationships, but public health leadership behaviours, such as coaching and motivating are essential to move change forward, and therefore, implement this OIP. Figure 3 illustrates the LMX and Servant Leadership encompassed in public health leadership with trusting relationships as the shared goal of the theories. LMX and Servant Leadership theories encompassed in public health leadership provide a theoretical underpinning for the development and implementation of a training plan for HCPs

so they can communicate effectively vaccine-hesitant patients in order to decrease vaccine hesitancy and increase vaccination uptake, and align with the PHU's goal to support a safe and healthy community.

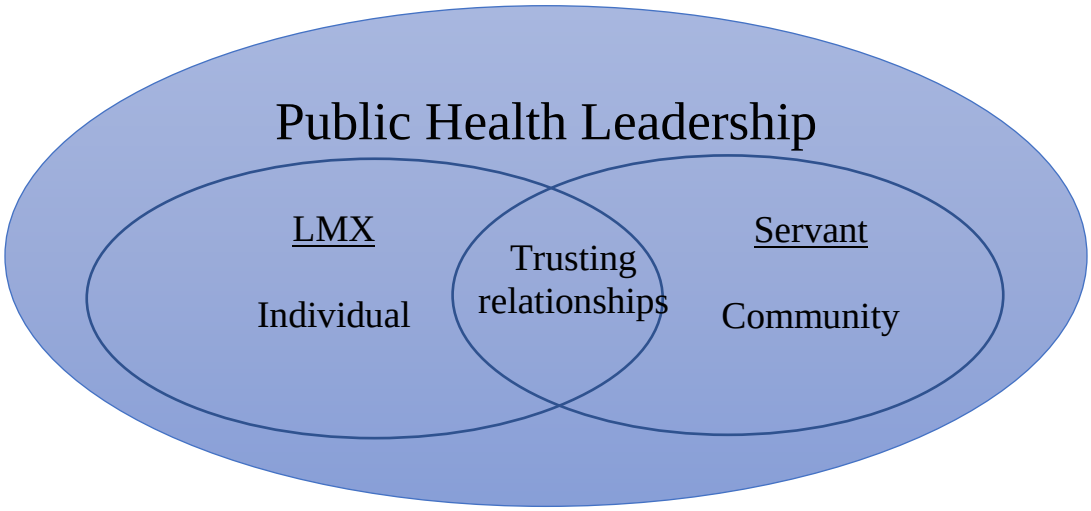

Figure 3. LMX and Servant Leadership encompassed in public health leadership.

Philosophical Paradigm

The first step in any research process is for the researcher to identify their philosophical paradigm as this underpinning guides the understanding of the PoP, as well as guides the solutions and strategies for their OIP (Research and Evaluation in Education and Psychology, n.d.). As a researcher, the Supervisor supports the Constructivist philosophical paradigm. According to Mackenzie and Knipe (2006), a Constructivist researcher's intention is to understand human experiences and the social context, and to rely on the participants' interpretations of the phenomenon being studied. Moreover, Schwandt (2000) states that a Constructivist researcher believes that knowledge is socially constructed and that "researchers should attempt to understand the complex world of lived experience from the point of view of those who live it" (Research and Evaluation in Education and Psychology, n.d., p. 16) by relying mainly on qualitative data sources; for example, listening and understanding the patient's reason

for choosing to not vaccinate (Mackenzie & Knipe, 2006). As such, the Supervisor believes that the Constructivist paradigm's social context is directly related to qualitative data regarding reasons for patient vaccine hesitancy and the PoP.

Patient vaccine hesitancy is complex and multifaceted, and as Kumar, Chandra, Mathur, Samdariya, and Kapoor (2016) state, "individual decision-making regarding vaccination is a complex process and is dependent on emotional, cultural, social, spiritual and political factors as well as cognitive factors" (p. 6). Mainly, the decision to vaccinate or not is related to the patient's social and emotional context, not related to science and facts that the available resources teach HCPs to use in their communication (Browne et al., 2015; Dubé, Bettinger et al., 2016; Kestenbaum & Feemster, 2015). Due to the social context underpinning patient vaccine hesitancy, the solutions and strategies proposed to address the PoP will espouse the Constructivist paradigm as *how* HCPs communicate with vaccine-hesitant patients will be more important than *what* they communicate.

In addition to identifying the Supervisor's philosophical paradigm as the underpinning that guides the understanding of the PoP, as well as guides the solutions and strategies for their OIP, the Supervisor will also view the PoP through different lenses to uncover the broader contextual contributing factors.

Framing the Problem of Practice

Framing the PoP is accomplished by viewing the PoP through different lenses and uncovering the broader contextual factors that contribute to it. As described by Grace, Korach, Riordan, and Storm (2006), "when we view organizational issues through different lenses, we increase the likelihood that we can recognize, and more effectively respond to, management and organizational challenges with flexibility, creativity, and compassion" (p. 16). Therefore, it is

vital that the Supervisor take a comprehensive approach and utilize the P.E.S.T Analysis framework to uncover the external contextual factors and Bolman and Deal's (2013) Four Frame Model to uncover the internal contextual factors that contribute to the PoP.

P.E.S.T Analysis

P.E.S.T Analysis is a strategic framework used by the Supervisor to analyze the external Political, Economic, Social, and Technological factors that contribute to the PoP (Change Designs, 2011; MindTools, 2018). The political factors that contribute to the PoP are related to the MOHLTC's immunization legislative requirements. PHUs are mandated to enforce immunization legislation, such as the *Immunization of School Pupils Act* (ISPA), which "requires that children and adolescents attending primary or secondary school be appropriately immunized against designated diseases, unless they have a valid exemption" (MOHLTC, 2018a, n.p.). Children who are not in compliance with the ISPA will be suspended from school in accordance with the MOHLTC's (2018b) *Immunization for Children in Schools and Licensed Child Care Settings Protocol, 2018*. Every year, all school and licenced child care attendees are assessed for complete and up-to-date immunization records. During this activity, Immunization HCPs experience an increase in vaccine-hesitant dialogue with parents. As such, political factors definitely contribute to the PoP, and therefore, it is integral that HCPs receive training to ensure that they are capable to communicate effectively with vaccine-hesitant patients.

In public health, the Economic factors that contribute to the PoP are behavioural economics as behavioural economics theory has recently been used to identify underlying reasons for vaccine hesitancy (Busby et al., 2018). Behavioural economics theory is used to better predict how individuals make long-term decisions, which are often related to biases and potentially lead to suboptimal outcomes (French & Oreopoulos, 2017). Specifically, Browne et

al. (2015) state that people are influenced by their cognitive biases, and that the decision to vaccinate or not is motivated more by social and emotional factors rather than evidence-based and scientific information. Furthermore, according to a comprehensive meta-analysis on vaccine hesitancy, Busby et al. (2018) state that vaccine hesitancy is related to "availability bias", meaning people are not exposed to vaccine-preventable diseases, such as measles, and therefore, "do not feel any immediate threat…which leads them to undervalue the benefits of immunization" (p. 7). Availability bias is evidenced in the PHUs jurisdiction as demonstrated in a local survey where 41 percent of the respondents believed that it is better for children to develop their own immunity from acquiring a vaccine-preventable disease naturally rather than receive the vaccine that protects them from the disease (Ipsos Public Affairs, 2016). Since patients make decisions based on biased, emotional and social reasons, these data suggest that behavioural economics needs to be considered when developing a training plan for HCPs as how they communicate with vaccine-hesitant patients is more important than the information they are communicating.

Social factors refer to the PHU's population demographics; specifically, education level and income, as well as the community's attitudes towards vaccines. In terms of population demographics, research indicates that individuals with lower education and individuals on social assistance and in the low-income tax bracket are less likely to vaccinate their children (Busby et al., 2018). In the PHU's jurisdiction, "42 percent of adults between the ages of 25 to 64 have no post-secondary education" (Reference withheld, 2014, p. 6) and the highest amount of incomplete vaccination records are with children who live and attend school in the top three low-income areas in the jurisdiction (Organization deleted, generated report, August 2018). These data illustrate that almost half of the community have low education which contributes to the

poor vaccine coverage rates, suggesting that vaccine hesitancy is evident in the PHU's jurisdiction and that social factors contribute to the PoP.

In terms of social attitudes as a contributing factor towards the PoP, Goldstein (2018) states that social attitudes towards vaccines are an indicator of the public's trust or mistrust of scientific institutions. The PHU is considered a scientific institution, and in the PHU's jurisdiction, 92 percent of the community is aware that the PHU has an immunization program or offers vaccine services; however, only 84 percent of the community believes that the PHU is a trustworthy organization (Ipsos Public Affairs, 2016). This gap between awareness and trust illustrates that there is some mistrust in the PHU in relation to vaccination. Since communicating effectively is foundational to relationship and trust-building, developing and implementing a training plan for HCPs so they can communicate effectively with vaccine-hesitant patients is an important aspect of closing this mistrust gap and improving the community's trust in the PHU. Moreover, closing this gap supports the importance of using LMX and Servant Leadership encompassed in public health leadership for this OIP as this theoretical underpinning supports building strong trusting relationships between HCPs and patients, as well as building strong trusting relationships between HCPs and the community.

For the purposes of this OIP, technology refers to communication technology and is defined as "a system that uses technical means to transmit information or data from one place to another or from one person to another" (Ramey, 2013, n.p.). Specifically, communication technology refers to the communication training resources available for HCPs. Unfortunately, there are few communication resources available, and of these few resources, the communication training methods are contrary to what the research suggests (discussed in the Solutions to Address the PoP in Chapter 2). Further, even though the MOHLTC's statutory provisions govern

the Immunization programs and services at the PHU, they do not provide any vaccination communication training resources for HCPs. As stated by Fahlman (2012), "the quality and delivery of Canadian healthcare is dependent upon well-trained healthcare providers responding to consumer needs" (p. 236). Therefore, in order to respond to vaccine-hesitant patients' needs and concerns, the PoP needs to be addressed and a communication training plan needs to be developed and implemented for HCPs.

Bolman and Deal's (2013) Four Frame Model

Framing the PoP from an internal lens, Bolman and Deal's (2013) Four Frame Model provides a comprehensive framework to uncover the broader contextual issues that impact the PoP by using the Structural, Political, Human Resource, and Symbolic Frames.

The Structural frame "focuses on rationally creating structure, including policies, goals, technology, co-ordination, and formal roles for individuals" (Schachter, 2018, n.p.). As described in the Organizational Context section, formal roles for management and staff are clearly defined using a traditional hierarchical organizational structure; however, the organizational structure slows communication and decreases internal collaboration. For example, HCPs who work in the Sexual Health program do not offer or administer vaccines to their high-risk patients, such as the Hepatitis B vaccine to intravenous drug users, because there is no current collaboration between the Immunization and Sexual Health programs. Offering and administering vaccines in other programs is important as this aligns with the MOHLTC's (2018c) Immunization program goal as well as aligns with the PHU's mission to promote and protect the safety, health, and well-being of the community. Therefore, the Supervisor will advocate for the training plan to be implemented in other programs at the PHU (discussed in Communicating the Need for Change).

Additionally, The Structural frame contributes to the PoP as there is no communication

training or policies related to communication training for HCPs at the PHU. Currently, HCPs are provided resources and training to increase their knowledge in vaccination, and then with this increase in knowledge are expected to be able to converse with vaccine-hesitant patients appropriately. Unfortunately, by not providing communication training for HCPs, both novice and veteran HCPs have verbalized their fears and frustrations with increasing vaccine hesitancy dialogue with patients.

For the Political frame, Bolman and Deal (2013) state that "politics is the realistic process of making decisions and allocating resources in a context of scarcity and divergent interests" (p. 183). Moreover, when resources are scarce, power is key; meaning that power has the "ability to influence behaviour, to change the course of events, to overcome resistance and to get people to do the things they would not otherwise do" (p. 190). In the context of this OIP, legislation dictates Immunization program and service delivery, which can portray and result in uneven power between HCP and patient; for example, the ISPA mandates that PHUs must enforce parents to report their child's vaccination records to the PHU or their child will be suspended from school. This uneven power has resulted in the Supervisor receiving complaints from patients about HCPs being "too pushy" with their vaccine education. Therefore, it is important to address the PoP from the political frame and develop and implement a training plan that facilitates empowerment rather than uneven power between HCPs and patients.

Further, Bolman and Deal (2013) state that leaders in the Political frame must build strong coalitions, or partnerships. Therefore, it is integral that the Supervisor address the PoP through the political frame by demonstrating LMX and Servant Leadership encompassed in public health leadership; this underpins the building of strong trusting relationships with HCPs so they understand the need to communicate effectively with vaccine-hesitant patients in an

effort to help build strong trusting relationships with individual patients and the community.

In terms of the Human Resource Frame, Bolman and Deal (2013) state that "the key challenge is achieving alignment between organizations and individuals – finding ways to get the job done while feeling good about themselves and their work" (Schachter, 2018, n.p.). In addition, the "human resource leader must be sensitive to the needs, feelings, prejudices, skills, and limitations of the individuals around him" (Schachter, 2018, n.p.). Since there is no communication training at the PHU, the Supervisor is sensitive to the needs, feelings, prejudices, skills, and limitations of the HCPs' fears and frustrations with increasing vaccine hesitancy interaction, and therefore, has embarked on addressing the PoP with this OIP. Furthermore, the Supervisor embraces the Human Resource Frame by espousing the LMX and Servant Leadership theories encompassed in public health leadership in order to build strong relationships with individual HCPs and the community of HCPs to help ensure a successful outcome in the development and implementation of a training plan for them.

Finally, the Symbolic Frame is described by Bolman and Deal (2013) as "how humans make sense of the chaotic, ambiguous world in which they live" (p. 244). Unfortunately, after a HCP experiences a frustrating vaccine conversation, there is no process for them to debrief or reflect on the experience. It is important for the Supervisor to capture these negative experiences and use them in the training plan to help HCPs learn the skills so they can manage difficult conversations. Further, Schachter (2018) states that in the Symbolic frame, "leaders become magicians, prophets and poets" (n.p.). The Supervisor believes that LMX and Servant Leadership encompassed in public health leadership behaviours will assist in guiding HCPs through the change initiative so they can understand the necessity for a communication training plan.

Using the P.E.S.T Analysis framework to uncover the external contextual factors and

Bolman and Deal's (2013) Four Frame Model to uncover the internal contextual factors that contribute to the PoP represents a comprehensive process that will assist the Supervisor's understanding in creating and implementing a successful OIP that focuses on the development and implementation of a communication training plan for HCPs.

Guiding Questions Emerging from the PoP

After reading the Organizational Context section, the PoP, the Supervisor's position and influence and leadership statement, and uncovering the broader contextual contributing factors by framing the PoP, five guiding questions have emerged from the PoP. The first question is: *Why are people hesitant towards vaccines in the first place?* Kumar et al. (2016) describes the reasons for patient vaccine hesitancy as an "epidemiological triad" (p. 2). This triad is a complex interaction of environmental (external) factors, such as patient-HCP relationship; agent factors (vaccine), such as the perception of vaccine safety and efficacy; and host (patient) factors, such as education level and past life experiences (Kumar et al., 2016). Additionally, there is significant literature illustrating that HCPs are also becoming more hesitant towards vaccinations due to the availability of time, knowledge, and resources (Blaisdell, Gutheil, Hootsmans, & Han, 2015; Paterson et al., 2016). The Supervisor needs to be cognisant of the underlying reasons for vaccine hesitancy and incorporate these findings into the solutions to address the PoP. For example, patients make vaccination decisions based on their emotional and social context, not on science and facts; therefore, the Supervisor understands that the solution to the PoP will need to address *how* HCPs communicate with vaccine-hesitant patients as a more important factor than *what* they are communicating.

The second question is *What are the skills that will help HCPs communicate effectively?* This question will be addressed in Chapter 2 under the Solutions to Address the PoP section.

The third question is *Who will benefit from this change?* Not only will the Immunization HCPs benefit from the training, but all the HCPs at the PHU will benefit regardless of the department they work in. For example, HCPs in the Family Health department will feel comfortable discussing vaccination with new parents who are questioning the efficacy of a vaccine. Additionally, the community will benefit as research suggests that HCPs who can communicate effectively with vaccine-hesitant patients can help increase patients' confidence in vaccination and improve vaccination rates with increased uptake (Austvoll-Dahlgren & Helseth, 2010; Williams, 2014; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson et al., 2016). Increasing vaccine uptake means that individuals are protected against vaccine-preventable diseases and this aligns with the PHU's vision by supporting individuals and the community to strive for safety, health, and well-being.

The fourth question is *How will the Supervisor persuade HCPs to participate in the development and implementation of a communication training plan?* The Supervisor believes that HCPs' participation lies in her ability to build strong trusting relationships with each HCP as well as the group of HCPs. As such, the Supervisor believes that her public health leadership practice, or her "ability to influence, motivate, and enable others to contribute towards the effectiveness and success of their community and/or the organization in which they work" (Canadian Public Health Agency, 2016, slide 3) encompasses LMX and Servant Leadership theories which facilitate the building of strong trusting relationships. Further, participation will be discussed in the Organizational Change Readiness section of this Chapter under Change Force: Internal Environment.

The fifth and overarching question is *What is the Supervisor actually trying to change?* The answer is behaviour; she is trying to change HCP behaviour (changing the way they

currently talk to vaccine-hesitant patients), which can then facilitate a change in patients' behaviour (choosing to vaccinate). Changing HCP behaviour begins with uncovering the change drivers that will help the Supervisor persuade HCPs to participate in the change. Patients' behaviour change happens when HCPs learn the communication skills to help facilitate behaviour change in their patients. Further, behaviour change theory is common in public health and has been applied to many public health promotion and disease prevention strategies (Pfister-Minogue & Salveson, 2010; Gray, 2013; Pokhrel, Anokye, Reidpath, & Allotey, 2015). For example, behaviour-informed messaging tripled the likelihood of parents responding to a notification that required them to submit their child's vaccination records online (Public Health Ontario, 2019b). Therefore, since the PoP is in the context of public health, the vision for change at the PHU will underpin behaviour theories and research throughout this OIP.

Leadership-Focused Vision for Change

Effectively managing change involves "developing an understanding of the current state; articulating a clear vision of the future state; and guiding the organization through a delicate transition period" (Nadler & Tushman, 1998, p. 12). Currently, there is no training plan for HCPs to help them learn the skills to communicate effectively with vaccine-hesitant patients. Since vaccines help keep individuals and communities safe and healthy, and since immunization is the number one inquiry at the PHU (Ipsos Public Affairs, 2016), it is imperative that the PoP be addressed and that the future state be a training plan developed and implemented. In order to successfully address the PoP and guide the transition, five change drivers have been identified.

Change Drivers

Five change drivers will be utilized by the Supervisor to help move the change initiative forward and to encourage participation from the HCPs in developing and implementing a

training plan. The first change driver is related Ontario's formal review of its immunization system. In 2014, An Advisory Committee for Ontario's Immunization System reviewed and provided "findings and advice on opportunities to improve the overall effectiveness and efficiency of Ontario's publicly funded immunization system" (Advisory Committee for Ontario's Immunization System Review, 2014, p. 1). Resulting from this review, the number one priority that emerged was to "Promote Immunization and Build Public Confidence" (p. 2). This priority stems from the fact that Ontario is facing unprecedented pressures, such as "changing public attitudes and greater hesitancy about vaccines, the growing number of new vaccines and an ever-evolving immunization schedule" (p. 5). Moreover, according to a public survey by the MOHLTC in 2011, the public's support for immunization is weaker than in the past as:

> 39 percent of Ontarians reported being more concerned about vaccine safety than they were five years ago, 55 percent felt that 'we are becoming too reliant on vaccines', 42 percent believe many vaccines are not needed, and 33 percent said there are too many vaccines. (p. 7)

Additionally, the Advisory Committee stated that as an action to promote immunization and build public confidence, HCPs need to understand the publics' concerns and perspectives about vaccines, and to provide the public with "information, tools and supports they need – when and how they need them - to make informed immunization decisions" (p. 14). The Supervisor understands that strong public support and confidence of vaccines is critical for the safety and health of the community; therefore, she will use this provincial review to help drive change and demonstrate to HCPs that there is a need to develop and implement a communication training plan.

The second change driver is related to poor vaccine coverage rates in the PHU's jurisdiction and public mistrust in the PHU. Vaccines that are publicly funded in Ontario, such as the vaccine that protects against the tetanus bacterium, are administered and entered into the

provincial registry database system called Panorama. Panorama is accessible to Public Health Ontario (PHO) for monitoring, assessing, and reporting data and trends. According to PHO's most recent vaccine coverage report for the 2017-18 school year, the PHU's jurisdiction has one of the best vaccine coverage rates for childhood vaccines and one of the worst rates for adolescent vaccines. Further, as identified in the Framing section of this OIP, 92 percent of the community is aware that the PHU has an immunization program or offers vaccine services; however, only 84 percent of the community believe that the PHU is a trustworthy organization (Ipsos Public Affairs, 2016). This difference between vaccine coverage rates and the difference between the community's awareness and trust in the PHU illustrates that there is a gap in the community's knowledge and confidence around vaccines, thus there is a need for HCPs to communicate effectively with vaccine-hesitant patients.

The third change driver is the Annual Service Plans (ASP) that are required by the MOHLTC. The Supervisor is required to submit an ASP that reflects how *The Ontario Public Health Standards: Requirements for Programs, Services, and Accountability, 2018* Immunization Program Standard is being implemented at the PHU. According to the MOHLTC (2018c), the Immunization Program Standard's goal is "to reduce or eliminate the burden of vaccine preventable diseases through immunization" (p. 39). To accomplish this goal, the PHU is required to "conduct epidemiological analysis of surveillance data" (p. 40) for vaccine coverage rates and trends, as well as "work with community partners to improve public knowledge and confidence in immunization programs and services by" (p. 40) promoting childhood and adult immunization, and by communicating the importance of immunization to the public. Considering that conducting epidemiological analysis includes the evidence and findings from change drivers one and two (formal review of the immunization system, and poor

vaccination coverage rates and mistrust), the Supervisor will identify in the ASP that there is a need to decrease vaccine hesitancy and increase vaccine coverage rates in the community by way of HCPs communicating effectively with vaccine-hesitant patients. Further, the Supervisor will use the ASP requirement to encourage HCPs to help develop and implement the training plan which also helps address the Immunization Program Standard's goal.

The fourth change driver is the integrated planning recommendation. As described in the Public Health Leadership section of this OIP, the PHU is recently undergoing an integrated planning process in order to improve the collaboration among departments, and to improve the overall governance, communication, and organizational capacity of its management and staff. The integrated planning process has involved completing a programmatic situational assessment, a gap analysis, and the identification of key stakeholders, which resulted in generating recommendations for integration and collaboration among the departments. One recommendation that the Supervisor generated is to provide communication training for HCPs in all departments so they can communicate effectively with vaccine-hesitant patients as HCPs in all departments experience vaccine-related questions, concerns and hesitancy. For example, HCPs who teach prenatal are required to discuss immunization as per the curriculum; however, the current prenatal teachers have not received formal immunization training (because formal training does not exist at the PHU). The recommendation of providing immunization communication training for HCPs in all departments has been approved by upper management; therefore, developing and implementing a training plan for HCPs is definitely a change driver for the Supervisor to use to ensure the change occurs.

Finally, the fifth change driver is the College of Nurses of Ontario (CNO) Quality Assurance (QA) program. Every year, Registered Nurses (RNs) and Registered Practical Nurses

(RPNs) in the province of Ontario are required to generate two practice-related learning goals, then identify activities that will help achieve these goals. At the PHU, the Immunization HCPs struggle to identify goals and activities for their QA requirement as they must be related to a Professional Practice Standard (CNO, 2018). The current CNO Practice Standard that relates to addressing the PoP is the Therapeutic Nurse-Client Relationship. According to the CNO (2006a), there are five components of the nurse-client relationship: "trust, respect, professional intimacy, empathy and power" (p. 3). These components align with LMX and Servant Leadership encompassed in public health leadership behaviours that will be espoused and demonstrated by the Supervisor throughout this OIP. Therefore, the Supervisor will use the CNO's QA program as a change driver and encourage HCPs to use "demonstrate effective communication with vaccine-hesitant patients" as their CNO QA goal.

Ontario's review of the Immunization system, poor vaccine coverage rates, the MOHLTC's ASP requirements, the integrated planning recommendation, and the CNO's QA program are the key change drivers that the Supervisor will use to move the change forward and encourage participation from the HCPs.

Organizational Change Readiness

Once the change drivers have been identified, the Supervisor must assess the PHU's change readiness as failing to identify an organization's change readiness often ends in a failed change initiative (Judge & Douglas, 2009). In fact, according to Judge and Douglas (2009), "approximately 70 percent of planned organizational change initiatives fail… [because of] the lack of reliable and valid diagnostic instruments to assess and track an organization's capacity for change" (p. 635). The Supervisor believes that an organization is the sum of its parts; meaning that in order to address the PoP, and develop and implement a training plan for HCPs,

the Supervisor will assess the change readiness of each individual HCP using the ADKAR Change Readiness Assessment tool (Hiatt, 2006).

ADKAR stands for Awareness, Desire, Knowledge, Ability, and Reinforcement and "represents the essential elements of change for a single person" (Hiatt, 2006, p. 43). The ADKAR Change Readiness Assessment tool is presented in Appendix A as a worksheet. The worksheet is completed by each HCP once the change initiative has been identified (Hiatt, 2006). Completing the ADKAR Change Readiness Assessment tool will assist the Supervisor in assessing what stage HCPs are at related to the change initiative and to identify any gaps or barriers that may inhibit the change initiative from moving forward. For example, in Appendix A under Desire, the ADKAR Change Readiness Assessment tool asks HCP to "list the factors or consequences (good and bad) related to this change that affect your desire to change". Completing the worksheet at an individual level is important as each HCP has an opportunity to offer their personal opinion and insight regarding the change. Further, each HCP will advance through the change stages at different speeds, such as under Ability, a new HCP in the Immunization program may need more support and training than a veteran Immunization HCP in order to feel comfortable communicating effectively with vaccine-hesitant patients.

Additionally, using the ADKAR Change Readiness Assessment tool aligns with LMX, Servant and public health leadership theories. Having HCPs complete the ADKAR tool individually depicts that the Supervisor is listening and cares about what HCPs have to say about the change initiative (LMX). Further, through the provision of "mentoring, coaching, and recognition" (Canadian Public Health Agency, 2016, slide 3) (public health leadership) with each HCP, the Supervisor believes that she is placing the HCPs' needs above her own which results in the building of a strong trusting relationship with the community of HCPs (Servant).

Assessing change readiness is essential in the change process; however, the Supervisor cannot ignore other internal and external forces that will shape the development and implementation of a communication training plan for HCPs.

Change Force: Internal Environment

While change readiness is being assessed, the Supervisor realizes that there is an internal environmental force that will shape change at the PHU: participation. HCPs will need to participate in the change readiness assessments as well as in the development and implementation of the training plan. According to Belle (2016), "participation is essential in the process of accomplishing change… [, and] participation in organizations must be intentional, experiential and motivational" (p. 333). In terms of intentional, Merriam, Caffarella and Baumgartner (2007) state that "adults need to know why they are learning something" (p. 84). Therefore, the change drivers are the evidence, or the *why*, that will assist the Supervisor in helping the HCPs understand the importance of developing and implementing a training plan.

In terms of experiential, the HCPs' participation in the development and implementation of a training plan will need to involve experiential learning. Experiential learning means that all four learning environments are involved in the training, including feeling, thinking, watching, and doing (Nestel & Tierney, 2007). Experiential learning is grounded in adult education principles in that "adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life" (Pappas, 2013, n.p.). Since HCPs are adults, adult education principles need to underpin the development and implementation of the training plan. This will be further discussed in Chapter 2.

Additionally, the HCPs' participation will involve experience. Pappas (2013) states that "experience (including mistakes) provides the basis for the learning activities" (n.p.). HCPs who

have worked in the Immunization program for numerous years have experienced more communication interaction with vaccine-hesitant patients than a new HCP to the program, and therefore their experiences need to be acknowledged and leveraged with the development and implementation. Moreover, in order to understand HCPs' experiences, the Supervisor believes that using LMX and Servant Leadership behaviours, such as listening to HCPs talk about their communication experiences, will help the Supervisor understand their expectations for training as well as influence them to complete the ADKAR Change Readiness Assessment tool.

Finally, participation in the change will involve motivation. Motivation can be seen as two categories; "*intrinsic motivation,* which refers to doing something because it is inherently interesting or enjoyable, and *extrinsic motivation,* which refers to doing something because it leads to a separate outcome*"* (Pew, 2007, p. 16). According to Merrium et al. (2007), the most powerful motivation to change is "internal rather than external" (p. 84). The Supervisor recognises that she has the position to make changes in the Immunization program and extrinsically motivate HCPs. She believes that using LMX and Servant Leadership behaviours encompassed in public health leadership practice, such as listening, empathizing, and coaching and encouraging participation in the development and implementation of a training plan, supports intrinsic motivation among HCPs.

Change Force: External Environment

The external environment that shapes change at the PHU refers to "those factors that occur outside of the company that cause change inside organizations and are, for the most part, beyond the control of the company" (Hartzell, 2018, n.p.). External environment factors include "customers, competition, the economy, technology, political and social conditions, and resources" (n.p.). The P.E.S.T Analysis framework used to describe the external contextual

factors that contribute to the PoP are also external environmental forces that shape change at the PHU. To build on the P.E.S.T Analysis, the PHU is a public-sector organization and according to Baird and Harrison (2017), public sector organizations do not have competitors, they provide services rather than products, and do so in a legislative and political restricted environment. This description aligns with the PHU's practices as public health work is highly policy-driven and services, such as immunizations, are provided to the public. Moreover, Baird and Harrison (2017) state that "public sector organization have two 'customers', clients to whom the organization provides services, and the citizenry and politicians who fund the provision of services" (p. 312). Therefore, the external environment that shapes change at the PHU is dependent on the community and political forces.

Community and political forces are intertwined as the statutory provisions that the PHU must adhere to directly affect the community. For example, as of July 1, 2014, the ISPA was amended to add immunizations against pertussis (whooping cough) and meningitis as well as chicken pox for children born in or after 2010 (MOHLTC, 2014). More recently, September 1, 2017, the ISPA was amended to include that any parent who requests a non-medical exemption from all or one of the required vaccinations for a child who attends school in Ontario, must complete a formal education session at the PHU (Government of Ontario, 2018). Adding more required vaccines for school attendance and mandating formal education sessions have increased the amount of vaccine hesitant conversations and are external forces that have shaped change at the PHU.

Chapter 1 Conclusion

Vaccines are essential in keeping individuals and communities safe and healthy, and choosing to delay or refuse vaccination puts individuals and communities at increased risk of

serious illness and possible death from vaccine-preventable diseases. Therefore, it is vital that HCPs administer recommended vaccines on time and at the appropriate age. More importantly, it is vital that HCPs have high-quality communication skills in order to engage in educative, informative, and effective dialogue with vaccine-hesitant patients so patients understand the risk and benefits of vaccination.

Chapter 1 provided context and background to the PoP with an explanation of the PHU's organizational structure, identified the PoP, described the Supervisor's position and influence and leadership statement and paradigm, framed the PoP, acknowledged the leadership-focused vision for change, uncovered change drivers, and finally, identified the ADKAR tool to assess the HCPs' readiness to change. Chapter 1 provided evidence that the PoP, *What training is needed to ensure HCPs are capable to communicate effectively with vaccine-hesitant patients*, needs to be addressed because HCPs who can communicate effectively with vaccine-hesitant patients are more likely to increase patients' confidence in vaccination, improve vaccination rates with increased uptake, and therefore, align with the PHU's vision of supporting individuals and the community to strive for safety, health, and well-being.

Chapter 2: Planning and Development

Vaccine hesitancy is a multifaceted and complex issue, and a plethora of research has been conducted on patients' vaccine knowledge, attitudes, and beliefs that contribute to decreased public confidence in vaccines which decreases the uptake of vaccines (Dubé, Bettinger et al., 2016; Larson, Jarrett, Eckersberger, Smith, & Paterson, 2014; O'Leary, n.d.). For example, 70 percent of Canadians continue to be concerned about potential vaccine side effects and 37 percent believe "that a vaccine can cause the same disease it was meant to prevent" (Dubé, Bettinger et al., 2016, p. 246). Research suggests that changing HCPs' communication behaviour and building their communication capacity will have a direct effect, or change, on their patients; specifically, improving confidence in vaccines (decreasing vaccine hesitancy) and increasing vaccine uptake (Austvoll-Dahlgren & Helseth, 2010; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson et al., 2016; Williams, 2014). Behaviour change theory has been applied to many public health promotion and disease prevention strategies (Gray, 2013; Pfister-Minogue & Salveson, 2010; Pokhrel et al., 2015), and as stated by Gray (2013), patient behaviour change interventions, such as those that target immunization practices, "are becoming increasingly more important in the quest to create a healthy society… [and] can support individuals to develop healthy habits and sustainable lifestyles" (p. 239). Therefore, it is integral to develop and implement a training plan for HCPs to facilitate change in their communication behavior that can foster behaviour change in patients, which aligns with the PHU's vision to support all people to strive for safety, health, and well-being.

The purpose of Chapter 2 is to present the planning and development phase of this OIP. First, three leadership approaches to change will be described. Second, the Supervisor will explain a framework for leading the change, including the description of the four types of change

and The Three Rights framework. Third, the Supervisor will conduct a critical organizational analysis, which includes generating a gap analysis. Fourth, four possible solutions will be presented with the chosen solution presented as the content for the training as well as how the content will be learned, or the training for the training plan. Fifth and finally, leadership ethics and organizational change issues will be uncovered and addressed.

Leadership Approaches to Change

Within the context of this OIP, the Supervisor's goal for the change initiative is for HCPs to feel both comfortable and be effective in their communication with vaccine-hesitant patients in an effort to decrease vaccine hesitancy in patients and improve vaccination uptake. This means that the Supervisor's goal is to change the current individual HCP communication behaviour and build communication capacity among the community of HCPs which will then positively impact and improve individual patient and community behaviour towards vaccination. Therefore, in order to ensure that this individual and community change is successful, the Supervisor will use a comprehensive change management strategy of three change management models that will address both the individual and the community aspects of developing and implementing a training plan for HCPs so they can communicate effectively with vaccine-hesitant patients. Moreover, the Supervisor made the decision to choose three models as they aligned with the foundational leadership theories, LMX which supports individual relationships and Servant Leadership which supports community relationships, and public health leadership which envelops LMX and Servant Leadership behaviours and is essential in coaching and motivating to the change forward. The three change models are The ADKAR Model of Change to focus on individual change, Kotter's Eight-Stage Change Process to focus on the community change, and Duck's Five Stage Change Curve to focus on the inevitable emotions that impact the

change process.

ADKAR Model of Change

The first change model to be used will be the ADKAR (Awareness, Desire, Knowledge, Ability, and Reinforcement) Model of Change. ADKAR is a five-stage model that focuses on the individual by ensuring that each person makes the transition and implements the proposed change initiative (Connelly, 2018; Hiatt, 2006). Figure 4 illustrates the five sequential steps of the ADKAR Model of Change. ADKAR's first stage, Awareness, represents the individual's "understanding of the nature of the change, why the change is being made and the risk of not changing" (Hiatt, 2006, p. 2). Desire represents the individual's "willingness to support and engage in the change" (p. 2). Knowledge represents the "information, training, education necessary to know how to change" (p. 2). Ability happens when knowledge turns into action, and Reinforcement represents the "internal and external factors that sustain the change" (p. 3). All five stages may be experienced differently by all participants in the change, as each individual could be at different stages. Thus, it is important to assess what stage each HCP is at with the ADKAR Change Readiness tool that was introduced in Chapter 1.

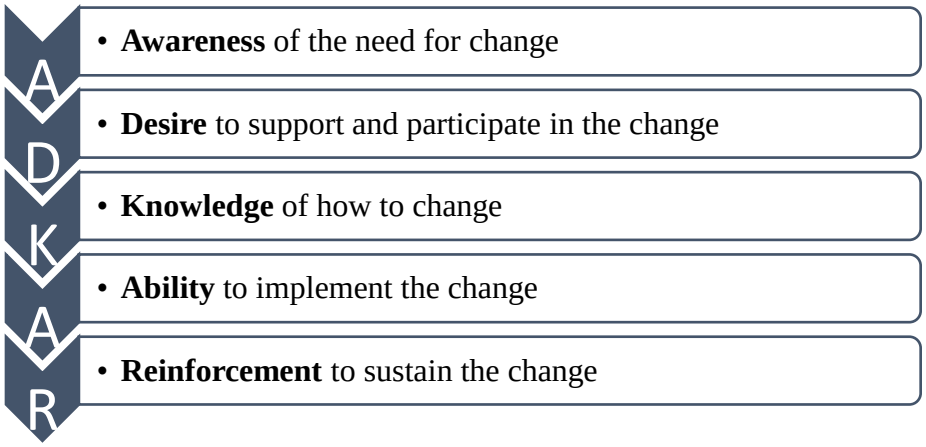

Figure 4. ADKAR Model of Change

Using the Change Readiness tool as part of the ADKAR Model of Change process is

important for the Supervisor to assess what stage HCPs are at related to the change initiative, to identify any gaps or barriers that may inhibit the change initiative, and to assist in moving the change initiative forward. Additionally, ADKAR's tool and Model of Change support the Supervisor's use of LMX theory as both ADKAR and LMX focus on building trusting relationships with each individual HCP which will then help motivate their participation in changing their current communication behaviour, thus a successful OIP implementation.

Kotter's Eight Stage Change Process

Kotter's Eight Stage Change Process is a systematic and sequential process for change leaders to follow when implementing an organizational change initiative (Kotter, 2012; Northouse, 2016; Pollack & Pollack, 2015). Figure 5 illustrates Kotter's eight stages and is one of the most frequently used change management models.

Figure 5. Kotter's eight stage change process

Kotter's stages one to four are considered preparing for the change by establishing a

sense of urgency among the community of HCPs, creating a guiding coalition, developing a vision and strategy, and communicating the change vision (Kotter, 2012; Sidorko, 2008). Stages five to seven are related to activating the change by empowering the community of HCPs, generating short-term wins, and consolidating gains and producing more change (Kotter, 2012; Sidorko, 2008). The last stage stands alone with grounding the change or anchoring the change into the organization's processes (Kotter, 2012; Sidorko, 2008); for example, creating a policy related to HCP communication training.

Kotter's eight-stage change process aligns with the Supervisor's Servant Leadership ideology as the Supervisor believes that listening to the HCPs and building trusting relationships with the community of HCPs will help facilitate a successful implementation of the OIP. Moreover, using Kotter's eight-stage change process will help ensure that the community of HCPs are successful in making the change.

Duck's Five-Stage Change Curve

Duck's Five-Stage Change Curve is a sequential change model that focuses on the emotions that fuel motivation and resistance in the change process, and has five stages: Stagnation, Preparation, Implementation, Determination, and Fruition (Cawsey et al., 2016; Duck, 2001; Rouse, 2001). Duck (2001) states that change is "influenced and directed by behaviours and attitudes, environments, ideas and relationships" (p. 13), and that "changing behaviour – corporate or individual – is inherently an emotional process" (p. 32). Since behaviour change is the change outcome the Supervisor is striving for, Duck's model encompasses the individual and the community focuses of ADKAR and Kotter, similar to public health leadership encompassing LMX and Servant Leadership behaviours.

Additionally, the underlying reason for vaccine hesitancy and patients' decision to

vaccinate or not is espoused from their emotional and social context; ergo, any change that exists in a vaccination context has the potential to be an emotion-filled process, which illustrates that Duck's Five-Stage Change Curve is an important change model for the Supervisor to utilize in conjunction with ADKAR's Model of Change and Kotter's Eight-Stage Change Curve.

The Supervisor believes that successful organizational change needs to address individuals, the community, and underlying emotions. Furthermore, according to Sidorko (2008), "no single model can provide a one-size-fits-all solution to organisational change" (p. 316); therefore, in order to address the PoP and develop and implement a communication training plan for HCPs, the Supervisor will overlap the ADKAR Model of Change, Kotter's Eight Stage Change Process, and Duck's Five-Stage Change Curve.

Overlapping the Change Models

The Supervisor believes that LMX and Servant Leadership behaviours, such as listening and empathizing, encompassed in public health leadership are emotionally fueled and underpin the use of Duck's Five-Stage Change Curve. Additionally, Duck's model focuses on the individual, similar to ADKAR's Model of Change, and ensures that each HCPs' emotions are considered throughout the change process. Conversely, Duck (2001) explains that when individuals make the change, groups of individuals will make the change, thus Duck's Five-Stage Change Curve encompasses Kotter's Eight Stage Change Process and ADKAR's Model of Change and is integral to leading HCP emotions, changing HCP communication behaviour, and building communication capacity among all HCPs at the PHU. Table 1 illustrates the overlapping of the three models into five stages.

To describe the overlapping, Stagnation, Awareness and Kotter's stages one and two is the initial stage where people may not be aware of the need for change. Duck (2001) states that

signs of unawareness are internal and external to the organization, and that in the Stagnation stage, the Supervisor's role is to "push people to see the truth of their situation and to wake them up" (Cawsey et al., 2016, p. 51), or make them aware of the need for change, as indicated in the ADKAR model. In Chapter 1 under Framing the Problem of Practice section, the Supervisor used a P.E.S.T Analysis framework to uncover the external contextual factors and Bolman and Deal's (2013) Four Frame Model to uncover the internal contextual factors that contribute to the PoP, thus highlighting that there is a need to move from stagnation at the PHU.

Table 1

Overlapping Duck's Five-Stage Change Curve and ADKAR with Kotter's Eight-Stage Change Process

Duck's Five-Stage Change Curve	ADKAR	Kotter's Eight-Stage Change Process
[Disrupting] Stagnation	Awareness	1. Establish a sense of urgency 2. Create a guiding coalition
Preparation	Desire	3. Develop a vision and strategy 4. Communicate
Implementation	Knowledge	5. Implementation
Determination	Ability	6. Generate short-term wins 7. Consolidate gains and produce more change
Fruition	Reinforcement	8. Anchor new approaches

The second stage includes Preparation, Desire and Kotter's stages three and four. This stage is where the planning and operational work happens (Cawsey, 2016), and the leader's role

is to "create productive anxiety – an appetite for change" (Duck, 2001, p. 92). Further, communication is the most important element of this stage. According to Duck (2001), communication is important at all stages of the change, but Preparation is where the communication channels open wide. In this stage, the Supervisor will use the change drivers in Chapter 1 as the "push" to onboard HCPs and persuade them that a communication training plan needs to be developed and implemented at the PHU.

Additionally, the Supervisor will utilize LMX and Servant Leadership behaviours (such as listening and empathizing) encompassed in public health leadership practice in order to "influence, motivate, and enable others to contribute towards the effectiveness and success of their community and/or the organization" (Canadian Public Health Agency, 2016, slide 3). This means that LMX, Servant, and public health leadership will be used to assess each HCPs' stage of change readiness (ADKAR tool - Appendix A) and then create a *Desire* (ADKAR model, stage two) to support and participate in the change. The Supervisor will also use LMX and Servant Leadership behaviours encompassed in public health leadership to develop a change strategy and shared vision with the HCPs (Kotter, stage three and four) that align with the PHU's Strategic Plan to support all people in the community to strive for safety, health, and well-being.

The third stage includes Implementation, Knowledge and empowering employees and as Cawsey (2016) states, is "where the journey begins…[and] requires changing people's mindsets and work practices" (p. 51). Addressing resistance and changing HCP communication behaviour happens here as HCPs will be changing the way they currently talk to vaccine-hesitant patients. Duck's Implementation aligns with Kotter's fifth stage to empower employees and eliminate resistance to the change, and ADKAR's Knowledge stage of how to change. Leading change moves people from a current state to a desired state "aimed at empowering employees to accept

and embrace changes in their current environment" (Ryerson University, 2011, p. 4). The Supervisor believes that LMX and Servant Leadership behaviours of listening and empathizing encompassed in public health leadership practice will be foundational to coaching and motivating HCPs through the change process.

The fourth stage includes Determination, Ability and Kotter's stages six and seven. This is where people realize that the change has happened and that their work is different (Cawsey, 2016). This stage is the most critical and has the highest chance of failing due to "change fatigue" and the effort needed to expand "their energy needed to re-think their daily work" (Duck, 2001, p. 30). Related to this OIP, the Supervisor understands that Public health work "often addresses problems with no clear set of answers or immediate and apparent results" (Ryerson, 2011, p. 46). For example, patients may refuse vaccination after educating them and jurisdictional coverage rates are revealed once a year by Public Health Ontario. Not experiencing or observing an immediate impact on their patients or their community may cause HCPs to regress or dismiss the communication training they receive. Therefore, in order for the Supervisor to implement the required skills and behaviours needed so HCPs can communicate effectively with vaccine-hesitant patients (Ability, ADKAR) (Hiatt, 2006), the Determination stage requires her to lead "with high energy and enthusiasm" (Cawsey, 2016, p. 52) by generating short-term wins, consolidating gains and creating more change (Kotter, 2012), such as highlighting communication successes at monthly team meetings.

The fifth stage is Fruition, Reinforcement and anchoring new approaches (Cawsey, 2016). At this final stage, Duck (2001) states that when "employees are confident in themselves; they're optimistic and energized" (p. 33-34). The Supervisor believes that supporting HCP emotions during the other four stages of the change curve will produce confidence and fuel their

motivation to continue with the changes made. As such, HCPs who are confident in their practice and believe that they are communicating effectively with vaccine-hesitant patients are more likely to decrease patient vaccine hesitancy and improve vaccination rates with increased uptake, which then intrinsically fuels their motivation to continue with the communication behaviour change.

Ultimately, the Supervisor believes that overlapping ADKAR Model of Change and LMX theory, Kotter's Eight-Stage Change Process and Servant Leadership theory, and Duck's Five-Stage Change Curve and public heath leadership practice will facilitate the building of trusting relationships with individual HCPs and the community of HCPs. Building these trusting relationships will then help to motivate HCPs to want to change their communication behaviour and build their communication capacity so they can communicate effectively with vaccine-hesitant patients. Conversely, changing communication behaviour and communication capacity will also help ensure that there is a decrease in vaccine hesitancy in the community and that there is an improvement in vaccination uptake in order to support a safe and healthy community that is protected against vaccine-preventable diseases.

Framework for Leading the Change

Having a framework for leading the change process will help the Supervisor understand how to make changes at the PHU; however, understanding the different types of change is important so the Supervisor can plan, respond, and lead appropriately. According to Dowdell (2018), there are four types of organizational change: Anticipatory (or proactive), Reactive, Incremental, and Strategic. Anticipatory or proactive change is implemented to handle expected situations, and is described as the easiest changes to implement (Dowdell, 2018; Nadler & Tushman, 1990). Additionally, anticipatory change is directly related to positive job performance

and known to decrease negative or resistive behaviour as leaders can prepare explanations ahead of time (Crant, 2000; Dowdell, 2018; Nadler & Tushman, 1990). This OIP represents Anticipatory change as the Supervisor is expecting to develop and implement a training plan for HCPs so they can communicate effectively with vaccine-hesitant patients. Uncovering the internal factors that can affect change and identifying change drivers to help move the change forward before the change plan is discussed with HCPs are examples of Anticipatory change. Further, the Supervisor will use the overlapping change management models to guide this Anticipatory change to develop and implement a successful communication training plan.

The opposite of Anticipatory change is Reactive change and is a response to unexpected change, usually forced upon the organization by external sources (Dowdell, 2018; Nadler & Tushman, 1990). Working in a public sector healthcare organization, Reactive change is a possibility. For example, the Immunization HCPs may have to halt daily work activities to manage a vaccine-preventable disease outbreak at a school. The MOHLTC's (2018d) Appendix A – Disease Specific Chapters provides disease-specific reactive direction for the management of vaccine-preventable diseases, such as measles. Additionally, unexpected human resource issues, such as a HCP leaves the program, can cause a Reactive change because workload would need to be temporarily divided among the other HCPs. The Supervisor will use her 20 years of public health leadership experience with LMX and Servant Leadership ideology to listen and empathize with HCPs, and to use the trusted relationships that she has built to lead them through a Reactive change.

Incremental changes are "small changes (as a part of the bigger picture) made within the internal structure and implemented to ensure organizational goals are met" (Dowdell, 2018, n.p.). Incremental changes happen often in organizations and strive to enhance organizational

effectiveness (Nadler & Tushman, 1990). Developing and implementing a communication training plan for HCPs is an Incremental change, considering if the plan is implemented for the Immunization program only. Currently, only Immunization HCPs administer vaccines which support the MOHLTC's (2018c) Immunization Program Standard goal "To reduce or eliminate the burden of vaccine preventable diseases through immunization" (p. 39). However, in order to achieve the organizational strategic vision with supporting all people to strive for safety, health and well-being, and to improve governance, communication and organizational capacity, a larger Strategic change will need to happen that includes all HCPs at the PHU being able to communicate effectively with vaccine-hesitant patients.

Strategic change impacts the entire organizational system and fundamentally redefines its strategy, structure, people or processes, and is usually made by upper management (Dowdell, 2018; Nadler & Tushman, 1990). In addition to Anticipatory change, this OIP has a vision for a larger Strategic change (this will be discussed in Chapter 3 under Communicating the Need for Change section). Since the recommendation of providing communication training for all HCPs in all departments has been approved by Upper Management (the fourth change driver), developing and implementing a training plan for HCPs so they can communicate effectively with vaccine-hesitant patients will be a Strategic change at the PHU that redefines the way all HCPs communicate with the public about vaccination.

Ultimately, all four types of change are involved in the change process of addressing the PoP and developing and implementing a communication training plan for HCPs. Understanding the types of change and where they fit into the process will assist the Supervisor in determining how to manage and lead the change process forward towards OIP implementation. The Supervisor believes that how she will develop and implement successful organizational change

involves The Three Rights framework.

The Three Rights

To ensure that organizational change is successful, Sidorko (2008) states that fundamentally, there are three rights to successful organizational change: the right leader, the right environment, and the right models and tools. As illustrated in Figure 6, the Supervisor visualizes a triangle with each vertex designated a Right. Any change in one of the vertices will have an effect on the other two. For example, if there were lay-offs at the PHU during the change implementation, this would negatively affect the environment, thus the change may not be successful.

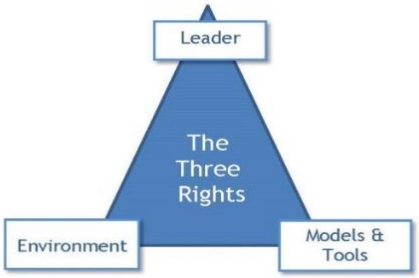

Figure 6. The Three Rights

The right leader to develop and implement a communication training plan for HCPs is the Supervisor. First, she has the position and influence to implement changes to the Immunization program and is responsible for ensuring that the eight Immunization HCPs are trained, competent, and comfortable in communicating with the public about vaccines. Second, the Supervisor has been in public health for over 20 years and in her position for seven years. With her years of public health experience, she has gained expertise in the field and she understands that her influence in public health is not a position, but a relationship that she uses to lead her program and support HCPs in changing to become leaders themselves. Finally, the Supervisor is the right leader because she encompasses LMX and Servant Leadership theories in her public

health leadership practice. She believes that the change will be successful when all individuals make the change; therefore, she supports LMX theory that listening to HCPs and developing unique trusting relationships with each one will assist the Supervisor in moving the change forward. Conversely, she believes that Servant Leadership theory is integral to her practice as she leads from behind and puts the needs of her followers (HCPs) first. This means that the training plan to be developed and implemented is not for the Supervisor's benefit, as she does not converse with patients as often as the HCPs, but for the benefit of the community of HCPs.

Successful change at the PHU requires the right leader establishing the right environment so change can happen. The Supervisor believes that as the right leader, she is responsible for establishing the right environment by identifying and addressing emotions related to the change initiative. Emotions are inevitable in any change initiative and are perhaps the most significant variable to organizational change success or failure (Cawsey et al., 2016; Sidorko, 2008). Specifically, employees who resist change are emotionally fueled and is said to be the number one obstacle that leaders experience with organizational change efforts (Keller & Price, 2011; Ryerson University, 2011). In fact, Rouse (2001) states that change efforts fail "not because of operational tasks or systems but because of emotional factors and social issues" (p. 1516). Furthermore, Duck (2001) states that "for a change initiative to succeed, the emotional and behavioural aspects must be addressed as thoroughly as the operational issues" (p. 8-9). Related to this OIP, emotions will fuel the motivation to participate in the change process, such as completing the ADKAR Change Readiness tool and participating in the development and implementation of a training plan. Furthermore, vaccine hesitancy and patients' decision to vaccinate or not is espoused from their emotional and social context which can potentially result in an emotionally-fueled conversation with a HCP. Therefore, the Supervisor believes that in

order to establish a right environment, she will use LMX and Servant Leadership behaviours encompassed in public health leadership practice to invest in the development of her followers by acting as a role model who provides support, involves followers in decision making, displays appropriate ethical behavior (discussed later in this Chapter), and stresses the importance of serving the wider community in which they are all embedded (Newman, Schwarz, Cooper, & Sendjaya, 2017).

Finally, ensuring successful change at the PHU requires the right leader to establish the right environment by using the right models and tools. Using the right models and tools involves using the ADKAR Model of Change to help facilitate individual change, Kotter's Eight-Stage Change Process to help facilitate community change, and Duck's Five-Stage Change Curve to manage the inevitable emotions that contribute to and affect the change environment. Additional information regarding the right models and tools will be discussed in Chapter 3 where The Three Rights framework will be presented as the strategy for the change implementation plan.

Critical Organizational Analysis: What to Change

Recognising what to change at the PHU begins with completing a gap analysis. A gap analysis identifies the current state at the PHU, the envisioned future state, the difference or gap between the two, and then identifies possible activities to that will help close the gap (Cawsey et al., 2016; Yochum, 2018). As illustrated in Table 2, there are four gaps identified.

The first gap is that there is no communication training plan. HCPs in all departments at the PHU experience vaccine-hesitant patients. For example, HCPs in Family Health who teach prenatal classes address vaccination in their curriculum; however, they have not received vaccine-specific training by the Immunization HCPs. As described in Chapter 1, the integrated planning recommendation to train HCPs in all departments at the PHU was approved by Upper

Management; therefore, in order to close the gap and develop a training plan, the Supervisor will investigate possible clinical education tools and techniques for the content of the training, which will be presented in Solutions to Address the PoP.

Table 2

Gap Analysis

Current State	Future State	Identify Gaps	Activities to Close the Gap
HCPs rely on their experience to talk to vaccine-hesitant patients	HCPs can communicate effectively with vaccine-hesitant patients	No training plan for HCPs	Investigate possible clinical education communication tools and techniques. Train all HCPs at the PHU
Poor coverage rates in the PHU's jurisdiction	Confident patients and improved uptake with vaccines	Communication skills and techniques are lacking	Train all HCPs to communicate effectively
HCPs fear and are frustrated with the increase in interaction with vaccine-hesitant patients	HCPs voicing their confidence related to conversing with vaccine-hesitant patients	Communication skills and techniques are lacking	Train all HCPs so they have the skills resulting in communication confidence
Only reading and memorization of immunization resources are available for HCPs	HCPs will have different types of resource material available to help them learn the skills needed	Few interactive resources or supportive communication resources available for HCPs	Develop and provide resources that address all types of learning

The second and third gaps are that HCPs' communication skills and techniques are lacking. Poor coverage rates and HCPs voicing their fears and frustrations with increasing vaccine hesitant conversations are evidence that communication skills and techniques are lacking and that communication capacity needs to be built among the HCPs. To help close the gap, the Supervisor has embarked on this OIP to address the PoP and develop and implement a

communication training plan for HCPs. Furthermore, research suggests that improving HCPs' communication skills will increase patients' confidence in vaccination to increase uptake and improve vaccination rates (Austvoll-Dahlgren & Helseth, 2010; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson et al., 2016; Williams, 2014). Therefore, developing and implementing a communication training plan for HCPs to improve their communication skills has the potential to increase HCPs' confidence and communication capacity which can then directly impact their patients' confidence in vaccination to increase uptake and improve vaccination rates.

The fourth gap is that there are few interactive resources or supportive communication-specific resources available for HCPs to learn the skills necessary to communicate effectively with vaccine-hesitant patients. Currently, only reading and memorization of immunization information are available for HCPs (further discussed in the Solutions section). Since HCPs are adults, the Supervisor believes that adult education principles need to apply in the educating of HCPs, which supports the four types of experiential learning (feeling, thinking, watching, and doing). Therefore, in order to close this resource gap, the Supervisor will investigate content and communication training that align with adult education principles.

In order to close the four gaps and build HCPs' communication behaviour and capacity, what needs to change addresses the fifth guiding question in Chapter 1: *What is the Supervisor actually trying to change?* The answer: behaviour. The Supervisor is trying to change HCP behaviour, or the way they currently talk to vaccine-hesitant patients, which will then facilitate a change in patients' behaviour by convincing them to vaccinate. Behaviour change theory is common in public health and has been applied to many public health promotion and disease prevention strategies (Gray, 2013; Pfister-Minogue & Salveson, 2010; Pokhrel et al., 2015). For

example, Self-Determination Theory is combined with the Health Belief Model to understand and predict university students' intention and follow-through with influenza vaccination (Fall, Izaute, & Chakroun-Baggioni, 2018). Therefore, when uncovering the solutions to address the PoP, the Supervisor will need to focus on solutions that emancipate behaviour change theory.

Solutions to Address the PoP

In order to alleviate patient vaccine hesitancy, Kestenbaum and Feemster (2015) state that it is integral to identify the most effective communication strategies for both presenting information and negotiating with patients who are vaccine hesitant. Table 3 illustrates four communication resources/techniques that could possibly provide the content for the communication training plan.

Table 3

Four possible solutions to address the PoP.

Possible Solution	Definition	Advantages	Disadvantages
A.S.K Approach	Acknowledge the client's concern; Steer the conversation; Know the facts well	• Categorizes HCP and patient information/answers • Up-to-date information	• Supports the deficit model • One-sided counseling. • Available in read-only format
C.A.S.E Framework	Corroborate, About Me, Science, Explain/Advise	• Advises to use presumptive vs participatory language	• One-sided communication • Supports the deficit model • Risk communication messaging
Motivational Interviewing (MI)	Explores ambivalence and engages patients' intrinsic motivation to change their behaviour.	• Can be used by all HCPs at the PHU • Extensively researched; Shown to change patient behaviour	• Takes time to practice • May take numerous interactions to change patient behaviour
Behaviour Change Counselling (BCC)	Fosters behaviour change via patient–provider relationship	• For short interactions with patients • Contains elements	• No training resources available • Limited research conducted

of MI

Solution 1: A.S.K Approach

A.S.K Approach is a framework developed by the British Columbia (BC) government for HCPs to use when communicating with patients about vaccines. A.S.K stands for acknowledge your client's concern (A); steer your conversation (S); and knowledge: know the facts well (K). A.S.K is in its second edition (the first was in 2008), and is a "systematic method to answer difficult immunization questions and helps to enhance immunization communication between health care providers and the public" (Derban, Jarvos, Klein, Morgana, & Pringle, 2013, p. ii). There is a "quick reference" guide for immunizers that supports the framework. The guide is a 39-page information tool that addresses the dominant vaccine hesitant-related questions and concerns, such as vaccine safety, multiple injections at one visit, and the safety of vaccine components. Each question and concern category contains a clinical evidence explanation for HCPs that is paralleled with an explanation of what to say to the patient.

Unfortunately, the reference guide contains BC's epidemiology and statistics, and is only offered in written form for HCPs to memorize the content. Memorizing content does not support adult education principles of experiential learning or address all four learning environments with feeling, thinking, watching, and doing (Nestel & Tierney, 2007). Additionally, the A.S.K Approach framework focuses on the information deficit model: Give patients scientific information to improve their knowledge and they will make the correct decision, which has been shown not to be effective in the context of vaccines (Dubé, Gagnon et al., 2016; Sturgis & Allum, 2004).

Solution 2: C.A.S.E Framework

American Academy of Pediatrics (AAP) (2018) developed a C.A.S.E framework for communicating vaccine science. C.A.S.E is an acronym for Corroborate (C): Acknowledge the

patients' concern, find some point where there is agreement, and set the tone for a respectful, successful talk; About Me (A): The HCP describes what they have done to build their knowledge base and expertise; Science (S): Describe what the science says; and Explain/Advise (E): Give science-based advice to the patient. C.A.S.E is only four steps for the HCP to memorize and follow; however, it supports the information deficit model, and as described by Austvoll-Dahlgren and Helseth (2010), promotes one-sided communication, such as explaining the scientific benefits and risks of a vaccine, then offering their professional recommendations, rather than engaging in a more balanced dialogue with the patient.

Additionally, within the C.A.S.E framework, the AAP (2018) advises HCPs to first use risk communication and second, to use presumptive rather than participatory language. First, risk communication is defined by the World Health Organization (WHO) (2018) as the "real-time exchange of information, advice and opinions between experts or officials and people who face the threat (from a hazard) to their survival, health or economic or social wellbeing" (slide 3). Risk communication is frequently used in public health practice; for example, in a disease outbreak situation to increase public awareness that there may be a threat to human health. Using risk communication techniques when discussing vaccines with hesitant patients may be easy for HCPs as it is part of their public health practice; however, risk communication promotes strong vaccine messaging that research proclaims to be counterproductive for vaccine-hesitant patients (Dubé, Bettinger, et al., 2016). Additionally, risk communication supports the information deficit model and promotes one-sided communication to patients.

Second, AAP (2018) states that HCPs should use presumptive language rather than participatory language. In the context of vaccinations, presumptive language linguistically presupposes that patients would receive their vaccination; for example, "So today we are

administering three vaccines that your one-year old needs". Conversely, participatory language linguistically provides patients with more decision-making latitude, or an opportunity to decide against vaccination; for example, "Have you thought about what shots you would like to get today?" In a study completed by Opel, Heritage, Taylor, Mangione-Smith, Salas, DeVere, Zhou and Robinson (2013), they concluded that the best predictor of vaccination uptake in the clinical setting, for both hesitant and non-hesitant parents, was how the HCP started the conversation. Therefore, training HCPs in starting their vaccination conversation with presumptive language has the potential to decrease patient vaccine hesitancy and improve vaccine uptake.

Solution 3: Motivational Interviewing (MI)

Motivational Interviewing (MI) is described as a form of patient empowerment and assists the patient to develop the knowledge, skills, and ability to make decisions about their health, and "has proven to be more effective than conventional methods to increase patient motivation" (Brobeck, Bergh, Odencrants, & Hildingh, 2011, p. 3323). According to Gance-Cleveland (2007), MI is a strategy for HCPs to exchange information with patients in order to reduce their resistance against treatment, and MI "outperforms traditional advice giving and can be effective in brief encounters of only 15 minutes" (p. 88). Conversely, Miller (2010) states that MI "permits health care professionals to use techniques such as open-ended questions, reflective listening, affirmation, and summarization to help individuals express their concerns" (p. 247). Additionally, in his YouTube video, Dr. Mike Evans (2014) describes MI as guiding HCPs through careful listening and strategic questioning, and that MI allows the HCP the ability to roll with patient resistance.

Unfortunately, even though MI has been extensively researched and has been shown to be successful in changing patients' behaviour (Hauer, Carney, Chang, & Satterfield, 2012; Miller

& Rollnick, 2013), this research is mainly in the context of addiction, such as smoking or over-eating, and is most successful when executed over an extensive amount of time; for example, a one-hour paid counselling session over several weeks (Hauer et al, 2012; Lane, Huws-Thomas, Hood, Rollnick, Edwards & Robling, 2005; Miller & Rollnick, 2013; Pfister-Minogue & Salveson, 2010).

Solution 4: Behaviour Change Counselling (BCC)

In order to reduce the time involvement associated with MI, Behaviour Change Counselling (BCC) is the fourth possible solution presented. According to Vallis, Lee-Baggley, Sampalli, Ryer, Ryan-Carson, Kumanan and Edwards (2018), BCC is defined as "the intervention, knowledge and skills of HCPs that foster behaviour change via the patient–provider relationship" (p. 71). BCC was developed for brief healthcare consultations with a more modest goal in mind: simply to help the patient to talk through the why and how of change, with the HCPs main task being to understand how the person is feeling and what plans they might have for change (Lane et al., 2005). Moreover, BCC is a communication technique that supports HCPs in guiding "individuals from not doing to doing the recommended behaviour" (p. 71); for example, from not vaccinating to choosing to vaccinate.

BCC is similar to MI as it selects crucial elements of MI, such as demonstrating respect for patient choice, asking open-ended questions, using empathic listening, and summarizing, that HCPs can use in clinic situations where brief contact times with patients are typical; for example, on a telephone consultation (Lane et al., 2005; Pfister-Minogue & Salveson, 2010). Unfortunately, BCC is not studied to the extent that MI is, and therefore, optimal training approaches and resources for HCPs are not yet established (Fontaine, Cossette, Heppell, Roussy, Maheu-Cadotte, & Mailhot, 2018), and as such, not available for training purposes.

The Solution

When the Supervisor was uncovering the four possible solutions, status quo was considered as a fifth possible solution; however, HCPs would continue to voice their fears and frustrations as the number of vaccine hesitant conversations continue to increase in frequency and complexity. As well, if improving HCP communication skills will help to improve patients' confidence in vaccines and improve vaccine uptake (Austvoll-Dahlgren & Helseth, 2010; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson et al., 2016; Williams, 2014), then remaining with status quo does not support patient confidence changes that are necessary to decrease vaccine hesitancy and improve vaccine coverage rates as well as align with the PHU's vision of supporting all people to strive for safety, health, and well-being.

Assessing the first and second possible solutions, BC's A.S.K and AAP's C.A.S.E resources are both available on-line for HCPs to access. Unfortunately, these resources are only appropriate for HCPs who learn by reading and memorizing, they support the information deficit model, and promote one-sided communication. The information deficit model and one-sided communication have been shown not to be effective in the context of vaccines as patients are influenced by their cognitive biases and their decision to vaccinate or not is motivated more by social and emotional factors rather than evidence-based and scientific information (Browne et al., 2015). In fact, Kestenbaum and Feemster (2015), state that public health anti-vaccine strategies that focus on providing information alone have not been successful, and Dubé, Bettinger, et al. (2016) state that "messaging that advocates vaccination too strongly may be counterproductive for those who are already hesitant" (p. 248). This research highlights the importance of HCPs knowing that *how* they discuss vaccination information with patients is more important than *what* information they discuss with patients. The AAP (2018) does support the *how* by

promoting the use of presumptive language over participatory language in order to improve patient confidence and vaccination uptake in a clinical setting (O'Leary, n.d.; Opel et al., 2013). Subsequently, communication resources/techniques that focus on how people think rather than how they should think are presented in the third and fourth possible solutions: MI and BCC.

MI and BCC both focus on changing patients' behaviour as the goal of patient conversations. MI is known to result in patient behaviour change in a controlled environment over an allotted amount of time, and BCC was created to assist HCPs with shorter sessions, such as a five-minute phone conversation. Vaccine hesitant conversations in the Immunization program can be as short as a five-minute phone conversation or a 10-minute in-person drop-in inquiry, or as long as a one-hour clinical appointment, such as when a parent is required to watch the vaccination education video as part of the process to exempt their child from a vaccine or vaccines. Vaccine hesitant conversations with patients can be unpredictable in terms of conversation length of time and vaccine topic (for example, patients may inquire about the influenza vaccine or if they should vaccinate their newborn baby). Unfortunately, since BCC is not researched to the extent that MI is, only MI training workshops are available for the Supervisor to fund.

Conclusively, in the context of this OIP, communicating effectively means that HCPs have the ability to listen, empathize and educate vaccine-hesitant patients which inherently builds trust and can evidently decrease patients' vaccine hesitancy and increase overall vaccine uptake in the PHU's jurisdiction. Conversely, research indicates that a HCP's ability to communicate effectively with their patients has a profound effect on patient adherence to medical advice and the adoption of preventative health behaviours, such as vaccination (Duffy et al., 2004; Goldstein, 2018; Institute for Healthcare Communication, 2019). Since the literature

indicates that *how* HCPs communicate with patients is more important than *what* they communicate, and since *how* providers initiate the vaccine conversation appears to be an important determinant of patient resistance (Opel et al., 2013), the Supervisor believes that the solution to the PoP, or the content for the communication training plan is that HCPs learn the elements of MI as well as learn how to use presumptive language in the clinical setting.

The Training

Research indicates that improving HCP communication skills will help to improve patients' confidence in vaccines (decrease vaccine hesitancy) and improve vaccine uptake (Austvoll-Dahlgren & Helseth, 2010; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson et al., 2016; Williams, 2014). As described, the Supervisor believes that providing MI and presumptive language training for HCPs will help build their communication capacity so they can communicate effectively with vaccine-hesitant patients in an effort to decrease vaccine hesitancy in the community and improve overall vaccine coverage rates. According to the Institute for Healthcare Communication (2011), effective communication is an essential part of delivering high-quality patient care by HCPs, and this relies heavily on them building their "core communication skills, such as open-ended inquiry, reflective listening, and empathy, as a way to respond to the unique needs, values and preference of individual patients" (n.p.). These skills are fundamental elements of MI (Miller & Rollnick, 2013), and even though MI is encouraged by the Government of Canada (2016) in the *Canadian Immunization Guide* as a communication technique for HCPs to use when talking to vaccine-hesitant patients, there is no specific training or guidance available about *how* to train HCPs these skills. Conversely, to date, there are no MI workshops available that focus specifically on vaccine hesitancy. Therefore, the Supervisor will need to substantiate a MI training workshop to include a vaccine-specific context and

presumptive language training with an evidence-informed method of delivery for the HCPs.

According to Jarrett et al. (2015), vaccine hesitant communication training for HCPs needs to use dialogue-based interventions, accompanied with information-based training and communication tool-based training. Further, the World Health Organization (2018) states that interventions for HCPs that address vaccine hesitancy should be dialogue-based, and that the "education and training of health care workers should be carried out to empower them to address vaccine hesitancy issues in patients" (n.p.). Additionally, Hauer et al. (2012), state that "existing literature suggests that trainees learn behaviour counseling through active, realistic practice and implementation of reminder and feedback systems within actual practical settings" (p. 956), and that "successful curricular interventions combine multiple learning strategies with opportunities for practice and feedback" (p. 961). As discussed in Chapter 1, the communication training plan needs to be grounded in adult education principles to ensure that learning has immediate relevance and impact with their job (Pappas, 2013), and that the training needs to reinforce experiential learning by addressing all four learning environments with feeling, thinking, watching, and doing (Nestel & Tierney, 2007). The Supervisor believes that problem-based learning (PBL) is the most appropriate approach for HCPs to learn MI and presumptive language.

Problem-Based Learning

PBL ensures that all four learning styles are incorporated in HCPs' training (Alkhasawneh, Mrayyan, Docherty, Alashram, & Yousef, 2008), and "is widely used in medical education and stimulates the development of leadership competencies as learners are self-directed and collaborate in small groups to work on authentic, complex tasks to explore problems and consider possible solutions" (Könings et al., 2018, p. 2). In addition, PBL incorporates the

use of role-playing. Role-playing is also common among medical education, and allows HCPs to practice the skills and acquire knowledge related to their context (Nestel & Tierney, 2007). Therefore, in order to substantiate a MI training workshop, the Supervisor will have HCPs develop case scenarios based on their real-life experiences with vaccine-hesitant patients and then practice using MI and presumptive language through role-playing.

Additionally, according to Fontaine et al. (2018), learning to counsel for behaviour change has been shown to be more effective in short sessions over an extended period of time, and Hauer et al. (2012) state that regular "refresher training would enhance ongoing application of skills and avoid decay in performance (p. 960). This means that the Supervisor will utilize her LMX and Servant Leadership behaviours encompassed in public health leadership to listen and motivate the HCPs in determining a training timeline and cycle for role-playing the scenarios (for example, monthly at the end of team meetings) so they can be successful in learning and using MI and presumptive language with vaccine-hesitant patients.

Ultimately, the answer to the second guiding question, *What are the skills that will help HCPs communicate effectively?* is for HCPs to learn MI skills and presumptive language through PBL activities (developing case scenarios and role-playing) so they can feel confident in communicating effectively with vaccine-hesitant patients. The Supervisor believes that her LMX and Servant Leadership behaviours encompassed in public health leadership practice will be foundational in facilitating the development and implementation of this communication training plan at the PHU. Moreover, the Supervisor is trained in MI and understands presumptive language; therefore, she will use public health leadership practice to guide and coach the HCPs when developing and implementing the case scenarios at the MI workshop. Encompassed in public health leadership are LMX and Servant Leadership behaviours, such as listening,

empathizing, and providing individual and group feedback to HCPs as they practice the case scenarios through role-playing. LMX and Servant Leadership encompassed in public health leadership promote the building of trusting relationships with HCPs which will be integral to the success of the training plan.

Additionally, the Supervisor understands that her LMX and Servant Leadership behaviours encompassed in public health leadership practices must consider and address two categories of ethics when developing and implementing a training plan with HCPs: professional and organizational.

Ethical Considerations

Ethical situations in the Immunization program are inevitable. The Immunization program is policy-driven work that is mandated by statutory provisions and legislation, such as the *Immunization of School Pupils Act* (ISPA). Mandated public health Immunization programs and services focus on protecting the public from vaccine-preventable disease outbreaks; however, sometimes these mandates cause ethical discord between HCPs and their patients. For example, ISPA requires PHUs to suspend children from school whose parents have not provided updated vaccination information to their local PHU. Ethical discord arises because the legislation requires PHUs to treat all students equally; however, HCPs want children to be in school and it is known that the highest amount of incomplete vaccination records and suspended students are with children who live and attend school in the top three low-income areas in the PHU's jurisdiction (Organization deleted, generated report, August 2018). According to Bernheim and Melnick (2008), "Public health officials, who are both government officials with obligations to the public are also healthcare professionals with their own professional norms, face ethical tensions and conflicting obligations when deciding how to act in many situations" (p. 359).

Therefore, it is integral that the Supervisor consider and address two categories of ethics that relate to the development and implementation of the proposed communication training plan: professional and organizational ethics.

Professional Ethics

Professional ethics is defined by Kangasniemi, Pakkanen, and Korhonen (2015) as "the general moral norms that are acceptable in a certain occupational group" (p. 1745). The Supervisor is a Registered Nurse (RN) and the HCPs in this OIP are either RNs or Registered Practical Nurses (RPN). Both RNs and RPNs (nurses) are governed by the College of Nurses of Ontario (CNO), and must adhere to the CNO's (2009) Ethics Practice Standard and provide ethical nursing care to their patients. According to the CNO (2006b), ethical nursing care is defined as "promoting the values of client well-being, respecting client choice, assuring privacy and confidentiality, respecting quality of life, maintaining commitments, respecting truthfulness and ensuring fairness in the use of resources" (slide 4). Communication is ingrained in the Ethics Practice Standard and in providing ethical nursing care, such as ensuring truthfulness (CNO, 2009). Truthfulness refers to "speaking or acting without intending to deceive… [and] also refers to providing enough information to ensure the client is informed" (CNO, 2009, p. 13). Unfortunately, due to the statutory provisions that mandate public health work, research illustrates that communication between HCP and patient can be complex, and has the potential to be discordant and coercive (Bernheim & Melnick, 2008; Callahan & Jennings, 2002; Leeder, 2004). For example, ISPA and the *Immunization for Children in Schools and Licensed Child Care Settings Protocol, 2018* requires parents to complete a formal education session at the PHU before they are allowed to have their child exempted from the required vaccines for school entry. This type of legislation has the potential to be viewed as "pushy", and as described in the

Problem of Practice section in Chapter 1, patient complaints have been received stating that HCPs were “too pushy” when providing vaccination education to patients. Therefore, since MI and presumptive language support *how* HCPs communicate with patients more than *what* they say to their patients, the Supervisor believes that training HCPs to use MI and presumptive language through PBL will help diminish patient complaints and the idea of discourse or coercion, and help support HCPs in practicing ethical nursing care when communicating with vaccine-hesitant patients.

In order to ensure that HCPs practice ethical nursing care, the Supervisor has further governing expectations with the CNO. According to the CNO (2006b), the Supervisor is considered a nurse administrator and has the responsibility to create an environment that supports HCP ethical values, to support staff when discussing and resolving ethical issues, and to hire and supervise staff in the best interest of the client. As discussed in Chapter 1, as part of the Three Rights framework, the Supervisor is also responsible for addressing HCPs’ emotions and establishing the right environment so change can happen. The Supervisor believes that her LMX and Servant Leadership behaviours, such as actively listening and empathizing with HCPs, encompassed in public health leadership practice by coaching and motivating them in case scenario development supports the building of unique and trusting relationships with each HCP and the group of HCPs, and facilitates a supportive and *Right* ethical environment. The Supervisor needs to be aware that LMX behaviour can be observed as favouritism due to the unique relationships that develop with each follower (Northouse, 2016). However, according to Newman et al. (2017), "by focusing on the development of their followers and providing opportunities to learn new skills…, servant leaders facilitate the development of strong interpersonal relationships with their followers" (p. 52). This means that with the Supervisor

exhibiting Servant Leadership behaviours, the idea of favouritism associated with LMX may be diminished, thus facilitating strong trusting relationships among HCPs and supporting an ethical environment at the PHU.

Additionally, the Supervisor as a nurse administrator is required to provide education opportunities and resources to support staff so they can practice ethical nursing care (CNO, 2006b). This requirement supports the creating of this OIP as well as aligns with the PHU's responsibility to ensure that organizational ethics are practiced.

Organizational Ethics

Organizational ethics, as defined by Bernheim and Melnick (2008), "focuses on the mission, values, and systems within an agency that creates a climate for ethical behavior, practices, and policies" (p. 360). As discussed in Chapter 1, management and staff at the PHU are required to link the Strategic Plan's vision, mission, and values to all existing and any proposed program or service changes. Additionally, according to Public Health Ontario (PHO) (2012), any new public health programs or services, or changes to existing programs or services require an ethical review. Further, Ondrusek, Willison, Haroun, Bell, and Bornbaum (2015) state that "many [public health] initiatives commonly labelled as 'non-research' are associated with risks to patients, participants, and other stakeholders, yet may not be subject to any ethical oversight" (p. 1). Therefore, conducting an ethical review of the proposed training plan ensures that the PHU is not inflicting harm to individuals or the community, regardless if the communication training plan is labeled as research or not.

To conduct an ethical review, the Supervisor completed PHO's (2018) Ethics Risk Screening Tool. The Ethics Risk Screening Tool is an on-line, 20-item, self-scoring questionnaire that facilitates a risk assessment for public health change initiatives. Completing

the tool is the first step in the ethics review process with the risk score results generating the level of review necessary (PHO, 2018). Specific to this OIP and as illustrated in Appendix B, the result generated was one, or likely low risk. Subsequently, no further ethics review is required from PHO for this OIP (the tool results were downloadable; however, it contained identifying information so it was not added as an Appendix).

Organizational ethics also “involves providing public health leaders and workers with training, tools, and organizational structures, such as committees, to help them recognize the ethical dimensions of their work and integrate the agency’s values into the performance of their tasks” (Bernheim & Melnick, 2008, p. 360). Unfortunately, as stated by Schröder-Bäck, Duncan, Sherlaw, Brall, and Czabanowska, (2014), "public health professionals often receive little training and guidance on how to reach decisions informed by careful ethical thinking and become confident in a moral sense about the ‘trade-offs’ they are frequently required to make in practice" (p. 73). Furthermore, Potter (2015) states that when it comes to teaching HCPs ethical decision-making in the public health context, it is integral that HCPs are exposed to learning experiences that use case scenarios and role playing to equip them adequately for their practice. Since the overarching PoP is that there is no communication training plan for HCPs, then developing this OIP is necessary in order to comply with organizational ethical practices. More specifically, in order for the Supervisor to ensure that the PHU applies organizational ethics, the Supervisor will support HCPs in developing case scenarios for the training plan that include ethical situations that arise between patient and HCP in the clinical setting.

Ultimately, HCPs experiencing ethical situations in the Immunization program at the PHU are inevitable. HCPs must adhere to the CNO’s (2009) Ethics Practice Standard and provide ethical nursing care when communicating to vaccine-hesitant patients. Furthermore, the

Supervisor must establish an ethical environment at the PHU and complete an ethics review when developing and implementing the training plan in order to adhere to ethical organizational practices. Conversely, ensuring that HCPs receive training related to ethical communication practices is the responsibility of the Supervisor. Therefore, addressing the PoP and developing and implementing a training plan through PBL activities (developing case scenarios and role-playing) for HCPs to learn MI skills and presumptive language must include ethical case scenarios so HCPs can practice communicating effectively and ethically with vaccine-hesitant patients.

Chapter 2 Conclusion

Chapter 2 presented the planning and development phase of this OIP. First, ADKAR's Model of Change, Kotter's Eight-Stage Change Process, and Duck's Five-Stage Change Curve were overlapped and described. Second, the framework for leading the change, including the description of the four types of change and The Three Rights framework was presented. Third, the Supervisor conducted a critical organizational analysis, included a gap analysis and its description. Fourth, in order to address the PoP, four possible solutions were presented, with the final solution chosen and then the training plan described. Fifth and final, ethical considerations were discussed both in relation to professional and organizational ethics.

Research suggests that improving HCPs' communication skills will increase patients' confidence in vaccination to increase uptake and improve vaccination rates (Austvoll-Dahlgren & Helseth, 2010; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson et al., 2016; Williams, 2014). Currently, there is no vaccine-specific communication training provided by the MOHLTC or by the PHU in order to improve HCPs' communication skills. Therefore, in an effort to address the PoP, *What training is needed to ensure HCPs are capable to communicate*

effectively with vaccine-hesitant patients, the Supervisor believes that HCPs need to learn MI and presumptive language through PBL activities (developing case scenarios and role-playing) in order to improve their communication skills so they can feel comfortable and confident in communicating effectively with vaccine-hesitant patients. Moreover, addressing the PoP with this communication training plan and using ADKAR, Kotter and Duck's change management models to implement the proposed training plan aligns with the PHU's vision by supporting individuals and the community to strive for safety, health, and well-being as HCPs who can communicate effectively with vaccine-hesitant patients can decrease patient vaccine hesitancy and increase vaccine coverage rates in the PHU's jurisdiction.

Chapter 3: Implementation, Evaluation, and Communication

Evidence suggests that MI and presumptive language support positive behaviour change in patients and reduce patient resistance against treatment by demonstrating respect for patient choice, asking open-ended questions, using empathic listening, and summarizing (Gance-Cleveland, 2007; Lane et al., 2005; Opel et al., 2013; Pfister-Minogue & Salveson, 2010). In an effort to address the PoP, *What training is needed to ensure HCPs are capable to communicate effectively with vaccine-hesitant patients*, the Supervisor believes that developing and implementing a communication training plan for HCPs to learn MI and presumptive language through PBL activities (developing case scenarios and role-playing) will improve their communication skills so they can feel confident and can communicate effectively with vaccine-hesitant patients. Developing and implementing the training plan will require a structured approach to transition HCPs from a current state to a desired future state in order to address the PoP. In other words, the Supervisor will need to develop a plan for implementing, monitoring and evaluating, and communicating the change process.

The purpose of Chapter 3 is to develop a plan for implementing, monitoring and evaluating, and communicating the organizational change process at the PHU. First, the change implementation plan and strategy will be explained. Second, monitoring and evaluation of the change process will be explained, supported by using a logic model and a PDSA cycle. Third, a plan to communicate the need for change will be presented, including the use of another logic model as a communication tool and a list of stakeholders. Fourth and final, limitations and next steps for future consideration will be suggested and explained.

Change Implementation Plan

Managing successful organizational change is not an easy task. In fact, approximately

two-thirds of change initiatives fail to achieve their desired outcome for reasons such as employee resistance, poor communication, and cost (Ryerson University, 2011). Therefore, in order to support successful change at the PHU, the Supervisor has developed a change implementation plan that will serve as a comprehensive structured approach to help move HCPs, the team of HCPs, and the organization from the current state to a desired future state by way of a strategy. Figure 7 illustrates the change implementation plan and its components. The purpose of this section is to explain the components of the change implementation plan (Figure 7 represents one complete cycle of OIP-related change).

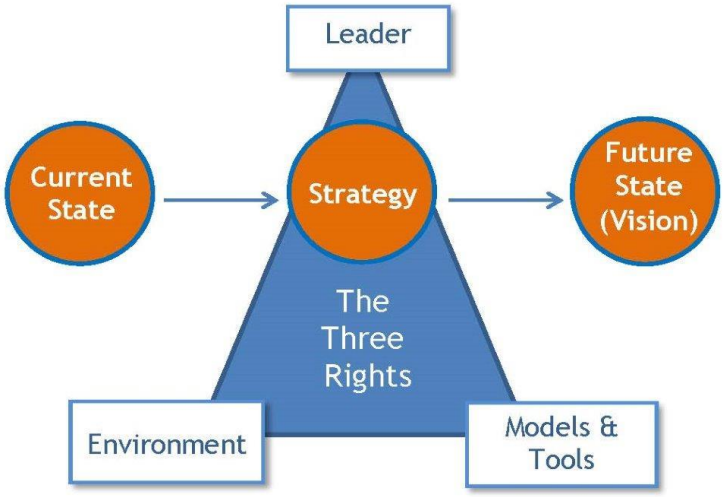

Figure 7. The change implementation plan

Understanding what needs to change at the PHU is the first component in developing the change implementation plan. What needs to change at the PHU was derived from the gap analysis' current state presented in Chapter 2, Table 2, where HCPs' communication skills are lacking when communicating with vaccine-hesitant patients as evidenced by HCPs verbalizing their fear and frustration with the increase in vaccine hesitant conversation with patients and by poor coverage rates in the PHU's jurisdiction. Additionally, mistrust related to vaccination is evident in the community as only 84 percent of the community believes that the PHU is a

trustworthy organization when 92 percent of the community is aware of the PHU's Immunization program (Ipsos Public Affairs, 2016).

Further, the gap analysis also identified that this lack in HCP communication skills can be attributed to the few interactive resources or supportive communication resources available for HCPs as well as the fact that there is no communication training plan for HCPs at the PHU. Since building trust between the Immunization program and the community is a foundational evidence-based strategy known to help mitigate community vaccine confidence crisis and improve overall vaccine coverage rates (MacDonald, Dubé, Canadian Pediatric Society, & Infectious Diseases and immunization Committee, 2018), and since research suggests that improving HCP communication behaviour with MI and presumptive language skills can help decrease vaccine hesitancy and improve vaccine uptake (Austvoll-Dahlgren & Helseth, 2010; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; MacDonald, et al., 2018; Paterson et al., 2016; Williams, 2014), then what needs to change at the PHU is HCPs' communication behaviour and capacity as it relates to vaccine-hesitant patients.

After identifying the current state and what needs to change at the PHU, the next component of the change implementation plan is identifying the future state, or the vision, that is to be achieved. Combining the results from the gap analysis with the solution to address the PoP, the specific future state is that HCPs will feel comfortable and confident using MI and presumptive language when communicating with vaccine-hesitant patients. Additionally, as a result of HCPs communicating effectively, the future state includes a decrease in vaccine hesitancy in the community and improved overall vaccine coverage rates. Achieving this future state is important because high vaccination coverage rates mean less incidence of vaccine-preventable diseases in the community, thus aligns with the PHU's vision to support all

individuals in the community to strive for safety, health, and well-being, as well as the overall goal to ensure health is supported for all (Reference withheld, 2014). Conversely, the future state aligns with the Immunization program's overarching goal "to reduce or eliminate the burden of vaccine preventable diseases through immunization" (MOHLTC, 2018c, p. 39), which includes meeting the required outcomes of "increased public confidence in immunizations" (p. 39) and "improved uptake of provincially funded vaccines" (p. 39). Since the PHU and the MOHLTC require that any proposed program changes align with their vision and goals, the Supervisor's goal to change communication behaviour and build communication capacity in HCPs' in an effort to decrease vaccine hesitancy in the community and improve overall vaccine coverage rates aligns with the future state of the change implementation plan.

In order to accomplish the future state, there needs to be a strategy, which is the third component of the change implementation plan. Ryerson University (2011) states that without a future state and a strategy to get there, the outcome for the change initiative will consequently be unsuccessful. As illustrated in Figure 7 and described in Chapter 2, the Supervisor will use The Three Rights framework as a structured approach to help manage the change and to help ensure that the future state is achieved. To reiterate, The Three Rights framework involves the right leader establishing the right environment by using the right models and tools to help implement the change **(**Sidorko, 2008). The right leader establishing the right environment will be addressed in this section of the OIP, and the right models and tools will be addressed in this section as well as the following section, Monitoring and Evaluation.

The Right Leader

As described in Chapter 1, the Supervisor has been in public health for over 20 years and leading the Immunization program for seven years. She understands the public health system,

including the statutory provisions related to vaccination, as well as the PHU's strategic priorities and goals to support a safe and healthy community. Understanding the public health system nuances helps to ensure that the Supervisor will be able to communicate the importance and necessity of the communication training plan to HCPs, thus supporting the safety and health of the community.

Additionally, she understands that communicating effectively with her staff will help build trusting relationships with them which will help motivate and empower them to want to change their communication behaviour and build their communication capacity in an effort to change patient behaviour. As described in Chapter 2, MI and presumptive language have been evidenced to support the building of trust between HCP and patient, and to reduce patient resistance against treatment by demonstrating respect for patient choice, asking open-ended questions, using empathic listening, and summarizing (Gance-Cleveland, 2007; Lane et al., 2005; Opel et al., 2013; Pfister-Minogue & Salveson, 2010). In other words, MI and presumptive language promote behaviour change as the goal of the interaction.

As such, the Supervisor has been trained in MI, and therefore, believes and understands that MI's elements, such as listening and empathizing, are beneficial for patients, but are also beneficial for her leadership to help motivate HCPs to accept and engage in the change initiative. Leading in this manner is congruent with LMX and Servant Leadership behaviours explained throughout this OIP.

Moreover, the Supervisor believes that her leadership behaviours are foundational to the successful development and implementation of the strategy. In fact, Kotter (2012) states that successful change implementation is "70-90 percent leadership and only 10-20 percent management" (p. 28). In the context of this OIP, the Supervisor believes that LMX and Servant

Leadership behaviours encompassed in public health leadership practice will be foundational when developing and implementing the training plan. Babic (2014) states that LMX is essential to leading ethically and establishing trusting relationships with followers for positive and transformational change outcomes. For example, listening and empathizing with individual HCPs about their fears, frustrations, and achievements with using MI and presumptive language in the clinical setting demonstrates that the Supervisor espouses the LMX leadership behaviours in her practice. Similarly, Servant Leadership behaviours also include listening and empathizing to support the Supervisor in building a community of HCPs who are committed to putting the patient's interest first by providing high-quality patient care (Trastek et al., 2014). Furthermore, as described by Newman et al., (2017), leaders who exhibit LMX behaviours, facilitate employee "psychological empowerment, defined as an individual's motivation to perform tasks" (p. 50), and exhibiting Servant Leadership behaviours facilitate "more satisfied, committed, engaged and better-performing followers" (p. 49). These LMX and Servant Leadership behaviours of motivating and empowering HCPs to participate in the communication training plan and change their communication behaviours to include MI and presumptive language are encompassed in public health leadership. The Supervisor applies public health leadership behaviours by motivating and empowering HCPs through mentoring and coaching them through the change process, which then facilitates HCPs to emerge as leaders themselves (Canadian Public Health Agency, 2016). Therefore, the Supervisor believes she is the right leader to develop and implement the strategy because LMX and Servant Leadership behaviours encompassed in public health leadership are foundational to building trusting relationships, and to motivate and empower HCPs to learn MI and presumptive language through PBL.

The Right Environment

As the right leader for the strategy, the Supervisor is responsible for establishing the right environment in order to help manage the change and to help ensure that the future state is achieved. According to Khan, Timmings, Moore, Marquez, Pyka, Gheihman, & Straus (2014), healthcare organization change initiatives often involve changing the behaviour of staff, and due to the complex and challenging nature of the work environment (for example, the unpredictability of a clinical setting), "as many as 60% to 80% of change strategies are not successfully implemented in healthcare" (p. 2). Since the Supervisor's change initiative involves changing HCP behaviour within an unpredictable clinical environment, it is essential that the Supervisor establishes the right environment so the change initiative will be accepted and implemented at the PHU. Establishing the right environment means that Supervisor has uncovered the various contextual factors that may impact the success of the implementation. As discussed in Chapter 1, the Supervisor utilized the P.E.S.T Analysis framework to uncover the external contextual factors and Bolman and Deal's (2013) Four Frame Model to uncover the internal contextual factors that contributed to the PoP. Establishing the right environment also means that the Supervisor will use her LMX and Servant Leadership behaviours encompassed in public health leadership practice to lead the change implementation process and ensure that the change process is effectively communicated with stakeholders throughout the change process (this will be further discussed in the Communicating the Need for Change section of this Chapter), as well as to manage the entire change implementation plan process.

As stated by Kotter (2012), leadership is the most important aspect of successful change implementation; however, managing the transition from current state to future state still requires the control and predictability that management facilitates. Therefore, it is important that the

Supervisor establish management tactics intertwined with her leadership behaviours in order to help ensure that the future state is achieved. Management tactics involve organizing and staffing for the change, planning and budgeting, and controlling and problem-solving issues to mitigate resistance and deviation from the plan (Kotter, 2012). Specifically, organizing and staffing for the change means that the Supervisor will uncover four key roles and responsibilities that can impact the change initiative: The Sponsor (PHU), Champion (Supervisor), Change Agent (lead HCPs to help plan and implement the change), and Participants (HCPs that will be affected by the change) (Ryerson University, 2011). Table 4 illustrates the assigned roles and responsibilities.

Table 4

Roles and Responsibilities Chart

Role	Responsibilities	Who
Sponsor	• Has the overall authority of the Immunization program, Supervisor and HCPs • Provides funding • Approves the Strategic change vision	PHU
Champion	• Provides the Sponsor with updates • Authority over the Immunization program • Develops change plan and budget • Leads and problem-solves when issues arise • Final choice of people to be involved	Supervisor
Change Agents	• Assist, advise and coach the Champion and the Participants in the training development and implementation	Lead HCPs
Participants	• Accept and ask question related to the change implementation plan	HCPs

As the Sponsor of the change initiative, the PHU has overall responsibility for the Immunization program, the Supervisor, and the HCPs involved. The Supervisor's goal for the

change initiative is for HCPs to be confident and comfortable using MI and presumptive language in their communication with vaccine-hesitant patients in an effort to decrease vaccine hesitancy in the community and increase vaccine coverage rates in the PHU's jurisdiction. This goal aligns with the PHU and the Immunization program goals by supporting a safe and healthy community that is protected from vaccine-preventable diseases. Additionally, achieving the Supervisor's goal addresses the PHU's internal Strategic Priority of improving communication as discussed in Chapter 1. Therefore, since the Supervisor will be seeking approval for a larger Strategic change vision initiative (this will be further discussed in the Communicating the Need for Change section of this Chapter), it is vital that the change initiative goal aligns with the PHU and Immunization program goals as well as link to the Strategic Priority of improving communication.

As the Champion for the change initiative, the Supervisor is the leader of the Immunization program, the HCPs, as well as responsible for developing the communication plan (discussed later), and assigning the roles and responsibilities for the Change Agents and Participants who will be involved in the planning and implementation of the communication training plan. Moreover, the Supervisor is responsible for budgeting and allotting time and money to pay for the MI training and allow staff time to be dedicated to their learning needs and communication skill development. For example, she can dedicate monthly one-hour follow-up training sessions for staff so they can practice MI and presumptive language and provide feedback to each other regarding the case scenarios they created. Allotting money and staff time to learn and practice MI and presumptive language is vital for the success of the change initiative because research indicates that in order for HCPs to become efficient in MI and presumptive language, they need active and realistic practice, combined with reminder and feedback systems

within actual clinical settings (Fu et al., 2015; Hauer et al., 2012; Keeley, Engel, Reed, Brody, & Burke, 2018; Lane et al., 2005).

Another important responsibility of the Champion (Supervisor) is to lead and problem-solve when issues arise; specifically, when HCPs resist the change. Resisting change is an inevitable hurdle in any change process, and research suggests that employees resisting change is the number one reason for organizational change initiative failures (Keller and Price, 2011; Kotter, 2012; Ryerson University, 2011). According to Kotter (2012), those who resist change, usually resist due to fear; for example, fear of the unknown, or fear for their job. Fear is an emotion, and since "organizational change is inherently and inescapably an emotional human process" (Duck, 2001, p. 9), fear cannot be ignored in this OIP. Furthermore, communicating with vaccine-hesitant patients is an emotional experience because vaccine hesitancy is fueled by fear, and patients tend to make decisions based on emotions (Browne et al., 2015; Dubé, Bettinger et al., 2016; Kestenbaum & Feemster, 2015). Since research demonstrates that MI is used to decrease resistance (Evans, 2014; Gance-Cleveland, 2007), and that LMX and Servant Leadership encompassed in public health leadership are foundational to building trusting relationships and to motivate and empower HCPs, the Supervisor believes that her training in MI and her leadership behaviours will help to lead, manage, and problem-solve issues, and decrease any HCP resistance. Additionally, since emotions will be an inevitable aspect of the change process, the Supervisor will use Duck's Five-Stage Change Curve as a supportive change management model as was described in Chapter 2 and will be described more fully later.

Choosing people to be involved in the change initiative is another Champion responsibility. This means that the Supervisor will choose the Change Agents to help her develop and implement the communication training plan for HCPs (choosing will be completed with

HCP input and will be further described in the Communicating the Need for Change section of this Chapter). Change Agents are responsible for assisting, advising, and coaching the Champion in the change effort. They have no direct authority over the Stakeholders, but will be extremely important in supporting a change in HCP communication behaviours. According to Fu et al. (2015), using peer coaches (Change Agents) to supplement initial MI training workshops improved the proficiency of MI training programs for HCPs. Additionally, choosing more than one Change Agent is important because staff turnover is a common obstacle when implementing organizational change (Ryerson University, 2011). Since the Supervisor's public health leadership behaviour facilitates the emergence of future leaders, and since the Supervisor has led the Immunization program for seven years, she will be able to identify who may fit the role of Change Agents to assist with the development and implementation of the communication training plan.

Finally, the Participants are the HCPs in the Immunization program, and responsible for accepting the change initiative and to ask questions and seek clarification during the change implementation. Specifically, they will be the recipients of the MI and presumptive language training as well as the individuals that will be involved in the monitoring and evaluation of the communication training plan; for example, participating in focus group interviews with the Supervisor to monitor and evaluate if the training was successful.

Ultimately, having the right leader establish the right environment is an important aspect of the strategy in order to move from the current state to the future state. However, to help ensure that the change implementation plan is successful, the right leader establishing the right environment also requires that the right leader use the right models and tools.

The Right Models and Tools

The right leader establishing the right environment by using the right models and tools is the framework to help ensure that the change moves from current state to the future state. As described in Chapter 2, the models the Supervisor will use to guide the change initiative are the ADKAR Model of Change with Kotter's Eight Stage Change Process, in combination with Duck's Five-Stage Change Curve to manage the emotions that inevitably will impact the change process. In terms of the tools the Supervisor will use, ADKAR's Change Readiness tool and PHO's Ethics Risk Screening tool have been discussed, and logic models, Behaviour Change Counseling Index (BECCI) and PDSA (Plan, Do, Study, Act) cycles will be discussed in the next section as Monitoring and Evaluation tools.

Mainly, using the right models and tools to help ensure a successful change outcome aligns with the MOHLTC's (2018c) Effective Public Practice Foundational Standard where the PHU must ensure a culture of organizational Continuous Quality Improvement (CQI) through the use of "tools, structures, processes and priorities to measure and improve the quality of programs and services" (p. 26). Specifically, CQI in health care is defined as a "philosophical approach to identifying problems within the system and finding solutions to these problems in order to meet patient expectations and achieve better patient care outcomes" (Kakyo & Xiao, 2017, p. 244). Therefore, in the context of this OIP, vaccine hesitancy and vaccine coverage rates are a problem in the PHU's jurisdiction. Since research indicates that a HCP's ability to communicate effectively with their patients has a profound effect on patient adherence to medical advice and the adoption of preventative health behaviours, such as vaccination (Duffy et al., 2004; Goldstein, 2018; Institute for Healthcare Communication, 2019), then this OIP of developing and implementing a communication training plan for HCPs aligns with the

MOHLTC's (2018c) CQI requirement.

Furthermore, encompassed in the Three Rights framework, the right models and tools, and the CQI requirement that tools, structures, processes, and priorities need to be used in order to measure and improve the quality of programs and services, measuring and improving programs and services' quality means that monitoring and evaluation must also be demonstrated by the PHU, thus will be discussed in the next section of this OIP.

Monitoring and Evaluation

The right leader establishing the right environment must also use the right models and tools to help ensure a successful transition from current state to the envisioned future state. Using the right models includes the change management models the Supervisor will use to guide the change initiative. As described in Chapter 2, the right models are the ADKAR Model of Change with Kotter's Eight Stage Change Process, in combination with Duck's Five-Stage Change Curve to manage the emotions that inevitably will influence the change process. Using the right tools means that the Supervisor is practicing CQI at the PHU by way of monitoring and evaluation. Monitoring and evaluation are vital as they provide information about the performance of public health programs and projects, and can help "identify what works, what does not work, and provide information about why" (Negandhi, Negandhi, Zodpey, Kulatilaka, Dayal, & Grewe, 2017). In the context of this OIP, monitoring is defined as an ongoing and iterative process used to collect information about a program or a project in order to help provide information about the current status and to help inform any immediate remedial actions or modifications that need to happen (Adhikari, 2017; Gopichandran & Krishna, 2013; MOHLTC, 2018c). For example, the Supervisor will use a PDSA (Plan, Do, Study, Act) cycle to determine if the case scenarios that the HCPs developed were helpful or not (this will be discussed later in

this section). Conversely, evaluation is defined as a periodic assessment about a program or project done at specific intervals that focuses on measuring outcomes, impacts and overall goals (Adhikari, 2017; Gopichandran & Krishna, 2013; MOHLTC, 2018c). For example, the Supervisor will use the Behaviour Change Counseling Index (BECCI) to evaluate HCP communication competence related to their use of MI skills in the primary health care setting before and after training.

In Ontario's public health system, program monitoring and evaluation is a requirement of the MOHLTC's (2018c) *The Ontario Public Health Standards: Requirements for Programs, Services, and Accountability, 2018,* (Standards). Under the Effective Public Practice Foundational Standard, all PHUs "shall routinely monitor program activities and outcomes to assess and improve the implementation and effectiveness of programs and services" and "The board of health shall ensure a culture of on-going program improvement and evaluation, and shall conduct formal program evaluations where required" (p. 24). Overall, within the context of public health, monitoring and evaluation (M&E) are observed as one term, and since there is a mandatory requirement of "monitoring and measuring the effectiveness, impact and success of…programs and services" (p. 10), M&E must be incorporated into the strategy of the change implementation plan, thus this OIP. Moreover, at the PHU, logic models and PDSA (plan, do, study, act) cycles are the recommended tools to demonstrate that M&E is being applied to a program and/or service.

Logic Model

Logic models are a diagrammatic description of a program's resources, activities and expected outcomes, and useful for monitoring program performance and determining whether planned processes are being followed, as well as identifying how success will be

measured (Public Health Ontario, 2016; Quality Improvement and Innovation Partnership, 2010). As illustrated in Figure 8 and in Appendix C for a larger and clearer description, the Supervisor has developed a logic model as a M&E tool to help monitor and measure the effectiveness, impact, and success of the change initiative proposed at the PHU.

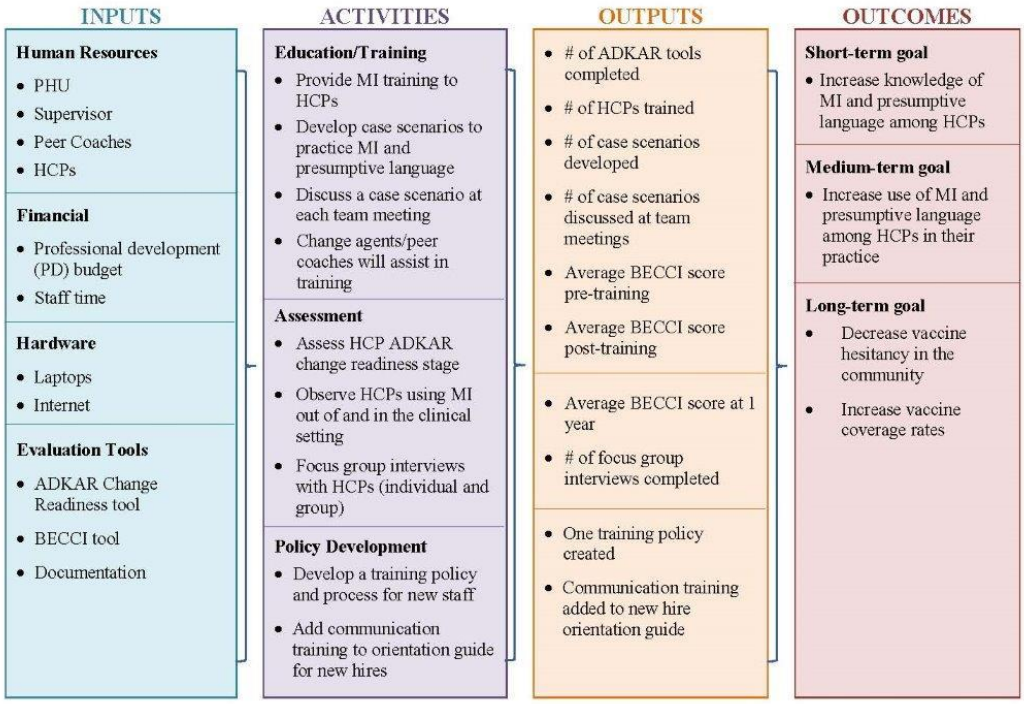

Figure 8. The Supervisor's logic model as a monitoring and evaluation tool

Logic models are evidence-based and espouse the theoretical underpinnings of systems thinking and change theory in that the understanding of a complex system, such as vaccine hesitancy, is best accomplished by first understanding the system's fundamental characteristics and impacts, and then by providing a pathway to bring about the change (Anderson et al., 2011; Levison-Johnson & Wenz-Gross, 2010; Public Health Ontario, 2016; World Health Organization, 2009). There is no one way to design a logic model; however, in order to be an effective M&E tool, the logic model must identify the processes and outcomes (activities and goals) that need to be measured to help determine if the program was implemented successfully

and produced the outcomes that were expected (Quality Improvement and Innovation Partnership, 2010).

When developing a logic model, the first essential component that needs to be determined is the overall goals or desired outcomes of the change initiative. As stated in the previous section, the Supervisor's goal of the change initiative is to change communication behaviour and build communication capacity in HCPs' in an effort to decrease vaccine hesitancy in the community and improve overall vaccine coverage rates. Therefore, the Outcome component of the logic model is divided into three categories of goals: short-term, medium-term, and long-term. Specifically, the short-term goal is for HCPs to be trained in MI and presumptive language, and they will practice using the skills (build capacity). This means that the HCPs will attend a MI workshop and use the case scenarios they develop to build their knowledge and capacity before applying the communication techniques in an actual clinic setting. The time-frame for the achievement of the short-term goal will be different for each HCP. This will depend on the results of the qualitative and quantitative data result, which will be discussed later in this section of the Chapter.

The medium-term goal is to be assessed at one year and the goal is that HCPs will be using MI and presumptive language in the actual clinical setting and will verbalize comfort with using the communication skills (change behaviour). The Supervisor chose one year for an assessment measure because Immunization program work is based on a one-year cycle, meaning that they have the opportunity to experience vaccine hesitancy and practice MI and presumptive language through the peak programmatic times. For example, every influenza season there is an increase in vaccine hesitant conversations related to the flu shot, and every fall HCPs go into the schools and administer three vaccines to grade seven students; during this time period, the

number of vaccine hesitant conversations increase for the HCPs as parents call-in and question whether or not to vaccinate their child.

The long-term goal of a decrease in vaccine hesitancy in the community and an increase in vaccine coverage rates are the desired overall public health outcomes. The Supervisor understands that this long-term goal may take years or decades to achieve because public health challenges, such as vaccine hesitancy, are complex and multi-faceted, and the solutions involve multiple stakeholders and levels of interventions and solutions (Anderson et al., 2011; Baxter, Killoran, Kelly, & Goyder, 2010; Craig, 2013). Additionally, all new and existing programs in public health are required to have a goal or goals that contribute to and align with the overall goals of the PHU and the Program Standards. Therefore, since PHUs are required to address vaccine hesitancy with the public and external stakeholders (such as schools), and since vaccination inquiries are the number one reason people consult the PHU (Ipsos Public Affairs, 2016), the Supervisor believes that changing communication behaviour and building communication capacity among HCPs by training them MI and presumptive language skills through PBL will help to achieve the long-term goal.

The second essential component in building a logic model is to outline the activities needed to help achieve the goals. In the logic model, Figure 8, there are three categories of Activities: Education/Training, Assessment, and Policy Development. First, Education/Training illustrates that the HCPs will receive training in MI and that case scenarios will be developed and discussed at team meetings to practice MI and presumptive language in order to help change HCPs' communication behaviour and build HCPs' communication capacity. Additionally, the Education/Training that will be provided in order to help achieve the Outcomes is to assign peer coaches (or Change Agents as described in the previous section under The Right Environment)

so HCPs can support each other in their MI and presumptive language skill development. Second, Assessment refers to the activities that the Supervisor will undertake to help achieve the short and medium-term goals. This means that she will assess the change readiness of HCPs with their completed ADKAR tools (Appendix A), observe the HCPs using MI and presumptive language in the clinical setting, and provide and receive feedback with HCPs in the form of focus groups. Finally, developing a policy around MI and presumptive language is an activity that aligns with ADKAR, Kotter, and Duck's change management final stage which focuses on sustaining and reinforcing the change; specifically, sustaining and reinforcing MI and presumptive language training and support among each individual HCP as well as the community of HCPs in the Immunization program.

To support the first and second essential components of a logic model, the activities and outcomes need to be measured to help determine if the program was implemented successfully and produced the outcomes that were expected. In order to measure the activities and outcomes, the MOHLTC (2018c) states that effective M&E requires a triangulation of data collection in the form of quantitative, qualitative, and mixed methods data collection. World Health Organization (n.d.) defines quantitative data as "structural methods for data collection" (slide 14), such as the ADKAR Readiness Tool, and describes qualitative data as "in-depth interviews, observations, document review, participatory assessment, focused group discussions" (slide 14), such as conducting and documenting the results from focus-group interviews with HCPs. Mixed methods data collection is the combination of qualitative and quantitative data collection.

As illustrated under the logic model's Inputs component, triangulation of data collection will be facilitated by utilizing the tools under the Evaluation Tools category (the other categories of the Input component were discussed in the previous section under The Right Environment).

The first two tools are quantitative data collection tools, and according to Hauer et al. (2012), gathering quantitative data by using a standardized instructional tool offers opportunities for targeted skills practice and also "emphasizes the need for learners to practice skills with instructors providing guidance and feedback" (p. 961). The first quantitative data collection tool is the ADKAR Change Readiness tool. HCPs completing the tool will assist the Supervisor in assessing what stage HCPs are at before the case scenario development and MI training workshop to identify any barriers that may impede the implementation process. This tool was described in Chapter 1 under the Organizational Change Readiness section.

The second quantitative data collection tool is the BECCI. As illustrated in Table 5, the BECCI is an 11-item assessment tool designed to evaluate HCP communication competency in the primary health care setting (Campiñez Navarro et al., 2016; Pfister-Minogue and Salveson, 2010; University of Wales College of Medicine, 2002). Specifically, this evaluation tool will be used to measure HCPs' communication competence before training and after training, and then at one year after the training (the one-year timeframe was discussed under the medium-term goal). Measurement is done by scoring the BECCI using a Likert scale: "0 = Not at all, 1 = Minimally, 2 = To some extent, 3 = A good deal, 4 = A great extent" (University of Wales College of Medicine, 2002, p. 4).

The Supervisor chose the BECCI over other MI assessment tools because the BECCI was designed specifically for primary health care settings and is appropriate for short interactions with patients, which "does not necessarily require the intensity of relationship building [between patient and provider] essential to the good practice of motivational interviewing" (University of Wales College of Medicine, 2002, p. 2). Since the timing and topic of vaccine hesitant interactions vary, assessing behaviour change counselling (BCC) skills, such as asking open-

ended questions and using empathic listening statements, rather than all the elements of MI is most appropriate in the Immunization program's clinical setting.

Table 5

The 11-Item Behaviour Change Counseling Index (BECCI)

BCC items	Pre-training	Post-training 1	Post-training 2
Practitioner invites the patient to talk about behavior change			
Practitioner demonstrates sensitivity to talking about other issues			
Practitioner encourages patient to talk about current behavior or status quo			
Practitioner encourages patient to talk about change			
Practitioner asks questions to elicit how patient thinks and feels about the topic			
Practitioner uses empathic listening statements when the patient talks about the topic			
Practitioner uses summaries to bring together what the patient says about the topic			
Practitioner acknowledges challenges about behavior change the patient faces.			
Practitioner actively conveys respect for patient choice about behavior change			
Practitioner and patient exchange ideas about how the patient could change current behavior (if applicable)			

Finally, the third evaluation tool, documentation, gathers qualitative data. Documentation is a requirement of the College of Nurses of Ontario (CNO) (2008), and as a nurse, the Supervisor is required to "make and keep records" (p. 4), which can be in the form of paper or electronic. Therefore, the Supervisor will keep a paper folder with written notes from focus

group interviews with individual HCPs as well as an electronic file to document the overall change process. Written and electronic documentation files are the property of the PHU, thus they must be stored in a locked cabinet or desk (in the Supervisor's office), and on the PHU's internal server. Moreover, as required by the CNO (2008), documentation must include goals of the individual or group, actions, and outcomes and evaluation of the actions (CNO, 2008). As such, the logic model is a form of documentation. Additionally, the CNO (2008) explains that the purpose of documentation is to monitor and evaluate nursing practice as well as support CQI in an effort to advance nursing practice. Since training HCPs to communicate effectively with vaccine-hesitant patients can result in improved patient care (Kakyo & Xiao, 2017), and since M&E and CQI are requirements for both public health and nursing practice, it is vital that the Supervisor use documentation as an evaluation tool and evidence to support M&E and CQI in HCPs.

Once quantitative and qualitative data are collected, the activities and goals can be measured. Measuring the activities and goals are titled Outputs in the logic model and are defined as the "products that are produced from program activities or interventions" (Public Health Ontario, 2016, p. 3). Outputs are quantifiable data, usually given numeric values or percentages (Public Health Ontario, 2016); for example, calculating the average BECCI score pre-training and post-training. Furthermore, as required by the MOHLTC's (2018c) Standards, activities need to be measured by way of process and outcome evaluations in order to demonstrate effective M&E. A process evaluation "determines whether program activities have been implemented as intended and resulted in certain outputs" (Centers for Disease Control and Prevention, n.d., p. 1). As illustrated under Outputs, the Supervisor finalising the numerical counts demonstrates process evaluation. For example, receiving completed ADKAR Change

Readiness tools and calculating the number of HCPs who attended the MI workshop are process evaluations because they demonstrate that an activity has been implemented. Conversely, an outcome evaluation "measures program effects in the target population by assessing the progress in the outcomes or outcome objectives that the program is to achieve" (p. 1). Outcome evaluation is demonstrated by how the Supervisor achieves the goals under Outcomes. For example, the Supervisor will tally the scores of the completed BECCIs pre-training and then post-training, and then compare to see if there is an increase in the averages. An increase in score signifies that there was an increase in knowledge, and therefore, achieves the short-term goal. If there is no increase or even a decrease in score, the activity will be put through a PDSA cycle (discussed in the following section) which may result in an amendment to the logic model activities.

Overall, logic models "identify key pathways, on the basis of evidence or other criteria, to make tractable the planning and evaluation of complex outcomes generated by complex processes…[and] provides a basis for assessing the potential contribution of an intervention or programme to the outcomes observed" (Craig, 2013, p. 470). The Supervisor believes that using the logic model is the *right tool* to support M&E at the PHU; however, in order to support the logic model's pathway, the other *right tool* to support M&E at the PHU is the PDSA cycle.

PDSA Cycle

PDSA cycle is a tool to monitor and evaluate change in an organization and is the most frequently used tool in healthcare quality improvement (Christoff, 2018; Institute for Healthcare Improvement, 2017; Laverentz & Kumm, 2017). PDSA is a "logical sequence of 4 repetitive steps [that] is carried out over a course of small cycles, which eventually leads to exponential improvements" (Varkey, Reller & Resar, 2007, p. 736). The PDSA cycle supports the small changes that will happen within the overall change implementation plan and is illustrated in

Figure 9. Additionally, in order to support the data collection and documentation requirements as described in the logic model section, Appendix D provides a PDSA documentation tool that the Supervisor will use when monitoring and evaluating the small changes that support the overall change implementation plan.

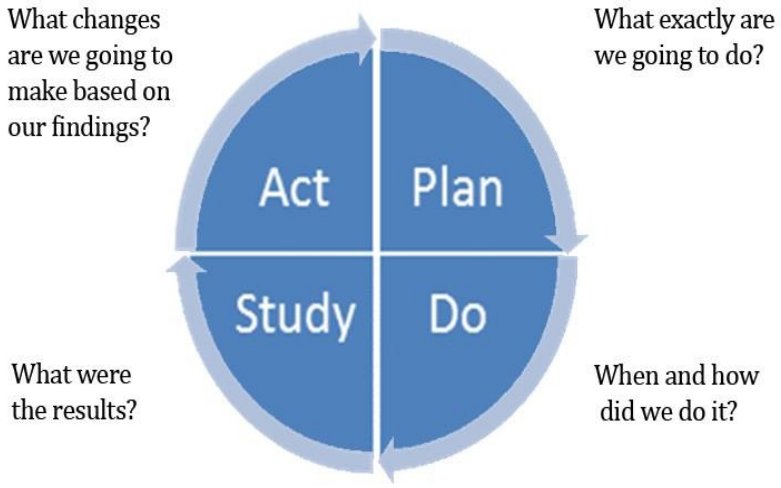

Figure 9. The PDSA cycle

To further explain and provide an example of a PDSA cycle that will be utilized by the Supervisor, the first step, Plan, is described by Laverentz and Kumm (2017) as "plan a small change based on evaluation data" (p. 288). For example, the Supervisor will investigate possible MI workshops and decide which workshop will be best based on reviews, price, availability, and whether the workshop will be able to accommodate vaccine hesitancy case scenario examples. The second step, Do, is implementing the change (Laverentz & Kumm, 2017), or host the MI workshop, have HCPs attend, and practice the case scenarios using role-playing. The third step, Study, is seeing "if the change had the desired effect using qualitative and quantitative measures" (Laverentz & Kumm, 2017, p. 288). As evidenced under Outputs in the logic model, the number of HCPs who attend the workshop will be calculated (quantitative data) combined with documenting the HCP interviews post-workshop (qualitative data). The final step of the PDSA

cycle, Act, is to standardize the new process (Laverentz & Kumm, 2017). According to Hauer et al. (2012), “refresher training would enhance ongoing application of skills and avoid decay in performance”. Therefore, based on the PDS of PDSA, the Supervisor and HCPs will decide if the workshop was effective or if another workshop format, such as an online module, would be a better option in order to support HCPs in learning MI and presumptive language. There is no limit to the number of PDSA cycles that can be completed as the goal of the PDSA cycle is to strive for the most favourable outcome that supports CQI (Laverentz & Kumm, 2017; Speroff & O'Connor, 2004; Varkey et al., 2007). Ultimately, using PDSA as a M&E tool helps to support the small changes and refining that may need to happen within the overall change implementation plan.

In summary, the Supervisor believes that the *right tools* to capture the M&E of the change initiative are the logic model and its components, and the PDSA cycles to support and refine the small changes within the overall change implementation plan. M&E is required by not only the provincial government, but also by the CNO and the PHU, thus M&E is an essential component of the change implementation plan, and ultimately, this OIP. However, more important than this essential activity, communicating that there is a need for change at the PHU in an effort to having this OIP accepted by relevant stakeholders is the essence of this OIP, which will be further explained in the next section.

Communicating the Need for Change

Communication is the essence of this OIP; specifically, effective communication as the Supervisor’s leadership theoretical underpinnings promote effective communication behaviours and by the overall goal of this OIP of supporting HCPs in learning the skills of MI and presumptive language through PBL. Effective communication is characterized by the "ability to

explain, listen and empathize" (Institute for Healthcare Communication, 2011, n.p.). These behaviours are elements of MI, as well as foundational behaviours of LMX and Servant Leadership theories encompassed in public health leadership that the Supervisor espouses and practices. Furthermore, not only is effective communication supported by the CNO (2006a) as an essential element of providing quality patient care, and part of the MOHLTC (2018c) Standards as "promoting and protecting the public's health require effective communication" (p. 25), it is also a key element of planning, implementing and evaluating organizational change (Croft & Cochrane, 2005). Specifically, without effective communication, change strategies stand a good chance of becoming part of the two-thirds of failed organizational change initiatives (Croft & Cochrane, 2005; Ryerson University, 2011). Therefore, it is vital for the success of this OIP that the Supervisor is able to communicate effectively the need for change (the change implementation plan) by developing an effective communication plan in order to accomplish the overall goal of HCPs communicating effectively with vaccine-hesitant patients.

The Logic Model as a Communication Tool

Before introducing the change initiative to any stakeholders who may be involved in the change, the Supervisor must understand the change implementation plan in its entirety, including any background evidence to support the need for change and exactly what the overall vision or goals are for the change initiative (Croft & Cochrane, 2005; Fausz, 2013; Ryerson University, 2011). As such, the Supervisor augmented the M&E logic model (Figure 8) to include three additional components: Situation, Assumptions/Theory, and External Factors.

As illustrated in Figure 10 and in Appendix E for a clearer picture, the augmented logic model can be used as a communication tool to concisely and clearly illustrate background evidence that contributes to the change pathway in order to help ensure a common understanding

of the change initiative (Public Health Ontario, 2016; Quality Improvement & Innovation Partnership, 2010).

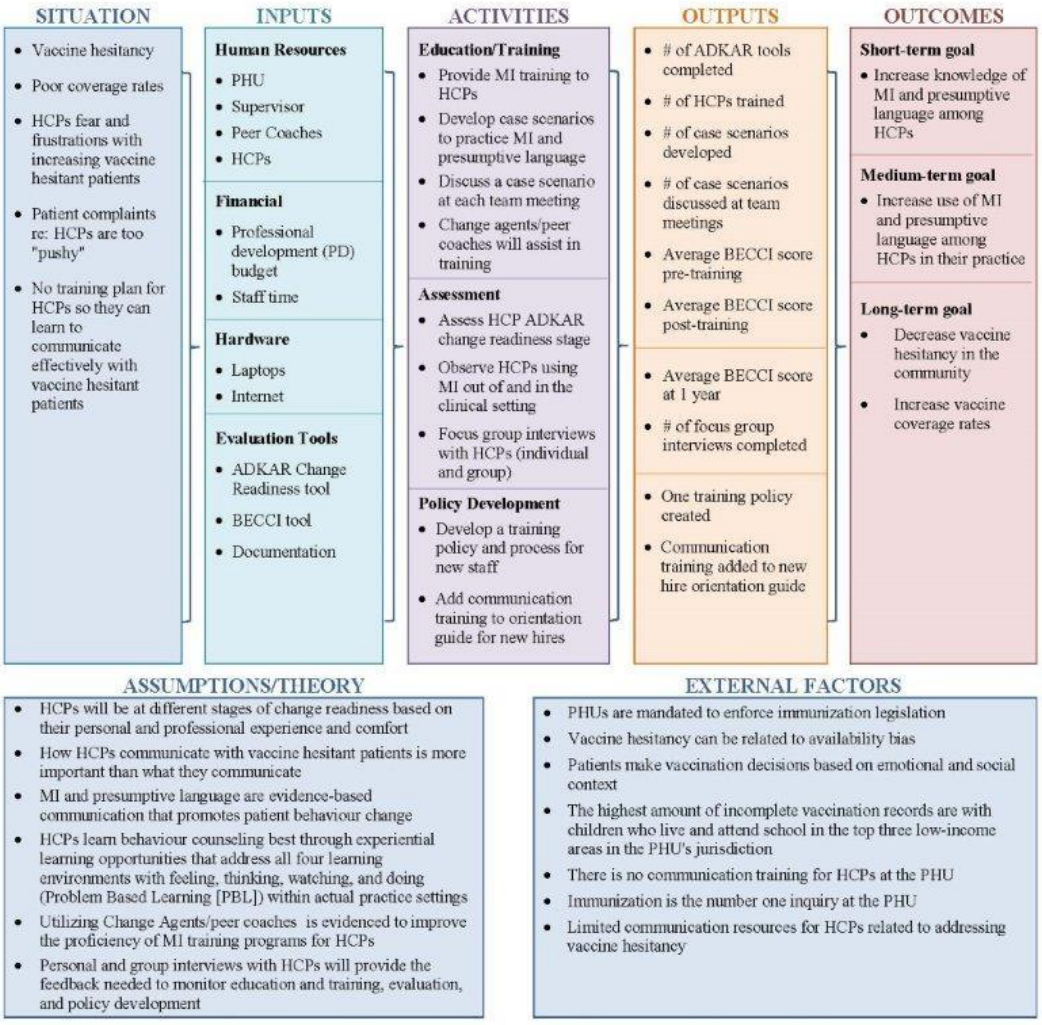

Figure 10. The logic model as a communication tool

In Figure 10, the Situation component describes the current state based on the gap analysis completed in Chapter 2. The Assumptions/Theory component is the "underlying theories and beliefs about the program and its context which can influence the development of a program and which activities are implemented" (Public Health Ontario, 2016, p. 3). The six Assumptions/Theories described in the logic model were included because they support the choice of activities; for example, the third bullet states "MI and presumptive language are

evidence-based communication that promotes patient behaviour change" which supports the activity that HCPs will be trained in MI and presumptive language. The External Factors component is positive and/or negative "factors that impact the program but are beyond the control of program planners and overseers… [,] and are likely to influence program success" (p. 3). The seven bullets listed in the External Factors component were derived from the P.E.S.T analysis and PoP section in Chapter 1 and help support the need for the change initiative; for example, the third bullet states that "Patients make vaccination decisions based on emotional and social context". Patient decision-making regarding vaccination is beyond the control of HCPs and since the few resources available for HCPs promote educating vaccine-hesitant patients with science and facts, this External Factor statement helps support the need for training HCPs MI and presumptive language in order to respect and manage patient vaccination decision-making.

Another initial understanding the Supervisor must have before introducing the change initiative to any stakeholders is understanding who the stakeholders are and when they need to be engaged.

Stakeholders

As discussed in Chapter 2 under Framework for Leading the Change, developing and implementing a communication training plan for HCPs is an Incremental change at the PHU with a vision for Strategic change. This means that the OIP will be implemented by the Immunization program (Incremental change), and that the experiences and outcomes will be used to support an overall organizational change where all HCPs at the PHU are trained in MI and presumptive language. Table 6 illustrates the four stakeholder groups that the Supervisor will effectively communicate the changes with: HCPs, the MOHLTC, the Chief Nursing Officer/Professional Practice Lead, and the Upper Management group.

Table 6

The four stakeholder groups

Stakeholders	When to Communicate	What to Communicate	How to Communicate	Why is the change necessary?
HCPs	• Right away; from the very beginning • Often; frequently	• Relevance to job & life • Benefit for self, patients, & community • Goals & vision for the training • Logic model's components	• One-to-one • Group • In-person • Visuals • Feedback loop	• Build awareness & urgency • Establish desire, appetite, & a guiding coalition • Establish shared vision & strategy
MOHLTC	• Yearly	• Provincial & jurisdictional statistics • Listed as an intervention	• Annual Service Plans (written)	• Standard's Required goal & outcomes
Chief Nursing Officer/ Professional Practice Lead (CNO/PPL)	• During HCP onboarding • Before presenting to Upper Management	• Benefit the organization, HCPs, & community • Logic model	• In-person • One-to-one • Written • Visuals	• Assist HCPs in building capacity • Help Supervisor present Strategic change vision
Upper Management (MOH, GM, & Managers)	• After training plan has been implemented	• Benefit the organization & community • Logic model • Results & Outcomes	• In-Person • Group • Written • Visuals	• Addresses Strategic Priorities & integrated planning

The different stakeholder groups identified in Table 6 require different messages. According to Croft and Cochrane (2005), stakeholders "cannot be viewed as one homogenous mass; individuals at different levels and within different roles within the organisation will react to change in various ways. It is crucial to segment the audience, and communicate with each segment appropriately" (p. 18). Careful thought and tailoring of messages must go into the

communication plan because as described throughout this OIP, *how* the message is communicated is even more important than *what* is communicated in order for it to be effective. Therefore, the Supervisor has identified the *how* and *what* to be communicated to the four stakeholders.

The first group and most important stakeholders that the Supervisor must engage are the Immunization program HCPs. HCPs are the most important stakeholder group because without them, the training plan or the change initiative cannot be implemented. Therefore, consistent with ADKAR's, Kotter's, and Duck's change management models, the first step to an effective communication plan begins with disrupting stagnation, and raising awareness and creating a sense of urgency that a change needs to happen among the HCPs in order to establish a guiding coalition. HCP stakeholders need "to be involved right from the start, so that they feel they have helped shape the changes" (Croft & Cochrane, 2005, p. 18). Moreover, "change strategies can only be embraced by staff if they are given a context for the change, and if they understand the need for change" (p. 18). This means that the tailored message must answer the human need of *why is the change necessary* (Croft & Cochrane, 2005; Hiatt, 2006). Since verbal, in-person communications are generally the most effective method when communicating change (Boston Consulting Group, 2019; Croft & Cochrane, 2005; Fausz, 2013), the Supervisor will verbally communicate the need for change using LMX (individual interaction) and Servant (group interaction) leadership behaviours (listening and empathizing) encompassed in public health leadership practices (coaching and motivating), and by using the logic model as a visual to support her message; specifically describing the Situation, the Assumption/Theory, and External Factors components that contribute to the message of why the change is needed.

Additionally, Fausz (2013) states that "change is not just about how people act but how

they think, and a change will never be successful if people's actions are not the result of an instilled belief in the change itself" (n.p.). HCPs must not only understand the reasons for the change, but they must believe that the change is necessary and have to want to change their communication behaviour; in other words, they must have the Desire (ADKAR's second step), "the appetite" (Preparation of Duck's model), and be intrinsically motivated to change. The Supervisor also believes that her ability to lead using the LMX and Servant Leadership behaviours encompassed in public health leadership practice will decrease resistance and facilitate intrinsic motivation among HCPs to want to participate in the communication training. For example, listening to HCPs' describe their fears and frustrations after a difficult conversation with a vaccine hesitant patient and then explaining how MI and presumptive language could help with these difficult conversations will help onboard HCPs to want to participate in the communication training.

Creating a desire and appetite to change will help motivate HCPs to agree to be the Change Agents or peer coaches (those who will help lead the training plan as discussed in the Change Implementation Plan section), and the development and communicating of the change vision and strategy (Kotter's steps three and four). Establishing a vision and a strategy are important and were initially developed by the Supervisor, but it is a *shared* vision and strategy that provides focus and energy to change, and "encourages risk-taking and innovation" (Marquardt, 2011, p. 63). This means that the initial vision and strategy may be amended based on HCP input, prompted by the Supervisor practicing LMX and Servant Leadership (listening and putting HCPs' needs first). Establishing a *shared* vision and strategy with HCPs will help strengthen the likelihood of achieving the change initiatives outcomes as HCPs will be invested and intrinsically motivated to develop and implement the communication training plan.

Additionally, the Supervisor believes that adult learning principles must be applied to effectively communicating the training plan in order to facilitate a successful implementation by the HCPs. For example, using PBL and developing case scenarios based on their lived experiences will help ensure that the training has practical connections and relevance to their job or personal life, and acknowledges their experiences and expertise (MacKeracher, 2004; Pappas, 2013). Such application incorporates the Supervisor using LMX and Servant Leadership encompassed in public health leadership's effective communication behaviours, such as listening, empathizing, and empowering to help enable feedback loops, or opportunities to share concerns and ask questions (Institute for Healthcare Communication, 2011; MacKeracher, 2004; Marquardt, 2011). Effective communication feedback loops will be instrumental and vital, not only in Kotter's first four steps, and ADKAR's and Duck's first two steps, but also throughout the entire change management process, such as when generating short-term wins with the HCPs and when implementing the training plan activities.

Ultimately, Kotter (2012) states that when leaders "neglect any of the warm-up, or defrosting, activities ([Kotter's]steps 1 to 4), …[they] rarely establish a solid enough base on which to proceed" (p. 25). This means that the Supervisor's goal of an effective communication plan is for her to disrupt stagnation, raise awareness, and create a sense of urgency that a change needs to happen, as well as create a desire and appetite to change, in order for HCPs to support the change and develop and communicate a *shared* change vision and strategy.

The second stakeholder is the MOHLTC. The MOHLTC must be informed of any existing or proposed program changes that support the Immunization Program Standard's overall goal and outcomes, and documented in the Annual Service Plan (ASP), as required on page 24 of the MOHLTC (2018c) Standards (and the third change driver, Chapter 1). The Supervisor is

responsible for communicating to the MOHLTC via the ASP and providing responses if there is inquiry. The communication message will focus on Incremental and Strategic change as there must be benefits for the province (as described in the first change driver, Chapter 1), statistically-based (for example, local vaccine coverage rate percentages), and documented as an intervention to the objective of decreasing vaccine hesitancy and increasing overall vaccination rates in the PHU's jurisdiction. Follow-up documentation and reporting outcomes of the change initiative will be reported yearly in the ASP by the Supervisor.

The third stakeholder is not a group, but an individual: The Chief Nursing Officer/Professional Practice Lead (CNO/PPL). The role of the CNO/PPL is to support the strategic planning, development, implementation, and evaluation of the PHU's programs and services as well as assists and supports the overall public health nursing practice. Tailoring the message for the CNO/PPL will focus on meeting with her in person, presenting the logic model and explaining the components' information that led to the activities and proposed outcomes, as well as describing the Incremental change benefits for the Immunization HCPs and the community; similar messaging that was presented to the HCPs. The CNO/PPL will be informed of the change implementation plan as soon as the HCPs are onboard so she can support the Incremental change, such as participating in the training workshop and/or participating in some feedback sessions, as well as assist the Supervisor with effectively communicating the Strategic change vision.

In terms of the Strategic change vision message, Gray (2013) states that behaviour change is "a central theme in public health interventions, with many programmes being developed to modify individual or community unhealthy lifestyle choices and replace them with healthy behaviours" (p. 239). The Supervisor will explain that MI, presumptive language, and

PBL promotes positive behaviour change which supports public health practice and the health of the community. This training will support Sexual Health HCPs as they interact with vaccine-hesitant patients when teaching in the schools (such as teaching about the vaccine that provides protection from the human papillomavirus), and when recommending vaccines to protect their patients who engage in high risk sexual behaviours. Additionally, the Strategic change vision message can also address the fifth change driver in Chapter 1, as being trained in MI and presumptive language through PBL can be used for HCPs' yearly QA requirement.

Having the CNO/PPL on-board and participating in the change process is not a requirement for the change implementation plan to be implemented. However, since she leads the Organizational Capacity Strategic Priority group and the integrated planning process, and sits on the Communication Strategic Priority group, onboarding the CNO/PPL can help communicate the Strategic change vision to the fourth stakeholder group, Upper Management.

The fourth and final stakeholder group, Upper Management, consists of the Medical Officer of Health (MOH), the General Manager (GM), and the three Managers. The tailored message to this group must focus on Strategic change benefits for the organization and the community by addressing the integrated planning recommendation (the fourth change driver) and the Strategic Priorities of Organizational Capacity and Communication (discussed in Chapter 1). As such, having the CNO/PPL onboard will help to onboard Upper Management to approve the Strategic change vision of having all public health professionals trained in MI and presumptive language.

Effectively communicating with Upper Management will happen after the change implementation plan has been implemented and results are available. The Supervisor has proposed this timeframe because Upper Management will need to see outcome measurement

results to demonstrate that the training plan has made a change in HCP communication behaviour and communication capacity. This means that how the message is presented to this group will be more formal than the other groups, and as such, the communication will happen in a group setting with a PowerPoint presentation complete with the logic model, background data, evidence-based analytics (such as the BECCI tool), and alignment with the MOHLTC (2018c) Standards, such as under Effective Public Health Practice Foundational Standard. Approval of this Strategic vision means that the Supervisor will work with the CNO/PPL to develop another change implementation plan and strategy to include all HCPs at the PHU.

Ultimately, HCPs are the most important stakeholder that the Supervisor must effectively communicate with as their acceptance of a need for change at the PHU must happen in order for this OIP to be implemented. The MOHLTC only needs to be notified of the change that the Immunization program is implementing and how it aligns with provincial and jurisdictional needs (to decrease vaccine hesitancy and improve vaccination coverage rates). Effectively communicating with the CNO/PPL is not a requirement to implement the change plan; however, she can be instrumental in effectively communicating the Strategic change vision to Upper Management. Upper Management's acceptance of the Strategic change vision for all HCPs to learn MI and presumptive language through PBL so they can communicate effectively with vaccine-hesitant patients would build communication behaviour and capacity at the PHU which can facilitate positive behaviour change in the community by decreasing vaccine hesitancy and improving vaccine coverage rates; however, their acceptance is not a requirement for this OIP's implementation. Other stakeholders may be interested in this OIP, which will be further discussed in the Limitations and Next Steps for Future Consideration section.

Chapter 3 Conclusion

Chapter 3 provided a comprehensive plan for implementing, monitoring, and communicating the organizational change process at the PHU. First, the change implementation plan was explained, including a detailed articulation of how The Three Rights framework will be instrumental in providing the strategy for this plan. Second, M&E was described as an essential component of this OIP with the Supervisor presenting a logic model, three evaluation tools, and PDSA cycles to support the logic model's pathway. Third, the Supervisor presented another logic model that can be used as a communication tool and identified stakeholders that will be involved in communicating that there is a need for change at the PHU.

Ultimately, this OIP provides an evidenced-based pathway to address the organizational PoP, *What training is needed to ensure HCPs are capable to communicate effectively with vaccine-hesitant patients,* in an effort to serve the public. Specifically, this OIP presented background information and evidence that vaccine hesitancy is a problem and that there is no training plan to build communication behaviour and communication capacity among HCPs at the PHU so they can communicate effectively with vaccine-hesitant patients in an effort to decrease vaccine hesitancy in the community and improve overall vaccine coverage rates. However, as with any culminating research-informed document, there are limitations and next steps for future consideration that need to be mentioned. Therefore, throughout the development and writing of this OIP, the Supervisor has identified four limitations that have generated next steps for future consideration.

Limitations and Next Steps for Future Consideration

This OIP provides an evidenced-based pathway to address an organizational PoP in the context of public health. According to Kemm (2006), evidenced-based in public health is more

of an ‘enlightening’ process rather than “providing the answer to any particular problem” (p. 319) because of the complexity of the context and decision-making process. Ergo, the Supervisor has identified four limitations and next steps for future consideration.

The first limitation is that Upper Management is not required to approve the Strategic change vision of all public health professionals learning MI and presumptive language to build communication capacity at the PHU (discussed in Communicating the Need for Change section). Since the Supervisor has the leadership ability and position to implement changes in the Immunization program, Upper Management rejecting the Strategic change vision does not impede her leadership ability and position to engage other internal Supervisors, such as the Supervisor of the Sexual Health program, where the HCPs also encounter vaccine-hesitant patients. Additionally, since there is no communication training provided by the MOHLTC, a next step for consideration is that the Supervisor can use the background information and change implementation plan provided in the OIP to share with other Immunization program leaders in the province as well as other Supervisors at the PHU.

The second limitation is that although MI and presumptive language have been shown to produce positive behavior change in patients, MI works best with HCPs who already have some basic knowledge in vaccine-preventable diseases and vaccinology; for example, understand the pathophysiology of meningococcal disease and how vaccines work on the immune system (Keeley et al., 2018). This base knowledge can be attained by completing the Canadian Pediatric Society’s (2019) *Education Program for Immunization Competencies 3rd Edition* (EPIC) before beginning the MI and presumptive language training. EPIC is an online course with 14 modules, such as learning how the immune system works and how vaccines are made, and is “designed to help health care professionals provide accurate and complete information about immunization”

(Canadian Pediatric Society, 2019, n.p.). Completing EPIC is part of the orientation process for new HCPs in the Immunization program; however, if other program HCPs are going to learn MI and presumptive language so they can communicate effectively with vaccine-hesitant patients, the next step is that the Supervisor will ensure that the policy developed around MI and presumptive language includes the completion of EPIC as a pre-requisite.

A third limitation is that MI workshops that focus on vaccine hesitancy are limited and relatively new. Currently, the Canadian Pediatric Society is in the process of developing an online module for HCPs to learn MI so they can communicate effectively with vaccine-hesitant patients; however, it is not completed, there is no date set for this completion, and there is no evaluation or implementation plan to support it. The Supervisor knows this information as she has attended a workshop and has been part of the pilot project for the module. As such, a next step is for the Supervisor to present this OIP to the researchers of the project and propose an action research study, potentially with her HCPs, to evaluate the effectiveness and make amendments as necessary.

The fourth and final limitation of this OIP is that training HCPs in MI and presumptive language is only one strategy in the effort to decrease vaccine hesitancy in the community and improve overall vaccine coverage rates in the PHU's jurisdiction. Public health work is mandated and highly legislated, and often addresses challenges "with no clear set of answers or immediate and apparent results" (Kaur, Walsh, John-Baptiste, & Terry, 2016, p. 46). Vaccine hesitancy is not only a jurisdictional public health challenge, it is also a provincial and global challenge, as evidenced by the recent measles outbreaks in BC and Europe (Government of Canada, 2019). The reasons for vaccine hesitancy are complex and multifaceted, and in a systemic review of strategies to address vaccine hesitancy, Jarrett et al. (2015) concluded that

there is no single strategy that addresses the magnitude of vaccine hesitancy. As such, next steps include layering other internal efforts such as improving external HCPs' knowledge regarding vaccination and the publicly funded immunization schedule, and improving the number of vaccinations delivered at school clinics. As research suggests that improving HCP communication skills will help to improve public confidence in vaccines (Austvoll-Dahlgren & Helseth, 2010; Williams, 2014; Dubé, Bettinger et al., 2016; Dubé, Gagnon et al., 2016; Paterson et al., 2016), the Supervisor believes that developing and implementing a training plan for HCP so they can feel confident and communicate effectively with vaccine-hesitant patients will support other strategies in the effort to decrease vaccine hesitancy and improve overall vaccination coverage rates in the PHU's community.

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Appendices

Appendix A: Change Readiness Assessment

INTRODUCTION

This assessment tool can give insight into where you and your team are on the change continuum and make an informed choice as to what activities you should be focused on. Complete the worksheet to the best of your ability, rating each element on a scale of 1 (e.g. no awareness) to 5 (e.g. complete awareness). Then, review the action steps on the following pages.

Briefly describe the change that is being implemented at your workplace.	
Awareness	
Describe your awareness of the need to change. What are the business, customer or competitor issues that have created a need to change?	Review these reasons and ask yourself the degree to which you understand all the business reasons for this change. Rank on a 1 to 5 scale. **Awareness Rank**
Desire	
List the factors or consequences (good and bad) related to this change that affect your desire to change.	Consider these motivating factors, including your conviction in these areas. Assess your desire to change. Rank on a 1 to 5 scale. **Desire Rank**
Knowledge	

List the skills and knowledge needed to support this change, both during and after the transition.	Do you have a clear understanding of the required skills and knowledge? Have you received training or education in these areas? Rank on a 1 to 5 scale. **Knowledge Rank**

Ability	
Considering the skills and knowledge from above, assess your overall proficiency in each area (low, medium, high). Are there any barriers inhibiting your ability?	To what extent do you have the ability to implement the new skills, knowledge and behaviors? Rank on a 1 to 5 scale. **Ability Rank**
Reinforcement	
List the reinforcement in your organization that will help you retain the change. Are incentives in place to make the change stick? Are there incentives to not change?	To what degree are reinforcements in place to support and maintain the change? Rank on a 1 to 5 scale. **Reinforcement Rank**

RESULTS

Transfer your scores from each ADKAR phase to the table below. Take a moment to review your scores. Circle those areas that scored 3 or less and identify which is the first area with a score of 3 or less. This first area will be your primary focus - this is the barrier point.

Awareness Rank	
Desire Rank	

Knowledge Rank	
Ability Rank	
Reinforcement Rank	

BAR GRAPH

Create a bar graph below showing your ADKAR change profile. To do so, mark your score for each element and shade the area below the mark to create each bar.

5					
4					
3					
2					
1					
	Awareness	**Desire**	**Knowledge**	**Ability**	**Reinforcement**

The example below is of a profile with A=4, D=S, K=2, A=l, R=4. The barrier point is Ability.

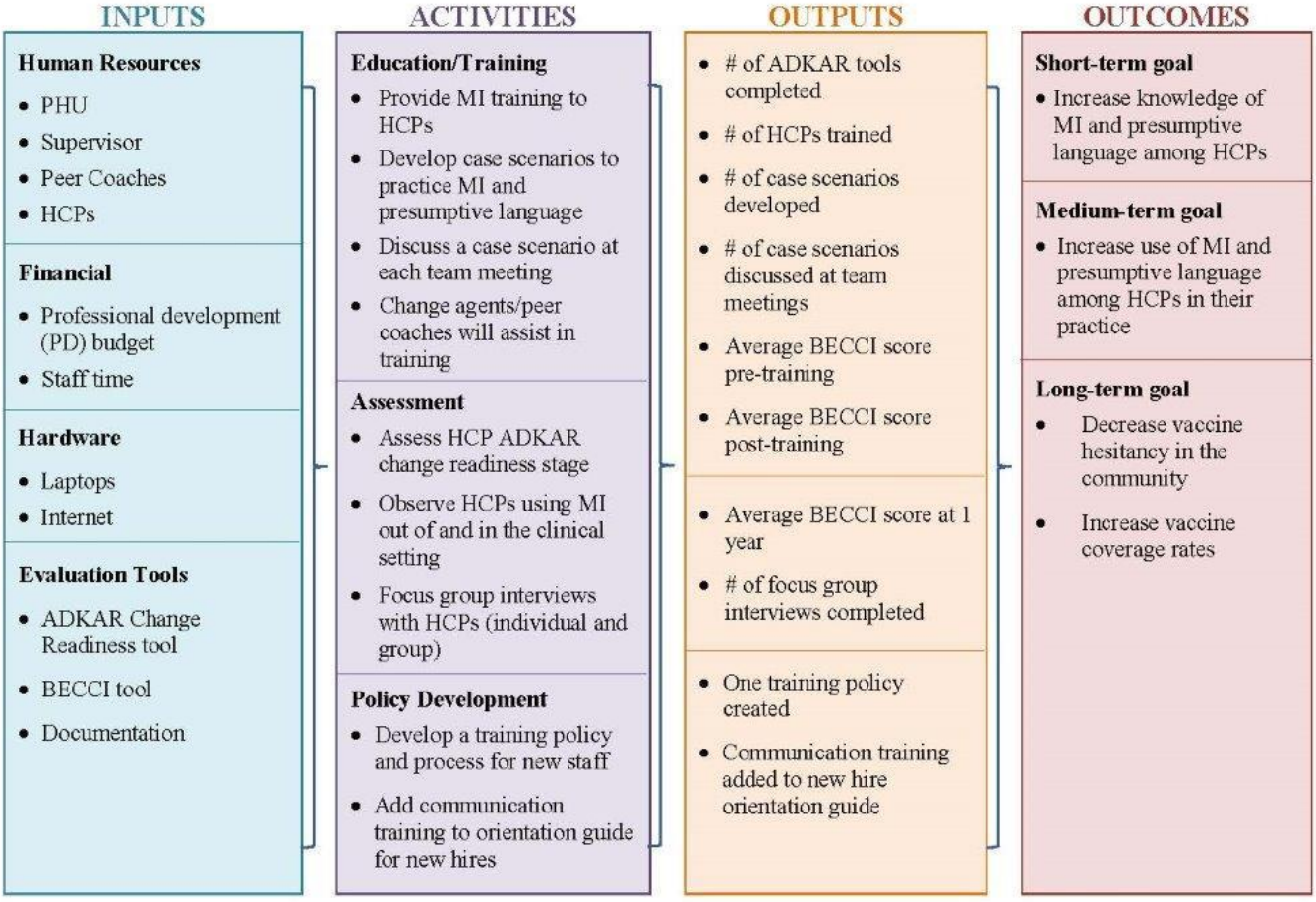
5					
4					
3					
2					
1					
	Awareness	**Desire**	**Knowledge**	**Ability**	**Reinforcement**

Notes

Appendix B: PHO risk screening tool

Score	Description of risk Level	Review level
0	No risks identified	Archive
		RST catalogued by ethics office, projects receive periodic audit.
1	Activity appears to be very low risk. Alternatives to ethics board review may be appropriate.	Level 1 Delegated Review
		Delegated review by single reviewer; no completion of separate application form.
2	Activity appears to be minimal risk	Delegated ethics review
		Completion of full ethics review board application form required.
		Review completed by two or more ethics review board members.
3	Activity appears to be greater than minimal risk	Full board ethics review
		Completion of full ethics review board application form required.
		Review completed by full ethics review board.

Appendix C: Logic Model as a M&E Tool



Appendix D: PDSA Documentation Tool

Plan What change are you testing with the PDSA cycle(s)? What do you predict will happen and why? Who will be involved in this PDSA? (e.g., one staff member or resident, one shift?). Whenever feasible, it will be helpful to involve direct care staff. Plan a small test of change. How long will the change take to implement? What resources will they need? What data need to be collected?	**List your action steps along with person(s) responsible and time line.**
Do Carry out the test on a small scale. Document observations, including any problems and unexpected findings. Collect data you identified as needed during the "plan" stage.	**Describe what actually happened when you ran the test.**
Study Study and analyze the data. Determine if the change resulted in the expected outcome. Were there implementation lessons? Summarize what was learned. Look for: unintended consequences, surprises, successes, failures.	**Describe the measured results and how they compared to the predictions.**
Act Based on what was learned from the test: Adapt – modify the changes and repeat PDSA cycle. Adopt – consider expanding the changes in your organization to additional residents, staff, and units. Abandon – change your approach and repeat PDSA cycle.	**Describe what modifications to the plan will be made for the next cycle from what you learned.**

Appendix E: The Logic Model as a Communication Tool