

PHYSICIAN LEADERSHIP DEVELOPMENT

- **Physician Leadership and**
 - **Physician Engagement**
 - **Quality Improvement**
 - **Succession Planning**
 - **Outcomes Measurement**
- **Organizations outside Alberta**
- **Considerations for AHS**



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Executive Summary

At AHS, physicians are predominantly independent professionals, trained as experts who fulfill a role in direct and immediate patient care, maintaining their clinical competencies with continuous medical education. As a result, most physicians do not have the capabilities or interest to provide indirect care for patients by fulfilling organizational physician-leadership responsibilities and partake in long-term systemic transformation of healthcare. The department of human resources (HR) has created a structure for its employees with strategies and tools to support and facilitate leadership development. Except for loose elements, there is no similar or integrated leadership learning program for physicians. The Alberta Health Governance Review Task Force recommended that the health care system properly trains physicians and gives them opportunities to gain experience in multidisciplinary teams and leadership positions to ensure that they are better prepared for effective participation in teams and for succession to leadership positions. The development of a physician leadership program and learning institute are in alignment with this recommendation.

The purpose of this document is:

- 1) To review physician leadership programs outside Alberta, to explore how they are embedded in the fabric of the organization and, to study the structural and cultural elements or frameworks that encourage and facilitate leadership and leadership learning. The specific content of those Canadian and international programs, although touched upon, is not within the scope of this document.
- 2) To list and explain considerations for the successful development of a Physician Leadership Program at AHS; to take into account successful elements and mistakes from other healthcare systems in formulating these considerations.

Facilitators and barriers to engage physicians in leadership and leadership development are explored first. In many successful organizations, physician leadership development is intertwined with quality improvement initiatives. High quality of efficient care is a domain of interest common to all healthcare workers: to physicians for their patients, to administrators for budgetary reasons. Because of that commonality, many successful organizations are using quality improvement as an introduction to physician leadership development. In addition to quality-related leadership learning, some organizations have an additional multi-level program for physician leadership development, sometimes in combination with a similar program for employees. To help clarify whether AHS should develop a separate program for physicians or an integrated organization-wide program, differences between skills needed for physician-leaders and skills for other leaders are described; there is a need to keep at least part of the programs separate. This does not prevent amalgamation of all programs under the umbrella of one Leadership Learning

Institute. Some of the successful organizations have integrated the leadership development program in a succession plan, but succession or acceleration pools are almost non-existent in Canada.

Data for this report were gathered from evidence-based, peer-reviewed publications and from grey literature, from the websites of national and international healthcare organizations and from 53 conversations with leaders in healthcare from Canada, the United States, Australia and Europe. Leaders create other leaders; this means that senior physician leaders are instrumental in physician engagement as is evident in Intermountain Health, Virginia Mason and the Mayo Clinic; once engaged, physicians are more likely to take on leadership roles. Facilitators for physician engagement include a physician compact, as developed successfully at Virginia Mason in Seattle and at the Ottawa Hospital in Ontario. Developing a system for quality improvement initiatives, tailored to the mental model and timeframe of physicians, is another strong facilitator for physician engagement toward leadership. The Mayo Clinic, Kaiser Permanente, Virginia Mason in Seattle, Intermountain Health in Utah and the Ottawa Hospital have been very successful in the QI arena and in physician leadership development. McLeod Regional Medical Center in South Carolina is an example of how fee-for-service physicians can be engaged in QI initiatives. The resources needed for this type of enterprise are extensive. Budget, although important, is not the first priority for these initiatives; the priorities are patients and staff, the quality of care received and delivered, and the experience of that care.

Mayo Clinic and Kaiser Permanente produce not only some of the best outcomes in quality but they also deliver some of the best physician leadership programs based on experience of other top non-health industries. At KP and Mayo, senior physician leaders are closely involved with the delivery of physician leadership programs. The Mayo Clinic has more academic focus than KP, by focusing not only on patients, but also on teaching and research. Outcome measurements, accountability, physician development and succession planning are intrinsic parts of the fabric of the organization. The size of AHS falls between that of Mayo with 60,000 employees and 4,000 physicians and that of Kaiser Permanente with 160,000 employees and 14,000 physicians. For the very best outcomes in the world, and if AHS wants to combine development of quality improvement with physician leadership, then smaller organizations like Jönköping Council in Sweden, Virginia Mason in Seattle and Intermountain Health in Utah are to be included. These three organizations have learning and research institutes and, here too, senior physician leaders are involved in the development and delivery of the physician leadership and quality improvement programs. Vision and leadership in these three organizations have remained stable for two decades, thereby developing credibility and trust. Jönköping is further interesting because it was able to develop a long-term healthcare vision without short term political interference.

Virginia Mason is developing links to help one region in NHS in Europe. Intermountain Health deserves AHS' closer attention for several reasons: the Institute for Healthcare Delivery Research can develop satellite institutes in Canada and physicians from Saskatchewan and Ontario have already taken the extended course program at the institute in Utah; Intermountain Health is also close to opening a Learning Academy alongside the existing Institute for Healthcare Delivery Research and will be based on some of the Harvard models around leadership development.

In Canada, two organizations deserve a closer look: St. Joseph's Healthcare in London, Ontario and the Ottawa Hospital (TOH). St. Joseph's has a well-developed physician leadership program with onboarding as a very strong component. TOH has published a few of its recent successes and failures on the implementation of a physician compact, probably the first healthcare organization in Canada to do so. They have a well-developed physician leadership program and a good quality program has been built around the physician compact and leadership program, with the help of the Studer group. Both TOH and St. Joseph's are expanding their physician leadership offerings in collaboration with the Schools of Business and Medicine, based on several levels of capabilities of the LEADS framework.

There are isolated innovative pieces from other systems in the world, the most striking one from the University College London Hospitals where physician leadership development, based on army experiences in Afghanistan, is piloted. The institute has a rigorous program, includes a leadership development simulation lab and is said to be transformational for behavior.

To develop the physician leadership program, the ACS and 70/20/10 models are important. To determine and measure the level of leadership capabilities LEADS has been accepted by many Canadian healthcare and professional organizations, including AHS; the Influencer© model is proposed and detailed to facilitate and maintain leadership behavior and habit formation in the organizational structure and culture. The Influencer is a change management model that increases the chance for successful behavioral changes tenfold in an organization.

Although centrally coordinated and standardized, needs assessment and implementation have to be developed within local context and needs. Therefore, no specific recommendations will be made; however, the last section contains three dozen suggestions based on reflections and facts obtained from the literature and from the interviews, to be taken into consideration when developing a physician leadership program at AHS.

The Purpose

- The main purpose of this document was to review Leadership Development Programs for physicians outside Alberta, nationally and internationally, comprehensively and based on information obtained from the literature, the internet and interviews.
- The secondary purpose was to compose a list of considerations based on these findings for AHS to use when developing a physician leadership program.
- A tertiary purpose was added during the research for this document because physician leadership is closely linked with other concepts: facilitators and barriers to physician engagement and leadership; links between physician leadership programs and quality improvement initiatives; leadership programs and succession planning; tools to measure the outcome of a leadership program.

Background

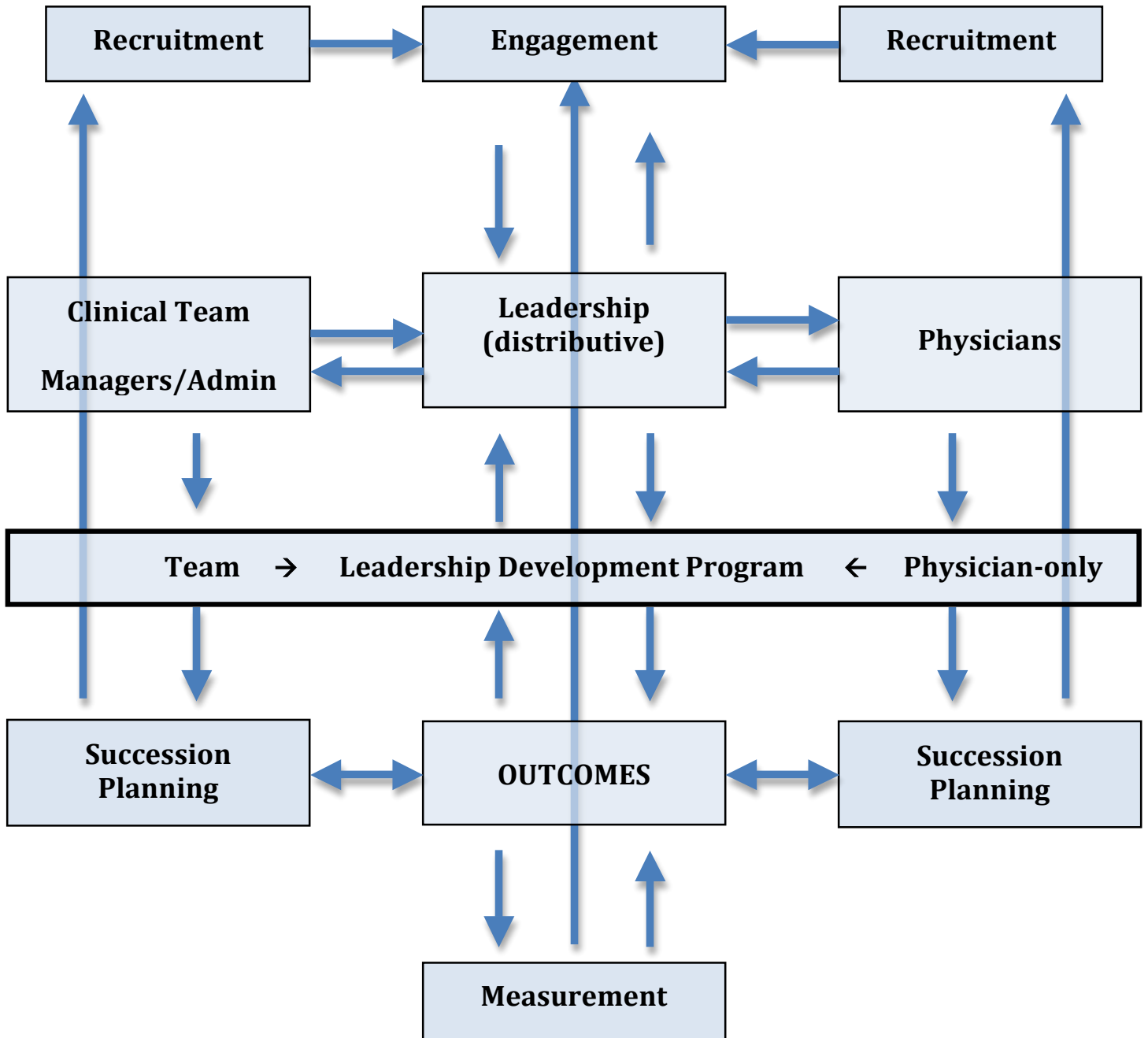
The department of human resources at AHS has created a structure for its employees with strategies and tools to support and facilitate leadership development. Although some elements are useful, it has not been developed with physicians in mind; physicians also do not consider themselves to be employees and do not or reluctantly access HR material. Although some initiatives for physician development have been provided by Medical Affairs, there is no parallel or integrated leadership learning program for physicians in place like there is for employees.

Many constructs and concepts intersect with physician leadership development. Therefore, it is necessary to explore and clarify the ones that intersect most closely with the concept of physician leadership and physician leadership development (figure 1).

Following concepts are explored briefly:

- How does the construct of ‘leader’ differ from that of ‘leadership’?
- What is physician engagement? How does engagement differ from leadership? How can physician engagement be measured in a validated manner? What are theoretical barriers and facilitators to physician engagement? What is the evidence of a link between engagement and organizational performance, specifically for the health care industry?
- What has worked to improve physician engagement?

Figure 1: Organizational and Systemic Constructs intertwined with Leadership and Physician Leadership Development



- How do physician leadership development and succession planning relate? How do leadership skills needed by physicians differ from the skills needed by other leaders?

These questions are discussed in the first section. The second section pertains to the literature and interviews around international and national (outside Alberta) physician leadership programs and the third section provides considerations for AHS when developing its physician leadership program. The last section also elaborates how some frameworks, most importantly LEADS in a caring environment and The Influencer©, can further support the program.

The Approach

Information for this document on Physician Leadership Development was obtained from several sources: peer-reviewed articles, grey literature, websites related to the topic, and conversations using semi-structured interviews with leaders from national and international health organizations. For the peer-reviewed literature search, following databases were used: Medline and EMBASE on Ovid, CINAHL, EBSCO and Google Scholar; for the grey literature Google and Google Scholar were used and, the Google search engine for websites of medical organizations. Limitations were set for articles in the English language published between January 2000 and July 2013. Search words used initially were “physician leadership”, “medical leadership”, “leadership development”, “physician leadership program”, “medical engagement”, “physician engagement”, “leadership ROI”, “succession planning” or combinations thereof. An initial set of 741 papers was retrieved and, based on those papers, a snowball approach was then used to further explore the topics. Textbooks on leadership development and physician leadership programs were consulted as a result of findings from a search using Google Scholar and the electronic book library of the Royal Roads University. Organizations identified in the literature or recommended by the interviewees in the last question of the list below were contacted. The semi-structured interviews were conducted, by phone mainly, around the following questions:

- What does your organization have in place to help physicians develop leadership skills?
- How do you know whether those initiatives work? How do you/would you measure their effect?

- What does your organization have in place to help physicians maintain the new leadership skills they have learned, allowing for behavioral change and new habit formation within the organizational culture?
- How does your organization identify potential physician leaders? What is the succession planning for physician leaders at your organization?
- How does physician leadership differ from leadership in general?
- What does your organization have in place to help non-physicians and physicians develop leadership skills together?
- Are there elements in your system for physician leadership development that you would like to add or change? What would you do differently?
- Do you know other national or international models where learning leadership skills, developing new behaviors and maintaining new habits are embedded in the organizational structure and culture for physicians and physician-leaders?

The questions were a guide for the conversation which was not necessarily limited to these questions. Fifty three conversations were held and included leaders from hospitals, health care systems, medical regulatory bodies and academic institutes in Alberta, British Columbia, Ontario, Manitoba, Nova Scotia, Saskatchewan, England, United States, Australia and Sweden, with representation from Alberta Health Services, Fraser Health, St. Joseph's-London ON, Toronto Rehabilitation Institute, The Ottawa Hospital, Sunnybrook Health Sciences Center, Capital District Health Authority, University of Manitoba, University of Alberta, University of Calgary, University of Saskatoon, University of Toronto, College of Surgeons and Physicians of Alberta, ROI Institute-Ottawa, Regina Qu'Appelle Health Region, Saskatoon Health Region, Royal College of Physicians and Surgeons, NHS-UK, Kings'sFund-UK, Jønköping Health Region, the Royal Australasian College for Medical Administrators (RACMA), Royal Perth Hospital (Perth, Australia), Mayo Clinic (Rochester), Kaiser Permanente (California), Geisinger Health System (Pennsylvania), and Intermountain Healthcare (Utah). For some organizations, more than one individual was interviewed. All interviewees were sent the reflective questions in advance, all agreed to partake in the conversation by responding to the electronic invitation and had an opportunity to not partake by not replying to the invitation. Only the Danish Medical Association and Virginia Mason in Seattle did not return the request. For all participants, the purpose of the study was re-stated at the beginning of the conversation and all interviewees were comfortable proceeding.

1. Concepts linked with physician leadership development

1.1. Development of Leaders vs. Leadership Development

The very definition of leadership can contribute to the confusion and derailment of engaging more physicians in leading the healthcare system because we often confuse leaders with leadership. Day (2002) describes development of leaders as an individualistic approach, drawing a sharp distinction between the leader and the followers. The focus is on understanding, assessing and improving the skills and abilities of individuals, often a limited number of them. Drath (2001) suggests that leadership pertains to the actions of more than one single person, a distributed process shared by many ordinary people instead of the expression of a single extraordinary hero. Leadership would then be particularly relevant in the service industries where complex decisions must be made quickly across functions and programs in relation to the external environment.

Medical leadership is a diverse set of behaviors – predicated on patients’ care – by frontline clinicians intended to bring about an improvement in patients’ medical outcomes. In medicine, there is a paradox where doctors are largely delivering a highly personalized, individually based service which often is an emotive, empathic and caring service. Doctors and the public, as patients, have something akin to an implicit contract that the individual transaction around care-giving shall remain the predominant characteristic of health systems. The paradox is in the cultural challenge for the physicians to recognize the need to engage in the wider systems’ context without detriment to this crucial physician-patient relationship. This challenge is made difficult by the increasing amount of centralized interventions by governments to contain costs and increase patient safety, threatening the physician’s clinical autonomy and professional values. This has resulted in alienation of the medical workforce, yet medical leadership is necessary to achieve full and positive engagement of physicians (Spurgeon et al, 2011). Bujak (2003) describes this as the “problem of the apostrophe”: physicians act as the patient’s advocate, less so as the patients’ advocate.

Despite the investments and the demand for better quality and innovation, health care organizations remain very resistant to change, especially changes derived from policy and managerial directions. Mintzberg calls this “professional bureaucracies” where the culture of professionalism, driven by the professionals who control the expertise and determine the

organizational arrangements, pervades decision-making and resource allocation (Mintzberg, 1979). According to Baker and Dennis (2011), the medical profession is a model of individual professionalism where each practitioner works with his or her own patients in his or her own practice and where “the defining influence on medical decision-making is based on assessing the needs of each patient.” In order to be patient advocates, doctors believe they must also maintain clinical autonomy to decide what care is needed. As a result, there is limited influence of management and administration on professionals in professional bureaucracies. The concept of the physician leader has traditionally rested on the expertise of individual clinicians and the capability of these same leaders to reflect the interests of their colleagues in group practices, departments or professional associations. Consequently, physicians’ accountability for costs and outcomes has been minimal, and clinical autonomy remains an integral component of physicians’ professional identity. Whereas doctors are accountable for safe, high-quality care, they are not accountable for the goals of the Canadian healthcare system. In contrast, in high performing healthcare systems, doctors see themselves as partners where performance is linked to measurement and payment, and where accountability is not seen as an inhibition of individual autonomy but as a tool to improve patient care (Bryan & Lewis, 2011). Intermountain Health is a great example of that philosophy, as are Virginia Mason, Mayo Clinic, Kaiser Permanente and Jønköping Health Region.

As a transitional step between individual physician leaders and the new model of medical leadership, the NHS and other organizations focused on the recruitment and development of individual leaders and on structural changes that gave doctors formal roles and responsibilities for clinical services, not just individual practices. The new organizational structures of divisional, departmental or program management led to little evidence that overcame the cultural divide, often separating medical groups and administrators. These individuals had limited abilities to implement sustainable improvements despite these structural changes and despite a variety of programs to help doctors develop managerial and leadership skills in these new roles. Creation of formal leadership positions for doctors within the organizational structure is insufficient to guarantee adaptation and improvement. Medical leadership development needs to take into account a more global approach, based on evidence around performance improvement in

the health care system and based on the creation of an enabling context for the development of leadership capacity across the system (Ham, 2010). An answer to the conflict between physicians at the frontline and physicians in formal leadership positions may well be found at the Kaiser Permanente group where all physicians, regardless of whether or not they hold a formal leadership role, are considered leaders and the learning system is set up accordingly (Mipos, 2002). A similar philosophy is found at the Mayo Clinic, Intermountain Health, Virginia Mason Institute and the Jønköping Health Region.

The individual physician's excellence, although necessary, is no longer sufficient to generate good patient outcomes (Bohmer, 2012). In the last decade, approaches to leadership in public services have shifted from individual leaders toward distributed and collective leadership. Collective refers to the sharing of leadership roles between participants in a complementary manner to combine diversity of expertise. Distributed denotes the degree to which such leadership roles are spread across a system or an organization to respond to challenges at various levels of governance. For health care systems, all physicians are leaders (Mipos, 2002) because clinical leadership takes place at the level of wards and in microsystems where care and services are delivered. Such new models of clinical and medical leadership have been easier to develop in organizations that created salaried physicians and physician-led hospitals, like, for example, the Mayo Clinic and Kaiser Permanente (Light, 2004).

Based on these findings, Baker and Dennis (2011) suggested three prongs for developing medical leadership within health care systems: 1) structural creation of formal leadership positions for physicians; this is only one element with limited impact unless coupled with a more engaging strategy to get docs involved in improvement efforts; 2) a more collective and distributive view of organizational leadership which occurs at all levels in a concerted manner by a variety of clinical and non-clinical disciplines; 3) leadership development aligned with clear improvement goals at strategic and operational levels of the organization and based on the science of improvement in health care systems (Baker et al, 2008). In other words, in the past the development of leaders and formal physician leaders used to focus on the first prong only, while presently the development of leadership and medical leadership focuses on all three prongs within an organizational or systemic context. In addition, initiatives for development of individual leaders have limited impact as

compared to a more collective and systemic approach to leadership development in the health care system.

Although this document focuses on physician leadership development, it is not the intention to detract from the essential leadership role of all health care professionals; what is essential is clinical leadership by all members of the care delivery team. Finally, in the context of servant leadership (Greenleaf, 2002), leadership in the healthcare environment is a moral and emotional way of being, of acting and, “doing the right thing, even on a difficult day” (Halligan, personal communication).

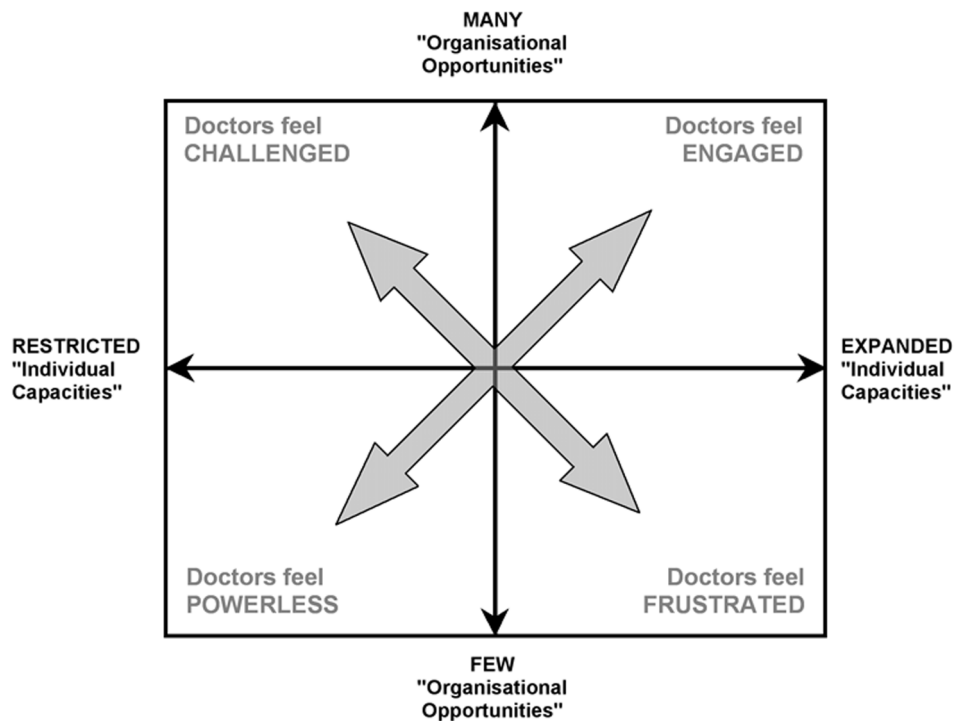
1.2. Physician Engagement and Leadership

In general, engagement is an interdependent, dynamic construct in a constant state of flux depending on the circumstances and the actions taken that either improve it or undermine it. It is a psychological commitment of the individual to a work enterprise, demonstrated by a set of behaviors that characterize evidence of engagement, leading to organizational or systemic contributive results. Physician engagement specifically is a psychological state mediated through an interactive relationship between physicians and their working environmental conditions seen through a structural, political and cultural frame in which each frame can be empowering or disempowering (Dickson, 2012). It is the energetic and committed involvement of physicians in their diverse working roles within the health system in order to: 1) ensure that patient care is done according to professional standards and personal ethics. At this individual level physicians are well engaged. 2) take collaborative action with others in the health community to determine the appropriateness of care, to improve the quality of patient-centered care, to enhance efficiency toward sustainability and to define working conditions. It is at this second level that physician engagement is limited.

Spurgeon et al. (2008, 2011a) define physician engagement as a two-directional social process where the organization must reciprocate the engagement of individual physicians toward high quality care by putting in place conditions and processes so that physicians want to participate and can find opportunities to do so. The two dimensions that encourage engagement are contained in the Medical Engagement Scale (MES): organizational opportunities, which reflect the cultural conditions that are inviting for

physicians to become more actively involved in leadership and management activities and, individual capacity, which reflects perceptions of enhanced personal empowerment, confidence in tackling new challenges and increased self-efficacy (Spurgeon et al., 2008; Hamilton et al, 2008; figure 2). Creating organizational opportunities, which will motivate the physician, and offering leadership learning opportunities, which will give the physician the abilities to accept those organizational opportunities, increase the chance for the physician's engagement to end up in the right upper quadrant of figure 2. Examples of organizational opportunities are quality improvement initiatives and an example of expanded individual capacity is a physician leadership program offered by the organization.

Figure 2: Medical Engagement Model (Spurgeon et al. 2008)



To buy into new approaches, physicians have to be equal partners in development and they should be encouraged to lead the change (Fraser Health, 2011, p.25). Some degree of physician engagement already exists because the physician invests psychological energy into patient care of the best quality possible. That current state of physician engagement is being disrupted by recent changes in how governments conceptualize and administer the

delivery of health services, from a single individual autonomic provider in an office or hospital-centered setting to a single regionalized system of program management around inter-professional patient-centered evidence-based care. This disrupted flow of engagement has been exacerbated by sustainability issues to fund the health system (Dickson, 2012). This may have begun a downward spiral of physician engagement caused by a low level of trust in politicians and a high level of suspicion toward administrators (Clark, 2012; Kaissi, 2012). As a result, physicians have been thrown together with fellow physicians and allied health professionals in new and different ways and the key question is how to get physicians to engage with each other in improving quality, safety and value to transform the health system. (Gosfield & Reinertsen, 2010). Gosfield and Reinertsen (2003, p.3) add that, “most aspects of health care are ultimately derivative of physician behaviour”.

Grimes and Swettenham (2012) reviewed the literature on barriers and facilitators to physician engagement in great detail. Leadership is pivotal to engagement, i.e. leaders engaging physicians is a strong facilitator for engagement and leadership development. Dickson (2012) states that the practical link between leadership and engagement is twofold: leadership is an enabler for improving engagement and, once engaged, attracting physicians to leadership roles is a central element for effective health reform. In other words, an invitation by senior leaders for physicians to become engaged and the availability of leadership development programs enable physicians’ engagement and generate interest in leadership. Intermountain Health, Mayo Clinic, Kaiser Permanente, Virginia Mason, St. Joseph’s Health Care (London, ON) and the Ottawa Hospital are good examples where physicians are engaged early by senior leadership and learn leadership skills in a development program; the resulting engagement of physicians in leadership roles and the reform of their respective organizations have led to extraordinary quality of care and staff satisfaction.

Initiatives and information around quality and communication leading to trust are also strong facilitators for physician engagement, as is learning in management tools, leadership skills, organizational and systems science and improvement methodology (Grimes & Swettenham, 2012). These facilitators are similar to the “organizational opportunities” and “individual capabilities” described by Spurgeon et al. (2008) (Figure 2). Lack of time in general and the quality and timing of meetings are barriers. Fee-for-service

payment is a barrier while rewards, recognition and compensation can all facilitate engagement. The evidence around difference in engagement between gender and generations for physicians is contradictory, but in this review by Grimes and Swettenham (2012), no differences were found.

Dennis et al (2013) released an outstanding literature review on physician engagement and leadership with key recommendations to enhance physician leadership skills and alignment with the healthcare system. Although engagement and physician leadership are important and well published, there is not as much in the literature on processes by which organizations can convert physicians' autonomy, knowledge and power into resources for health system performance and improvement. Although physician leadership at the top is important, leadership occurs at all levels of the system; therefore, clinical microsystems to improve clinical outcomes, and new forms of leadership like dyads between physician and administrator/manager are important in the context of distributive leadership. Some organizations have developed physician compacts which can foster 'organized professionalism' (Dennis, 2013), rather than 'professional bureaucracy' (Mintzberg, 1979). This means that "professions and organizations must mutually accommodate systems changes" (Dennis, 2013). Open communication, willingness to share relevant data, a shared vision and accumulating evidence of successful collaboration are essential to (re)build trust between physicians and organizations. Besides economic motives of the physicians, the challenge is to bridge and integrate culture; the biggest cultural shift probably is "considering physicians as workers among workers", a shift which may help develop new norms of engagement and new leadership roles (Dennis, 2013).

The Canadian Forces Health Services (CFHS) are a good example of a health care system that has embedded several factors to circumvent some of the barriers against physician engagement: structure, remuneration/recognition, training and culture (Courchesne et al, 2012). As for structure, a physician has always been the leader of the CFHS. From early in their career, physicians are expected to partake in leadership roles as clinician leaders; leadership is shared or distributed. This is not dissimilar from the setting at Mayo or Kaiser Permanente. As for remuneration and recognition, all physicians at CFHS are salaried or paid session fees. A physician should in no way be penalized for time and income taken away from patient care duties. In the army, the only way to increase

compensation is by promotion, which is based on proficiency in leadership and management, direct patient care and participation in quality improvement initiatives. Performance review and accountability provide the evidence for that promotion. Training is an important component for military physicians when they start in the army. This is not only important to acquire new skills and behaviors, but it is also part of the ‘onboarding’, and branding, also strong at Kaiser Permanente and, on a smaller scale, at Intermountain Health in Utah and at St Joseph’s Health Care in London, Ontario. This training continues at critical phases and is ongoing, often through action learning. Finally, culture in the army, based on traditions and values, the values of service, professional development, stewardship and excellence are significant factors contributing to successful physician engagement.

Virginia Mason Health Center and the Ottawa Hospital are great examples of a successful approach to improve hospital-physician relationships by developing a physician-hospital compact (Silversin & Kornacki, 2000; Silversin 2011). A compact or agreement is build around shared values and trust and establishes a set of rules and behavioral expectations for hospitals and physicians within the construct of their working relationship. Compact refers to the “give” and “get” that physicians expect as members of their organizations, it is a psychological contract between an organization and its members. Silversin (2000, p.47) identified that the “deal” physicians were promised when they joined their organization years ago had become a barrier to adopting improvements, as these improvements or changes provoked the response, “I did not come here for that”. The effort to develop a new compact will pay off if the process includes: first, a discussion at a philosophical level about what the organization needs and expects from its members in order to be successful and, second, development of new expectations to guide physician behavior, i.e. expectations related to both what physicians “give” and what physicians “get” (Silversin & Kornacki, 2000). Typically, physicians commit to actively engage in quality improvement, select and empower leaders around a shared vision, treat all with respect, engage in collaborative practice, and promote the hospital through clinical innovation and outreach. In return, the hospital commits to: include physicians in significant decisions and be transparent about these decisions and about finances; demonstrate appreciation for physicians’ contributions; ensure a well-run hospital; improve access to clinical data and physician performance relative to benchmarks; provide the learning tools for quality

improvement and development of leadership skills. (Silversin, 2011; Kaissi, 2012). Compacts should and do include statements regarding rewards for physicians to make changes and undertake non-clinical work, including payment systems beyond fee-for-service while embedding quality deliverables (Grimes & Swettenham, 2012). In their systematic literature review on physician engagement in the context of the Canadian healthcare system, Dennis et al (2013) found that physician compacts are one of at least four strategies as mechanisms that help clarify roles, expectations and accountabilities between physicians and their organizations. The other three initiatives are leadership development, leadership linked to improvement strategies and team leadership (Dennis et al, 2013). Combining all four components results in physicians developing leadership skills and taking the lead around quality improvement initiatives in the context of microsystems, as demonstrated extensively at Intermountain Health, Virginia Mason and the Mayo Clinic.

Does engagement make a difference for organizational performance? Higher engagement of staff in general and of physicians specifically leads to better outcomes for patients and better measures of organizational performance (West & Dawson, 2012; Dickinson et al, 2013). Using the Medical Engagement Scale, Spurgeon et al (2011a) demonstrated that the level of medical engagement in NHS was linked with patient mortality and safety, and with levels of service provision. The correlation between physician engagement and organizational performance was evidenced in more detail by Spurgeon et al (2011b) and by Dickinson et al. (2013) who identified limited time commitment, limited proportion of physicians in leadership positions and lack of developing a culture of engagement as serious barriers to effectively engage physicians in leadership roles. Making engagement of medical staff a priority by implementing opportunities to learn and use the NHS' Medical Leadership Competency Framework (Spurgeon et al, 2008) was suggested as a priority. Finally, in the US, hospitals with physician CEO's and high physician engagement had a high rating in quality performance, patient satisfaction and financial outcome (Goodall, 2011).

1.3. Quality improvement for physician engagement and leadership development

Engagement can occur by creating organizational opportunities and by expanding individual capabilities (Spurgeon et al., 2008; figure 2). Some organizational opportunities

can be created through quality improvement initiatives in the context of clinical integration and micro-systems while individual capabilities can be acquired through a leadership development program. Research suggests that there is a link between the engagement of doctors in leadership and quality improvement and that quality improvement programs that fail to engage doctors or that are not sensitive to the nature of medical work tend to have limited impact. According to the framework developed by the Institute for Healthcare Improvement on how organizations improve medical engagement (IHI, 2007), the key is not to engage doctors with the organization per se, but to engage with peers in improving quality, not only the quality of patient care but also the quality of the well-being of staff and self (TheKingsFund, 2012). Successful organizations must have a sustainable plan to engage physicians in quality and safety, as demonstrated by McLeod Regional Medical Center, Intermountain Health, Virginia Mason Medical Center and the Mayo Health System (IHI, 2007; Gosfield & Reinertsen, 2010). Key quality drivers are: engaged leadership to achieve physician co-ownership, a physician compact, appropriate compensation, realignment of financial incentives, information including data, and promotion (Taitz et al, 2011; Grimes, 2012). At McLeod Regional Medical Center, the mantra is “physician-led, data-driven, evidence-based” and support is provided as follows: physicians are asked to lead the improvement and what improvement efforts they want to work on; time is not wasted because support staff is made available and because it is made easy for physicians to lead and participate; those who lead are recognized and supported when obstructed; development opportunities in quality, safety and leadership are provided (Gosfield & Reinertsen, 2010).

Some barriers against being engaged in quality improvement initiatives are lack of time, the feeling that it is not a rewarding experience and the lack of understanding and training in quality improvement methodology, in change management, communication and other leadership skills. Mountford & Webb (2009) mention ingrained skepticism among physicians about the value of spending time on leadership as opposed to the evident and immediate value of treating patients; furthermore, there is no incentive, certainly not with the fee-for-service system, which discourages organizational engagement. At AHS, skepticism is high among physicians, as reflected in the results of two surveys on the physicians’ engagement, and there is a feeling of estrangement from the organization. The

constant restructuring from 17 regions to 9 regions to one province to 5 zones plus the political interference, the disrespect during the 2013 AMA negotiations and the removal of the AHS Board have disconnected physicians not only at the organizational, but also at the local level. Therefore, to re-engage physicians, re-connection will have to start at the local level rather than top-down. In 2012, the Health Quality Council of Alberta (HQCA) (Cowell et al, 2012; HQCA, 2012) found evidence of a significant level of distrust in AHS which is incompatible with a just or regenerative culture. HQCA reported that continuous restructuring, numerous changes at the leadership level of the ministry of Health, the AHS Board and AHS have made it difficult to establish the supportive processes and the trust needed to create a just and regenerative culture, the benefits of which accrue through active engagement, open dialogue and ongoing learning and improvement. It recommended the creation of structures, processes and educational programming necessary to support effective physician advocacy, including recommendations that Alberta Health Services, the Alberta Medical Association and the College of Surgeons and Physicians of Alberta collaborate to develop policies and procedures that guide physicians on how to ethically, appropriately, responsibly and effectively advocate, and that this learning should start at undergraduate and graduate level with involvement of the universities and RCPSC. Several of HQCA's recommendations can be fulfilled within the context of a physician leadership program.

In response to the HQCA findings, the Alberta Government (2013) published a Report on the Health Governance with ten recommendations, the 10th recommendation on relations with physicians. The Alberta Health Governance Review Task Force (AHGRTF) recommended that physicians, as partners and in the interest of their patients, accept participatory and decision-making roles in the evolutionary change of the health care system and that the health care system appropriately prepares physicians for that role, during training and on an ongoing basis of learning and improvement. This, again, fits in the context of a physician leadership development program. The AHGRTF then identified the IHI Framework for engaging physicians in quality and safety (Reinertsen, 2007) and the physician compact at Virginia Mason and Ottawa Hospitals as successful examples. It went on to mention the revised provincial Medical Staff Bylaws that outline accountability; however, those should not be confused with a physician compact or physician-organization

agreement of mutual expectations, rights and obligations. AHGRTF's recommendation #10.3 "Physicians are properly trained and given opportunities to gain experience in multidisciplinary teams and leadership positions to ensure that they are better prepared for effective participation in teams and for succession to leadership positions" is aligned with AHS' development of a physician leadership program and a learning institute. Contrary to their statement, the skills needed for this recommendation are not covered by the competencies of CanMEDS, but are found in the capabilities of LEADS. In short, some of the recommendations made by the AHGRTF, based on the HQCA's findings, can be accomplished by developing a physician leadership program and a learning institute.

In 2012, AHS commissioned an evidence-based literature review on medical staff engagement and successful quality improvement initiatives. The review did not define engagement or how this concept fits into physician leadership development in general, and it did not clearly identify barriers. Facilitators included early engagement of medical staff as partners, selecting appropriate leaders (leaving "appropriate" open for interpretation), cultivating skills in leadership and management and in quality improvement and safety. The following themes and principles for medical staff engagement were derived from that literature review: integration and coordination of organizational strategies and priorities at all levels around a common vision, organizational leadership and role clarity; patient-centered; physician as leader; transparent and participatory; data-driven and evidence-informed; development of core competencies; incentives; knowledge sharing and integrated service delivery (AHS, 2012). The review did not mention physician compact.

1.4. Leadership Development and Succession Planning

This section briefly outlines the connections between physician leadership development and succession planning. Whereas a leadership development program is beneficial for physicians and for the transformation of the health system in general, such a program is also important for succession planning of physician leaders. Organizations outside healthcare with formal succession planning, have a ROI 15% above that of organizations without such a structured plan. Because of the importance of succession planning for physicians, PMI introduced a course on the topic recently (PMI, 2013).

Evidence gathered from the interviews indicates that succession planning for physician leadership is not well structured in the Canadian health care system, while it is well developed at Geisinger, Kaiser Permanente, Mayo clinic and Virginia Mason. In these organizations, physician leadership and leadership development programs are also well incorporated into the structure and the culture of the organization. Whereas the Canadian succession planning for physician leadership is based mainly on a “the tap on the shoulder” approach, the organizations with high physician engagement have developed ‘acceleration pools’ or ‘succession pools’, where several high-potential physicians learn and develop within a structured succession framework into which the leadership development program is incorporated (Byham, 2002). The accelerated development of those physicians happens through stretch jobs and task force assignments that offer the best learning and visibility opportunities, under the guidance of a mentor and with special developmental experiences. Description of the entire acceleration pool process is outside the scope of this paper.

Succession planning and leadership development programs are interconnected closely (Craighead et al., 2011) and are not well developed in Canadian medical schools. In Alberta, the Faculty of Medicine at the University of Calgary is developing an integrated academic succession plan in the context of a physician leadership development program (Craighead, 2011). The Ottawa Hospital is looking specifically at the next generation of emerging leaders and has published a practical approach to identify potential physician leaders and what steps need to be taken for their future development (Hunt et al. 2011). TOH suggests that by creating a database to document the skills based on regular performance reviews and informal tactics, such as recommendations and feedback of colleagues and team members, identification mechanisms will be in place and documented. To develop these individuals, three key areas were proposed based on the ACE model: achievement, continuing education and engagement. This is not dissimilar from the principles behind acceleration pools. Stretch goals, recognition and career advancement are part of the achievement component. Continuing education not only implies workshops, seminars and courses, but also expansion of professional networks and practicing or demonstrating what has been learned. Engaging these individuals with more senior leaders and physician-leaders moves them up in level of engagement (Hunt et al., 2011). From the ACE model, it is clear how much engagement and continuing education are linked within a

physician leadership development program. At the core, this approach is not different from that in other industries where leadership development and succession are integrated into best practice plans with six themes: developing pervasive mentoring relationships, identifying and codifying leadership talent, enhancing high potentials' visibility, assigning action-oriented developmental activities, leadership development through teaching and, reinforcing an organizational culture of leadership development. (Groves, 2007). In general, the literature indicates that leadership development in organizations is tightly intertwined with engagement and succession planning.

1.5. How does physician leadership differ from leadership in general?

When professionals lead professionals, a hierarchical structure will not work and the physician-leader has to rely on commitment from his or her peers. In general, the interviews revealed that leadership skills for physicians were similar to those needed by non-physician leaders, with the addition of the need for credibility with peer-physicians. This was particularly important for those who continued to practice clinically. That credibility had to originate in the clinical arena or could be earned in the research or teaching arena for academic physician-leaders. Comparison with a guild was made where guild membership is necessary to have credibility. Because physicians may return to clinical practice, they have to maintain clinical credibility and an intact, respectful relationship with peers, something non-physician leaders do not have to deal with. The accountability skills toward peers for issues related to disciplinary actions around standard of care and bylaws enforcement are also different for a self-regulating profession like physicians, adding to the argument that clinical credibility is important. It was also felt that physician-leaders originated from a caring environment; physicians went into medicine because caring is one of medicine's values which may not be a value in business or other worlds from which other leaders enter the healthcare system. Therefore, a physician leader may become caught in the vise of being an advocate for the patient as a physician, while the goals of the organization s/he represents as a leader do not align with that patient advocacy; the issue on advocacy by physicians was addressed in the HQCA report (2012).

Several of the successful organizations kept some of the physician learning separate from training with others, particularly as it pertained to management skills like, for example

finances. Physicians were identified to feel uncomfortable when others may know more than they do and, as a result, they do not show up, either in physically or mentally. Whereas this is not much of an issue for quality improvement learning, it has sometimes been an issue for other topics in leadership learning.

1.6. Measuring Outcomes of Leadership Development Programs

Although not the scope of this paper, a brief reflection is required, particularly as the interviews revealed that most organizations did not have a system in place to measure the outcomes of their physician leadership development programs. Many used some kind of annual one-on-one evaluation, sometimes as a 360-degree evaluation. Those who had well-established quality improvement programs in place considered their embedded physician leadership development programs to be part of the quality programs, which were measured extensively as quality outcomes.

On one hand, leadership development programs are open-systems with interactions and connectivity between activities, programs, people and organizations which implies one has to recognize that participants benefiting from leadership development programs also experience a multitude of non-program stimuli (Grove et al, 2007). An open-system perspective means that we assume that both predictability and unpredictability occur. As such, evaluative investigations of the results of leadership development programs should be a journey of discovery rather than proof of success. On the other hand, in the world of improvement, everything has to be measured and some would argue that everything can be measured. However, leadership development is a complex psychological and social process. A critical part of the design process of a leadership development program is deciding what kind of change will be measured because it is difficult to measure leadership outcomes and link them to a specific initiative in a dynamic and evolving context. It is important to determine at what level the change is expected and will be measured (Hannum et al, 2007; Phillips et al, 2012). Leadership development programs hold the expectation that changes at the individual level will lead to changes in outcome at organizational, systemic and societal level, but moving from individual-level to organizational or systemic-level outcomes adds further complexity to the evaluation of a leadership development program.

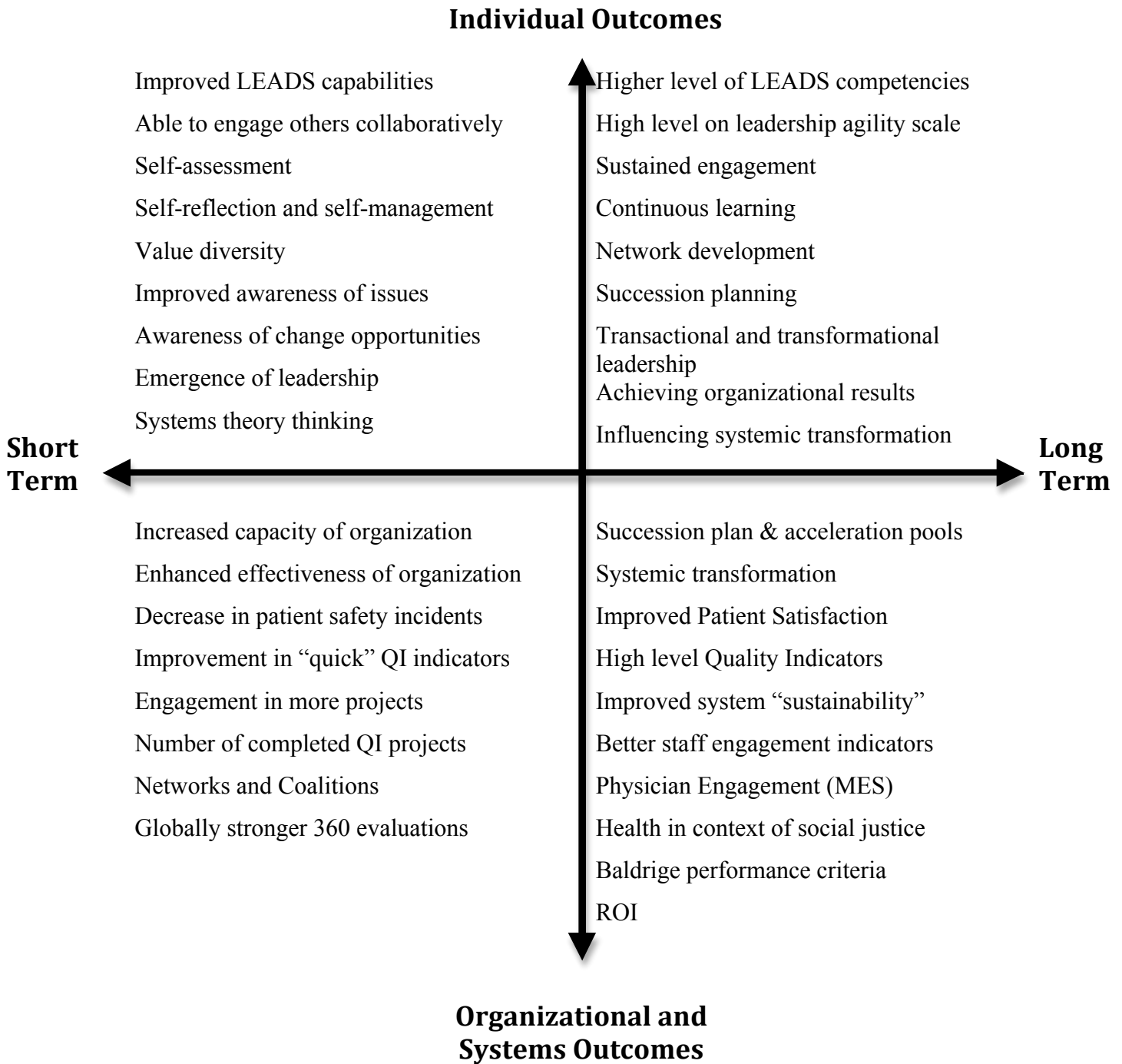
There are three fundamentally different, yet interrelated forms of change that leadership development programs seek: 1) episodic changes which are of the cause-and-effect variety, well-defined and time-bound and therefore easy to measure; 2) developmental changes which occur across time and proceed at different paces with progress and setbacks - results are open-ended, less controllable or predictable and more difficult to measure - examples include a sustained change in behavior, a new organizational strategy to guide operations; 3) transformative changes which represent fundamental shifts in individual, organizational or community values and perspectives that seed the emergence of fundamental shifts in behavior or performance (Grove et al, 2007). These results, typical for an open system, are emergent over time and very difficult to measure with intersecting qualitative and quantitative, tangible and intangible parameters at individual, team and organizational level.

Evaluation methodology for leadership development programs has been extensively researched at the Center for Creative Leadership (CCL) (Hannum & Martineau, 2007; Hannum et al, 2008). From a business perspective, Phillips et al (2007) from the ROI Institute have developed methodology to estimate ROI for leadership development programs (Phillips et al, 2012) and for health care organizations (Buzachero et al, 2013). The ROI Institute evaluation model is based on the four Kirkpatrick (2006) levels from the educational world with a fifth level added for measurement of ROI (Phillips et al, 2012). Recently, the Canadian branch of the ROI Institute has been working with AHS on other initiatives, and the idea for the ROI Institute to measure the ROI of at least part of a new physician leadership development program would fit with ongoing initiatives at AHS.

As much as is possible within the context of an emergent open-system, it is of utmost importance to delineate outcomes and evaluation tools at the time of the development of the leadership program (Phillips et al, 2012). Some outcomes of leadership development programs have to be projected; Figure 3 is adapted from Meegan & Reinelt (2007) for the health care system in an attempt to determine short term and long-term outcomes on the individual and organizational or systemic level. Detailing each of these evaluation tools is beyond the scope of this document, but some further details are given in table 4 (section 3.3).

Figure 3: Frequently desired leadership outcomes

(modified from Meehan & Reinelt, 2007, p.522 - adjusted for healthcare; specific outcomes can be derived from these general concepts within the local context of an organization)



2. International and Canadian (outside Alberta) Physician Leadership Development

This section is based on the literature review and the 53 conversational interviews. Details are given for high-performing organizations with a high level of physician engagement, patient and staff satisfaction, and strong quality improvement programs; only those organizations with elements of potential interest to AHS are described. Aspects of the organizational philosophy and functioning are included to convey the context of organizational structure, culture and politics within which the physician leadership programs are embedded. For some organizations, only isolated, individual components or aspects that may contribute to AHS' success are mentioned. Tables 1 and 2 at the end of this section give a high level overview on physician leadership development programs in ten different countries. Obviously, this review cannot be all-inclusive.

2.1. EUROPE

2.1.1. Jønkøping Health Region

Jønkøping County Council in Southern Sweden serves a population of 350,000 and has gained international recognition for making and sustaining large-scale improvements in healthcare. It provides a model of healthcare system transformation that ranks among the best in the world and exemplifies the innovation, the sustainable performance and the social values on which the Swedish healthcare system is founded. It is interesting that it was able to do that as the only county within a system of twenty publicly funded counties that were all coordinated under the same federal government. On all indicators, Jønkøping performs 2-3 times better than any of its Swedish peers. What follows is a summary of Baker's very good analysis (Baker et al, 2008) plus a dialogue specifically on physician leadership development with Dr. Mats Bojestig, the chief medical officer and planning director, who was part of that transformation from the beginning.

Rooted in the social fabric of participation and partnership, the Swedish system is highly decentralized and aims to achieve its objectives through public ownership as well as local democracy, local operation and local accountability. The councils are regionally elected political bodies that include several municipalities and that fund, plan and deliver healthcare. Finances come from proportional income taxes in the region, and part of the healthcare financing also comes from federal grants and user charges. Goals for quality are

established by the central government. Councils employ salaried, community-based primary care physicians and salaried hospital-based physicians; the hospitals are owned and operated by the county councils. One remarkable fact is that both the CEO and the council have been very stable, with the CEO leading for almost two decades and the successor coming from inside the organization. The council has also been relatively stable, with both the governing and opposing parties represented; the council functions as the equivalent of a board of directors. This has helped a lot with the long-term transformation because a frequent challenge with this type of politically driven governance structure is that the power changes every 4 years and that politicians (who in this case are board members) are unwilling to maintain an arm's length distance from day-to-day operations. Even in other counties in Sweden, CEO's often struggle against local board members meddling with the frontline workforce, which is not the case in Jønkøping. The CEO, a physician, and the board chair, a politician, have developed a sound working relationship built on trust. Continuity, transparency through open communication, strong financial performance and trust supersede political partisanship and, as a result, board interference in day-to-day operations does almost not exist. A commitment to financial discipline and a common vision for system-level investment in improvement capability had Jønkøping already ahead of all the other counties when the federal government introduced a national quality agenda.

Jønkøping appointed a Chief of Learning and Innovation separate from clinical and executive leadership which had never been done before and shifted the approach to improvement from a series of projects to a way of leading and working systemically. Leadership and focusing on clinical results still drive the health care system at Jønkøping and everyone learns that s/he has two jobs, "to do what you do (i.e. manage, provide care) and to improve what you do". There is massive training and learning for improvement and for leadership theory and practice; from the CEO to the frontline workers, all work together on improvement processes across councils, with physicians often as process leaders. To optimize the working of the Office for Learning and Innovation, "Qulturum", a meeting place for quality and culture was created in partnership with some of the professional organizations. This centralized quality house is a stand-alone building where small and large groups meet, using learning arenas supported by technology as needed; it is funded by 0.03% of Jønkøping's annual budget. In one decade, between 1999 and 2008, 800

measurable improvements have been accomplished. Qulturum is part of the strategy for developing internal expertise and capacity for skill and knowledge. Jønkøping is not afraid to learn from others, has developed coalitions with IHI and continues to observe others. The institute model is similar to the concept of the learning institute at Intermountain Health and Virginia Mason, described below.

Like the education delivered for established physicians at Qulturum, a parallel approach for physician trainees has been accomplished in partnership with the medical school and other health professions. There is a network of medical residency supervisors trained at Qulturum and, quality and leadership modules have been created for the supervisors. Here too, physician leadership development programs are internal programs and start during the internship rotation: interns learn to understand the healthcare system, political interactions and decision-making at council level, they meet with leaders to reflect together on how they act as leaders and around ethical decision-making. The interns also work on a small improvement project. At the level of residency, besides the training coordinated through Qulturum with specific supervisors, there are interactions with the CEO and with the chair of the council board. The residents work on a larger, local improvement project, the results of which lead to a real change upon implementation; their project receives facilitation and guidance depending on how the initiative evolves and depending on what leadership skills are used or need to be learned during the project.

To create leadership at the microsystems level, the current CEO and the senior executives are leading a 21-day leadership development program combined with what are called “Deming days” for the next generation of new incoming physicians. The leadership learning is organizationally maintained by the slogan, “everybody has two jobs: your job and to improve it”. Leaders and senior physicians involve the newcomers immediately in improvement work and are champions for improvement by mentoring. The results are measured not only by monitoring quality indicators, but also by drafting an annual evaluation plan for each physician and leader in collaboration with his or her immediate boss and by developing a 360 evaluation every other year. Presently, there is no succession plan in place at Jønkøping and succession happens “by rumor”.

Baker et al (2008) state that political stability and leadership continuity have been an important part of Jønkøping’s outcome. This finding is not dissimilar from the benefits

seen from a constructive relationship between the government and medicine in Denmark as described next. Visionary and stable leadership, placing quality at the center of strategic and business planning, are important; learning from others, engaging clinical and physician leaders, building in-house capacity for large-scale staff education in improvement are also critical. Many changes were enabled by alternate funding plans for physicians, the willingness of health professionals to adopt expanded roles and the new models of care. As for physician leadership development, this is coordinated through Qulturum, is based on a mentoring system of other physicians, and is part of team development within the context of quality improvement and patient-outcomes. Taking the lead on improvement is the second nature of each physician and staff member at Jønkøping.

In summary, the following conceptual facts are part of the success of the Jønkøping Health Region: although the quality goals are set centrally by the federal government, the implementation and a large part of the financial resources are de-centralized; there is minimal political meddling at Jønkøping, and leadership and vision have been stable for twenty years; the physicians are salaried and early ‘indoctrination’ of physicians occurs; the senior leaders are involved in the learning activities, and leadership learning is embedded in the entire organization with many reinforcing feedback loops and is facilitated through the Qulturum Institute; “Everybody has two jobs”.

2.1.2. Denmark

Denmark is mentioned because it is the unusual example of a country where the Medical Association deliberately set out to lay claim on the jurisdiction of management by proactively shaping the events, without waiting to react to external threats and challenges. In Denmark, there is an explicit aim of increasing the involvement of physicians in leadership roles. The UK tried the same, but the comparison between the two countries shows us how common processes of medical re-stratification might unfold differently across health systems as a similar approach by the government to engage physicians had much a much less successful outcome in the UK. No later than last year did The King’s Fund report that much of the medical establishment has been in open rebellion against the government because the NHS “disempowers and alienates some of the brightest people in the country” (The King’s Fund, 2012); that was repeated in different words this year in the

New England Journal of Medicine when Black (2013) asked, “Can England’s NHS survive?” Given the history of the last few years, AHS may be facing a similar problem; due the continuous interference of the government, changing the structure and functioning of the health care system over the last two decades, the 2013 AMA negotiations, the removal of the AHS board of directors, physicians see AHS as an extension of a physician-unfriendly government, rather than as a partner in providing patient-centered and sustainable high-quality care (AHS Surveys 2010 and 2012; personal communications). It has been argued that the more consensual style of politics in Denmark has led to less resentment and confrontation between medical professionals and government-imposed changes and reorganization (Ham, 2008; Kirkpatrick et al, 2009).

Specifically, in Denmark there are medical directors on the boards of all hospitals, and clinical departments are required to have a physician as a leader. Physicians are supported to take on leadership roles through mandatory training at the post-graduate level that is based on demonstrating core competencies in seven roles similar to those in CanMEDS. The training includes a mandatory 10-day leadership course provided by the Danish regions and the National Board of Health. After appointment as consultants, doctors are offered another 5-day leadership course which has to be taken within two years of coming on staff. The main topics are: leading professionals, quality, change, leadership in a political context and personal leadership. Unfortunately, it was not possible to connect with the Danish Medical Association to ask detailed questions around the effect of the program on sustainability, quality improvement and behavioral or cultural change.

Kirkpatrick et al (2009) and O’Sullivan et al (2011) submit that the Danish doctors have developed a ‘continental’ style of professionalism with an emphasis on pursuing power and status through the organization of the state. In contrast, in the UK, like in Canada, medicine has remained a ‘liberal profession’ with emphasis on independence and autonomy, leading to a culture dominated by ideas of self-employment and a detachment from administration. In addition to the advantageous structural and cultural environments, Denmark has also set up a comprehensive leadership development framework particularly in postgraduate education (Ham, 2008), albeit it based on CanMEDS. In 1999, 41% of all leading consultants had some form of formal management education.

In summary, important elements in Denmark's physician leadership development are: the model of "continental professionalism"; the role of the Danish Medical Association and its relationship with the government; and, the leadership development embedded not only in the structure of the healthcare system, but also in the training system.

2.1.3. National Health Services (NHS) – UK

One of the world's best competency frameworks for medical leadership was developed by the Academy of Medical Colleges and the NHS Institute for Innovation and Improvement, and it is the first management and leadership competency framework that is applicable to all stages of a doctor's training and career (NHS, 2010). The framework is based on the concept of shared leadership with a sense of responsibility for the success of the organization and its services. It has 5 domains with 4 elements each and 3 stages for each element, resulting in 60 'definitions'. The framework was developed based on a literature review, comparative analysis of leadership competency frameworks (including the precursor framework of LEADS), analysis of the specialty medical curricula and consultation or interviews with a large network of stakeholders.

A second strong element in the NHS' physician leadership development is the extensive amount of research on medical leadership done by The King's Fund organization. This has resulted in many research publications on physician engagement, international medical leadership development and the correlation between medical engagement or leadership and organizational performance (Clark, 2012; Dickinson et al, 2013; Ham 2008, 2010; Ham et al, 2008; Spurgeon et al, 2008, 2011a, 2011b).

The NHS is the only healthcare system in the world with a definition of quality enshrined in legislation (Keogh, 2013). Many recommendations have been published, but the NHS as an organization has not been able to successfully implement many across the entire system. The most recent proof was described in the Francis report (Francis, 2013) after 1,200 patients died under the responsibility of the Mid Staffordshire NHS Foundation Trust because "...it failed to tackle an insidious negative culture involving tolerance of poor standards and a disengagement from managerial and leadership responsibilities...in part the consequence of allowing a focus on reaching national access targets, achieving financial balance and seeking foundation trust status to be at the cost of delivering

acceptable standards of care”. Normalization of deviation, bystander effect and willful blindness had led to disempowerment. Fourteen more hospitals are on the suspect list (Keogh, 2013). So, despite a great medical leadership framework, it is not practiced consistently. A large industry around teaching leadership skills exists at NHS, but without the behaviors needed to fulfill the capabilities of the medical leadership framework; many programs look impressive on paper but do not work or do not reach the intended results. Concerns about the NHS’ outcomes and the need for good medical leadership were further accentuated a few weeks ago (Black, 2013). Dickinson et al (2013) submit that tribalism remains deeply ingrained in the NHS with little evidence that newer organizational forms have superseded professional bureaucracies. Meanwhile, the dynamics of the physician-nurse-manager relationship have remained remarkably unchanged. The National Advisory group on the Safety of Patients in England, chaired by Dr Berwick, just released yet another report on the topic, “A promise to learn – a commitment to act”. (NAGSPE, 2013).

In an attempt to advocate medical leadership development, a centralized organization, the Faculty of Medical Leadership and Management, was formed in 2011; it held its inaugural conference in 2012 and will have its first educational days in the fall of this year. It is a UK-wide institute aiming to promote the advancement of medical leadership, management and quality improvement at all stages of the medical career for the benefit of patients. Details on how the Faculty plans to accomplish this are not clear from the website (<https://www.fmlm.ac.uk/>) and it is too early to do any evaluation of its effect. A fellowship is offered for a very limited number of junior physicians.

A few trusts have developed formal leadership programs in conjunction with a local university or a management consultancy (Dickinson et al, 2013). There is one new experimental program at University College London Hospitals (UCL) that deserves attention and which may benefit the AHS medical leadership development program. It is unique in that it is not more of the same, what it offers seems transformationally different, including simulation labs for behavioral changes. Dr. Aidan Halligan, an obstetrician by training, is director of education at the University College London Hospitals Foundation Trust, and chief of safety at Brighton and Sussex University Hospitals Trust. He was the first NHS director of Clinical Governance and the Deputy Chief Medical Officer for England. For him, any leadership program has to be based on behavioral change.

Traditional NHS leadership programs lead to skill acquisition, development of knowledge and technical competence but they are stacking up to do more of what they've done before, without leading to the desired results. Some wards, teams, departments, divisions and hospitals stand out because they have engaged and motivated staff, because they have good leadership that filters down into the places that staff surveys don't touch, but which make all the difference to patient experience and outcomes. According to Halligan, leadership cannot be taught, it has to be learned. There has been enormous investment in leadership development but because the end product is so difficult to measure, there has been little proper rigor in assessing its effectiveness. Besides mapping agreed standards against framework domains, competencies and levels, there is little understanding of how to bridge the leadership "knowing/doing" gap.

According to Halligan, behaviors and values are the lynchpin of sustainable performance. At its core, leadership is a purely moral and emotional activity. It is unconnected with seniority, only loosely related to intellect and it is about the ability to engage, motivate and inspire. Leadership is defined by our values and implies having moral courage, integrity and the conviction to accept accountability. The conversation with Dr Halligan is striking in that he brings the values of servant-leadership upfront, which requires courage (Greenleaf, 2002). He believes that training in how to "have courage" is at the basis of physician leadership and leadership development. "The leadership program ethos is an aspiration to do the right thing, particularly on a difficult day."

Halligan (2012) has set up a new experimental leadership program based on his experience when he visited the healthcare services of the military in Afghanistan. Working in partnership with the armed services, an experiential leadership program was developed at UCL (<http://www.ucheducationcentre.org/index.html>), spread across three modules over nine months. Before acceptance into the program, there is a two-day selection process to assess the suitability of the candidates and four issues are addressed: the ability to understand complex interpersonal situations, to make a decision based on that understanding, to communicate that decision and to motivate people to follow them when they have made that decision. Failing to pass in any of the 4 issues indicates that the candidate is not ready to go to the next level which has three modules, including self-awareness, self-management and leading teams. The faculty is composed of highly trained

directing military staff and NHS leaders. The learning is based on the growing awareness that people mainly believe their own data, which is one of the reasons why the simulation lab does a lot of video and audio recording. Because it is their own data, individuals believe footage of their own performance, more so than verbal feedback received after unrecorded observations. This simulation lab is part of a complete “Learning Hospital” within the UCH Education Center (<http://www.ucheducationcentre.org/behaviouraldevelopment.html>). Participants learn about their blind spots, their hidden areas of fear and prejudice, and their underestimated or undiscovered talents. This leadership program seems to equip individuals with the quality of qualities: moral courage. Without acquiring these critical interpersonal character components, there cannot be competence in social skills such as communication, negotiating, influencing, team working, decision-making and situational awareness. Halligan sees the acquisition of these skills as the learning outcomes against which the program should be assessed. The feedback from the organizations where the participants work indicates that they have changed profoundly upon return to their organization.

Up until now, few clinical role models have built their careers on organizational leadership. The UCL attempts to address this gap: to awaken in clinicians a sense that the delivery of excellent care requires effective organizations and systems, and that taking on leadership and management roles can be a highly effective way to deliver one’s calling. Whatever happens now needs to be from the ground up. Participants come from primary care or from hospitals and physicians learn alongside nurses, allied health professionals and managers. To date, more than 500 have been through the program. The top performers of the participants, a few dozen of the 500, are then further trained to become internal trainers; the program is now starting in a few hospitals at a cost of \$130,000 each for setting up the simulation equipment in an artificial clinical setting. This way, the program will be spread from the ground up rather than from the top down and expertise will develop internally.

In summary, the lessons learned from NHS include that initiatives in the healthcare systems driven by government rarely work; however, similar initiatives but driven by physicians tend to be successful, as seen in Denmark. The Learning Hospital, the leadership simulation lab and the new UCL leadership program deserve further exploration by AHS for development of its own leadership program.

2.2. AUSTRALIA

2.2.1. Royal Perth Hospital, Australia (with mention of RACMA)

In Australia, there are several programs for highly advanced physician-leaders and the highest level is coordinated by the Royal Australasian College of Medical Administrators (RACMA). It is a 3-year fellowship specialty with a very detailed and well-developed curriculum (RACMA, 2011). As this is a 3-year fellowship, the RACMA program is not within the scope of this paper.

The Royal Perth Hospital is experimenting with pilot programs to develop physician leadership skills. It is a combination of quality improvement initiatives in which leadership learning is incorporated. The medical heads of departments and the managers of the nursing units work toward service line improvements (also known as quality improvement projects). This is done in a team setting, using six sigma as the improvement tool, accompanied by 8 master classes toward understanding medical and clinical leadership. The three domains around which the program is structured are: how do we look after the patient, how do we look after the staff, how does the unit run within the hospital's structure and culture? The issues around the patient deal with quality, safety, risk management and patient satisfaction. Monitoring takes place with key performance indicators. The issues around staff deal with clinical and corporate governance: HR issues, evaluation and feedback, training of staff, how to perform as a high functioning team, importance of professional development. The issues around hospital deal with finances and financial constraints, cost drivers, hospital performance targets and respective roles within the hospital and its performance. The projects chosen by the dyads and teams are around their own top priorities within the hospital's strategies and priorities and, when finished, they are presented to the hospital team at large to ask for buy-in and support toward how the goals. The program has been developed in-house as a pilot but master classes will be outsourced with universities and business schools in the future. Dr. Frank Daly, emergency physician and CEO, is personally heavily involved with the development and the delivery of the leadership program.

Whereas the setup of this leadership program may not be different from others, the interesting fact about this organization is that measurement has been planned pro-actively, as the program has been set up as an academic study, including ethics approval and

funding. Except for Royal Perth Hospital, no pro-active measurements around leadership development programs were observed in any of the organizations interviewed. Dr Daly has qualitative and quantitative baseline measures in place, and, as the pilot progresses, the same measures will be monitored at predetermined times. Parameters include measurements around leadership, engagement, patient safety, team function and team engagement. The outcomes do not include measurements on succession. Given that this is still in the pilot stage, no more information was available at the time of the conversation. Members of the King's Fund in the UK have been involved with this program.

In summary, the take-away message from this organization is the need to pro-actively determine what outcomes of the leadership development program will be measured and how to determine differences, changes and ROI (Phillips & Philips, 2011).

2.3. UNITED STATES

2.3.1. Kaiser Permanente (KP)

Kaiser Permanente is an integrated system with 9 million members, operational revenues of about \$40 billion, almost 160,000 employees and 14,000 physicians. The model is based on a partnership between physicians and health plan(s), on cooperation and coordination of physicians across specialties, on non-profit health plans focusing on long-term quality and efficiency and, on capitated prepayments encouraging efficiency, prevention and wellness. Partnering physicians co-determine organizational strategies and priorities while care is provided by multi-disciplinary teams (Spurgeon, 2011b).

The regional groups of physicians are self-governing, multi-specialty partnerships or professional corporations. After a probationary period, doctors are elected into membership by their peers to become shareholders in these groups. Members of the medical group in turn elect their leaders and hold them accountable for their performance. The relationship between the physicians and the organization is one of mutual exclusivity. The doctors are paid market rates with a small bonus for performance in quality outcomes and in patient satisfaction. The remuneration package and retirement plan create additional incentives. Because the fate of the medical groups and KP is intertwined, KP has found a way to align incentives and sustain high levels of performance in a competitive market.

A high proportion of physicians in these medical groups take on leadership roles with up to $\frac{1}{4}$, sometimes $\frac{1}{2}$ of the physicians involved in some leadership capacity. Doctors who are not in formal leadership roles are still involved in contributing through participation in developing clinical guidelines, drug formularies, etc. Medical leadership is “the way business is done around here” and an expectation of those joining the group; the physician leaders work in partnership with leaders from general management and nursing (Crosson, 2003). The physicians have dedicated time for their leadership work, which is not done in addition to the clinical workload. Throughout the organization, physicians take responsibility for performance and they work with peers to address areas of underperformance in order to achieve high standards of care. As a result, data on comparative performance of groups and peers are reviewed extensively which, reinforced by financial incentives, add pressure to improve quality. These incentives are relatively small, \$7,000 to \$25,000, but they work because physicians are naturally competitive.

The work culture at KP, developed over the last two decades, reflects learning and investment in career-long education and professional development for physicians. This investment starts with the recruitment of new physicians and their induction into the medical group, and it continues as they gain experience and take on different leadership roles. That progression through roles is part of a career structure enabling physicians to undertake clinical and leadership responsibilities in different combinations as their career unfolds (Figure 4). Most training is provided in-house with some external support. Because all physicians are involved in education and development, a distinctive corporate culture has developed among physicians, promoting followership as well as leadership. As a result, incredibly, there is actual competition for the physician leadership positions. Those who do not fit in this culture are asked to leave or are not appointed permanently after the probation period. Ham (2008) noted that the attitude of physicians at KP was very positive and that the doctors took pride in their work and in their organization.

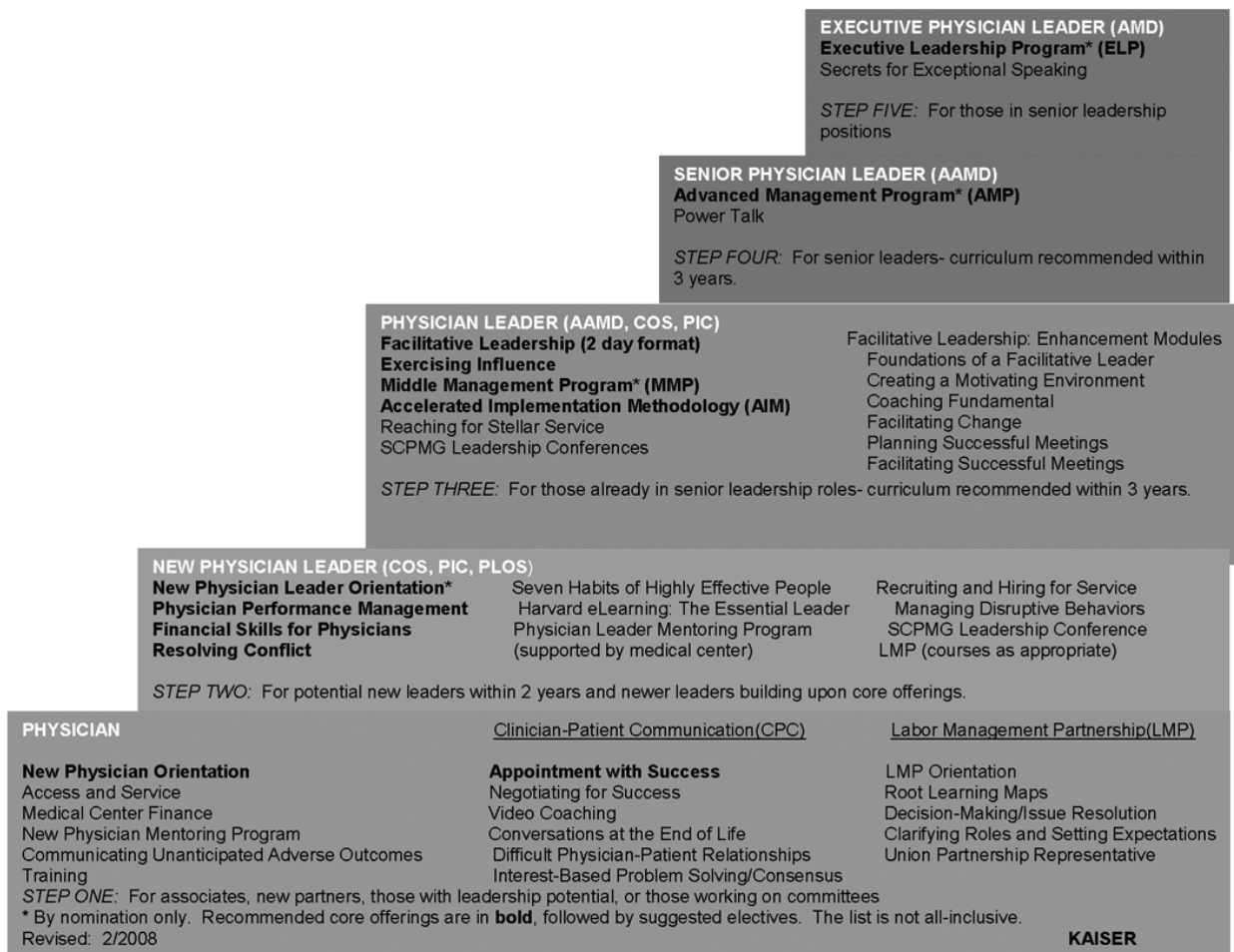
When starting at KP, every physician receives three levels of orientation: around their department, around the medical complex or hospital and around the overall KP region, all in one day. They receive a second day on physician-patient communication. Embedded in these first days of ‘on-boarding’ and in the four clusters outlined below is an attempt to build a connection between the individual physician and the organization, to bring across

that s/he has joined something bigger than just a place to practice medicine. Some would call this ‘branding’. Everybody has a mentor in the first two weeks; involving leaders in training other leaders is very important for successful organizations. One of the most important jobs of a physician-leader is to engage people’s heart and mind in service of the organization without violating a physician’s own internal standards of quality of care and patient care and, in the meantime be an outstanding clinician to earn respect and credibility. In all, the combination intends to communicate and demonstrate the culture of the organization in a disciplined way. It seems that KP builds a critical mass of committed followers and participants, drowning out the counterproductive elements.

At KP, successful mutual commitment and partnership between physicians and management have three fundamental elements: joint leadership based on mutual dependency; mutual alignment of mission and strategy; management training for all physicians in a staged manner for those wanting to choose a leadership track (Crosson, 2003; Spurgeon 2011b; figure 4). KP’s premise is that ALL physicians, whether or not in a formal leadership position, are leaders (Mipos, 2002); there is a distinct relationship between how physicians perform in this informal leadership role and how the team cares for patients (Spurgeon, 2011b).

New Physician leaders also take four clusters of competencies which, together, form Step one of figure 4: Cluster 1) strategic/systems thinking, service orientation, decisiveness; Cluster 2) communications, influence, team focus, leading change; Cluster 3) results orientation, ability to take initiative; Cluster 4) cultural competence, commitment, development of self and others. After that first step, there are four more steps with learning focused on progressive leadership development of physicians, as listed in Figure 4. This program is for physicians only because a different skill set is needed when a physician transfers from being a peer to being the boss as compared to when an employee becomes a manager. A parallel learning program for nurses and administrators occurs around specific initiatives to re-engineer and improve care delivery processes. Overall, about $\frac{3}{4}$ of the training is for physicians only and about $\frac{1}{4}$ is team-based. Together with General Electric’s Leadership Development Center and Boeing’s Leadership Center, the Kaiser Permanente Leadership Development Program is listed as one of the top ‘Best in class’ programs (Blumenthal et al, 2012).

**Figure 4: Physician Leadership Development at Kaiser Permanente
Additive effect of building our leaders step by step (from Ham, 2008)**



The organization monitors the effectiveness of the leadership development program by using an annual physician engagement survey and by measuring the disappearance of the negative from the organization, i.e. employment losses, how many physicians are asked to leave, etc. KP noticed how very difficult it was for physicians to do performance management, so difficult that an external HR consultant was hired to help and script physician-leaders preemptively when they will have a performance conversation.

Ham (2008) summarizes that involving doctors in leadership requires attention for a range of factors, and the lessons learned from KP include:

- Education and development in skills to be effective team players, leaders and followers, at induction and throughout their careers.

- Career structures that allow movement in and out of leadership roles by combining leadership roles with clinical activities.
- The value placed on leadership activities, not only monetary but also in recognition by the organization.
- A high proportion of physicians in leadership roles; enabling participation in leadership has resulted in leadership being an expectation of doctors rather than a minority interest.

It is this entire package of factors that is likely critical in strengthening medical leadership; just ensuring that chief executives and senior managers come from medical backgrounds or just strengthening education and development to support doctors in taking on leadership roles has been proven to be insufficient to build strong medical leadership throughout an organization.

In summary, KP has many strong components embedded in its outstanding organizational physician leadership development program: the organization's expectation is for physicians to take on leadership positions; physicians lead the organization and have capitated financial arrangements based on efficiency, longterm outcome and patient experience. Leadership development starts strongly upon recruitment with onboarding and a probationary period of three years during which a physician can demonstrate and develop clinical and leadership capabilities. All physicians, even the high level leaders, remain clinically engaged, allowing them to return to clinical practice when desired or needed. Vision and leadership have been stable for twenty years, contributing to excellent QI outcomes.

2.3.2. Mayo Clinic

The Mayo Clinic is the oldest multidisciplinary group practice in the US which has evolved into an integrated delivery system with 24 hospitals in 6 states, 60,000 employees with 3,900 physicians and a 9 billion dollar budget with a \$500 million for research. Mayo has been ranked the #3 hospital system in the US for 2012 and 2013. Visitors are struck by the emphasis on the patient's needs coming first, as reflected in the organization's values and principles. Its mission is to "provide the best care to every patient every day through integrated clinical practice, education and research" (Spurgeon et al, 2011b). By its mission, combining patient care, education and research, the Mayo Clinic differs from KP,

and, according to its spokespeople, it distinguishes itself from other academic medical centers by emphasizing the primary value of patient-centered care.

The organizational design of the Mayo Clinic is the most important part of physician leadership development. The Mayo Clinic is physician-led and administratively managed, meaning that all physicians partner into a dyadic partnership with a physician lead and an administrative co-lead. Not many physicians have an MBA or Master's in Medical Management because the administrators bring that training and experience to the table. Physicians lead all education, research and clinical education, the office of the CEO, the microsystems and the 255 committees throughout the organization. All rotate after a maximum of two 4-year terms, usually moving from more junior to more senior leadership roles, and sometimes into different locations and/or responsibilities. Those who choose not to pursue senior leadership roles can do so at any time because every leader stays in clinical practice and can return to full-time clinical commitment when appropriate. Like in Kaiser Permanente, physicians are salaried and have a relationship of mutual exclusivity with the organization. Everybody in the same specialty makes the same income whether they work 100% clinically or contribute in other areas; there is a small stipend for leadership positions. Salary scales are 65-70% of those of the top five healthcare companies. Nobody is expected to be a leader past the microsystem level if they do not want to be, but every physician is looked at as a leader from the beginning. At Mayo, the physician leadership roles are sought after and are invariably filled internally based on a succession pool. The succession plan is very strong and uses a scoring card system. All departmental members and other stakeholders are interviewed intermittently on why somebody should be a leader, and a top 3 list is developed. This allows for peer-supported succession, thereby maximizing the chance for the future leader's success. This means a time-consuming process with about 600 interviews every year, but it means that transition is always smooth without stepping back or slowing down during and shortly after that transition. At the time of the interview for this report, the Mayo Clinic had 592 succession pools, including for 233 divisional and departmental chairs and for 138 senior institutional positions. The pools are rated green, yellow or red depending on vitality of the succession pool and the rating is based on diversity including ethnicity, gender and generational composition. These succession pools are similar to the acceleration pools mentioned in the section on

‘physician leadership and succession planning’ (Byham et al, 2002). Members in the succession pool are each advised by the departmental chair on opportunities around physician leadership development, which is based on the 70/20/10 learning system (10% classroom learning, 20% mentoring and coaching, 70% action learning) (Duberman, 2011).

Based on an internal needs assessment and study of other successful organizations, Mayo identified early on that a combination of traditional academic approaches, which physicians like, combined with contextually embedded, personally relevant, behaviorally-based learning experiences are essential for successful development of physician leadership competencies. Their present leadership program has been designed from programs in 14 other successful, mainly non-healthcare organizations, eleven of which were Fortune top 25 organizations like FedEx, Cisco, General Electric and General Mills. From that study, ten strategies were developed from the best that is available in all business sectors. Leadership development for physicians is provided internally. Using the 70/20/10 learning system (Duberman, 2011), Mayo’s 10%, i.e. the classroom content of the curriculum, has four levels: for newly appointed staff, for newly appointed leaders with their teams, for experienced leaders and for senior leadership. Key competencies are identified in the area of personal attributes, people leadership, business acumen and strategic leadership. Mentoring, the ‘20’ in the 70/20/10 model is organic to Mayo and there is a formal assignment of mentors when a new physician is appointed. The first three years of appointment as senior associate are probationary. After the first year, an emotional intelligence assessment is performed followed by a dialogue with the chairperson around the findings. After the second year, a 360-degree assessment by the manager(s), peers and immediate boss takes place, again with support allowing further growth in areas needed. At the end of the third year, permanent appointment as consultant may then take place. Mayo has several dozen internal executive coaches; 2/3 of them are physicians and 1/3 are administrators or HR professionals, many of whom are or have been formally certified coaches. There is formal mentorship throughout the organization, which supports action learning in the context of team development. Mayo places a lot of emphasis on teamwork and the tendency is to favor reluctant leaders over the outwardly ambitious ones, perhaps reflecting the Scandinavian origins of the organization (Spurgeon et al, 2011b). As for the ‘70’ of the 70/20/10 model, there is a centralized action learning program. Action learning

teams with specific charters are composed of all disciplines and they have 90 days to complete a quality improvement project. For two days, the team gathers to work on the project, do team development and team building, some financial learning, rapid cycle improvement and then share the experiences. Ninety days later, each team, under the physician's leadership, will report the results of the action learning project to the site leaders. This action learning approach is not only important for physician leadership and team development but it also gives a concrete ROI, more so than any simulation learning would do, because the projects need to be done anyway.

Like at Kaiser Permanente, a large proportion of physicians is or has been in leadership positions and the regular turnover enables the development of followership, which is very important when leading relatively autonomous professionals who become more willing to support their colleagues who are presently in leadership positions. Like for patient care, physician leadership development is expected to be the same throughout the organization with centrally shared support and with the philosophy that at Mayo "everybody is a leader." The mentality of physicians toward the organization has changed over the years from 'them' to 'us'. There are no contracts, just a handshake and Mayo appeals to the intrinsic motivation of doctors to do a good job, rather than providing large financial incentives for leaders. The retention is among the highest if not the highest in the US with a turnover rate of 2-3%, including retirements (Spurgeon et al, 2011b).

In summary, there are similarities between the Mayo Clinic and KP, both organizations with very strong physician leadership development programs. The additional strengths of Mayo are the academic teaching and research environment, with a research budget of ½ billion dollars, and the very strongly developed succession pool system, not seen in any of the other healthcare organizations studied. The internal mentoring and coaching system is very well developed and the physician leadership program, based on expertise and experience from 14 other industries, may be stronger than that of KP.

2.3.3. Cleveland Clinic - OHIO

Many elements for physician leadership development mentioned so far are also present at the Cleveland Clinic. Its philosophy is based on action learning and has an immediate ROI with all the projects implemented at the end of the leadership development

program. A leadership rotation in which high-potential leaders meet with and shadow organizational leaders and key committee assignments for alumni of the course who can then exercise and consolidate their leadership skills (Stoller, 2008). The onboarding is also very strong and part of a leadership program delivered in 4-hour workshops every other week during the first year of the probationary appointment.

http://academy.clevelandclinic.org/Portals/40/2013%20Catalog/TAU_schedule%2020_2013.pdf Accessed July 23, 2013).

Although not directly related with the physician leadership development program, the Cleveland Clinic published an interesting article on ‘quality of service’ in the May 2013 issue of the Harvard Business Review (Merlino & Raman, 2013). The position of a Chief Experience Officer was created and is held by an inside physician after initial failure by an outside non-physician. The physician-leader is responsible for the Office of Patient Experience and has a \$9.2 million budget. In four years, the overall satisfaction ranking for the organization went from the 55th to the 92th percentile and the staff engagement went from the 38th to the 57th percentile in the Gallup survey.

In summary, this organization has a strong one-year onboarding program for physicians. Shadowing and committee assignments for course alumni allow practice of skills learned during the course. The concept of Chief Experience Officer is interesting in that the program truly places the patient at the center.

2.3.4. Geisinger Health System

This organization serves a population of 2.6 million people, has 17,000 employees, 1,000 physicians and a revenue of \$3 billion. A series of programs is offered to high potential leaders, both physicians and non-physicians. A conversation with Dr. Glen Steele, a practicing surgeon and CEO, revealed that the development programs work in three areas:

- 1) A set of workshops over a six-month period, once a week; participants work together on one project while sharing experience, questioning each other and learning through action. These six months also serve as an interactive, bonding experience with mutual affirmation of all the different disciplines at the table. It is also an opportunity for the senior leaders to identify potential future leaders. The training expertise is in-house for topics around HR and organizational infrastructure; senior clinical and administrative

leads teach some of the material. For other topics, outside expertise is sought from universities and from Geisinger directors working at other sites.

- 2) Physicians are mentored readily in support of engagement with the organization. To guarantee immediate availability when needed, an outside consulting firm helps with this support. This mentoring component also helps identify those who need to depart from the organization.
- 3) Metric aspects of leadership development are accomplished by looking at performance expectation, i.e. accomplishment of team goals, patient interaction and satisfaction, chronic disease management outcomes and other comparative quality indicators. When there is a specific problem with a unit or an individual's performance, inside and outside resources are available to train that unit or individual as needed.

A physician is not expected to be knowledgeable in everything but s/he has to be able to work in dyads and triads with other healthcare workers who possess the skills the physician does not have and vice versa. No matter what skills each brings to the table, everybody is expected to work on the solution(s). For example, a financial team member is not allowed to just provide data, s/he has to be part of finding solutions.

There is a structured succession plan in place. The 180 leaders have 20% of their income directly related to the operational performance goals, one of which is succession planning. Up-to-date lists have three levels: physicians who are ready to take over immediately, those who will be ready in a few years, and future promises. When a vacancy is available, an external search is always combined with internal candidates to allow comparison and choice, but often an internal candidate is chosen. Geisinger also favors learning interactions with other great organizations inside and outside healthcare.

In summary, the main difference between Geisinger Healthcare System and others lies in the business philosophy which differs from those like Intermountain Health (religious) or Mayo (academic). It has a strong mentoring system and succession plan.

2.3.5. Virginia Mason Medical Center – SEATTLE (Kenney, 2011)

Unfortunately, VM was the only North American healthcare organization that did not respond to requests for a conversation. However, there is plenty of literature, internet material and one recent textbook (Kenney, 2011). It is a nonprofit integrated healthcare

system (composed of one acute care hospital, a few affiliated hospitals, a network of regional clinics, a research institute on autoimmune disease and the Virginia Mason Institute) in Washington State with 5,000 employees and a multispecialty group practice of just under 500 physicians. Although it is a relatively small healthcare organization, Virginia Mason is included in this review for a few aspects that are unique when compared to the other systems described. It has received national and international acclaim for quality care and has won several awards. It has the highest quality:resource ratio in the US. The vision and the leadership have been stable for the last 15 years. When the present CEO, Dr Kaplan, took the lead in 2001, he saw that the institution, which he had advocated as physician-driven and physician-led, was actually also physician-centered, rather than patient-centered. Many parts of the Canadian healthcare system also remain, if not physician-centered, then certainly organization-centered rather than patient-centered. When the patient was placed at the top of the organizational pyramid (Kenney, 2011, p.4), Kaplan believed that quality had to be as well. During the search for a reliable management method, VM discovered that the attributes of the Toyota Production System (TPS), also used by Seattle-based Boeing, were applicable to health care delivery and were aligned with VM's mission of transforming healthcare by being a quality leader. These TPS attributes were: customers first, highest quality, obsession with safety, high staff satisfaction and a good economic enterprise. The senior leadership team and others acquired the TPS knowledge and skills by studying at the Toyota complex in Japan, adapted it to healthcare and named it the Virginia Mason Production System (VMPS). VM was the first one to implement QI principles from the auto industry into the healthcare industry. Because VMPS is based on the premise that healthcare consists of a set of complex processes in which waste can be eliminated, it also stands that not only quality, but also the financial health of the organization improved. VMPS is a management system in which all members of the organization are aligned through a common language, a common way of solving problems and a common set of cultural values. Some parts of how that culture was obtained will be described here because some of them were 'firsts' and because some of them may be of use for the AHS physician leadership program.

At VM, like at Intermountain Health described next, the link between quality improvement and physician leadership development is very strong. There is no specific

physician leadership development program at VM, it is all in the context of quality improvement learning at the VM Institute; each VM physician has to take the VMPS. This program is so successful as a QI program that the Northeast region of NHS in the UK has invited Dr Kaplan and his team to pilot VMPS in its region. This initiative is ongoing and no further information could be provided by our contacts in the UK.

VM was the first healthcare organization to use the TPS and is the first one that integrated TPS throughout its entire system. However, at the beginning, reality and aspiration were in direct conflict because the organization was so physician-centric. A new deal, a new process had to be worked out, coming at least in part from the doctors. Silversin (2008, 2011) developed a VM Physician compact (Kenney, 2010, p.9), which determined the responsibilities from the organization and the responsibilities of the physicians, a process that was deliberate and inclusive. It embodied a shared vision between physicians and the VM administration and clarified expectations in the new world. This was one of the first and most successful physician compacts in the healthcare world. The Ottawa Hospital also introduced a physician agreement recently (Scott et al, 2012) as described below.

In 2008, the Virginia Mason Institute (VMI) was formed, not only for all staff and physicians to be trained in VMPS (which is the only form of leadership development for physicians at this institution), but also to offer it to the outside world, which now includes healthcare workers from six states and one region in the NHS-UK.

In summary, the VMPS is a management system based on the Toyota model. Leadership development for physicians and other team members occurs within the context of quality improvement. Part of the culture is based on physician engagement, which is built on a physician compact for which VM was one of the first in the world. VMPS has also produced some of the best patient quality outcomes in the world.

2.3.6. Intermountain Healthcare (IHC) - UTAH

This integrated organization has been a pioneer in innovation, in quality improvement and in clinical integration. Its reputation for clinical excellence is based on a strong foundation of evidence-based medicine and clinical process management. It employs close to 30,000 people, has 3,200 affiliated physicians, and 1,200 of them are employed by

Intermountain Health. Besides clinical integration and evidence-based medicine, the third underlying philosophy is that of the Latter-Day Saints faith system.

The vision and leadership at IHC have been stable for decades. Almost thirty years ago, Dr Brent James, an internist, developed educational programs for clinical staff, leaders and physicians based on process management and clinical integration. According to Dr James, there are three levels for physician leadership development at IHC: one through the Advanced Training Program (ATP), one through clinical integration learning and one through the Leadership Academy which is in the developing stages. The first level, the Advantage Training Program (ATP) is offered through the Institute for Healthcare Delivery Research and addresses quality improvement theory, measurement and tools, healthcare policy, systems theory and leadership. The ATP has been recognized and supported worldwide by the likes of Drs. Batalden, Frankel, Reinertsen and Berwick. Don Berwick has said, “The ATP is the finest training program we know of bringing frontline clinicians, healthcare leaders and internal change agents to a deeper understanding of what it means to make quality the core strategy for an organization (Baker et al, 2008).

ATP shows physicians that quality improvement makes perfect professional sense and teaches a core set of improvement principles and tools from a variety of approaches. It is based on the key principle of action based learning by having the participants apply their learning to an improvement project. Instead of teaching leadership upfront, ATP teaches the tools of effective leadership as needed and within the context of the improvement project. Between sessions, experts in the field provide mentorship and coaching. At the conclusion of the training, results of the projects are shared with the organization. There is a 20-day course for executives and QI leaders, a 9-day course of practicing clinicians and physicians and a mini 2-day introductory course. According to Dr James who has been doing this since the 90’s, “bringing together physicians, seasoned clinicians, managers and administrators to learn the same theory, methods and tools has created a palpable cultural change of interdisciplinary collaboration, which is the drive behind the origins and maintenance of the institute”. All senior managers, leaders and physician-leaders are required to take the 20 day ATP course and James notes that many of the physicians become champions. The 9-day ATP is a part of the required onboarding at the time of recruitment. Intermountain Healthcare Continuing Medical Education is accredited by the Accreditation Council of

Continuing Medical Education (ACCME) to provide continuing medical education for physicians. James measures the ROI which he places at 4-to-1.

Whereas ATP participants came from inside the ICH system initially, the programs are now available for participants throughout the world at affordable rates as the institute is a non-profit organization. Canadian physicians from Ontario and Saskatchewan have been trained at the institute and there is talk to bring satellites to Canada. Another goal of the institute is to support networking between graduates from the program through an annual conference and by other means.

If process management learned from the ATP is the first level of leadership development, then clinical integration is the second one. The advanced ATP and other educational programs include a focus on clinical integration. James believes that ATP is the basis for learning to manage clinical care as a process, by integrating clinical medicine into a process management structure. He identified 104 clinical processes that accounted for 95% of the work, out of 1,400 identified clinical processes; as a result, he believes there is a 95:5 rather than an 80:20 rule. Besides using process analysis and process management as key elements in his teaching, he also discovered, from failures, that traditional business data systems fail with physicians and clinicians. Clinically adjusted data and a lot of mentoring, coaching and personal involvement from a few senior physicians are required for the clinical integration to be successful. In each clinical program and regional structure, a medical director co-leads with a nurse manager; the medical directors are carefully selected based on credibility with peers in a specific clinical area. These physicians have demonstrated management and leadership skills while continuing to be active in clinical practice and in quality improvement. Besides setting clinical goals, the medical leader holds the clinicians accountable for performance. The selection process of physician leaders is not dissimilar from that in Mayo, albeit on a smaller scale.

The third level of physician leadership development will start soon as a new Leadership Academy, which will use the Harvard Business School case method. By setting up this institute, James wants to ensure retention of the organizational memory.

As for measurement, besides the organizational quality indicators of patient outcomes and finances, the individual practitioners and teams are in healthy competition as their results are measured against peer, regional and systemic results and goals. Practice

groups may be financially rewarded for improvement and up to 25% of senior leaders' salary may be contingent on achieving the goals (Baker et al, 2008). Measurement of effectiveness of the leadership development is incorporated in the quality outcomes, accountability against role descriptions and board-determined goals.

It is somewhat difficult to get an absolute feel for physician engagement in this organization as only the 1,200 employee physicians, out of the 3,300 affiliated physicians, are part of what has been described above. Baker et al (2008) cautioned as follows in a detailed study about the Intermountain Healthcare system, "Led by clinicians, the IHC strategy has been extraordinarily successful at initiating a major cultural shift throughout the system by engaging frontline clinicians in defining excellence in clinical care and working actively in teams on improvement. Despite the flexibility built into the system and its bottom-up development, an ongoing challenge is the perception of affiliated physicians outside the IHC medical group that the clinical integration comes at the cost of local and professional autonomy and micromanagement from high-level decision-makers. IHC has assumed that achieving improvements among those physicians closely aligned with the system will help to win over the rest. But will IHC need to change its relationship options to attract more physicians as employees or articulate strategies to develop more clinical champions among the non-employed group?" AHS has similar relationships with different groups of physicians, urban and rural, hospital-based and community-based, fee-for-service and alternate funding; any leadership development or quality improvement program will have to take that into account. Involving primary care physicians in urban and rural settings is part of the answer. Ultimately, relationships with the medical schools and the Royal College have to be build so that the principles of leadership, clinical integration and improvement are introduced earlier into the education, before physicians spread out into different regions and groups.

Dr. James finished with an interesting thought. Process management produces improvement in clinical and in financial outcomes simultaneously, so tightly intertwined that they cannot be separated. Process management combines the necessary clinical and administrative components not only in a hospital setting but also in a private office setting. The quality theory fits with the values of the medical profession almost perfectly if set up well, and that is what ATP does. James shows in ATP how deep professional commitment

translates into today's business environment and provides the tools to do so. ATP is said to be life-changing.

In summary, like Virginia Mason, Intermountain Healthcare is a high performing organization in leadership development and in quality outcomes. However, the philosophical background of the two organizations is different as reflected in the financial approach of the two leadership institutions. ICH does not only have one of the best institutes for learning quality improvement, soon there will also be a new Leadership Academy.

2.3.7. McLeod Regional Medical Center

This is a more typical US hospital with a largely independent medical staff, like in many Canadian hospitals. Can this type of independent physician step up to leadership and work together to systematically improve value and quality? The quality performance of the 453-bed hospital with 400 physicians is spectacular and recognized by awards because they were successful in the Institute of Medicine's six quality aims of safety, patient-centeredness, timeliness, effectiveness, efficiency and equity with replicable models and systems in place. Medical staff engagement has led to enthusiastic, effective leadership and active participation in quality, safety and value initiatives without any significant payments.

Several elements from the IHI's "Framework for Engaging Physicians" were implemented successfully and some of the specific elements of McLeod's methods for engaging and clinically integrating physicians are listed below:

- McLeod has ASKED doctors to lead and their slogan is "Physician-led, data-driven, evidence-based". McLeod's Board and CEO specifically invite a physician to lead each major improvement initiative and to report back to the Board.
- McLeod asks doctors what THEY want to work on. The first element of the IHI engagement model is to "uncover common purpose". Each year, physicians work on about 12 initiatives, which are meaningful to them and to the organization.
- McLeod makes it easy for physicians to lead and to participate. It does not waste doctor's time by avoiding an endless series of pointless meetings and vague responsibilities. The physician's role is to lead three meetings over ninety days and have the project done by then. All the relevant data from internal sources and all the

relevant literature from external sources are gathered for the physician in advance.

Quality support staff draft the meeting agendas, contact committee members, keep minutes and record the changes measured, while the physician leaders and members of the medical staff who work on the improvement initiatives lead and guide the process, using their best judgment, skills and experience as clinicians.

- McLeod RECOGNIZES the physicians who lead by having them present to the board, by full-scale adoption of the improvement, and by newsletter and poster board exposure.
- McLeod backs up its medical staff leaders, with courage. McLeod’s leaders have demonstrated, through highly visible examples, that they will back the evidence-based, data-driven safety and quality recommendations of their physician leaders all the way to the board, even when the resistance comes from other physicians.
- McLeod provides opportunities for its physicians to learn and grow through educational and learning initiatives, some of them generated spontaneously by the physicians.

The main issue to learn from this organization is that, in order to gain the support of fee-for-service physicians for QI initiatives and leadership roles, the organization has to provide a considerable amount of non-monetary resources to engage physicians.

2.4. CANADA

2.4.1. Saskatchewan (Saskatoon - Regina)

Saskatchewan is heavily invested in the dyad model which could be working better if the physicians had been involved closer with its setup as they feel they were not included in the development of the region’s vision of cost-cutting and efficiency. The physician of the dyad often feels that s/he has limited input into financial decisions and sees the administrative partner just as a voice from ‘the big’ administration, while the admin partner sees physicians as big spenders.

Saskatchewan has made large investments in the development of physician leaders in several ways. For the dyads and preselected people, there are 14-16 workshops over 18 months for learning together, with a stream for management development and a stream for leadership development without specific attention for physician leadership development. There is no structured program for physician leadership development in Saskatchewan. The

SMA and the government provide sponsorship for all physicians to attend PMI courses. Every year, a few dozen physicians from Saskatchewan visit organizations with a strong quality improvement system like Kaiser Permanente or take the ATP course at Intermountain Health. The province also sponsors LEAN learning widely across all regions. In some areas coaching is available. As for measurement for some of the initiatives as they relate to quality improvement, accountability agreements for physician-leaders are in place. The data on quality indicators are collected and analyzed by the provincial Health Quality Council and every region commits to some specific improvement initiative(s).

In summary, Saskatchewan believes in physician leadership development, but, besides QI work, AHS cannot benefit from further exploring that model.

2.4.2. Sunnybrook Hospital – Toronto

At Sunnybrook Hospital in Toronto, loose elements for physician leadership development are available, but there is no packaged physician leadership program. There is a Sunnybrook Leadership Institute for all employees, staff and emerging leaders which is accessible for physicians, but not specifically designed for them. However, the organization is starting to tailor some of the offerings to the need of physicians in specific departments. The present program is a combination of internal components developed by HR for all staff; leaders and physician-leaders can also access external resources by taking courses at, for example Rothman or PMI, which is funded by the organization as part of the leader's contract.

There is no measurement of the effect of the physician leadership development program at the organizational level. At the individual level, changes in leadership behavior are measured as part of an annual performance review, including a 360 degree evaluation; that evaluation takes place in the context of mentorship and of positively reinforcing desired leadership behavior as part of the organizational culture.

As for succession planning, there are Deputy Chiefs in each department in case immediate replacement is needed. Chiefs and Deputy Chiefs identify individuals who may take on leadership positions and evaluate the readiness and needs for further development of the chosen ones. There is no good structure around identifying emergent physician-

leaders and vacancies are filled by a combination of internal candidates and external advertisements.

In summary, except for the contractual agreement to fund external leadership learning, there are no elements to add to the physician leadership program at AHS.

2.4.3. Quebec Health and Social Sciences Centers

One aspect of this organization is worth mentioning. Most organizations devote little time to integrating physicians into their new workplace, except for perhaps a quick tour, a welcome document that isn't read anyway, an introduction to clerical and nursing staff. This does not entice engagement, the seeds of which are easier to sow at the beginning when a physician joins an organization. Kaiser Permanente, the Cleveland Clinic, Intermountain Health and St. Joseph's in London have "on-boarding", and Mayo Clinic and Geisinger have a strong mentoring network. The Quebec Health and Social Services (Gfeller & Lacaile, 2012) have created a new organizational practice to facilitate physicians' integration into their new work. A mentor is designated to each newly-arrived physician to answer questions, quickly identify problems or potential problems and help address issues as soon as possible. Statutory meetings are scheduled quarterly for one year and a written report is given for each meeting. Privileges to practice are given for one year only and renewal is dependent on any issues identified. Whereas this may be seen as threatening, new doctors have found this all together a positive experience so far.

In summary, as part of onboarding and of a probationary period before a permanent appointment is given, mentoring should occur in a (semi-)structured way. This could be done by way of one single mentor, or as a mentor committee like in St. Joseph's in London Ontario, described below.

2.4.4. Capital District Health Authority (CDHA) – Halifax

CDHA has about 1,200 physicians on staff. Physician leadership development takes place at three levels: one for emerging physician leaders, one for formal leaders who currently hold leadership roles and, an orientation program for physicians newly recruited into the organization. There is no real measurement mechanism for the effect of any of the three programs.

For emergent physician leaders there is a well-developed program named Fully at the Table (FAT), to be renamed shortly as Physician Leadership Development Program. The name comes from the fact that physicians often felt that they were invited to the management table, but didn't feel really at the table due to lack of tools and skills. The program consists of six different modules around key elements on leadership development offered over a 2 month period; the main themes include communication, change management, political environment and self-awareness. The program was started in-house out of a real need, because people lacked some of the basic communication skills. The development of the program was based on an external consultants' report, a literature review and a needs assessment based on interviews. FAT is in its fifth year and revised each year based on feedback. The program is available for all physicians, including the community-based physicians. Initially, the program was offered for physicians and non-physicians, but the doctors did not show up and this turned out to be caused by a high degree of discomfort. The discomfort came from the physicians' perception that the non-physicians already had some experience in this area of leadership/management, while the physicians did not; physicians hate to admit they do not know something. Therefore, this level of the program is available for physicians only. In the future, mentorship will also be offered but there is no mentorship structure in place at present. There is no on-boarding for the newcomers, just a two hour orientation which is around day-to-day operational issues, not including organizational mission, strategic directions, or a meeting with senior leaders.

The program for formal leaders in existing roles is designed around the co-leadership-dyad approach, i.e. a department chief in partnership a VP or director. The dyad concept is still growing and initiatives are taken to increase the level of trust between the two partners of the dyads (MacNeil K, 2011); roles, responsibilities and agreements of the dyads are well defined. This level of the program is based on 18 competencies (based on Being/Caring/Doing) and action statements ("what does it look like to be...?") as part of "My Leadership" which is a CDHA-operationalized version of LEADS (2012). At this level of the program, coaching by a certified coach is offered for up to one hour every other week.

Finally, the third component of the leadership development program is for newly arrived leaders and has been developed around the organizational culture of Capital Health.

This part of the program includes a university component, looking less at the traditional tenure track and more toward career development around one of four possibilities for physicians: the clinician-teacher, the clinician-researcher, the clinical clinician and the clinician-leader. By adding the leadership career track, it is acknowledged that the leadership stream is meaningful and should not, cannot be done off the side of the desk, thereby honoring the time commitment. A development portfolio with clear expectations is being developed for this career track. The financing may be found through university practice plans and other alternative payment plans for physicians.

As for succession plans, potential leaders are identified during the annual review with the departmental heads. There is no strict succession plan in place. There is also no defined way for measuring whether the leadership programs make a difference at an individual or an organizational level.

In summary, useful information for AHS includes: do a needs assessment for a physician leadership development program; community-based physicians can be included if the program is developed to accommodate their needs and schedule; like in KP, it is appropriate to have some component for physician leadership development available for physicians only; CDHA may have one of the better dyad systems in Canada; the physician-leader career track is valued as much as other career tracks.

2.4.5 St Joseph's Health Care, LONDON, ON

This faith-based healthcare organization has one of the better leadership development programs for physicians in Canada. The present CEO, Dr Gillian Kernagan, a GP and the previous VP Medical, was very instrumental in the development of the physician leadership program. She was also the drive behind making St. Joseph's an organization in which the training and living of Crucial Conversations© are embedded. Many physicians are trained instructors of Crucial Conversations. Presently, Dr Robin Walker, VP Medical Affairs & Medical Education and a neonatologist, is in charge of the physician leadership development program. He was also instrumental in the development of "Fully at the Table" when he worked at the Capital District Health Authority in Halifax, described above. There are 4,200 employees, 1,000 physicians of whom 300 have a primary appointment and the budget is about \$0.5 billion. All physicians who are leaders

are also clinically active and several have cross-appointments with the university. The GP's and community doctors are not (yet) involved with the leadership development programs described below.

Integrated performance development tools for physicians and physician-leaders were developed about twelve years ago in collaboration with the university and are based on competencies needed to develop leadership skills. The organization has developed a culture of 360's, which is mandatory for physician-leaders. A yearly self-assessment is based on the LEADS framework capabilities and, every other year a 360-degree evaluation is done with input from physicians and non-physicians. This review includes goals, areas for improvement for certain competencies, etc. Every new recruit undergoes onboarding: this is a combination of welcoming activities and the Foundational Leadership series, as described below.

There are three levels in the physician leadership development program that, together, form a hybrid between CanMEDS (Frank, 2005) and LEADS (2012):

- The Foundational Leadership Series has to be taken by all newly recruited physicians during the first two years. They focus on self-development, knowledge & skills for running efficient meetings, ethics, career development, finances 101 and working in a unionized environment. To identify gaps in the foundational leadership series and to ensure that the series meets the needs, the content and delivery are tweaked based on feedback received from questions like “what do you know now that you wished we would have told you when you started?”
- The Talent Management System (TMS) for physicians is the next level up in the leadership development program and runs in collaboration with the university. It is appropriate for site chiefs, divisional leaders, program leaders, associate deans, i.e. for roles that are at the middle management level. During TMS, self-awareness and self-management are further explored, engaging others through teamwork and collaboration, strategic thinking and planning and, systems theory within the health environment. Templates for role descriptions are well established. Dr Kernagan mentioned that it would be interesting to complement the role descriptions of physician leaders with a list, which contains the skills and competencies that will be acquired when fulfilling respective leadership roles; this may make the roles more attractive and make people

more eager to apply for leadership positions. St. Joseph's is presently trying out a recruitment tool mapped against LEADS capabilities, i.e. recruitment will happen along the level of the LEADS capabilities of the potential recruit.

- The Strategic part of the physician leadership development program aims at the level of the departmental chair, MAC chair, Vice-Dean or the medical director of large programs.

The three levels need to be seen as concentric circles with the foundational level in the center and the other levels building on the content of the central circle, going outward. The efficiency of the development program is measured at an individual level, using 360's based on the level of capabilities reached by each physician. The self-assessment and 360's framework are used to decide on further leadership and career development. The physician leadership development program has not yet been evaluated at organizational level. There is a parallel program developed by the HR department for employees; it is well developed but not much attended by physicians because physicians do not consider themselves employees. Physicians can obtain financial support for additional training to attend the CSPE annual conference and PMI courses and, there are links to resources through the intranet. In collaboration with the Ivey School of Business, a pilot is starting for physicians wanting to do leadership projects in their environment.

A succession plan does not exist but is being developed. Like at Capital Health in Halifax, evaluation for recruitment of academic physicians happens more and more based on leadership capabilities, before the committee evaluates the candidate's academic and clinical talents. Those who are appointed to assistant or associate professor and at mid-management level receive a mentorship committee consisting of 2-3 people who can help with initiation in the new system and with career development around leadership. In a world where a large diversity of skills is needed, the skills of the mentors in the group have to be complementary; the satisfaction with the committee is also better than with one mentor whose 'chemistry' may not connect with the mentee. The mentor committee model has not yet been evaluated. It is hoped that the organizational culture regarding leadership capabilities and behavior will change because all in-house physicians are subjected to the same program and it is made part of the promotion process, i.e. what have you done in your

leadership role to support the culture and to develop leadership? This question is actually being asked from all leaders, not just from the physicians.

In summary, St. Joseph's has several components of value for AHS' future program: an embedded tool to have safe conversations throughout the organization; a good onboarding program; a well-developed three level physician leadership development program; integration of leadership into career development and evaluation; mentorship committee structure; the culture of a learning organization. It is interesting that these initiatives align with what Francescutti (2012), past president of the RCPSC and incoming president of the CMA, believes will reverse physicians' disengagement in the Canadian healthcare system: a vibrant governance structure, the physician's ability to have difficult conversations (what Dr Halligan - NHS called 'courage') and, performance measurement by providing feedback as part of continuing learning.

2.4.6. The Ottawa Hospital (TOH)

The Ottawa Hospital believes that engagement grows organically, one workgroup at a time" (Mcguire et al, 2012). Specific quality improvement projects that use engagement principles might have better outcomes over time and they also advance physician engagement at organizational level, even at multiple sites and across multiple programs. TOH aligned with Studer Institute initially to help with the preparatory phase and five further phases, inviting the physicians' input from the beginning. The entire process took many years and resulted in an array of tactics to engage physicians: alignment, measurement, leadership development, communication and governance. Even if the strategic goals and objectives of an organization do not always align, one can achieve alignment in areas of common values focused on quality. Once that is accomplished, roles and responsibilities need to be clarified and a metric/reporting system put in place. Formal and informal leadership skill development and maintenance of two-way communication are two more contributing factors to physician engagement. Finally, enhancing physician input into organizational decision-making processes is an important part of governance. As a result of these five factors, TOH has an alignment of Board, senior management and MAC commitments toward quality. A physician engagement agreement (Scott et al, 2012) was developed and accepted to reaffirm commitments of both the organization and the

physicians within the framework of the aligned values. Only then were the Medical Staff Bylaws revised and aligned to enable and support engagement and strengthen the credentialing and reappointment process. This process seems very similar to the way a physician compact was developed at Virginia Mason and how the quality improvement program was aligned at Intermountain Health and at Virginia Mason.

In a conversation with Jim Worthington, Sr VP of Medical Affairs, Quality and Performance, one of TOH's five strategic goals was explored, i.e. formal and informal leadership development. At TOH, there is a progression in options for leadership development of physicians:

- “One-off” programs: four half day workshops on leadership development around annual performance review, how to give feedback, how to have a difficult conversation, professionalism, etc.
- Leadership Management Academy: an 6-month in-house, structured program for groups of 40 managers and physician leaders on topics like finances, HR issues, how hospitals function, change management. The participants are a mix of different generations and of divisional and departmental heads.
- LIN Leadership program: leadership training course through the Rotman School of Business. Three sessions over two days each on relationship building, change management, finance, how health care systems work; attended by 6-10 leaders from TOH each year.
- Provincial leadership program in Toronto: 1-week course, three times per year; 1-2 department heads attend annually.
- Some individual leaders take EMBA or EXTRA.
- Quality and Patient Safety Physician Leadership course: developed two years ago between Ottawa Hospital and Telfer School of Management at University of Ottawa. This six-month course of 2-2.5 days per month involves a quality improvement project. Topics include quality and patient safety, science of quality improvement, leadership, change management.
- For senior leaders: a senior management level program is in development, including formal 360's with services of a very senior individual from outside TOH who interprets, coaches and monitors the program.

Upon recruitment, physicians sign an agreement, similar to the physician compact at Virginia Mason. Early during the first year, there is a welcome and introductory evening with wine and cheese from the board members, senior management team and medical advisory committee members; this event will be expanded and improved in the future to foster interest in physician leadership. Succession planning needs to be developed; presently, division and department heads identify potential physician leaders.

Competencies for different physician leadership roles and learning programs to develop these competencies are being created with the local business school. This will allow identification of the capabilities needed for a specific leadership position, and what learning may be required to develop those capabilities. TOH would also like to develop a network between present and past leaders for support, mentoring and/or coaching; this may start simply as socializing events like a journal club, pizza and beer evening or fireplace chats. As Dr. Worthington says, “We would all be better and healthcare would be better if we got that feeling again of belonging, of commitment to the patient and to each other, of being part of a bigger team”. This may be easier on a local level than in huge organizations, which tend to lack the feeling of human connection.

In summary, the TOH has developed a great structure around leadership development and quality improvement based on a physician-organization agreement. The engagement of physicians was accomplished by involving them right from the beginning; the array of tactics to engage physicians included alignment, measurement, leadership development, communication and governance. To our knowledge, it is the only Canadian healthcare organization with a physician compact. Despite the fact that TOH is small, there are elements for AHS to explore within the context of Canadian healthcare.

2.4.7. Information on some initiatives within AHS

Although not within the scope of this paper, a few existing programs at AHS are highlighted as they may link with findings in other organizations and in the literature.

- **Charter for Leadership Development Program:** this AHS document was developed by the Leadership Development Steering Committee, a cross-organizational group of representative leaders (AHS, 2011). It was developed based on a gap analysis between the present and the desired state of leadership to support AHS’ strategic direction and

goals by providing systematic training, education and other developmental opportunities for formal and informal leaders. It was developed for managers and employees but has not been accessed much by physicians. There are likely to be several reasons for that, including: physicians are not employees and consider this to be an HR initiative; physicians feel uncomfortable taking non-clinical workshops or courses with content they are unfamiliar with; the program was developed without significant input from physicians; physicians may not see the need for non-clinical skills and it takes away from their patient care time.

The document has been developed for four levels of leaders: emerging leaders who are high potential employees, entering leaders who are new in their role or new to AHS for less than 2 years, experienced leaders who have been at AHS for more than 2 years, and executive leaders. For each level, the four phases of the Boyd's Ooda Loop have been used: assess, plan, learn and integrate. This document is very strong in that each of the 20 LEADS capabilities has been connected with behaviors expected from a leader at all four levels. Learning tools to acquire and practice the necessary skills are also listed.

- **MyLearningLINK**: online resources for managers and employees to determine change readiness, to have electronic leadership tools readily available and to have a database of resources, including workshops. The LEADS framework forms the basis. Also available is an electronic mentoring network, "MyMentoring Network" to initiate and temporarily maintain connections between mentors and mentees with experience at 5 different levels.
- **Capability Maturity of Strategic Clinical Networks (SCN)**: this tool for assessment of the SCN's has been developed by IBM (April 5, 2012 – Assessing the capability maturity of the SCN's). The document covers 10 capabilities at 4 levels of maturity. The levels of maturity are initiating, practicing, optimizing and leading; the capabilities are strategic alignment, program & project management, innovation, performance management & measurement, planning & priority setting, knowledge management & translation, evidence-informed decision-making, organizational culture, engagement and relationship management of network & stakeholders, transformational leadership. Forty definitions are given on what each capability at each level means, how to assess the present capability level, what evidence has to be provided for it and what action is needed around that evidence to support the claim that a certain level of a certain capability has been

reached. There is a second draft document “Achieving capability maturity in the SCN’s” on how to develop increasing maturity levels; the list of learning resources at the back of that document is limited and likely to be developed more in the future.

- **The AHS Learning Institute:** Because of many ongoing but disconnected learning activities throughout AHS, a business case has been made for developing a Leadership Institute (AHS-PGO, 2012), which would increase the effectiveness and efficiency of the learning investment through standardization; it would also coordinate and align learning and delivery across the organization. AHS’ executives have determined that a corporate university construct named “AHS Learning Institute” is the preferred way of addressing the existing gaps in governance, and to centralize and standardize learning practices. The Learning Institute would be an overarching body with its own governance structure, learning council and foundational learning supports. While it will encourage standardized learning, it has to allow for adjustments to accommodate local needs, using a model that combines face-to-face learning, distance learning and technology-based learning. The intention is to start small.

The framework is based on Corporate University constructs from BJC Healthcare (#15 on list of best hospitals for 2013) and the North Shore LIJ Health System. To attract the interest of the frontline physicians, this initiative is best aligned with the QI philosophy of organizations like Intermountain Health or Virginia Mason. Presently, there is a limited amount of structured or organized learning opportunities for physicians at AHS and, although mentioned briefly in the business plan of the learning institute, physicians’ leadership development is not delineated. As a matter of fact, the document foresees a low impact of the AHS Leadership Institute on Physician Leadership Development. The draft document of the business case of the AHS Learning Institute dated March 31, 2012 (AHS-PGO, 2012) has very good outcome measurements and would fit nicely into a ROI Institute framework (Phillips & Phillips, 2012).

- **Department of Oncology – Faculty of Medicine - Univ Calgary:** Dr. Peter Craighead, professor and chair of the Department of Oncology and professor, surveyed members of the AHS Cancer Care Domain around leadership development, including present and desired status of LEADS capabilities. Mentoring, coaching and work-based challenges were ranked as the most important tools for leadership development, but they were only

rarely to occasionally available at AHS. What people preferred to have available as leadership resources varied widely, probably because they were uncertain what resources would be best for their learning. 94% of those surveyed did not know what LEADS was all about and 79% had never heard of it. When asked about the support for leadership development at AHS, 65% said it was non-existing to poor. In short, the survey indicated that there was a strong desire for development opportunities to improve leadership capabilities (Craighead, Nov 2012). Craighead has held a few workshops for emerging physician leaders. Based on an evidence-based literature review, he has also developed a document for a Leadership Academy and for succession planning at the Faculty of Medicine, (personal communication; draft document).

- **Physician Learning Program (PLP)**: this initiative between AHS, AMA and University of Calgary, led by Dr Lara Cooke, Associate dean at the Faculty of Medicine, uses databases to provide physicians with the information needed to answer their own questions, thereby helping them to identify unperceived educational or training needs. PLP is physician-driven and physician-led; after a question is formulated, stakeholders are identified and ethics approval for AHS data mining obtained. If the question can be answered, a report is generated and presented, including reflection on how the findings may affect and change the clinical practice. This is a very practical and direct form of quality improvement; it not only provides data, but it is also a knowledge translation tool which may lead to implementation of new practice guidelines. There is also a reflection component by asking what has been learned and how the findings will change practice. The program is still in the pilot stage and the initiative is focusing on whether and how the physicians' questions can be answered. Besides the onsite QI potential, it may also be a way to involve non-hospital and rural physicians into QI initiatives and leadership development. Presently, there are groups of rural physicians using this system and practicing change management based on PDSA cycles. It would be interesting to compare this initiative with the work at the Intermountain Institute for Healthcare Delivery Research.
- **Leadership Development Steering Committee Inventory**: is an unofficial inventory of learning opportunities and programs for leaders across AHS developed by the department of Medical Affairs. Presently, there are PMI courses, Physician Health, Disruptive

Behavior, Leadership Coaching and some leadership courses related to the development of the SCN's. Details are available at the office for Medical Affairs and are not within this document's scope.

Summary

Whether or not linked with quality improvement, there are several elements from national and international healthcare organizations AHS can incorporate for further development of its physician leadership program.

In Europe, Jønköping, a publicly funded region, is the outlier; its leadership development program for physicians is intertwined with its internationally renowned system for quality improvement and with its learning institute Qulturum. There are small spots of innovation at NHS, but in view of recent serious patient events and given that efforts have been going on for more than two decades, progress seems surprisingly slow as compared to some of the healthcare organizations in the US with better outcomes. The pilot work by Dr Halligan at the University College London Hospitals, particularly the leadership simulation lab, is worth exploring further. Interesting comparisons have been made between the UK where changes were mandated by the government and Denmark where physicians took leadership with minimal government intervention. As a matter of fact, all the healthcare systems in Europe and the US with successful quality improvement and physician leadership programs that are reviewed in this document had minimal to no political interference.

In the US, the Mayo Clinic and Kaiser Permanente are comparable in size to AHS; AHS' number of people served, number of employees and physicians, and budget fall between these of Mayo and KP. Medical leadership development programs are well developed at both organizations. KP starts with the premise that all physicians are leaders, whether they take on formal roles or not. This starts with strong onboarding which, together with the learning during the 3-year probationary period, leads to a strong identification with the organization. The physician leadership development program has four stages and organizational quality outcomes are very high. Although the Mayo Clinic is only slightly larger than half the size of AHS, it has a strong teaching and research component with an annual research budget half that of CIHR. Mayo is also physician-led while the emphasis

placed on values and principles of 'patient comes first' is very strong throughout the organization. The physician leadership program has been well researched and has been developed with components of leadership programs in 25 top Fortune organizations; it is also based on the 70/20/10 learning system. Mentoring and coaching are strongly embedded in the organization. It probably has the strongest succession pool system of all organizations reviewed in this paper. If size of the organization matters, then the Mayo Clinic, the #3 hospital system in the US, is the most suitable organization for AHS to look at for developing its physician leadership program.

Geisinger Health Systems, Virginia Mason with its Institute and Intermountain Healthcare with its Institute for Healthcare Delivery Research are smaller organizations with outstanding nationally and internationally recognized quality and leadership programs. Virginia Mason has a well-developed physician compact. At Intermountain Health and Virginia Mason the physician leadership programs are intertwined with the outstanding quality improvement programs and are run by their own institute, not dissimilar from the Kultorum institute at Jønkøping. While Intermountain Health worked closely with IHI, VM developed its system based on the Toyota system. Intermountain Health has been working on Quality and Leadership development the longest and many physicians from Saskatchewan and Ontario have been trained at Intermountain Health's institute. Given the business model and philosophical difference, training (and probably consulting) is cheaper at Intermountain Health than at Virginia Mason.

Interestingly, all five US organizations mentioned here have different financial, religious or academic philosophies, but the basic concepts of these organizations have similarities: led by physicians who are salaried; physicians are involved in leadership and expected to take on leadership roles; alignment in values between the organization and the physicians; stable long-term senior leadership and vision; heavy involvement with quality improvement which is embedded throughout the organization; medical leaders remain involved in clinical practice; the financial incentive for leadership positions is relatively small; strong leadership development institutes.

In Canada, St. Joseph's in London, ON and the Ottawa Hospital have well developed physician leadership programs with several elements of interest. The size of the organizations is small compared to AHS, but they are successful within the Canadian

healthcare system. St Joseph's has a well-structured physician leadership program and probably the best onboarding, which, besides a social event, also includes the Foundational Leadership Series to be taken within the first two years after recruitment. The Ottawa Hospital is probably the first healthcare organization in Canada to have a physician-organization agreement/compact (Scott et al, 2012). It has multiple layers in its physician leadership development program. TOH, with the support of Studer, accomplished physician engagement by early involvement, by finding and aligning common values, by putting a metric and governance system in place with two-way communication and by offering a formal and informal leadership development program. At TOH and St. Joseph's, physician leadership competencies and related learning tools are being developed with the support of local universities and/or business schools.

Table 1: International initiatives and programs related to physician leadership development

<ul style="list-style-type: none"> • Is there a national health policy to increase the involvement of physicians in leadership roles? • Is there a national framework for medical management & leadership and competency? 									
UK	Denmark	Sweden	Norway	Netherlands	Germany	N Zealand	Australia	US	Canada
<p>* Yes, reiterated by govt and NHS several times over the last three decades with various, limited successes in different trusts.</p> <p>* Yes, Medical Leadership Competency Framework for all practicing physicians; different levels of competencies.</p>	<p>* Yes, last three decades more importance of medical leadership in hospitals. Physicians on all hospital boards. Current health policy states that each clinical department should have a physician leader.</p> <p>* Yes, one of the core competencies during specialty training is Leader and Administrator</p>	<p>* No not federally, but some regions do (example Jønköping).</p> <p>* No, not federally</p>	<p>* No</p> <p>* No</p>	<p>* No.</p> <p>* CanMEDS part of new curriculum.</p>	<p>* Only through the German Medical Association (equivalent of CMA) which is one voice for physicians in decentralized and fragmented health care system.</p> <p>* Curriculum on leadership but voluntary.</p>	<p>*No</p> <p>* National competency framework for physicians as professional development tool.</p>	<p>* Not federally, but some state policies as clinical networks.</p> <p>* In the context of the specialty of RACMA. Also limited model adapted from UK model and for selected few. No national framework for physicians in general. LEADS under consideration.</p>	<p>* No</p> <p>* No</p>	<p>* No.</p> <p>* CanMEDS as framework to develop competencies in clinical and professional skills; LEADS as framework to develop leadership capabilities. PMI-CMA courses built on LEADS</p>

Information in Table 1 and 2 based on Ham & Dickinson, 2008; LEADS, 2012; RACMA, 2011; NHS Institute for Innovation and Improvement & Academy of Medical Royal Colleges, 2010; O'Sullivan, 2011.

Table 2: International physician leadership development programs

What leadership development training is available for physicians? Content ? Competency-based?									
UK	Denmark	Sweden	Norway	Netherlands	Germany	N Zealand	Australia	US	Canada
<p>* Variable, provided optionally. Many provide training for individual hospitals and health organizations. Various deaneries and Medical Royal College offer leadership programs.</p> <p>* Faculty of Medical Leadership and Management; University College London's experimental program</p> <p>* Medical Leadership Competency Framework : five domains, 4 competencies, 3 levels.</p>	<p>* New physicians are offered a 5-day basic leadership course nationally by Danish regions and Medical Association; to be taken in first two years of practice.</p> <p>"Education for Physician Leadership and Management".</p> <p>During residency also mandatory national 10 day course with improvement project.</p> <p>* Competencies structurally evaluated during residency; not thereafter.</p>	<p>* In-house leadership development by counties. No defined core curriculum or formal assessment of competencies. Also courses by external resources and business schools.</p> <p>* See Jönköping county described in text.</p>	<p>* In-house leadership development by the local enterprises.</p> <p>* Joint offering of 4 month program for senior leaders of all disciplines covering strategic and financial management including international module with study tour to Sweden and Denmark.</p>	<p>* Voluntary training and development programs provided by individual institutes. Mainly short class-type courses.</p> <p>Competencies not assessed.</p> <p>* Some compulsory leadership and management training during residency.</p>	<p>* Offered as CME by Medical Associations. Competencies not assessed.</p> <p>* Different management structure between private hospitals, university and public hospitals.</p>	<p>* National leadership program offered by District Health Boards but funding and attendance left to hospitals and individuals.</p> <p>*Not competency based</p>	<p>* Health Leadership Framework in consultative stage in 2013.</p> <p>* RACMA curriculum for Physician-Executives is a College specialty; competency-based.</p> <p>* Individual initiatives by hospitals (for example: Perth-see text)</p>	<p>* Nothing national or systemic. Training through ACPE.</p> <p>* Very good programs for Physician Leadership Development in individual organizations and hospitals</p>	<p>* Individual initiative or in-house learning by hospital or region in combination with business school or PMI-CMA. Also external consultants.</p> <p>* Few have learning around QI.</p> <p>* No mandatory or systemic leadership development initiatives at national level.</p> <p>* Individual offerings from universities</p>

3. Developing a Physician Leadership Program at AHS

3.1. Frameworks for Leadership Development

Three purposes commonly direct leadership development of an organization: 1) performance improvement because an organization needs leaders who are highly effective in their current roles; 2) succession management because an organization needs a robust pipeline or succession pool with some leaders who can effectively move up in the organization and take on the increased complexity and scope of higher level leader positions; 3) organizational change which requires new behaviors, skills or competencies for leaders (Van Velsor et al, 2010). Just as becoming a skilled physician requires practice, developing a good leader requires practicing leadership. A literature review for academic faculty in healthcare found that leadership development initiatives result in a high level of satisfaction, a change in attitudes toward organizational contexts and leadership roles, gains in knowledge and skills, and changes in leadership behavior (Steinert et al, 2012).

3.1.1. ACS MODEL: Assessment, Challenge, Support

Leadership development is a process that requires a variety of developmental experiences and the ability to learn from those experiences. The ACS model is a combination of three elements that make development experiences more powerful: Assessment, Challenge and Support (ACS model) (Van Velsor et al, 2010). The best developmental experiences are rich in assessment data that come from self and others in formal and informal ways. Assessment gives people an understanding of their current strengths, the level of their current performance or leader effectiveness and their primary developmental needs. Stimulating people to evaluate themselves provides a benchmark for future development which points out the gap between the person's current capacity and the desired level of performance for the LEADS capabilities. The leadership development program helps overcome that gap by clarifying what people need to learn and by providing the right tools and environment to practice those skills, leading to the new behavior and capacity level of a particular capability. Developmentally, the experiences most potent for growth and learning are the ones that stretch or challenge people. Challenges are situations demanding skills and abilities beyond the current capabilities of people or when the situation is complex. The main sources for challenge are novelty, difficult goals, conflict

and dealing with adversity. The element of challenge serves the dual purpose of motivating development and it provides the opportunity to learn. A variety of challenges help with developing a wide range of capabilities. Although developmental experiences stretch people and point out their strengths and weaknesses, such experiences are most powerful when they include elements of support. Whereas the element of challenge in the ACS model provides the disequilibrium needed to motivate people to change, the element of support in an experience sends the message that people will find safety and a new equilibrium at the other side of the change. Practices associated with support vary widely and mean different things to different people. The most important support is found in other people who can listen, identify challenges, suggest strategies for coping, provide resources and inspire renewed effort. Support can also come from organizational cultures with incorporated norms and procedures that are based on the belief that continuous learning and development of people are key factors for organizational success, as are the support and reinforcement needed for learning in a safe environment (for example, by using The Influencer © framework, section 3.3). Support is also a key factor to maintain motivation to learn and grow.

3.1.2. CAPABILITIES FRAMEWORK – LEADS and others

Only a few medical leadership frameworks have been validated worldwide. The most important medical, professional frameworks found in the literature will be described briefly and the main differences between these models and LEADS (2012) will be highlighted. “LEADS in a caring environment” is the leadership framework accepted by the Canadian healthcare community, including AHS.

The framework of the Royal Australasian College of Medical Administrators (RACMA, 2011) is a curriculum to obtain a fellowship after three years of training and is not intended for physicians who are in clinical leadership positions. Therefore, further exploration for this document is not necessary. The Medical Leadership Competency Framework (MLCF) from the NHS (2010) in UK and the LEADS (2012) framework from Canada have many similarities and are both based on literature reviews, semi-structured interviews and conversations with healthcare leaders and stakeholders. Both frameworks have five domains with four capabilities in each domain. The five domains for LEADS are

Lead self, Engage others, Achieve results, Develop coalitions and Systems transformation. In addition, the MLCF also has three stages of development for each capability: for the person in pre-graduate training, in postgraduate training and for the established physician. LEADS does not have several levels of development, but AHS (2011) has developed four levels of development for non-physicians within the LEADS framework: emerging, entering, experienced and executive leaders. In order to reach a certain level for a certain capability, the individual has to learn certain skills with the tools listed in the charter/manual (AHS, 2011). It is helpful for an organization to have this type of menus or lists for employees and for time-pressured physicians. Because LEADS has been largely accepted as the framework for leadership in a caring environment by healthcare organizations in Canada, including PMI and AHS, it is logical to use the LEADS framework for the AHS' Physician Leadership Program. Like for the non-physician, different stages for different levels of physician leadership would have to be either newly developed and/or adapted from the existing document (AHS, 2011).

CanMEDS (Frank, 2005) has been accepted as professional framework for physicians in several countries and is different from LEADS in many aspects. CanMEDS is a framework with professional competencies for physicians only and it uses profession-specific language. LEADS is for all healthcare workers and uses universal language across disciplines. Whereas CanMEDS uses prescriptive competencies, describing minimum requirements, LEADS uses descriptive capabilities which includes competencies but with potential for more within a certain situation or context. CanMEDS contains no real competencies around leadership, just a few around management under the role of 'Manager'. Detailed description of LEADS is outside the scope of this document as it is already accepted and well described in other AHS documents (AHS, 2011). However, this does not mean that LEADS is well known among the physicians, as Dr Craighead (academic department head of Oncology-University of Calgary) found out in a survey: 94% of the participants had no real knowledge of LEADS and 79% had never heard of it (personal communication). In short, LEADS, a Canadian framework for leadership within a caring environment, has been accepted in Canada, including AHS, and it is gaining increasing acceptance internationally.

3.1.3. SUSTAINABILITY FRAMEWORK – The Influencer©

Leadership is influence (Grenny et al, 2013, p3). The model of “The Influencer”© (Grenny et al, 2013) is a framework for creating and maintaining impressive changes in human behavior and has been studied in hundreds of organizations, including in hospitals to improve hand washing. To our knowledge, this framework has not been used before to change behaviors linked with leadership capabilities. There are three keys for success of the Influencer© framework (Figure 5):

a) Focus and measure outcomes: goals to be achieved have to be clarified rather than having fuzzy goals and non-compelling objectives. As for the leadership development program, the outcomes can focus on leadership behavior in general or specifically on each individual LEADS capability.

b) Find vital behaviors: identifying a handful of high-leverage behaviors to accomplish the change works for almost any problem. In the case of developing leadership skills, specific behaviors linked with specific capabilities make it easier to identify vital behaviors. The vital behavior can also be around leadership behavior in general.

c) Engage all six sources of influence: the final key to influence lies in finding a way to carry out the defined vital behavior. Engaging four or more of the six influences increases the chance to successfully form new habits by up to ten times (Figure 5, table 3).

The six influences are:

1) *Personal Motivation*: how do we change the behavior such that people are willing to do it? How can we make sure that it aligns with people’s values? In some cases, how can we help to make them love what they hate? How can we create situations such that people are willing to try it out?

2) *Personal Ability*: do people have the skills for the new behavior? How do we help them do what they can’t? Lack of skills may be misinterpreted as lack of motivation. Successful organizations overinvest in skill building.

3) *Social Motivation*: harness peer pressure. How can others provide encouragement into the new behavior? How can peer pressure be used as an advantage?

4) *Social Ability*: how can assistance be provided? How can others enable you? In the context of team and collaboration, interdependence makes the total larger than the sum of its parts.

5) *Structural Motivation*: how can changing the economy facilitate the leadership behavior? Aligning rewards, measurements and accountability are part of this category.

6) *Structural Ability*: how can changing the ‘environment’ facilitate the leadership behavior? What can be introduced structurally that enables and facilitates practicing the new leadership capabilities?

Figure 5 summarizes the Influencer © model; table 3 shows questions and general strategies for the six influences to make leaders successful; table 4 in section 3.3 lists specific strategies for a physician leadership development program within the context of the six influences.

Figure 5: The Influencer Model (adapted from Grenny et al, 2013)

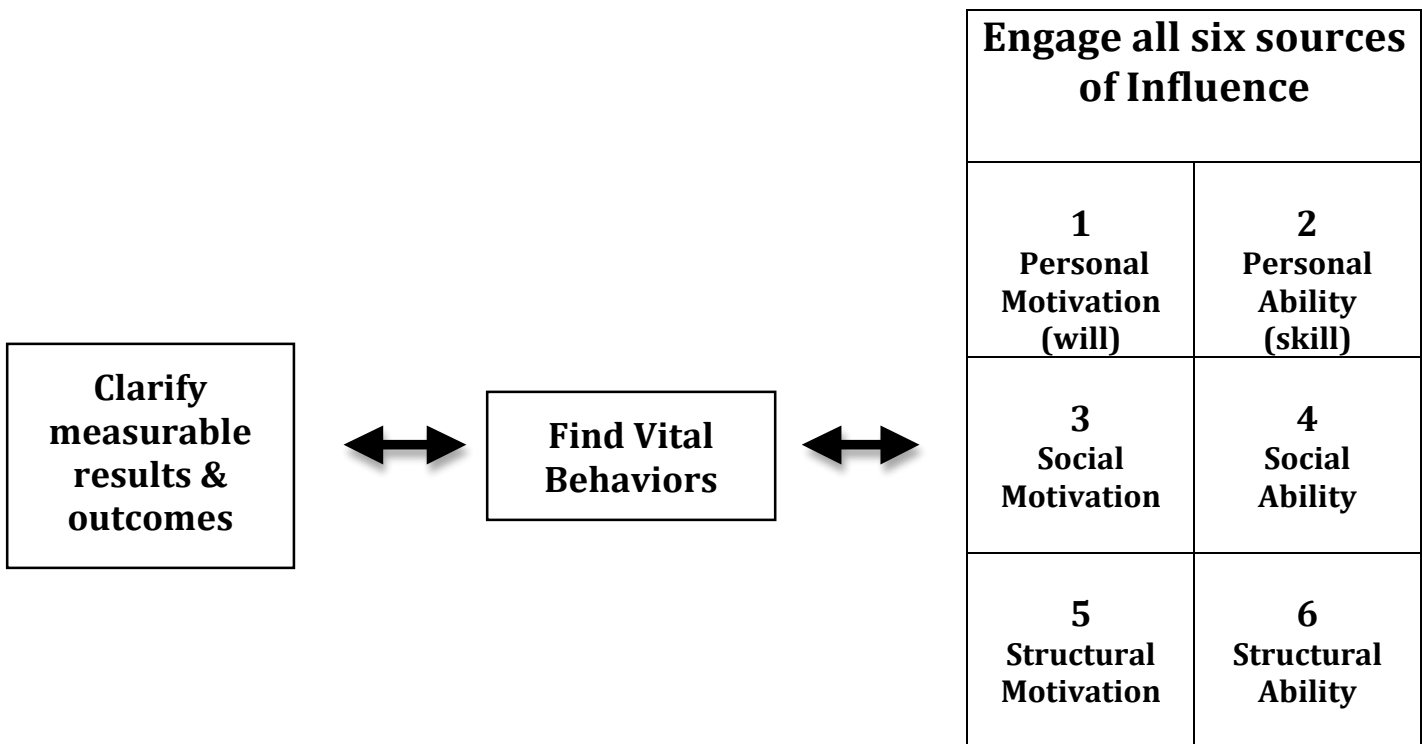


Table 3: The Six Sources Strategy Matrix
How to increase chance of success tenfold

Source 1: Personal Motivation	
Questions to ask	<ul style="list-style-type: none"> • Do physicians find meaning in the change? • Do they feel a moral or ethical obligation? • Does it fit into their sense of who they are as physicians and/or who they want to be?
Strategies	<ul style="list-style-type: none"> • Identify unpleasant aspects of the change and find ways to eliminate those aspects or make them more pleasant. • Find ways to connect with physicians' core values. • Motivate by creating purpose (and vision). • Take great pains to get buy-in/ownership.

Source 2: Personal Ability	
Questions to ask	<ul style="list-style-type: none"> • Do physicians have the knowledge and skills around leadership capabilities? • Can they handle the toughest challenges they will face?
Strategies	<ul style="list-style-type: none"> • Give physicians guided practice and immediate feedback to ensure they can engage in the new behaviors in most difficult circumstances. • Expose to learning experiences to help physicians manage any communication, emotional and interpersonal obstacles they may face in their leadership role. • Participate in real-time simulations, testing whether physicians can perform as required under challenging circumstances.

Source 3: Social Motivation	
Questions to ask	<ul style="list-style-type: none"> • Are others encouraging the right behavior and discouraging the wrong behavior? • Are there good relationships with those physicians we are trying to influence positively? • Is there a safe environment to encourage leadership behavior?
Strategies	<ul style="list-style-type: none"> • Enlist support of organizational opinion leaders. • Mentors, mentoring groups, coaching. • Involve all members in management in teaching, modeling and coaching people toward new behavior. • Make it clear that these initiatives are supported and modeled by top management. • Provide tools to have 'safe' conversations.

Source 4: Social Ability	
Questions to ask	<ul style="list-style-type: none"> • Do others provide the help, information and resources required – particularly at critical times? • Are there forums where the total is larger than the sum of the elements? • Is there a safe environment to have a leadership conversation?
Strategies	<ul style="list-style-type: none"> • Identify toughest obstacles to change and make sure physicians have others to support them when facing those obstacles. • Create a safe environment to have leadership conversations. • Create safe ways for people to get help. • Provide everybody with information and resources and 'authority' to step up to new behavior as easily as possible.

Source 5: Structural Motivation	
Questions to ask	<ul style="list-style-type: none"> • Are there rewards? Financial, promotions, performance reviews or perks like stipends for books, conferences or courses? • What is the human and financial cost? • Do rewards encourage the right behaviors?
Strategies	<ul style="list-style-type: none"> • Adjust formal rewards to ensure people have incentives to adopt the new behaviors. • Put in place appropriate measures for specific behaviors. Some may relate to accountability. • Use carrot and stick approach so people know that the organization is serious. • Even most senior leaders are held accountable for walking the talk.

Source 6: Structural Ability	
Questions to ask	<ul style="list-style-type: none"> • Does the environment (time, facilities, information, proximity to others, policies, work processes, etc) enable the practice of the new skill(s) or behavior? • Are there enough cues and reminders to help people stay on course?
Strategies	<ul style="list-style-type: none"> • Reorganize time schedules/workspaces/ technologies to remove obstacles and make the required changes convenient and easy. • Provide new software, hardware, printed or other resources to make the change simple and automatic. • Use cues, reminders, regular communication, metrics to keep the need for change in front of the mind for all physicians. • Measure and monitor by creating ways to give feedback about how successfully or unsuccessfully individuals or teams are in leading the change.

Modified from Grenny et al. 2008. p.50

3.2. Considerations for developing an AHS Physician Leadership Program

Description and specific, detailed content of a complete Physician Leadership Program are outside the scope of this document. Based on information obtained from healthcare organizations outside Alberta and the literature, considerations are suggested for the development of a physician leadership program within the context of an Alberta Leadership Learning Institute.

Basic principles for healthcare leadership learning (Leatt & Porter, 2003) are simple and, adjusted for AHS, look as follows:

1. Should be a life-long learning model, possibly as part of a physician compact.
2. Must be competency-based to be able to identify, quantify, develop, measure and evaluate the capabilities of the LEADS framework at several levels of maturity.
3. Has to be based on the principles of adult learning, i.e. reflective, interactive and participative. The LEADS framework, combined with the 70/20/10 (Duberman, 2011) and the ACS model (Van Velsor et al, 2010) can accomplish that.
4. Must be sustained by fulfilling as many elements as possible for 4 to 6 influences in the matrix of the The Influencer© (table 4).
5. After learning as part of onboarding, the next level of physician leadership development is best done within a framework of quality improvement. As demonstrated at the Ottawa Hospital, Virginia Mason, Intermountain Healthcare, Mayo Clinic and Kaiser Permanente, additional discipline-based silos of HR, finances, basic leadership skills, patient safety, risk management and quality care are all contained in a quality improvement framework.
6. Part of the physician leadership development must be interdisciplinary and cross-functional to develop leadership throughout the healthcare system. Team participation and team leadership skills must be developed continuously; to be successful in a microsystem and in other team settings, both theory and practice of the team process are important, using simulations with immediate feedback. Overall, initiatives for developing capabilities and competencies of individual leaders have limited impact as compared to a collective and systemic approach to leadership.

Evidence from the literature and from interviews on practices and experiences in other organizations suggest that a combination of the following models helps create

powerful experiences in leadership development programs: LEADS, the ACS model, the Influencer© and the 70/20/10 model. The specific content of a leadership program is not within the scope of this paper; good textbooks have been written on developing strong leadership programs (Van Velsor et al, 2010; Yukl, 2006). Instead, the organizational context necessary to make such a program successful will be explored. With single training events, such as workshops, the odds of changing behavior are slim, and without behavioral change any training fails to generate results (Phillips & Phillips, 2002). That is why a system with many feedback loops, like the one we present here, has to be embedded in the organization. Best et al (2012) who looked at large-system-transformation using the realist review wrote, "...a particular intervention or class of interventions triggers particular mechanisms of change somewhat differently in different contexts." For that reason, tools and interventions that are successful in other organizations may not necessarily work within the context of an AHS' physician leadership development program and need to be evaluated within the local context. Furthermore, healthcare organizations do not need to affect all drivers at the same time as improvement in some drivers may have systemic ripple effects (Grimes et al, 2012).

The broad-based interventions across a healthcare organization, such as general physician training events, are unlikely to succeed given the high diversity of physicians. Instead, more focused interventions aimed at particular groups of physicians are more likely to have a positive effect (Grimes et al, 2012), particularly if local leadership and local work area processes and subcultures are the likely causes of lower engagement. Therefore, even when the resources for the physician leadership program are coordinated and standardized centrally, the delivery has to be adjusted in the context of the local team or subunit. Best et al (2012) identified five simple rules for Large (Healthcare) System Transformation to enhance the chance for success: to use a blend of designated and distributed leadership, to establish feedback loops, to attend to history, to engage physicians and to include patients and families. The proposed framework (section 3.3) contains elements of four of the rules, and of all five rules if patients are involved in the action learning of quality improvement initiatives.

From the literature review and the interviews, it appears that development of physician leadership capabilities needs to occur at several levels of maturity. Four levels

may be sufficient: newcomers (onboarding), clinical physician leaders, medical leaders and executive/senior physician leaders. Subgroups within the level of medical leaders may exist or a set of courses on a sliding scale of difficulty may be ‘mixed and matched’ to the individual’s needs based on assessment and measurement of his/her capabilities.

1. Onboarding for all newcomers (mandatory): onboarding has to have a minimum of a social and a practical component and, preferably, also a career development component. The first two components would include a social event with welcoming of senior leadership and a practical component with information to function as a physician in the new environment, governance of AHS and of the healthcare system, basic skills in communication (Crucial Conversations) and in leadership. The event would occur over a few days, similar to the new rotation of residents, for example. A third component on career development can be added to generate interest in leadership and in the organization, possibly in the context of a one-year program and as part of probationary requirements. Learning at the level of onboarding would be for physicians only.
2. Clinical leadership (for all physicians): the premise of training at this level is what is called “All physicians are leaders” at KP and “Everybody has two jobs” at Jønkøping. Leadership skills are learned in the context of quality improvement initiatives and should be mirrored to the ATP model at Intermountain Health. This could be integrated with elements of the existing PLP initiative in Alberta. This level of leadership development would be mainly team-based; experience from other organizations indicates that some components may have to be for physicians-only. To maximize physician engagement in learning quality improvement and leadership, resources have to be generous like in McLeod Regional Medical Center (section 2.3.7). Similarly, the General Practice Services Committee of the Practice Support Program in BC developed a document to facilitate engagement of busy physicians (PSP, 2010).
3. Level of medical leaders: for physicians in formal leadership positions, on a sliding scale of difficulty; learning is aligned with LEADS framework capabilities for different levels of development and maturity.
4. Level of senior/executive medical leaders: not within the scope of this document.

3.2.1. Considerations

It is difficult to make recommendations without a needs assessment and without knowing the context of the local conditions, which vary widely across AHS. However, based on the literature and the interviews, a list of suggestions is proposed, to consider for the development of the physician leadership program and the Alberta (Leadership) Learning Institute. Not all considerations apply to all levels of development.

Consideration #1: to perform a needs assess and gap analysis. The survey by Dr Craighead (Univ Calgary-Dept Oncology) may contribute to some of the information required. To define the groups of physicians to be targeted as there may be variations in curriculum content depending on what part of the organization or province the groups are from.

Consideration #2: to create a Physician Provincial Leadership Council (PPLC) (see also consideration #3); this council should have wide representation from all groups of physicians across the province. Representation from academic institutions (faculties of medicine and business at UA and UC) and from professional organizations (PMI, CSPA, AMA) should be considered.

Consideration #3: to develop a Physician Leadership Resource Manual for Alberta, similar to what was developed in Ontario. As part of the Physician Engagement Strategy, the Ontario Hospital Association (OHA, 2013) established a Physician Provincial Leadership Council (PPLC) in 2010 to provide strategic advice on physician-related health system issues in Ontario. In 2011, the PPLC identified physician leadership as an important area of focus and a physician leadership manual was developed. The goal of the manual was to assist hospitals and physician-leaders in defining roles, responsibilities and expectations for hospital-physician leaders. It was also designed to support physician-leaders in their role by enhancing their leadership skills and building on their knowledge of the healthcare system, hospital governance, relevant legislation, hospital-physician relationships, managing staff and their performance, and more. The six modules were: Healthcare in Ontario; Hospital governance; Leadership basics; Knowing and managing yourself; Leading high-performance teams; Basics of hospital finance; Quality, safety and risk management. As defined in consideration #2, all physician groups in Alberta would be represented as well as partners from academic and professional organizations.

Consideration #4: to develop a curriculum based on the physician leadership resource manual in partnership with professional organizations (AMA, CSPA), universities (faculties of medicine and business at UA and UC), PMI and AHS. The partnership would support academic credibility and diffuse the attention away from any perception of government involvement. The composition of this partnership may or may not be different from the PPLC.

Consideration #5: to develop definitions of different levels of maturity for each capability; to develop categories of learning, including onboarding for newcomers, clinical leadership for quality improvement-related leadership development of all physicians (clinical leaders), medical leadership for physicians in formal leadership roles offering courses with a variety of complexity (scale of progressively more complex courses), and senior/exec leadership.

The last group may be considered for outside training to obtain a degree. The first three levels would be delivered in-house in part by senior physician-leaders.

Consideration #6: for the partnership to develop actions and behaviors that reflect each of the LEADS capabilities at the different levels as defined under consideration #5.

Consideration #7: to develop an ‘Alberta Leadership Learning Institute’; the Advisory Committee for the physician component of the “Alberta Leadership Learning Institute” could be the PPLC. A draft document on “AHS Learning Institute” (AHS-PGO, 2012) has been developed by the AHS Program governance office as described briefly in 2.4.7 and does not have a component specific for physicians. Integration of a component for physician leadership learning and, perhaps a component on learning of clinical skills is feasible). The name of the Learning Institute will have to be carefully chosen to get buy-in from all parties involved.

Consideration #8: for the ‘Alberta Leadership Learning Institute’ to create courses, tools and workshops for facilitating the actions and developing the behaviors as defined in consideration #6.

Consideration #9: to obtain CME credits from the Royal College for Physicians and Surgeons of Canada; for the level of medical leader, to apply those credits towards recognition as Canadian Certified Physician Executive (CCPE) by the Canadian Medical Association and by the Canadian Society for Physician Executives.

Consideration #10: to do a ROI assessment for measuring organizational outcomes before the physician leadership program is initiated and at regular intervals thereafter; to do the Medical Engagement Scale (MES) before implementing the program as a baseline and to measure regularly to monitor changes in physician engagement.

Consideration #11: to define common values to align between physicians and AHS, mainly but not exclusively focused on quality.

Consideration #12: to develop a physician compact with early and broad involvement of physician representation from all groups, using the Ottawa Hospital and Virginia Mason as models.

Consideration #13: to make signing of the compact part of the privileging process at the time of recruitment or reappointment; to adjust the bylaws accordingly. Early involvement of the physicians, two-way communication throughout the process and clarification of roles and responsibilities around a metric/reporting system will contribute to success.

Consideration #14: to make funds available for the leadership time, i.e. for the training resources, for the time commitment during training and for fulfilling leadership roles (alternate payment plans, stipend or session fees).

Consideration #15: to develop a strong onboarding program with regular followup by the physician leaders throughout the first probationary year. The onboarding program should include a social component, practical organizational aspects and some leadership learning. That learning should include basics such as operational practicalities, how the local organization works, governance of AHS at a large scale and, at minimum, an abbreviated version of Crucial Conversations©. Like at the beginning of residency, the onboarding could take a few days and should be mandatory. Onboarding could be expanded into an

entire year with bi-weekly learning and structured mentoring and feedback as part of a probationary period like in Cleveland Clinic.

Consideration #16: to create a safe environment throughout the organization, not only for the leadership development initiatives, but also for the 360 feedback, mentoring and coaching. Due to the size of AHS, anonymity and safety may be easier to accomplish than in a small organization. Providing feedback safely, mentoring and coaching require training.

Consideration #17: to embed a structured mentoring system throughout AHS, using the Mayo Clinic and St. Joseph's as models. Medical and senior leaders need to be involved in this mentoring.

Consideration #18: to make coaching internally available, using the Mayo model as an example; different levels of formal training in coaching are needed (Tri-Namics, Coach-in-a-box, certified coach, executive coach).

Consideration #19: to develop leadership portfolios for annual assessment and for measuring progress against LEADS capabilities; portfolios include annual self-assessments, 360 degrees alternate years, formal and informal feedback in part from mentoring structure.

Consideration #20: to use portfolios as evidence for permanent appointment after probation and for reappointment or promotion.

Consideration #21: to develop a database for building a succession pool based on a scoring card system and using the assessments and measurements collected in consideration #19 and #20.

Consideration #22: to create a list with skills physicians do learn while fulfilling respective physician leadership roles; this may increase interest in leadership development and positions, particularly at the time of onboarding.

Consideration #23: to develop a career stream for physician-leaders based on role description; to develop a description of capabilities and leadership behaviors needed for those respective formal roles.

Consideration #24: to develop a model of action learning where teams work on quality improvement initiatives throughout AHS. Resources have to be made available, similar to what is available in the McLeod Regional Medical Center and Intermountain Health.

Consideration #25: to create opportunities for job-stretching or rotation between 'regions' within SCN's for developing leadership skills in the context of succession/acceleration pools. This can be accomplished with QI initiatives combining formal learning with learning from experience. Skilled facilitating may be required depending on the level of maturity.

Consideration #26: to expand the AHS' online resources for leadership learning with some specific components for physicians only. This may include Harvard ManageMentor, vignettes, PMI online modules, short case reviews, eBooks, electronic interactive communities of practice, etc. Electronic communities of practice can be sustained using interactive software; software like Moodle 2 allows for latency between interactions.

Consideration #27: to further expand PLP for rural and office-based physicians in the context of clinical leadership development and quality improvement throughout AHS.

Consideration #28: to develop the content of the leadership programs centrally but deliver locally, with flexibility to accommodate for the needs of specific groups or subunits. Skillful senior facilitators may be required to make these adjustments. To consider developing the physician leadership program within the context of microsystems (= self-managed operating units at AHS with the intend to down scale toward success).

Consideration #29: to develop one or more leadership development simulation labs.

Consideration #30: to hold an annual AHS leadership conference.

Consideration #31: to facilitate the development of local communities of practice; different types of communities of practice are described in section 3.3.4.

Consideration #32: to start the physician leadership program as a pilot in a few areas where success is likely to occur or where learning from mistakes will be experienced positively; this also allows setting up metrics for evaluation of ROI and other outcomes.

Consideration #33: use the six boxes of the matrix of influence as detailed in the next section (3.3).

Consideration #34: to make leadership learning enjoyable. At Mayo and KP, the physicians identify with the organization and visitors have a very positive feeling about how the physicians talk about their organization.

3.3. Specific strategies – Embedding a Physician Leadership Program within an organizational influence framework

This section highlights how to maintain and facilitate continuous learning within the organization once the knowledge and/or skills have been acquired. It is important that outcome(s) and vital behavior be determined clearly before applying the matrix of influence (figure 4). To increase the chance for success, the six- source strategy matrix (table 4) was expanded with specific strategies for physician leadership development, which should be embedded in the organizational culture and structure. As many elements as possible of four to six boxes of the model in table 4 have to be fulfilled. Elements of the six categories of influence are further detailed, based on the literature, the interviews and conceptual reflections.

3.3.1. Influence Source 1: Personal Motivation (will)

This is the most important of the six categories because, without personal motivation, without the will to do so, nothing else can or will happen. How do we turn something that may not be desirable into something desirable? Making sure that feedback and support structures are in place, how can we create opportunities to ‘try it’ in a safe environment? The table below lists strategies for personal motivation with explanations of those strategies below the box.

<u>Personal Motivation</u>	
Specific Strategies	<ul style="list-style-type: none"> • Senior leaders → engage → leadership engagement • Program is from physicians for physicians; partnership with professional and academic organizations for credibility • Needs assessment and early involvement; what are the physicians’ needs to succeed? • Ask physicians what they value and what frustrates them. • Physician Compact • Recruitment around LEADS capabilities • Onboarding (with workshops on Crucial Conversations and other) • “What’s in it for me?” list. • Self-assessment portfolio • Local initiatives with central support • Stretch skills • Reward time commitment • Rewards like annual conference, books, etc • How to make the right behavior enjoyable

- Good leaders create more good leaders. Research indicates that organizational engagement and interest in leadership occur when senior leaders invite members to engage in leadership development.
- In order to have credibility with physicians, the program needs to be developed in collaboration with professional and academic organizations (ex. physician leadership program in Ontario; see section 3.2). Collaboration with the university of Alberta, (where a small physician leadership program exists), the university of Calgary (Faculty of Medicine is planning a Leadership Institute and succession plan; Dept of Oncology has a small physician leadership development curriculum; PLP with AMA and AHS), PMI, CSPA and AMA would increase credibility and distantiate the program away from the perception of government involvement or from it being an HR offering for employees. All different leadership learning programs can be coordinated under the Alberta Leadership Learning Institute.
- Engage physicians representing all groups early in the needs assessment. Include information about what physicians need, what the barriers are against participating in leadership development or taking leadership roles.
- Find and align common values to develop a mutually agreeable physician compact.
- Make signing of such physician compact a requirement for (re)appointment and credentialing.
- Include LEADS capabilities and leadership potential in evaluation for recruitment.
- Develop a strong onboarding program for newcomers. The program can have several components: a social component, a functional component for immediate use when joining a new organization, and a career component. Onboarding, also known as organizational socialization refers to a mechanism through which new employees acquire the necessary knowledge, skills and behaviors to become effective organizational members, not dissimilar from resident orientation days. Some basic leadership skills and tools can be added (for example, Crucial Conversations©, how to hold an effective meeting, etc.), or onboarding can be part of a one year program while the recruit is on probation, as is done at Cleveland Clinic (see below). Physician leaders should meet with each newcomer, either in person and/or as part of the onboarding activities. In order to interest physicians in physician-leadership, the existing leaders need too first engage the

physicians, particularly the newcomers. The introduction, the appreciation and the acknowledgement with follow-up are very important. Given the size of AHS, this cannot always be done at provincial level and may be accomplished at zonal, hospital, departmental or smaller level. These initiatives should not be lead by mid-level, non-physician HR managers. Onboarding can also be the beginning of continuous career planning.

Research has demonstrated that these socialization techniques lead to positive outcomes for new employees such as higher job satisfaction and performance, greater organizational commitment and employee engagement resulting in reduced stress. In terms of structure, empirical evidence indicates that formal institutionalized socialization is the most effective onboarding method. It is also important to note that in-person onboarding techniques are more effective than virtual ones. Mayo Clinic is conscious about welcoming physicians and building loyalty through the use of symbolic gestures that say “you are now one of us” such as nametags, welcome dinners for staff and families (Bender et al, 1999). At Kaiser Permanente (King & Speckart, 2002; Weisz & Spiegel, 2009), onboarding is also very strong with a slow start to attend orientation and training sessions, to learn about the systems on the job and to network. As a matter of fact, breakfast meetings occur every other week for the first nine months. With mentorship, the performance can be evaluated and additional learning obtained as needed toward permanent employment. At Cleveland Clinic, the onboarding is part of a one-year program where the necessary leadership skills around professionalism are shared in 4-hour workshops every other week for the first year

http://academy.clevelandclinic.org/Portals/40/2013%20Catalog/TAU_schedule%202_2_0_2013.pdf Accessed July 23, 2013).

- “What’s in it for me?” list: a list with skills and tools a physician leader learns during the term as a formal leader; offering this list at the time of onboarding is likely to generate interest in leadership development and roles. At KP and Mayo, organizations led by physicians, physician leadership positions are much desired, in part due to the onboarding and to the opportunities outlined at the time of recruitment.

- A career portfolio around self-assessment and 360-degree evaluations sets goals on leadership development and learning. As physicians are of competitive nature, they want to accomplish their goals.
- Stretch skills are challenges outside the comfort zone within the context of succession pools. Temporary responsibilities for projects and workgroups or a rotation within specialty or SCN in the same or between different regions may be options.
- Time commitments need to be acknowledged with stipends, session fees, or alternate funding. If governments want all physicians involved in transformation of the healthcare system, funds have to be made available outside the fee-for-service system. Rewards do not always have to be monetary and can be tailored to further increase the success of the leadership development.

3.3.2. Influence Source 2: Personal Ability (skill)

Often, what is perceived as lack of motivation by others is actually a lack of skills or ability. Good organizations overinvest in the learning of their members. This box contains mostly learning in the ‘10’ category of the 70/20/10 model (Duberman, 2011), i.e. content and workshop learning.

<u>Personal Ability</u>	
Specific Strategies	<ul style="list-style-type: none"> • Workshops/courses as described in AHS manual (consideration #3); content determined by Leadership Institute in partnership with professional and academic organizations (considerations #2, 4-8) • Action learning as member of team (see social ability) • Outside learning resources, from attending leadership conference to obtaining a degree externally • Onboarding (with workshops on Crucial Conversations and other) • Simulations and simulation lab. • On-line modules (PMI, Harvard Mentor, vignettes, “quick checks”,...) • Book and reprint resources (online) • Book/journal club

- Learning activities will be listed in the AHS manual, in consideration #3 of section 3.2.
- Make funding for some outside learning resources available (see also influence source on Structural Motivation in section 3.3.5).

- Simulations and simulation lab: simulations of crucial conversations and team process can take place anywhere with good facilitating; simulation labs to learn and practice leadership skills can be developed with minimal costs (~\$130,000 per lab) in different areas of the province and can be made portable.
- Develop online resources, to be updated frequently. This may include learning modules from Harvard ManageMentor and PMI, vignettes, short and fast readings to be used around skills and topics needed immediately, eBooks, reprints, etc.
- Create local journal clubs for dialogue around a paper or book of the month.

3.3.3. Influence Source 3: Social Motivation

This category falls under the ‘20’ of the 70/20/10 model, which includes mentoring and coaching. How can peer pressure be harnessed? How can others provide encouragement into the new behavior? How can peer pressure be used as an advantage?

<u>Social Motivation</u>	
Specific Strategies	<ul style="list-style-type: none"> • Mentoring: <ul style="list-style-type: none"> ○ E-mentoring: AHS software; PDA ○ F2f (peer and other) ○ Group/committee • Process advising • Coaching: <ul style="list-style-type: none"> ○ F2f ○ Coaching Ourselves ○ Tri-Namics for LEADS ○ Coach-in-a-box ○ E-Coaching and telephone ○ Coach on call • Portfolio review around 360 • Accountability of “heads” to encourage physicians to use learned skills.

- Mentoring can include any of these three components: emotional and psychological support, direct assistance in career and professional development and, role modeling. The traditional mentoring model of one stable, long-term mentor-mentee dyad relationship may becoming less viable. Forces such as rapidly changing technology, shifting organizational structures, and global healthcare system dynamics have transformed mentoring into a process that by necessity extends beyond the services of a single

mentor. Mentoring has become an effective means for coping with organizational change. A collection of mentors is invaluable, providing different perspectives, knowledge and skills while serving multiple mentoring functions (de Janasz et al, 2003; DeCastro et al, 2013); St. Joseph's in London Ontario is using such mentoring committee with 2-3 mentors per newcomer. Geisinger and Mayo have strong mentoring networks and the Quebec Health and Social Services have created a new organizational practice where a mentor is designated to each newly-arrived physician to answer questions, quickly identify problems or potential problems and help address issues as soon as possible. Good mentoring needs some training and will need to be coordinated well in order to create a safe environment in which mentoring can be effective and efficient. Time, complexity and geography are major obstacles to mentoring to support busy leaders and physicians, such that time is a challenge for both the mentee and mentor. Bamford (2008, 2010) developed an app for electronic mentoring with PDA devices using a camera. The software would even trigger some of the questions or thoughts to guide the mentor. The tool was well perceived, has probably improved since publication and would fit into AHS' extensive electronic connections and technology. AHS has 'MyMentoring Network' on the intranet for employees to make or maintain connections between mentors and mentees who search expertise or have experience at 5 different levels. Accessing 'MyMentor Network' with handheld devices would be interesting and useful.

- The positive impacts of coaching have been reported to result in 73% better relationships, 72% improvement in communication and 71% improvement in interpersonal skills. (<http://www.pattywolfe.com/ICF%20Study.pdf>). External executive coaching is expensive and mostly reserved for senior leaders. Internal coaches can be available within the organization, from individuals who only took the PMI course on 'Physicians as coaches', to "Coaching out of the box", to process advisors or, preferably, individuals with formal training in coaching like is seen at Mayo Clinic. Some have advocated a "dial-a-coach" where a coach carries a pager to be available immediately. Some form of coaching in very small groups can be done using CoachingOurselves by Minzberg (<http://www.coachingourselves.com/>); this is more for team setting and perhaps of limited value for physician leaders. Tri-Namics for LEADS in a caring environment may

be more suitable, particularly for coaching in triads (Payne & Hagge, 2012) and only a short training is required to become skillful.

- Process advising (Guthrie, 1999): is different from executive coaching in that it blends coaching elements and elements from mentoring. It may be more suitable specifically for leadership development. AHS is large enough to have internal, anonymous process advisors somewhere else in the province if needed. The service provided is a blend of face-to-face and telephone and electronic communication. The elements are ASSESS: expert, feedback provider and partner in reflective thinking; CHALLENGE: dialogue partner and accountant (as in accountability); SUPPORT: role model for the leadership component, counselor aiding in the emotional side of leadership learning, positive reinforcer and historian tracking progress and accomplishments. It is usually less intense than executive coaching.
- 360-degree feedback: In order to grow, appropriate assessment and planning need to take place. 360's and other evaluations can be used as tools for dialogue to determine learning needs rather than as a performance review in the old and strict sense of the definition. Experience is needed on how to provide feedback, particularly for physicians who are not trained for either providing feedback or for creating a safe environment to do so. A meta-analysis on 360-degree feedback revealed that poorly designed feedback assessments or interventions can actually increase disengagement and cause a decline in performance. (Nowack K & Mashihi, 2012). The skills to do this expertly do not come naturally and need training. (Dubinsky et al, 2010).

3.3.4. Influence Source 4: Social Ability

This category falls under the '70' of the 70/20/10 model, learning that should take place on the job through problem-solving and special assignments. Quality improvement initiatives and action learning fall under the '70', in the context of team, collaboration and community of practice, where the total is more than the sum of its parts.

<u>Social Ability</u>	
Specific Strategies	<ul style="list-style-type: none"> • On boarding • Book/journal club, electronic or in person • Community of practice in person • Community of practice: electronic (Moodle) • Community of practice tele/videoconferencing • Balint group (peer mentoring/COP): 'safe-confidential-supportive' dialogue → with senior peer or trained facilitator • Schwartz Round ® (modified Balint group, i.e. for multidisciplines) • Dyads/triads • Deliberate practice with rehearsal team • Annual AHS Leadership conference • Annual Canadian Conference for Physician Leaders • Fireside chats - Socializing event (beer and pizza) • Action learning with or without QI initiatives

- Community of Practice (COP): is different from a group, team, collective or aggregate. The keyword is PRACTICE and the key difference lies in the power of shared activities to create shared knowledge and shared ways of knowing. In a COP, people are not just united by membership in a group or category, they are involved with one another in action (Drath & Paulus, 1994). A Balint group (Roberts, 2012) helps with personal and professional resilience and can also be used for leadership issues. A small group of physicians, possibly with a facilitator, meets regularly for one or two hours over a longer period of time. The confidential environment should allow for safe reflection on difficult encounters, how this affected individuals on an emotional basis and have a purposeful dialogue under the guidance of a skilled facilitator toward possible resolution(s). It is interesting that the quest for and cultivation of contact with colleagues is also one of the strategies used by physicians to reduce emotional stress and the chance for burnout. Whereas the Balint group is a community of practice for peer support, a Schwartz Round involves members of all disciplines.
<http://www.kingsfund.org.uk/publications/schwartz-center-rounds-pilot-evaluation> ;
<http://www.theschwartzcenter.org/ourprograms/rounds.aspx>). COP's can also work well online, using interactive software like Moodle 2.0 which allows for latencies without interrupting the flow of thinking.

- A journal/book club and an annual leadership conference are tools that contribute to the categories of both social and personal ability. Simple social events like fire chats, a dinner, wine and cheese and TGIF fall under this category too.
- Action learning inside or outside the context of quality improvement initiatives is a major component of this '70' category. Details about action learning are not part of this document and can be studied at the Learning Institutes of Intermountain Health and Virginia Mason. Evidence in a recent review on the effectiveness indicates that action learning: develops broad executive and managerial leadership skills, particularly collaborative leadership and coaching skills; improves the ability to develop integrative win/win solutions to conflict situations; helps acquiring critical skills to success like questioning and listening, learning from the diversity of group members, feeling confident, creating a safe environment and some coaching; helps with learning of team processes, how to implement solutions, how to obtain support from top decision makers and how to leverage organizational resources (Leonard &Marquardt, 2010).
- Dyads/triads: is the dyad/triad model a structural solution to engage physicians into leadership roles? Physicians do not behave differently in dyads with a manager or administrator unless they possess the right skills to do so and, they should be partners with equal skills (which cannot be done with a 0.2 FTE). Due to confidentiality, no further information can be provided about conversations on the success of dyads in Canada and AHS. It may be interesting to find out how physicians at AHS perceive their dyad's functioning, i.e. do the dyad data look good on paper only or are they also good as functional and relational partnership? Geisinger Healthcare and the Mayo Clinic have well-functioning dyads and Capital Health in Halifax is implementing new initiatives to improve the trust level.
- Learn with and from peers during the annual Canadian Conference for Physician Leaders organized by the Canadian Society for Physician Executives.
- Organize an annual AHS leadership conference similar to the BC Health Leadership Conference (http://www.cchl-ccls.ca/default_conferences.asp?active_page_id=8064) and the Annual Conference for alumni organized by Intermountain Health (<http://intermountainhealthcare.org/qualityandresearch/institute/alumniresources/Pages/AnnualATPALumniConference.aspx>).

3.3.5. Influence Source 5: Structural Motivation

Aligning rewards, measurements and accountability are part of this category.

<u>Structural Motivation</u>	
Specific Strategies	<ul style="list-style-type: none"> • Reimbursement for time – session fee - salary • CME credits toward CCPE credentialing • Stipend for outside learning • Recognition for finished projects • Awards • Succession pools • Leadership portfolio (and 360) → performance review → promotion • Work with new responsibilities after “return” • Alberta Leadership Learning Institute

- Make sure that income loss is not a deterrent to leadership behavior and roles. Session fees, stipends or salaried positions have to be made available for leadership activities.
- Obtain CME credit for formal leadership learning through the Alberta Leadership Learning Institute.
- Negotiate to have some CME credit qualify toward recognition for Canadian Certified Physician Executive honored by the Canadian Society of Physician Executives and by the Canadian Medical Association.
- Provide stipends to encourage outside learning for skills not available internally.
- Recognize accomplishments, particularly QI projects (some organizations do posters, acknowledgements in newsletter, awards with or without social event).
- Make promotion dependent on contribution toward leadership and/or QI portfolio. This may apply more in an academic context. For AHS, it may mean adding the individual to the acceleration or succession pool.
- A physician who has taken a significant amount of courses has to be given new responsibilities such that s/he can practice the newly acquired skills, preferably around the concept of action learning.
- As the physician develops higher capability levels of the LEADS framework, s/he should be involved in facilitating action learning projects and possibly other learning activities through the Alberta Leadership Learning Institute.

3.3.6. Influence Source 6: Structural Ability

How can “structure” influence behavior? What can be introduced structurally to enable and facilitate practicing the new leadership capabilities? What structural feedback loops can be introduced to reinforce the leadership behavior and capabilities?

<u>Structural Ability</u>	
Specific Strategies	<ul style="list-style-type: none"> • Physician compact/agreement • Probationary period before permanent appointment (with mentoring and annual review) • 360 eval and portfolio as part of annual review • Leadership portfolio for organizational contributions. • Temporary assignments/expanded responsibilities • Lead of QI initiatives • Action learning projects (QI and other) • Build many structural feedback loops • Succession/acceleration pools • Alberta Leadership Learning Institute

- Introduce the signing of a physician compact as a requirement for privileging. In the healthcare organizations with a physician compact, there is no alternative. At TOH, all physicians have signed an agreement; those who resisted did end up signing after a conversation with the chief of staff and then, if wanted, with the CEO; nobody went as far as the board. At TOH bylaws were adjusted only after the medical staff had accepted the physician compact.
- Introduce a probationary period of one to three years during which the physician can learn from the mandatory courses as part of the onboarding. Mentoring and annual evaluation in a structured way would add further information before a decision on a permanent appointment would be made.
- Create temporary assignments and expanded responsibilities like workgroups, QI projects, exchange responsibilities. Can this, for example, be done between geographic areas within one SCN or between groups within the same geographical region?
- Action learning projects, with or without direct quality improvement outcome, are an expectation from physicians and physician leaders as part of their evaluation portfolio.
- Creating an entire philosophy of leadership (and QI) learning within the context of an Alberta Leadership Learning Institute will embed leadership (and QI) development into the structure and culture of AHS.

Table 4: The Six Sources Strategy Matrix
Specific Strategies to increase physicians' chances of success as leaders

Source 1: Personal Motivation	
Specific Strategies	<ul style="list-style-type: none"> • Senior leaders → engage → leadership • Program is from physicians for physicians; partnership with professional and academic organizations for credibility • Needs assessment and early involvement; what are the physicians' need to succeed? • Physician Compact • Recruitment around LEADS capabilities • Onboarding • "What's in it for me?" list. • Self-assessment portfolio • Local initiatives with central support • Stretch skills • Reward time commitment • Rewards like annual conference, books, etc • How to make the right behavior enjoyable

Source 2: Personal Ability	
Specific Strategies	<ul style="list-style-type: none"> • Workshops/courses as described in AHS manual; content determined by Leadership Institute in partnership with professional and academic organizations • Action learning as member of team • Outside learning resources, from attending leadership conference to obtaining a degree externally • Onboarding (with workshop on Crucial Conversations and other) • Simulations and sim lab. • On-line modules (PMI, Harvard Mentor, vignettes, "quick checks",...) • Book and reprint resources (online) • Book/journal club

Source 3: Social Motivation	
Specific Strategies	<ul style="list-style-type: none"> • Mentoring: <ul style="list-style-type: none"> ○ E-mentoring: AHS software; PDA (Twitter?) ○ F2f (peer and other) ○ Group/committee • Process advising • Coaching: <ul style="list-style-type: none"> ○ F2f ○ Coaching Ourselves ○ Tri-Namics for LEADS ○ Coach-in-a-box ○ E-Coaching and telephone ○ Coach on call • Portfolio review around 360. • Accountability of 'heads' to encourage physicians to use learned skills

Source 4: Social Ability	
Specific Strategies	<ul style="list-style-type: none"> • On boarding • Book/journal club, electronic or in person • Community of practice in person • Community of practice: electronic (Moodle) • Community of practice tele/videoconferencing • Balint group (peer mentoring): 'safe-confidential-supportive' dialogue → with senior peer or trained facilitator • Schwartz Round @ • Dyads/triads • Deliberate practice with rehearsal team • Action learning with and without QI initiatives • Annual AHS Leadership conference • Annual Canadian Conference for Physician Leaders • Fireside chats - Socializing event (beer and pizza)

Source 5: Structural Motivation	
Specific Strategies	<ul style="list-style-type: none"> • Reimbursement for time - session fee - salary • CME → CCPE • Stipend for outside learning • Recognition for finished projects • Awards • Succession pools • Leadership portfolio (and 360) → performance review → promotion • Work with new responsibilities after "return" • Leadership Learning Institute

Source 6: Structural Ability	
Specific Strategies	<ul style="list-style-type: none"> • Physician compact/agreement • Probation • 360 eval and portfolio as part of annual review • Leadership portfolio for organizational contributions. • Three years probation with mentoring and annual review. • Temporary assignments/expanded responsibilities • Lead of QI initiatives • Action learning projects (QI and other) • Build structural feedback loops • Succession Pools • Leadership Learning Institute

Model adapted from Grenny, 2013: content from literature review or interviews

References

- AHS Program Governance Office – Charter for Leadership Development Program (version 8), 2011.
- AHS (the Medical Engagement Literature Review Team). (2012). Medical staff engagement: literature review. <http://www.albertahealthservices.ca/medicalstaff/wf-ms-mseqwg-literature-review.pdf> Accessed July 8, 2013.
- AHS-POG (2012). AHS Learning Institute-Business case. Program Governance Office. Version 1.0; March 31, 2012.
- Alberta Government. (2013). Working together to build a high performance health system: Report of the Health Governance Review Task Force. <http://www.health.alberta.ca/documents/High-Performance-Health-System-2013.pdf> Accessed July 23, 2013.
- Baker R, MacIntosh-Murray A, Porcellato C et al. (2008). High Performing Health Care Systems: Delivering Quality by Design. Longwoods, Toronto.
- Baker R & Dennis JL. (2011). Medical leadership in health care systems: from professional authority to organizational leadership. *Public Money and Management* 31 (5): 355-362.
- Bamford C. (2010). Mentoring in the twenty-first century. *Leadership in Health Services* 24(2): 150-163. <http://www.nliah.com/portal/microsites/Uploads/Resources/M4mwOI6JO.pdf>
- Bender C, DeVogel S & Blomberg R. (1999). The socialization of newly hired medical staff into a large health system. *Health Care Manage Rev* 24(1): 95-108.
- Best A, Greenhalgh T, Lewis S et al. (2012). Large-system transformation in healthcare. *The Milbank Quarterly* 90(3): 421-456.
- Black N. (2013). Can the NHS survive? *NEJM* 369: 1-2.
- Blumenthal D, Bernard K, Bohnen J & Bohmer R. (2012). Addressing the leadership gap in medicine: residents' need for systematic leadership development training. *Academic Medicine* 87 (4): 513-522.
- Bohmer R. (2012). The instrumental value of medical leadership. White Paper - The King's Fund, London, England.
- Bryan S & Lewis S. (2011). Physician performance and productivity *in* Medical Makeover: Redesigning physician services for tomorrow's health system. Report of the summit meeting, Fraser Health, November 2011.
- Bujak JS. (2003). How to improve hospital-physician relationships. *Frontiers of Health Services Management* 20(2): 3-21.
- Buzachero V, Phillips J, Phillips P, Phillips Z. (2013). Measuring ROI in Healthcare: Tools and techniques to measure the impact and ROI in healthcare improvement projects and programs. McGraw Hill, Toronto.
- Byham W, Smith A & Paese M. (2002). Grow your own leaders: How to identify, develop and retain leadership talent. Acceleration pools: a new method of succession management. Prentice Hall, New York.
- Clark J. (2012). Medical Engagement: too important to be left to chance. The King's Fund, London, England. <http://www.kingsfund.org.uk/sites/files/kf/medical-engagement-nhs-john-clark-leadership-review2012-paper.pdf> Accessed July 7, 2013.
- Cowell J, McBrien-Morrison C & Flemons W. (2012). Physician advocacy, physician engagement – Two sides of the same coin. *Qmentum Quarterly* 4(3): 26-29.

- Craighead P, Anderson R & Sargent R. (2011). Developing leadership within an academic medical department in Canada: a roadmap for increasing leadership span. *Healthcare Quarterly* 14(3): 80-84.
- Crosson F. (2003) Kaiser Permanente: a propensity for partnership. *BMJ* 326: 654.
- Courchesne C, Lorenzen M & Langlais C. (2012). Physician engagement in Canadian Forces Health Services Accreditation. *Qmentum Quarterly* 4(3): 10-13.
- Davidson PL, Griffith JR, Sinioris M and Carreon, DC. (2005). "Evidence-Based Leadership Development for Improving Organizational Performance." Evaluation Report to the National Center for Healthcare Leadership (NCHL), August 2005.
- Day D. (2002). Leadership development: a review in context. *Leadership Quarterly* 11 (4): 831-841.
- DeCastro R, Sambuco D, Ubel P et al. (2013). *Academic Medicine* 88(4): 488-496.
- deJanasz S, Sullivan S & Whiting V. (2003). Mentor networks and career success: lessons for turbulent times. *Academy of Management executive* 17(4): 78-91.
- Dennis JL, Baker R, Black C, Langley A, Lawless B et al. (2013). Exploring the dynamics of physician engagement and leadership for health system improvement: prospects for Canadian healthcare systems. <http://www.cfhi-fcass.ca/PublicationsAndResources/researchreports/articleview/13-04-16/c2dcf12c-680f-4b63-91ab-bc3e726b523f.aspx> Accessed June 4, 2013.
- Dickinson H, Ham C, Snelling I, & Spurgeon P. (2013). Are we there yet? Models of medical leadership and their effectiveness: an exploratory study. NHS-National Institute for Health Research. http://www.netscc.ac.uk/hsdr/files/project/SDO_FR_08-1808-236_V07.pdf Accessed April 28, 2013.
- Dickson G. (2012). Anchoring physician engagement in vision and values: principles and framework. http://www.rqhealth.ca/inside/publications/physician/pdf_files/anchoring.pdf Accessed July 7, 2013.
- Drath W. (2001). *The Deep Blue Sea: Rethinking the Source of Leadership*. Center for Creative Leadership – Jossey-Bass, San Francisco.
- Drath W & Paulus C. (1994). *Making common sense: Leadership as meaning-making in a community of practice*. Center for Creative Leadership, Greensboro, North Carolina.
- Duberman T. (2011). Developing physician leaders today using the 70/20/10 rule. *Physician Executive* 37(5): 66-68.
- Dubinsky I, Jennings K, Greengarten M & Brans A. (2010). 360-degree physician performance assessment. *Healthcare Quarterly* 13(2): 71-76.
- Francescutti L (2012). Physician disengagement: can it be reversed? *Qmentum Quarterly* 4(3): 6-9.
- Francis R. (2013). Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry.
- Frank, J. R. (2005). *The CanMEDS 2005 physician competency framework. Better standards. Better physicians. Better care*. Ottawa, ON, Canada: The Royal College of Physicians.

- Fraser Health (2011). Physician performance and productivity *in* Medical Makeover: Redesigning physician services for tomorrow's health system. Report of the summit meeting, Fraser Health, November 2011.
- Gfeller P & Lacaille MC. (2012). Accompanying new doctors in Quebec's Health and Social Services Centres. *Qmentum Quarterly* 4(3): 38-40.
- Goodall A. (2011). Physician-leaders and hospital performance: is there an association? *Social Science & Medicine* 73: 535-539.
- Gosfield A & Reinertsen JL. (2003). Doing well by doing good: Improving the business case for quality. Institute for Healthcare Improvement. http://www.uft-a.com/PDF/uft-a_White_Paper_060103.PDF Accessed July 7, 2013.
- Gosfield A & Reinertsen JL. (2010). Achieving clinical integration with highly engaged physicians. Institute for Healthcare Improvement. <http://www.ihl.org/knowledge/Pages/Publications/AchievingClinicalIntegrationHighlyEngagedPhysicians.aspx> Accessed July 7, 2013.
- Greenleaf R. (2002). *Servant Leadership*. Paulist Press, New York.
- Grenny J, Maxfield D & Shimberg A. (2008). How to have influence. *MIT Sloan Management Review*: 50 (1)(Fall issue): 47-52.
- Grenny J, Patterson K, Maxfield D, McMillan R & Switzler A. (2013) *Influencer*. McGraw Hill, New York.
- Grimes K & Swettenham J. (2012). *Compass for Transformation: Barriers and Facilitators to Physician Engagement*. http://www.rqhealth.ca/inside/publications/physician/pdf_files/compass.pdf Accessed July 7, 2013.
- Grove J, Kibel B & Haas T. (2007). EvaluLEAD: An open-system perspective on evaluating leadership development. *In: The Handbook of Leadership Development Evaluation*. pp. 71-110. Jossey-Bass-Wiley publ, San Francisco.
- Groves K. (2007). Integrating leadership development and succession planning best practices. *Journal of management development* 26(3): 239-260.
- Guthrie V. (1999). *Coaching for action: a report on long-term advising in a program context*. Center for Creative Leadership, Greensboro, North Carolina.
- Halligan A. (2012). UCL partnership NHS Staff College. *British J Hosp Medicine* 73(11): 604-605.
- Halligan A. (2013). Investing in leadership post-Francis. *Health Services Journal*, February 26, 2013.
- Ham C. (2008). Doctors in leadership. *Int J Clinical Leadership* 16: 11-16.
- Ham, C. (2010). The coalition government's plans for the NHS in England. *BMJ* 341:3790.
- Ham C & Dickinson. (2008). Engaging doctors in leadership: What can we learn from international experience and research evidence? NHS Institute for Innovation and Improvement. http://www.aomrc.org.uk/publications/statements/doc_view/198-engaging-doctors-what-can-we-learn-from-international-experience-and-research-evidence.html Accessed April 2, 2013.
- Hamilton P, Spurgeon P, Clark J, Dent J, Armit K. (2008). *Engaging doctors*. NHS-Institute for Innovation and Improvement. www.institute.nhs.uk/medicalleadership Accessed March 1, 2013.
- Hannum K & Martineau J. (2008). *Evaluating the Impact of Leadership Development*. Pfeiffer-Wiley publ, San Francisco.

- Hannum K, Martineau J & Reinelt C. (2007). *The Handbook of Leadership Development Evaluation*. Jossey-Bass-Wiley publ, San Francisco.
- Hartely J & Benington J. (2010). *Leadership for Healthcare*. The Policy Press, Portland, OR.
- HQCA. (2012). Review of the quality of care and safety of patients requiring access to emergency department care and cancer surgery and the role and process of physician advocacy. Accessed July 23, 2013.
<http://www.hqca.ca/assets/files/EDCAP%20FINAL%20REPORT.pdf>
- Hunt J, Gruenewaldt E, & Hagen-Lyster A. (2011). Engaging the next generation of health leaders: Perspectives of emerging health leaders. *Healthcare Management Forum* 24: 4-8.
- Kaissi A. (2012). A roadmap for trust: Enhancing physician engagement.
http://www.rqhealth.ca/inside/publications/physician/pdf_files/roadmap.pdf Accessed July 7, 2013.
- Kenney C. (2011). *Transforming Health Care: Virginia Mason Medical Center's Pursuit of the Perfect Patient Experience*. CRC Press, New York.
- King H & Speckart C. (2002). Ten evidence-based practices for successful physician retention. *The Permanente Journal* 6(3): 52-54.
- Keogh B. (2013). Review into the quality of care and treatment provided by 14 hospital trusts in England: overview report. <http://www.nhs.uk/NHSEngland/bruce-keogh-review/Documents/outcomes/keogh-review-final-report.pdf> Accessed July 17, 2013.
- King'sFund (2012): Leadership and engagement for improvement in the NHS: Together we can. Report from The King's Fund Leadership Review.
http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/leadership-for-engagement-improvement-nhs-final-review2012.pdf Accessed June 3, 2013.
- Kirkpatrick D & Kirkpatrick J. (2006). *Evaluating Training Programs: Four Levels*. 3rd ed. Berrett-Koehler, San Francisco.
- Kirkpatrick I, Jespersen PK, Dent M, Neogy I. (2009). Medicine and management in a comparative perspective: the case of Denmark and England. *Sociology of Health and Illness* 31 (5): 642-658.
- LEADS in a caring environment framework (2012). <http://www.chlnet.ca/leads-caring-environment-framework> Accessed July 12, 2013.
- Leatt P & Porter J (2003). Where are the healthcare leaders? The need for investment in leadership development. *Healthcare Papers* 4(1): 14-31.
- Light D & Dixon M. (2004). Making the NHS more like Kaiser Permanente. *BMJ* 328: 763-765.
- Leonard S & Marquardt M. (2010). The evidence for the effectiveness of action learning. *Action Learning: Research and Practice* 7(2): 121-136.
- MacNeil K. (2011). How trust strengthens and sustains co-leadership at Capital Health. Master's thesis, Royal Roads University, BC.
- McGuire S, Kitts J, Turnbull J, Worthington J, Forster A. (2012). Developing an organizational strategy to support physician engagement and quality. *Qmentum* 4(3): 14-17.
- Meehan D & Reinelt C. (2007). Accelerating learning about leadership development: a learning community approach. *In: The Handbook of Leadership Development Evaluation*. pp. 511-535. Jossey-Bass-Wiley publ, San Francisco.

- Merlino J & Raman A. (2013). Health care's service fanatics. *Harvard Business review* 91(5): 108-116.
- Mintzberg H. (1979). *The Structuring of Organizations*. Prentice-Hall, Englewood Cliffs).
- Mipos D. (2002). Are all physicians leaders? *The Permanente Journal* 6(3): 55-56.
- Mountford J & Webb C. (2009). When clinicians lead. *McKinsey Quarterly* (February): 1-8.
- NAGSPE. (2013). A promise to learn – a commitment to act. Improving the safety of patients in England. National Advisory Group on the Safety of Patients in England. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226703/Berwick_Report.pdf Accessed August 8, 2013.
- NHS Institute for Innovation and Improvement & Academy of Medical Royal Colleges. (2010). *Medical Leadership Competency Framework*, 3rd ed. http://www.yorksandhumberdeanery.nhs.uk/about_us/news/documents/Medical%20Leadership%20Competency%20Framework%203rd%20ed.pdf Accessed July 12, 2013.
- Nowack K & Mashih S. (2012). Evidence-based answers to 15 questions about leveraging 360-degree feedback. *Consulting Psychology Journal: Practice and Research* 64(3): 157-182.
- OHA (Ontario Hospital Association). (2013). *Physician Leadership Resource Manual*. Accessed July 20, 2013. <http://www.oha.com/CurrentIssues/keyinitiatives/PhysicianandProfessionalIssues/QPSGT/Pages/PhysicianLeadershipResourceManual.aspx>
- O'Sullivan H & McKimm J. (2011). Medical leadership: an international perspective. *British J Hospital Medicine* 72 (11): 638-641.
- Payne D & Hagge E. (2012). Tri-Namics: Leadership wisdom for the health system – LEADS in a caring environment. *Deberna Coaching International* (www.deberna.com)
- Phillips J & Phillips P. (2002). Eleven reasons why training and development fails...and what you can do about it. *Training* (September): 1-10.
- Phillips J & Phillips P. (2007). Measuring return on investment in leadership development. *In: The Handbook of Leadership Development Evaluation*. pp. 137-173. Jossey-Bass-Wiley publ, San Francisco.
- Phillips J, Phillips P & Ray R. (2012). *Measuring Leadership Development: Quantify your program's impact and ROI on organizational performance*. McGraw Hill, Toronto.
- PMI. (2013). *Talent Management: developing physician leaders*. http://www.cma.ca/multimedia/CMA/Content/Images/Inside_cma/Leadership/2013/descriptions/2013-Talent-Management.pdf Accessed July 7, 2013.
- PSP. (2010). *An incomplete guide to engaging physicians into quality improvement*. Practice Support Program – General Practice Services Committee, BCMA and MoH, BC. (<http://www.gpsbc.ca/psp/practice-support-program>) Accessed July 12, 2013.
- RACMA (2011). *Medical Leadership and Management Curriculum Document*. http://www.racma.edu.au/index.php?option=com_content&view=article&id=393&Itemid=104 Accessed May 2, 2013.
- Reinertsen JL, Gosfield A, Rupp W, Wittington JW. (2007). *Engaging physicians in a shared quality agenda*. IHI Innovation series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement. www.IHI.org Accessed March 1, 2013.
- Roberts M. (2012). Balint groups: a tool for personal and professional resilience. *Canadian Family Physician* 58: 245.

- Scott C, Theriault A, McGuire S, Samson A, Clement C & Worthington J. (2012). Developing a physician agreement at the Ottawa Hospital: a collaborative approach. *Healthcare Quality* 15(3): 50-57.
- Silversin J & Kornacki M (2000). Leading physicians through change. American College for Physician Executives. ACPE, Tampa, Florida.
- Silversin J. (2011). Engaging physicians: Insights and actions for results. IHI 2011 Forum.
http://ep50.eventpilotadmin.com/doc/clients/IHI/IHI2011/library/AB12_Presentation.pdf Accessed June 20, 2013.
- Spurgeon P, Barwell F & Mazelan P. (2008). Developing a medical engagement scale (MES). *International Journal of Clinical Leadership* 16: 213-223.
- Spurgeon P, Mazelan P & Barwell F. (2011a). Medical Engagement: a crucial underpinning to organizational performance. *Health Serv Manage Res* 24(3): 114-120.
- Spurgeon P, Clark J & Ham C. (2011b). *Medical Leadership: From the dark side to centre stage*. Radcliffe Publ, London, UK.
- Steinert Y, Naismith L & Mann K. (2012). Faculty development initiatives designed to promote leadership in medical education. A BEME systematic review. *Medical Teacher* 34: 483-503, 2012.
- Stoller J. (2008). Developing physician-leaders: key competencies and available programs. *Journal of Health Administration Education* (Fall): 307-328, 2008.
- Taitz J, Lee T & Sequist T. (2011). A framework for engaging physicians in quality and safety. *BMJ Quality and Safety*: July 14, 2011.
<http://qualitysafety.bmj.com/content/early/2011/07/13/bmjqs-2011-000167.short> Accessed July 8, 2013.
- Van Velsor E, McCauley C & Ruderman M. (2010). *Handbook of Leadership Development*. The Center for Creative Leadership, Jossey-Bass-Wiley, San Francisco, CA.
- Weisz J & Spiegel N. (2009). SCPMG University: Helping new physicians adapt and succeed. *The Permanente Journal* 13(1): 78-79.
- West M & Dawson J. (2012). Employee engagement and NHS performance.
<http://www.kingsfund.org.uk/sites/files/kf/employee-engagement-nhs-performance-west-dawson-leadership-review2012-paper.pdf> Accessed July 21, 2013.
- Yukl G. (2006). *Leadership in Organizations*. 6th ed. Pearson Custom Publishing, Boston, MA.
- Zwack J and Schweitzer J. (2013). If every fifth physician is affected by burnout, what about the other four? Resilience strategies of experienced physicians. *Academic Medicine* 88(3): 382-389.