



Female Physician Leaders in Alberta Health Services



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Services

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December 20, 2018

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Executive Summary

Alberta Health Services (AHS) has undertaken an overview of women in medical leadership within the organization. The purpose of this work is to help us better understand the experience of female medical leaders and female medical staff aspiring to be leaders within AHS. Many of the findings apply not only to female medical leaders and staff, but to medical leadership more broadly across the organization and, as a result, the findings and recommendations outlined align with AHS' Medical Leadership Strategic Plan, which is currently under development.

The goals of this review were threefold:

- 1) To develop a broad understanding of the current state of female physician leadership in AHS.
- 2) To explore opportunities to improve supports and encouragement for female physician leaders.
- 3) To develop recommendations for consideration by the Chief Medical Officer (CMO) that will encourage and support female physicians to consider and/or continue in physician leadership roles.

AHS is shining a light on diversity and how the organization can create a psychologically safe environment for patients, staff and physicians of all genders, ethnic groups and denominations. This leads to better satisfaction for staff, physicians and volunteers and a higher performing system for patients and their families. This report is an important part of this goal.

This report was undertaken as part of AHS' commitment to fostering a medical leadership group that is representative of its medical staff, as well as taking actions toward increasing the number of women in medical leadership positions. This review will help guide the development of education materials and improved processes that support women who currently hold or are seeking medical leadership roles within AHS. This document also supports AHS' Medical Leadership Strategic Plan, which aims to better support medical leaders more generally across the organization.

Comparative data from other Canadian jurisdictions and healthcare systems on the experiences of female physician leaders and the gender composition of medical leadership is not readily available. This demonstrates that Alberta is breaking new ground and leading the nation in this work; AHS is not only discussing and examining this important issue within the medical community, but is also being proactive in finding solutions and making efforts toward meaningful, lasting change.

Although it is important to acknowledge that discrimination and harassment against female physicians has been reported within AHS – as has been the case within many other healthcare organizations in Canada and abroad – addressing these incidents is not the intended purpose of this report. Addressing these incidents is a key responsibility of medical leaders and physicians. Staff with concerns regarding harassment and discrimination in the workplace are encouraged to report incidents to a leader in their zone or program.

Report Methodology

Two individuals led the collection and initial review of the data which forms the basis of this report.

Data was collected using three methods:

- Survey: A mixed-method online survey of all AHS physician leaders. A total of 170 responses were received (response rate of 30%). The survey was published using the AHS Survey Select Tool and results were analyzed using the Statistical Package for the Social Science (SPSS) statistical analysis software. T-tests and chi square statistical analyses were conducted with an error rate or statistical significance rate of $p < 0.05$.
- Focus groups: A standard tool was created to support focus-group facilitation. Ten focus groups were conducted with 69 participants. Focus-group data was aggregated by question and then grouped by theme.
- Interviews: 30 interviews were held with physician leaders in AHS (24), and with some external to AHS (six). A standard interview tool was used to guide the interviews. Interview data was aggregated by question and then grouped by theme.

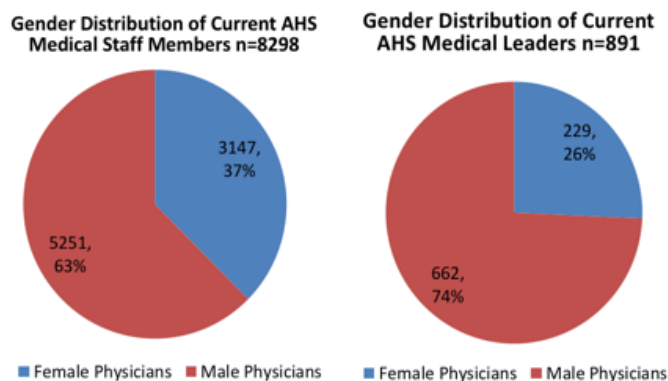
AHS Provincial Medical Affairs provided detailed data on current physician and medical leadership demographics by zone.

The report approach focused primarily on physicians who hold AHS medical staff appointments. An advisory group was formed to provide guidance for the review. Members of the advisory group were chosen to represent the breadth of female physician leadership within AHS, including age, geography, leadership experience, specialty and university affiliation. A focus question was developed as a basis for the collection and evaluation of data: “Is the experience of female physician leaders different from male leaders in AHS and, if so, how?”

Summary of Findings

Data shows that within AHS, the gender distribution of medical leaders lags behind the gender distribution of AHS medical staff. This trend is in keeping with current experience across North America.

AHS Physician Distribution by Gender



Three overarching themes emerged and form the focus for this report:

- **Culture:** The data demonstrated a difference between female and male physician leaders in their feelings regarding medical leadership culture within AHS. This report provides a review of the following components that contribute to culture of physician leadership in AHS:
 - AHS culture.
 - Physician culture.
 - Gender-specific culture.
 - Physician leadership.
 - Relationships with universities.
 - Medical learners.
 - Health professionals.
 - Local management.
 - Dyads.
- **Organizational Support and Development of Physician Leaders:** A consistent theme of survey and focus-group feedback suggests that greater attention needs to be made to support and develop physician leaders in AHS. This would benefit female and male leaders by clarifying roles and responsibilities and providing additional opportunities for leadership development, mentoring, and integration into the larger AHS organization. The following components were explored in further detail in the review:
 - Purposeful leadership development.
 - Transparent processes.
 - Female physician leadership.
 - Orientation for new physicians.

- *Support Systems*: It is clear that personal and professional support systems were critical to professional success and personal well-being. Support systems were explored through the following areas:
 - Personal support systems.
 - Professional support systems.
 - Self-care and wellness.

Summary of Recommendations

Recommendations stemming from the survey findings are separated into three areas: *Female physician leaders/female physicians*, *physician leaders/physicians*, and *partnerships*. Many of the recommendations apply not just to fostering female medical leaders within AHS, but supporting and developing leaders more generally. In many cases, AHS either already has or will soon begin taking action on a number of the recommendations contained within this report.

With regard to female physicians and female physician leaders, the report makes a number of recommendations as to how AHS can better address gender equity and improve the experience of female physician leaders across the organization. This includes not only raising the profile of current female medical leaders, but also developing strategies to better identify, encourage and develop female physicians who would like to pursue leadership roles.

A number of projects are currently underway within AHS Provincial and Zone Medical Affairs aimed at expanding, standardizing and improving the quality of leadership tools and processes for AHS physicians. This includes the development of AHS' Medical Leadership Strategic Plan, improved processes to identify potential leaders, and more standardized onboarding and orientation materials for new medical leaders. The CMO Quality Innovation Fund is also in place to support front-line physicians and care teams leading quality improvement efforts in their clinical areas.

A new medical leadership role for an Associate Chief Medical Officer, Physician Health, Diversity and Wellness has been formally established at AHS and recruitment for this position is underway.

The report also calls for AHS to build partnerships with internal and external partners to address issues of gender parity. AHS Medical Affairs and physician leaders continue to work closely with Alberta's faculties of medicine, the Alberta Medical Association (AMA) and the College of Physicians and Surgeons of Alberta (CPSA) to better support female physicians and physician leaders and pursue roles that have historically not demonstrated a high level of representation from both genders.

Background

Currently, women comprise more than 50% of medical school enrolment, and yet the numbers of female physician leaders are significantly lower. This reality is prevalent across North America and internationally.¹ The numbers in Alberta are no different. In addition, there is much written about the experience and challenges of female physician leaders. Developing an understanding of current state in AHS will allow an opportunity to improve the experience of female physician leaders, and encourage more women to consider leadership roles.

Alberta Health Services strives to be a leading healthcare organization. Our People Strategy² is one of four foundational AHS strategies. “It is about creating a culture in which we all feel safe, healthy and valued, and can reach our full potential.”³ AHS’ Our People Strategy has four priorities:

- Clear vision. Shared purpose. Common goals.
- A safe, healthy and inclusive workplace.
- Excellent leaders.
- Empowered people.

Identifying and addressing issues that are currently affecting female physician leaders provides an opportunity to improve the physician culture within AHS, as well as the broader culture of the organization.

The objective of the review was to develop an understanding of the experience of female physician leaders in AHS through the exploration of current state, organization behaviours and culture. In addition, the review considered how to address any gaps and increase support for female physicians currently in leadership roles, as well as for those considering leadership roles.

¹ References 5, 9, 13, 36, 48.

² Our People Strategy: Because We are Stronger Together. Alberta Health Services. June 2016.

³ Our People Strategy: Because We are Stronger Together. Alberta Health Services. June 2016. p 10.

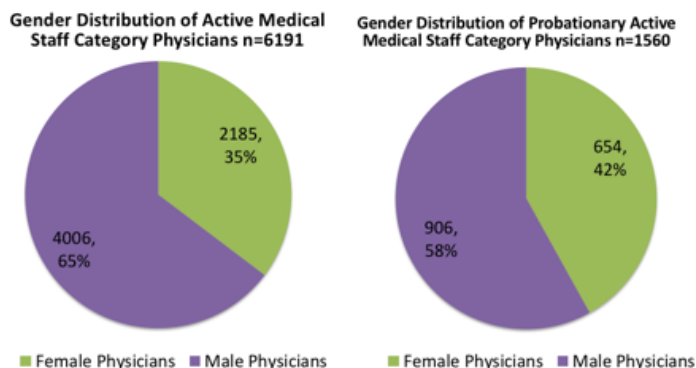
Summary Data Analysis

AHS Physician Leadership Demographics

The AHS physician leadership demographics information presented here is based on data provided by AHS Provincial Medical Affairs in December 2017.

The population demographics for physicians is changing in Alberta. The number of younger female physicians is growing at a faster pace than their male counterparts. The following graph compares the numbers of physicians with active and probationary medical staff appointments⁴ in AHS. Probationary staff appointment is the initial medical staff appointment in AHS and has a term of 12-24 months.

AHS Physician Distribution by Gender and Medical Staff Appointment Category



This trend is similar to what is happening in Canada. The Canadian Institute of Health Information (CIHI) 2016 Summary report on Physicians in Canada⁵ reports that as of December 31, 2016, 40.6% of Canada’s physicians were women. CIHI also reports a five-year national trend of increasing female physician population. “Between 2012 and 2016, the number of female physicians increased by 21.4%, while the number of male physicians increased by 6.1%.” In addition, “in 2016, 54% of

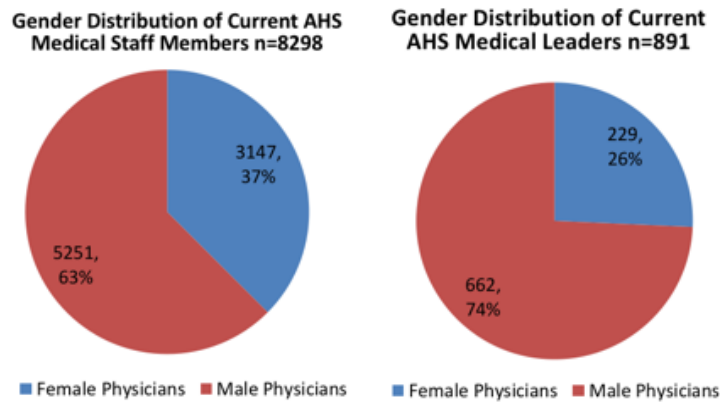
⁴ The Alberta Health Services Medical Staff Bylaws. February 28, 2011. p 25.

⁵ Canadian Institute for Health Information. Physicians in Canada, 2016: Summary Report. Ottawa, ON: CIHI; 2017. p 7-12.

Canada’s physicians younger than 40 were women.” In Alberta, the proportion of physician workforce younger than 40 was 31.3%.

In AHS, the gender distribution of AHS medical leaders lags behind the gender distribution of AHS medical staff. This trend is in keeping with current numbers across North America. Various sources quote that although women make up more than half of current medical school enrolment, physician leadership positions range between 17-25%.⁶ The following graph depicts the current gender distribution for medical staff and medical leaders in AHS.

AHS Physician Distribution by Gender



The distribution of AHS physician leadership was examined by geography and full-time equivalent (FTE). It should be noted that Medical Officers of Health (MOHs) were included in zone data, and Zone Medical Directors and EMS physician leaders were included in provincial data. There is opportunity to further refine and standardize data which may change the numbers; however, the trends identified here would not be significantly altered.

Review of the data demonstrates that overall there is a disparity in head-count numbers and total FTE between female and male physician leaders in AHS. This trend was greater in rural zones and provincial programs compared to urban zones (See Appendix E: Gender Distribution of Current AHS Medical Leaders by Zone).

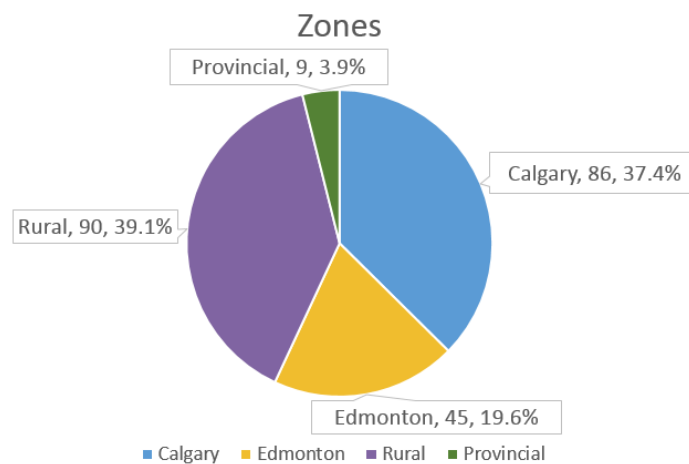
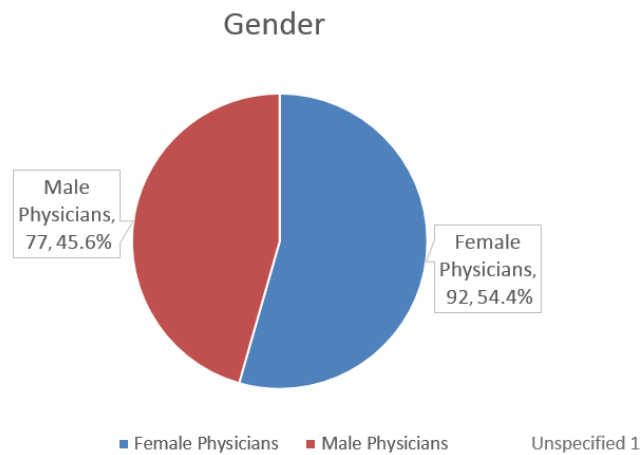
⁶ References 5, 9, 13, 36, 48, 61.

Survey Data

The survey was sent to 565 AHS physician leaders via zone Medical Affairs Offices, and achieved a response rate of 30% (n=170). A summary of quantitative survey results can be found in Appendix D: Survey Results – Quantitative Data.

As a reference point for the discussion, data for gender, zone, FTE, age, training and leadership role description are provided below. The survey demographics differ significantly from the AHS physician leadership demographics for gender mix, zone and FTE mix. The survey population had a gender mix of 54.4% female respondents and was predominantly urban (77.1%) with an FTE less than 0.4 (60.6%). Survey data does not compare age, training and leadership role.

Survey Demographics



FTE				
	Female		Male	
	n	(%)	n	(%)
Less than 0.4	56	35.0	41	25.6
Greater or equal to 0.4	30	18.8	33	20.6

Unspecified: 10

Respondent Age				
	Female		Male	
	n	(%)	n	(%)
30-39	12	13.0	4	5.2
40-49	41	44.6	21	27.3
50-59	24	26.1	36	46.8
60-69	15	16.3	16	20.8

Unspecified: 1

What is your training?				
	Female		Male	
	n	(%)	n	(%)
Family Practice (CCFP)	25	28.1	21	27.6
Specialist (Royal College)	4	4.5	50	65.8
Other	60	67.4	5	6.6

Unspecified: 4

Is your leadership role comprised of:				
	Female		Male	
	n	(%)	n	(%)
Multidisciplinary team	58	63.0	45	59.2
Physician-centric team	34	37.0	31	40.8

Unspecified: 2

Discussion of Results

As mentioned earlier, three overarching themes emerged and form the focus for this report: Culture; Organizational Support and Development of Physician Leaders; and Support Systems.

Culture

“Organizational culture refers to the pattern of beliefs, values and learned ways of coping with experience that have developed during the course of an organization’s history, and which tend to be manifested in its material arrangements and in the behaviours of its members.”⁷ Simply put, it is “the way things are done around here.”⁸

AHS has invested considerable time and energy in understanding and developing its organizational culture. For the purposes of this report, the discussion around culture will focus on components that were identified through the review as significant contributors to the organizational culture affecting female physician leaders in AHS.

While many of these components affect physicians and physician leaders in general, it is important to note that the survey data showed a difference between female and male physician leaders in their overall feelings regarding the medical leadership culture within AHS. For female physician leaders, the percentage of women who were satisfied or very satisfied was 36.8%, with those who were dissatisfied or very dissatisfied at 29.9%. For male physician leaders, the percentage of men who were satisfied or very satisfied was 58.9%, with those who were dissatisfied or very dissatisfied at 8.2%. There are some specific reasons for this difference, which will be highlighted through this discussion.

The components of culture that will be explored include:

- AHS culture.
- Physician culture.
- Gender-specific culture.
- Physician leadership culture.

⁷ Brown, A. *Organizational Culture* (2nd ed). Pitman Publishing 1995. p 9, 33, 176.

⁸ Deal, TE and Kennedy, AA *Corporate Cultures*. Addison-Wesley 1982.

AHS Culture

The history of AHS has had a significant impact on physicians across the province. Many physicians experienced AHS as being born from a consolidation of pre-existing health authorities. There was a general acknowledgement from review participants that the culture of AHS is improving, and an almost universal acknowledgement that Dr. Verna Yiu as CEO has had a significant, stabilizing, positive impact on the organization.

In focus groups, some participants indicated that greater attention should be taken to integrate physicians into the culture of the organization, to reassure physicians that the organization has stabilized and to ensure physician leaders are able to lead to their full abilities.

Decision-making and roles and accountabilities of physician leaders were issues raised by physicians and physician leaders as barriers within the organization. Many participants shared that there is a need for continued support and evolution for effective, strong, local leadership and local decision-making.

The issues highlighted here are broadly applicable to physicians and physician leaders. There was a general sense that although there are challenges, there have been many positive strides forward and improvements. It was also acknowledged that changing organizational culture is incredibly difficult and takes considerable time. Our People Strategy⁹ was identified as an opportunity with potential to address concerns and improve physicians' views of AHS.

Physician Culture

Physicians have their own culture that is driven by several different factors. Governing bodies, origins of training, zone, site and department constructs all have an impact on that culture. Three components of physician culture were identified by review participants as important to the discussion on the experience of female physician leaders: professionalism; disruptive behaviour; and physician perceptions of physician leadership.

Professionalism

Professionalism is a pivotal underpinning of physician culture. It is a core value and one physicians hold to a high standard. Society and the regulatory bodies also have clear expectations of physician professionalism. The College of Physicians and Surgeons of Alberta (CPSA) Code of Conduct¹⁰ clearly defines these expectations for physicians. For the purposes of this report, specific passages are highlighted from the CPSA Code of Conduct that pertain to the scope of the review.

⁹ Our People Strategy: Because We are Stronger Together. Alberta Health Services. June 2016.

¹⁰ Code of Conduct: Expectations of Professionalism for Alberta Physicians. College of Physicians and Surgeons of Alberta. Revised: June 5, 2014. p 3.

*Respect for Others:
As a physician, I will:*

(b) Refrain from conduct that may reasonably be considered offensive to others or disruptive to the workplace or patient care. Such conduct may be written, oral or behavioural, including inappropriate words and/or inappropriate actions or inactions.

(f) Respect the personal boundaries of co-workers and their rights to privacy and confidentiality; refrain from unwanted physical contact, sexual overtures and behaviour or remarks of a sexual nature.

(g) Avoid discrimination based on, but not limited to, age, gender, medical condition, race, colour, ancestry, national or ethnic origin, appearance, political belief, religion, marital or family status, physical or mental disability, sexual orientation or socioeconomic status. (NOTE: In human rights legislation, this is known as 'protected grounds.')

This standard is the expectation to which physicians hold themselves and is used by physicians to measure the actions of self and others.

Disruptive Behaviour

Disruptive behaviour has been defined as “an enduring pattern of conduct that disturbs the work environment.” (AHS¹¹, CPSA¹²) “Disruptive behaviour generally refers to inappropriate conduct, whether in actions or in words, that interferes with or has the potential to interfere with quality healthcare delivery. Disruptive behaviour is rarely a single egregious act but is more often a pattern of conduct.” (CMPA¹³). There is universal agreement among governing bodies within and external to AHS that exhibiting disruptive behaviour is not acceptable and must be addressed.

It is the responsibility of physicians and medical leaders to address disruptive behaviour. Disruptive behaviour can pose a significant challenge and source of stress for a medical leader especially if they do not feel equipped or supported. This challenge is universal for all medical leaders.

Disruptive behaviour exhibited by physician colleagues was a frequent focus of discussion with review participants. It was commonly agreed that it was important that disruptive behaviour be identified and addressed promptly and effectively. In order to ensure disruptive behaviour is addressed appropriately, it is essential medical leaders receive education and support. It is equally important that those who are impacted by disruptive behaviour are supported, and that those who witness disruptive behaviour are empowered to address it. While there are many good resources to

¹¹ AHS Managing Disruptive Behaviour Handbook for Medical Leaders. Alberta Health Services. Last updated: December 20, 2012.

¹² Managing Disruptive Behaviour in the Healthcare Workplace: Guidance Document. College of Physicians and Surgeons of Alberta. Fall 2010.

¹³ The role of physician leaders in addressing physician disruptive behaviour in healthcare institutions. Canadian Medical Protective Association. 2013.

support this, it continues to be an issue. Review participants highlighted that there is work to be done within AHS to become more effective at addressing disruptive behaviour.

Physician Perception of Physician Leadership: 'Going to the Dark Side'

In order to be an effective physician leader, it is essential to have the respect and support of one's physician colleagues. There is a general perception among physicians that physician leadership positions are akin to 'going to the dark side.' In other words, the physician leader is at risk of being perceived as working for and advocating for the needs of the organization over the needs of the patient and/or physician colleagues. This can be challenging to deal with, and has an impact on some physicians' willingness to pursue physician leadership positions. After taking leadership roles, physician leaders may experience a change in relationship with their colleagues resulting in isolation, exclusion and a feeling of lack of respect. It is important that the organization be aware of this, and provide the support and structure to enable the physician to be an effective and well-respected leader.¹⁴

Gender-Specific Culture

The gender issues identified through the data collection are complex and multifaceted.

Participants consistently stated that gender bias affects female physicians in AHS. The experience is consistent with literature which reports that 30%¹⁵-70%¹⁶ of female physicians experience gender-based discrimination.

Gender bias was identified in different ways and consistently in all three components of data collection. Participants frequently acknowledged it as something they have learned to deal with, and may not think about on a daily basis.

Four topics will be explored in this discussion:

- Insidious gender bias.
- Female culture issues.
- Covert sexism.
- Harassment.

Insidious Gender Bias

There was a general acknowledgement that the majority of interactions between male and female physician colleagues are respectful and supportive. There was also a general consensus that clinical

¹⁴ Kornacki, MS. Three Starting Points for Physician Leadership. NEJM Catalyst. September 1, 2016.

¹⁵ Jagsi, R. et al. Sexual Harassment and Discrimination Experiences of Academic Medical Faculty. JAMA 2016; 315(19): 2120-212.

¹⁶ Carr et al. Faculty Perceptions of Gender Discrimination and Sexual Harassment in Academic Medicine. Ann Intern Med. 2000; 132(11): 889-896.

situations were less likely to have overt gender-bias issues. It was in leadership, department or team situations where gender-bias issues were felt to be more evident. Some women felt they had a hard time voicing opinions even with a group of men who are genuinely trying to be inclusive.

Female Culture Issues

The following issues specific to female culture were identified by review participants as important in the exploration of the experience of female physician leadership. These issues are not exclusive to women, but thought to occur more frequently or to be more pervasive in female culture.

- *Fear of Failure and the Imposter Syndrome*

While this is not limited to female physicians, there was a sense among the participants that female physicians were more susceptible to fear of failure and the imposter syndrome than their male counterparts. A cursory review of the literature bolstered this supposition. One study¹⁷ of American medical students found that almost a quarter of male medical students and nearly half of female students experience imposter syndrome. Fear of not knowing the job, fear of failure, fear of not being supported or fear of not being included were reported. This is a complex issue, but it will not be addressed in any further detail within this report. It is included here as this concept was raised and discussed in several instances throughout the review.

- *Assertiveness*

The challenges of being an assertive female physician was a common theme throughout the review. The general consensus was that female physicians who are assertive are often labelled as aggressive, difficult to get along with and disruptive. This was felt to be especially true in multidisciplinary teams and with nursing colleagues. Being labelled as aggressive can cause significant challenges for female physicians especially in team environments, and can potentially impact career opportunities and advancement. It was also felt that women are held to different standards than men regarding being assertive and taking charge.

- *Relational Aggression – a.k.a. the Mean Girls Club*

“Relational aggression is a form of bullying typified by various forms of psychological abuse.”¹⁸ It can be a common phenomenon in female culture, and is present in healthcare settings. During the course of the review, this was a topic raised in focus groups and interviews. The general consensus was this type of behaviour occurred both within professions and across professions with it being most prevalent with female physicians, nursing leaders and front-line nursing. It was agreed that it was most typically directed

¹⁷ Villwock, JA et al. Imposter syndrome and burnout among American medical students: a pilot study. *Int J Med Education*. 2016; 7: 364-369.

¹⁸ Dellasega, C. Bullying Among Nurses. *American Journal of Nursing*. Jan. 2009 109(1); 52-58.

toward female medical students, residents and young female physicians. Within these groups, the impact can be especially detrimental.

- *Female Leadership Styles*

During the course of the review, female leadership styles and the differences between male and female leadership styles were a common topic of discussion. The ideas and theories shared were vast and beyond the scope and expertise of the review to comment further. There is a risk of making assumptions or generalizations about leadership styles based on gender. This may be an area of interest for greater study, which would be useful to further understand the needs of female physician leaders and to support leadership development.

- *External Gender Bias*

Societal gender bias has an impact on female physicians. This is usually exhibited through patient interactions. It presents a unique challenge for female physician leaders who are interacting directly with the public as part of their role. This is also a concern when female physician leaders are interacting with external leaders, which may pose a unique challenge for female physician leaders.

Covert Sexism

Covert sexism may be defined as subtle forms of sexism that are hidden and clandestine or unnoticed because it is built into cultural and societal norms.¹⁹ Throughout the review, participants shared examples of covert sexism and with it the frustration, hurt and anger that results. Many women expressed that they have attempted to address it personally with varied success. There was palpable frustration that, in many cases, there was no recourse or opportunity to have their concerns and experiences addressed. Many women reported that when they raised issues, they were either dismissed or felt that their complaints were not taken seriously.

Harassment

As part of the review, participants indicated that instances of harassment exist within physician culture in Alberta. Participants identified instances from a variety of sources, including physician colleagues, patients, other healthcare professionals and leaders. There is not quantified data to further refine the AHS experience. A review of the literature demonstrates that this is not an issue limited to AHS.²⁰ One American study²¹ found that 30% of female physicians report sexual harassment at work. A 2018 report from the National Academies of Sciences, Engineering, and Medicine found that in these fields, “greater than 50% of women faculty and staff and 20-50% of

¹⁹ Swim, JK and Cohen, LL., Overt, Covert and Subtle Sexism: A Comparison Between the Attitudes Toward Women and Modern Sexism Scales. *Psychology of Women Quarterly*, 21(1997), 103-118.

²⁰ References 17, 28, 44, 54, 70.

²¹ Jagsi, R. et al. Sexual Harassment and Discrimination Experiences of Academic Medical Faculty. *JAMA* 2016; 315(19): 2120-2121.

women students encounter or experience sexually harassing conduct in academia.”²² Given the participant feedback and evidence in the literature, it is important to state that while this issue does exist within AHS workplace, AHS has processes and policies such as the Medical Staff Bylaws to address issues of harassment.

Physician Leadership Culture

Physician culture has historically been paternalistic and male-dominated. Although medical staff appointment numbers are shifting and numbers of female physicians are increasing, many review respondents reported there has not been a significant shift away from a paternalistic culture. Senior physician leaders are predominantly male physicians. During the review, participants consistently shared that this sends a significant message to physicians.

Three topics will be explored in this discussion which specifically relate to ways physician leadership culture impacts women’s ability to fully realize their leadership potential:

- Clinical expectations and workload.
- Generational differences.
- Zone Clinical Departments.

Clinical Expectations and Workload

Physicians and AHS have an implicit expectation that physician leaders maintain a clinical practice. It is thought that maintaining a clinical practice will ensure that physician leaders remain relevant, and informed about the realities of providing patient care. Maintaining a practice also positions them to bring a unique perspective to the leadership team as other health professionals often leave their clinical practices when they assume management roles.²³

While physicians understand the importance of maintaining a clinical role, this undoubtedly provides an additional challenge to those physicians – both women and men – who also have to consider family obligations, essentially limiting their eligibility for senior leadership roles.

Physicians who participated in the review stated clearly that the workload expected of physician leaders in AHS can be demanding. There is often lack of clarity regarding the amount of time required for the role and the responsibilities for physician leadership positions. This is seen as a deterrent to physician leadership.

²² National Academies of Sciences, Engineering, and Medicine. 2018. Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine: p 65.

²³ Eagle, C. Physicians at the executive table. Health Management Forum 2016, Vol. 29 (1) 15-18.

Generational Differences

The generational impact on physician leadership was explored. More than 50% of survey²⁴ participants believe age has an impact on the experience of being a physician leader. This was also supported in focus groups and interviews. It was reported that older physicians are more likely to take on leadership roles for a number of reasons; their years of experience often give them insights valuable in fulfilling their roles. Due to their relative lack of experience, younger physicians often face challenges getting respect from older physicians. This often makes younger physicians less inclined to take on leadership positions. It may also be the case that because the profession has historically been male-dominated, strong examples of female leadership in the older generation of physicians are lacking for the younger generation to learn from and emulate.

Zone Clinical Departments

Zone Clinical Department governance and leadership were consistently identified as a source of concern for female physicians through survey comments, focus groups and interviews. Although not depicted in the AHS physician leadership demographics data presented earlier, the raw data was reviewed to examine the breakdown of numbers of female to male Zone Clinical Department Heads (ZCDHs). The data is not easily compared across the five zones as there are different governance structures and different breadths of responsibilities for ZCDHs within each zone. For example, in Calgary, most ZCDHs have clinical and academic responsibilities. In Edmonton, half of ZCDHs have clinical and academic responsibilities, and half have solely clinical leadership roles. In rural zones, ZCDHs are clinical leadership roles only. A simple calculation of ZCDHs by gender reveals that in December 2017, 55 ZCDH positions were filled by males (83%) and 11 were filled by females (17%). Although this is rudimentary data, it does illustrate that the vast majority of Zone Clinical Departments across the province are led by male physicians.

Participants in both focus groups and interviews identified the ZCDH role as a concern for gender inequity within AHS. Participants expressed frustration and concern regarding the perceived lack of opportunity for leadership positions within departments, especially when those ZCDH roles had both clinical and academic responsibilities. Many participants who expressed interest and aspiration for leadership positions felt their opportunity to rise to the ZCDH role was extremely limited.

While participants agreed there were myriad physician leadership opportunities within AHS, ZCDHs were repeatedly identified as being out of reach for female physicians. It was also agreed there was not a clear path to identify and develop the skills and experience required to attain this specific position.

²⁴ Appendix D: Survey Results – Quantitative Data.

Other areas identified in the interviews which reflect cultural challenges for physician leaders, though do not specifically relate to gender disparity, include:

- Shared leadership with academic institutions. The shared positions between AHS and universities are valuable but complicated, and effort should be undertaken to improve structure and processes for these positions.
- Medical learners. A small group of female resident physicians identified gender bias, imbalance of power, and feelings of isolation and an ‘anti-doctor’ sentiment within some interdisciplinary teams.
- Health professions. While the overwhelming majority of inter-professional work environments were reported to be positive, some mention of lack of collegiality and respect in team environments. This is a challenge for both genders.
- Local management culture was noted as having a unique impact on physician leaders. Strong, respectful relationships are key to satisfaction, but lack of clarity on roles – and difficulty separating clinical and leadership time – were noted by some as challenges.
- Dyads. These were consistently identified as having positive impact on physician leadership, though there was some confusion and frustration over how the dyad model works, especially as it relates to shared decision-making.

Organizational Support and Development of Physician Leaders

Organizational support and development of physician leaders was a consistent theme throughout the review. Review participants readily acknowledged that continuing to build additional supports for the development of all physicians will have a positive impact on female physician leaders.

A literature review highlights that organizational support and development of physician leaders has been identified as a key activity of successful healthcare organizations.²⁵ An extensive review²⁶ of physician leadership development activities was completed for AHS in 2013 by Dr. J. Van Aerde. Dr. Van Aerde’s report provides a comprehensive review of national and international experience and approaches to physician leadership development, highlighting best practices, and providing a series of considerations to move forward. AHS has undertaken work that addresses many of the considerations from Dr. Van Aerde’s report. Some of the progress to-date includes:

- Development of a physician leadership curriculum and a LEARN navigator.
- AHS has started a Physician Leadership Institute (PLI) certificate program that allows physicians to complete a series of PLI courses on a specific topic and receive a certificate. These courses could then be used to qualify for the Canadian Certified Physician Executive (CCPE).
- Coaching is available through external contracts with trained coaches for succession, planning and development. Coaching is also available internally through the Executive Education program. Additionally, AHS offers Coaching for Excellence PLIs for Leaders within the province.

²⁵ References 21, 30, 35, 56, 62, 64, 68.

²⁶ Van Aerde, J. (2013, July) Physician Leadership Development. Alberta Health Services.

The components of organizational support and leadership development that will be explored include:

- Purposeful leadership development.
- Transparent processes.
- Female physician leaders.
- Orientation for new physicians.

Purposeful Leadership Development

Leadership development may be approached statically or dynamically.²⁷ The more traditional approach has been to provide a series of courses or lectures on leadership topics, including but not limited to physician leadership, managing disruptive behaviour and business management such as HR or finance. These would be considered static learning opportunities. There is increasing recognition that there is a need for a broader set of teaching tools, including developmental relationships (mentors, coaching, peer learning partners), assignments (job moves and rotations, action-based learning projects), feedback processes (performance appraisal, 360-degree feedback), and self-development activities.²⁸ This is dynamic learning.

Purposeful physician leadership development was consistently identified by review participants as a key opportunity for improvement within AHS. The ideas and concepts presented in this section are applicable to all physician leaders in the organization. Recommendations specific to female physician leaders will be addressed in a later section.

Six aspects of physician leadership development will be discussed:

- Education – current opportunities.
- Development of emerging leaders.
- Leadership orientation.
- Ongoing physician leadership development.
- Mentorship.
- Succession planning.

Education – Current Opportunities

Education is at the core of leadership development. The CMO and Provincial Medical affairs has invested heavily in Canadian Medical Association (CMA) Physician Leadership Institute (PLI) courses²⁹ which have been very well-received. In addition, there are courses offered through AHS

²⁷ Bronson, D. et al. (2015). Crafting successful training programs for physician leaders. *Healthcare* October 15. <https://doi.org/10.1016/j.hjdsi.2015.08.010>

²⁸ Frich, JC et al. (2015). Leadership Development Programs for Physicians: A Systematic Review. *J Gen Intern Med*, 30(5): 856-874.

²⁹ Canadian Medical Association. Joule - Physician Leadership development program. <https://joule.cma.ca/en/learn.html>

that have been extremely valuable (e.g. Crucial Conversations). Review participants who had taken AHS-sponsored courses were universally appreciative of the opportunity and recognized the value these courses provide. It was frequently noted there was opportunity for improvement with the AHS CMO educational offerings. Specifically short notice of educational opportunities (<three months) and difficulty in determining what is being offered and at what location were identified as barriers to access. Feedback from review participants suggested that the AHS CMO Office consider producing a physician educational calendar for all physician education offerings (provincial and zone) with a minimum lead time of six months in advance and that is readily available in multiple modalities. As well, it should be clearly identified who is eligible to attend. It would also be helpful to be able to readily access policy regarding what supports, if any, are available for attendees.

Review participants highlighted two excellent opportunities for leadership development. Both of these opportunities are not specifically created for physician leaders and would be considered executive level education suitable for senior physician leaders.

- AHS Executive Education Program³⁰ was developed and delivered in partnership with the University of Alberta School of Business and the University of Calgary. The program “develops new approaches to transformational leadership” and is “based on the LEADS in a Caring Environment leadership development framework.” Participants are sponsored by senior leadership to participate and physician leaders are eligible to attend the program. Several physicians who participated in this program agree it was a valuable learning opportunity.
- University of Alberta “Gold College is a comprehensive leadership program designed for academic leaders.”³¹ Review participants who had opportunity to participate in this program identified it as an excellent opportunity for leadership education. Similarly, the University of Calgary has an Academic Leadership Academy that “offers opportunities for new and experienced academic leaders to advance their leadership expertise.”³²

Development of Emerging Leaders

Development of emerging leaders was an area that was readily identified by review participants as an opportunity to enhance physician leadership within AHS. A coordinated approach for developing emerging physician leaders does not currently exist within AHS. Creating an effective program to identify and develop emerging physician leaders was seen as a significant opportunity for the organization.

Many high-performing health organizations have invested in creating physician leadership programs. A well-developed approach for emerging physician leaders is a cornerstone of many of these programs.^{33,34}

³⁰ Alberta Health Services Executive Education Program. <https://insite.albertahealthservices.ca/hr/Page7988.aspx>

³¹ University of Alberta Gold College Program. <https://www.ualberta.ca/faculty-and-staff/learning-development/leadership/gold-college>

³² University of Calgary Academic Leadership Academy. <https://www.ucalgary.ca/provost/ala>

³³ Van Aerde, J. (2013, July) Physician Leadership Development. Alberta Health Services. p 39, 42, 49.

³⁴ References 43, 68.

Identifying and developing emerging leaders was identified as a particular strategy that would benefit female physicians in AHS. The current perception is that identification and development of male physician leaders is occurring informally within many departments and facilities in AHS. Young male physicians are being ‘taken under the wing’ of current leaders and ‘being groomed’ for future leadership through exposure to early opportunities to develop leadership skills. This perception was not further evaluated other than to note it was raised frequently in all modalities of the review. The creation of a deliberate and consistent approach by AHS for emerging physician leaders would address this concern and, more importantly, create opportunities to grow physician leaders more purposefully and earlier in their careers.

Leadership Orientation

Review participants identified the lack of a consistent, deliberate orientation to leadership as a source of frustration and a significant weakness within AHS. Survey results demonstrated that both males and females had significant concerns about the approach to orientation of physician leaders in AHS. Among male physician leaders, 43.2% disagreed/strongly disagreed that their orientation to medical leadership was sufficient. For female physician leaders, 56.1% disagreed/strongly disagreed that their orientation to medical leadership was sufficient. This illustrates that a majority of physician leaders believe that the orientation to their roles was not sufficient, and that this experience is more prevalent for female physician leaders. This data highlights a significant opportunity for improvement for AHS.

Dr. Van Aerde’s report highlights best practices for leadership orientation³⁵ and this is also supported in the literature.³⁶

The CMO office has identified this need and is currently working with zones to develop and refine the current approach to physician leadership orientation. These efforts include but are not limited to:

- Developing clear job descriptions and outline of roles and responsibilities.
- Basics of position – orientation to Medical Staff Bylaws; difficult conversations; resources available (AHS HR/Finance).
- Build in a mentorship program.
- Educational opportunities.
- Direct contact with senior leadership focused on encouragement and exploring/ brainstorming challenges.
- Build in accountability and feedback on leadership skills.

Review participants provided suggestions for physician leader orientation, including the following:

- Having an element of structured orientation could potentially better prepare physician leaders.

³⁵ Van Aerde, J. (2013, July) Physician Leadership Development. Alberta Health Services. p 40.

³⁶ References: 11, 56, 64.

- Toolbox of leadership resources that should not be limited to an online list or ‘big binder’ of resources, but rather specific resources that are clearly linked to key components of the orientation program.
- Orientation to key policies, procedures, and developing a thorough understanding of key documents such as AHS Medical Staff Bylaws and Rules.
- A defined curriculum that all new physician leaders are expected to progress through over a specific period of time.
- Zone-specific orientation, preferably in group settings to foster development of key relationships and networking of local physician leaders.
- A facilitated meeting with operational counterpart and reporting leaders so the expectations of the dyad relationship and responsibilities are clearly outlined and documented.
- Directory of key contacts and resources would be of significant value to physician leaders. The following were specifically mentioned: Quality; Analytics; Human Resources; Finance, Legal and Ethics.
- Continuous deliberate leadership training is needed, not intermittent exposure.
- Technical skill development as well as soft skill development (reading a budget vs. conflict resolution).
- Deliberate discussions regarding fostering mentorship relationships and possible access to coaching.

Review participants agreed that building this type of a program would have far-reaching benefits for all physician leaders in AHS.

Since 2017-18, efforts have been made to advance a zone-led orientation program for AHS physicians; 30% of new medical staff attended a new physician orientation during their first six months. During 2017-18, 120 physicians participated in Physician Leadership Institute (PLI) courses. Of those, 58 are confirmed AHS physician leaders.

Ongoing Physician Leader Development

Ongoing physician leadership development was identified by review participants as an important avenue to support and encourage existing physician leaders. As discussed previously, AHS does provide ongoing learning activities through sponsored PLI courses. While this has been identified as a valuable resource, it represents only one facet of a dynamic leadership development program.

The program should be multifaceted and include a well-developed curriculum and clear learning paths. It should be comprised of self-directed learning; supported experiential learning; opportunities for networking with peers; interactions with senior physician leaders; mentorship; and well-developed, deliberate and regular evaluation and feedback for all levels of physician leadership.

In addition to this, one of the highly recommended activities recognized as a best practice was regular one-on-one meetings with senior leaders. Participants who currently attend one-on-one meetings identified them as an opportunity for growth and mentorship. Ideally, meetings would be with the leader that the physician reports to but that was not essential. These meetings would be structured and would involve components of task and issue updates, mentorship, reflection, and

direction-setting. In order to be truly effective, it was also identified that senior leaders would need to be supported through training/learning resources to make this a positive, impactful experience for both physician leaders involved.

The ideal for many of the review participants would be the creation of a formal AHS physician leadership program that would encompass the continuum of physician leadership with clearly outlined paths of progression for all levels of leadership, from budding curiosity through executive leadership positions. There would be clear expectations of participation for all physician leaders and the resources necessary would be in place to support this. Organizations that have comprehensive physician leadership programs in place are well-recognized for leading innovation and quality of patient care.³⁷

Mentorship

Mentorship was consistently identified by review participants in every modality as critical to the success and satisfaction of physician leaders. Evidence to support this is readily identified in the literature.³⁸

Experience with mentorship was explored within all three modalities in the review. Survey data indicated that 56% of female leaders and 78.9% of male leaders agreed/strongly agreed that they had been supported by mentors in their AHS leadership role. Of note, there was a statistically significant difference between male and female leaders' responses to this question: 25.9% of female physician leaders and 10.8% of male physician leaders indicated they had not been supported by mentors.

Mentorship may involve formal and informal relationships. There was clear feedback that it was important that individuals be involved in determining which mentoring relationships would work best, and that a mixture of both would be beneficial. It was also clear that most review participants were not recommending that AHS establish a mandatory mentorship program for physician leaders. Review participants identified specific opportunities to foster and encourage mentorship which included but were not limited to: active identification of leaders willing to be mentors; voluntary matching mentorship program; education and support for mentors; and possible opportunities for external mentorship with partner organizations and institutions. Coaching, although different from mentorship, was also identified an option that could be provided to physician leaders in lieu of or in addition to a mentor relationship.

Succession Planning

Review participants identified another key opportunity for AHS in developing a consistent and transparent approach to succession planning. The lack of clear succession planning has resulted in an unanticipated entry into leadership for many physician leaders. Rather than actively developing a

³⁷ Van Aerde, J. (2013, July) Physician Leadership Development. Alberta Health Services. p 40.

³⁸ References 36, 49, 68, 75.

succession plan, entry into leadership has been more like 'taking turns,' 'being tapped on the shoulder,' 'being voluntold,' or 'filling a gap because no one else wanted the position.' Lack of planning may have far-reaching impacts on the development and effectiveness of leaders who step forward.

Succession planning is a key focus of leading healthcare organizations.³⁹

Review participants identified that effective succession planning would provide many benefits, including but not limited to:

- Develop a clear exit strategy for leaders and address the perception that 'leadership is a lifetime sentence.'
- Improved expectations for incoming/outgoing leaders and department members.
- Clearly defined opportunities for leaders who are interested in positions.
- Support for departments, programs, facilities through leadership transition, and minimize the potential negative impact of change.

Transparent Processes

Transparency of process has been identified as a significant indicator of a healthy organizational culture.⁴⁰ Transparency builds trust.⁴¹ Many of the stories shared during the review illustrated repeated experiences with leadership processes that lacked transparency. Specifically, identification of emerging leaders, selection of leaders and succession planning were pinpointed as processes that required increased transparency. Additional processes that were identified included addressing complaints, handling of disruptive behaviour and response to instances of intimidation and harassment.

Transparency moves an organization toward a culture of trust, openness and fairness. Review participants indicated that deliberate efforts to improve transparency and develop consistent processes would have a significant impact on building and restoring trust in physician leadership and the organization. It was also felt that increased transparency would have a positive impact on the numbers of female physicians in leadership positions.

The importance of professionalism in physician culture is discussed in a previous section. Physician leaders are held to the same expectations regarding professionalism. The following data represents AHS physician leaders' perception of professionalism among their peers.

Amongst physician leaders, 45.4% of female physician leaders and 72.6% of male physician leaders agreed/strongly agreed that standards of professionalism are consistently adhered to among medical leaders. Conversely, 26.8% of female physician leaders and 6.8% of male physician leaders

³⁹ References 18, 33, 38, 75.

⁴⁰ References 8, 26, 60, 80.

⁴¹ Rawlins, BR. (2008). Measuring the relationship between organizational transparency and employee trust. *Public Relations Journal*. 2(2): 1-21.

disagreed/strongly disagreed that standards of professionalism are consistently adhered to among medical leaders. This was a statistically significant difference in response between male and female physician leaders.

Reflection on review participant feedback and review of literature⁴² leads to the connection of transparency of process, the accountability of physician leadership and the concept of authentic leadership. Without transparency of process, it is difficult to hold leaders accountable and this ultimately impacts trust in leadership and in the organization.

Three specific areas that were identified by review participants as impacting transparency within physician leadership:

- AHS medical leadership policy and process.
- Compensation for physician leadership positions.
- Search and selection process.

AHS Medical Leadership Policy and Process

Review participants identified development and consistent implementation of transparent medical leadership policy and process as a significant opportunity for improvement. It was acknowledged that the Office of the Chief Medical Officer and Medical Affairs (both provincial and zone) have made significant strides over the past five years in developing standardized processes and resources. Participants repeatedly shared that this work is not reaching physician leaders (especially new and smaller FTE leaders) consistently. Simply put, physicians are not aware of current policy and process, and are not sure where to look or who to contact if they have a question or concern. It is readily acknowledged that communicating with physicians can be challenging. AHS has historically tried to use sources such as Insite as the single source of communication. This poses challenges for physicians, and it was felt by review participants that there needed to be multiple avenues available to access information. In addition, a standardized orientation for physician leaders would improve awareness and understanding of current policy and process. It also must be acknowledged that communication between physicians and AHS is a two-way process which requires ongoing attention and engagement on both ends. Physicians have a responsibility to proactively seek information and remain informed and aware of communications being disseminated by AHS through various channels.

Specific areas identified by review participants that require additional attention and/or communication and orientation include but are not limited to:

- While AHS Bylaws and Rules provide a general template for the required roles and responsibilities for a selection of senior medical staff leadership positions, clear job descriptions customized to the respective zones, facilities, or communities will increase the

⁴² Wong, CA and Cummings, GG. (2009). The influence of authentic leadership behaviours on trust and work outcomes of health care staff. *Journal of Leadership Studies*. 3(2): 6-23.

transparency of expectations for these positions. This customization should include ongoing responsibilities, expected FTE requirements, expected supportive infrastructure and regular feedback for ongoing learning and improvement.

- There are other senior physician leadership roles that are not described in the bylaws but these adhere to the same general principles and would benefit from similar clarity in defined job descriptions.

Compensation for Physician Leadership Positions

Compensation for physician leadership positions was a frequent topic raised by review participants especially in survey and focus groups. Data regarding physician leadership compensation was not requested as part of this review. Two areas of focus emerged through discussions and feedback from review participants. Discussions regarding compensation for leadership positions can best be summed up in a series of questions:

- Compensation for leadership positions:
 - Is the compensation for physician leadership positions adequate for the work expected?
 - The current level of compensation does not allow for the loss of clinical income. Is this reasonable? Should there be an adjustment to address loss of clinical income?
 - Is the compensation for similar physician leadership positions equivalent across the province? Is there a standard and is it adhered to?
- Equity in compensation for female leadership positions:
 - Is there a difference in compensation for similar physician leadership positions for female and male physician leaders?

Search and Selection

Search and selection processes were repeatedly identified as being without defined structure and consistency. The current process is identified as having a significant impact on the advancement of female physicians in leadership positions. Individual physician leaders can and should carry out recruitment activities for emerging leaders. However, to address systemic bias that exists, active guidance of those leader recruitment activities is needed to prevent gender-status-quo hiring from persisting.

While search and selection processes for senior positions are defined in the bylaws, there is opportunity for further development of a provincially consistent process for search and selection of physician leadership positions. Suggestions include:

- Consistent process and time frame for job postings; develop and follow strategies to ensure there is awareness of available leadership positions.
- Positions above a certain level of complexity (number of reporting physicians, size of facility, needs of community, etc.) may require more formal recruitment processes.
- Selection committees should be chosen – and their work conducted – in an open and transparent way.
- Selection process should be respectful. All unsuccessful candidates should be notified directly and provided feedback on areas for improvement or growth.

Female Physician Leaders

Deliberate and purposeful initiatives and programs to support female physicians to explore, accept and excel in leadership programs have demonstrated an impact on improved experience and numbers of female physician leaders.⁴³

As stated previously, all of the areas of improvement and recommendations included in this report will directly impact female physician leadership in AHS. The themes addressed in this section are specific to the development and advancement of female physician leaders.

The following topics are discussed in this section:

- Visible female leadership.
- Female physician leadership development.
- Family-friendly policy development.

Visible Female Leadership

Visible female leadership has a very powerful impact, especially on female physician leaders. It also has significant impact on organizational culture. “It requires people to put a stake in the ground and clearly articulate intent... Visibility is a very powerful motivator.”⁴⁴

Throughout the review, and specifically in response to queries regarding positive deviance⁴⁵, visible female physician leadership was identified as inspirational to both female and male physicians. Participants identified the power and impact of stories from female leaders who are respected role models, have successfully managed personal and professional responsibilities, and attained their leadership goals.

Review participants indicated that any initiative or action to improve the quality of experience and number of female physician leaders must include purposefully shining a bright light on female physician leaders within AHS.

Female Physician Leadership Development

Female physician leadership development is a critical tool to support the identification and growth of female physician leaders. Literature review⁴⁶ supports this statement. Previous sections addressed participant feedback regarding the importance of education, leadership orientation and development, and well-developed transparent processes.

⁴³ References 5, 20, 29, 46, 59.

⁴⁴ Stewart, C. (2016, July 21). Visible female leaders help change male perceptions. *Financial Review*.

⁴⁵ Spreitzer, GM and Sonenshein, S. (2004). Toward a construct definition of positive deviance. *American Behavioral Scientist*. 47(6): 828-847.

⁴⁶ References 5, 36, 39, 48, 53, 61.

In addition to the actions listed under physician leadership development, review participants felt there was a place for focused female physician leadership development. Review participants identified several strategies that should be considered to further promote and develop leadership skills for female physicians. These include but are not limited to:

- Educational courses specific to female physician leadership, such as the PLI course: “Leadership for medical women: strengthen your leadership capacity.”⁴⁷ Provide opportunities across the province for female physicians to attend these educational offerings.
- Develop a speaker series specific to female physician leadership that could be offered through various mediums across the province.
- Develop AHS-specific workshops and events for skill development.
- Mentorship programs with opportunities to be mentored by both female and male mentors.
- Sponsorship as a specific action separate from mentorship.
- Networking and social events with topics specific to female physician leadership.

Three specific ideas were highlighted and warrant further exploration:

- Networking.
- Sponsorship.
- Quotas for female leadership positions.

- *Networking*

Networking was identified as a unique opportunity to support women. Specifically, review participants advocated that AHS undertake an initiative to promote networking events for female physicians. Participants indicated that networking could take place in many forms, including in-person events, journal clubs, social media connectivity and other modalities. Participants also indicated these opportunities should not be universally exclusive to female physicians, but should focus on topics and awareness that are germane to female physicians and female physician leaders.

Additional suggestions included joining organized groups of physician leaders such as the Federation of Women in Medicine or the Canadian Society for Physician Leaders, or joining online communities of female physicians.

A review of the literature highlights the importance and impact of networking and why women may need encouragement to pursue this.

“A key reason why women lag behind in leadership is that they are less likely to have extensive networks to support and promote them as potential leaders... Networking with

⁴⁷ Leadership for medical women: strengthen your leadership capacity. Canadian Medical Association. Physician Leadership Institute. <https://www.cma.ca/En/Pages/pmi-course-leadership-for-medical-women.aspx>

more senior representatives has its benefits. Having access to a powerful spokesperson and building your connections is one way of working toward extending your network.”⁴⁸

- *Sponsorship*

Sponsorship is one strategy shown to have an impact on addressing inadequacies in leadership diversity. Mentorship is commonly identified as key for emerging leaders and it is valuable to support development of leadership skills. However, focused mentorship of females has not shown to increase the number of female physician leaders. Sponsorship has.⁴⁹

“ ‘The Sponsor Effect’ defines a sponsor as someone who uses chips on his or her protege’s behalf and advocates for his or her next promotion as well as doing at least two of the following: expanding the perception of what the protege can do; making connections to senior leaders; promoting his or her visibility; opening up career opportunities; offering advice on appearance and executive presence; making connections outside the company; and giving advice. Mentors offer friendly advice. Sponsors pull you up to the next level.”⁵⁰

Throughout the review, many participants spoke of male physicians being singled out and groomed for leadership. In fact, what participants were describing is a form of sponsorship. Sponsorship of female physician leaders means actively identifying emerging and mid-level leaders and sponsoring them for activities that have potential to propel their leadership careers. It is an active, deliberate action to assist female physicians to ascend the leadership ladder.

- *Quotas for female leadership positions*

The idea of establishing quotas or goals for increasing the number of female physician leaders in AHS was mentioned by a few review participants. This idea was controversial as there were equal comments from participants concerned about the value or unintended consequences of such an initiative. Reviewers could not find much written about this strategy in healthcare. A cursory review⁵¹ of business literature identified a positive impact on increasing female leadership percentages with the use of this strategy. Affirmative action campaigns have occurred through history to address diversity issues. They have been met with criticism and mixed success.

This should be considered a cursory examination of this construct and, as such, this strategy will not be included in the recommendations. There may be merit in further investigation of this concept.

⁴⁸ Vongalis-Macrow, A. (2012, June 29). Assess the value of your networks. *Harvard Business Review*.

⁴⁹ References 37, 39, 40, 41, 72.

⁵⁰ Hewlett, SA. (2011, January 26). The real benefit of finding a sponsor. *Harvard Business Review*.

⁵¹ References 7, 19, 28, 63.

Family-Friendly Policy Development

Development of family-friendly policies and approaches for leaders was identified by review participants as a potential action to encourage more female physicians to consider leadership roles. If effective, this change in policy focus would likely have impact on both female and male physician leadership. There is minimal reference in the literature⁵² to implementation of family-friendly policies on leadership in healthcare.

Orientation for New Physicians

Physician-specific orientation for all new physicians who receive AHS appointments and privileging was identified by review participants as an opportunity to improve physician awareness and adherence to AHS process, policies and professionalism standards. It was identified as an opportunity to imprint AHS organizational and physician cultures, and to clearly demonstrate ‘the way things are done around here.’ High-performing healthcare organizations include new physician orientation as a key activity for physician engagement as well as initiating leadership activities.^{53,54}

Review participants recommended that physician orientation should be specific, structured, interactive and purposeful. Orientation also provided an opportunity to offer buddy experiences with experienced AHS physicians and to provide support to new physicians as they adjusted to their practices in Alberta.

As previously noted, zone-based physician orientation has been established and is underway.

Support Systems

The impact of support systems on female physician leaders was purposefully explored as part of the review. Participants explained that both personal and professional support systems were critical to professional success and personal well-being. It has been well documented⁵⁵ that female physicians experience barriers to assuming leadership positions when adequate supports are not in place.

Three themes in this area will be explored:

- Personal support systems.
- Professional support systems.
- Self-care and wellness.

⁵² References 10, 19, 32.

⁵³ Van Aerde, J. (2013, July) Physician Leadership Development. Alberta Health Services.

⁵⁴ Mayo Clinic Provider Orientation presentation.

<http://mayoclinichealthsystem.org/~media/Local%20Files/Waycross/Documents/ProviderOrientationOnline.pdf>

⁵⁵ References 5, 7, 10, 19, 32, 36, 53, 62.

Personal Support Systems

Personal support systems were identified by review participants as crucial for personal well-being and professional success. Analysis of participant feedback identified three important components to consider when developing personal support systems: support to manage duties at home; social networks; and personal time.

Support at home can come from shared duties with a spouse, partner or other individuals living in the home. Many participants stated that being able to hire extra resources to assist with managing the responsibilities of caring for a home and raising a family was important, especially if both partners are working outside the home.

In 1989, Arlie Hochschild⁵⁶ described the phenomenon of “second shift” in her book of the same name. The second shift occurs in dual-income families where one spouse, typically the woman, works full time outside the house and also takes care of a majority of the household and child-rearing responsibilities at home. This phenomenon has the potential for significant impact on female physician leaders.

Creating personal networks was identified by participants as a second key strategy to developing a strong personal support system. There is evidence to support that men and women have different needs and create personal support networks differently.⁵⁷

Having personal time was also identified as part of a strong personal support system. Carving out time out for personal pursuits can be challenging, and many identified that leadership activities were filling up this time.

Professional Support Systems

Professional support systems are equally as critical for physician leaders. Participants identified that key components of their professional support networks are comprised of relationships with colleagues and personal mentorship supports. Many participants said they were challenged to establish strong professional support systems.

Participants also spoke about the importance of establishing specific professional support relationships such as mentorship or coaching. Identifying one or two trusted colleagues to share challenges and seek advice from was also seen as a useful strategy.

⁵⁶Hochschild, AR and Machung, A. (1989). *The second shift: Working parents and the revolution at home*. New York, NY: Viking.

⁵⁷Moore, G. (1990). Structural Determinants of Men's and Women's Personal Networks. *American Sociological Review*. 55(5): 726-735.

Self-Care and Wellness

Review participants readily identified the value of self-care and supporting one's own wellness. Although viewed as important, many said they found it challenging to achieve. Organizational support for healthy lifestyles through modelling and deliberate attention to the health and well-being of leaders was identified as important. Many thought an increased focus within the organization would have a positive impact on physician leaders.

Role Models

Identifying role models who prioritize wellness and self-care was identified by review participants as a top strategy for self-care and wellness. Relationships with role models are different than mentorship relationships.⁵⁸ Visible female leaders and networking with other physician leaders, especially female physician leaders, presented opportunities to identify strong role models.

⁵⁸ Taylor, CA et al. (2009). The influence of mentorship and role modeling on developing physician-leaders: Views of aspiring and established physician-leaders. *Journal of General Internal Medicine*, 24(10): 1130-1134.

Recommendations

All recommendations in this section are a synthesis of review participant feedback and ideas, examples of best practice and literature review. As described previously, female physician leaders are affected by unique issues, but also affected by issues affecting female physicians, physician leaders and physicians. Each recommendation has the potential to have a positive impact on female physician leaders, and some will also have potential to impact broader physician leader and physician groups.

Recommendations are divided into three sections:

- Female physician leaders/female physicians.
- Physician leaders/physicians.
- Partnerships.

1. Female Physician Leaders/Female Physicians

1.1 Visible physician leadership.

1.1.1 Chief Medical Officer will continue to demonstrate a commitment to address gender inequity and to improve the experience of female physician leaders in AHS.

Strategies to consider:

- Identify and implement metrics to measure gender equity in physician leadership.
 - **Quick Win** – develop and implement metrics for beginning of fiscal year 2019/20.
- Leverage the work currently underway with Our People Strategy to prioritize action to address gender equity and improve the experience of female physician leaders in AHS.

1.1.2 Raise the profile of existing female physician leaders – create channels to tell their stories, provide opportunities for interaction and celebrate their successes.

1.2 Female physician leadership development strategy.

1.2.1 Develop a sponsorship strategy for female physician leaders in AHS.

Strategies to consider:

- Join the #GoSponsorHer campaign.
 - **Quick Win** – initiate campaign by end of fiscal year 2018/19.
- Establish and monitor metrics specific to sponsorship.

1.2.2 Develop a strategy to offer networking events specific to female physician leadership. Explore partnerships as a component of this strategy.

Strategies to consider:

- Co-sponsor networking events with Zone Medical Staff Associations with specific focus on highlighting female physician leaders.
 - **Quick Win** – Co-host one event per zone before end of fiscal year 2018/19.
- Establish a broader networking strategy that would include female physician leadership as one area of focus.

1.2.3 Embed female physician leader specific curriculum in Physician Leadership Development Strategy (see recommendation 2.2.2).

1.3 Search and selection process: Continue to improve the standardized search and selection processes for all AHS leadership positions to enhance inclusivity of female physicians.

Suggestions for key components of the process:

- Current search and selection processes as defined by Medical Staff Bylaws need to be reviewed to ensure there is clarity on roles, standardization, and open and transparent processes within the confines of the need for confidentiality when appropriate.
- Processes should be applicable to all AHS physician leadership positions.
- Search and selection committees should demonstrate broad diversity representation, including that of gender. External representation is important and should also be an important aspect of committee membership representation.

NOTE: AHS does have standardized search and selection processes in place through bylaws. New documentation is being developed to provide additional clarity and to strengthen these processes, thereby addressing the concerns outlined above.

2. Physician Leaders/Physicians

2.1 Develop and implement a health and wellness strategy to support physician leaders.

Suggestions for key components of the strategy:

- Actively promote awareness and modelling of health and wellness by senior physician leaders.
- Physicians who are employed by AHS need to be aware of current policies that support balance with the demands of personal responsibilities. Support balance with professional responsibilities (clinical work, academic responsibilities, education and research).
- Work with existing partners to create and promote health and wellness education and initiatives specifically designed for physician leaders.
- Explore networking opportunities specific to health and wellness of physician leaders.

2.2 Establish an AHS physician leadership program.

2.2.1 Curriculum should be developed for two streams:

- **Orientation to physician leadership.**
- **Continuing development of physician leaders.**

2.2.2 Female physician leadership curriculum should be developed and embedded in both streams (as per Recommendation 1.2.3).

Suggestions for key components of the strategy:

- Build on the strengths and experience of the AHS Executive Education Program.
 - Implement an orientation to physician leadership.
 - Develop a defined curriculum that spans the breadth of leadership responsibilities for AHS physician leaders.
 - Initially designed specifically for Zone Clinical Department Heads; section chiefs; division heads.
 - Curriculum and content should be developed by and delivered by existing AHS physician leaders in conjunction with non-physician expertise as required.
 - Content should include specific materials on gender-bias awareness (and, more broadly, on unconscious bias/implicit bias awareness), training and strategies to encourage female physicians to consider leadership positions.
 - Program should include an in-person component to foster mentorship and networking opportunities.
 - Continuing development of physician leaders.
 - Develop curriculum of 'bite-sized' Continuing Medical Education (CME) for AHS physician leaders.
 - Diversity/gender-specific curriculum and training. Include unconscious bias/implicit bias training in the curriculum.
 - Program should include an in-person component to foster mentorship and networking opportunities.
 - Bursary/grant programs to support external or specialized learning with clear and transparent access.
- **Quick Win** – Develop Medical Affairs education calendar. The calendar should be regularly maintained, include provincial and zone Medical Affairs and AHS learning opportunities and ensure that events are posted with adequate lead time (minimum six months). Calendars should be readily available to all AHS physicians. Implement by end of fiscal year 2018/19.

2.3 Develop a strategy to purposefully identify and develop emerging physician leaders.

- Suggestions for key components of the strategy:
 - Embed a deliberate discussion regarding interest and opportunities for physician leadership positions at critical junctures for physicians, such as recruitment, physician onboarding, transition from probationary to active appointment, periodic reviews.
 - Develop deliberate process to identify and encourage female physician leadership.

- Establish a small pool of funds that can be accessed to support emerging leaders to head small projects/innovations.
 - AHS has taken action to support front-line leadership and innovation with the establishment of the CMO Quality Innovation Fund, which supports front-line care teams that are driving evidence-based quality improvement (QI) efforts in their clinical areas. Since 2014/15, AHS has funded 96 physician-led projects. There are currently 40 QI projects underway provincially, with \$750,000 in funding provided in 2017/18.

2.4 Ensure that current physician leaders are supported and empowered to be successful.

- Suggestions for key components of the strategy:
 - Clear job descriptions that accurately reflect the work and the time needed to successfully complete it. Job descriptions should include a clear description of responsibilities and expectations for completion.
 - Clearly-defined reporting structure.
 - Clearly-defined expectations and support for those involved in dyad leadership roles.
 - Access and consistency in approach to assignment of administrative support. Physician leaders need dedicated administrative support so that leadership time can be used as efficiently as possible.
 - Clarity and consistent application of AHS policies (e.g. travel policy).
 - Clear statements and commitment from AHS to support physician leaders' continued clinical work.
 - **Quick win** – Mandate minimum of quarterly one-on-one meetings for every physician leader with their senior physician leaders (the physician they report to). Medical Affairs should assist this process with creation of materials/training. Implement by end of fiscal year 2018/19.

2.5 Develop and implement an orientation program for all new AHS physicians.

- Suggestions for key components of the strategy:
 - Learn from others. Study and implement best practices of high-functioning institutions with well-established physician-orientation programs.
 - Mandatory for all new physicians.
 - Education on physician-specific AHS processes, policies and professional standards.
 - Personal interaction with direct report physician leader.
 - Consider implementation of a physician buddy system or other strategies to support physicians as they adjust to new practices.

2.6 Establish a third Associate Chief Medical Officer position dedicated to Physician Health, Diversity and Wellness to support physicians and physician leaders within AHS.

- Strategies to consider:
 - This position would provide a safe, secure, confidential venue for individual physicians to receive advice, support and/or navigation for issues related to gender equity, as well as a broader diversity mandate.
 - The scope of this position must be clearly defined and may include but is not limited to education, awareness, navigation services, and facilitating arranging mentorship relationships.
 - This position will support ongoing AHS work to ensure a safe, healthy and inclusive workplace.
 - Learn from high-functioning organizations that have implemented a similar position.
 - Explore partnerships within AHS (such as the Chief Ethics and Compliance Officer) or possibly with other Alberta organizations such as the CPSA or AMA.

3. Partnerships

The scope of this review was limited primarily to physician leadership within AHS. In reality, there are many institutions and organizations that have an impact on physicians in Alberta. A unique opportunity exists to partner with those organizations in order to further address and increase the impact of initiatives to address gender equity and to motivate women physicians to take on medical leadership roles.

1.1 Work with internal and external partners to address issues of gender parity and improve the experience of female physician leaders. Partnership could include (presented alphabetically, not in order of importance):

- **Alberta Medical Association (AMA)**
 - Patient and Family Support Program – health and wellness.
 - Professionalism.
 - Advocacy for female physicians/sponsorship/networking.
 - Zone medical staff associations – networking/advocacy.
- **College of Physicians & Surgeons of Alberta (CPSA)**
 - Professionalism.
 - Navigating issues of complaints/health and wellness.
- **Covenant Health**
 - Professionalism.
 - Process/procedure – search and selection committees.
 - Advocacy.
- **Universities**
 - Review shared leadership positions.
 - Diversity programs are well-established at both the University of Alberta and the University of Calgary. Seek opportunities to learn from and explore areas to collaborate.

Conclusion: Reflection by the Chief Medical Officer

The objective of this review was to develop an understanding of the experience of female physician leaders in AHS through the exploration of current state organization behaviours and culture. In addition, the review considered how to address any gaps and increase support for female physicians currently in leadership roles, as well as for those considering leadership roles. With the guidance of our advisory committee, we completed an extensive data collection across the province using three modalities, and heard from more than 200 physicians in the process.

Through data analysis, we identified three themes from the discussions: Culture; Organizational Support and Development of Physician Leaders; and Personal Support Systems. In each theme, we explored specific areas and concepts that were identified by review participants. Where relevant, we have also indicated when participant feedback was supported by literature.

A general overview of the statistical data shows there are more male physician leaders than female physician leaders overall, but particularly so among Zone Clinical Department Heads. On a broader basis, the literature shows Alberta is not different than other jurisdictions. Further work is needed to explain why this is the finding, but a benefit of this review is that it allows for open and transparent discussions about the data differences and how we should further define the issues and specific actions that can be taken.

The concept is that female physician leaders, in addition to being affected by their own unique subset of issues, are also affected by issues that affect physicians, female physicians and physician leaders. Throughout the report, we have used this concept as a lens to further delineate issues, and also to identify the breadth of impact any actions would have.

Throughout this report, we have made reference to outstanding questions and opportunities for further exploration. We have deliberately not included those questions and opportunities as part of the recommendations or conclusions. Through consideration of this report, in addition to other resources, it is the work of Office of the Chief Medical Officer to determine the course for future action to address and improve the experience of female physician leaders in AHS.

The recommendations are separated into three areas: Female physician leaders and female physicians; physician leaders and physicians, and partnerships. Our goal was to identify opportunities for action and improvement that were practical and achievable. Where possible, we also identified actions that we thought may be quick wins within each of the recommendations.

The experience of female physician leaders in AHS is different than their male counterparts. However, this does not universally imply that it is worse. Throughout the report, our focus has been on issues we identified and to seek opportunities for improvement. Almost universally, the female physician leaders we spoke with indicated they enjoyed their leadership positions and found their work stimulating and gratifying.

Through listening, reflection, discussion and planning, AHS is in a position to set a course to address current concerns, continue to build on current physician leadership initiatives, and create an environment that is increasingly welcoming, supportive and nurturing for female physician leaders.

Francois Belanger, MD, FRCPC
Vice President, Quality, and Chief Medical Officer
Alberta Health Services

Appendix A: Advisory Group

The project lead, project coordinator, and the Chief Medical Officer extend a special debt of gratitude to the Advisory Group. This remarkable group of female physicians provided grounding, inspiration and aspiration. They willingly participated, provided advice and wisdom, and made the review and the report better.

Advisory Group members included (in alphabetical order):

Dr. Jennifer Bestard, Neurology, Central Zone.

Dr. Susan Gilmour, Pediatrics, Edmonton Zone.

Dr. Michelle Grinman, General Internal Medicine, Calgary Zone.

Dr. Lorraine Hosford, Primary Care, Edmonton Zone.

Dr. Carrie Kollias, Orthopedics, South Zone.

Dr. Marie Patton, Primary Care, Calgary Zone.

Dr. Elizabeth (Beth) Pedersen, Orthopedics, Edmonton Zone.

Dr. Carol Rowntree, Primary Care, Central Zone.

Dr. Lizanne Venter, Primary Care, North Zone.

A special thank you to project lead, Dr. Vanessa Maclean, and project coordinator, Chelsey Hurt.

Appendix B: Survey Tool

AHS Physician Leadership Survey September 2017

Dr. Francois Belanger, AHS Chief Medical Officer (CMO) has requested a review of female physician leadership in AHS. The purpose of the review is to develop an understanding of the experience of female physician leaders in AHS – current state, organizational behaviours/drivers and culture.

Dr. Rollie Nichol, Associate CMO, is the Executive Sponsor, and Dr. Vanessa Maclean is the project lead. An Advisory Group has been established to provide oversight for the review. Data will be collected through survey, focus groups and interviews. Upon completion of the review, the CMO will be provided a report and recommendations.

This survey is being distributed to all physicians who hold a formal physician leadership position within AHS. For the purposes of this survey, 'physician leader' has been defined as follows:

- Physician with leadership responsibilities outlined in AHS Medical Staff Bylaws and Rules;
- Physician with oversight responsibility for clinical programs (e.g. Physician Lead for clinical program such as Breast Health) or provincial programs (e.g. SCN Medical Director)
- It does not include physicians who are contracted to provide clinical service or those physicians who have administrative roles that fall outside of those defined above.

Thank you for taking the time to complete this survey. All responses will remain anonymous; only aggregate information (not possible to distinguish individuals) will be reported. To ensure confidentiality, please do not include any traceable indicators in any of the comments sections.

Your thoughts and feelings are what we want to know. If you do not wish to answer a question, please leave it blank. The survey may take up to 20 minutes to complete. Please complete the survey in one sitting and close the web browser once you've completed your survey.

Thank you again for your willingness to participate. A high response rate will provide validity and reliability of themes to be addressed.

Please complete the survey by October 2, 2017. If you encounter any issues with the survey tool, or have any questions regarding this initiative, please contact Chelsey Hurt at chelsey.hurt@ahs.ca

Sincerely,

Vanessa Maclean
Project Lead

Chelsey Hurt
Project Coordinator

For the purpose of creating filters for compiling the survey data, please begin the survey by answering the following demographic questions:

Demographics

1. Age
 - a. 20-29
 - b. 30-39
 - c. 40-49
 - d. 50-59
 - e. 60-69
 - f. 70-79

2. Gender
 - a. M
 - b. F

3. Zone
 - a. North
 - b. Edmonton
 - c. Central
 - d. Calgary
 - e. South
 - f. Cancer Control
 - g. Provincial

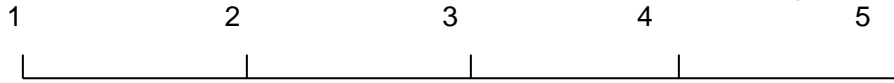
4. Number of years in current leadership position

5. Number of years total in any leadership position as a licensed physician

6. Age range at which you first began a physician leadership position
 - a. 20-29
 - b. 30-39
 - c. 40-49
 - d. 50-59
 - e. 60-69
 - f. 70-79

7. Do you have a formal affiliation with any of the following (check all that apply)?
 - a. University of Calgary
 - b. University of Alberta
 - c. Covenant Health
 - d. Other post-secondary institutions

22. Standards of professionalism are consistently adhered to amongst medical leaders

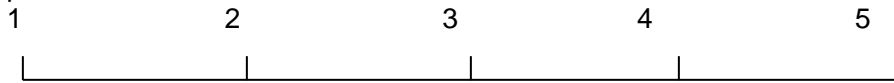


Strongly Disagree

Neutral

Strongly Agree

23. Sufficient processes exist to hold medical leaders accountable for performance and professionalism

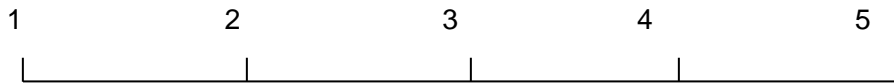


Strongly Disagree

Neutral

Strongly Agree

24. I feel comfortable discussing challenges that I experience in my leadership role with other medical leaders

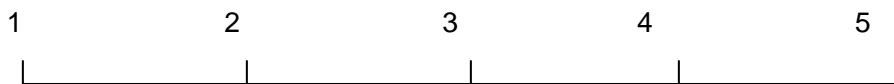


Strongly Disagree

Neutral

Strongly Agree

25. I feel safe to express my opinions and ideas with other AHS leaders (medical and other)

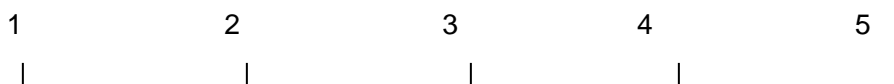


Strongly Disagree

Neutral

Strongly Agree

26. I am supported by my physician colleagues in my role as a medical leader

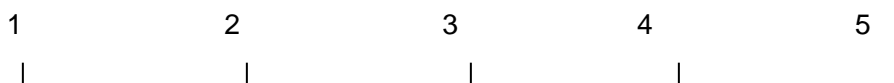


Strongly Disagree

Neutral

Strongly Agree

27. AHS has policies and practices in place that encourage physicians to become medical leaders

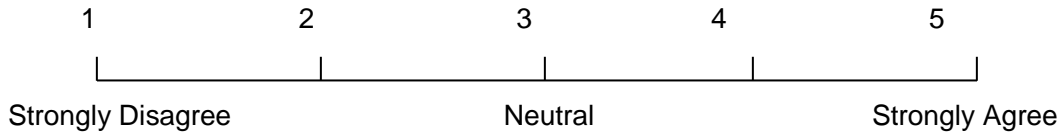


Strongly Disagree

Neutral

Strongly Agree

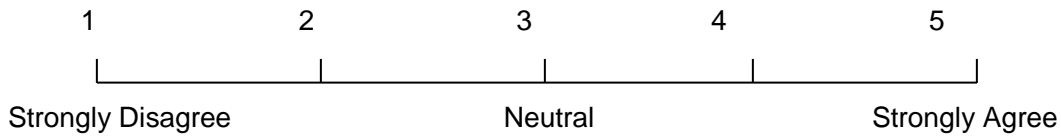
33. My experience of time and personal commitment required to fulfil my AHS leadership position is consistent with my expectations before taking the role



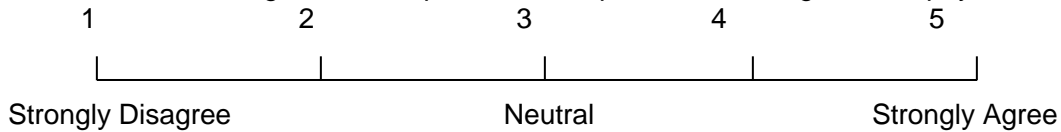
34. Please briefly identify why you responded the way you did to the above set of questions

Other Domain (geography, payment, gender, generational)

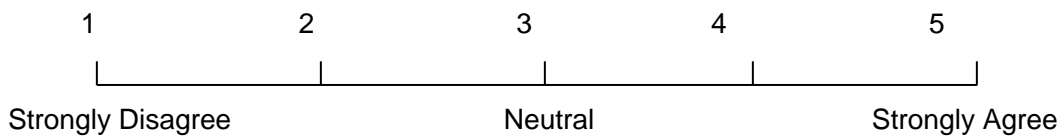
35. I believe that geographic location is a significant contributing factor in the overall experience of being a physician leader within AHS



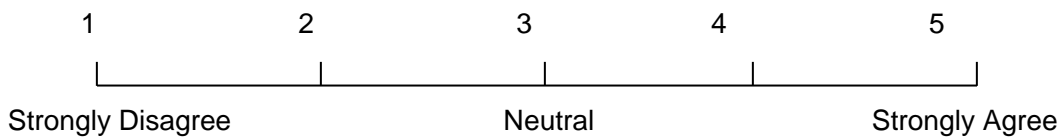
36. I believe that age has an impact on the experience of being an AHS physician leader



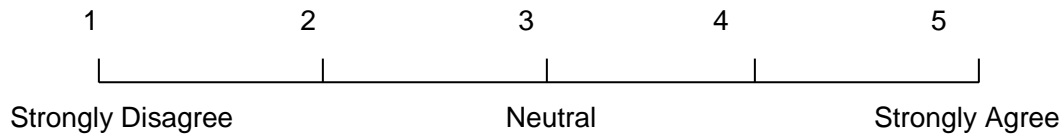
37. I believe that clinical payment models have an impact on those considering physician leadership positions in that salaried or ARP physicians are more likely to pursue physician leadership.



38. The experience of leadership is different for female and male physician leaders in AHS



39. Female and male physicians have equal opportunities to advance to a leadership position



40. Please briefly identify why you responded the way you did to the above set of questions

41. Do you have recommendations to improve leadership culture or support within AHS?

42. Do you have recommendations to improve the experience of female physician leaders in AHS?

43. Positive deviance is defined as intentional behaviours that significantly depart from the norms of a referent group in honourable ways. Positive deviance focuses on those extreme cases of excellence when organizations and their members break free from the constraints of norms to conduct honourable behaviours (Spreitzer & Sonenshein, 2004). In considering this concept, are you aware of examples of positive deviance with respect to the experience of female physician leadership?

Appendix C: Focus Group and Interview Tool

Note: The tool was created for the reviewers who were facilitating focus groups or conducting interviews. It was used to guide the discussion and as a means to ensure that there was consistency throughout the focus group and interview process. The tool was not shared with focus group or interview participants.

Focus Group/Interview Tool:

Focus Group/Interview:

Date:

Dr. Francois Belanger, CMO-AHS, has requested a review of female physician leadership in AHS. The intent of the review is to develop an understanding of the experience of female physician leaders in AHS – current state, organizational behaviours/drivers and culture. The review will be guided by an Advisory Group. Data will be collected through a survey of all physician leaders in AHS; focus groups from all five zones, a resident FG and cross zone all male, and mixed groupings; and interviews. A final report with recommendations will be provided to Dr. Belanger.

Interview

1. **Current experience:**
 - Professional: Training/current clinical practice/leadership experience.
 - Personal: Personal support system.
2. What are your **thoughts and experiences with female physician leadership** in AHS?
3. What **factors impact** the experience of female physician leaders in AHS?
4. What are your thoughts about the **organizational support and development of physician leaders** in AHS? Do you believe that there are **differences** in this support and development for male and female physician leaders in AHS?

5. What are your thoughts and experience regarding the **culture in AHS** regarding physician leadership? Is there a different culture for male and female leaders in AHS?

6. What is the **impact of personal support systems** on female physician leaders? Is it different for male physician leaders (if so, how and why)?

7. Positive deviance is defined as intentional behaviours that significantly depart from the norms of a referent group in honourable ways. Positive deviance focuses on those extreme cases of excellence when organizations and their members break free from the constraints of norms to conduct honourable behaviours (Spreitzer & Sonenshein, 2004).

In considering this concept, are you aware **of examples of positive deviance** with respect to the experience of female physician leadership?

8. Do you have any potential recommendations to improve the experience of female physician leaders in AHS?

Appendix D: Survey Results – Quantitative Data

The survey was sent to 565 physician leaders via zone Medical Affairs Offices and achieved a response rate of 30% (n=170). The survey was not set to obtain a required response before moving onto the next question, and this proved to be a limiting factor.

AHS employees who support the Survey Select tool used SPSS to examine gender differences in responses. T-tests and chi square statistical analyses were conducted with an error rate or statistical significant rate of $p < 0.05$.

DEMOGRAPHICS

Gender		
	n	(%)
Female	92	54.4
Male	77	45.6

Unspecified: 1

Zone		
	n	(%)
Calgary	86	50.6
Edmonton	45	26.5
Rural	30	17.6
Provincial	9	5.3

What is your primary method of clinical income?				
	Female		Male	
	n	(%)	n	(%)
ARP	33	36.3	19	25.0
Fee-for-service	47	51.6	48	63.2
Other	11	12.1	9	11.8

Unspecified: 2

What is your training?				
	Female		Male	
	n	(%)	n	(%)
Family Practice (CCFP)	25	28.1	21	27.6
Specialist (Royal College)	4	4.5	50	65.8
Other	60	67.4	5	6.6

Unspecified: 4

Where did you complete your medical degree training?				
	Female		Male	
	n	(%)	n	(%)
Canada	82	89.1	60	78.9
International Medical Graduate	10	10.9	16	21.1

Unspecified: 1

Is your leadership role comprised of:				
	Female		Male	
	n	(%)	n	(%)
Multidisciplinary team	58	63.0	45	59.2
Physician-centric team	34	37.0	31	40.8

Unspecified: 1

Age range at which you first began a physician leadership position				
	Female		Male	
	n	(%)	n	(%)
20-29	3	3.3	4	5.3
30-39	46	50.0	32	42.1
40-49	32	34.8	31	40.8
50-59	11	12.0	9	11.8

Unspecified: 1

Respondent Age				
	Female		Male	
	n	(%)	n	(%)
30-39	12	13.0	4	5.2
40-49	41	44.6	21	27.3
50-59	24	26.1	36	46.8
60-69	15	16.3	16	20.8

Unspecified: 1

Do you have a formal affiliation with any of the following:				
	Female		Male	
	n	(%)	n	(%)
University of Calgary	55	58.5	48	60.0
University of Alberta	31	33.0	28	35.0
Covenant Health	5	5.3	4	5.0
Other post-secondary institutions	3	3.2	0	0.0

* Note that as this question is set up as 'check all that apply,' the actual number of physicians affiliated with an external stakeholder could not be determined.

Leadership development and organization support domain

The orientation I received when I started in my AHS medical leadership position was sufficient to set me up for success				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	28	30.8	8	10.8
Disagree	23	25.3	24	32.4
Neutral	23	25.3	23	31.1
Agree	15	16.5	16	21.6
Strongly Agree	2	2.2	3	4.1
Missing	1		3	

$p=0.045$ (Chi-square). There is a significant difference ($p=0.045$) in the level of agreement between males and females with regards to this statement.

I am satisfied with the amount of learning and development opportunities I receive in my leadership role				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	9	9.9	2	2.7
Disagree	23	25.3	11	14.9
Neutral	19	20.9	15	20.3
Agree	32	35.2	35	47.3
Strongly Agree	8	8.8	11	14.9
Missing	1		3	

p=0.088 (Chi-square).

I am sufficiently supported in my leadership position to effectively perform the responsibilities of my role				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	9	9.9	4	5.6
Disagree	17	18.7	6	8.3
Neutral	17	18.7	10	13.9
Agree	40	44.0	38	52.8
Strongly Agree	8	8.8	14	19.4
Missing	1		5	

p=0.072 (Chi-square)

I believe that participating in a dyad leadership model has a positive impact on the experience of physician leaders in AHS				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	3	3.4	1	1.4
Disagree	6	6.8	5	6.8
Neutral	18	20.5	18	24.7
Agree	39	44.3	26	35.6
Strongly Agree	22	25.0	23	31.5
Missing	4		4	

p=0.674 (Chi-square)

I have been supported by mentors in my leadership role within AHS				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	11	12.4	0	0.0
Disagree	12	13.5	8	10.8
Neutral	17	19.1	15	20.3
Agree	31	34.8	32	43.2
Strongly Agree	18	20.2	19	25.7
Missing	3		3	

p=0.030 (Chi-square). There is a significant difference (p=0.030) in the level of agreement between males and females with regards to this statement.

What are your overall feelings regarding the support you receive in your leadership role?				
	Female		Male	
	n	(%)	n	(%)
Very Dissatisfied	6	6.6	3	4.1
Dissatisfied	18	19.8	7	9.5
Neutral	26	28.6	17	23.0
Satisfied	35	38.5	39	52.7
Very Satisfied	6	6.6	8	10.8
Missing	1		3	

p=0.162 (Chi-square)

Culture domain

Medical leaders within AHS are consistently treated fairly and equitably				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	9	10.3	2	2.7
Disagree	15	17.2	9	12.3
Neutral	35	40.2	21	28.8
Agree	26	29.9	37	50.7
Strongly Agree	2	2.3	4	5.5
Missing	5		4	

p=0.028 (Chi-square). There is a significant difference (p=0.028) in the level of agreement between males and females with regards to this statement.

Standards of professionalism are consistently adhered to amongst medical leaders				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	6	7.0	0	0.0
Disagree	17	19.8	5	6.8
Neutral	24	27.9	15	20.5
Agree	30	34.9	43	58.9
Strongly Agree	9	10.5	10	13.7
Missing	6		4	

p=0.003 (Chi-square). There is a significant difference (p=0.003) in the level of agreement between males and females with regards to this statement.

Sufficient processes exist to hold medical leaders accountable for performance and professionalism				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	8	9.2	3	4.1
Disagree	19	21.8	14	19.2
Neutral	35	40.2	24	32.9
Agree	21	24.1	29	39.7
Strongly Agree	4	4.6	3	4.1
Missing	5		4	

p=0.256 (Chi-square)

I feel comfortable discussing challenges that I experience in my leadership role with other medical leaders				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	2	2.3	0	0.0
Disagree	8	9.3	3	4.1
Neutral	12	14.0	8	11.0
Agree	49	57.0	47	64.4
Strongly Agree	15	17.4	15	20.5
Missing	6		4	

p=0.395 (Chi-square)

I feel safe to express my opinions and ideas with other AHS leaders (medical and other)				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	5	5.7	1	1.4
Disagree	9	10.3	1	1.4
Neutral	16	18.4	11	15.3
Agree	46	52.9	42	58.3
Strongly Agree	11	12.6	17	23.6
Missing	5		5	

$p=0.038$ (Chi-square). There is a significant difference ($p=0.038$) in the level of agreement between males and females with regards to this statement.

I am supported by my physician colleagues in my role as a medical leader				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	2	2.3	0	0.0
Disagree	5	5.7	4	5.5
Neutral	23	26.1	13	17.8
Agree	42	47.7	45	61.6
Strongly Agree	16	18.2	11	15.1
Missing	4		4	

$p=0.336$ (Chi-square)

AHS has policies and practices in place that encourage physicians to become medical leaders				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	10	11.5	5	6.9
Disagree	25	28.7	20	27.8
Neutral	35	40.2	32	44.4
Agree	16	18.4	13	18.1
Strongly Agree	1	1.1	2	2.8
Missing	5		5	

$p=0.809$ (Chi-square)

What are your overall feelings regarding the medical leadership culture within AHS?				
	Female		Male	
	n	(%)	n	(%)
Very Dissatisfied	4	4.6	1	1.4
Dissatisfied	22	25.3	5	6.8
Neutral	29	33.3	24	32.9
Satisfied	32	36.8	37	50.7
Very Satisfied	0	0.0	6	8.2
	5		4	

p=0.001 (Chi-square). There is a significant difference (p=0.001) in the level of agreement between males and females with regards to this statement.

Support system domain

I believe that having a strong family and personal support system is important in my role as a leader				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	0	0.0	0	0.0
Disagree	1	1.2	2	2.8
Neutral	4	4.7	6	8.3
Agree	35	40.7	23	31.9
Strongly Agree	46	53.5	41	56.9
Missing	7		5	

p=0.684 (Chi-square)

My experience of time and personal commitment required to fulfil my AHS leadership position is consistent with my expectations before taking the role				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	11	12.6	4	5.6
Disagree	23	26.4	16	22.2
Neutral	15	17.2	12	16.7
Agree	31	35.6	33	45.8
Strongly Agree	7	8.0	7	9.7
Missing	5		5	

p=0.473 (Chi-square)

I am able to consistently maintain sufficient balance between my medical leadership and clinical responsibilities				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	8	9.1	3	4.2
Disagree	26	29.5	20	27.8
Neutral	17	19.3	17	23.6
Agree	31	35.2	27	37.5
Strongly Agree	6	6.8	5	6.9
Missing	4		5	

p=0.765 (Chi-square)

I am able to maintain a satisfactory level of work-life balance between my professional and personal responsibilities (including having the time and ability to maintain my personal health)				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	18	20.5	5	6.9
Disagree	19	21.6	14	19.4
Neutral	14	15.9	21	29.2
Agree	31	35.2	29	40.3
Strongly Agree	6	6.8	3	4.2
Missing	4		5	

p=0.060 (Chi-square)

What are your overall feelings regarding the personal support you require and receive in your role as a physician leader within AHS?				
	Female		Male	
	n	(%)	n	(%)
Very Dissatisfied	5	5.7	2	2.8
Dissatisfied	16	18.2	10	13.9
Neutral	30	34.1	19	26.4
Satisfied	33	37.5	32	44.4
Very Satisfied	4	4.5	9	12.5
Missing	4		5	

p=0.237 (Chi-square)

Other domain (geography, payment, gender, generational)

I believe that the geographic location is a significant contributing factor to the overall experience of being a physician leader within AHS				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	3	3.4	0	0.0
Disagree	8	9.1	10	13.9
Neutral	19	21.6	20	27.8
Agree	46	52.3	35	48.6
Strongly Agree	12	13.6	7	9.7
Missing	4		5	

p=0.342 (Chi-square)

I believe that age has an impact on the experience of being an AHS physician leader				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	1	1.1	1	1.4
Disagree	13	14.8	2	2.8
Neutral	28	31.8	24	33.3
Agree	39	44.3	41	56.9
Strongly Agree	7	8.0	4	5.6
Missing	4		5	

p=0.102 (Chi-square)

I believe that clinical payment models have an impact on those considering physician leadership positions in that salaried or ARP physicians are more likely to pursue physician leadership				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	0	0.0	1	1.4
Disagree	4	4.6	4	5.7
Neutral	11	12.6	9	12.9
Agree	43	49.4	24	34.3
Strongly Agree	29	33.3	32	45.7
Missing	5		7	

p=0.292 (Chi-square)

The experience of leadership is different for female and male physician leaders in AHS				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	0	0.0	4	5.6
Disagree	4	4.6	10	14.1
Neutral	18	20.7	40	56.3
Agree	36	41.4	16	22.5
Strongly Agree	29	33.3	1	1.4
Missing	5		6	

p<0.001 (Chi-square). There is a significant difference (p=0.001) in the level of agreement between males and females with regards to this statement.

Female and male physicians have equal opportunities to advance to a leadership position				
	Female		Male	
	n	(%)	n	(%)
Strongly Disagree	14	16.1	1	1.4
Disagree	18	20.7	8	11.1
Neutral	25	28.7	15	20.8
Agree	25	28.7	35	48.6
Strongly Agree	5	5.7	13	18.1
Missing	5		5	

p<0.001 (Chi-square). There is a significant difference (p=0.001) in the level of agreement between males and females with regards to this statement.

Appendix E: Gender Distribution of Current AHS Medical Leaders by Zone

Compared average full time equivalent (FTE) to total FTE for both genders, and found that there was minimal variability in average FTE between genders with the exception of South Zone and Central Zone
(Data from December 2017).

Table E: 1 Gender Distribution of Current AHS Medical Leaders by Zone (All)

Zone	Medical Leaders Total Head count	Male Head count (% total)	Female Head count (% total)	Collective Male FTE & Avg.	Collective Female FTE & Avg.	Avg. Male FTE	Avg. Female FTE
South	67	57 (85%)	10 (15%)	9.3 (79%)	2.5 (21%)	0.16	0.25
Calgary	387	254 (66%)	133 (34%)	48.3 (66%)	24.5 (33%)	0.19	0.18
Central	50	40 (80%)	10 (20%)	5.7 (66%)	2.9 (33%)	0.14	0.29
Edmonton	212	159 (75%)	53 (25%)	31.2 (74%)	10.7 (26%)	0.20	0.20
North	95	83 (87%)	12 (13%)	10.8 (86%)	1.7 (14%)	0.13	0.14
Provincial	80	69 (86%)	11 (14%)	33.7 (88%)	4.8 (12%)	0.49	0.43
Total	891	662 (74%)	229 (26%)	139 (75%)	47.1 (25%)	0.21	0.21

Appendix F: Summary of Best Practices – Review of Four Relevant Articles

Programs to address and improve the experience of female physician leaders have been developed by many healthcare organizations both nationally and internationally.

Review of the literature identified programs that were primarily focused on academic or mixed academic/clinical settings usually limited to a specific department or geography. We have chosen four articles to highlight. They provide unique context and insight for consideration within the scope of this review.

- Journal Article: Women Physicians as health care leaders: a qualitative study (2016) and an Interview with Dr. Virginia Roth, Senior Medical Officer, The Ottawa Hospital.
- Report: Glass Ceilings and Sticky Floors. Time for the Department of Pediatrics to Renovate, written by the Women in Leadership Task Force of the McGill Department of Pediatrics (2017).
- Journal Article: A Longitudinal Curriculum to Address the Gender Gap in Physician Leadership from Family Medicine residency program at the University of Missouri (2014).
- Report: Releasing Potential: Women doctors and clinical leadership from NHS Midlands and East (2012).

Women Physicians as Health Care Leaders: A Qualitative Study (2016) and an Interview with Dr. Virginia Roth, Senior Medical Officer, The Ottawa Hospital (TOH)

This study⁵⁹ explored the under-representation of women physicians in clinical leadership. The study was conducted at a large, tertiary care, multi-site Canadian healthcare organization, and used large group engagement methods to explore the experiences and perceptions of women physicians. The paper provides insights to the barriers and enablers to leadership with female physicians in a clinical setting.

The analysis identified three themes that influence women in medical leadership:

1. Individual factors:
 - a. Definition of a leader.
 - b. Self as leader.
 - c. Challenges to women assuming leadership roles.

⁵⁹ Roth, VR et al. (2016). Women physicians as healthcare leaders: a qualitative study. *Journal of Health Organization and Management*, 30(4): 648-665.

2. Organizational factors:
 - a. Organizational structure.
 - b. Organizational culture.
 - c. Leadership recruitment and selection.
3. Leadership support, development and systemic correctives:
 - a. Leadership support.
 - b. Promotion of leadership opportunities.
 - c. Training and acquisition of leadership skills.
 - d. Redesigning leadership roles and tasks.
 - e. Facilitating women's influence on leadership culture.

We were fortunate to meet with Dr. Roth and learn more about the experience and initiatives that have been implemented at The Ottawa Hospital to address the issues of female physician leadership.

Dr. Roth indicated the results of the study clearly demonstrated there was opportunity to help female physicians see what leadership had to offer, and to address the barriers that were preventing female physicians from pursuing leadership opportunities.

A Female Physician Leadership Committee⁶⁰ was founded in March 2011. The purpose of the committee is to identify potential female physician leaders, encourage and support their development, and provide recommendations for leadership development specific to female physicians.

The committee led several initiatives including:

- Data measurement. Requirements were put in place to measure and report on specific gender-related metrics, including female physician representation within departments, with key leadership positions, and on search and selection committees.
- Networking events specifically designed to address female physician leadership. The events were open to all physicians, and also included residents and medical students.
- Leadership development. Focused education (PLI course; strengths-based leadership course was developed locally).
- Organizational structure. Supporting and encouraging leaves, focusing recruitment activities to ensure gender balance, improving work environments (timing of meetings; flexibility in work hours).
- #GoSponsorHer campaign:
 - #GoSponsorHer⁶¹ is a social media movement that has been used in business and education worlds to encourage sponsorship of female physicians. TOH was the first Canadian hospital to join the social media campaign. As part of the campaign, a challenge was issued to physician leaders to commit to sponsor a female physician. The result was active, intentional involvement of leaders to support and enable female physicians to explore leadership opportunities. The campaign has helped highlight a focused effort on sponsoring female physicians as physician leaders.

⁶⁰ Female Leadership Physician presentations (2017, September 13). The Ottawa Hospital.

⁶¹ Go Sponsor Her Campaign. <http://gosponsorher.com> .

Key successes of the work to date include:

- Leadership activities and goal-setting are now embedded in the annual performance review.
- Leadership selection committees have improved gender balance.
- Committee members assuming leadership roles.
- TOH Leave Policy.
- Networking event; physician leadership recognition awards.
- Short-term child care.
- Establishment of a new portfolio: Medical Director, Physician Health and Wellness.

Dr. Roth emphasized that identifying and implementing practical measures has been an important key to success. There is a deliberate focus on metrics which are shared broadly. TOH data on female physician appointments and leadership positions from 2011-2017 is as follows:

- Percentage of female physicians as active/associate staff has increased from 29.6% to 37.8%
- Percentage of female physicians as division heads has increased from 17% to 21%
- Percentage of female physicians as department heads has increased from 0% to 8%.

Meeting with Dr. Roth was inspirational, and TOH is an institution in Canada that is leading the way in addressing gender inequality in physician leadership.

Glass Ceilings and Sticky Floors. Time for the Department of Pediatrics to Renovate, written by the Women in Leadership Task Force of the McGill Department of Pediatrics (2017)

In 2016, the Women in Leadership Task Force of the McGill Department of Pediatrics was created to develop strategies and realistic action plans that would result in an increased number of female physicians applying for and assuming positions within the Department of Pediatrics. Information was gathered through an extensive literature review, participating in a CMA Leadership for Medical Women conference, and results from a survey and focus groups held with the McGill Department of Pediatrics.

The task force identified real and perceived barriers to women attaining high level medical leadership positions with the Department of Pediatrics. Barriers included:

- Image of effective leadership as traditionally male due to implicit biases.
- Lack of active guidance of women in the form of mentorship and networking opportunities.
- Disproportionate amount of family obligations resulting in the assumption that women are less interested, dedicated or able to take on more visible roles.
- ‘Distracting roles’ – clinical and educational leadership roles that distract from pursuit of high level leadership roles.
- Outdated organizational structure that relies on a career framework based on the traditional male work-life cycle and does not ensure a family-friendly work environment.

Based on identified barriers, the task force proposed six recommendations with associated action plans:

1. **Implement gender-diversity training and education** through the recruitment of a diversity expert to help implement gender-diversity training of faculty members, a gender-diversity policy, and specific gender-diversity training of all leaders within the Department of Pediatrics which will result in bias-free selection and promotion processes.
2. **Track and monitor demographic data and metrics** to determine ongoing gender-disparity issues and whether implemented initiatives have been effective in a measurable capacity.
3. **Adopt a renewed career framework** that would allow flexibility in work to support work-life integration and career advancement, optimizing faculty productivity and wellness.
4. **Provide active guidance for women** that includes a formal mentorship program (for both men and women), increased networking opportunities for women and increased participation of women in leadership, career-related and scientific workshops, programs and meetings.
5. **Establish a family-friendly work environment** that would aim to benefit both women and men by re-evaluating concepts (such as flexible meeting times and remote access) to allow participation of faculty with family-related responsibilities, and establishment of on-site services and amenities to facilitate work-life integration.
6. **Formally recognize departmental members' clinical, administrative and educational achievements** equal to research achievements, allowing for such achievements to be celebrated and held in high regard, benefiting faculty and trainees of all genders.

A Longitudinal Curriculum to Address the Gender Gap in Physician Leadership from Family Medicine Residency Program at the University of Missouri (2014)

We chose to highlight this study as it has some interesting ideas that could be considered for an emerging leaders program in AHS.

Authors of the study sought to understand the underlying issues and address challenges for female physicians assuming leadership positions in academic medicine. They developed a Growing and Inspiring Resident Leadership (GIRL) curriculum that promoted the development of leadership skills in residents of both genders, but specifically targeted female residents. Areas of focus included awareness of leadership opportunities, understanding organizational dynamics, conflict resolution, negotiating skills, mentoring and personal wellness.

The curriculum consisted of:

- A yearly networking event that was designed to introduce residents to potential mentors, and increase relationship building.
- Longitudinal leadership workshops led by female faculty. The workshops included exercises, panel discussions and networking opportunities.
- Faculty members were asked to intentionally seek out residents to provide mentorship opportunities.

The program was evaluated and feedback from residents was universally positive. There are plans to extend this program to junior faculty. At the time of the report, evaluation to determine the long-term impact of the interventions had not been completed.

Releasing Potential: Women doctors and clinical leadership from NHS Midlands and East (2012)

This report was written by Dr. Pamela Newman at a time in the NHS where newly mandated Clinical Commissioning Groups (CCGs) were taking over responsibility for commissioning the majority of NHS primary care services in England. At the time of writing, emerging CCGs were already dominated by male General Practice (GP) leaders. The review and report were commissioned to evaluate and address improving the talent pipeline for female medical leadership. A detailed review included interviews with female GPs and consultants who currently held a senior leadership role in the country, additional interviews with female medical leaders and other experts, and a literature review.

Recommendations from the report are included here:

2. National level and Strategic Health Authority (SHA) clusters.
 - Coaching and mentoring for women doctors in isolated senior leadership roles should be routinely offered where women doctors are a significant minority.
 - Role models should be identified and developed to encourage women doctors to aspire to leadership roles. Women doctors in senior leadership positions should be offered training to coach female colleagues. As well, awards for their achievement and sponsorship of others will recognize and appreciate their value.
 - Work should be undertaken in collaboration with the National Leadership Council's Top Leaders program to identify the pipeline of talented women doctors ready to apply for board-level positions and challenge male-only boards.
 - A women doctors' web-based interactive leadership social network should be created with support from NHS Networks to promote peer support, online co-coaching, career development and involvement in commissioning.
 - All appointment processes should be scrutinized to ensure they are transparent and robust.
 - The numbers of women doctors should be tracked to identify those achieving leadership roles by specialty and at board level, similar to the Female FTSE 100 board report.
 - All national primary care organizations should take joint responsibility to encourage and enable the development and contribution of sessional GPs at practice and CCG level and ensure their involvement in the future leadership of primary care.
 - Flexible training, part-time positions and posts where there is the ability to "ramp on and off" should be made more available across the NHS for all doctors, male and female.
 - A booklet or web page for junior women doctors should be developed to provide career advice on what to expect, highlight role models, and provide useful sources for support.
 - A steering group should be established to oversee implementation of these recommendations and consider the need for further research.
3. Organizational level.
 - All emerging CCGs should be aware of the number of sessional GPs in their area, ensure they receive all communications, and have voting rights and access to development and leadership opportunities.
 - CCGs should consider the benefits of diversity and representation of the performers list at board level and the need to co-opt members who are under-represented prior to authorization, e.g. female and sessional GPs.
 - All NHS organizations should develop sponsorship programs to encourage women doctors in leadership, make roles available by having fixed board-level appointments,

monitor uptake of development programs by gender and actively promote women doctors for local or national awards.

4. Individual women doctors.

- All women doctors should consider leadership opportunities, put themselves forward, join a network and offer to mentor or sponsor other women doctors.

Prepared by Dr. Vanessa Maclean (Project Lead) and Chelsey Hurt (Project Coordinator)

Appendix G: Recommended Reading List

1. Bismarck, M. et al. (2015). Reasons and Remedies for under-representation of women in medical leadership roles: a qualitative study from Australia. *BMJ Open*. 2015;5:e009384
2. Glass Ceilings and Sticky Floors: Time for the Department of Pediatrics to Renovate to Improve Opportunities for Women in Leadership. (2017). *Women in Leadership Task Force of McGill Department of Pediatrics*. Revised: August 16, 2017
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