

Mind the Gap:

Gender Equity in Physician Compensation

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NLMA Discussion Paper



In 2021, the NLMA established a committee to provide leadership and guidance to the NLMA Board of Directors to advance gender equity in physician compensation. The issue of physician compensation equity has been studied extensively in Canada (most recently in Ontario) and the world.

Pay equity is not an issue isolated to physician compensation. According to the Ontario Pay Equity Coalition, only six provinces have enacted specific pay equity legislation. There are many ways physician compensation can be affected inequitably by systemic factors.

Our research methodology relied on two key activities: documenting conclusions from the extensive research available on gender equity in physician compensation and documenting the experiences of physicians in this province with respect to gender inequities in compensation.

There has been a significant amount of research documenting the pay gap for female physicians. In 2021, the Ontario Medical Association reported there was an unexplained daily pay gap of 13.5 per cent between male and female physicians (OMA News Release, September 21, 2021; Merali et al, 2021). The unadjusted daily pay gap was 22.5 per cent. The OMA research was preceded by other compensation research confirming the pay gap for female physicians in Canada and around the world.

Key findings from the literature review show female physicians experience inequities in compensation, much of which cannot be explained by other systemic factors. Three key areas have been identified for mitigation: payment models, fee code biases, and referral practices.

Fee-for-service compensation models reward volume. Female physicians spend more time with their patients and, consequently, see fewer patients. The greater amount of time spent with a patient is a factor in better outcomes (fewer hospital admissions and readmissions, fewer visits to emergency rooms, and lower mortality rates). Fee codes do not permit physicians to bill for time spent establishing rapport, counselling patients, charting, and managing chronic diseases. The latter would be of particular concern here in Newfoundland and Labrador.

Fee codes may assign higher value to procedures and issues experienced by men and lesser value to procedures and issues experienced by women. Fee codes also do not permit compensation on the amount of time spent.

Systemic bias in referral practices contributes to lower rates of pay. It can also contribute to slower advancement. Biased referral practices can contribute also to health system backlogs, leading to poorer health outcomes.

The member survey responses and key informant interviews reflected many, if not all, of the issues identified in the literature review. The majority of respondents agreed gender inequity in physician compensation was an issue for NLMA members. They welcomed future action on the issue and identified a number of actions to take in moving the issue forward.

The following recommendations offer concrete opportunities to mitigate the systemic bias female physicians encounter.

Compensation Solutions

1. The NLMA examine the FAIR process and its implementation in Ontario to determine how these principles can be incorporated in fee code allocation in NL.
2. The NLMA pursue, through the MCP Payment Schedule Review Committee (PSRC), a review of the MCP fee codes using *the Gender-Based Analysis Plus*¹ approach to address unequal compensation for multiple issue visits and for non-medical processes, such as counselling, coordination, patient education, affecting patient care.

Structural Solutions

3. The NLMA support a review of the assignment of patients, tests, operating room allocations etc. for systemic bias by the regional health authorities and/or the provincial health board.
4. The NLMA support a review of the opportunities for centralized referral processes in NL as a mechanism to promote gender pay equity.
5. The NLMA support the inclusion of physicians in the provincial pay equity legislation.
6. The NLMA undertake a review of existing member benefits, support member education, and promote available benefits to members.

Leadership Solutions

7. The NLMA promote continued respect and support for female physicians through the use of diversity, inclusion, and equity-based messaging in member communications.
8. The NLMA work with the regional health authorities/provincial health board to support the promotion of female physicians in leadership roles (including approval of requests for leave and professional development).
9. The NLMA advocate for the training/education of senior health administrators re: gender bias and its impact on the gender wage gap in medicine using the Gender-Based Analysis Plus (GBA+) approach.
10. The NLMA work with Memorial University to include sessions on gender bias and other forms of discrimination against women and other historically marginalized groups, and support mentorship and peer support of female medical students/residents.

¹ The federal government defines GBA Plus as “an analytical process that provides a rigorous method for the assessment of systemic inequalities, as well as the means to assess how diverse groups of women, men, and gender diverse people may experience policies, programs and initiatives. The “plus” in GBA Plus acknowledges that GBA Plus is not just about differences between biological (sexes) and Socio cultural (genders). We all have multiple characteristics that intersect and contribute to who we are. GBA Plus considers many other identity factors such as race, ethnicity, religion, age, and mental or physical disability, and how interaction between these factors influences the way we might experience government policies and initiatives.” (www.women-gender-equality.canada.ca)

I. NEED & OPPORTUNITY

In 2021, the NLMA established a committee to provide leadership and guidance to the NLMA Board of Directors to advance gender equity in physician compensation. The issue of physician compensation equity has been studied extensively in Canada (most recently in Ontario) and the world. To learn more about how female physicians in this province are affected by gender inequity, the NLMA engaged in a consultative process composed of reviewing secondary research, collecting member feedback, and developing a multi-pronged engagement plan with the NLMA's key audiences: members, government, and the public.

Pay equity is not an issue isolated to physician compensation. Per the Government of Canada, “Canadians have the right to experience workplace compensation practices that are free from gender-based discrimination. Pay equity aims to ensure that employers provide you with equal pay for doing work of equal value.”²

According to the Ontario Pay Equity Coalition, six provinces have enacted specific pay equity legislation: Manitoba, New Brunswick, Nova Scotia, Prince Edward Island, Ontario, and Quebec.³ Three other provinces, including Newfoundland and Labrador, have developed pay equity frameworks to negotiate pay equity with *some* public sector employees (emphasis added).⁴ The provincial government announced in August 2022 plans to introduce pay equity legislation for Newfoundland and Labrador in the fall 2022 sitting of the House of Assembly.

All provinces and territories have human rights legislation “which prohibits discrimination in employment generally and which, in the absence of or in addition to pay equity legislation, can be a tool for addressing discrimination at pay.”

There are many ways physician compensation can be affected inequitably by systemic factors. For example, compensation may be affected by the number of OR days available, referral processes, scheduling, types of call, access to clinic space and administrative support, the amount of time spent on administrative responsibilities, and types of work assignments. However, the research clearly concludes female physicians are not compensated equitably compared to their male peers, even when multiple factors are included in the calculation.

II. METHODOLOGY

Our research methodology relied on two key activities: documenting conclusions from the extensive research available on gender equity in physician compensation, and documenting the experiences of physicians in this province with respect to gender inequities in compensation.

² <https://www.canada.ca/en/services/jobs/workplace/human-rights.html>

³ <http://equalpaycoalition.org/the-gender-pay-gap-across-canada/>

⁴ The other two provinces are Saskatchewan and British Columbia. Alberta has neither legislation nor a framework re: pay equity.

The literature review included research published in academic journals in Canada, the U.S., the U.K. and parts of Europe and Asia. It concerns data published in the last 20 years. The literature review is also supplemented with material collected from news media and medical association websites.

As benchmarking can be helpful in understanding complex issues, we chose the legal profession as an appropriate comparison to medical practice models, compensation models, and gender equity approaches. Like physicians, lawyers work in independent practice, have specialties, bill for separate services, or can practise as salaried professionals (for example, Departments of Justice and regional health authorities).

The consultation process with NLMA members included a survey open to all NLMA members and key informant interviews from self-selected participants. The NLMA promoted the project through two president's letters in March 2022, in which members were invited to complete a survey or to participate in a confidential interview. We received 46 completed surveys and interviewed two physicians.

Additional Support – The Gender Equity in Physician Compensation Committee managed the research process between September 2021 and May 2022. Committee members reviewed material in progress, provided advice on the questions used in the key informant interviews and member survey, and guided the structure of the report. Members also assisted in the retrieval of documentation from various medical journals and shared new research and publications.

In September 2021, the researcher and NLMA met with a representative of the Ontario Medical Association who generously provided background information on their research and methodology used in their recent assessment of compensation equity in their membership. They have shared insights with us on their approach, which we have used in analyzing our own findings and experiences here in the province. The OMA has continued to share information with the GEC, as appropriate, concerning the results of their research.

III. LITERATURE REVIEW

According to the Canadian Medical Association (2019), the gender profile of physicians in Canada is as follows: 43 per cent are female; 57 per cent are male; two thirds (64 per cent) of family physicians under age 35 are female, and 56 per cent of first year medical students in 2017/18 were female; 44 per cent were male. The NLMA has 1534 members, of whom 1349 are practising members. The NLMA has 575 members who identify as female, or about 42 per cent, which is on par with national statistics. It is important to note that in this paper we are considering gender in the binary sense. There is simply no data on non-binary physicians, and therefore their experiences are not reflected in our analysis of the data.

3.1 Gender Inequity in Compensation

There has been a significant amount of research documenting the pay gap for female physicians. Each subsequent study has refined the methodology to account for the existence of the pay gap. In 2021, the Ontario Medical Association reported there was an unexplained daily pay gap of 13.5 per cent between male and female physicians (OMA News Release, September 21, 2021; Merali et al, 2021). In addition to the unexplained pay gap, the OMA said its analysis also concluded there was an annual pay gap. The OMA study, one of the most comprehensive to date, looked at the 2017-2018 OHIP daily billings from 31,481 physicians. Additional findings included:

- The unadjusted daily pay gap was 22.5 per cent.
- Two-thirds of the daily pay gap could be attributed to specialty type. Thirteen specialties had gaps of more than 15 per cent. Male-dominated specialties, like neurosurgery, cardiology and vascular surgery, had the greatest gaps, while some female-dominated specialties, like geriatrics and pediatrics, also showed significant gaps.
- The adjusted daily gap was greatest among physicians practising in fee-for-service models, where doctors bill OHIP for each medical service performed, and smallest among those practising within a capitation, or fixed payment per patient, model.
- The annual pay gap of 32.8 per cent was larger than the daily gap, reflecting the impact of gender-based differences in the number of days worked.

The OMA analysts concluded further research was needed to understand why female physicians worked fewer days.

A second Canadian study focused on net earnings (after taxes and expenses) instead of gross billings. Kralj et al (2022) found female physicians earn 9.3 per cent less on average compared to male physicians. Further analysis showed the gap was about 8.5 per cent for female family physicians and 10.2 per cent for female specialists. The study also reported “Beyond averages, at the top of the income distribution the gap is double that at the median for both family physicians and other specialists. The gap also varies across provinces, from 6.6 per cent in Quebec to 19.8 per cent in Manitoba.” The study authors concluded their findings substantiated previous work documenting the pervasiveness of the gender pay gap in medicine.

The OMA research was supported by other compensation research confirming the pay gap for female physicians in Canada and around the world:

- Canadian women physicians consistently earn less than their male colleagues (Cohen & Kiran, 2020; Hwang 2021).
- Primary care physicians in the United States, United Kingdom, Germany, France, Brazil and Mexico report similar gender pay gaps, with female doctors in those countries making 20–29 per cent less than their male colleagues. (Rimmer, 2017; Boesveld, 2020; Doximity, 2020).

- A gender gap still exists among Korean emergency physicians, and women earn less than men regardless of their rank, clinical hours, or training (Lee et al, 2020).

3.2 Factors Affecting Physician Compensation

Impact of Referral Bias – Dossa et al (2019, 2021) reviewed nearly 40 million referrals to surgeons. They found male surgeons, who accounted for 77.5 per cent of all surgeons, received 79 per cent of referrals by female physicians and 87 per cent of referrals sent by male physicians. However, female physicians were 1.6 per cent more likely to refer to female surgeons compared to male physicians who referred to male surgeons 32 per cent of the time. Dossa et al also found that even though more women entered surgery in the 10-year period reviewed by the study, the number of referrals to female surgeons did not go up. The researchers also found female surgeons earned 24 per cent less in spite of being paid via the fee-for-service payment model. A supplementary analysis concluded “bias in the referral process may have a detrimental impact on the practices of female surgeons and such biases will not automatically correct over time as more women enter surgery.”

Specialists – The pay gap between women and men exists within every medical specialty, in higher-paying and lower-paying specialties, and in male-dominated and female dominated specialties (Rottenstein & Dudley, 2019; Boesveld, 2020; Cohen & Kiran, 2020; Isabelle Sin et al 2021). For example, Gambhir et al (2021) reported salaries (unadjusted and adjusted) were significantly lower for female surgeons compared to male surgeons. A number of studies have also concluded the gap in specialty compensation cannot be fully explained by individual factors, such as hours worked, efficiency, age and experience (Cohen & Kiran; 2020; Doximity, 2020; Hwang, 2021; Sin, I et al 2021; Sin, Y, 2021).

Academic Appointments – Physician compensation is also affected by academic appointments, both research and teaching roles. Li et al (2021) carried out a study of gender differences in faculty rank among academic physicians. They found men were 2.77 times more likely to be full professors, men published more papers, earned higher salaries, and were more likely to be departmental chairs; as well, men were more likely than women to be full professors after controlling for experience, academic productivity, and specialty. The authors concluded “gender inequity in academic medicine exists across all specialties, geographical regions and multiple measures of success, including academic rank, publications, salary and leadership.”

Jagsi, et al (2021) also found gender differences in salary existed for mid-career academic physicians, even with “adjustments for differences in specialty, institutional characteristics, academic productivity, academic rank, work hours and other factors.” Finally, Merali et al (2021) reported “studies evaluating specific subgroups of physicians have found sex- and gender-based salary discrepancies among research, academic, and clinical physician groups.”

Systemic Bias – Sheppard et al (2021) reported female physicians still experience harassment, discrimination, and pay inequity when compared to their male colleagues. Both Cohen and Kiran

(2020) and Yvonne Sin (2021) conclude the gender pay gap in medicine relates to systemic bias in medical school, hiring, promotion, clinical care arrangements, the fee schedule itself and societal structures more broadly. Hwang (2021) also identified systemic causes of the gender pay gap; these include gender norms, referral bias and inequity within the fee schedule itself. Hwang also reported procedures specific to female patients are often paid at a lower rate than comparable procedures in male patients. Cohen and Kiran (2020) reported:

Dossa and colleagues found a gender distribution in surgical cases to be the major driver of pay inequity between male and female surgeons. Female surgeons disproportionately operate on women, and these procedures are often remunerated at a lower level. For example, in Ontario, surgeons are paid \$50.90 for incision under general anesthetic of a vulvar abscess, compared to \$99 for a scrotal abscess. Similarly, payment for a biopsy is \$39.60 for the penis and \$26.85 for the vulva. That procedures performed mainly in female patients are lower paying is itself suggestive of systemic bias.

Kralj et al (2022) reported that despite the evidence showing pay gaps between male and female physicians exist, there is also a gap in belief regarding the existence of a pay gap. Kralj et al referenced a 2020 OMA survey of physicians: “A key finding is the contrast in opinion by gender on the reality of the pay gap, with 84 per cent of female versus only 34 per cent of male respondents in agreement that a pay gap exists. Three-quarters of female respondents, but only 14 per cent of male respondents, reported being “very concerned” with the gender pay gap.”

Impact on Patient Outcomes – Women physicians are penalized for their style of practise in that they tend to spend more time with their patients and they are more likely to address psychosocial issues, follow clinical guidelines, and spend more time on counselling and preventive care (Hwang, 2021). Both Hwang and Rottenstein & Dudley (2019) reported these practices result in fewer ER visits and hospital admissions as well as lower hospital readmission, complication, and mortality rates. However, gender bias in referrals to male specialists over female specialists is a factor in waitlists and has fueled a surgical backlog in Ontario. Solarina Ho, writing for CTV News, documented the pandemic’s exacerbation of the impact of the gender bias on surgical backlogs (March 2021). Cohen and Kiran (2020) also reported that poor outcomes had different impacts on referrals:

Referral bias from primary care physicians also contributes to the gender pay gap in surgery. A 2017 study using US Medicare data showed that female surgeons received fewer referrals overall and that, if a patient had a poor outcome after surgery performed by a woman, his or her primary care physician was less likely to refer to any women in that specialty.⁶¹ However, if a poor outcome occurred at the hands of a male surgeon, an equivalent drop in referrals to men was not seen.

Impact on Female Physicians – CIHI (2017) also reported “female doctors had 23 per cent higher odds of experiencing burnout, 32 per cent higher odds of depression and 31 per cent higher odds of suicidal thoughts than their male colleagues.” Patrel (2019) found almost 75 per cent of women physicians reported either reducing their work hours or considering part-time

work within six years of completing their residency training. Most recently, Boesveld (2020) found female doctors have lower career satisfaction and less control over their work, in addition to being paid less and shouldering more responsibilities at home.

Simpson et al (2021) considered the negative perception of childbearing (either during medical training or later in one's career) and looked at birth rates, infertility from delayed childbearing, and pregnancy complications. The authors recommended:

Interventions to reduce discrimination against childbearing physicians may include increasing the number of residency positions to ensure scheduling flexibility, integrating reproductive-health teaching for physicians into medical curricula early in training, and fostering allyship in the profession to reduce stigma.

3.3 Potential Solutions

The Canadian Institute for Health Information (2017) reported most physicians in this country are “paid by the government based on a fee-for-service schedule that itemizes each service a doctor provides. This means that a doctor who sees more patients in the least amount of time earns more than one who sees fewer patients, taking more time with each visit.”

Many of the studies reviewed identified an immediate need to revise compensation models including fee schedules, assignment of fee codes, and so on to address the impact of systemic and unconscious biases in physician remuneration. Isabelle Sin et al 2021 concluded gender wage gaps between male and female physicians of similar experience could not be eliminated by employment agreements that specify minimum wages for each level of experience and progression through these levels. Multiple authors concluded physicians who provide more time to their patients are not compensated adequately, and while unintended, the lack of compensation is disproportionately felt by women physicians (Roy, 2018; Hwang, 2021; Cohen & Kiran, 2020).

Dudley et al (2022) in the *Harvard Business Review* examined the trend for female physicians to leave medicine. Their key recommendation:

Organizations should also review compensation to ensure that current practices are equitable. *Developing new payment models that take into account the greater time that female physicians spend with female patients is critical.* For example, risk-adjusted panel payments can include adjustments for patient age, gender, comorbidities, and social determinants of health (emphasis added).

The literature review found additional strategies:

- Implementation of a centralized referral system (Boesveld, 2020).
- Making data on gender pay gaps publicly available. In the U.K., employers with more than 250 employees must publish their pay and bonus gap information on their own websites as well as the government site (Rimmer, 2017).

- Cohen and Kiran (2020) also recommended offering anti-oppression training, challenging the hidden curriculum in medical education, implementing fair and transparent hiring and referral processes, and publicly reporting physician payments by gender.
- The OMA Physician Resources Committee (2020) recommended the OMA address changes to the benefits schedule; undertake advocacy re: pay equity; expand the available opportunities for female physicians; and improve benefits (parental leave) for physicians.
- Sheppard et al (2021) recommended more research on biases against women in Emergency Medicine; implementation on non-punitive investigative process re: sexual harassment; address gender bias in learning environments; develop/implement policies (breastfeeding, parental leave, etc.); additional research re: persistent pay gap in Canada; address bias in medical school selection processes; develop mentorship programs within medical schools/emergency departments to support women in EM; and leadership must focus on gender equity in recruitment/retention.

Ontario Medical Association Approach – The Ontario Medical Association and the Ontario provincial government announced a new three-year master agreement in spring 2022. The new OMA agreement includes investments in a number of areas related to gender equity:

- A joint OMA-government committee will be established to modernize the OHIP schedule of benefits, and part of this committee’s mandate is to achieve gender pay equity. This includes considering the time, intensity, complexity, risk, technical skills, and communication skills required to provide each service;
- Enabling more physicians to join Family Health Organizations and participate in blended capitation payment models; and
- Increasing pregnancy and parental leave benefits for physicians.

Another highlight from the new agreement is the Ontario Government’s endorsement of the FAIR relativity model. The objective of the FAIR model is to achieve relativity between specialties (or other physician groupings as appropriate), as measured through hourly compensation adjusted by overhead and education. This has considerable potential to reduce gender pay gaps, as female physicians are more heavily concentrated in lower-paid specialties (e.g., Family Medicine, Pediatrics, Psychiatry).

As a result of the new agreement, the 2022 round of the OMA’s fee-setting process is soliciting and considering proposals from physician leaders that positively impact the gender pay gap within their specialty. Many proposals are working to make the schedule of benefits better reflect the time required to perform a service, and/or to better compensate for unremunerated or highly time-variable work. Other proposals are constructed to ensure that changes in the schedule of benefits do not worsen any gender imbalances within their specialty.

Key Takeaway: Because the conclusions of the OMA data have many parallels with the NLMA member experience, the OMA approach would be a good one to adapt for Newfoundland and Labrador going forward.

3.4 Benchmarking Gender Equity in Compensation: Legal Profession

Like medicine, women have been participating in greater numbers in law schools, making up almost half of the graduating classes (Attorney at Law, 2021). However, they are still in the minority when it comes to partnerships in law firms and private practice. In the US, the compensation of women lawyers has been influenced by three myths: that there are too few women entering law school; that too often women ask for less with respect to compensation, and that women prioritize family over career.

Doolittle and Dobby (2021) in the *Globe and Mail* found female partners in Toronto earned a quarter less than male lawyers. Male associates earned more than female associates, and they were more likely to earn a bonus (80 per cent of men vs. 44 per cent of women). Doolittle and Dobby said male lawyers at one firm earned \$200,000 more a year than female lawyers, and 75 per cent of the lawyers who were equity partners were men.

Doolittle and Dobby also reported men achieved higher billings than women, but men were also likely to be given cases that would generate more billable hours. They also reiterated conclusions from earlier reports, which showed men are more likely to hold positions of power in public institutions and large private corporations. They are also more likely to use that power to hire lawyers with whom they already have a relationship, or who are more likely to be like them.

Other research confirmed the inequity in compensation for female lawyers. McNab (2021B) concluded causes of the wage gap were gender wage segregation, affinity bias and task value, and client bias which values women practitioners as lesser than men. In 2019, the Women Lawyers Forum, in their preliminary work on partner compensation, recommended three solutions: research how best to influence firms to include gender equity statistics in reporting; research actual compensation gender differences; and actively query gender equity policies at the provincial and national level of law organizations. McNab (2021A) also identified several mitigation strategies: focus on student pipeline, go beyond the numbers to study embedded biases, provide mentors and appropriate advisors, and take real steps to enact change re: diversity, equity, and inclusion (DEI).

Key Takeaway: Unlike the legal field, medical associations in Canada have been able to obtain useful data on physician compensation by gender. While there are similarities between remuneration models between lawyers and physicians, the quantity of new, and more comprehensive, data analysis means physicians and their professional associations are in a better position to address gender inequity in compensation.

3.5 Key Findings

Key findings from the literature review show female physicians experience inequities in compensation, much of which cannot be explained by other systemic factors. Three key areas have been identified for mitigation: payment models, fee code biases, and referral practices.

Fee-for-service compensation models reward volume. Female physicians spend more time with their patients, and consequently see fewer patients. The greater amount of time spent with a patient is a factor in better outcomes (fewer hospital admissions and readmissions, fewer visits to emergency rooms, and lower mortality rates). Fee codes do not permit physicians to bill for time spent establishing rapport, counselling patients, charting, and managing chronic diseases. The latter would be of particular concern here in Newfoundland and Labrador.

Fee codes may assign higher value to procedures and issues experienced by men and lesser value to procedures and issues experienced by women. Fee codes also do not permit compensation on the amount of time spent.

Systemic bias in referral practices contributes to lower rates of pay. It can also contribute to slower advancement. Biased referral practices can also contribute to health system backlogs, leading to poorer health outcomes.

IV. Newfoundland and Labrador Member Perspectives

Gender equity in compensation has been studied extensively in Canada and the world as documented in the literature review. The research concludes female physicians are not compensated equitably compared to their male peers, even when multiple factors are included in the calculation. As noted earlier, we have combined survey responses with key informant interview content. Not all survey respondents answered every question. To avoid confusion, we have represented as percentages.

Rate of Compensation – We asked respondents how they would describe their rate of compensation compared to their physician colleagues. Of the responses received, respondents described their compensation as follows:

- 71 per cent said they earn less than male colleagues who are equal in skills, experience and years in practise;
- 15.5 per cent said they earned the same as male colleagues who are equal in skills, experience and years in practise;
- 13.3 per cent said they hadn't considered there being a difference in how they are compensated.

Nobody reported earning more than male colleagues who are equal in skills, experience, and years in practise.

Indicators Influencing Compensation – We asked respondents what indicators had a role in how they were compensated. Respondents could choose from a list of indicators provided or provide additional factors in their comments. Almost one third of respondents (29.5 per cent) said the amount of uncompensated administrative work required affected their rate of compensation.

The second most frequently identified factor was the expectation that female physicians could provide more time for a patient during a clinical visit than what was expected from male physicians (18 per cent). For example, a physician reported a patient said they had planned to ask their surgeon about an issue but he was too busy so they saved it to ask their female doctor.

Other factors affecting compensation included:

- Access to clinic space inside the hospital vs. rental space outside the hospital (13.6 per cent)
- Number of patients they could see (13.6 per cent)
- Number of OR days, Number of referrals received, Call schedule (nights/weekends/holidays), types of work assignments (e.g. fewer CT scans, more mammograms) and academic appointments (9.1 per cent each)

Other factors influencing compensation included access to administrative support and bias in compensation for specialties (less than five per cent each). One respondent said there were no factors influencing compensation.

Some representative comments:

- *Referral pattern of high need and complex cases affects ability to see same volume, also as I was in an admin role I had many non-remunerated duties that affected clinic time, disparities with for fee-for-service model, alternate payment (APP) plans, academic stipends for identical work between institutions.*
- *It's subtle ways in which we practise or are expected to practise. Patients expect females to be better listeners, more patient, and take a holistic approach. Which is fine, but we don't get paid for that. We are paid for one issue per visit, but as females we are more likely to spend longer time dealing with multiple (issues).*
- *I feel this is more so evident when you look at how specialties are compensated. Traditional "male" dominated specialties are paid higher than traditionally "female." There is so much discrepancy across pay scales...*
- *(Women) complete more committee work and non-paid work. Similar amounts of call and service for less pay.*
- *In my field, there is an "old boys club" who keeps outside opportunities (for example, locum opportunities outside of St. John's) to themselves.*

Other Causes – Existing research has found a wage gap exists even when all known factors are accounted for. We asked physicians why these inequities continue to exist. Respondents

highlighted gender-based biased expectations re: female physicians as a contributing factor. Other examples described being overlooked for leadership potential, male-preferred bias in leadership, more help given to male physicians by other doctors and health professionals, and a general lack of respect for female physicians due to role, youth, and attitude.

The single biggest difference cited was time spent with patients and the differing expectations for female and male physicians. Issues related to work-life balance, such as maternity leave, childcare, after hours time on administrative functions, or making time for family over work commitments were raised almost as often as uncompensated time spent with patients.

- *One issue for fee-for-service that I'm aware of from the literature is that female physicians often take more time with patients, so they do not see as many patients which means they bill less for fee-for-service. However, female physicians also typically get better health outcomes than their male counterparts. I think there needs to be a review of billing codes that allow for increased billing when a patient has a more complex presentation that requires a physician to spend more time.*
- *I will have to take unpaid maternity leave due to the NLMA's outdated policy. Even if I did qualify for this policy, it only covers 17 weeks of pay which is totally unacceptable. Nurses in this province get over 12 months of paid maternity leave. Issues with childcare is another concern. Women often work less than their male counterparts due to issues with parental leave and childcare. These are issues that the NLMA and the government need to address.*
- *Salaried males do less work and less high-quality work. They see less patients during the workday so that they can "double dip." This is a known fact. They will see less patients in the hospital and clinic and then go to an outside private practice and bill fee-for-service. You go to senior management, and they are also male and protect their male counterparts. You are then labelled as a female troublemaker and given no leadership opportunities. It is a very troubling system. The older males get more money for doing less work during salaried hours and the females stuck in the system have to pick up the slack.*
- *Female physicians are expected to spend more time with patients, they receive/treat more mental health for longer during visits, they take more time to document in the electronic medical record (EMR), it is proven that they get more unpaid requests from patients and admin staff (EMR tasks), they often are suffering unpaid/admin burden having to be done late at night after children go to bed or on the weekends, whereas male colleagues (generally speaking) are able to stay later at the office to finish work.*
- *In specialties it has been shown that male specialists receive less "soft consults" that often require extensive time educating and counselling patients but doesn't actually translate to paid surgeries or procedures. It has also been shown that female dominated specialties are systematically paid less than male equivalents and female procedures are valued less in fee codes. Prenatal appointments i.e., take a significant amount of time counselling but are*

paid no more than an ear infection, many male colleagues opt “not to treat prenatal patients.”

- *Perhaps we are less likely to be respected and listened to what we advocate for ourselves. I also think women are much more likely to say "yes" and take on extra, often unpaid, work and tasks. For example the CaRMS interviews - when I looked at the list of those who volunteered to review applications, the majority were women. We are no less busy than our colleagues, and in fact often busier.*

Gender-Based Discrimination – We asked respondents to elaborate on their experiences of gender-based discrimination. Eighty per cent of the respondents reported experiencing various types of gender discrimination – microaggressions, disrespect, and overt bias – in their medical career.

Of the 80 per cent, 57 per cent reported experiencing discrimination from their male colleagues, supervisors, and other health professionals (nurses and administration) and 42 per cent reported experiencing discrimination from their patients and/or their families. Of the 20 per cent who did not report experiencing discrimination, one said they had faced negative attitudes based on age (being younger than their colleagues).

Gender-based discrimination from colleagues and other health professionals included a number of issues. The most frequently provided example of discrimination was being overlooked for leadership opportunities, such as being excluded from team building events, leadership opportunities, and equal access to clinics and operating rooms.

Other experiences offered were:

- Having their opinion dismissed by older male colleagues;
- Having the roles of female physicians and the concerns of female patients dismissed or diminished;
- Having their concerns about unequal treatment between males and females dismissed;
- Being told to order tests by male colleagues for their patients;
- Being the target of inappropriate comments (respondents said they were most often described as a “little girl”);
- Being referred patients with issues that have lower fee codes or would take too much time to resolve;
- Receiving fewer referrals compared to their male colleagues; and
- Having meetings scheduled early or late in the day that affected family and home responsibilities.

Some illustrative comments:

- *I have worked with a male doctor at a walk-in clinic who refused to see complex patients, who were then assigned to me.*
- *From medical school to current day, there is almost daily gender discrimination in medical practice - from both men and women, extending from staff, from colleagues, and from patients. It has changed my perspective of medicine and brought me close to leaving medicine at times.*
- *Differences in types of referrals sent to females, different treatment by other staff or colleagues, lack of respect for women practitioners and women as patients, lack of respect for female reproductive issues, lack of opportunities for breastfeeding support, no maternity leave afforded female physicians, loss of status due to maternity leaves, lack of support from male authorities.*
- *I have been overlooked for positions that were then given to a male colleague with the same training and experience. I feel when I voice concerns that it is overlooked as me being a whiny female. When we stand our ground as females we are seen as difficult, but men are respected for such behaviour. The attitude is still that we should just sit and look pretty with no opinions. It's still very much an old boys club. The dominant specialties are male dominated and they are also paid the best and get the most recognition for their work.*

Patient discrimination examples included the following:

- Being seen as a nurse, not a doctor; experiencing higher no-shows at clinics;
- Men complaining about having to see a female physician;
- Demanding more time because they are female;
- Having their advice questioned or dismissed;
- Being addressed inappropriately (sweetie, nurse, etc.)

Illustrative comments include:

- *I am often treated like I am their servant. I am getting very tired of this attitude towards females in family practice.*
- *100 per cent yes, on the daily. Patients often look down on young, female physicians and comment on our abilities.*
- *(...) patients have treated me in a condescending manner. They expect if they wait a year to see "the specialist" it is a middle-aged man and when I walk in, I can tell sometimes they are surprised, disappointed and disapproving.*

The responses to this question indicate a pattern of disrespect toward female physicians. Such attitudes among administrators and supervisors suggest opportunities for career progression among female physicians may be limited as a result.

Other Factors Contributing to Unequal Compensation – Not all discrimination is based on gender. We asked respondents to identify other factors which may contribute to unequal compensation, theirs and/or of others. Leading factors were age (47.6 per cent), location (26.2 per cent), race (23.8 per cent), ethnicity (16.6 per cent) and none of the above (14.29 per cent). Respondents also identified the following as factors, although they each comprised of less than five per cent of total responses: compensation forms (FSS, APP, salaried), specialty, lack of parental leave, years in practise, longer time with patients.

Preventive Measures – Our survey asked what measures could be taken to reduce inequities in compensation. The majority of responses focused on evaluating fee codes for unconscious bias or inadequate compensation for time (53.5 per cent). The next most frequently mentioned measures were negotiating pay equity in future agreements (42 per cent) and implementing a centralized referral process (25.6 per cent).

Other measures suggested included:

- Educating the old boys' club/the public regarding respect for female physicians;
- Educating the public on expectations of care (time);
- Recognizing the reality of the pay gap;
- Reviewing workload of salaried physicians;
- Evaluating salaries and OR billing codes for unconscious bias;
- Evaluating deliverables for salaried physicians and developing job descriptions; and
- Requiring clinical chiefs to address unequal time schedules and clinic access.

Some comments we received:

- *These are all important. I believe the literature and other advocacy groups have brought this issue to the forefront. Steps going forward should be action plans not further justification.*
- *I am not hopeful that people in the public, and people in positions of power, actually care about the wage gap. We have no power to change this systemic issue.*
- *Educate NLMA membership, advocate to government and then develop tools on equitable and inclusive referral processes and payment schedules.*

Two respondents indicated this was not an issue: *“I don't think there is a problem. There are (more) part-time females than males. If lack of referrals stems from this, then that would be expected. The more accessible physician will have better working relations with colleagues and patients. It is a service issue, not gender issue.”*

Other Remedies – We asked respondents what other remedies they would recommend. More than a third of respondents said new payment models were needed. These included revising existing models, such as fee-for-service (introducing a cap), developing new models (blended

capitation), expanding salary models, and ensuring equal pay. In this category, some respondents recommended developing more specific job descriptions with outcomes for salaried physicians, while others suggested revising the fee-for-service model to ensure time was compensated appropriately.

One quarter of respondents said fee codes needed revision outright. Fee-for-service payment models were inherently biased, respondents said, because they did not compensate for time spent with a patient, thus penalizing female physicians who spend more time with patients, while male physicians see more patients and spend less time with them.

Fee codes were also biased because similar procedures were paid differently depending on whether they were male patients vs. female patients. Finally, fee codes applied to specialties also needed work to ensure they were not being disproportionately compensated vs. time and expertise required.

Respondents frequently commented the NLMA should start with addressing *the old boys' club mentality* they saw in medical school and throughout the system.

Almost 20 per cent of respondents said workload issues between female and male physicians needed attention. Several respondents said family responsibilities were not accounted for in modern medical practices and the fee-for-service model penalized physicians who wanted a better work-life balance. Respondents said better maternity leave options were required (the 17-week leave currently available was not enough said some respondents) and others recommended better childcare options, including a physician-centred childcare centre similar to that available to staff at Confederation Building in St. John's.

Other issues included focusing more on gender equity and diversity issues, challenging the negative culture toward women in medicine, and developing a process by which physicians could address these inequities, such as an ombudsman service or a discussion group process.

Almost 11 per cent of respondents indicated they did not know where the NLMA could begin to address the issue, while less than 10 per cent indicated the issue did not require attention.

Advocacy and Stakeholder Relations – Respondents were asked with whom the NLMA should collaborate on addressing these inequities. The majority (65 per cent), or almost two-thirds, of respondents said the NLMA should work with other physician organizations (provincial and federal). More than half of the respondents also indicated the NLMA should work with the four regional health authorities and the department of Health and Community Services. A little more than a third (37.2 per cent) of respondents supported working with the provincial Human Rights Commission.

Additional options for collaboration included working with MCP and organizing focus groups with female physicians to understand the problem and issues. Two respondents said they did not believe this to be an issue, two respondents said they did not know with whom the NLMA should work, and one respondent said of the four options, the NLMA should not work with the RHAs.

Engaging with Internal and External Stakeholders – We asked how the NLMA could talk about the issue with its members and the public to increase understanding and promote action. The most highly supported actions were:

- Including the issue in negotiation strategies (57 per cent);
- Educating the membership about the issue (48 per cent);
- Engaging in advocacy to the provincial government (38.6 per cent); and
- Partnering with provincial physician associations (36.3 per cent).

Respondents also indicated their support for the following approaches: collaborating with the Faculty of Medicine at Memorial University (32 per cent); developing information tools on equitable and inclusive referral processes (32 per cent); and publishing policy research (27.2 per cent).

Other insights – More than half of the respondents said they appreciated the effort the NLMA was making on their behalf. Specific concerns included:

- Looking for concrete changes with referral processes;
- Recognizing the amount of time female physicians spend with patients compared to male physicians (outcomes, unpaid work, work life balance);
- Recognizing career choice/practice/calls schedules affect family time and more females choose to earn less as a result;
- Addressing fee code discrepancies and biases;
- Overhauling MCP to address billing issues (counselling and chronic disease management) and focus on auditing high volume practices vs. lower volume practices;
- Learning more about the issue, even when they believe they are fairly compensated;
- Collecting additional data re: female and male physicians;
- Providing appropriate financial support for maternity/adoption leaves, family needs (sick children, medical and dental appointments, school interactions).

4.2 Key Takeaways

The member responses collected reflected many, if not all, of the issues identified in the literature review. The majority of respondents agreed gender inequity in physician compensation was an issue for NLMA members. They welcomed future action on the issue and identified a number of actions to take in moving the issue forward.

Along with the issues reported elsewhere, such as the need to revise payment models, address covert and overt bias in fee codes, and improve and centralize referral practices, respondents

reported concerns with a lack of respect for female physicians, a lack of support for leadership ambitions, and a lack of acknowledgement of challenges with workload, work-life balance, patient expectations, and practice management. Most importantly, members indicated the lack of recognition they felt for managing patient care comprehensively, through largely unpaid labour, compared to many of their male colleagues. In pragmatic terms, society pays for what it values; in medicine and health care, we need to value better, safer care. That includes ensuring appropriate and equitable compensation for work that leads to improved outcomes for patients and reduces stress and burnout for physicians.

As noted earlier, an unexpected result was the number of respondents who felt discriminated against because of their gender, and this bias, not just in income earned, was reflected in attitudes expressed and behaviours presented by patients and colleagues. This suggests greater attention needs to be paid to valuing and highlighting the contributions of female physicians in Newfoundland and Labrador.

V. CONCLUSION & RECOMMENDATIONS

Gender inequity in physician compensation has been well documented, as reported in the literature review. Respondents in the confidential survey and key informant interviews reported facing gender-based discrimination from their patients and peers, they reported inequities in compensation, and they identified specific issues affecting compensation, leadership opportunities, and professional advancement in their medical careers.

Social attitudes and systemic bias have a generalized impact on gender inequity in compensation, whether it is through appointments in leadership positions, referral patterns between physicians, and the priorities assigned in fee code allocations. We need a higher level of shared understanding and awareness between the regional health authorities, the Department of Health and Community Services, Memorial University, and clinical leadership. Shared understanding facilitates shared responsibility for solutions and attitudinal change when it comes to making effective progress in reducing gender inequity.

The following recommendations offer concrete opportunities to mitigate the systemic bias female physicians encounter, from reduced compensation and leadership opportunities to structural processes inhibiting advancement and appropriate value.

Compensation Solutions

1. The NLMA examine the FAIR process and its implementation in Ontario to determine how these principles can be incorporated in fee code allocation in NL.
2. The NLMA pursue, through the MCP Payment Schedule Review Committee (PSRC), a review of the MCP fee codes using *the Gender-Based Analysis Plus*⁵ approach to address

⁵ The federal government defines GBA Plus as “an analytical process that provides a rigorous method for the assessment of systemic inequalities, as well as the means to assess how diverse groups of women, men,

unequal compensation for multiple issue visits and for non-medical processes such as counselling, coordination, patient education, affecting patient care.

Structural Solutions

3. The NLMA support a review of the assignment of patients, tests, operating room allocations etc. for systemic bias by the regional health authorities and/or the provincial health board.
4. The NLMA support a review of the opportunities for centralized referral processes in NL as a mechanism to promote gender pay equity.
5. The NLMA support the inclusion of physicians in the provincial pay equity legislation.
6. The NLMA undertake a review of existing member benefits, support member education, and promote available benefits to members.

Leadership Solutions

7. The NLMA promote continued respect and support for female physicians through the use of diversity, inclusion, and equity-based messaging in member communications.
8. The NLMA work with the regional health authorities/provincial health board to support the promotion of female physicians in leadership roles (including approval of requests for leave and professional development).
9. The NLMA advocate for the training/education of senior health administrators re: gender bias and its impact on the gender wage gap in medicine using the Gender-Based Analysis Plus (GBA+) approach.
10. The NLMA work with Memorial University to include sessions on gender bias and other forms of discrimination against women and other historically marginalized groups, and support mentorship and peer support of female medical students/residents.

and gender diverse people may experience policies, programs and initiatives. The “plus” in GBA Plus acknowledges that GBA Plus is not just about differences between biological (sexes) and Socio cultural (genders). We all have multiple characteristics that intersect and contribute to who we are. GBA Plus considers many other identity factors such as race, ethnicity, religion, age, and mental or physical disability, and how interaction between these factors influences the way we might experience government policies and initiatives.” (www.women-gender-equality.canada.ca)

REFERENCES

- Asgari, Maryam; Carr, Phyllis; and Bates, Carol. Closing the Gender Wage Gap and Achieving Professional Equity in Medicine. *JAMA*. 2019 May 7;321(17):1665-1666. doi: 10.1001/jama.2019.4168.
- Attorney at Law Magazine. Out of the Black Box: Highlighting Central Myths of Gender Pay Disparity in the Legal Profession in 2020. November 2021.
- Boesveld, Sarah. What's driving the gender pay gap in medicine. *CMAJ* January 06, 2020 192 (1) E19-E20; DOI: <https://doi.org/10.1503/cmaj.1095831> <https://www.cmaj.ca/content/192/1/E19>
- CMA Masterfile. January 2019. Canadian Medical Association. <https://www.cma.ca/quick-facts-canadas-physicians>
- Canadian Institute for Health Information. Physicians in Canada, 2017. Ottawa, ON: CIHI, 2019.
- Canadian Institute for Health Information. How Canada Compares Results From The Commonwealth Fund's 2016 International Health Policy Survey of Adults in 11 Countries. Ottawa, ON: CIHI; 2017.
- Cohen, Michelle. Canada Undervalues Women's Healthcare. Medicine's Pay Gap Proves It. *Chatelaine*. December 9, 2020. <https://www.chatelaine.com/opinion/pay-gap-womens-healthcare/>
- Cohen, Michelle and Kiran, Tara. Closing the gender pay gap in Canadian medicine. *CMAJ* August 31, 2020. DOI: 10.1503/cmaj.200375
- Doolittle, Robyn and Dobby, Christine. Female partners earned nearly 25% less than their male counterparts at a major Toronto law firm, document shows. *The Globe and Mail*. February 9, 2021. <https://www.theglobeandmail.com/canada/article-female-partners-earn-less-than-male-colleagues-at-big-law-firm/>
- Dossa F, Zeltzer D, Sutradhar R, Simpson AN, Baxter NN. Sex differences in the pattern of patient referrals to male and female surgeons. *JAMA Surg*. 2021 Nov 10. Epub.
- Dossa F, Urbach DR, Sutradhar R, Baxter NN. Longitudinal trends in physician preferences for referrals to same-sex surgeons: a population-based study. *Br J Surg* 2021 Oct 14. Epub. Letter. <https://academic.oup.com/bjs/article/108/11/e375/6396996>
- Doximity. 2020 Physician Compensation Report: Fourth Annual Study. October 2020. (US-based).
- Dudley, Jessica; McLaughlin, Sarah; and Lee, Thomas. January 19, 2022. "Why So Many Women Physicians Are Quitting." *Harvard Business Review*. https://hbr.org/2022/01/why-so-many-women-physicians-are-quitting?fbclid=IwAR2Lt6WM-mIivYAxDVqq_d9F4A5tlepx250gV5w8L6n7yA-2AAhZ9ZjLkW8
- Fell, Tina; Canizares, Mayilee; Jin, Ya-Ping; Buys, Yvonne. Pay Gap Among Female and Male Ophthalmologists Compared with Other Specialties. Published: July 13, 2021
DOI:<https://doi.org/10.1016/j.ophtha.2021.06.015>
- Frangou, Christina. "The Only Woman in the Room." *Toronto Life Magazine*. December 20, 2021. https://torontolife.com/city/irene-cybulsky-surgeon-fired-for-being-female-hamilton-general-hospital/?fbclid=IwAR11gl2H310abnJOy3mxLwWCJd9Tpg-1t3-z2hcbFnDmTjVkrj59zi_k9U

Gambhir, S., Daly, S.C., Effenbein, D. et al. The effect of transparency on the gender-based compensation gap in surgical disciplines within a large academic healthcare system. *Surg Endosc* 35, 2607–2612 (2021). <https://doi.org/10.1007/s00464-020-07679-1>

Hwang, Dr. Liana. Gender Inequity in Medicine and the Gender Pay Gap. August Messenger Special Edition 2021, CPSA: August 31, 2021 <https://cpsa.ca/news/gender-inequity-in-medicine-and-the-gender-pay-gap/>

Jagsi, Reshma; Griffith Kent A; Stewart, Abigail. “Gender Differences in the Salaries of Physician Researchers.” *JAMA*. 2021;307 (22): 2410-2417. doi:10.1001/jama.2012.6183

Kralj, Boris; O’Toole, Danielle; Vanstone, Meredith; Sweetman, Arthur. The gender earnings gap in medicine: Evidence from Canada. *Health Policy*. <https://doi.org/10.1016/j.healthpol.2022.08.007>

Lee MJ, Kim C. Breaking the Gender Gap: A Two-part Observational Study of the Gender Disparity Among Korean Academic Emergency Physicians. *J Prev Med Public Health*. 2020 Sep;53(5):362-370. doi: 10.3961/jpmph.20.286. Epub 2020 Aug 7. PMID: 33070508; PMCID: PMC7569010.

Li, B, Jacob-Brassard J, Dossa F, Salata K, Kishibe T, Greco E, Baxter NN, Al-Omran M. Gender differences in faculty rank among academic physicians: a systematic review and meta-analysis. *BMJ Open*. 2021 Nov 2;11(11):e050322.

McNab, Aiden. How the gender wage gap is reflected in the legal profession. *Canadian Lawyer Magazine*. July 2, 2021. <https://www.canadianlawyermag.com/resources/practice-management/how-the-gender-wage-gap-is-reflected-in-the-legal-profession/357784>

McNab, Aiden. How to mitigate systemic discrimination in law firms. *Canadian Lawyer Magazine*. June 2, 2021. <https://www.canadianlawyermag.com/resources/practice-management/how-to-mitigate-systemic-discrimination-in-law-firms/356858>

Merali, Zamir; Malhotra, Armaan; Balas, Michael; Lorello, Gianni; Flexman, Alana; Kiran, Tara; and Witiw, Christopher D. Gender-based differences in physician payments within the fee-for-service system in Ontario: a retrospective, cross-sectional study. *CMAJ*. 2021 Oct 18;193(41):E1584-E1591. doi: 10.1503/cmaj.210437.

McIlveen-Brown, E., Morris, J., Lim, R. *et al*. Priority strategies to improve gender equity in Canadian emergency medicine: proceedings from the CAEP 2021 Academic Symposium on leadership. *Can J Emerg Med* 24, 151–160 (2022). <https://doi.org/10.1007/s43678-021-00245-1>

OMA Physician Resources Committee (OHRC). Report to Council, Understanding Gender Pay Gaps Among Ontario Physicians. OMA: July 2020.

Parturel, Amy. October 1, 2019. Why women leave medicine. *AAMC News*. Association of American Medical Colleges. <https://www.aamc.org/news-insights/why-women-leave-medicine>.

Richards, Elizabeth. Who are the Working Women in Canada’s Top 1%? Analytical Studies Branch Series. Statistics Canada. January 21, 2019. <https://www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2019002-eng.htm>

Rimmer, Abi. April 28, 2017. “The gender pay gap: female doctors still earn a third less than men.” *BMJ* 2017;357:j1967. doi: <https://doi.org/10.1136/bmj.j1967>

Rottenstein, Lisa and Dudley, Jessica. How to Close the Gender Pay Gap in U.S. Medicine Harvard Business Review. November 04, 2019.

Roy, Brita. Gender Pay Gaps in Medicine: Moving from Explanations to Action. Journal of Internal Medicine 33, 1413-1414 (2018). <https://link.springer.com/article/10.1007%2Fs11606-018-4579-3>

Sheppard G, Pham C, Nowacki A, Bischoff T, Snider C. Towards gender equity in emergency medicine: a position statement from the CAEP Women in Emergency Medicine committee. CJEM. 2021 Jul;23(4):455-459. doi: 10.1007/s43678-021-00114-x. Epub 2021 Mar 11. <https://link.springer.com/article/10.1007%2Fs43678-021-00114-x#citeas>

Simpson AN, Cusimano MC, Baxter NN. The inconvenience of motherhood during a medical career. CMAJ. 2021 Sep 20;193(37):E1465-E1466.

Sin, Isabelle; Bruce-Brand, Bronwyn; Chambers, Charlotte. The gender wage gap among medical specialists: a quantitative analysis of the hourly pay of publicly employed senior doctors in New Zealand BMJ Open. 2021 Apr 27;11(4):e045214. doi: 10.1136/bmjopen-2020-045214.

Sin, Yvonne. The gender pay gap in medicine. BCMJ, Vol. 63, No. 3, April 2021. p101. Editorials. <https://bcmj.org/editorials/gender-pay-gap-medicine>

Steffler, Mitch MA; Nadine Chami, PhD; Samantha Hill, MDCM, MSc, MScCH; Gail Beck, MDCM; Stephen C. Cooper, MD; Robert Dinniwell, MD; Sarah Newbery, MD; Sarah Simkin, MD, MSc; Brittany Chang-Kit, BMSc; James G. Wright, MD, MPH; Jasmin Kantarevic, PhD; Sharada Weir, DPhil. Disparities in Physician Compensation by Gender in Ontario, Canada. JAMA Network Open. 2021;4(9):e2126107. doi:10.1001/jamanetworkopen.2021.26107 (Reprinted) September 21, 2021.

Women Lawyers Forum. Partner Compensation Survey Report. Toronto: Canadian Bar Association, 2019.