Parental Leave Policies in Canadian Residency Education

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ABSTRACT

Background In recent decades, the gender makeup of Canadian medical residents has approached parity. As residency training years coincide closely with childbearing years and paid parental leave is associated with numerous benefits for both parents and children, it is important for there to be clarity about parental leave benefits.

Objectives We aimed to conduct a comprehensive review of maternity and parental leave policies in all residency education programs in Canada, to highlight gaps that might be improved or areas in which Canadian programs excel.

Methods We searched websites of the 8 provincial housestaff organizations (PHOs) for information regarding pregnancy workload accommodations, maternity leave, and parental leave policies in each province in effect as of January 2020. We summarized the policies and analyzed their readability using the Flesch Reading Ease.

Results All Canadian PHOs provide specific accommodations around maternity and parental leave for medical residents. All organizations offer at least 35 weeks of total leave, while only 3 PHOs offer extended leave of about 63 weeks, in line with federal regulations. All but 2 PHOs offer supplemental income to their residents, although not for the full duration of offered leave. All PHOs offer workplace accommodations for pregnant residents in their second and/or third trimester.

Conclusions Although all provinces had some form of leave, significant variability was found in the accommodations, duration of leave, and financial benefits provided to medical residents on maternity and parental leave across Canada. There is a lack of clarity in policy documents, which may be a barrier to optimal uptake.

Introduction

In recent decades, the gender makeup of residency trainees has moved from highly male-dominated to something more closely resembling parity. In 1990, just over one-third (38%) of Canadian medical residents were female; since 2010, 53% to 55% of residency trainees have been female.[1] Residency training frequently coincides with prime childbearing years for female residents, and the average age of childbirth for both mothers and fathers aligns closely with the age of Canadian medical residents.[2,3]

Cross-national studies have consistently shown the benefits of paid parental leave.[4] Paid leave is associated with lower infant mortality and morbidity,[5,6] improved maternal health outcomes,[7] and lower rates of intimate partner violence.[8] There are also economic benefits, with higher rates of participation in the labor force and increased wages for women with paid leave.[4] Paternal leave has also been associated with improved maternal health outcomes, improved childhood educational outcomes, lower rates of divorce, and improved paternal engagement in the child-parent relationship.[9–11] While there is the impression that taking parental leave has a negative effect on a physician's career and colleagues, physicians view their colleagues taking leave less negatively.[12] Institutional culture also likely plays a significant role in how physicians view the impact of parental leave.

Maternity and parental leave protections for Canadian resident physicians fall under the purview of provincial regulation and are governed by the employment standards of individual provinces.[13] Canadian provincial housestaff organizations (PHOs) negotiate on behalf of all residents with academic hospital employers in their province(s) regarding income, work policies, and additional entitlements in their respective collective agreements. These cover items such as complete duration of maternity and parental leave, supplemental employee benefits (SEB, or "top-up" above the standard employment insurance [EI] benefit entitlements), as well as rights regarding workload modification during pregnancy.

Several US studies have recently been published examining the prevalence of parental leave policies in

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Editor's Note: The online version of this article contains a detailed written summary and link to the electronic document of each province's agreement.

resident medical training. However, the American landscape is quite different from the Canadian context as there is no paid federally protected leave in the United States (though there is protected leave without pay).[14] Many other countries such as Australia and countries in the European Union have national leave policies which apply to their medical trainees.[11,12] There is a paucity of similar Canadian literature around parental leave policies for medical trainees and Canadian provincial or federal policies do not universally apply to medical residents.

Despite numerous benefits to residents and their families associated with parental leave, many residents still face challenges in taking parental leave. A recent survey showed that the majority of residents felt that they should delay childbearing due to a variety of reasons.[13] Our goal was to provide a comprehensive review of maternity and parental leave policies in all residency education programs in Canada, to highlight gaps that might be improved or areas in which Canadian programs excel.

Objectives
This study aimed to conduct a content analysis of the available parental leave policies from provincial housestaff organizations that represent resident physicians in Canada.

Findings
Although all provinces had some form of leave, significant variability was found in the accommodations, duration of leave, and financial benefits provided to medical residents on maternity and parental leave across Canada.

Limitations
This study is limited by its textual nature, and therefore may not fully reflect the lived experience of trainees.

Bottom Line
Although all provinces have fairly robust parental leave clauses, there is a lack of clarity in policy documents, which may be a barrier to optimal uptake.

Methods

We conducted a textual analysis review of the collective agreements of all PHOs in Canada, focusing on the sections pertaining to parental and maternity leave policies.

Data Collection

Collective agreement documents were extracted from PHOs on January 15, 2020. We searched websites of the 8 PHOs for information regarding pregnancy workload accommodations, pregnancy leave, and parental leave policies as of January 2020. We also reviewed the PHO websites on June 5, 2020 to confirm that there were no changes during the period of our analysis. Where available, full-text collective agreements were obtained. Where these were not available, all text was extracted from each PHO website pertaining to the above policies.

Data Extraction

Two data extractors (T.S., L.C.C.) collected the following variables for analysis: duration of maternity leave (applicable to pregnant residents during and after pregnancy); duration of parental leave (applicable to both parents); amount (if any) of supplemental income provided to the resident by the academic hospital, Ministries of Health, or other provincial organization in addition to federal EI income; time at which a resident is eligible to start maternity leave; work accommodations (if any) provided to pregnant residents including but not limited to excusal from 24-hour or longer call shifts, night shifts, and weekend shifts; gestational age at which a pregnant resident was eligible for work accommodations; and agreement dates of each PHO-Ministry of Health collective agreement. The full text of relevant policy sections was collected for readability analysis.

Analysis Plan

We conducted a series of simple descriptive statistics on the extracted data and presented the summary in a tabulated form. The data was then used to construct various visualizations including comparison tables. To assess if there could be comprehension problems with the collective agreements, we analyzed the readability of all parental and maternity leave sections of the PHO agreements using the Flesch Reading Ease (FRE) score,[14] which is commonly used for health literature, and completed a word count of the relevant policy sections. This article was generated based on publicly available data or policy documents, so it was not subject to Institutional Review Board approval.

Results

PHO Contract Analysis

We found a total of 8 collective agreements, which were all openly available as public documents. This collection of documents represented all PHOs in Canada, and by extension all residents training in Canada. Notably, one collective agreement encapsulated 3 provinces (New Brunswick, Nova Scotia, and Prince Edward Island) as there is only one medical school within those provinces. There were no collective agreements for Northwest Territories, Yukon, and Nunavut; trainees who rotate there are generally based out of one of the provinces and would use the PHO agreement related to that particular province. There were no disagreements between the 2

TABLE 1
Duration of Resident Maternity Leave, Paternity Leave, and Supplemental Employee Benefit Provided in Canada

Canadian Province	Time for Maternity Leave	Time for Parental Leave[a]	Start of Maternity Leave[b]	Supplemental Employee Benefits[c]
Alberta	17 weeks	With maternity leave: +61 weeks No maternity leave: 62 weeks	8 weeks predelivery	Maternity leave: 90% for 17 weeks No maternity leave: 2 weeks full pay; otherwise no additional
British Columbia	17 weeks	With maternity leave: +35 weeks No maternity leave: 35–37 weeks	11 weeks predelivery	Maternity leave: 90% for 16 weeks No maternity leave: no additional SEB
Manitoba	17 weeks + days post-dates	37 weeks (with or without maternity leave)	17 weeks predelivery	No specific SEB. Under Doctors Manitoba, 60% of average earnings up to 17 weeks (max $1,200/week) for either maternity or parental leave
Maritimes[d]	17 weeks	35 weeks (with or without maternity leave)	16 weeks predelivery	Maternity leave: 93% for 6 weeks Parental leave: 93% for 11 weeks
Newfoundland and Labrador	Not specified	52 weeks	8 weeks predelivery	Not specified
Ontario	17 weeks	With maternity leave: +35 weeks standard or 61 weeks extended leave No maternity leave: 37 weeks standard or 63 weeks extended leave	8 weeks predelivery	Maternity leave: 84% for 17 weeks Parental leave (with or without maternity leave): 84% for 12 weeks
Québec	21 weeks	With maternity leave: +28 weeks Paternity leave: up to 38 weeks	Not specified. 16 weeks predelivery provincially in QB	Depends on type of QPIP plan, but in general: Maternity leave: 95% for 21 weeks Paternity: 100% for first 6 weeks Then 55%–70% for next 25–28 weeks parental leave
Saskatchewan	16 weeks	36 weeks standard leave, or 62 weeks extended leave (with or without maternity leave)	13 weeks predelivery	Maternity leave: 90% for 16 weeks No additional parental leave top-up

Abbreviations: SEB, supplemental employee benefits; QB, Québec; QPIP, Québec Parental Insurance Plan.
[a] Maternity leave refers to leave during and after a resident's pregnancy. In Ontario's collective agreement this is referred to as pregnancy leave.
[b] Parental leave may apply to either parent (including adoptive parents) from before to after the birth of the child. Standard leave refers to employment insurance benefits up to 35 weeks, while extended leave refers to employment insurance benefits at a reduced rate for up to 63 weeks.
[c] Supplemental employee benefits refer to the pay that residents receive while on leave. Most programs, except for Alberta, specify that a resident needs to be eligible for employment insurance benefits in order to receive supplemental employment benefits.
[d] The Maritime Resident Doctors provincial housestaff organization covers residents working in 3 provinces: New Brunswick, Nova Scotia, and Prince Edward Island.

independent data extractors and all areas of extraction were completed.

A summary of all extracted variables for the different collective agreements are provided in TABLES 1 and 2. The domain with the least provincial variability was time offered for maternity leave: most agreements offer about 17 weeks of leave. With regards to parental leave, every organization offers at least 35 weeks of total combined leave (maternity and parental), while only 3 (Alberta, Ontario, and

TABLE 2
Accommodations Provided to Pregnant Residents in Canada

Canadian Province	Accommodations During Pregnancy
Alberta	No call, standard, or shift duties in excess of 12 hours, no overnight hours (12:00 AM–6:00 AM) after 27 weeks, or at an earlier date if a medical reason is provided.
British Columbia	No call after 24 weeks of gestation, if provided in writing by physician, midwife, or nurse practitioner.
Manitoba	No call after 31 weeks of gestation.
Maritimes	No call after 28 weeks if recommended by a physician.
Newfoundland and Labrador	No call, no evening shifts (after 5:00 PM), no weekend shifts (8:00 AM Saturday to 8:00 AM Monday) after 32 weeks gestation.
Ontario	No call after 27 weeks gestation.
Québec	From the start of pregnancy, no more than 8 hours per day except for call. From 20 weeks, no in-hospital or home call, no evening or night shift, and must have 2 straight days off per week.
Saskatchewan	No call or night shifts after 28 weeks of gestation.

Note: Other specific individual workplace modifications, or modifications at an earlier date, can typically be obtained under the direction of the resident's health care provider.

Saskatchewan) offer extended leave of up to 63 weeks, in accordance with the recent change in federal parental leave policy.

While all but 2 collective agreements (Newfoundland and Labrador, Manitoba) offered SEB for residents, some of these were restricted only to maternity leave (British Columbia, Saskatchewan). Residents in Manitoba—while not offered a SEB via their collective agreement—are offered supplemental income through the provincial physician organization (Doctors Manitoba), which covers both staff and resident physicians.

Collective agreements do only provide a top-up for parental leave for a portion of the total leave, after which the regular EI rate applies. When offered, the SEB top-up is most often 90% of expected income or higher. Every collective agreement provides call-related accommodations for pregnant residents with some variation in the gestational age at which accommodations are applied. Only half of the collective agreements specify whether accommodations are to be made regarding evening and weekend work.

A more detailed written summary and link to the electronic document of each province's agreement can be found in the online supplementary data.

TABLE 3
Word Count and Readability Analysis of Leave Policies in Canada

Canadian Province	Total Word Count	Flesch Reading Ease
Alberta	701	41.7
British Columbia	1529	38.1
Manitoba	968	18.7
Maritimes	3343	51.7
Newfoundland & Labrador	228	35.4
Ontario	830	37.8
Québec	4241	43.5
Saskatchewan	393	36.1
Average	1529 (SD 1469)	37.9 (SD 9.4)
Range	228–4241	18.7–51.7

Note: For the Flesch Reading Ease, a score of 50–60 reflects a reading level of a 10th–12th grade student. A score of 30–50 reflects college level reading, while a score < 30 reflects the reading level of a college graduate.

Readability Analysis

TABLE 3 shows the word counts and FRE scores for each of the policies. The documents were highly variable in their word count, ranging from 228 to 4241 words. The average FRE score for the documents was 37.9 (SD 9.4). There was significant heterogeneity in both word count and FRE between different collective agreements. While this does not reflect heterogeneity in content (TABLES 1 and 2), it demonstrates the differences in written construction of the respective collective agreements.

Discussion

This article illustrates that even in a single payer health care system, where resident work policies are made at a provincial level instead of a university or hospital level, policies surrounding maternity and parental leave still have a high degree of variability. There was significant variation in most of the examined leave categories. Few programs have an option to extend one's leave to 69 weeks, meaning that the majority of agreements are presently not in

line with the national standard.[15] However, all but one collective agreement were negotiated prior to the change in federal policy in March 2019. Supplemental employee benefits were also quite variable in amount and duration though most collective agreements offered some supplemental income. It was uncommon for collective agreements to be fully equitable in their treatment of both parents for any given supplemental income. All collective agreements provide accommodations to pregnant residents, typically from their late second or third trimester onward. This may help mitigate some of the negative effects that overnight and call shifts have on pregnant residents[16,17]; however, further research would be warranted to see if Canadian residents are using these accommodations during pregnancy.

With regard to readability, all the collective agreements required a high education level for comprehension. Most residents would have the required education levels to comprehend these documents. However, an easily readable document is considered to have a FRE score of higher than 60,[18–20] a standard which none of the collective agreements met. The length of parental leave sections in the collective agreements varied substantially, and on the upper end exceeded 4000 words, which can be quite onerous for a resident to read. While many PHOs have produced more concise summary documents for residents to review the simplification of legal language is known to increase comprehension to non-experts without compromising integrity.[21–23] Supporting physicians as parents is a critical component of resident wellness[24]; both residency programs and PHOs have roles to play in creating supportive, non-stigmatizing environments for trainees who become parents. The creation of clear, consistent policies that support the physical, mental, and financial well-being of residents is paramount.

Beyond the challenges residents face with regard to taking parental leave, resident parents face many challenges upon their return to work.[25] The time taken for leave results in an extension of residency training and may result in residents being "off-cycle" from their initial residency cohort (ie, peers in the same year of residency training) for educational opportunities (eg, fellowships) or for being hired as staff physicians. Furthermore, residents' work schedules, which often include weekend, evening, and extended hour on-call duties, create additional challenges around parenting young children. At present, it is not commonplace for Canadian residency programs to have specific alternative work models for return after leave (or these issues explicitly addressed by the collective agreements). We do note that some PHOs have provisions to address part-time residents, but these sections are typically quite limited. The above challenges may be addressed by models that provide more flexibility[26] and may warrant consideration by PHOs in their future collective agreements.

Limitations of this present study include that our authorship group is not trained in reading legal documents and policies, and our analysis may be less robust than if we had involved specialized legal expertise. One key limitation is that this study is a textual analysis and therefore may not fully reflect the lived experience of trainees. There may be a gap between these policy documents and real trainees' experiences, which cannot be discerned by our present design. In terms of readability, we also did not look at PHO summary documents that aim to provide simplified conclusions for their members.

In order to explore specific challenges of parenting in residency, areas of further study could include reviews of breastfeeding policies, illness leave, and parenting policies. Surveys or qualitative interviews of residents could further investigate the theory that residents may experience confusion or cultural barriers related to taking parental leave and elucidate the role of collective agreements, PHOs, residency programs, and GME offices as sources of support or barriers.

Conclusions

There is significant variability among the different Canadian provincial agreements in terms of length of leave, financial support during leave, and type and length of accommodations provided for pregnant residents. Only a minority of collective agreements offer extended parental leave that matches the recent changes to federal EI parental benefits. The pertinent sections in the full-text collective agreements are generally difficult to read, potentially leading to confusion regarding the full leave benefits provided.

References

1. Canadian Post-MD Education Registry. Gender Analysis of Postgraduate Medical Trainees in Canada. https://caper.ca/postgraduate-medical-education/special-reports-and-presentations. Accessed February 16, 2021.
2. Provencher C, Milan A, Hallman S, D'Aoust C. Fertility: Overview, 2012 to 2016. Report on the Demographic Situation in Canada. https://www150.statcan.gc.ca/n1/pub/91-209-x/2018001/article/54956-eng.htm. Accessed February 16, 2021.
3. Resident Doctors of Canada. 2018 National Resident Survey. https://residentdoctors.ca/wp-content/uploads/

2018/10/National-Resident-Survey-2018-R8.pdf. Accessed February 16, 2021.
4. Raub A, Nandi A, Earle A, et al. *Paid Parental Leave: A Detailed Look at Approaches Across OECD Countries*. WORLD Policy Analysis Center. UCLA Fielding School of Public Health; 2018:82. https://www.worldpolicycenter.org/sites/default/files/WORLD%20Report%20-%20Parental%20Leave%20OECD%20Country%20Approaches_0.pdf. Accessed February 16, 2021.
5. Ruhm CJ. Parental leave and child health. *J Health Economics*. 2000;19(6):931–960. doi:10.1016/S0167-6296(00)00047-3.
6. Nandi A, Hajizadeh M, Harper S, Koski A, Strumpf EC, Heymann J. Increased duration of paid maternity leave lowers infant mortality in low- and middle-income countries: a quasi-experimental study. *PLoS Med*. 2016;13(3):e1001985. doi:10.1371/journal.pmed.1001985.
7. Aitken Z, Garrett CC, Hewitt B, Keogh L, Hocking JS, Kavanagh AM. The maternal health outcomes of paid maternity leave: a systematic review. *Soc Sci Med*. 2015;130:32–41. doi:10.1016/j.socscimed.2015.02.001.
8. D'Inverno AS, Reidy DE, Kearns MC. Preventing intimate partner violence through paid parental leave policies. *Preventive Med*. 2018;114:18–23. doi:10.1016/j.ypmed.2018.05.024.
9. Cools S, Fiva JH, Kirkebøen LJ. Causal effects of paternity leave on children and parents. *Scandinavian J Economics*. 2015;117(3):801–828. doi:10.1111/sjoe.12113.
10. Petts RJ, Knoester C, Waldfogel J. Fathers' paternity leave-taking and children's perceptions of father-child relationships in the United States. *Sex Roles*. 2020;82(3–4):173–188. doi:10.1007/s11199-019-01050-y.
11. Séjourné N, Vaslot V, Beaumé M, Goutaudier N, Chabrol H. The impact of paternity leave and paternal involvement in child care on maternal postpartum depression. *J Reproductive Infant Psychol*. 2012;30(2):135–144. doi:10.1080/02646838.2012.693155.
12. Lent B, Phillips SP, Richardson B, Stewart D. Promoting parental leave for female and male physicians. *CMAJ*. 2000;162(11):1575–1576.
13. Government of Canada. More choice for parents. https://www.canada.ca/en/employment-social-development/campaigns/ei-improvements/parental-choice.html. Accessed February 16, 2021.
14. Readability calculator. https://www.online-utility.org/english/readability_test_and_improve.jsp. Accessed February 16, 2021.
15. Gottenborg E, Rock L, Sheridan A. Parental leave for residents at programs affiliated with the top 50 medical schools. *J Grad Med Educ*. 2019;11(4):472–474. doi:10.4300/JGME-D-19-00227.1.
16. Todd AR, Cawthorn TR, Temple-Oberle C. Pregnancy and parenthood remain challenging during surgical residency: a systematic review. *Acad Med*. 2020;95(10):1607–1615. doi:10.1097/ACM.0000000000003351.
17. Chernoby KA, Pettit KE, Jansen JH, Welch JL. Flexible scheduling policy for pregnant and new parent residents: a descriptive pilot study [published online ahead of print July 11, 2020]. *AEM Educ Train*. https://doi.org/10.1002/aet2.10504.
18. Protheroe J, Estacio EV, Saidy-Khan S. Patient information materials in general practices and promotion of health literacy: an observational study of their effectiveness. *Br J Gen Pract*. 2015;65(632):e192–e197. doi:10.3399/bjgp15X684013.
19. Gargoum FS, O'Keeffe ST. Readability and content of patient information leaflets for endoscopic procedures. *Ir J Med Sci*. 2014;183(3):429–432. doi:10.1007/s11845-013-1033-8.
20. Smart JM, Burling D. Radiology and the internet: a systematic review of patient information resources. *Clin Radiol*. 2001;56(11):867–870. doi:10.1053/crad.2001.0738.
21. Adler M. The plain language movement. In: Solan LM, Tiersma PM, eds. *The Oxford Handbook of Language and Law*. Oxford, UK: Oxford University Press; 2012.
22. Black B. A model plain language law. *Stanford Law Rev*. 1981;33(2):255–300. doi:10.2307/1228479.
23. Burton S. The case for plain-language contracts. *Harvard Bus Rev*. 2018;Jan–Feb:134–139. https://hbr.org/2018/01/the-case-for-plain-language-contracts. Accessed February 16, 2021.
24. Stack SW, Jagsi R, Biermann JS, et al. Maternity leave in residency: a multicenter study of determinants and wellness outcomes. *Acad Med*. 2019;94(11):1738–1745. doi:10.1097/ACM.0000000000002780.
25. Willett LL, Wellons MF, Hartig JR, et al. Do women residents delay childbearing due to perceived career threats? *Acad Med*. 2010;85(4):640–646. doi:10.1097/ACM.0b013e3181d2cb5b.
26. Gordon AJ, Sebok-Syer SS, Dohn AM, et al. The birth of a return to work policy for new resident parents in emergency medicine. *Acad Emerg Med*. 2019;26(3):317–326. doi:10.1111/acem.13684.

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