# **Development and Impact of a Progressive Parental** Leave Policy in a Neurology Residency

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# Abstract

Appropriate parental leave policies remain an unmet need in graduate medical education. Although legal and institutional guidelines allow for policies that support parental leave, there are many challenges and perceived barriers to consider in developing and implementing a successful policy. In 2018, we revised the parental leave policy for our neurology residency. Here we describe the development of our policy, measure its effects, and offer guidelines for other programs to develop a similar approach. We propose solutions to commonly encountered problems, focusing on training and education, staffing of clinical services, evolving legal requirements, resident well-being and equity, and financial support.

Over the past several decades, the proportion of physicians becoming parents during residency has substantially increased. However, appropriate parental leave policies remain an important unmet need in graduate medical education (GME). There remains substantial variation in residency programs' approaches toward this critical issue.<sup>1,2</sup> Reported reasons for this variability include limited scheduling flexibility, the need to fulfill education and board certification requirements, and concerns regarding equity among trainees.

In recent years, there has been increasing attention to and support for parental leave both on a national level and specifically in GME.<sup>1</sup> However, far more challenging than adopting a supportive stance toward parental leave is the development and implementation of an actual policy that meets its stated goals. A policy that is enacted must comply with both legal and regulatory requirements while ensuring that trainees achieve clinical competence and remain board eligible. Successful implementation requires well-planned solutions to logistical challenges associated with scheduling clinical rotations within a training program.

Here we detail the specific steps taken before, during, and after the creation of our policy that were important for its successful implementation. Then, we discuss the effect of the updated policy measured by the duration and composition of leaves and by residents' perspectives on parental leave before and after policy implementation. Finally, we offer strategies for other programs to help implement a parental leave policy with similar goals. Although the specific circumstances affecting each training program are unique, we hope our experience will provide a useful model for this much needed change to occur broadly in our field.

# **Development of a Parental Leave Policy**

In 2018, we revised our neurology training program's parental leave policy to embody the values of equity, fairness, transparency, and wellness while maintaining our commitment to fostering clinical excellence and academic development. Our policy allows for a 12-week paid Correspondence Dr. Prasad sprasad2@bwh.harvard.edu

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# Glossary

**ABPN** = American Board of Psychiatry and Neurology; **ACGME** = Accreditation Council for Graduate Medical Education; **GME** = graduate medical education; **IQR** = interquartile range.

parental leave, exclusive of vacation time, without extension of training, and applies to both childbearing and non-childbearing parents.

Developing support at several levels was an essential first step towards revising our parental leave policy. To foster this support, we convened a working committee of stakeholders including departmental, GME, and institutional leadership, residents, and faculty members. We then articulated the major anticipated shortcomings to existing parental leave policies and ideal solutions (Table 1). We reviewed the regulations, policies, and requirements relevant to all specialties and those specific to neurology<sup>3</sup> and then began building a framework for a policy specifically designed for our program. Development of a 12-week paid parental leave policy required careful attention to the logistics of scheduling clinical rotations. We found that many initial challenges to the implementation of parental leaves could be anticipated and mitigated by making strategic adjustments to the structure of the training curriculum in advance. Institutional backing allowed strategies to maintain appropriate staffing of clinical services despite changes to residency rotations.

## Assessing the Effect of the Policy

Following institutional review board approval from Mass General Brigham, we administered an anonymous survey to residents in our program graduating between 2010 and 2022. The survey was administered via REDCap. Participation was voluntary and there was no remuneration. Residents were stratified into prepolicy (graduation date pre-June 2018) and postpolicy groups (graduation date post-June 2019).

Duration and composition of leave were reported as number of weeks. Residents' perceptions were graded on an ordinal scale comprising the following choices: very supportive, somewhat supportive, neutral, somewhat unsupportive, and very unsupportive. Quantitative analysis of parental leaves between the pre- and postpolicy group was performed with the Wilcoxon 2-sample test and with the  $\chi^2$  test or Fisher exact test for proportions. Two-tailed *p* value < 0.05 was considered significant for all analyses. Data analysis was performed with SAS version 9.4.

# Results

## Survey Response Rate and Respondent Demographics

Our survey was sent to 221 former and current residents (150 prior to and 71 following implementation of the new policy). The overall response rate was 64% (n = 142) without a

significant difference between the prepolicy and postpolicy groups. Among the respondents, 56% (n = 80) were male and 44% (n = 62) were female. This breakdown mirrored the percentage of female residents in our program prepolicy (42%) and postpolicy (44%). Overall, 25% (n = 35) of respondents reported that they had or adopted a child during residency, without a significant difference between the prepolicy (26%) and postpolicy groups (22%) (p = 0.55).

## **Parental Leave Characteristics**

Of the 35 residents who reported a parental leave during residency, 24 were in the prepolicy group and 11 were in the postpolicy group. Among the individuals in the prepolicy group, 38% (n = 9) were the childbearing parent, and in the postpolicy group, 72% (n = 8) were the childbearing parent (p = 0.075). The median duration of a parental leave was 4 weeks (interquartile range [IQR] 2–8 weeks) in the prepolicy group and 12 weeks (IQR 10–12 weeks) in the postpolicy group (p = 0.009) (Figure 1). The composition of leaves with regard to clinical rotations, elective, and vacation is also shown in Figure 1. No residents used short-term disability or unpaid time for their leaves. Three leaves started in the PGY2 year, 14 in the PGY3 year, and 18 in the PGY4 year. No trainee in either group had to extend training for reasons relating to clinical competency.

In our residency program of 54 residents, we accommodated five 12-week paid parental leaves in the 2019–2020 academic year (3 childbearing and 2 nonchildbearing, with 3 leaves occurring simultaneously) and 6 parental leaves in 2020–2021 (4 childbearing and 2 nonchildbearing, 3 simultaneously). Each leave used a balance of canceled clinical time and reduced elective time, preserved vacation outside the leave, and did not extend residency training. Each leave required reassignment of 2 or fewer calls because of the scheduling changes made up-front to minimize call coverage needs for a leave.

# Perceptions of Parental Leave Policy During Residency

After implementation of the updated parental leave policy, the proportion of residents who felt that the policy was transparent and clearly communicated increased from 24% to 80% (p < 0.0001) and the proportion of residents who felt that the policy was implemented consistently increased from 48% to 80% (p = 0.002) (Figure 2). The proportion of residents who felt that program leadership was supportive of parental leave increased from 60% to 86% (p = 0.002).

In both the prepolicy and postpolicy groups, residents felt that their coresidents were supportive of parental leave (74% and 84%, respectively; p = 0.21). Across both groups, residents indicated that they were willing to make major, minor, or

Table 1 Key Shortcomings With Many Existing Parental Leave Policies in Graduate Medical Education

| Shortcoming/need   | Solution   |  |
|--|--|--|
| There is real and perceived stigma against taking parental leave. <sup>8,9</sup>   | Recognize parental leave as a common, normal occurrence during residency training.<br>Create a culture of support for parental leave.  |  |
| Policies for nonchildbearing parents are not as robust as those<br>for childbearing parents. Parental leave can perpetuate gender<br>inequity. <sup>8-11</sup>   | Eliminate distinctions between maternity and paternity leave and between childbirth and adoption.  |  |
| Inadequate parental leave has negative effects on maternal, child, and family health. <sup>12</sup> Taking adequate leave may require using vacation time or taking time unpaid.                         | Allow up to 12 weeks of paid parental leave, exclusive of vacation elsewhere in the year, taken within 6 months of birth/adoption.   |  |
| Policies may not provide sufficient detail about the sources of time that<br>will be used to create a leave. There can be disproportionate use of<br>vacation and elective time for creation of a leave. | Explicitly state how a parental leave will be created with proportionate reductions of elective time and clinical rotations, while maintaining compliance with ACGME requirements, for each year and each track of the residency program.          |  |
| Extension of training is often required, delaying ability to start fellowship training on cycle. <sup>13</sup>   | Specify that residents taking a parental leave will typically remain eligible to graduate on time, except in cases where an individual has not demonstrated satisfactory clinical competency, acknowledging the importance of fellowship training. |  |
| Policies may require payback of calls during a parental leave. <sup>13</sup>   | Consolidate clinical rotations, in advance, to minimize these effects, striving to maintain equity regarding clinical service commitments and educational opportunities for all members of the residency.  |  |
| Without a formal leave policy, a leave may have to be negotiated on an individual basis, putting pressure on trainees. <sup>14</sup>   | Disseminate the revised policy transparently and implement it consistently.  |  |

Abbreviation: ACGME = Accreditation Council for Graduate Medical Education.

neutral adjustments to their schedules to support colleagues' parental leaves: 98% in the postpolicy group and 100% in the prepolicy group stated they would be willing to make these changes (p = 0.36).

Of those in the prepolicy group who did not have or adopt a child during residency, 22% stated that a 12-week paid parental level policy would have influenced their plans to have or adopt a child during residency. Of those in the prepolicy group who did have or adopt a child during residency, 100% indicated that they would have taken a longer parental leave if a 12-week paid leave had been available at the time.

# Lessons Learned: Strategies for Developing a Parental Leave Policy

## **Legal Requirements**

The first step in creating a parental leave program is to ensure compliance with federal, state, and institutional policies regarding GME and parental leave, which we have reviewed in detail separately.<sup>3</sup> The Accreditation Council for Graduate Medical Education (ACGME) states that "there are circumstances in which residents may be unable to attend work, including but not limited to fatigue, illness, family emergencies, and parental leave. Each program must allow an appropriate length of absence for residents unable to perform their patient care duties."<sup>4</sup> The ACGME does not further specify or outline how a parental leave should be created but does state that there must be "policies and procedures in place to ensure coverage of

patient care."<sup>4</sup> For neurology training, the ACGME specifically requires that a 36-month residency comprise at least 18 months of adult neurology, 3 months of child neurology, 1 month of psychiatry, 3 months of elective, and 3 months of vacation. It does not specify how the other 8 months should be scheduled.<sup>4</sup>

The American Board of Psychiatry and Neurology (ABPN) states that a candidate must have graduated from an accredited medical school, completed training at a program accredited by the ACGME or approved by the ABPN, and have an active full, unrestricted medical license. In fact, as of November 2020, the ABPN stipulated that programs must allow a minimum of 6 weeks of parental leave without exhausting other time away from training and without mandatory extension of training.<sup>5</sup>

A parental leave program must also be in compliance with institutional and state laws, which will vary across residency programs.<sup>4</sup>

# Strategies to Maintain Appropriate Clinical Coverage

Crafting a parental leave policy involves making decisions about how the leaves are constructed (Table 2). We adopted an approach of augmenting the amount of elective time in our training program curriculum and canceling some clinical rotations where appropriate to construct a parental leave (eFigure 1, links.lww. com/WNL/B965). When identifying rotations that could potentially be canceled, we suggest selecting experiences where an outpatient clinic or inpatient service benefits from a resident's presence, but patient care would be preserved in his or her





Box plots show the distribution of leave duration in weeks taken by graduates before (gray) and after (blue) implementation of the updated parental leave policy. (A) Results from all residents who took a parental leave. (B) Subgroup results divided according to childbearing status.

absence. These experiences could then be cancelled if not specifically required for training or postponed until the subsequent year.

Another way to identify time for leave is to examine staffing levels that services can safely accommodate on weekends and holidays. Overnight calls can then be moved or limited on those rotations so that they could be used for a parental leave if needed. Other strategies include utilizing swaps between different residency class years (PGY3 and PGY4s can staff PGY2 rotations, for example), or having faculty cover a service or clinic temporarily. For example, in our program, we determined that 1 of our consult services could be staffed with 2 rather than 3 residents if necessary.

After identifying experiences that could be cancelled, we suggest grouping experiences into consolidated rotations so they could be utilized toward building a parental leave more easily (eFigure 2, links.lww.com/WNL/B965). These approaches are shown in eFigures 1 and 2.

# Creating a Leave in Relation to the Residency Schedule

If a request for a parental leave is made before residents' schedules are set for the following year, the leave can be created by maximizing the use of canceled rotations and minimizing the use of electives (eFigure 1, links.lww.com/WNL/B965). If a leave is created after the year's schedule has been built, we suggest rearranging rotations between residents to place rotations that can be canceled within the time of the scheduled leave (eFigure 1).

# **Resident Well-being and Equity**

An important aspect of promoting resident well-being and equity is to provide a clearly written policy that details how a leave is scheduled. This is important for promoting transparency and equity, increasing support for the policy, and facilitating its practical implementation. Program directors or chief residents should be responsible for arranging clinical coverage and trainees should not be required to find their own coverage to create a parental leave. The policy should offer both childbearing and nonchildbearing parents adequate leave to promote equity among residents.

In addition, for a parental leave policy to be successful, it is important to mitigate the effect a scheduled leave will have on other residents in the program. We suggest limiting the number of calls on electives and other rotations that could be used for parental leave to minimize the reassignment of call responsibilities when a parental leave is scheduled. Another strategy to reduce the burden on other residents is using advance practice providers where possible to help cover some shifts for a resident on parental leave. Using the strategies outlined above, for the 11 parental leaves scheduled in our program between 2019 and 2021, each required reassignment of 2 or fewer calls to other residents.

## **Financial Support**

Another critical aspect of a successful parental leave policy is adequate institutional financial support. Residency program leadership should work with institutional leaders to promote the idea that paid parental leave is a critical investment in the well-being of trainees, in order to



Figure 2 Perceptions Regarding Parental Leave During Residency

Horizontal bars indicate the proportion of residents answering yes to each question about their perceptions. Results are aggregated into the group of graduates before (gray) and after (blue) implementation of the updated parental leave policy. (A) Survey results from all residents (prepolicy, n = 91; postpolicy, n = 51). (B) Results divided according to sex (prepolicy, n = 40 female, n = 51 male; postpolicy, n = 22 female, n = 29 male). (C) Results divided according to groups who did or did not become a parent during residency (prepolicy, n = 24 parent, n = 67 nonparent; postpolicy, n = 11 parent, n = 40 nonparent).

establish a clear plan describing the continuation of salary and benefits. This requires discussion and collaboration with the Human Resources department and GME office at each respective institution. We also recommend each program review relevant state laws when planning funding for leaves. At the time of our study, our GME mandated a minimum of 8 weeks paid leave for all training programs, exclusive of vacation time, fully paid for by our institution. Individual programs were allowed to grant up to 12 weeks paid leave, exclusive of vacation time, also paid for by our institution. Since we completed our study, a new Massachusetts state law on paid parental leave has gone into effect. Currently the first 8 weeks of paid leave are covered by the institution, with additional leave (up to 12 weeks) covered at a rate of \$850/wk by state funds.<sup>6</sup> If institutional or state funds are not available, residency programs may consider assisting residents in utilizing short term disability insurance to provide financial support during leave.

#### **Extenuating Circumstances**

We recognize that a 12-week paid parental leave policy may not be feasible in circumstances where there are concerns regarding a trainee's clinical competency or when there is more than 1 parental leave for a trainee during residency. The policy should stipulate that extension of training may be needed in these circumstances.

| Goal                                   | Strategy  |  |
|--|---|--|
| Ensure legal requirements are met      | Review GME, institutional, state, ABPN, and ACGME guidelines  |  |
| Maintain appropriate clinical coverage | Augment elective time, identify nonessential rotations that can be canceled, identify rotations that can be downstaffed, use advanced practice providers to cover shifts if available |  |
| Ensure resident well-being and equity  | Minimize redistribution of calls, provide clearly written accessible policy, consistently implement policy  |  |
| Clarify plan for financial support     | Establish plans with institutional GME, HR offices  |  |

#### Table 2 Strategies for Developing a Successful Parental Leave Policy

Abbreviations: ABPN = American Board of Psychiatry and Neurology; ACGME = Accreditation Council for Graduate Medical Education; GME = graduate medical education; HR = human resources.

## **Virtual Rotations and Experiences**

Parental leave should generally be free of mandatory educational or clinical obligations. However, the ability to deliver virtual patient care and online learning has increased significantly during the COVID-19 pandemic, creating helpful options for trainees who wish to engage in these activities during their leave. In addition, the flexibility provided by virtual rotations can improve resident well-being after the return from leave, for example during disruptions in childcare.<sup>7</sup>

## Limitations

Our policy was enacted in a large academic neurology residency program, which may limit some aspects of its generalizability to smaller programs and other specialties. However, although the size of our training program is large, our program also has clinical commitments commensurate with its size. We cover several clinical services with high volume at multiple hospitals. Therefore, many aspects of our approach can serve as a framework for smaller training programs. We also recognize that our program was fortunate to have institutional financial support and evolving state legislation that promoted paid parental leave. One limitation of our study is that we have been able to assess the effect of our 2019 parental leave policy in only a few classes of residents in our program, although we have already demonstrated that it has had a significant effect on the duration of parental leaves and on the culture of our training program. We intend to reassess its effect in coming years once our policy has been available to additional classes.

Although implementing a parental leave policy is challenging, it provides an opportunity to enact substantive changes that directly affect equity and wellness. Specific circumstances in each program vary depending on educational, financial, and scheduling factors relevant to the institution, but our experience suggests that a fair and equitable approach to parental leave can be achieved with institutional backing, support of leadership and trainees, careful advance planning, and clear and consistent implementation. We share our experience and outline a framework for addressing common challenges. We hope that this framework and our results serve as a catalyst for programs to adopt similar approaches towards parental leave. Advocacy at a national level is critical to advance the regulatory policies that affect training requirements and parental leave across the board in GME.

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## References

- Humphries LS, Lyon S, Garza R, Butz DR, Lemelman B, Park JE. Parental leave policies in graduate medical education: a systematic review. *Am J Surg.* 2017;214(4): 634-639.
- Magudia K, Bick A, Cohen J, et al. Childbearing and family leave policies for resident physicians at top training institutions. JAMA. 2018;320(22):2372-2374.
- Prasad S, Vaswani P, Budhu J, et al. Legal regulations and institutional policies underlying parental leave in graduate medical education. J Graduate Med Educ. 2021; 13(3):349-354.
- ACGME Program Requirements for Graduate Medical Education in Neurology. Accessed April 2, 2021. acgme.org/Portals/0/PFAssets/ProgramRequirements/180\_Neurology\_2020.pdf?ver=2020-02-25-140549-567
- American Board of Psychiatry and Neurology. General requirements. Accessed April 2, 2021. abpn.com/become-certified/general-requirements/
- Massachusetts law about parental leave. Accessed February 3, 2022. mass.gov/infodetails/massachusetts-law-about-parental-leave
- Sandrone S, Albert DV, Dunham SR, et al. Training in neurology: how lessons learned on teaching, well-being and telemedicine during the COVID-19 pandemic can shape the future of neurology education. *Neurology*. 2021;96:e3007-e3010.

- Sandler BJ, Tackett JJ, Longo WE, Yoo PS. Pregnancy and parenthood among surgery residents: results of the first nationwide survey of general surgery residency program directors. J Am Coll Surg. 2016;222(6):1090-1096.
- Hariton E, Matthews B, Burns A, Akileswaran C, Berkowitz LR. Pregnancy and parental leave among obstetrics and gynecology residents: results of a nationwide survey of program directors. Am J Obstet Gynecol. 2018;219(2):199.e1–199.e8.
- Edmunds LD, Ovseiko PV, Shepperd S, et al. Why do women choose or reject careers in academic medicine? A narrative review of empirical evidence. *Lancet.* 2016;388: 2948-2958.
- 11. Willett LL, Wellons MF, Hartig JR, et al. Do women residents delay childbearing due to perceived career threats? *Acad Med.* 2010;85:640-646.
- Burtle A, Bezruchka S. Population health and paid parental leave: what the United States can learn from two decades of research. *Healthcare*. 2016;4(2): 30.
- 13. 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.
- Weinstein DF, Mangurian C, Jagsi R. Parenting during graduate medical training: practical policy solutions to promote change. N Engl J Med. 2019;381(11): 995-997.

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