Table. Paid Childbearing and Family Leave for Trainees With New Children at 15 GME-Sponsoring Institutions Associated With 12 Top US Medical Schools (continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington University</td>
<td>St Louis</td>
<td>Washington University/BJH/SLCH Consortium</td>
<td>No institutional policy beyond sick leave</td>
<td>May use available sick leave (up to 10 days) and vacation (20 days)</td>
<td>No institutional policy</td>
</tr>
<tr>
<td>Yale University</td>
<td>Yale-New Haven Hospital</td>
<td>4 Weeks</td>
<td>2 Additional weeks for cesarean delivery; can be extended with written documentation of continued medical need by treating physician; additive to 6 weeks parenting leave</td>
<td>6 Weeks (additive beyond the maternity leave for childbirth mothers for total of 10 weeks for birth mothers)</td>
<td>Applies to adopting and fostering mothers and fathers of children from birth, adoption, or fostering</td>
</tr>
</tbody>
</table>

Abbreviations: BJH, Barnes-Jewish Hospital; GME, graduate medical education; NIH, National Institutes of Health; SLCH, St Louis Children's Hospital; UPMC, University of Pittsburgh Medical Center.
1 Medical schools selected as in Riano et al. Selected schools were among the top 10 in 1 of the following rankings: 1) US News and World Report (“Best Medical Schools: Research”, 2016. https://usnews.com/edu/best-medical-schools); or 2) Blue Ridge Institute for Medical Research (“Ranking Tables of NIH Funding to US Medical Schools in 2016”, 2016. https://blue-ridge-institute.org/). Because many schools were on both lists, the search resulted in 12 unique schools.
2 Policies apply to vaginal delivery, with specification for cesarean delivery in constraints, clarifications, and related provisions. Only 100% paid leave is included. Leave does not include vacation time, sick leave, or short-term disability for those with disability extending beyond sick leave.
3 Vacation time is listed when institutional policies specifically state that vacation may be used in this setting; unused vacation time may be available for this purpose at other institutions, but vacation time is not listed when policies on childbearing or family leave do not state this (as it is unclear how much time off may be taken in one stretch or whether the resident can expect unused vacation time to be scheduled at the time of birth).
4 Affiliated with both Columbia and Cornell medical schools; included in this study because of its Columbia affiliation.
5 Brigham and Women's Hospital and Massachusetts Hospital are separate Accreditation Council for Graduate Medical Education “sponsoring institutions” but have many integrated GME programs and share GME policies determined by a common governing body.
6 At the time of submission, this policy was under revision. The policy was changed in September 2018 to include 8 weeks of paid parental leave for nonchildbearing (as well as childbearing) parents. To ensure consistency in the July 2018 end of the evaluation across institutions, that change has not been included.
7 This policy is under revision.

Kirti Magudia, MD, PhD
Alexander Bick, MD, PhD
Jeffrey Cohen, MD
Thomas S. C. Ng, MD, PhD
Debra Weinstein, MD
Christina Mangurian, MD, MAS
Reshma Jagsi, MD, DPhil

Author Affiliations: Department of Radiology, Brigham and Women's Hospital, Boston, Massachusetts (Magudia, Ng); Department of Medicine, Massachusetts General Hospital, Boston (Bick); The Ronald O. Perelman Department of Dermatology, New York University School of Medicine, New York (Cohen); Office of Graduate Medical Education, Partners Healthcare, Boston, Massachusetts (Weinstein); Weill Institute for Neuroscience, University of California, San Francisco (Mangurian); Center for Bioethics and Social Sciences in Medicine, University of Michigan, Ann Arbor (Jagsi).

Accepted for Publication: September 5, 2018.

Corresponding Author: Christina Mangurian, MD, MAS, Department of Psychiatry, Weill Institute for Neuroscience, University of California, San Francisco, 1011 Potrero Ave, Ste 7M, San Francisco, CA 94110 (christina.mangurian@ucsf.edu).

Author Contributions: Drs Magudia and Bick had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. Drs Magudia and Jagsi contributed equally as senior authors. Concept and design: Magudia, Bick, Cohen, Ng, Mangurian, Jagsi. Acquisition, analysis, or interpretation of data: All authors. Drafting of the manuscript: Magudia, Bick, Ng, Weinstein, Mangurian, Jagsi. Critical revision of the manuscript for important intellectual content: All authors.

Statistical analysis: Magudia, Bick, Jagsi.
Administrative, technical, or material support: Magudia, Ng.
Supervision: Mangurian, Jagsi.

Conflict of Interest Disclosures: All authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Dr Mangurian reported receiving salary support from the National Institutes of Health (NIH) and the Doris Duke Charitable Foundation during the study period for unrelated work. Dr Jagsi reported receiving grants from the NIH, the Doris Duke Charitable Foundation, the Susan G. Komen Foundation, and the Greenwall Foundation for unrelated work; consulting fees from Aman and Vizient; and stock options in Equity Quotient. No other disclosures were reported.


Specialty Board Leave Policies for Resident Physicians Requesting Parental Leave
A study of family and childbearing leave policies for academic faculty members at 12 top US medical schools found the mean duration of paid childbearing leave was 8.6 weeks in
For physicians in residency training, determinations of parental leave duration are complicated by training requirements set forth by specialty boards. Board policies aimed at ensuring adequate preparation for independent practice often include time-based residency training requirements. Residents taking more than the allowed leave may have to extend training to be eligible for board certification. In practice, decisions on parental leave for resident physicians are typically made with residency program directors, which are influenced by specialty board organization leave policies. We identified and compared leave policies for resident physicians among American Board of Medical Specialty (ABMS) member organizations (boards).

**Methods** | Websites of the 24 ABMS boards were accessed in July 2018 to identify leave policies related to residency training requirements and board eligibility. The following variables were collected: (1) whether the policy specifically included terms referring to parental leave (maternity, paternity, parental, childbearing), (2) maximum amount of leave time allowed for any reason, and (3) whether exemption from extending training duration was permitted if leave taken was longer than the maximum leave allowed. The median annual allowed leave time was calculated. Qualitative analysis was performed on clarifying language within leave policies to determine whether extension of training was required to remain eligible for board certification if leave taken was longer than the maximum allowed amount stated in the policy. Analyses used an iterative thematic approach, focusing on training program autonomy vs specialty board control. Clarifying language was collected to exemplify variability across policies.

**Results** | Twenty-two of the 24 boards had leave policies but only 11 specifically mentioned parental leave as a potential reason for resident physicians taking leave (Table). No boards had a separate policy for parental leave. Twenty boards had time-based training requirements for board eligibility, allowing a median of 6 weeks of leave (range, 4-12 weeks) for any reason during any 1 year. There was considerable variation in the clarifying language regarding leave policies and maintaining board eligibility. Eight boards had explicit and clear clarifying language that allowed program directors to seek exemption of resident physicians from time-based training requirements without extending training duration.

**Discussion** | Specialty boards allowed resident physicians requesting parental leave a median of 6 weeks without extension of training duration, less than the leave allowed faculty and similar to the 6 to 8 weeks of paid parental leave recommended by the American Academy of Pediatrics. However, most board policies lacked specific reference to parental leave and were ambiguous about whether training would need to be extended, which may create barriers to resident physicians taking parental leave.

Inadequate parental leave during residency has been associated with delayed childbearing, use of assisted reproduction technology, and difficulty maintaining breastfeeding.

---

**Table. Summary of American Board of Medical Specialties (ABMS) Member Boards Parental Leave Policies for Resident Physicians**

<table>
<thead>
<tr>
<th>ABMS Specialty</th>
<th>Policy Specifically Addresses Parental Leave</th>
<th>Maximum Leave Allowed for Any Reason</th>
<th>Exemption From Extension of Training Is Allowed</th>
<th>Excerpts of Clarifying Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Board of Allergy &amp; Immunology (ABAI)</td>
<td>No</td>
<td>8 Weeks (over 24-month period)</td>
<td>Yes</td>
<td>“If program directors believe that an absence of more than two months is justified, they should send a letter of explanation to the ABAI for review and approval.”</td>
</tr>
<tr>
<td>American Board of Anesthesiology</td>
<td>No</td>
<td>12 Weeks (during clinical anesthesia years 1-3)</td>
<td>No</td>
<td>“Duration of absence during the clinical base year may conform to the policy of the institution and department in which that portion of the training is served.”</td>
</tr>
<tr>
<td>American Board of Colon and Rectal Surgery</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>No formal leave policy available on website.</td>
</tr>
<tr>
<td>American Board of Dermatology</td>
<td>Yes</td>
<td>6 Weeks (per training year); 14 weeks over 3-year period</td>
<td>Yes</td>
<td>“An absence exceeding six weeks in any one academic year, or a total of 14 weeks in three years, may necessitate additional training to successfully ‘make up’ for that lost time … If the time is not made up, any resident approved to sit for the certifying examination despite such an absence must have completed each year of training in an above average or excellent manner as recorded on the annual residency evaluation forms.”</td>
</tr>
<tr>
<td>American Board of Emergency Medicine</td>
<td>No</td>
<td>6 Weeks (per training year)</td>
<td>No</td>
<td>“If a residency program already has a policy in effect for leave time that is less than six weeks, the program may operate according to its own policy.”</td>
</tr>
<tr>
<td>American Board of Family Medicine</td>
<td>No</td>
<td>4 Weeks (per training year)</td>
<td>No</td>
<td>“Absence from residency education, in excess of one month within the academic year must be made up before the resident advances to the next training level, and the time must be added to the projected date of completion.”</td>
</tr>
<tr>
<td>American Board of Internal Medicine (ABIM)</td>
<td>Yes</td>
<td>4 Weeks (per training year)</td>
<td>Yes</td>
<td>“If the trainee’s program director and clinical competency committee attest to ABIM that the trainee has achieved required competence with a deficit of less than one month, extended training may not be required.”</td>
</tr>
<tr>
<td>American Board of Medical Genetics and Genomics</td>
<td>Yes</td>
<td>4 Weeks (per training year)</td>
<td>No</td>
<td>“Of the required training period, programs may grant up to one month/year for vacation, pregnancy, parental or family leave, or illness. Training must be extended to make up any absences exceeding one month per year of training.”</td>
</tr>
</tbody>
</table>

(continued)
### Table. Summary of American Board of Medical Specialties (ABMS) Member Boards Parental Leave Policies for Resident Physicians (continued)

<table>
<thead>
<tr>
<th>ABMS Specialty</th>
<th>Policy Specifically Addresses Parental Leave</th>
<th>Maximum Leave Allowed for Any Reason</th>
<th>Exemption From Extension of Training Is Allowed</th>
<th>Excerpts of Clarifying Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Board of Neurological Surgery</td>
<td>Yes</td>
<td>No maximum given</td>
<td>Yes</td>
<td>“… any reduction from the standard 84 months of training must come from the resident’s 30 months of elective time” “… the Program Director should follow the Human Resources policies of his/her institution and applicable law when determining whether to approve such leave requests, in whole or in part, and whether any time away from training needs to be made up at the back end of the resident’s training”</td>
</tr>
<tr>
<td>American Board of Nuclear Medicine (ABNM)</td>
<td>No</td>
<td>6 Weeks (per training year)</td>
<td>Unclear</td>
<td>“If leave exceeds these limits … the program director must have a plan approved by the ABNM to compensate for the lost educational time.”</td>
</tr>
<tr>
<td>American Board of Obstetrics and Gynecology</td>
<td>Yes</td>
<td>8 Weeks (per training year); 20 weeks total during training</td>
<td>No</td>
<td>“Leaves of absence and vacation may be granted to residents at the discretion of the Program Director … However, the total of such … leaves for any reason—including … maternity or paternity leave … may not exceed 8 weeks in any of the four years of residency training. If any of these maximum weeks of leave per year are exceeded, the residency must be extended for the duration of time the individual was absent in excess of 8 weeks …”</td>
</tr>
<tr>
<td>American Board of Ophthalmology (ABO)</td>
<td>No</td>
<td>No maximum given</td>
<td>Unclear</td>
<td>“Duration of training is a specific requirement for board eligibility. If you have taken time off or extended leave … you will need to make up the missed time in consultation with your Residency Program Chair or Director. The ABO does not accept less than one PGY-1 internship year, followed by 36 months of ABMS-accredited residency training in ophthalmology.”</td>
</tr>
<tr>
<td>American Board of Orthopedic Surgery</td>
<td>No</td>
<td>6 Weeks (per training year)</td>
<td>No</td>
<td>“Program directors may retain a resident for as long as needed beyond the minimum required time to ensure the necessary degree of competence in orthopedic surgery.”</td>
</tr>
<tr>
<td>American Board of Otology and Neurology (ABOto)</td>
<td>No</td>
<td>6 Weeks (per training year)</td>
<td>Yes</td>
<td>“If a circumstance occurs in which a resident’s absence exceeds the allotted time outlined by the ABOto, the program director must submit a plan to the ABOto for approval on how the necessary training will be achieved, which may require an extension of the residency.” “Leaves of absence and vacation may be granted to residents at the discretion of the program director in accordance with local rules.”</td>
</tr>
<tr>
<td>American Board of Pathology</td>
<td>Yes</td>
<td>Average of 4 weeks (per training year)</td>
<td>No</td>
<td>“Each institution sponsoring a pathology training program should develop their own sick, vacation, parental, and other leave policies for the resident. Regardless of institutional policies … any training less than 48 weeks must be made up.”</td>
</tr>
<tr>
<td>American Board of Pediatrics (ABP)</td>
<td>Yes</td>
<td>4 Weeks (per training year); not &gt;3 months of entire training</td>
<td>Yes</td>
<td>“If the program director believes that the candidate is well qualified and has met all the training requirements, the program director may submit a petition to the ABP requesting an exemption to the policy.”</td>
</tr>
<tr>
<td>American Board of Plastic Surgery</td>
<td>Yes</td>
<td>4 Weeks (per training year)</td>
<td>Unclear</td>
<td>“Should absence exceed four weeks per annum for any reason, the circumstances and the proposed correction (i.e., make-up time) of this irregular training arrangement must be approved by the program director.” “The 48-weeks can be averaged over the training years in the program.”</td>
</tr>
<tr>
<td>American Board of Physical Medicine and Rehabilitation</td>
<td>Yes</td>
<td>6 Weeks (per academic year)</td>
<td>Unclear</td>
<td>“A resident must not be absent from residency or fellowship training for more than six weeks (30 working days) annually. Regardless of institutional policies regarding absences, any leave time beyond six weeks will need to be made up by arrangement with the program director.”</td>
</tr>
<tr>
<td>American Board of Preventive Medicine</td>
<td>No</td>
<td>8 Weeks (per training year)</td>
<td>No</td>
<td>“The training must include at least ten months of direct patient care.”</td>
</tr>
<tr>
<td>American Board of Psychiatry &amp; Neurology (ABPNI)</td>
<td>Yes</td>
<td>No maximum given</td>
<td>NA</td>
<td>“The ABPN recommends that all programs allow a minimum of four weeks of leave time (including vacation, sick time, maternity/paternity leave, etc) during training per year. These four weeks should be averaged over the four-year training period.”</td>
</tr>
<tr>
<td>American Board of Radiology (ABR)</td>
<td>No</td>
<td>Leave policy is not based on time</td>
<td>NA</td>
<td>“Leaves of absence and vacation may be granted to residents at the discretion of the program director … Depending on the length of absence … the required period of graduate medical education may be extended accordingly. Residency program directors and their institutional GME offices determine the need for extension of residency training. Therefore, it is not up to the ABR to determine graduation dates for individual residents.”</td>
</tr>
<tr>
<td>American Board of Surgery (ABS)(^a)</td>
<td>Yes</td>
<td>4 Weeks per year (averaged over first 3 years and last 2 years)</td>
<td>Yes</td>
<td>“The ABS will also consider other arrangements beyond what is noted above on a case-by-case basis. These will also require advance approval. All requests for approval must be made by the program director (not the resident).”</td>
</tr>
<tr>
<td>American Board of Thoracic Surgery</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>“The American Board of Thoracic Surgery does not have a formal medical or maternity leave policy.”</td>
</tr>
<tr>
<td>American Board of Urology (ABU)</td>
<td>No</td>
<td>6 Weeks (per training year)</td>
<td>Yes</td>
<td>“Should circumstances occur which keep a resident from working the required forty-six weeks in one year, the program director must submit a plan to the ABU for approval on how the training time will be made up, and an extension of the residency may be required.”</td>
</tr>
</tbody>
</table>

**Abbreviations:** ACGME, Accreditation Council for Graduate Medical Education; GME, graduate medical education; NA, not available; PGY-1, postgraduate year 1.  
\(^a\) A prerequisite is ABS certification.  
\(^b\) As long as training deficit is less than 1 month.  
\(^c\) Policy is for certification in general surgery. Policies for certification in other ABS subspecialties were excluded.
Lack of support for adequate parental leave during residency training may contribute to persistent sex disparities in certain specialties, dissatisfaction with work-life balance, and increased risk of physician burnout. Conversely, residency program directors face unique challenges in making determinations of parental leave duration for resident physicians. They must weigh potentially conflicting factors such as adhering to board and institutional policies, maintaining adequate clinical service coverage, considering precedent within the program, and ensuring that resident physicians are well trained.

Balancing the needs of resident physicians, training programs, and specialty boards may require novel approaches such as use of competency-based rather than time-based training milestones to determine eligibility for board certification. Study limitations include possible lack of identification of all relevant policies and subjective evaluation of policies.

Briony K. Varda, MD, MPH
McKinley Glover IV, MD, MHS

Author Affiliations: Department of Urology, Boston Children’s Hospital, Boston, Massachusetts (Varda); Department of Radiology, Massachusetts General Hospital, Boston (Glover).

Accepted for Publication: September 20, 2018.

Corresponding Author: McKinley Glover IV, MD, MHS, Department of Radiology, Massachusetts General Hospital, 55 Fruit St, Buflinch 205, Boston, MA 02114 (mckinley.glover@mgh.harvard.edu).

Author Contributions: Drs Varda and Glover had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Concept and design: Both authors.

Acquisition, analysis, or interpretation of data: Varda.

Drafting of the manuscript: Both authors.

Critical revision of the manuscript for important intellectual content: Both authors.

Statistical analysis: Varda.

Conflict of Interest Disclosures: None reported.


COMMENT & RESPONSE

Third Molar Extraction and Persistent Use of Opioids

To the Editor Dr Harbaugh and colleagues1 addressed an important issue as to whether the initial prescription of an opioid after wisdom tooth extraction leads to persistent use. The American Association of Oral and Maxillofacial Surgeons has been addressing this issue, including publishing a white paper on opioid use2 as well as supporting research on alternative means of pain control for third molar procedures.3

We have a number of concerns about the study. First, the authors stated that any additional opioid prescriptions for longer than 3 days postoperatively were not considered a perioperative indication. Third molar extraction involves cutting of soft tissue and bone, thereby producing acute inflammation and pain. Studies revealed that by postoperative day 7, up to 15% of patients who underwent a third molar extraction rated their pain as severe.4

All surgeries have the potential for delayed healing with persistent pain. Infection in a class II or III wound can lead to continued pain. The painful postoperative complication of alveolar osteitis (dry socket) occurs 3 to 7 days after extraction, with an incidence of up to 5% among patients.5 Therefore, classifying a prescription renewal after 3 days as “persistent use” is arbitrary.

Second, the authors stated that dentists are the second-leading opioid prescriber to children and adolescents; however, children rarely have third molar surgery and were not part of the study population.

Third, there was no correlation between the prescribing of opioids and persistent opioid use for the more complicated third molar surgical procedures.

Opioids are only one aspect of the multimodal approach (preventive analgesia, long-acting and delayed-release local anesthetics) to pain control that oral surgeons use.

Brett L. Ferguson, DDS
Stuart E. Lieblich, DMD
Thomas B. Dodson, DMD, MPH

Author Affiliations: Truman Medical Center, Kansas City, Missouri (Ferguson); University of Connecticut, Avon (Lieblich); School of Dentistry, University of Washington, Seattle (Dodson).

Corresponding Author: Brett L. Ferguson, DDS, Truman Medical Center, 2301 Holmes St, Kansas City, MO 64108 (brett.ferguson@tmcmd.org).

Conflict of Interest Disclosures: Dr Lieblich reported receiving personal fees from Pacira Pharmaceuticals. No other disclosures were reported.


In Reply Dr Ferguson and colleagues raised concerns about our study demonstrating an association between perioperative opioid prescribing and new persistent opioid use in