Jenna Fredette, MD
Associate Program Director, Department of Emergency Medicine, Christiana Care Health System

Corresponding author: Richard Bounds, MD, Christiana Care Health System, Emergency Department, 4755 Ogletown-Stanton Road, Newark, DE 19718, 302.733.4176, richbounds@gmail.com

NEW IDEAS

A Mathematical Formula for Institutional GME Program Support

Setting and Problem

The Accreditation Council for Graduate Medical Education (ACGME) requires sponsoring institutions to provide protected administrative time for program directors (PDs) and program coordinators (PCs). Some specialty requirements state the full-time equivalents (FTEs) required for PD and PC support, while others do not. This has led to inequitable budgetary support for our institution's ACGME-accredited programs. To address this inconsistency, our Graduate Medical Education Committee (GMEC) appointed a task force in 2014 to develop a solution for transparent, equitable institutional support of ACGME-accredited programs.

Intervention

The task force consisted of graduate medical education (GME) administration and PDs representing medical, surgical, and hospital-based programs. The effort used the ACGME Common Program Requirements for PD and PC responsibilities, the ACGME's protected time requirements by specialty, and the institution's job descriptions for PDs and PCs to develop *principles of support* and to estimate work hours by administrative activities.

The task force agreed on 4 principles of support: (1) every program requires a base amount of PD and PC support for fixed work activities; (2) residents require more support than fellows; (3) large programs require more support than small programs; and (4) ACGME specialty-specific protected time requirements supersede task force recommendations.

Fixed work activities were defined as PD duties requiring completion regardless of program size. Minimum work time estimates were assigned for each of these fixed work activities. These are outlined in the ACGME Common Program Requirements and the institution's requirements, which considered factors of local practice environment and support. While such work estimates may differ across institutions, the exercise of defining minimum time to meet required activities provides transparency and explains the rationale for assigned distribution. Assuming 2080 work hours annually, estimated PD time for fixed work activities totaled 724 hours (0.3 FTE) for residency programs, 462 hours (0.2 FTE) for large fellowship programs ($\geq$ 10 trainees), and 270 hours (0.1 FTE) for small fellowship programs ($<$ 10 trainees).

Incremental work activities were defined as additional PD duties resulting from program type and size. These activities formed the basis of additional FTE support allocated based on programs being either large or small, and residency versus fellowship programs. For PC support, we created a minimum time estimate based on program type and size.

The task force devised a mathematical institutional formula to account for base FTE by program type for fixed work activities, plus additional FTE support to account for incremental work activities by program type and size.

Outcomes to Date

To assess budgetary implications, we compared historical (2014 budget) with the institutional formula (proposed 2015 budget) FTEs. Using the institutional formula, 15 of 18 residency programs had FTE redistributions: 11 in PD FTEs and 14 in PC FTEs. Of 30 fellowship programs, 28 had FTE redistributions: 14 in PD FTEs and 25 in PC FTEs. Overall, total PD FTEs were similar (17.90 in 2014 versus 17.85 for 2015), whereas total PC FTEs were higher (21.0 for 2014 versus 25.0 for 2015 [additional expense of $166,000]). The proposed institutional formula was reviewed and approved by the GMEC, as well as the institution's physician and administrative executives starting with the 2015 budget cycle.

Our model provides transparent allocation of GME funds for PD and PC FTEs, and is now used for the annual GME budget as well as for estimating minimum costs of new program leadership and support. While the institutional formula outlines a

DOI: http://dx.doi.org/10.4300/JGME-D-16-00769.1

method for equitable support, true equity was not achieved because of higher ACGME specialty FTE requirements in several specialties. As all PDs were involved from the start of this project as part of the GMEC, no dissent occurred in implementation of the institutional formula.

Kimberly Baker-Genaw, MD
Designated Institutional Official, Henry Ford Hospital
Director, Department of Medical Education, and Vice-chair, Department of Medicine, Henry Ford Hospital

Crystal Gyiraszin, MS
Administrative Director, Department of Medical Education, Henry Ford Hospital

Corresponding author: Kimberly Baker-Genaw, MD, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202, 313.916.1829, kgenaw1@hfhs.org

NEW IDEAS

Institutional Review Board Checklist for Trainee Quality Improvement Project Approvals

Setting and Problem

In 2012, the Accreditation Council for Graduate Medical Education (ACGME) introduced a requirement for trainees to participate in quality improvement (QI) and patient safety (PS) work. This requirement increased trainee exposure to QI/PS, and created an opportunity for scholarly work. For traditional scholarly work, trainees must obtain approval from their Institutional Review Board (IRB) prior to conducting a study. In practice, the IRB process acts as a significant barrier for trainees, due to the significant amount of administrative work and advanced planning required during a trainee's other, unrelated rotations. Expansion of IRB submissions due to required QI/PS projects also creates the potential for IRB submission overload, bogging down timely review. Internal surveys at our urban, academic hospital confirmed that delays in IRB review already deter trainees from ambitions to create impactful projects.

DOI: http://dx.doi.org/10.4300/JGME-D-16-00740.1

Intervention

At our hospital, which is responsible for 450 trainees, we implemented our interpretation of ACGME requirements by requiring all residents to participate in QI/PS projects. We created an institution-wide curriculum and an online QI platform to facilitate QI/PS scholarship. During initial implementation, trainees submitted project applications through the IRB before starting these scholarly activities. Subsequently, we observed IRB feedback that (1) the majority of projects were not human subject research, and (2) the remaining submissions evaluated by the IRB were ultimately approved as exempt.

Noting the opportunity to improve efficiency, we collaborated with our IRB to create a checklist that would appropriately route all institutional QI/PS projects. If the project met checklist criteria (FIGURE), it would be approved as *QA/QI Status* and would not require separate IRB submission. The IRB included a quality assurance (QA) designation for this checklist in anticipation of other groups choosing to do projects in this area; our projects were predominantly focused on QI and PS. Enforcement of the checklist completion and umbrella protocol compliance was tasked to graduate medical education leaders overseeing the QI/PS effort at our institutions (A.C. and K.M.). This checklist was placed on an online QI platform so trainees can certify that a project qualifies; projects that do not qualify require IRB submission.

Outcomes to Date

From October 2016 to January 2017, a total of 47 projects have been entered onto the site. Of these projects, all but 3 have met QA/QI Status approval conditions, bypassing traditional IRB submission.

Most QI/PS projects are initiated with the intent to improve systems at the home institution. In the event that any outcomes are deemed worthy of dissemination, and thus presentation or publication, they will fall under the original umbrella protocol and can be published. We also have anecdotal evidence (via focus groups) that residents are more satisfied and eager to complete QI projects without the barrier of IRB approval. We plan to continue to track submissions to the QI platform as well as IRB submissions for QI/PS work.