

## Confronting Assumptions

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In 1999, David Dunning and Justin Kruger published a paper in the field of social psychology addressing the question of why people so frequently fail to recognize their own incompetence.<sup>1</sup> Across a wide range of cognitive activities, they demonstrated that subjects in their research tended to overestimate their own skills and to underestimate their limitations. This notion achieved ironic popular attention in 2002 when Secretary of Defense Donald Rumsfeld extolled the dangers of “unknown unknowns” (things we don’t know that we don’t know) in congressional testimony about weapons of mass destruction in Iraq.<sup>2</sup> Medical educators have long recognized the challenge of working with students who are unaware of their limitations in evaluating patients or making medical decisions. In fact, few problems are quicker to strike fear into attending physicians than residents who think they are competent when they are not. We are quick to notice this problem in our students and residents. Perhaps it is a bit harder to recognize it in ourselves.

In this issue of *Family Medicine*, Piotrowski and colleagues from the University of Chicago report on the results of a survey of 789 medical students who either attended the 2015 National Conference of Family Medicine Residents and Students (NCFMRS) or were enrolled in four American allopathic medical schools.<sup>3</sup> The study included second, third, and fourth-year students and had a response rate ranging from 12% at Drexel University to 67% at the University of Chicago. The response rate at the NCFMRS was 19%. There are serious methodological weaknesses to the study, all recognized by the authors. The study population was a heterogeneous convenience sample taken from all four groups of students. It was not limited

to students interested in primary care careers. The response rate was low. So why have we chosen to publish this paper and why do we think it is worth your attention?

The paper is important because it suggests something new, something that might be important. Over half of the students surveyed in this study indicated they were interested in working less than full time during their residency. Given a choice between 40, 60, and 80 hour-per-week work schedules, 59% preferred reduced work hours (40 or 60 hours per week) even if this meant spending more years in training or receiving lower pay. Reduced work hours were preferred more often by women (68%) than men (46%), and more often by those interested in primary care (69%) than those interested in medical specialties (55%) or surgical specialties (43%). The study explicitly linked weekly work hours with salary and length of training. The questions posed to these students seem clearly written. So, the study’s results might surprise many faculty members and residency leaders. Although caution is warranted due to concerns about selection bias and low response rate, this study deserves to be replicated with a more comprehensive and representative sample of students. It also might be time to reexamine our assumptions about what today’s medical students are looking for in residency training.

For almost 2 decades, our discipline has been debating the length and structure of a family medicine residency.<sup>4-10</sup> Task Force Two of the Future of Family Medicine project suggested both flexibility in training and a reconsideration of the length of training in its 2004 report.<sup>11</sup> More recently, the topics of flexibility and length of training have been addressed in the P4 (Preparing the Personal Physician

for Practice) and Family Medicine for America's Health projects.<sup>12,13</sup> In 2013, the American Board of Family Medicine funded a national study to examine the length of family medicine residency training.<sup>14,15</sup> This study has now been collecting data for 5 years and its results are pending. In all of these papers, two major concerns predominate about increasing the length of training: student interest and cost. Residency leaders have worried that lengthening training would harm student interest in family medicine at a time when we already have major problems in this area. Concerns about costs have included the increased cost to residencies if residents are in training for more than 3 years and the cost of delayed entry into practice for the students themselves. The paper by Piotrowski and colleagues challenges our prevailing wisdom about how students view these concerns.

It has now been over 15 years since the Accreditation Council for Graduate Medical Education placed limits on resident work hours. Much has changed in the practice of medicine since these changes were made, and duty hour restrictions have been amended as recently as 2017. Nevertheless, concerns about physician burnout in general and about burnout among medical students and residents have increased even as the number of hours worked by residents has decreased. To those of us from an older generation, lengthening training seems unpopular and costly, but maybe our students see this differently. Are our concerns still valid in today's environment?

While we anxiously await data from the length of training pilot, we should encourage more research with stronger methods about student priorities regarding family medicine residency training. In the meantime, we have a choice. We can choose to discount the results of this study citing its weak methods, or we can reexamine our assumptions about what will be best for the next generation of family

physicians. Over 2,000 years ago Confucius wrote, "Real knowledge is to know the extent of one's ignorance." Is it possible we don't know as much as we think we do about today's medical students? What will we do if additional research supports the conclusions of this study?

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### **Family Medicine Call for Submissions: The Outcomes of Family Medicine for America's Health**

The Family Medicine for America's Health (FMAHealth) Board of Directors and the journal *Family Medicine* announce our intention to publish a theme issue of *Family Medicine* to highlight the lessons learned and accomplishments of FMAHealth's 5-year collaborative effort to drive improvement in American health care, demonstrate the value of primary care, and reform the specialty of family medicine. The purpose of the theme issue will be to provide an assessment of the project and to update the journal's readers about FMAHealth's progress in achieving its goals.

Papers for the theme issue will be considered if they are submitted to the journal by July 1, 2018. All submissions should comply with the journal's Instructions for Authors and must be submitted into the journal's electronic manuscript management system. Further details regarding submission requirements, and types of articles sought, can be found at <https://journals.stfm.org/media/1367/fmahealth-call-for-papers.pdf>.