Tradition Meets Innovation: Transforming Academic Medical Culture at the University of Pennsylvania's Perelman School of Medicine

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Abstract

Traditional performance expectations and career advancement paths for academic physicians persist despite dramatic transformations in the academic workflow, workload, and workforce over the past 20 years. Although the academic physician's triple role as clinician, researcher, and educator has been lauded as the ideal by academic health centers, current standards of excellence for promotion and tenure are based on outdated models. These models fail to reward collaboration and center around rigid career advancement plans that do little to accommodate the changing needs of individuals and organizations. The authors describe an innovative, comprehensive, multipronged initiative at the Perelman School of Medicine at the University of Pennsylvania to initiate change in the culture of academic medicine and improve academic productivity, job satisfaction, and overall quality of life for junior faculty. As a key part of this intervention, task forces from each of the 13 participating departments/divisions met five times between September 2010 and January 2011 to produce recommendations for institutional change. The authors discuss how this initiative, using principles adopted from business transformation, generated themes and techniques that can potentially guide workforce environment innovation in academic health centers across the United States. Recommendations include embracing a promotion/tenure/evaluation system that supports and rewards tailored individual academic career plans; ensuring leadership, decision-making roles, and recognition for junior faculty; deepening administrative and team supports for junior faculty; and solidifying and rewarding mentorship for junior faculty. By doing so, academic health centers can ensure the retention and commitment of faculty throughout all stages of their careers.

The academic physician workforce, workflow, and workload have transformed dramatically in the past 40 years. Yet, the traditional performance expectations and career advancement path for the model academic physician have not. Innovation in academic medicine is urgently needed to respond to the dramatic changes in the way work is created, completed, and gauged in the current academic health care climate.

The Academic Physician's Triple Role in Action

Consider a hypothetical scenario. Dr. M. is a consummate clinician who sees four to five patients per hour, three days per week, in a busy practice affiliated with a premier academic medical school. Dr. M. is at the end of a typical office day and just finishing medical charting at 6:30 PM. Dr. M. supervises residents and medical students once or twice a week, provides leadership for the residency community-based practice curriculum, and mentors junior faculty and trainees on an ongoing basis. Following dinner at 8:30 PM, Dr. M. is paged by the practice answering service about a young patient being admitted to the hospital just as Dr. M.'s eight-month-old child wakes up crying with a fever and vomiting. Because Dr. M.'s spouse (a consultant who travels four days per week) is not home, Dr. M. struggles to comfort the child while speaking with the concerned parents. The next day, Dr. M.'s chairperson expresses concern about Dr. M.'s chances for promotion because Dr. M still has one year left before reaching the nine-year required evaluation mark. The chairperson believes that the institution has greater motivation to consider "early" promotion for subspecialists as incentive to retain such faculty because of their national shortage in comparison with primary care clinicians.

Another typical scenario: Dr. T. is a driven, productive junior faculty member at a prestigious medical school who has sent a dossier for review by a supervisor before submitting it for the official review by the promotions committee. Dr. T. has successfully obtained 80% salary support from extramural grants and would like to reduce clinical time to devote more time to research, thus allowing greater flexibility for scheduling care for aging parents. Dr. T.'s spouse is a clinician in a busy private practice, and they have three school-aged children. Dr. T.'s elderly parents live nearby and require regular assistance (at least three times per week) with transportation for grocery shopping, obtaining medications, and attending doctor's visits. In an environment of reduced National Institutes of Health (NIH) funding and university budget reductions, Dr. T.'s chair is intent on generating revenue for the department through clinical care and also has a firmly established policy of equity in clinical responsibilities on evenings, weekends, and holidays. The chairperson will not grant Dr. T. any flexibility in these clinical responsibilities despite Dr. T.'s excellent research salary support. Dr. T.'s chair reviews the dossier and tells Dr. T. that three to four additional first-author publications in prestigious, peer-reviewed journals will be required in the next 12 months for Dr. T.'s promotion to be

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approved (Dr. T. has reached the standard nine-year review mark).

Many individuals would plausibly conclude that the consummate clinician and the successful researcher, in these two scenarios, are different individuals. Yet, in reality, at most medical schools in the United States, the same individual is responsible for meeting performance expectations as a clinician, medical educator, and researcher. The academic physician's triple role has been firmly entrenched at academic health centers for many generations. However, the juggernaut of these demands, combined with advances in medical technology and demographic changes in the newest generation of physicians, has turned the ideal of even a generation ago into an anachronism. Innovation in the academic medicine business model is urgently necessary to respond to dramatic shifts in the way work is created, completed, and gauged so that talented clinicians and researchers will be able to flourish in their careers and the United States can continue to be at the forefront of medical advancement.

The Difficulty With the Promotion and Tenure Model

For the academic physician, the definitions of excellence required for promotion and tenure developed in a previous era are antiquated and out-of-step with the current economic and sociopolitical climate. For the most part, existing promotion and tenure systems reward individual achievement rather than collaboration and require advancing through a rigid (and narrow) multistep system with little opportunity for advancement without stepping on every rung of the academic promotion ladder.[1] As a result of its rigid promotion and tenure structure, academic medicine continues to waste an astonishing amount of talent: Though women have made up more than 40% of medical student bodies for nearly two decades, they make up only 20% of full professors among medical school faculty.[2] This system stands in stark contrast to the private sector, where flexible work environments reward and expect effective teamwork and encourage the development of individualized career advancement plans that ebb and flow with individual needs and organization requirements. At the Deloitte consultancy, for example, the implementation of mass career customization has resulted in retention of a highly talented and diverse workforce that keeps pace with evolving client demands and powers innovation.[3]

In academic medicine, the physician icon serves at least two customers/masters: patients and academics. But these masters have completely different expectations. In today's world, patients now expect this physician to absorb and analyze health-related information from multiple locations and sources to make evidence-based decisions customized to their individual needs and preferences and then leverage current technology to communicate in real time using multiple modalities (e.g., e-mail, telemedicine videoconferencing, text messaging, secure patient portals). For academics, this iconic physician is responsible for contributing to the intellectual vibrancy and discovery of the university through research, education, or both. Both require unrelenting attentiveness and persistence to meet performance expectations with new information about the most up-to-date advances. These demands are increasingly challenging for the academic physician to process and manage individually; yet, academic health centers frequently have inadequate numbers of administrative staff, precluding the timely processing of this information to patients or into academically productive currency for advancing on the promotion and tenure ladder.

The Initiative for Change at Perelman

A comprehensive, multipronged intervention has been introduced at the Perelman School of Medicine at the University of Pennsylvania to address this challenging, multifaceted problem. The program aims to harness the creative power of medical faculty to change the culture of academic medicine. Funded by the NIH and launched in September 2009, the NIH-TAC (Transforming Academic Culture) intervention was purposefully designed to generate significant institutional change to improve academic productivity, job satisfaction, and overall quality of life for junior women faculty and, thereby, improve the workplace environment for all faculty (both men and women). A multipronged approach was selected to foster individual innovations from the bottom up and to drive institutional changes from the top down.

To be eligible for participation in the trial, departments/divisions had to have a minimum of three junior women faculty. A total of 27 departments/divisions at Perelman were eligible to participate, all consented, and 13 were randomized to the intervention group (14 in the control group). The three components of the intervention were junior women faculty participation in the nationally recognized Total Leadership Program[4] and a series of writing workshops on manuscript preparation[5]; senior leaders' participation in individual and group sessions with a focus on oversight of department/division-specific institutional changes and schoolwide issues; and structured, facilitated task forces in each intervention department/division to conduct analyses of work practices, policies, recruitment, mentorship, and cultural attitudes and then develop recommendations for change.

Here, we describe our experience in generating innovative recommendations within the traditional medical school faculty structure from the task force initiative component at Perelman. Using an approach grounded in appreciative inquiry,[6] the leaders of each of the 13 intervention departments/divisions in the School of Medicine appointed a task force chair and assembled a task force from senior-level men and women faculty and administrators. Each task force was charged with making specific recommendations to improve the workplace environment within their departments or divisions (local interventions) and that of the medical school and university to support the success of junior women medical faculty. We recruited a high-ranking extramural academic administrator (J.R.) to facilitate the task force sessions and created an annotated online resource library for use by the task force members. The task forces met five times between September 2010 and January 2011; the kickoff session for all task force members was followed by three individually facilitated task force sessions focused on developing innovative recommendations. This phase of the initiative culminated in a dissemination session for all task force members and leaders of intervention departments/divisions to allow task forces to share innovative recommendations for local interventions as well as ideas aimed at galvanizing institutional change at Perelman. A "Blueprint for the Future"

was created that summarized all 91 task force recommendations thematically and provided short-term (less than one year) and long-term (two to five years) goals for implementation. The 14 control group departments/divisions did not participate in any portion of the task force initiative.

The success of this initiative in generating an abundance of innovative recommendations relied on principles adopted from business transformation. First, midlevel/senior faculty and administrators were appointed to the task forces to harness the power of their collective experience as survivors of the current system. This group possesses intimate knowledge of local and university-wide constraints and opportunities for change. Moreover, this group largely shapes junior faculty's daily workplace environment, and their engagement is key to generating sustainable change. Second, the mission of the task force was clearly articulated by the dean of the School of Medicine in preparatory meetings with the leaders of the departments/divisions and again at the kickoff session for the initiative. The mission statement emphasized the unique opportunity for the leaders and faculty to engage in a transformative process that was valued intramurally (by the university president) and extramurally (by the NIH). Third, the innovations were presented as local or university-wide experiments with defined metrics to assess success. Fourth, innovation at the local level was strongly encouraged because these "microinnovations" are often under the control of the specified unit.

A number of themes emerged in the Blueprint for the Future that could guide workforce environment innovation in academic health centers. These included solidifying and rewarding mentorship for junior faculty, embracing a promotion/tenure/evaluation system that supports and rewards tailored individual academic career plans, ensuring leadership, decision-making roles, and recognition for junior faculty, and deepening administrative and team supports for junior faculty. Notably, these themes echoed findings from the Josiah Macy Foundation's 2006 report on women and medicine that offers a set of conclusions and recommendations from a nationally recognized group of academic medical leaders designed to address complex issues concerning the roles of women involved in the practice of medicine.[7] Consistent with the Macy report, 11 of the 13 intervention departments/divisions produced a recommendation directly relating to mentorship. However, recommendations were also specific to the work environment for a given division. Thus, recommendations for basic science departments differed from those for clinical departments. For example, the Radiology Task Force suggested investing in technology to allow the interpretation of clinical images from home, whereas the Biochemistry Task Force suggested creating a fund to provide salary support for mentors. In contrast, issues such as embracing a promotion/tenure/evaluation system to support and reward individualized career plans will require strong leadership to drive institutional culture change.

However, it is important to note that even these institutional initiatives can draw on the lessons learned from successes (and challenges) in local environments where faculty have had the opportunity to tailor various approaches to achieving some (or all) of their professional goals. One of the most surprising findings from Deloitte's mass career customization program is that more employees opted to "dial up" rather than "dial down" their individual career plans at any given point in time.[3] Ultimately, academic medical institutions will retain talent by similarly embracing a work/life balance mission that is equal to their commitment to excellence in patient care, education, and research.

Since the recommendations were produced, each of the 13 intervention departments/divisions has developed a two-year, metric-based work plan for implementing and evaluating one or more initiatives specifically developed for that department/division. Progress reports are generated every six months, and annual meetings are convened to promote cross-fertilization of ideas. The ultimate success of the task force effort will only be determined at the end of the study in September 2013 when the fully implemented projects and metrics are evaluated. To date, we have found that the initiatives have varied substantially across departments/divisions according to the level of engagement by faculty and leadership. Not surprisingly, the most challenging barriers have been the administrative and faculty time commitment required to implement small-scale programs and the lack of funds to support these efforts and/or compensate faculty time; notably, the grant was not intended to financially support individual department/division task force initiatives. Despite these challenges, many task forces are making solid progress with their projects, and some changes seem to be truly innovative. Moreover, most participants agree that this process has generated new ways of thinking about academic medicine and the faculty who lead it. Our one prediction: The change process will continue beyond the time frame of the trial.

Imagining the Future

Imagine the potential if Dr. M./T. had a nursing telephone triage system to handle all patient calls from 5 PM to 9 AM daily and started his/her first clinical outpatient visit at 9 AM. Imagine if the department/division had a cadre of capable administrative assistants responsible for entering and maintaining the educational and research accomplishments of each faculty member into an online database accessed directly by the promotion and tenure committee as needed for evaluation. Imagine if the department/division maintained a staff of research assistants supervised by an experienced research coordinator specifically allocated to working with junior faculty in the first three to four years after initial appointment to facilitate early academic productivity. Imagine if Dr. M./T. could accelerate his/her career before having children, decelerate during the early parenting years, and accelerate again before his/her parents age. By doing so, academic health centers can ensure the retention and commitment of faculty throughout the lifetime of their careers.

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