ASYMMETRY AND TENSION: A BRIEF HISTORY OF MEDICAL STUDENT INVOLVEMENT IN THE U.S. LICENSURE PROCESS

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ABSTRACT

A little more than two years ago, the first nationally standardized clinical skills exam was added to the United States Medical Licensure Examination (USMLE) series. The implementation of this exam was troubled by vigorous resistance from medical students whose objections were supported by several prominent and powerful medical organizations. This article suggests that beyond obvious sources of tension inherent in the exam (chiefly, expense and inconvenience) a real and overlooked source of antagonism is the lack of direct involvement by examinees (students and residents) in the licensure process. Students and residents were able to promote a much larger (and acrimonious) debate than anticipated largely because of their recent ascendancy to positions of influence in medical schools and organizations. This article traces the evolution of student and resident involvement in medical schools and organizations and further suggests that the lack of parallel involvement by students and residents in the licensure process creates asymmetry in an otherwise balanced system of professional autonomy. Such asymmetry in a system balanced between medical schools, organizations and licensing authorities has led and can again lead to unproductive tension and undermine efforts on all parts to advance the practice of medicine and assure the best care possible to the American public. The author closes with a call to forum to discuss openly the possibility of increased student and resident participation in the licensure process; details of how, when and where this participation could occur should be the first items of discussion in such a forum.

INTRODUCTION

One hundred years ago, American medicine underwent a dramatic transformation to become a powerful self-regulating profession. The basis of this authority to self-regulate is complex but can been described as a social contract that ensures the public interest will be served by the profession.[1] Maintaining this social contract is even more complicated; in essence it is accomplished through a tripartite structure of checks and balances, namely the medical societies, the medical schools and the medical boards. Although the duties and obligations of these three groups are related, their individual goals and interests are distinct which tends to favor synergism seasoned with tension. While this tension is frequently productive, occasionally tension over particular issues has risen to the level of outright antagonism. The recent controversy over implementation of a clinical skills component to the allopathic national medical licensing exam series provides an opportunity to examine some specific sources of unproductive tension between these checks and balances in American medicine. This paper will not be a thorough post-mortem of this controversy; rather, I will focus on one specific area of asymmetry between these groups: student and resident participation in the setting of objectives, policies and practices. I will further suggest that increased participation by students and residents in the licensure community can speed a return to more amicable and synergistic relations not only with respect to students and residents but also with respect to organized medicine and medical schools in general. The preservation and improvement of relations between these communities will be essential if the American medical profession is to maintain its autonomy in the 21st century as dramatic changes in education, practice and licensure develop.

A BRIEF HISTORY OF STUDENT AND RESIDENT VOICES IN MEDICAL SOCIETIES AND SCHOOLS

To understand the contemporary relationship between medical student and licensure communities, it is imperative to first explore the context of student extracurricular involvement in the medical profession at the level of societies and schools. In the first half of the 20th century, stu-

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dents and residents were rarely instigators or important proponents of change within the profession. By and large, they were viewed as passive participants; much like patients, they came to the profession to seek expertise and to follow the paternalistic, somewhat authoritative advice of physicians.[2-3] Of course, the medical profession was by no means the only purveyor of paternalism in early 20th century America. Quite the contrary, government, the professions and business all enforced a very hierarchical societal structure.

Even when students and residents did formally organize, medical societies and schools did not originally welcome their input. The Association of Interns and Medical Students (AIMS), the first national organization of students and residents, encountered great resistance to their critiques of organized medicine and medical education in the late 1940s. Initially, the American Medical Association (AMA) Council on Medical Education and Hospitals sternly advised students and interns to steer clear of the organization. Soon after, however, the AMA did recognize a need for students to have an organized voice and subsequently established a new student organization, the Student American Medical Association (SAMA), in 1950. Unlike AIMS, this new organization was supportive of the AMA's stances on issues ranging from intern salaries to national health insurance and, within two years, AIMS had disbanded while SAMA had delegates from 47 U.S. medical schools.[4]

The second half of the 20th century saw the rise of students and residents as legitimate contributors to organized medicine and medical education. SAMA eventually split into two distinct groups: the Medical Student Section (MSS) of the AMA and the American Medical Student Association (AMSA). While SAMA had originally been housed with the AMA in Chicago, the organization moved and became independent in 1954, just four years after its creation, yet still maintained a presence on a number of AMA committees through the 1950s and 1960s. In 1972, a Student Business Section was created within the AMA at the behest of SAMA leadership to provide formal membership and participation for students in the AMA.[5] By the late 1970s this section had managed to appoint students to seats on many of the major AMA councils and in 1980, the section changed its name permanently to the Medical Student Section. By the late 1980s the maturation of the AMA-MSS was completed by the addition of student members to all AMA councils, as well as the Liaison Committee on Medical Education and even the Board of Trustees. The other descendent of SAMA, the American Medical Student Association (AMSA), was formally created in 1975 after several years of increasing divergence between SAMA and AMA leadership stances on a variety of medical and social issues. As a completely independent student organization, AMSA did not focus on increasing its representation on established committees within organized medicine.[6] Instead AMSA successfully developed its own committees and full-time staff and student leadership positions near Washington, D.C. As an independent organization, AMSA has been successful in bringing input to the AMA and other major medical organizations. AMSA has also advocated student and resident interests to state and federal legislators and has become a major force for change at individual medical schools and residency programs.

Two other important student and resident organizations that developed in the late 20th century were the Organization of Student Representatives of the Association of American Medical Colleges (AAMC-OSR) and the Committee of Interns and Residents (CIR).[7] The AAMC-OSR, like the AMA-MSS, was borne out of student pressure on a powerful pre-existing organization whereas CIR was created *de-novo*, much like AMSA. It is worth noting that input from students in the AAMC, as in the AMA, was not initially welcomed by the leadership of the organization; students at a 1969 AAMC executive council meeting wrestled the microphone from a medical school dean and demanded their concerns be heard. Subsequently, the OSR was created in 1971 to provide a formal means for students to communicate with the AAMC and participation in policy-making processes. Initially, AAMC leadership held student participation as suspect at best but as students proved they could provide valuable professional input over the years, they won over many former skeptics and now occupy a prominent place in the organization. Likewise, the CIR and organizations like it were first viewed with suspicion yet ultimately they created new channels for input by residents into training programs and hospital administration that have continued in one form or another to date.[8]

Although these were by no means secondary organizations, students of the AAMC-OSR attained representation at the highest levels of the AAMC much as did students in the AMA-MSS and residents of the CIR agitated for change independently through activism much as AMSA did. Finally, it must be noted that direct student participation in medical schools at the level of curriculum committees, Liaison Committee on Medical Education (LCME) accreditation committees, admissions committees and honor councils skyrocketed during the same period that student and resident voices became prominent in organized medicine.[9]

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The effects of this groundswell of student and resident participation in organized medicine and medical education have been multifold: the creation and evolution of a "match" system for postgraduate placement, the establishment of residency salaries and work hour restrictions, and curricular shifts to emphasize social, humanistic and public health aspects of medical practice to name only a few specific examples. As with circumstances in the early twentieth century, broader changes in American society must also be credited for these changes seen medicine; the post-WWII era has been characterized by a decline in authoritarianism and the rise of individualism via civil rights, consumer rights and patient rights. Especially considering the militancy of student protests and "youth culture" in the late 1960s and early 1970s, medical students and residents would have stood out had they *not* organized to express their opinions about the medical establishment in this period.

A BRIEF HISTORY OF STUDENT AND RESIDENT VOICES IN MEDICAL LICENSURE IN THE 20TH CENTURY

While students and residents have made great efforts to make critical yet constructive input to organized medicine and medical education in the past 50 years, it appears that relatively little effort has been made to participate in the licensure process along similar lines. In 1973, the NBME published an influential report, "Evaluation in the Continuum of Medical Education," written by an appointed committee on Goals and Priorities that urged participation and representation from "all constituencies involved in and concerned with the evaluation of professional competence."[12-13] It is unclear whether this report or pressure from medical students and residents was the impetus for including them in NBME functions – most likely both played a role – but we do know the bylaws of the NBME were changed at the 1974 meeting to include two residents and two students. The residents were to be elected by resident organizations (the Physicians National Housestaff Association and the Resident Business Section of the AMA) and two students were elected by a consortium of peer organizations – AMSA, the Student National Medical Association (SNMA) and the AAMC-OSR. These four seats out of the approximately 80 total seats on the board remain in place today in the form of two resident members nominated by the Resident and Fellows Section of the AMA, one student nominated by AMSA and one student nominated by SNMA. The next mechanism for student involvement came two decades later with the creation of the United States Medical Licensing Examination (USMLE) Step Committees; a student representative was appointed to the Step 1 Committee and a resident representative was appointed to the Step 2 committee.[14] There also is a Medical School Programs Advisory Committee, comprised of four students (nominated by AMA-MSS, AAMC-OSR, SNMA and AMSA) and one resident (from AAMC-ORR and AMA-RFS in alternate terms), as well as representatives from AAMC and AMA groups engaged with medical education, that meets twice annually with the NBME. The organizations represented are AMSA, SNMA, AMA-MSS, AAMC-OSR, AAMC Organization of Resident Representatives and AMA-Resident Fellow Section. The committee was originally created in 1989 as the Medical School Liaison Program Steering Committee and was renamed as above in 2003.[15] Finally, there is one student appointed to a special AAMC liaison committee with the NBME that meets once annually. Taken collectively, these positions have been important channels for communication between the student and resident communities. However, these positions – one dozen in total – are the *only* permanent and official means of student and resident participation in the entire licensure community; there are no formal student positions at the level of state boards or the Federation of State Medical Boards (FSMB). This level of participation, compared with the number of students and residents who participate in organized medicine – which numbers in the tens of thousands – is clearly only minimally representative of student (approximately 65,000) and resident (approximately 105,000) populations. One important reason for this disparity may be that students have traditionally had no direct contact with individual state boards and residents have only been involved so far as applying for provisional licensure is concerned. It must also be noted, however, that direct input from the public (much like students or residents) to licensure boards was once held to be unnecessary by many boards.[16]

Perhaps the most important explanation for this lack of student and resident involvement in the state boards can be found in their structure, source of authority and contractual obligations. Unlike medical societies or schools, state licensure boards are populated by appointees of the state (often by state governors) rather than through election by peers. Further, the authority of the boards derives from the state legislature in the form of medical practice acts dating back to the early 20th century rather than from organizational charters. Finally, the responsibility of the boards, as organs of the government rather than of the profession, is to protect the public interest alone whereas medical organizations and schools must also be responsive to the interests and needs of the professional membership of their con-

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stituency base. These structural differences may help to explain why active participation by students and residents is difficult yet they do not, *per se*, exclude the possibility of increased participation in the future. While there may be no explicit provisions in the medical practice acts for student and resident participation, the absence of explicit proscriptions could be interpreted as permission to reconsider their level of involvement and responsibility for upholding the social contract and the public interest. Indeed, as trainees move through their transition from layperson to professional, they may be even closer to the views of the unindoctrinated public than practitioners of distinction in the community. Their *relative* naiveté might, in this light, be viewed as a unique contribution to the mission of the licensing boards.

The only other major arm of licensure that has direct impact on students has traditionally been examinations for licensure. Yet even on this matter, students have been relatively quiet before the controversy over the USMLE Clinical Skills (CS) exam, although in the years immediately preceding implementation of the CS exam, student anxiety over computer-based testing did result in some tension between students and the NBME. Moreover, the licensure process has remained relatively stable throughout the 20th century from a student point of view. This is not to downplay the major advances in licensure exams that have occurred in this period: the creation of a unified examination series accepted by all U.S. medical licensing boards – the USMLE series – significantly raised the bar for the scientific standardization of medicine while simultaneously diminishing barriers to individual physicians seeking licensure in different states throughout their careers. On the other hand, the individual USMLE Steps were very similar in content (basic and clinical science) and format (multiple choice questions) to the previous nationally accepted exams, the Federation Licensing Examination (FLEX) and the NBME Certifying Examinations, whereas the CS introduced both new content (clinical skills, communication skills and professionalism) and a new format (simulated patients and encounter notes). It should be noted that although examinations at the bedside had been a part of the pathway to licensure in some states, the practice was discontinued in the late 1960s as advanced psychometric analyses showed these tests were not easily standardized. Thus, from students' perspective, the advent of a nationally standardized clinical skills exam represented an unprecedented change in the expectations placed on them for licensure. Moreover, though examinees are routinely stressed by such exams and may complain that they distract them from studying and participating in areas of education not tested by USMLE exams, historically they have accepted comprehensive testing of basic and clinical science knowledge as a part of becoming a physician.

CLINICAL SKILLS AND CONFLICT WITH THE LICENSURE COMMUNITY IN THE EARLY 21ST CENTURY

Students became much more vocal about the USMLE series in 2002 when implementation timelines for the Step 2 CS exam were presented to student organizations and medical schools. In the two years before the Step 2 CS was implemented, students were successful in mobilizing organizations like the AMA and AAMC to oppose the exam.[17] These organizations, along with independent student organizations like AMSA and a number of medical school student affairs officers, exerted significant political pressure on the NBME to halt implementation of the Step 2 CS. The major reasons for this opposition were concerns about cost, availability and geographic location of testing centers, and ability of the test to accurately measure clinical skills. Ultimately, the Step 2 CS was implemented successfully and voices of dissent from within organized medicine and medical education dwindled; some organizations and individuals even came to embrace the exam.[18] Although the AAMC never officially amended its only policy statement regarding the clinical skills exam, the Association's president supported the exam on record and encouraged acceptance from the academic community.[19]

Why did students protest the CS so stridently? This much is clear: the exam represented a bold new departure from the traditional content and format of licensure exams as found in the NBME, FLEX and USMLE series. Additionally, the cost and inconvenience of travel to testing centers represented new individual burdens that students felt went above and beyond what should be required of them to obtain licensure.[20-21] Less evident are the reasons that medical societies and schools joined the students in opposition. Of course, these larger organizations had some of their own interests to consider: how would the CS impact curricular change and could the CS signal a turn towards more extensive and expensive renewal processes for licensed physicians? Educators also had reason to be concerned about the exam – although many students and educators asserted that clinical skills evaluation belonged exclusively in the realm of medical school and residency, research has shown there are many gaps and very little consistency in clinical skills education at schools across

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the country.[22] But these concerns notwithstanding, the sine-qua-non of their organizational opposition lay in the strength of student and resident voices from within the medical schools and organizations.

Given that students and residents had very little representation and power within the licensure community, naturally they utilized the channels available to them in the medical societies and schools to raise their concerns. Furthermore, given their lack of involvement in the setting of objectives, policies and practices of the licensing community, it follows that they had little knowledge of the purposes for licensure and practically no responsibility or accountability for the mission to which the licensure community aspires. When contrasted with the significant roles students and residents have in setting the objectives, policies and practices of organized medicine and medical education, it would have been strange had students *not* marshaled their resources within these two communities to oppose a dramatic change in a community in which they have almost no direct investment. While there were certainly many other forces at play in this complex controversy, it is no overstatement to say that the essential imbalance or asymmetry of student and resident participation in two of the three checks and balances in American medicine was a major cause for the antagonistic tension over the implementation of the Step 2 CS. More importantly, this most certainly represents the area most amenable to change in the interest of restoring balance and avoiding future confrontations between these groups.

MOVING FORWARD: THOUGHTS FROM LEADERS IN STUDENT AND LICENSURE COMMUNITIES

In the course of writing this article, I informally interviewed several dozen students and faculty or staff involved in the licensure community. I also made formal inquiries to several leaders of both student and licensure communities, which are presented here. From the student community, I spoke with Rob Stenger, a senior medical student at the Johns Hopkins School of Medicine and 2004-2005 chair of the AAMC-OSR. On the question of students' awareness of the licensure process, Dr. Stenger says he believes there is much room for improvement: "Unfortunately, I think students are fairly ill-informed about licensure issues, beyond knowing what tests they have to take and when. I say unfortunately because the concept of licensure in my mind can be closely tied to ideas of professionalism: professional self-policing to ensure a high standard of medical practice." Many leaders in the licensure community, like James N. Thompson, M.D., president and CEO of the FSMB, shared this perception. "By and large, students are not well informed about licensure – they believe it is a 'right' granted to them at graduation." Beyond being an educational opportunity lost, Dr. Stenger further believes the fundamental lack of knowledge helps create an unfortunate situation in which, "the licensure process is generally viewed by students with an us-versus-them mentality." Still, he believes common ground can be found between students and licensing authorities. "Students, as future doctors, have just as much of an interest in ensuring a high quality medical profession as those in practice; perhaps more so. If there were a more collaborative relationship between students and the licensing community, it could lead to some very fruitful collaboration in terms of figuring out how to design licensure exams that really do eliminate those who are unfit for medical practice." Indeed, while examinees may be less knowledgeable than more experienced examiners about test design, it is also true that students are often the first to identify gaps in professionalism amongst their peers. This is important as problems in this area can predict future disciplinary action whereas grades and performance on current licensure exams do not.[23] Testing for such gaps has always been difficult but, as Dr. Stenger suggests, greater input into the process from this peer group may greatly enhance future exams, as well as establish responsibility and accountability in the process for examinees. This would certainly help address the "us-versus-them" mentality as well.

David Winchester, a recent graduate of the University of Southern Florida Medical School and immediate past-chair of the AMA-MSS, offered a similar perspective: "While I can really only speak intelligently about the situation in my state, my perception is that students know little to nothing about licensure issues and that the state board of medicine knows little about what we are doing in medical school." Like Dr. Stenger, Winchester favors more direct participation by examinees in the licensure process. He says: "I think a reasonable approach to get a better student-board interface would be to encourage the state boards, and perhaps the FSMB as well, to take applications for student members." The problem, he says, does not lie in any inherent ill-will between the two communities but rather a lack of formal communication and involvement between them. Winchester says: "To my knowledge, board members do not visit schools in any official capacity and while there may be a handful of students that have attended board meetings, none have done so in any official

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capacity." This may not be true across the board, however, says Dr. Thompson. "Many state medical boards do offer to visit medical schools for the purpose of explaining licensure and regulation to students, but receive very little acceptance due to the heavy load of the current curriculum." Yet it is true, he adds, that there is little consistency in the measures taken by the different state boards to define their role in the profession to students and residents.

Of course, it would be a mistake to examine the relationships between students, residents and the licensure community without considering the broader state of relations between schools, licensing boards and the NBME. While a full discussion of these relations is beyond the scope of this paper, suffice it to say there has always been some tension between licensing authorities and medical schools. According to Dr. Thompson, much of this tension may be because there is so little communication between them. "I think boards are hesitant to reach out to students in part because of tension between the boards and the schools. Sometimes this tension is productive but other times it can create an unhealthy gap – much like having too great a gap between students and teachers." Peter Scoles, M.D., NBME senior vice president for Assessment Programs, also sees both cause for present concern and hope for future improvement. "State boards could be more effective in educating students and residents about the role of boards in assuring the public of competency. But this would require that boards take a relationship with schools and students and residents seriously." Dr. Scoles added that schools would also have to let down their guard a bit for this to happen. "There would be a lot of fences to mend. Most medical schools probably would look at requests for access to students and residents by state boards with suspicion."

Furthermore, not everyone within the academic community agrees that increasing student and resident input to the licensure process is a good idea. As one former dean put it, "I think you could make the argument that students should be more involved in licensure issues and then, on the other hand, there is the argument that licensure is above them much like certification or accreditation of residencies." Indeed, a number of faculty and administrators I spoke to felt that licensure and accreditation require a certain distance from the individuals or entities being regulated to maintain objectivity. Yet how much distance is necessary, even beneficial, is not clear. Moreover, it is not true that licensure and accreditation processes employ similar levels of student and resident involvement. The LCME, which is responsible for accrediting all U.S. medical schools, has a very high level of student involvement: two out of 17 total seats on the LCME board are occupied by students appointed by peers (these seats have full voting privileges), and the LCME site visit process mandates direct involvement, including student assessment of school strengths and weaknesses.[24] Residents also play a prominent role in the Accreditation Council for Graduate Medical Education (ACGME) with resident members on the Residency Review Committee for each specialty and a seat on the board of directors.[25] Despite students' and residents' participation at high levels in nearly every aspect of the medical profession, the perception that they are still not qualified to take on a larger role in the licensure community is not uncommon and must be acknowledged here. One faculty member concluded, "I don't think it would be practical for students to be nonvoting or voting members of a licensure board. They don't have the maturity or knowledge to understand all the issues."[26]

CLOSING THOUGHTS: NEXT STEPS

I have made several claims in this paper; some of which are banal: first, students and residents have become active participants in the setting of objectives, policies and practices at medical schools and in most medical organizations; second, that interactions between students, residents and the licensure community have been much more limited but hitherto largely unproblematic because of the consistent and predictable format and content of licensure exams for most of the 20th century.

This paper also makes several more provocative claims: first, that the Step 2 CS represents a dramatic new direction for licensure examination that has essentially changed the rules of the game for students and residents; second, that the imbalance between student and resident participation in the licensure community as compared with their involvement in medical schools and organizations creates a tremendous opportunity for conflict; third, that increasing the representation, responsibilities and accountability for students and residents in the licensure process will help speed a return to more productive relations and avoid unproductive tension and conflict as the licensure process continues to evolve throughout the 21st century.

As with any complicated problem, it would be premature to suggest specific solutions in the same space where the sources of the problem are delineated. Therefore, this paper makes no specific recommendations for change other than that representatives from the three essential

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checks and balances of American medicine come together to discuss this problem and how to move forward. I have argued here for increasing student and resident participation in the licensure community to a level more comparable to their involvement in medical schools and organizations; exactly how this is done should come from a consensus of representatives from student, resident and licensure communities. Should students and residents be members of state boards? Should they have formal representation to the FSMB? If so, how many students should participate at the level of state boards and the FSMB? Should they be present in increased numbers on NBME test design and implementation committees? These are all questions that should be considered in earnest by the concerned parties.

As I write this article, the USMLE is being studied for great changes. In the future, licensure will likely have far greater reliance on practice profiles (initiated during medical school and expanded throughout the physician's career) and interactive examination platforms that will be useful to the learner, as well as authorities granting licensure. As the examination process shifts focus to better estimate the physician's real-world clinical and professional behavior input from examinees will be increasingly vital; especially if the process is to become an important tool for self-assessment and improvement. It is my great hope as a former student leader, current resident representative to the NBME and future physician that the strengths of student and resident input can be brought to the licensure community in the interest of improving the ability of the medical profession to regulate itself and uphold its social contract with the American public.

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26. This quote as well as the first quotation of this paragraph are from personal communication with a faculty member and former dean who wished to remain anonymous.

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