

The Present and Future of Appointment, Tenure, and Compensation Policies for Medical School Clinical Faculty

Robert F. Jones, PhD, and Jennifer S. Gold, MA

ABSTRACT

The authors present data and information about appointment, tenure, and compensation policies to describe how medical schools are redefining the terms under which they relate to their full-time clinical faculties. First, the authors note the increasing differentiation of clinical faculty members into two groups, researchers and clinicians. The present-day competitive realities of both research and clinical enterprises have prompted this change and the principles of mission-based management are reinforcing it. Second, they document the long-term tendency of schools to appoint new clinical faculty members to contract-term (as opposed to tenure) appointments, as special non-tenure-eligible tracks for clinically oriented faculty proliferate. Third, they report on the policies of schools to limit the financial guarantees provided to clinical faculty members who are awarded tenure. For schools that have yet to address this issue, they discuss the various

employment and pay arrangements that inform or confuse the question. Fourth, they describe historic problems with clinical faculty compensation arrangements and illustrate, with examples from ten schools, the characteristics of recently implemented performance- and risk-based compensation plans.

While these trends in institutional policies and practices may initially concern faculty advocate groups, the authors argue that they may serve the long-term interests of those groups. The terms of relationships between medical schools and their clinical faculties are tied closely to the specifics of organizational structure, which are currently undergoing review and change. The challenge all schools face is to define these terms in ways that allow them to continue to attract high-quality clinical faculty while avoiding an insupportable financial liability.

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In a previous report,¹ we described the status of and changes under way in personnel policies governing medical school faculty in U.S. allopathic medical schools. While the data revealed that no medical school had eliminated tenure, many schools were considering, if not already implementing, changes to the tenure salary guarantee, the length of the pre-tenure probationary period, faculty tracks, faculty compensation structures, and faculty evaluation, including post-tenure review.

The motivation of medical school leaders to reexamine and change the way in which faculty are appointed, evaluated, tenured (or not), and paid is easily understood. While medical school revenues continue to grow, the schools are operating in a less certain economic environment.² The financial health of many is tied closely to the fortunes of their teaching hospital partners, which are being buffeted by changes in health care financing and reductions in Medicare funding from the Balanced Budget Act of 1997.³ The health care market is also having a direct impact on income from faculty physicians' fees, part of which supports medical school academic programs. Some schools are seeing actual declines in faculty practice income, after years of growth.^{4,5} Others are maintaining these revenues, but purportedly at the cost of increased faculty time in the clinic, and diversion from academic endeavors. To be sure, research support available to medical schools, through the National Institutes of

Dr. Jones is vice president for institutional and faculty studies, and Ms. Gold is senior research associate, division of institutional and faculty studies; both are at the Association of American Medical Colleges, Washington, D.C.

Correspondence and requests for reprints should be addressed to Dr. Jones, Association of American Medical Colleges, 2450 N Street, NW, Washington, DC 20037; telephone: (202) 828-0520; fax: (202) 828-1125; e-mail: <rfjones@aamc.org>.

Health (NIH) and other research sponsors, is growing at an unprecedented rate.⁶ However, the ability of schools to take advantage of this external funding boom is dependent on their sound management of institutional resources to meet infrastructure-support and cost-sharing demands.

The financial underpinnings of medical schools have always rested on a thin layer of hard-money support: tuition, state appropriations, and endowment income. Together, these three sources constituted only 20% of the revenues of public medical schools in 1998–99, and as little as 8% of those of private medical schools.⁷ The bulk of the remainder, 74% for public schools and 84% for private schools, derives from faculty practice, hospital, and grant and contract revenue. Korn has written persuasively of the fragility of this financial support structure and of the difficulties of sustaining the historic levels of growth enjoyed by academic medicine.⁸ Yet, the institutional commitments inherent in traditional faculty appointment, tenure, and compensation structures have often failed to reflect these risks.

In this report, we present data on and discuss trends in clinical faculty appointment, tenure, and compensation policies. (The issues with regard to the basic science faculty have nuances that merit a separate discussion). We believe that medical schools are redefining the conditions under which they relate to their clinical faculties—indeed, that they have been engaged in this redefinition for many years. Its hallmarks are (1) an increasing differentiation of faculty roles and a separation of clinical faculties largely into two groups, clinicians and researchers; (2) a movement to contract-term, as opposed to tenure, appointments; (3) the establishment of limited tenure guarantees for those clinical faculty who are awarded tenure; and (4) the introduction of compensation structures that are more performance- and risk-based. These changes are occurring against the backdrop of a more fundamental reexamination and restructuring of medical school–clinical enterprise relationships, the full description of which is beyond the scope of this article.⁹

The data and information that support our thesis come from several sources: (1) the 1999 online Faculty Personnel Policies Survey conducted by the Association of American Medical Colleges (AAMC), to which all but two schools responded; (2) the AAMC Faculty Roster System (FRS), a continuously updated database on the characteristics of full-time U.S. medical school faculty; (3) institutional documents describing new faculty compensation arrangements, and (4) informal telephone interviews and discussions with faculty affairs deans and principal business officers within the past two years.

DELINEATION OF CLINICAL FACULTY ROLES: CLINICIANS AND RESEARCHERS

Medical schools have led the way in higher education in designing multiple career pathways to accommodate the di-

verse roles and responsibilities of their faculty members. The quintessential example is the clinical faculty member primarily engaged in patient care who has some teaching responsibilities but is not expected to make original contributions in research. Nearly all medical schools have such faculty on their full-time rolls, and 91 schools have created separate faculty tracks to accommodate them.¹ Various descriptions of these tracks have appeared in the literature.^{10–13} Problems continue with the promotion of faculty on these tracks,¹⁴ but their inclusion in faculty ranks appears to have taken hold.

The number of schools with clinical tracks has increased from the 61 we counted in 1986.¹⁵ These tracks began to appear years before. With the advent of Medicare and Medicaid in the mid-sixties, medical schools began to see the benefits of hiring more clinically oriented faculty and organizing the billing for their services. This growth of the clinical enterprise also ostensibly helped to expand sites for and fund new opportunities in teaching and research. Clinical tracks facilitated these changes by providing an academic “home” and formal career pathway for these faculty.

Through the development of clinical tracks, medical schools also began to acknowledge the rarity, if not end, of the “triple-threat” clinical faculty member. The current realities of both research and clinical enterprises now make it unlikely that a clinical faculty member can excel in all three missions of teaching, research, and patient care. Patient care that is of high quality, is satisfying to patients, and makes efficient use of resources demands nearly full-time attention of the physician to the clinical mission. Remaining competitive for NIH and other external research funding requires a similarly focused commitment. Thus, we see the increasing separation of clinical faculty members largely into two groups, clinicians and researchers, with clinical teaching responsibilities distributed broadly among them.

Few clinical faculty, even those identified as clinician–educators, can now point to education as a primary or even major activity. Clinical education has become a byproduct of other medical school missions. Educators have long been concerned about the effect of this model on the quality of clinical education and are calling for a renewed recognition of teaching.¹⁶ Schools are developing teaching-focused clinical venues (for example, the Shapiro Institute at Beth Israel–Deaconess Medical Center), and teaching-focused subgroups of clinical faculties (for example, the Academy of Medical Educators at the University of California, San Francisco). Thus, a third, albeit small, distinct group of faculty may emerge with a major focus on the clinical teaching program.

As schools implement principles of mission-based management, the sharp demarcation of clinical faculty roles is likely to become further embedded.¹⁷ Mission-based man-

agement requires that schools track the allocated effort of each faculty member by mission and relate it to measures of activity or productivity in that mission. It reveals faculty effort that is not optimally deployed, and provides the basis for redirection of that effort for the benefit of the faculty member, the department, and the school. A fertile area for redirecting faculty effort appears to be the unsponsored research of clinical faculty.¹⁸ Some of this effort, to be sure, represents a strategic investment: helping a promising researcher become competitive for NIH funding. Some is a luxury that institutions are discovering they simply can no longer afford. Having some amount of protected time for scholarly pursuits is part of all faculty job descriptions. However, bifurcation of most of the clinical faculty into researchers (at least 60–70% effort in research) and clinicians (at least 75–80% effort in patient care) seems only a matter of time and institutional resolve.

CLINICAL FACULTY APPOINTMENT AND TENURE: POLICY AND PRACTICE

The evolution and delineation of roles discussed above confronts directly the question of institutional commitments and obligations to clinical faculty. On its face, U.S. medical schools do not appear to be abandoning tenure. Only five of these do not offer tenure: Ponce School of Medicine, the Universidad Central del Caribe School of Medicine, Morehouse School of Medicine, Mayo Medical School, and Boston University School of Medicine. This list is unchanged from the last two surveys we conducted in 1994¹⁹ and 1997.¹ Boston University is the only one of these institutions that previously granted tenure. However, that practice ended in the late 1970s.

Wright State University School of Medicine and the University of Missouri—Kansas City School of Medicine might also be included in this group. Neither offers tenure *through the medical school*, although both have basic science faculty members who are appointed by and eligible for tenure through other university departments. Five other medical schools limit tenure eligibility generally to basic science faculty: Brown University School of Medicine, Loma Linda University School of Medicine, Northeastern Ohio Universities College of Medicine (NEOUCOM), Tufts University School of Medicine, and Louisiana State University in New Orleans. As we discuss below, the peculiarities of organizational structures and employment relationships dictate the policies at some of these schools.

All other medical schools, as a matter of policy, offer tenure to at least some of their clinical faculty members. However, the problem tenure may create for institutional management hinges on the answers to two questions. Are medical schools continuing to make tenure widely available

to clinical faculty? And when medical schools do grant tenure to a clinical faculty member, what is their financial commitment to that individual?

Trends in Tenure-eligible Clinical Faculty Appointments

Of the special tracks that medical schools have established for clinical faculty members primarily engaged in patient care and teaching, approximately 80% are tenure-ineligible.¹ Most of the expansion of clinical faculties during the last several decades has been through appointments to these tenure-ineligible tracks. The result is a dramatic redistribution of clinical faculty by tenure status, illustrated in Figure 1.

During the period 1981–1983, an average of 68% of all clinical faculty at the assistant professor level and above were in tenure tracks, either tenured or tenure-eligible (Figure 1, top panel). By 1997–99, this figure had declined to 46%. Figure 1's bottom panel shows that changing new-hire practices have been driving this decline. In the period 1981–1983, 57% of all new hires (assistant professor and above) were appointed to tenure-eligible tracks. During the period 1997–1999, this figure dropped to 24%.

This period corresponds to a time of rapid growth in the number of clinical faculty. Thus, even with this significant decline in proportion, the number of MD clinical faculty on tenure tracks gradually rose during the period (Figure 2). Within the most recent decade, the number of non-tenure-track faculty increased at an accelerated pace, while the number of tenure-track faculty appears to have been leveling off. We conclude that appointments to non-tenure-eligible faculty tracks are now driving any continuing growth of clinical faculties.

Whether or not the redistribution of clinical faculty by tenure status has stabilized is not yet clear. It depends on the future growth of full-time clinical faculties as well as changing appointment practices. Some medical schools, like the University of Connecticut School of Medicine, have de facto ended tenure-track appointments for new clinical faculty, even while institutional policy allows such appointments.²⁰ Other schools may sharply reduce the size of their tenured clinical faculties by following Georgetown University School of Medicine's recent lead in severing their employment relationships with clinically active faculty.²¹ With new hires being less and less frequently appointed into tenure tracks, and the large proportion of current tenure-track clinical faculty approaching retirement age, the proportion, if not the number, of clinical faculty members on tenure tracks may continue to decline in the coming years.

The Tenure Guarantee

Even in those cases where tenure is offered, institutional liability varies, depending upon what tenure guarantees. In

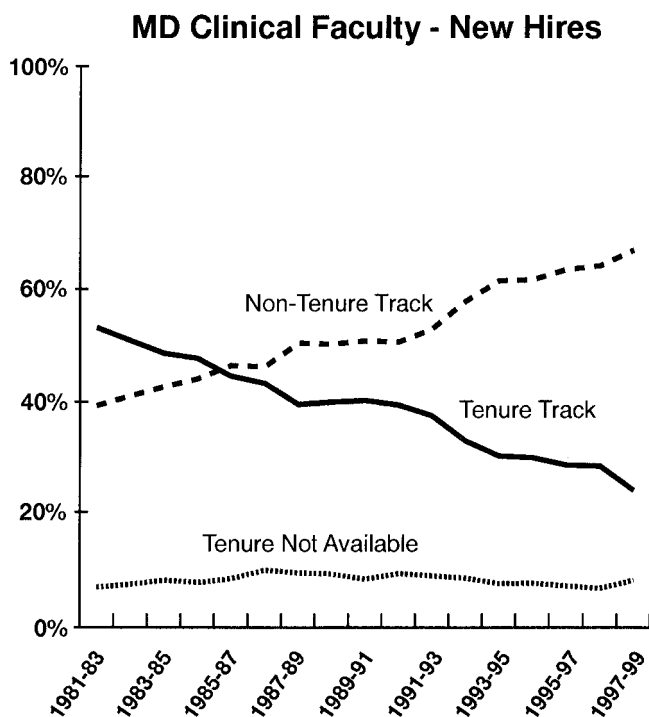
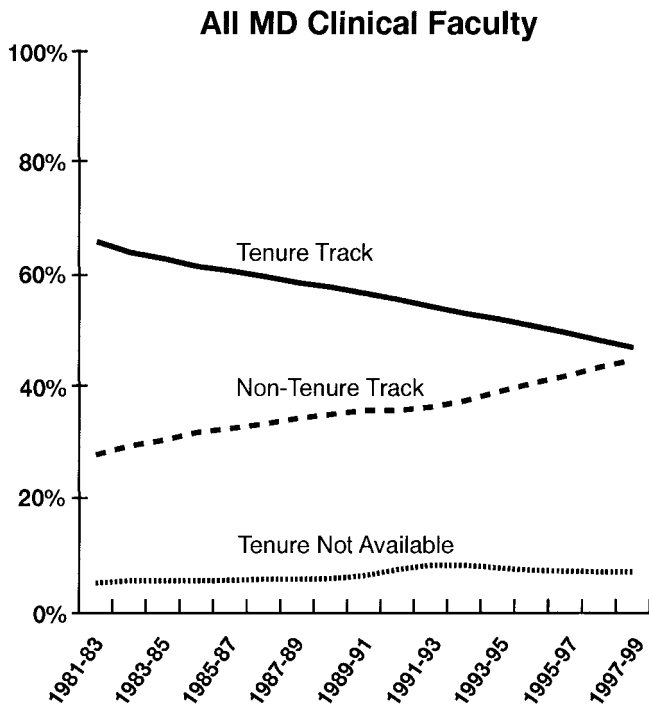


Figure 1. Percentage distributions of MD clinical faculty by tenure-track status for all faculty (top panel) and new hires (bottom panel), from 1981–1983 to 1997–1999. The data are about those at the rank of assistant professor and above only, and are from sequential, overlapping three-year time periods. “Tenure not available” refers to faculty at schools that do not grant tenure to clinical faculty. *Source:* Association of American Medical Colleges Faculty Roster System.

simple terms, tenure refers to the characteristic of a faculty appointment that distinguishes it from a term appointment. A tenure appointment is one “without term,” or “of indefinite term.” It guarantees the faculty member a continuing appointment, subject to certain conditions. The American Association of University Professors (AAUP) ties the purpose of tenure to two objectives: academic freedom (“freedom of teaching and research and of extramural activities”) and economic security (“a sufficient degree of economic security to make the profession attractive to men and women of ability”).²² In an excellent historical and legal review of tenure issues for academic medicine, White suggests that the link between tenure and academic freedom is “venerable and well established,” but that the link between tenure and economic security is “more tenuous.”²³ The latter issue is at the heart of the problem for medical schools.

The guarantees associated with tenure for clinical faculty members vary considerably among medical schools, according to the most recent AAMC data (Table 1). First, 32 schools assert that tenure provides for a continuing appointment but “without any specific financial guarantee.” In some

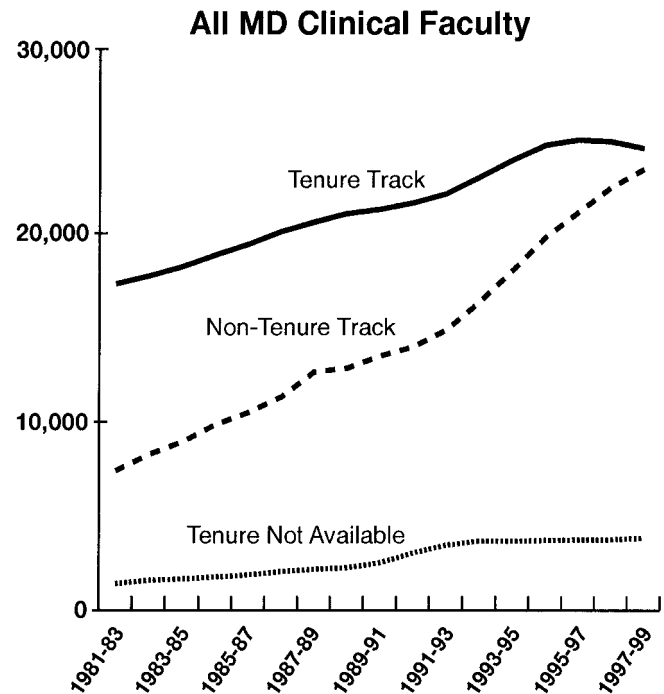


Figure 2. Numbers of MD clinical faculty by tenure-track status, all faculty, 1981–1983 to 1997–1999. The data are about only those at the rank of assistant professor and above for which tenure information was available, and are from sequential, overlapping three-year time periods. Data for most recent years may be slightly underestimated because of a reporting time lag for new hires. “Tenure not available” refers to faculty at schools that do not grant tenure to clinical faculty. *Source:* Association of American Medical Colleges Faculty Roster System.

cases, such as that of Northwestern University Medical School, which recently successfully defended its policy in an Illinois trial court and through appeal,^{24,25} this assertion reflects a clearly stated and defined contract: the award of tenure is not associated with any particular level of salary, or salary at all. In other cases, the definition of tenure in the faculty bylaws is simply absent language with respect to a financial guarantee and may reflect an issue still unresolved.

Of the schools that offer financial guarantees with tenure, few assert that they guarantee clinical faculty “total institutional salary/compensation” when clinical practice earnings are factored into that compensation. The Johns Hopkins University School of Medicine and the Finch University of the Health Sciences/Chicago Medical School (Finch) are the exceptions. Johns Hopkins’s response to this question is qualified by a provision in its faculty handbook that allows a salary reduction of up to 20% for any faculty member, “[w]hen in the judgment of the Dean and the Department Director the individual’s professional activities (clinical, research, teaching or administrative) indicate that such a salary reduction would be appropriate.”²⁶ Finch has only a small number of tenured clinical faculty. The remaining schools define the financial guarantee for a tenured clinical faculty member as something less than full compensation, for example, salary exclusive of clinical earnings, which are handled separately; a state-funded portion of salary; a “base salary” otherwise defined; etc. Many of these schools have always had clearly defined policies that limit the tenure guarantee. Other schools, for example the University of Pittsburgh School of Medicine,²⁷ have recently clarified policies to address the problem of an unspecified and potentially large liability. Still others have redefined the tenure guarantee as part of a restructuring of faculty compensation, described below. In these last cases, the institution has to determine its contractual obligations to previously tenured faculty.

Payroll/Employment Arrangements and the Tenure Guarantee

Administrators at 17 schools acknowledged that tenure guarantees for clinical faculty were “not well defined.” In such cases, the critical question is whether any part or all of the contribution to salary that derives from clinical earnings should be included in the tenure guarantee. Payroll and employment arrangements may help to clarify this issue. Our recent survey found that at 45 schools, full-time clinical faculty members who were active in medical practice were employed solely by the medical schools and received one paycheck, which compensated them for activities in all missions (Table 2). These situations potentially are most rife for tenure interpretation disputes. Another 19 medical schools also

Table 1

Tenure Guarantees for Clinical Faculty at U.S. Medical Schools		
	No.	%
Total institutional salary/compensation	2	2
Total institutional salary/compensation (where clinical earnings are handled separately)	7	6
State-funded base salary	18	16
“Base” salary, otherwise defined	27	24
Fixed dollar amount	5	5
Linked to salaries of a reference group (e.g., average salaries of basic science faculty)	3	3
No specific financial guarantee	32	29
Guarantee not clearly defined	17	15
TOTAL*	111	110

*Does not include 11 schools that do not award tenure to clinical faculty and three for which data are missing.

Table 2

Employment Status and Payroll Procedures for Clinical Faculty at U.S. Medical Schools				
Employer of Clinical Faculty	One Paycheck		Two or More Paychecks	
	No.	%	No.	%
Medical school/university only	45	37	11	9
Practice group or hospital/health system only	10	8	1	1
Both medical school/university and separate practice group or hospital/health system	19	15	37	30
TOTAL*	74	60	48	40

*Does not include two schools for which data are missing.

provided just one check to clinical faculty members, but both the medical school and a separate practice group or health system employed them and contributed to their pay. Conversely, at 11 schools, the medical school remained the single employer (the practice plan was a unit of the school), but provided separate paychecks to clinical faculty members for their academic and clinical activities.

At the 37 medical schools where there are dual employers and two (or more) paychecks for clinically active faculty, a limited financial obligation may be most clear. Here, the medical school contribution to salary is clearly delineated,

with the presumption, absent any contravening statement, that the tenure guarantee does not exceed that contribution.

Eleven schools observed an arrangement whereby clinical faculty active in medical practice had full-time academic appointments at a medical school but were not employed by those schools. Such schools included Tufts University School of Medicine, Brown University School of Medicine, and NEOUCOM, none of which offers tenure to clinical faculty. Dartmouth and Texas A&M are organized in this way as well. At Dartmouth, the majority of full-time clinical faculty are employed by the Dartmouth–Hitchcock Medical Center, and at Texas A&M, by the Scott and White Memorial Hospital and Clinic. Both institutions offer tenure to clinical faculty, but only to the relatively small group that the school employs.

Two medical schools in Washington, DC, are moving toward this model as a result of recent restructurings. Georgetown University School of Medicine divested itself of its hospital and faculty clinical practice through a partnership agreement with MedStar. Clinical faculty at Georgetown active in medical practice recently became employees of the nonprofit health care organization, which is based in Columbia, Maryland. Tenured clinical faculty were offered a “buy-out” of their tenure commitment.²⁸ The George Washington University School of Medicine and Health Sciences also recently restructured its faculty practice plan from an administrative unit of the school to a separate, nonprofit, physician-directed corporation affiliated with the school. George Washington has pledged to respect the rights of tenure for existing clinical faculty, but those whose support depends on clinical practice earnings became employees of the new corporation as of July 1, 2000.²⁹ It is questionable whether Georgetown or George Washington will grant tenure to new clinical faculty hires, at least insofar as that tenure is associated with a financial guarantee.

However the ambiguities about the meaning of tenure at the local school level are resolved, the national data reported here do not provide empirical support for the assertion that tenure protects the total compensation of clinical faculty. There is little conceptual support for this assertion as well. Even a 1996 AAUP task force on tenure in medical schools has acknowledged that “certain kinds of [faculty] appointments were not foreseen by, and in any case not intended to fall within the ambit of the 1940 *Statement*. . . . Their [clinical faculty members’] relationship to the institution . . . is therefore fundamentally unlike that of full-time teachers and investigators. . . .”³⁰ The report goes on to say that tenured faculty “should be guaranteed an assured minimum salary adequate to the maintenance of support at a level appropriate to faculty members in the basic sciences, on a formula to be determined by the administration and board of trustees after consultation with a representative body of

the faculty.” While the AAUP never formally adopted the task force’s statement, it provides a balanced and real-world view of the nature of clinical faculty appointments and the limits of institutional obligation.

FACULTY COMPENSATION

Redefining and limiting the tenure guarantee is merely one, albeit an important, element of medical school efforts to restructure compensation plans for clinical faculty. The problems that have led schools to change existing compensation plans can be described as follows.

Large within-school variation in compensation arrangements. Medical school clinical departments historically have had relatively wide latitude in developing compensation arrangements for their faculties. That tradition has been supported by the plethora of organizational arrangements for practice activities and corresponding multiple employment relationships for clinical faculty. While the differing cultures of clinical departments, among each other and from basic science departments, may demand some individualization of plans, the variation has been so great at some schools as to belie the existence of any common framework. As schools have moved toward more centralized practice arrangements, a loosely federated group of departments if not a true multispecialty group practice, so too has there been the push for a common framework for compensation.

Lack of a clearly defined, consistent, and fiscally responsible tenure guarantee. As we have discussed, many schools have been reexamining the financial guarantees made to faculty members who receive tenure. Some of these schools are struggling with guarantees that are not clearly defined or are difficult to identify from compensation arrangements that vary considerably among departments. Other schools have acknowledged guarantees that are not supportable by adequate bases of stable funding.

Failure to link salary to performance. The salaries of clinical faculty have generally been linked to the patient care revenues they generate. However, when performance in non-clinical areas is considered, the differentials in pay increases may be relatively small. In addition, individual faculty members’ pay may not be well tied to group performance, so those individuals tend to have little financial stake in the success of the department or the institution.

Inability to reduce compensation when warranted. A meaningful link of compensation to performance requires that medical schools be able to reduce faculty salaries from one year to the next, when warranted. Except in those cases where the earnings from clinical services are treated separately and at risk, existing compensation frameworks may not give medical schools much ability to reduce salaries. Thus, schools are hesitant to give large increases in pay, even

when performances or changes in market factors demand them, because they see themselves as unable to take these increases back when performance deteriorates or market conditions change.

Difficulty in recruiting because of failure to allow for market differentials. In a few cases, existing compensation plans may impede recruiting by not allowing schools to pay market rates for clinical faculty in certain specialties. This may be particularly problematic for state institutions that have various regulations and requirements around compensation.

Elements of New Faculty Compensation Plans

We outline in Table 3 the structures of clinical faculty compensation plans (some cover basic science faculty as well) introduced at ten medical schools—three private and seven public—since 1996. They illustrate, in our opinion, the general direction for clinical faculty compensation plans.

These new plans have three to four basic components that are remarkably similar in concept. The first is a fixed and guaranteed (for that year) “base” component; the second, a variable, supplemental component; and the third, if applicable, a bonus/incentive component. A few schools include a separately labeled component to capture special, time-limited stipends for administrative service. We discuss each of these in turn.

Fixed-base component. The fixed-base component is that customarily linked to the tenure guarantee, although some schools that we examined (UNC–Chapel Hill, Penn State) do not associate tenure with a financial guarantee. There are several approaches to setting the level of the base: (1) a salary figure fixed by rank (Stanford, Yale, Virginia Commonwealth, Virginia); (2) a salary figure linked to the average salary by rank of basic science faculty (Colorado); (3) a salary figure linked to the average regional or national salaries of medical school faculty (Florida, Penn State); (4) a salary figure linked to the average salary of university faculty campus-wide (North Carolina, East Carolina); and (5) a fixed percentage of total salary (New Mexico).

Most of these approaches preserve the principle that base pay is equivalent for basic science and clinical faculty, varying only by rank. They imply an association between base pay and the core academic duties of teaching, research, and institutional service, which is independent of specialty or discipline. Most also preserve a level of financial guarantee for tenured clinical faculty that is not greater than that accorded to basic science faculty and, in some cases, may actually be less.

Variable, supplemental component. A variable, supplemental component in new clinical faculty compensation plans has several purposes. First and foremost, it allows med-

ical schools to provide for differences in total compensation because of market factors, even while maintaining base pay that is the same for all faculty members at a given rank. While the fixed-base component may recognize the equal values of teaching, research, and institutional service provided by all faculty regardless of discipline, a variable pay component provides for the reality that schools have to pay faculty in certain disciplines more than they pay faculty in others. This is most clearly evident in the pay differences between basic scientists and clinicians, but it also is seen in the pay differences among clinicians in different specialties.

The variable, supplemental component also allows pay to be directly tied to faculty performance. Pay raises (and reductions) from year to year are realized by changing the variable pay components, even while base pay may remain the same or increase. While the variable component of pay is not guaranteed from year to year, most schools have recognized the need to set limits on how much it may be allowed to vary. These limits generally range from 10 to 20%, and are applied in both directions. Alternatively, the variable, supplemental component may be guaranteed for more than one year, but, after that time, could be reduced by more than 20%.

Bonus/incentive component. The bonus/incentive component to faculty compensation is not new. Schools generally give departments discretion, within broad guidelines, about whether to offer bonus/incentive payments and how to determine them. While schools have historically provided bonus/incentive pay to reward exceptional clinical productivity, they can use it to reward exceptional performances in other mission areas. The obstacle to doing so is the general perception that performance data in teaching and research are not comparable to those provided by clinical billings or relative-value unit measures of faculty clinical work produced by most billing systems.

Administrative stipends. Faculty members who serve as section heads, as department chairs, or in other administrative roles may receive supplemental pay components tied to these administrative responsibilities, as is the case, for example, at Virginia Commonwealth University School of Medicine. The objective in doing so is not only to recognize such service but also to have a basis for reducing pay accordingly when the faculty member steps down from the responsibility.

A common framework in these plans provides for them to be “institutional,” links each faculty member’s pay to all others, and ensures that the plans comply with state and federal requirements. However, if a plan is too prescribed and detailed, it will fail to recognize the differing cultures of the individual departments and will likely impede recruiting. Schools have preserved departmental autonomy by allowing departments to set and implement evaluation criteria and

Table 3

Examples of Recently Implemented Medical School Faculty Compensation Plans					
School	Effective Date	Faculty Applicability	Salary Components	Definition of Base Salary and Tenure Guarantee	Additional Details
Stanford University School of Medicine (private)	Fiscal year 1999; affecting compensation beginning 2000	Basic science and clinical faculty on university tenure and medical center lines; excludes VA-based research faculty and teaching line	Base; variable; bonus	Levels of base: professor, \$110,000; associate professor, \$84,000; assistant professor, \$66,000	<p><u>Base.</u> Tenure protects the base. Base levels change with promotion to higher rank only and are not indexed for cost of living, but will be reviewed periodically.</p> <p><u>Variable.</u> A set of salary ranges by discipline and rank identifies total salary opportunity for faculty.</p> <p><u>Bonus.</u> Periodic cash payment. Not considered salary. Dependent on individual performance. Available to faculty in clinical departments only.</p> <p><u>Limits on salary changes.</u> Total base plus variable salary can be increased or decreased up to 10% per year (applied to variable component).</p> <p><u>Transition.</u> Tenured faculty whose previous "x" component exceeded the new base received that "x" component as the base until new base figures were adjusted and exceeded.</p>
University of Colorado School of Medicine (public)	July 1996	Basic science and clinical faculty at ranks of assistant professor and above	Base; supplement; incentive	Tenure protects the base, which is defined as 70% of average salary of all basic science faculty by rank at the school for the prior year	<p><u>Base.</u> While salaries are supported by state FTEs, there is no necessary link between base salary and state FTE dollars.</p> <p><u>Limits on salary changes.</u> No caps, but as a general guideline, salaries should not increase or decrease by more than 15% per year.</p> <p><u>Transition.</u> Salary of tenured faculty became the base at time of plan's initial implementation.</p>
Yale University School of Medicine (private)	July 1, 1996	Basic science and clinical faculty	Base; supplement; bonus	<p>Base set annually by the dean</p> <p>Rank-specific bases are slightly, but not considerably, higher than "reasonable" salaries for liberal arts faculty</p>	<p><u>Base.</u> Varies only by rank. Base and supplement components do not apply to research track faculty.</p> <p><u>Supplement.</u> Set in recognition of discipline-specific market factors, individual productivity, and individual contributions to missions of department, school, and university.</p>

<p><u>Bonus.</u> Awarded only if department has sufficient funds. Retrospective with no future commitment.</p> <p><u>Limits on salary changes.</u> Written explanation must justify decreases over 10%.</p> <p><u>Transition.</u> Faculty who received base salary commitments exceeding the plan's designated base continued with those bases until the newly defined base exceeded the former base.</p>	<p><u>Core.</u> Plan calls for periodic review and update of core salaries.</p> <p><u>Performance.</u> Based on individual performance measured against criteria established on departmental basis.</p> <p><u>Limits on salary changes.</u> Annual increases and decreases can range from 1 to 10%, absent special approval.</p>		<p>For clinicians, core is set at the 20th percentile by rank on the AAMC Faculty Salary Survey for the faculty's primary clinical department</p> <p>For basic scientists, core salary is set at the 20th percentile of basic science salaries by rank, according to the AAMC Faculty Salary Survey</p>	<p><u>Limits on salary changes.</u> Increases and decreases limited to 25%.</p>
<p>University of Florida College of Medicine (public)</p>	<p>July 1, 1996; affecting compensation beginning July 1, 1997</p>	<p>Basic science and clinical faculty</p>	<p>Core; performance</p>	<p>Base set at the average salary of UNC-CH faculty by rank</p>
<p>University of New Mexico School of Medicine (public)</p>	<p>July 1, 1999</p>	<p>Basic science and clinical faculty</p>	<p>Base; supplementary; incentive</p>	<p>Base; supplementary; incentive bonus</p>
<p>The Brody School of Medicine at East Carolina University (public)</p>	<p>July 1, 1996</p>	<p>Clinical faculty</p>	<p>Base; supplementary; incentive bonus</p>	<p>Increases and decreases apply only to the supplement.</p>

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Table 3 (Continued)

School	Effective Date	Faculty Applicability	Salary Components	Definition of Base Salary and Tenure Guarantee	Additional Details
University of North Carolina at Chapel Hill School of Medicine (public)	July 1996; revised January 2001	Clinical faculty	Academic base; negotiated component; contingent supplemental payment	Academic base set at average salary of UNC-CH faculty by rank, according to annual survey conducted by the American Association of University Professors	<p><u>Academic base and negotiated component.</u> Together these comprise the total projected annual salary. During the fiscal year, up to 15% of this salary is considered flexible and subject to downward adjustment if warranted by financial circumstances for the department or other operating unit.</p> <p><u>Contingent supplemental payment.</u> Provides an opportunity for faculty to receive income during the year over and above the annual salary, if favorable financial conditions warrant.</p>
Pennsylvania State University College of Medicine (private)	1998	Basic science and clinical faculty	Academic; clinical Academic component includes base, supplement, and incentive	<p>Basic science base salary set at 75% of current salary</p> <p>Clinical science base salary set by rank at the 50th percentile nationally as determined by AAMC Faculty Salary Survey</p> <p>No defined financial guarantee for tenure.</p>	<p><u>Limits on salary changes.</u> Supplement can increase or decrease by 8.3% of total compensation annually, up to a total of 25%. Total salary may not exceed 80th percentile of AAMC Faculty Salary Survey without special approval.</p> <p>Basic science and clinical faculty are eligible for leadership stipends, academic and research incentives.</p>
Virginia Commonwealth University School of Medicine (public)	July 1, 1998	Clinical faculty	Fixed base; variable base; administrative supplement; non-base component	Levels of base: professor, \$50,700; associate professor, \$44,000; assistant professor, \$36,500	<p><u>Base.</u> Tenure guarantees the fixed base.</p> <p><u>Supplement.</u> For administration.</p> <p><u>Non-base.</u> Includes both bonus/incentive pay and other extra-duty or consulting pay.</p> <p><u>Limits on salary changes.</u> Reductions generally limited to 20%.</p> <p><u>Transition.</u> Previously tenured faculty were assigned a base salary equivalent to their existing position in a salary-step structure.</p>
University of Virginia School of Medicine (public)	July 1998	Clinical faculty	Base; variable; incentive	Levels of base: professor, \$67,900; associate professor, \$57,500; assistant professor, \$47,000	<p><u>Base.</u> Based on AAMC and AAUP salary surveys and Virginia's state salary plan. Reviewed annually.</p> <p><u>Variable.</u> Negotiated salary generally cannot exceed the AAMC's 60th percentile.</p> <p><u>Limits on salary changes.</u> Reductions generally limited to 10%.</p>

processes for judging performance and linking a portion of compensation to them. They have also allowed departments to decide whether, and in what form, they should provide for bonus/incentive pay.

Continuing Problems and Issues

When a new compensation plan incorporates a tenure guarantee that is less than that offered previously, its introduction creates an obvious problem: what to do with the existing tenured faculty. Except under circumstances previously defined, institutions must honor their contractual obligations to tenure faculty. The problem is in understanding what these obligations are. When guarantees have been well defined, schools have tended to "grandfather" previously tenured faculty. The existing level of financial guarantee is honored but "frozen," until such time as the new tenure guarantee, through increases and adjustments, comes up to or exceeds that level. Stanford, Colorado, Yale, and New Mexico have dealt with the transition problem in this way. One drawback is that departments have to live with a dual-class reward system: a group of newer faculty working under a performance-based system and a second group of previously tenured faculty enjoying more generous guarantees that are independent of performance. Other schools (including those not represented in Table 3), where the tenure guarantees have not been clearly defined, have used the opportunity of a restructured compensation plan to state the university's position with regard to its obligations under tenure.

Another problem is that the creation of a performance-based compensation framework that allows for differentiation of pay increases and decreases does not guarantee that department chairs will use it to manage their faculties. Historically, the academic culture has discouraged sharp differentiation in pay and pay increases in the interest of promoting collegiality. This practice reaches its purest expression in other areas of higher education where pay is primarily a function of faculty rank and years of service. Given the growing recognition that the economic viability of medical schools rests on faculty productivity, it is doubtful that schools will continue to allow productivity and pay not to be tightly linked. Still, these cultural concerns appear to have been at least one factor in the decision by Johns Hopkins not to follow through on a new compensation plan that was two years in the planning.^{31,32}

A third major problem is that information support systems within many departments are not sufficiently robust to support the hard decisions that performance-linked and risk-based compensation requires. Most clinical department chairs can look toward financial (e.g., billings) and non-financial (e.g., resource-based relative value units) measures that are easily derived from billing systems to judge perfor-

mance within the clinical mission.³³ Productivity measurement is less mature in the educational and research areas.^{34,35} In our experience, schools have looked to changes in the compensation plan as the key to improving productivity. However, without a decision-support system in place, the plan's principles often cannot be fully enacted.

Finally, schools that seek to reward high-performing faculty with bonuses and incentives find themselves constrained when faculty members so described are located in departments with deficits and without the funds to do so. Such faculty members may be key to having prevented a worsened financial state for those departments. Solving this problem requires a cross-departmental mechanism to reward such faculty. Instituting such a mechanism requires that departments recognize their interdependence and their stakes in the financial health of the institution as a whole.

CONCLUSIONS

We have posited and illustrated several trends in policies and practices governing appointment, tenure, and compensation of medical school clinical faculty. We believe that schools are increasingly differentiating two primary clinical faculty roles, researchers and clinicians, with members of both groups each contributing a small amount of time to teaching. Tenure eligibility is being preserved primarily for researchers and may extend to a small group of specialists that emerge to lead educational programs. The proportion of clinical faculty appointed to tenure-eligible tracks is likely to continue to decrease, to a plateau not yet discernible. Medical schools are defining explicitly and conservatively the financial guarantees they provide to those clinical faculty to whom they do offer tenure. They are tying faculty compensation more closely to productivity across all missions. Their ability to reduce pay from year to year when warranted is increasing.

While these trends may initially concern faculty advocate groups such as the AAUP, we believe these groups may eventually see their benefits. The changes will allow medical schools to preserve tenure for the small group of medical school clinical faculty who most resemble in their activities their university colleagues, those most heavily involved in teaching and research. After all, the primary argument for tenure has been the protection of academic freedom. To the extent to which academic freedom issues have involved medical school faculty, they have mainly dealt with the research mission.³⁶⁻³⁸ In addition, many if not most medical schools may be expected to provide tenured clinical faculty financial guarantees that are consistent with the AAUP task force's recommendation.²⁸

Finally, the terms of the relationships between medical schools and their clinical faculties are tied closely to the

specifics of organizational structure: how medical schools are configured with faculty practice organizations, hospitals, and health systems. To the extent to which medical schools change these configurations, they will need to reexamine the terms of their relationships with clinical faculty. The continuing challenge of all schools is to define these terms in ways that allow them to continue to attract high-quality clinical faculty while avoiding an insupportable financial liability.

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