### **Internal Medicine Training in the 21st Century**

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#### Abstract

Many are calling for changes for internal medicine training, arguing that changes in the practice environment mandate changes in how the internal medicine residency is structured. Residency could be shorter, more conducive to role differentiation among general internists, and more supportive of subspecialization. Training could provide more experience in ambulatory care, multidisciplinary team-based care, chronic disease management, and quality improvement.

The authors contend that the claim that internal medicine training ought to mirror internal medicine practice is

mistaken. Many changes now proposed would likely damage if not destroy the consultant-generalist ideal of traditional internal medicine training which remains critical to effective medical care in the 21st century. The authors propose a model for training similar in structure but different in spirit from contending models. This model, like others, would involve a core experience in the first two years with tracking in the final year; unlike others, it would provide a conceptually coherent experience based on internal medicine's traditional ideal. Outpatient experience would be subsidiary to a predominantly inpatient experience, and it would be structured

in blocks rather than continuity clinics. Twenty-first-century internists will continue to face what has always been the internist's task: the resolution of complex and ill-defined patient problems into proper diagnoses and therapeutic options. Contemporary internal medicine training must fit trainees for that task and must, thus, continue to offer the training experience necessary for the realization of the Oslerian ideal: a substantial apprenticeship taking care of inpatients with a wide range of medical illnesses.

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nternal medicine training in America is undergoing a period of soul-searching. Restive subspecialty organizations wish to shorten residency training so that prospective subspecialists can begin their subspecialty training sooner. The changes in conditions of practice that have discouraged general internists are inducing educators to consider other possible changes in training that may better prepare trainees for the 21st-century world of practice they will soon enter.

Several themes have emerged among the recommendations of disparate groups for internal medicine training.<sup>3–5</sup> Educators



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in the subspecialties argue that internal medicine training must accommodate the increasing need for subspecialists in our current medical system. General internists are themselves undergoing role differentiation as they increasingly select either hospital medicine or outpatient medicine as areas of mutually exclusive practice. It is suggested that role differentiation, toward subspecialties or toward hospital or outpatient general medical practice, be recognized sooner in the training process. Such role differentiation might best occur after a year or two of internal medicine residency, after which trainees would join one of several tracks leading toward careers in outpatient primary care, hospitalist medicine, or subspecialty medicine.<sup>6,7</sup> Calls for increasing attention to ambulatory medicine during internal medicine training, prominent in the literature since the 1980s, are being renewed in the current climate. And, as both medicine and its delivery become more complex, it is suggested that prospective internists gain more experience as members of multidisciplinary teams caring for patients with particular illnesses and more knowledge about health systems and their impact on practice. Calls for change are generally accompanied by assertions that as practice is changing,

training should adapt to resemble it. Of three concrete recommendations coming out of recent discussions, one is old: the long-standing demand for a greater emphasis on ambulatory training; and two are new: to recognize role differentiation earlier in training, and to add to current training opportunities to gain kinds of knowledge and experience not presently afforded to trainees: knowledge and experience relevant not to clinical competence but to increasing complexities of health care delivery.

It is illuminating to consider the forces behind these calls for change. Subspecialists naturally wish to shorten the span of preliminary training required before trainees can begin their subspecialty programs. General internists are aware that something is broken; interest in general internal medicine is declining as the practice environment becomes more and more difficult for traditional internal medicine practice. Third-party payers, increasingly preoccupied with lowering cost and achieving quality as indicated by objective measurements, are probably the most important force behind calls for training in new skills needed to participate in chronic disease management initiatives, multidisciplinary teams, and quality improvement activities.

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In what follows, we will argue that current calls for change in internal medicine training are misconceived; not that all of the concrete recommendations for change are mistaken, but that the vision of internal medicine implicit in current discussion is consistent neither with our historical identity as internists nor with the demands of the 21st century. The unspoken presumption of recent calls for change is that the traditional identity of the internist is no longer viable; that the Oslerian ideal of the consultant-generalist must give way to the multiple specialized roles that internists now take on, none of which any longer need share the common identity that internal medicine training has traditionally provided. The two years or so of common training envisioned before specialist or generalist tracking are insufficient to produce a competent practitioner of any kind; they are to be a prelude to career-specific shaping that will happen in the final tracking year of residency and the ensuing years of fellowship (for those going on to subspecialties). In models for residency recently proposed, it is these latter years of training that will cement the practitioner's identity as outpatient primary caregiver or as hospitalist or as subspecialist rather than as internist. Although some reformers still argue for traditional board certification in internal medicine as a prerequisite for the further qualifications that would define readiness for practice,6 such certification would be at best a rearguard action against the disintegration of traditional internal medicine that will inevitably follow the commonly suggested training reforms if these are carried out in the spirit in which they are proposed.

It is our contention that what the 21st century demands are internists conceived in the traditional way as Oslerian generalists—seasoned clinicians possessed of a knowledge of internal medicine both wide and deep, and of clinical acumen such as follows from several years of experience caring for sick patients in an inpatient setting.8 Such internists are acquainted, both intellectually and concretely, with the spectrum of adult nonsurgical disease, can intelligently grapple with its variability, and are determined to do so from compassion for its sufferers. Our object in what follows is to present a case for the continued relevance of the

traditional ideal and to set out the broader lines along which reform of training ought to proceed to produce internists for the 21st century. We agree that change is necessary, and the structure of the internal medicine residency we favor does not differ markedly from that of other current proposals: a two-year core experience followed by limited tracking in the final year of residency. But, we contend that the internal medicine residency ought to remain a coherent experience, tied together by its attainment of the Oslerian ideal by our trainees. The kind of program we envision would not provide a common preliminary experience followed by de facto specialization toward several conceptually separate careers. It would remain an integrated inpatient and outpatient experience aimed at producing traditional internists, who, we believe, remain the adult medicine physicians best suited to meet the challenges of 21st-century health care, whether practicing their craft in the office, in the hospital, or as subspecialists.

Such changes in training as might follow from our discussion might not satisfy all of those currently agitating for reform of internal medicine training. They would, we believe, address the needs of those most concerned in the outcome of training reform: internists, who need a set of skills and a sense of identity adequate to the tasks facing them in 21st-century practice, and patients, who want competence and high-quality care from physicians who have a breadth of outlook adequate to the range of health problems that 21st-century patients may develop—as well as an interest in a relationship extending beyond the hurried prescribing and test scheduling permitted by the brief office visits now imposed by many third-party payers.

## The Traditional Ideal of Internal Medicine

As we contemplate changes in our system of training internists, we may do well to refresh our memories as to the thinking and practice that led to our current approach. Present-day arrangements for medicine residency in America trace back to William Osler's organization of the medical service at Johns Hopkins Hospital in the 1890s. And this aspect of the Hopkins organization was not so much a break from the past as a natural

development of ideas about clinical training that educators had agreed on for the previous hundred years. In an era when medicine was overwhelmingly outpatient and nonsurgical, it was widely agreed that physicians-in-training needed, if possible, hospital experience to complete their clinical training. There was no better way, medical educators held, of conveying to trainees the kind of practical acquaintance with disease necessary to competent practice than by having them care for hospital patients under supervision.8,10 The conditions of medical work for medical graduates were generally far removed from the hospital, but that did not lessen its appeal as a place for them to hone their clinical acumen. Thus, the notion that "training should resemble practice" would have sounded odd to Osler and his forbears.

The hospital was the best place to learn to be a "naturalist" of disease, the ideal of the mid-19-century British "physician," forerunner of the internist. In the later years of the 19th century, the British ideal was blended with the aspirations of German clinicians who brought laboratory science to bear on bedside clinical problems. German "innere medizin"11 became British and American internal medicine, which came to combine the need to comprehensively grasp the clinical spectrum of disease with the impetus to penetrate through signs and symptoms to a physiological and biochemical reality beneath the clinical level. "Internists" began to think of themselves as such in the 1880s and 1890s, and the specialty became organized in America with the American College of Physicians in 1916. The internist or "consultant-generalist" ideal was best exemplified America by the vision and training Seler at Johns Hopkins Hospital.<sup>9,12</sup> Since Osler's time, internal medicine has remained close to both its German and its Anglo-French roots; we still identify ourselves as experts in the understanding and management of patients with diseases pertaining to internal organs. Whereas subspecialization provides areas of expertise within organ systems, training in the broader realm of internal medicine remains a fundamental premise of subspecialty-based practice.

Contemporary internal medicine training, as much as it has evolved since Osler's day, retains considerable

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continuity with his aspirations for his own trainees. We still give our trainees a lengthy experience taking care of patients exhibiting illness across the spectrum of internal medicine. Our ideal of training has remained the kind of knowledge and competence exemplified in the university hospital chief medical resident, for whom the focus of interest is in the subset of patients exhibiting the wide spectrum of complex internal medicine, plucked from a university hospital system's vast reservoir of routine "bread and butter" cases. The faculty we judge to have most closely approximated this ideal are not the skilled proceduralists who, perhaps, gain the largest monetary rewards and, often, the most power in our departments of internal medicine; they are, instead, the seasoned clinicians who, whatever subspecialty they may belong to, possess a fund of knowledge and experience that allows them to skillfully assess and care for patients exhibiting the full range of disease described in Harrison's Textbook.

#### **Internal Medicine Training in the** 21st Century: Is Our Present Task to Fit Ourselves to Changing **Conditions?**

The increasing complexity of health care delivery and the increasing role differentiation that has accompanied it have combined to threaten the viability of the consultant-generalist ideal in medical practice. In the early 1990s it seemed that American medicine was going to evolve toward a system of primary care gatekeepers who would take care of routine problems and subspecialists who would handle issues in their areas of expertise when they exceeded the complexity of those that primary caregivers could resolve. That expectation proved to be mistaken; the American public has so far proved willing to pay for an expanding cadre of subspecialists who, more and more, assume the responsibility for primary care of patients whose major problems are in their own areas of expertise. For those patients with complex or multiple medical problems who remain under the primary care of general internists or family practitioners, interaction with multiple subspecialists has become an important aspect of ongoing care. Budgetary pressures on Medicare and the structural incentives of managed care have, in recent years, limited

reimbursement for office visits sufficiently to move internist practice away from the complex patients that have traditionally been their focus, and toward low-complexity primary care. These same pressures have made it increasingly difficult to combine office and hospital practice, leading to division between now exclusively office- and hospital-based internists.

The present calls for change in training look at the emerging world of internal medicine practice and seek to fit our preparation of trainees to it. They presuppose the obsolescence of the current ideal of internal medicine and envision a training system that will offer divergent paths to multiple possible generalist and specialist careers sharing no common identity. But is the traditional model, in fact, obsolete? Although seldom explicitly voiced, the argument for obsolescence would presumably be that we no longer need skilled general internists as traditionally conceived; we need primary care givers and subspecialists, neither of whom need the kind of general knowledge and experience that internists have traditionally valued. Instead, both need the familiarity with systems of practice, team-based care, and quality indicators that increasingly constrain contemporary practice. General internists might better fit themselves to our contemporary practice environment by focusing on primary care (or hospital medicine) and on broader issues of care coordination and disease management through roles as team leaders. Internal medicine residency can be divided into tracks for hospital medicine (leading to hospitalist certification or subsequent subspecialization) and outpatient primary care; both tracks might include substantial attention to team leadership and health care quality in the training experience. Such a course might allow us to shorten internal medicine training for prospective subspecialists and outpatient primary caregivers on the grounds that subspecialists will continue to gain expertise in further training, and primary caregivers can attain the needed skill level in outpatient medicine in less time than the traditional three-year training span.

The difficulty with this kind of shaping of our discipline to the exigencies of health care organization and reimbursement is that, although it may align us well to the

current practice environment, it ignores the reality of disease and illness with which we must continue to cope. Present emphasis on evidence-based medicine and its treatment algorithms shines a light on areas of medicine in which our therapeutic success is clearly improving. For many common, chronic illnesses, proper treatment is better defined than ever before, and the use of evidencebased treatment guidelines holds the potential for dramatically better health outcomes. The right use of guidelines, however, demands clinical judgment. Physicians must judge when the guideline ought to be applied and when exceptions need to be made. And the application of such guidelines to patient care is, in spite of their increasing number, still but a part of what internists should be doing. We must properly identify signs or symptoms of illness from the broader stream of human suffering that we confront, and, in cases of undifferentiated symptoms, we must properly assess their significance. The manifestations of very common diseases are quite variable, so much so that confusing clinical pictures are more likely to be unusual presentations of common diseases rather than rarer diseases that we may have our eye out for. Because the realm of internal medicine is so vast and variable, achieving clinical competence as an internist takes time. The trainee who has seen several cases of pneumonia operates at a very different level from the trainee who has seen several hundred cases. Clinical competence such as that traditionally provided by internal medicine training is not plumbed by conformity to guidelines, but equips the trainee to apply them properly—and to face the essential internal medicine tasks for which evidence-based medicine so far has offered no assistance.13

Internists, whatever their eventual career paths, will continue to need the sort of broad-based clinical competence that our training has traditionally provided—as patients, whether under the primary care of generalists or subspecialists, will continue to present with complex undifferentiated problems that will call on the skill and experience that internists have traditionally offered. Subspecialists will do well within the range of their specialty, but less well outside of it, if their broader inpatient experience is sufficiently limited in the early stages of internal medicine training. Generalists

without lengthy hospital training will be unable to cope at all with such patients. For such patients to do well in a system such as that contemplated in current calls for training change, they would have to somehow get from their primary caregivers to those with expertise to care for them. Outpatient generalists and nurse practitioners, however skilled they might be at routine problems and at meeting quality indicators, would not be equipped to direct such patients properly. And subspecialists might do no better outside of their limited areas of expertise. To meet the demands of the 21st century, internal medicine training must continue to produce internists with the kind of broad-based clinical competence that traditional training has done well at fostering.

# Training Oslerian Internists in the 21st Century

We internists must, of course, inhabit our practice environment, however uncongenial we may find it. But, we must do so without sacrificing our ability to meet the challenges of complex patient presentations that internists have traditionally valued and that continue to face us both as generalists and subspecialists. We thus suggest that the multiple roles now taken on by internists still require the kind of general competence provided by traditional training; such competence must involve familiarity with the broad range of internal medicine illness and with managing such illness in both inpatient and outpatient settings. The Oslerian consultant-generalist ideal is alive and well, or it ought to be if we are to prepare physicians for the adult medicine of the 21st century. How can we best train such internists? What changes in approach are demanded by new internist roles and new conditions of practice?

Present calls for reform tend to imply that inpatient and outpatient internal medicine practice are sufficiently independent of one another that training in each setting must be conducted separately for each kind of practice to be learned well. This, we believe, is an error. Outpatient and inpatient medicine are less separate than ever before and continue to grow closer together as sicker patients, who might previously have required hospital care, are cared for as outpatients. The object of training in the

inpatient and outpatient settings is to provide the trainee with the clinical experience necessary for achieving competence in both settings—the skill that the internist wields in sizing up a case and deciding not only what is going on and what must be done, but in what setting treatment or follow-up ought best to take place.

The overlap between settings suggests to some not only that outpatient training ought to be a considerable part of conveying consultant-generalist skill, but that relatively early tracking need be no threat to the development of such skill. That is likely a mistaken presumption. If 21st-century internal medicine cuts across settings more than it did in Osler's day, it remains the case for us as it was for him that it is best learned in the inpatient setting. This is not to say that exclusively outpatient problems do not demand attention in training; it is to contend that the traditionally inpatient problems that now straddle inpatient and outpatient settings are best learned by trainees if first confronted on the wards. Although the pace of inpatient medicine is no longer leisurely, it does allow for engagement with the evolution of disease over hours to days; the trainee can understand, for instance, the neurohormonal perturbations of the heart failure patient by connecting him or her to clinical manifestations and watching these respond to physiologically targeted therapy on the ward. The snapshot quality of the heart failure patient visit in the outpatient setting cannot achieve the same kind of acquaintance with heart failure.

Even in the present era of higher acuity and shorter stays, it is the more extended exposure to disease on the wards that allows trainees to appreciate the variability of common diseases and the possible pitfalls of addressing them in the stereotyped fashion that an overreliance on guidelines and algorithms might encourage. It is on the wards that trainees see the pneumonia patient who doesn't respond as expected to conventional therapy, the chronic obstructive pulmonary disease patient whose exacerbation proves to be caused by a pulmonary embolism, or the chest pain patient whose seemingly typical symptoms in fact signify pericarditis rather than angina. And even the brief hospitalizations that patients now

undergo allow trainees to gain experience with dramatic responses to contemporary therapies, a critical aspect of modern internal medicine.

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Trainees must learn to connect complex disease concepts such as the pathophysiology of heart failure to variable heart failure patients, and they must come to appreciate the wide spectrum of presentation and evolution of other common diseases. Only then will they learn when they may rest assured that the obvious diagnosis is the correct one and when they must attend to the worrisome detail that does not quite fit. For such a grasp of internal medicine, sustained engagement with individual cases over days is necessary. Outpatient visits simply do not provide the kind of short-term continuity of exposure to a case in which such variability of disease natural history can be brought home to the trainee. But, trainees may take the lessons of the ward to their outpatient

While inpatient training ought to remain the core of internal medicine residency, outpatient training needs to be conducted differently than it is at present in most residency training programs. The outpatient analog of patient presentations that prove to be deceptive on the wards is the day-to-day evolution of confusing presentations in clinic, manifested in serial outpatient visits over a short period. Unfortunately, there is seldom opportunity for trainees to follow such patients during closely spaced visits because of the structure of residency outpatient clinic. That same structure mandates continuity outpatient clinic assignments that pull residents away from complex inpatients during ward rotations. Such weekly or more frequent clinics interfere with inpatient training and predispose trainees against the outpatient setting—as the lesser acuity of outpatient medicine cannot compete with the urgency of caring for sick patients on the ward. Teaching in clinic is brief and sometimes perfunctory; there cannot but be an invidious contrast with the in-depth consideration of pathophysiology, diagnosis, and management that takes place during ward teaching rounds. It is little wonder that fewer and fewer trainees are interested in outpatient general internal medicine, given the character of outpatient primary

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care as experienced by trainees in most internal medicine residencies.

The solution to this problem, we suggest, is a reinvigoration of outpatient training achieved by separating it from the inpatient experience. Rather than subjecting trainees to two or more halfday clinics per week during busy ward months, outpatient experience would be gained primarily during months blocked off for that purpose alone. Clinic block rotations would allow for the kind of short-term follow-up of confusing or sicker patients necessary for learning the more challenging aspects of outpatient medicine. And, without the constraints of assignment to a ward service, residents could spend more time learning during a clinic schedule that allowed time both for discussing individual patient issues with attendings and for exploring outpatient problems with the same kind of intellectual intensity usually associated with inpatient medicine-through conferences, journal clubs, and, perhaps, other kinds of small-group exercises designed for that purpose. Experiments with block outpatient rotations are already occurring in several medicine programs across the country. We suggest that such experiences ought to provide the core, if not the whole, of internal medicine outpatient training. Devoting one third of internal medicine residency to such outpatient rotations, as the Accreditation Council for Graduate Medical Education currently requires, should be sufficient to produce competent internists—as would either somewhat more or less time. Thus, the proportion could be adjusted upward for trainees aiming at outpatient generalist careers and downward for those planning to be hospitalists. Continuity clinic, in our model, would be severely curtailed, if not done away with altogether.

This is, of course, a radical proposal, going against the strategy of the internal medicine residency review committee since the 1970s. But that strategy has not worked. Continuity clinic does not recreate the satisfactions of internal medicine outpatient practice and attract trainees toward such practice. It immunizes them against outpatient internal medicine by providing a caricature of such practice, offering "continuity" but providing a clinic experience that is, in fact, fragmented and frustrating both to trainees and to

patients. Trainees are often pulled away from clinic by their ward rotations, and patients complain that they seldom can actually see their doctor. Neither finds the experience satisfactory.

The purpose of outpatient clinic ought not to be to recreate a practice experience unattainable during training—that is, if training is to achieve its object of transforming trainees into internists. The clinical competence which is the object of training in either setting demands not continuity of experience with individual patients over months to years, but continuity with given patients over the course of an illness in either setting and guidance in directing patients through the transitions between the inpatient and outpatient settings. Such skill can be conveyed during discrete inpatient and outpatient rotations. If we are correct, inpatient rotations will provide the core training in apprehending and treating disease in the realm of adult medicine in its most demanding aspects; armed with that experience, trainees will usefully progress to outpatient rotations and gain a supplementary view of the same diseases in their less acute manifestations: a view that will be fully intelligible because of the inpatient experience that trainees will bring to the outpatient setting. Trainees will indeed have to postpone the emotional satisfactions of continuity in internal medicine practice until they actually enter practice, but such postponement will be no further deprivation than training imposes at present; it will merely be acknowledged rather than papered over by what now passes as "continuity" clinic in many programs.

#### **Adapting Training to Contemporary Health Systems** Complexity

What of proposals for adjusting to the complexity and systemic malfunctions of 21st-century health care? Some changes recommended in recent proposals are already being carried out on many university hospital inpatient services. Interdisciplinary collaboration between medicine and other caregivers has long been a reality, especially between physicians and pharmacists and social workers. Such collaboration can be further developed with nutrition services, physical therapy, specialty nurses, and other groups increasingly participating in patient care. The challenge here will be to optimize patient care through collaboration without further diminishing the time for direct care and teaching already threatened by the increasing demands of documentation and care coordination.

Other new proposals for training aimed at medical errors and health care quality will have their most important effects not on what we teach residents to do but on the system in which they work. Adherence to measures used as quality indicators will be achieved through clinical reminders and other prompts built into the electronic medical record and treatment-ordering software. The thrust of the recent literature on quality emphasizes the systemic character of the changes needed for improvement; these changes will affect training mostly indirectly. The more important point to be made about performance targets and quality improvement activities is that these targets and activities must be subsidiary to the internist's intelligent engagement with the individual patient. Performance targets are being imposed in many institutions as rigid requirements with penalties attached to nonattainment, as if compliance with them were never harmful through lack of fit to individual patients, distraction from other important matters, or gaming. In our model, these activities would have a place among the tools used by the competent trainee, but they would not be used independently of skillful grappling with the idiosyncrasies of the individual case, the latter of which is, by far, the more important component of clinical competence. Furthermore, the performance targets and quality improvement activities of a given moment are transitory. The mechanisms of best care delivery today will not be those of tomorrow; learning the ways in which particular treatment algorithms are best put into practice is learning what will soon be superseded. The kind of clinical competence which traditional training prizes, on the other hand, is both immune to obsolescence and absolutely prerequisite to properly bringing such innovations to bear on patient care. Whether quality improvement is learned through separate exercises or through the judicious injection of such material into the day-to-day care of patients on traditional rotations, it must be taught as the internist's servant, not his or her

master—although that is not the line that third-party payers would prefer us to take. For outpatient rotations to afford the kind of vigorous intellectual stimulation presently common on ward services, let alone the training in new approaches to care currently recommended, many resident medicine clinics will themselves require reinvigoration. Many such clinics do not presently offer the patient mix, infrastructure, and staff support necessary for the practice and teaching of good outpatient medicine. Present funding of internal medicine training through Medicare fosters education on the wards much more effectively than in clinic. That may have to change for outpatient education to substantially improve. Indeed, many of the measures recommended in recent calls for training reform will fall flat if outpatient clinics cannot call on resources not presently available, especially in inner-city university hospitals. Chronic disease management programs with their base of ancillary staff support and electronic medical records designed for the collection of quality measures can be no more than a distant aspiration for many resident medicine clinics, given present levels of financial support.

#### **Reform Without Wrong Turns**

Our suggestions for internal medicine training in the 21st century differ little in outline from recent calls for training reform; we and others suggest a two-year core training experience followed by some degree of tracking toward outpatient, hospital, or subspecialty medicine in the final year of residency. In contrast to other proposals, our core training experience would remain inpatient; outpatient experiences would be block in form rather than continuity, and education in nonclinical areas such as team leadership, health systems, and quality control would be firmly subsidiary to the primary goal of clinical competence in general internal medicine. Our suggestions are further distinguished from others by the presumption that the traditional ideal of internal medicine remains viable and important—so that the three-year internal medicine residency ought to fulfill its traditional mission of producing internists rather than three groups of practitioners having little in common beyond a two-year

preparatory experience, at the end of which professional identity is still to be shaped. Rather than premature specialization into roles limited by practice setting or organ system, the complexity of 21st-century medicine demands role specialization after training broadly and deeply enough to encompass traditional internal medicine. Such training will prepare the trainee for practice not by resembling practice, but by producing the skills necessary for it. Its product will be the internist, well equipped to face the undifferentiated problems of adult medicine whether in outpatient practice, hospital medicine, or in a subspecialty.

Retaining the traditional ideal offers us the additional advantage of attractiveness to trainees. Internists traditionally pride themselves on being detectives; this "Sherlock Holmes" aspect of what we do, exemplified by Osler and his descendents, remains a powerful draw to prospective trainees. If medicine had been pitched to us as an opportunity to see large numbers of patients in a limited time, even if aided by informatics and other support to make that possible, how many of us would have found such a prospect attractive? And if, as students, we had been exposed not to wise and thoughtful physicians puzzling over confusing cases but, instead, to harried attendings curtailing teaching rounds so as to better meet the demands of documentation requirements, quality improvement initiatives, and recalcitrant hospital computer systems, would we not have run as far and as fast as we could, especially given the financial advantages of other specialties?

The intellectual allure of our field remains best represented in our inpatient experiences. If we can improve the outpatient experience, we can, perhaps, diminish the gap in attractiveness currently suffered by ambulatory training. A longer-term solution to lack of interest in primary care may be to change the way in which outpatient internal medicine is practiced. But to self-consciously alter our training to more closely resemble current internal medicine practice in the present circumstances would not only be mistaken but potentially disastrous. The American public clamors for a better health care system because of the impersonal nature of their interactions

with physicians, the complexity of the system they are being asked to navigate, the sheer number of physicians they have to visit, and the increasingly brief encounters that their physicians allow them. It would be a terrible mistake to "close the gap" between training and practice without carefully considering on which side of that gap the shortcomings lie.

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## **AUTHOR QUERIES**

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