PERSPECTIVE

American Internal Medicine in the 21st Century

Can an Oslerian Generalism Survive?

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American internal medicine suffers a confusion of identity as we enter the 21st century. The subspecialties prosper, although unevenly, and retain varying degrees of connection to their internal medicine roots. General internal medicine, identified with primary care since the 1970s, retains an affinity for its traditional consultant-generalist ideal even as primary care further displaces that ideal. We discuss the origins and importance of the consultant-generalist ideal of internal medicine as exemplified by Osler, and its continued appeal in spite of the predominant role played by clinical science and accompanying subspecialism in determining the academic leadership of American internal medicine since the 1920s. Organizing departmental clinical work along subspecialty lines diminished the importance of the consultant-generalist ideal in academic departments of medicine after 1950. General internists, when they joined the divisions of general internal medicine that appeared in departments of medicine in the 1970s, could sometimes emulate Osler in practicing a general medicine of complexity, but often found themselves in a more limited role doing primary care. As we enter the 21st century, managed care threatens what remains of the Oslerian ideal, both in departments of medicine and in clinical practice. Twenty-first century American internists will have to adjust their conditions of work should they continue to aspire to practice Oslerian internal medicine.

KEY WORDS: internal medicine; primary health care; specialization.

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Internal medicine prospers in America if numbers of practitioners and interest among medical students are valid measures. Never have there been so many qualified internists, and as the population ages, their scope for activity seems likely only to increase. Yet at the turn of the 21st century, the mission and identity of internal medicine are less clear than ever before. The internal medicine subspecialties prosper, but do so unevenly, proceduralists gaining at the expense of the less procedural fields such as

endocrinology, rheumatology, and infectious disease. General internal medicine, after a vogue in the early 1990s, finds itself in the doldrums as primary care, prosperous and fashionable only 10 years ago, now wanes in popularity. As subspecialists continue to increase and displace generalists among internists, it can legitimately be asked whether "internal medicine" retains a coherent identity.

In what follows we will explore the meaning of American internal medicine in the past 100 years, particularly insofar as that identity has been shaped in the academic setting; in doing so we will consider the Oslerian consultant-generalist ideal, powerful in pre-World War II academic departments of medicine and then eclipsed by the 1970s as subspecialists took over from generalists. We will then consider threats to that ideal in the present practice environment and discuss how departments of medicine might act to preserve it, at least within their own institutions.

EARLY 20TH CENTURY INTERNAL MEDICINE

Early in the 20th century, the leadership of American internal medicine passed from the "consultant-generalists" who had been the preeminent "physicians" of the 19th-century profession to the clinical investigators who were taking over academic departments of medicine beginning in the 1920s. Typified by William Osler, the consultant-generalist had been the naturalist of disease, concretely familiar with its protean manifestations and able to understand it in terms of physiological disturbance and, especially, pathological manifestations as seen at autopsy. Such knowledge made for accurate diagnosis and prognosis, the good physician's trademark skills. Osler had developed his clinical acumen in time-honored fashion by engaging in busy hospital and clinic practice while performing hundreds of autopsies on patients he'd seen during life. By the time he reached Hopkins in 1889, his clinical knowledge and skill at diagnosis had brought him into great demand as a consultant, as he could often shed light on cases that left his colleagues confused. His sparkling personality and deep interest in the humanities rounded out the picture of the wise and humane consultant-generalist physician, which he exemplified and which became the ideal of American internal medicine just as internal medicine began to split apart into subspecialties.¹

By the 1920s, the modern internal medicine ideal of applying laboratory investigation to clinical problems was

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displacing the consultant-generalist ideal among internal medicine's academic leaders. Nascent subspecialties of internal medicine were becoming increasingly prevalent in a world of practice that was still dominated by generalism, generalism which, in internal medicine, was shaped by the consultant-generalist ideal.

The major specialties of medicine had taken form in the world of practice in the early years of the 20th century; by the 1930s, American specialists were beginning to organize certifying boards as a means of identifying legitimate claimants to specialty status. Internal medicine, having organized its own society in 1915, had to respond to restive subspecialists by the time it was organizing its certifying board. Internal medicine might not have kept its subspecialties had not the College ensured their retention in what was becoming internal medicine's big tent by planning to issue subspecialty certificates when the American Board of Internal Medicine was set up in 1936. That plan ensured that postgraduate training in internal medicine would take on the now familiar pattern of generalist internal medicine residency, followed either by generalist practice or by further training leading to subspecialization.²

The consultant-generalist ideal flourished in internal medicine residency training programs, where residents were able to become familiar with complex cases in all of the subspecialties, training under teachers who were subspecialist in their research but generalist in their clinical work. The monastic life of the internal medicine resident culminated in possible selection as chief resident, a figure in whom the ideal of clinical knowledge that was both wide and deep was perhaps most explicitly valued. By the 1940s and '50s this ideal was becoming more difficult to realize in the world of practice. Practicing internists might serve as consultants to general practitioners (GPs) on complex medical problems; but GPs were a shrinking proportion of the profession and as internists subspecialized, the GP became more likely to refer problematic patients to subspecialists than to general internists. Thus, the general internist was increasingly forced either to subspecialize or to do an increasing proportion of primary care. By mid-century the consultant-generalist ideal was strong in academic training programs but weakening outside of them.

By the late 1960s, a postwar boom in federal support for medical research had transformed academic departments of medicine from division-sized units of 10 to 12 faculty into much larger organizations. The older department of medicine had fostered research, in a small way, along subspecialty lines; in its outpatient and inpatient clinical work it had retained a generalist focus. Beginning in the 1950s, federal money tied to subspecialty research led to an increasing tendency to organize departmental clinical activities along subspecialty lines. Just as board-certified specialists were replacing GPs in the community, an increasing proportion of faculty in departments of medicine were subspecialists rather than general internists. Subspecialization was consistent with the "clinical

science" aspect of internal medicine but was subversive of the Oslerian ideal of the consultant-generalist; although the latter ideal perhaps contained the seeds of subspecialization in its presumption that practice would be informed by clinical science. As such, science was increasingly organized by subspecialty, and it was natural that clinical practice would follow suit. Thus, general internists became a shrinking proportion of internal medicine faculty, and their scope for clinical activity shrank as general medicine wards gave way to wards organized by specialty, led by cardiology and hematology-oncology. Consultant-generalism was in decline in departments of medicine by the early 1970s, and general internists were step-children in departments of medicine organized by subspecialty and led by specialists.

While academic internal medicine was less and less interested in generalism, forces from without led departments of medicine to form general internal medicine divisions alongside their subspecialty divisions in the early 1970s. Generalism in clinical practice had undergone a crisis of identity in the preceding decade, leading to the formation of the new specialty of family practice. That family practice rather than internal medicine assumed the mantle of primary care given up by the traditional general practitioner was a reflection of the ambivalence about primary care that academic internists had always felt. The routine care of common outpatient clinical problems simply didn't comport with the kind of intellectual rigor and complexity that consultant internists in the Oslerian tradition prided themselves upon exhibiting. Yet internists did a lot of primary care, and the federal government sought to foster primary care training among internists, aiming grants for primary care education at departments of medicine. At the same time, federal and foundation money for health services research began attracting generalists among researchers, who would find homes in the divisions of general internal medicine that were increasingly the recipients of grants for primary care training.³ While most chairmen of medicine found health services research to be a more respectable calling than primary care, they embraced neither one nor the other, although they could not ignore or refuse the federal money that supported them. Thus, academic divisions of general internal medicine appeared and flowered within departments of medicine that were fundamentally oriented toward other forms of research and practice.

These divisions were very successful at cultivating health services research and the grants that flowed in its direction. By the mid-70s, generalist health services researchers and clinical teachers took the first steps toward organizing their own society, first known as the Society for Research and Education in Primary Care Internal Medicine and then as the Society of General Internal Medicine.³ The flourishing of that organization has paralleled the growth of research in divisions of general internal medicine. The clinical identity and place of general internal medicine divisions within departments of medicine

has not developed quite so straightforwardly. As residency review committee requirements for internal medicine resident clinic experience were formalized in the mid-1970s, general internists were found to be useful by medicine department chairmen in the staffing of such clinics; certainly subspecialists had little interest in participating. The role of general internists on the wards varied greatly according to the manner in which the department's wards were organized. If subspecialty-based wards predominated, general medicine wards could become a "dumping ground," a receptacle for patients that no one else wanted, demoralizing for general internist attendings and residents alike. In such departments of medicine, general internists generally wore the hat of "primary care" and retained little of the luster of the Oslerian consultant-generalist. In such departments, the Oslerian ideal was more often attained by members of subspecialties such as infectious disease, rheumatology, nephrology, and pulmonary medicine than by general internists.

In some departments of medicine, wards remained primarily general medicine, taking all comers, and were led by attendings acting as generalists, while subspecialists appeared in their specialist capacity only when consulting. Such general medicine wards were much more challenging and offered a more attractive role for those general internists who attended on them. Such wards were one setting in which the ideal of the consultant-generalist could still be cultivated, and generalists who pulled their weight and could hold their own with the subspecialists in the wards' day-to-day work sometimes attained that ideal more easily than their specialist colleagues.

WHITHER THE PRACTICE OF GENERAL INTERNAL MEDICINE?

In the larger world of practice, general internal medicine is at a crossroads. Until the recent past, general internists have been able to do primary care (here considered to be preventive medicine and the routine care of common outpatient problems in their simpler manifestations), but also to hold on to relatively complex inpatients and outpatients. This elastic continuum between routine primary care and a more challenging medicine of complexity is now threatened by contemporary reimbursement arrangements, particularly those mandated by managed care. Outpatient general internal medicine practices, including medical school faculty practices, have been increasingly pressed into the mold of high-volume, low-margin primary care as practiced by general or family practitioners. Such practice has many satisfactions that internists value, most notably that of lasting relationships with patients developed over time. Yet most of us wish to preserve our work with those patients who come to us with complex presenting complaints, multiple medical problems, and multiple medications—who demand more than can be offered in the 15-minute "primary care" clinic visit for which managed care companies have successfully

ratcheted down reimbursement. Such complex patients ought to be the internists' bread and butter, but are increasingly burdensome in practice as their needs for thoughtful care exceed the time for which internists can bill insurance companies. While managed care has been the most powerful force in lowering fees for office visits, Medicare has begun to exert a powerful effect in the same direction. Relatively stable for the past few years, Medicare reimbursement for the level 3 internal medicine office visit code fell for 2002 and would have fallen again had Congress not voted to replace a scheduled 4.5% cut with a 1.6% increase.^{4,5} Medicare officials have warned that they expect a cut in 2004, barring further legislative action in 2003. Such pressures on office fees have led to an increasing separation between outpatient and inpatient general internal medicine, as internists unable to afford the time taken from the office to make hospital rounds turn their inpatients over to "hospitalist" colleagues, who spend all of their time doing inpatient medicine.⁶

Hospitalism could easily set up as an internal medicine specialty or even as a separate specialty on its own. Hospitalists already have their own organization and are in the process of identifying knowledge and skills important to their clinical work. If they go on to devise certifying exams, identify training pathways, and gain approval from credentialing organizations, they will simply be following the example of other specialties, such as emergency medicine.⁶ The fate of general internal medicine is certainly bound up in hospitalism's evolution; should hospitalists separate from general internal medicine, general internal medicine would become a very different discipline. Perhaps its survival would be in question, as outpatient internal medicine might soon become congruent with primary care. If that were all that general internists did, their differentiation from family medicine, and, for that matter, from independent nurse practitioners would be problematic. General internists might then go the way of the general practitioner as the space between pure primary care and subspecialty medicine disappears. The result would be complex patients cared for by multiple subspecialists, except when seeing nurse practitioners for their sore throats. And so the frequent charges that contemporary medicine is over-specialized, fragmented, and uninterested in the whole patient would be abundantly confirmed.

In spite of pressures moving them toward routine primary care and away from a medicine of complexity, general internists have so far have been unwilling to give up the ideal of the Oslerian consultant-generalist. Only if generalists are able to establish a niche for a medicine of complexity can that ideal remain viable outside the academic center. Establishing such a niche will likely require different reimbursement models than now prevail in the medical marketplace, at least on the outpatient side. Medicare, the bellwether payor for most insurance companies, is more and more in the position of dividing a fixed pot of money among demands from increasingly expensive medications, new and costly imaging technologies, and an

ever-increasing number of procedures performed. In such competition, clinical generalism has held its own in the past few years but is unlikely to keep up, given continuing pressures on global Medicare expenditures. Some generalists are overcoming the restraints of insurance reimbursement by forming "concierge" or "retainer" practices, limited in size, which allow at least the possibility of practicing a satisfying medicine of complexity by topping up insurance payments directly from their patients' pockets.⁷ Clearly, that can be a solution only for the few physicians able to attract a full practice of well-to-do patients. For a medicine of complexity to be viable more generally, the present managed care one-size-fits-all primary care model, alike for healthy 30-year-olds and the ill elderly, must be superseded by reimbursement mechanisms flexible enough to accommodate both in a fair manner.

While any battle for the continued possibility of complex generalist medicine practice will have to be fought at the societal level, departments of medicine can, if they wish, act to preserve the Oslerian ideal among generalists within their own institutions. General internal medicine research has flourished in the past twenty years, and general internists do a disproportionate share of resident education in most departments of medicine. The clinical identity of academic generalists remains somewhat schizophrenic, however. Divisions of general internal medicine offer a locus for internal medicine primary care that is clearly a major part of its identity; academic generalists continue to aspire to the ideal of the Oslerian consultant-generalist, but achieve that ideal unevenly.

The wards are at present the most congenial setting in which to foster such a mode of practice. The inpatient setting is not without its contemporary difficulties. Facing ever more stringent criteria for inpatient admission, internists are confronting more and more difficult diagnostic problems in the clinic rather than in the hospital, limiting teaching opportunities on the wards. Those patients who do get admitted are sicker than in the past, forcing residents and their attendings to focus more on the management and monitoring of the acutely ill than on the differential diagnosis of confusing clinical pictures. Yet, the inpatient setting still offers the generalist a chance to ponder differential diagnosis and to bring to bear the deeper, wider knowledge base that aspiring consultant-generalists cultivate. The wards are also the place in which we can try to model the kind of wise compassion for which Osler and Peabody were so admired. General internists are frequently far more eager to seek such roles than their specialist colleagues, who tend to give up their breadth of knowledge as they focus upon their specialties. However, general medicine wards accepting patients with a wide range of clinical problems and not just the leavings of other services are essential if generalists are to take on the consultant-generalist role successfully. On the outpatient

side departments of medicine will have to find a way to foster a generalist medicine of complexity, both for faculty and for residents. Both the patient population and the productivity expectations for clinic will have to be adjusted to allow this to happen—unless clinic is to continue to be exclusively "primary care," and faculty and trainees alike are to be forced to send on anything beyond routine acute problems and the management of diabetes and hypertension to their specialist colleagues.

The evolution of American internal medicine offers a striking example of the manner in which pressure upon disciplinary boundaries can be brought by economic forces. The rise of subspecialty medicine owes much to the progress of clinical science; but that rise has been vigorously reinforced by the willingness of society to pay for its innovations. Yet, general internal medicine along Oslerian-consultant lines has no lack of intellectual vitality, as the presence of many expert generalist clinicians in academic medical centers continues to attest. Such generalism would not likely have maintained its early 20th-century importance in the latter half of the century no matter what economic arrangements it subsisted on in the shadow of rising subspecialism. Yet, in the early 21st century, Oslerian generalism is becoming impossible in practice due its inability to pay its way. General internists might preserve complexity in their practices by becoming hospitalists; but if they wish to practice such medicine in the outpatient setting, they must contend for economic arrangements that would make that possible. Failing such arrangements, internists practicing in the outpatient setting will likely be forced to give up their traditional identity and join with other exclusive practitioners of primary care.

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