REFLECTIONS

Facilitating Collaboration Among Academic Generalist Disciplines: A Call to Action

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ABSTRACT

To meet its population's health needs, the United States must have a coherent system to train and support primary care physicians. This goal can be achieved only though genuine collaboration between academic generalist disciplines. Academic general pediatrics, general internal medicine, and family medicine may be hampering this effort and their own futures by lack of collaboration. This essay addresses the necessity of collaboration among generalist physicians in research, medical education, clinical care, and advocacy. Academic generalists should collaborate by (1) making a clear decision to collaborate, (2) proactively discussing the flow of money, (3) rewarding collaboration, (4) initiating regular generalist meetings, (5) refusing to tolerate denigration of other generalist disciplines, (6) facilitating strategic planning for collaboration among generalist disciplines, and (7) learning from previous collaborative successes and failures. Collaboration among academic generalists will enhance opportunities for trainees, primary care research, and advocacy; conserve resources; and improve patient care.

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merica's communities need a well-trained primary care physician workforce to ensure adequate access to high-quality health care. 1-3 To meet these primary care health needs, the United States requires a coherent, collaborative system to train and support primary care physicians. 4 Such a system can be developed only though genuine collaboration between academic generalist disciplines. By collaboration we can avoid costly duplication while expanding the breadth and depth of the pool of generalist clinicians, educators, and researchers. In addition, the academic generalist disciplines offer broad clinical perspectives that enable them to address the challenge set forth in the National Institutes of Health (NIH) "Roadmap" initiative to develop new partnerships among organized patient communities, community-based physicians, and academic researchers.⁵ Collaboration among generalists has many advantages, including enhanced opportunities for trainees, more meaningful primary care research, conserved resources, powerful advocacy, and improved patient care.

The academic generalist disciplines—general pediatrics, general internal medicine, and family medicine—that form the source of the primary care physician workforce may be hampering these efforts and their own futures by competing with each other for patients, trainees, and resources.⁶ These primary care disciplines, which flourished until the 1990s, are now facing uncertain futures. Since 1998, there has been a marked decline in the number of graduates of US medical schools selecting residency training in internal medicine or family medicine and in the percentage of internal medicine residents pursuing generalist careers. 7,8

Interspecialty collaboration is often advocated^{9,10} but rarely practiced. Previous calls for collaboration, like those outlined in the Institute of Medicine's 1996 report, Primary Care: America's Health in a New Era, have rarely succeeded.¹¹ Generalist physicians must overcome barriers to collaboration and unite in an effort to address the challenge set out by the Institute of Medicine to create a health care system that is safe, effective, patient-oriented, timely, efficient and equitable.¹² The purpose of this essay is to describe the historical barriers and potential benefits to collaboration, and to make specific recommendations for achieving collaboration among academic generalists.

BARRIERS TO COLLABORATION

Achieving collaboration among the academic generalist disciplines will require overcoming long-standing financial, structural, cultural, and historical barriers. Within academic centers, generalist faculty are under pressure to obtain grant funding or to increase clinical productivity and are burdened with increasing administrative demands and formidable financial challenges. 13,14 Generalist faculty physicians provide a disproportionate share of clinical teaching and supervision at a time of declining federal and state support for the educational mission of medical schools. This problem is exacerbated by perceived competition among generalist faculty for limited (and shrinking) training, research, and program funds. 15 Federally-funded fellowship training for primary care researchers, administered by the Health Resources and Services Administration (HRSA), receives only 0.5% of the funds allocated by NIH to research training through the National Research Service Award program. HRSA programs, funded through Title VII of the US Public Health Service Act, struggle for survival in annual congressional budgetary deliberations. Despite recommendations that one be established, there is no primary care institute within the NIH. 11,16 Primary care research plays a minor role in the disease-oriented NIH institutes, often finding a home only within the chronically underfunded Agency for Healthcare Research and Quality. 17

Collaboration among generalists is not obviously valued or easily achieved in the current academic organizational structure. The academic medical center rests on discipline-specific, departmental pillars. Each clinician and clinical researcher is a brick within that pillar and communicates primarily with the other faculty above and below. Rewards flow within separate hierarchies. Generalists rarely share clinical or office space, teaching assignments, or course work. Many generalist academic units fail to collaborate, even in such simple ways as joint grand rounds or other educational conferences. Medical school and residency accreditation bodies often have strict requirements about who can teach and where learners can train. These pose major barriers to collaboration in training sites.

The lack of cohesion across the generalist disciplines also reflects their different historical origins. Consider the different developmental paths of family medicine and general internal medicine. The specialty of family medicine arose in the 1960s, in large part to fulfill the generalist function in medicine, which was desired by the American people and had largely disappeared with the growth of specialization after World War II.¹⁸ In contrast, academic general internal medicine began to flourish in the 1970s within departments of medicine in response to federal grants for primary care education of internists and the increased availability of federal and foundation resources for health services research. 19,20 As each of the primary care disciplines emerged, their discipline-specific professional organizations invested considerable time and resources in establishing unique identities. The 3 academic generalist disciplines thus maintain largely separate professional organizations and research meetings, and there is no prominent generalist research journal to stimulate and support scholarly conversation or joint advocacy efforts. Identification with a specialty at the individual and institutional level has become deeply entrenched. The resulting isolated cultural silos may lead to territoriality and fears about loss of autonomy. Substantial though they may be, the barriers that divide the generalist disciplines grow out of tradition and habit rather than science or method. Faculty from all 3 disciplines employ similar approaches to diagnosis, treatment, and professional roles. These similarities pave the way for building cross-disciplinary bridges.

COLLABORATION: OPPORTUNITIES AND BENEFITS

Research

Generalist research can greatly benefit from interdisciplinary collaboration. Primary care research must invest in the human infrastructure of faculty and staff who are skilled in all components of generalist research: grant writing, survey design and administration, data management and analysis, human subjects issues, cultural competence, and information technology. 17 By combining resources and sharing expertise, interdisciplinary generalist research units will develop the critical mass of researchers and staff necessary to sustain meaningful research, funding, and intellectual synergy. Shared research space promotes formal and informal interactions that establish trust, facilitate identification of common research methods and themes, and generate new ideas. A shared infrastructure for developing and managing research projects also enhances funders' confidence in principal investigators' success. Practicebased research networks are an example of research

infrastructure that benefits from including all generalist disciplines.

An example of effective collaboration is the Robert Wood Johnson Generalist Physician Faculty Scholars Program.²¹ This collaborative effort trains faculty from family medicine, general pediatrics, and general internal medicine to become generalist researchers and leaders. The advisory committee is composed of diverse generalist faculty. It is not uncommon for fellows to be mentored successfully by advisors from disciplines other than their own. One essential component of the success of this program is its collaborative nature. The fellows benefit from the depth of expertise and guidance of some of the best generalist scholars in the nation. This program demonstrates how generalist researchers can successfully collaborate to meet common goals that benefit each discipline.

Education

Fostering collaboration among the generalist disciplines in education requires developing innovative interdisciplinary medical student and resident training models. Collaborative efforts among the generalist disciplines will facilitate teaching the Accreditation Council for Graduate Medical Education competencies, which are required across generalist residency training programs. Accreditation bodies should address accreditation regulations and residency financing structures that are barriers to educational collaboration. Why duplicate the same physical examination, basic hypertension, or diabetes lectures for medicine and family medicine when they could be co-taught? Why can't pediatrics and family medicine jointly teach on children's health issues? Creation of joint appointments for generalist faculty, collaborative generalist clerkships, and fourthyear medical student electives (such as the interdisciplinary community-oriented primary care elective at the University of California, Irvine), integrated primary care student interest groups, and the University of Washington model of primary care faculty serving in shared leadership roles are other potential approaches to collaboration in medical education. There are several medical schools that have successfully competed for interdisciplinary predoctoral and residency education HRSA grants, thus benefiting students and residents in multiple generalist training experiences.

Clinical Care

Academic clinical practices offer another ideal opportunity for cooperation. Clinical collaboration, which is increasingly common, especially in the community health center setting, may allow academic generalist divisions and departments to compete more effectively with local medical groups, expand their pool of clini-

cian-educators, and elevate the stature of primary care within the academic setting.⁶ To facilitate the success of collaborative clinical practices, generalist professional societies should provide guidance on such issues as budgeting, demonstrating benefit to medical schools and hospitals, and balancing competing demands for academic and clinical productivity. Several successful clinical programs mix various specialties. Geriatrics certifies physicians in both general internal medicine and family medicine. 22,23 Sports medicine may include family medicine, general pediatrics, and general internal medicine. Co-location of family medicine, general internal medicine, general pediatrics faculty and resident clinics may provide important cross-disciplinary collaboration as faculty and trainees care for patients side-by-side. Such collaborative practice models may address concerns that primary care physicians are being expected to provide a scope of practice beyond their clinical expertise²⁴ and may more definitively justify the role of the generalist physician.²⁵ We practice much the way we are trained. Currently we train separately and we practice separately. Building model collaborative practices in academic institutions may help overcome many artificial divisions.

Advocacy

Academic generalists can benefit from working together to support and fund research, clinical care, and education. Generalist faculty across the 3 disciplines often have more in common with each other than they do with specialists within their own departments. For example, academic generalists face similar issues of limited space, time, and money. Rather than competing for resources, generalists can and should unite to achieve fair compensation for their efforts and to share successful approaches.

National organizations representing the 3 generalist disciplines have much to gain from uniting forces in advocacy. Numerous organizations have convened special panels to address the future of generalism and have made recommendations for change. These organizations would wield more political clout if they worked together. Legislators and congressional staffers may need education about the difference between a general internist and a family physician to prevent confusion when both groups claim to provide primary care to America. Generalist advocates should therefore join forces in lobbying efforts and in providing joint testimony before Congress.

There are successful advocacy initiatives that have shown how collaboration is both possible and powerful. For example, the Society of Primary Care Policy Fellows is a multidisciplinary community of scholars who are committed to affecting primary care policy, education, research, and service at local, state, national, and international levels.²⁷ Members of this organization have succeeded in fostering legislative and governmental relationships to advocate for the needs of primary care. They have established quarterly forums on Capitol Hill that allow policy makers, health care clinicians, and consumers to engage in dialogue on primary care topics.

RECOMMENDATIONS

Collaboration is a series of purposeful decisions driven by the common mission of excellent, accessible patient care. Academic generalist collaboration is a deliberative process that requires time, open and frank communication, and a commitment to the belief that collaborating is better than standing alone; acting on its patientdriven mission can lead to effective communication, mutual respect, trust, and an appreciation of the role and contributions of others.²⁸ Existing models of successful collaboration among the primary care disciplines, as a means of maximizing clout within academic medical centers, should be emulated. 10,17,29-35

Collaboration among the generalist disciplines should occur within and across academic institutions nationally. We suggest the following steps to achieving this important vision and goal.

- 1. Decide to collaborate. Make the conscious decision to collaborate with other primary care departments and divisions. Collaboration must be supported by departmental leadership, who may be subspecialists as well as generalists, and widely communicated to all members of departments and divisions.
- 2. Proactively discuss monetary issues. An open discussion of the equitable management of direct and indirect financial resources from grants, contracts, and clinical earnings lays the groundwork to develop principles of collaborative management. These agreements must be developed before they are needed so that faculty are not caught in the middle of financial debates while trying to produce or implement grants or programs.
- 3. Reward collaboration. Collaborative efforts should receive priority for funding and additional support in the form of salary, office space, staff support, and protected research and educational time. Academic institutions and funders should make it easier and more beneficial to collaborate than to work alone.
- 4. Initiate regular generalist meetings. Meeting regularly with other generalist faculty is a potent method for encouraging and supporting collaborative efforts, allowing individual faculty to solicit collaborators. An annual national cross-generalist research conference would encourage and support collaborative efforts and provide a forum for sharing knowledge and

resources. Combined continuing medical education and other educational and research conferences are small efforts that can lead to important face-to-face interaction amongst the generalist disciplines.

- 5. Prohibit denigration of the other generalist disciplines. Acceptance of the value and benefit of each generalist discipline is essential for successful collaboration. This acceptance must be modeled by leaders in each discipline through creation of a culture in which denigrating language and behavior toward other disciplines are unacceptable.
- 6. Facilitate strategic planning for collaboration among the generalist disciplines. Such strategic planning can be facilitated by annual think tanks that bring together academic leaders to develop and monitor a comprehensive strategic plan for promoting interdisciplinary generalist collaboration at the national, regional, and local levels. Academic generalists ought to unite to form either a "Society of Generalism" or an equivalent structure through which existing discipline-specific organizations can work together on advocacy. Working at the policy level for more flexibility in accreditation may improve opportunities for collaborative education.
- 7. Learn from previous collaborative successes and failures. We should learn from the experiences of those who have attempted cross-disciplinary collaboration. Successful collaboration will require avoiding previously identified pitfalls and building on promising avenues from previous and current efforts.

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References

- 1. Lurie N. Healthy people 2010: setting the nation's public health agenda. Acad Med. 2000;75:12-13.
- 2. Ferrer RL, Hambidge SJ, Maly RC. The essential role of generalists in health care systems. Ann Intern Med. 2005;142:691-699.
- 3. Larson EB, Grumbach K, Roberts KB. The future of generalism in medicine. Ann Intern Med. 2005;142:689-690
- 4. Fincher RM. The road less traveled—attracting students to primary care. N Engl J Med. 2004;351:630-632.
- 5. National Institutes of Health. NIH Roadmap. Available at: http:// nihroadmap.nih.gov. Accessed: 7 February 2005.

- Scherger JE, Rucker L, Morrison EH, Cygan RW, Hubbell FA. The primary care specialties working together: a model of success in an academic environment. Acad Med. 2000;75:693-698.
- 7. Whitcomb ME, Cohen JJ. The future of primary care medicine. N Engl J Med. 2004;351:710-712.
- Garibaldi RA, Popkave C, Bylsma W. Career plans for trainees in internal medicine residency programs. Acad Med. 2005;80:507-512
- Schatz IJ, Realini JP, Charney E. Family practice, internal medicine, and pediatrics as partners in the education of generalists. Acad Med. 1996;71:35-39.
- Inui TS. Stand and deliver—together. J Gen Intern Med. 1994;9 (Suppl 1):S1-S2.
- Donaldson MS, Yordy KD, Lohr KN, Vanselow NA, eds. Primary Care: America's Health in a New Era. Washington DC: National Academy Press; 1996.
- Institute of Medicine. Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press; 2001.
- Larson EB, Fihn SD, Kirk LM, et al. The future of general internal medicine. Report and recommendations from the Society of General Internal Medicine (SGIM) Task Force on the Domain of General Internal Medicine. J Gen Intern Med. 2004;19:69-77.
- 14. Schroeder SA. Primary care at a crossroads. Acad Med. 2002;77: 767-773.
- Health Resources and Services Administration. Fiscal Year 2004
 Application Guidance, Training in Primary Care Medicine and Dentistry. Available at: http://www.hrsa.gov/grants/preview/guidancebhpr/hrsa0401htm.
- Showstack J, Lurie N, Larson EB, Rothman AA, Hassmiller S. Primary care: the next renaissance. Ann Intern Med. 2003;138:268-272.
- 17. Steiner JF, Kempe A, Davidson AJ, et al. The case for interdepartmental research in primary care. Acad Med. 2004;79:617-622.
- Future of Family Medicine Project Leadership Committee. The future of family medicine: a collaborative project of the family medicine community. Ann Fam Med. 2004;2(Suppl 1):S3-S32.
- Huddle TS, Centor R, Heudebert GR. American internal medicine in the 21st century: can an Oslerian generalism survive? J Gen Intern Med. 2003:18:764-767.
- Moore G, Showstack J. Primary care medicine in crisis: toward reconstruction and renewal. Ann Intern Med. 2003;138:244-247.

- Robert Wood Johnson Foundation. Generalist physician faculty scholars program [Web site]. Available at: http://www.gpscholar.uthscsa.edu/gpscholar/FacultyScholars/index.html.
- Libow LS. Geriatrics in the United States—baby boomers' boon? N Engl J Med. 2005;352:750-752.
- 23. American Geriatrics Society Core Writing Group of the Task Force on the Future of Geriatric Medicine. Caring for older adults: the future of geriatric medicine. *J Am Geriatr* Soc. 2005;53:S245-S256.
- St Peter RF, Reed MC, Kemper P, Blumenthal D. Changes in the scope of care provided by primary care physicians. N Engl J Med. 1999;341:1980-1985.
- Showstack J, Rothman AA, Hassmiller S. Primary care at a crossroads. Ann Intern Med. 2003:138:242-243.
- The Future of Family Medicine Project. Available at: http://www. futurefamilymed.org/.
- Primary care society Web site. Available at: http://www.primarycaresociety.org/index.htm.
- Reynolds PP, Giardino A, Onady GM, Siegler EL. Collaboration in the preparation of the generalist physician. J Gen Intern Med. 1994; 9:S55-63.
- 29. Friedman RH, Alpert JJ, Green LA. Strengthening academic generalist departments and divisions. J Gen Intern Med. 1994;9:S90-98.
- Geyman JP. Training primary care physicians for the 21st century. Alternative scenarios for competitive vs generic approaches. JAMA. 1986;255:2631-2635.
- 31. Kahn N, Davis A, Wilson M, et al. The Interdisciplinary Generalist Curriculum (IGC) project: an overview of its experience and outcomes. *Acad Med.* 2001;76:S9-S12.
- 32. Kimball HR, Young PR. A statement on the generalist physician from the American Boards of Family Practice and Internal Medicine. *JAMA*. 1994:271:315-316
- 33. Kimball HR, Young PR. Educational resource sharing and collaborative training in family practice and internal medicine. A statement from the American Boards of Internal Medicine and Family Practice. *JAMA*. 1995;273:320-322.
- Noble J, Bithoney W, MacDonald P, et al. The core content of a generalist curriculum for general internal medicine, family practice, and pediatrics. J Gen Intern Med. 1994;9:S31-42.
- O'Dell D V, Sitorius MA. A new approach to training primary care physicians: a four-year combined internal medicine-family practice residency for seniors. Acad Med. 1992;67:88-89.