DE CHIRIGIS SENILIBUS ACADEMIAE *

B. EISEMAN, MD, FACS,

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* THE ELDER SURGEON'S ROLE IN ACADEMIA

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The Elder Surgeons' Roles in Academia

Drastic changes in the health care system during the past two decades have asserted tectonic pressure on academic medical programs which threaten our classic professionalism. To date we have failed to counter this challenge, hoping outdated techniques will remain effective in a new paradigm.

We suggest two techniques to maintain our heritage in the new health care environment. Both involve altered use of ageing practicing and retired clinicians.

We also review the potential advantages and techniques for using elderly Physicians as teachers in this environment.

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Background

Revolutionary changes in health care and the consequent required changes in its organization, administration and management during the past quarter of a century are too familiar to require extensive review for medical academicians. The economic, scientific, demographic, legal, industrial and political forces have grossly altered the medical teaching and research environment in the twenty-first century (1-6). These inexorable forces are certain to continue as the cost of health care escalates and the portion of government funds directed toward entitlements such as health care will decrease (7)

Medical Academicians have been slow to respond to this challenge, hoping that small changes in classic operational methods will continue to function in a drastically altered health care system.(8) The problem is being addressed by medical academicians and educators throughout the world. (9)

A Current Problem

We focus on the challenge to provide young academic surgeons with protected time to pursue their goals in teaching and research after completion of Resident training. Trained clinicians whose goals include leadership in academic medicine must add skills in teaching and productive research when they finish their residency training. Currently a significant number choose some form of group practice.

A Medical School or University appointment in the current market place becomes a competitor for their talents with little difference between the financial dynamics of Physicians working in a University Hospital and colleagues in private group practice similarly employed in community hospitals. In academic practice, the diminishing income from government sources has shifted the burden for supporting the University Hospitals and their teaching and research, to the income produced from patient care. Academic physicians' practice, not the government, has become the cash cow for academia. This has reversed the priorities for those selecting and supervising the academic clinical faculties. Hospital and Medical School administrators must assure the profit realized from patient care is adequate for proper organizational function. This translates into maximizing the time devoted by their paid employee clinicians to providing reimbursed patient care. This inevitably competes with time available for teaching and research. The halcyon days of the twentieth century when the Full Time Medical Faculty in a University system had sufficient time to pursue both a busy clinical practice and simultaneously run a research program are over. The shared challenge for the Hospital Administrators, the Academic Deans and the young academic clinical specialist is to provide protected time for the academicians to teach and to perform meaningful research while continuing a significant volume of patient care in the changed practice environment

SUGGESTED SOLUTIONS:

#1. A Two Track Clinical Faculty

We suggest two separate types of faculty be created in clinical specialties such as surgery. One will solely provide clinical care; the other in addition to clinical care will provide teaching and research.

The Clinical Track

The primary duties of those in the clinical track would be to practice expert clinical patient care. They would be answerable for their clinical performance to the Division and Department Chairmen of the Medical School. They would not be expected to perform research or formal teaching. The salary structure would be similar for those in the clinical and academic tracks and be competitive with groups in Community Hospitals. The full time University faculty, regardless of track, would limit their practice to the University Hospital and its affiliated institutions. All their patient related income would revert to the Hospital and Medical School.

The Academic Track

The Second Track of the University faculty would consist of those pursuing an academic career in a clinical specialty. In addition to

their clinical activities they would be expected to teach and perform meaningful research.

In its historic perspective this is a modification of the usual mid-twentieth century academic system but altered to function within the paradigm of the twenty first century. The twentieth century model evolved from the Flexner Report in 1909 which was based on the system in England and Germany where Full Time academicians practiced in teaching hospitals alongside colleagues in private practice.

In the latter half of the twentieth century the Full Time Faculty gradually replaced their colleagues in private practice in U.S. University Hospitals. Currently most University physician staffs are full time employees of either the Hospital or Medical School. Such conversion resulted from the need for the Hospital and Medical School to capture the income from patient care.

Paying for the Two Tier System

Adapting the two tier system into the current health care environment will require extra clinician's salary budget lines to protect time for teaching and research. If, for example, 25% of an academic faculty position is to be protected, then another full time salary must be made available for four clinicians in the academic track.

Consent from cost-conscious hospital and medical school administrators for such additional budget lines to be cost effective will require evidence that investing in teaching and research increases patient derived income. Fortunately, such evidence currently is available by example from several leading private health care clinics, hospital systems and health insurance organizations (10, 11).

These privately owned and financed institutions have a proven record for providing first rate clinical care, outstanding clinical research, good teaching and simultaneously turning a modest profit. They are becoming the role models for universities in attracting patients, performing solid clinical research, providing post graduate teaching, working responsibly with industry for clinically oriented research, and at the same time showing a solid financial bottom line.

Medical academia is currently emerging from a needlessly awkward love-hate relationship with the biotechnology industry on which we both depend. Predictably, a more mature system will develop because the two parties have mutually potential benefits.

Review of Productivity

Academically inclined beneficiaries of protected time for teaching and research must be kept accountable for productivity by continued review. If performance lags, the culprit should be dropped from the academic track. As was advised many years ago by a famous French

consultant to the British Admiralty, "Every now and then it is necessary to hang an Admiral *"pour encourager les autres"*

SECOND SUGGESTION

More effective use of Part Time and Retired Faculty

Medical research in the U.S.has become dangerously dependent on government support which will predictably decrease. Every source of talent must therefore be reexamined for its potential usefulness. We suggest the talent pool of ageing and elderly clinicians be reviewed as potential contributors to improving cost effective teaching.

Clinicians typically start retirement plans soon after their 60th birthdays. Early retirement is becoming more frequent due to diminishing satisfaction with the administrative, financial and industrialization of clinical practice. Academic part time practice then becomes an option and leaders in medical academia should be prepared to discuss such possibilities with those who show interest.

Options for use of Part Time Clinicians

Although non-reimbursed (pro bono) provision of health care of the indigents was the norm for many physicians until the mid twentieth century, this worthy tradition no longer is realistic. When all but universal reimbursement for health care is available, it is

unrealistic for a practicing physician to provide such service without compensation when the fee goes elsewhere. Therefore any part time appointment for clinical care in a University system will require some form of salary reimbursement. Such part time clinical practice is particularly appealing to those with competing family responsibilities or to those wishing gradually to decrease the demands of practice prior to retirement. Such use is familiar in the Veterans Administration and many Municipal Hospitals with University affiliations. Such experienced clinicians create a potential source of talent for academia as other financial support decreases.

Pro Bono Involvement

There are numerous opportunities for clinicians to voluntarily contribute to an academic medical program. Their motives are mixed. Some will recognize their historic heritage and sense of professionalism as Physicians. They should be cherished like an inherited wrist watch. Others may contemplate part time employment as a step toward gradual retirement. Others want professional experience in Third World Countries and recognize the advantages of doing so through programs which exist in many Medical Schools as a part of their International activities. Regardless of motives, the academic Department Chairmen should be prepared to offer the inquiring clinician a shopping list of opportunities.

Common areas of ongoing pro bono involvement include the following:

Medical School Admission Committees,

Selection Committees for Interns, Residents or Fellows,

Post Graduate Education and Training Programs,

Scholarship Committees

International Relation programs

Community Hospital Liaison Committee.

Financial Development Committee

Surgical Simulation Center

Senior Advisory Committee

Medical Department Chairmen should consider the advantages of a Senior Advisory Committee consisting of elderly, wise and powerful friends from the community. Members need not have an official attachment with the Medical School or University and they need not all be Physicians. Used with discretion, such an arm's length group of distinguished community advisors may solve administrative and political problems which seem insoluble within the academic hierarchy.

Consultation

A trusted senior Physician may be helpful as an informal personal advisor to the Department or Division Chairman. At best they provide another wise unavailable historic perspective on a

controversial problem. Like look outs on a ship stationed in the Crow's Nest high above the deck, the horizons of the elderly advisors extend far beyond the bow lookout whose vision for rocks, shoals or floating objects is limited to only see a few hundred meters dead ahead.

Community Relations

Academic physicians, secured by police within its University Hospital gated walls, in towers requiring secret codes for admission and in hallways and offices open only by those with secret electronic wands or codes, communicate largely among themselves, and then usually by email. They have become increasingly isolated even from their professional colleagues in nearby community hospitals whom they consider only as competitors in practice. But the most immediately destructive communication breakdown is between the clinical specialties and their academic colleagues in the basic sciences. All that is lacking in the present isolated environment is a moat and a drawbridge.

Such a "silo mentality" invites professional mediocrity not by a dramatic security break but by gradual intellectual decay.

Such system failures are often more apparent to outsiders such as elderly professional friends whose intentions are beyond reproach and who have the courage and friendship to speak up with those who have the power to institute change.(12)

Fund Raising

Elderly alumni are familiar targets for those who run medical institutional development programs. The benefits are evident by endowed Medical School Chairs or even entire Medical Campuses bearing the name of an elderly alumnus or grateful patient. If, for no other reason, this is ample excuse for tolerating some of the Oldest Old within the Academic Department family

Value of the Oldest Old

Following retirement most professionals go through a symptomatic period of withdrawal. One therapeutic option for them is limited practice in a teaching program. If, however, retirement is due to declining manual skills all parties are better served if the ageing physician, who happens to be a Surgeon, stops operating. The tragedy of continuing is too familiar to require detailed discussion. The analogy holds for non-operating specialists where cognitive skills have significantly declined.

Teaching

A few elderly physicians continue to have potentially helpful roles as teachers. They have two unchallenged attributes: They have extensive clinical experience, and they have demonstrated prolonged survival. Other helpful attributes include a reasonably accurate recall of past events, they were critical of their own errors and triumphs during their practice years, and they can communicate with students.

Most old people dwell in the past and overestimate the glories of the Good Old Days when everything seems to look good to those in their teens and twenties. If, in maturity, they fail to come to peace with themselves they frequently find fault with the world around them. Still later in life when they qualify for the Oldest Old and are witnessing their own multi organ dysfunction and co morbidities, such pessimism often leads to depression. These unfortunate people deserve respect but make poor role models or teachers.

Before participating in a teaching program, the elderly clinician and his/her Chairman should reach agreement on their mutual expectations. The would-be teacher should realize to remain relevant in modern medicine requires constant self education. Today's students armed with laptops, Blackberries and iPods have enormous amounts of data immediately available to them in their hip pockets. An outdated clinician is well advised to avoid trying to provide today's medical students or Residents with data such as outcome expectancies, or modern laboratory techniques. A few elderly teachers seeking an excuse for their pronouncements take refuge by depending on historic references on any or all thorny problems. These prove to be weak intellectual crutches which may occasionally raise temporary interest but should not be over used with young people who want to learn more about the future than the past.

This creates a challenge for the elderly teacher: What remains relevant for him to teach students crammed with a terrifying mass of

unconnected data? The answer is for the elderly teacher to rely on his own strengths and the students' weaknesses: Like any good sports coach, to make the opponent play his own game, not to be trapped into playing to the strengths of the students. This translates into how best to select and organize the available data concerning a sick patient into a form leading to a diagnosis and to a logical method for treatment. This requires combining the science of medicine with the art of its clinical application

The usual method for achieving such an objective involves a case presentation, following which the teacher demonstrates how to select pertinent clinical and laboratory evidence to make a diagnosis; how then to intelligently sequence confirmatory laboratory studies; and finally to arrive at a logical management option.

Such teaching aims to create a helpful thought process in the students mind. In modern technical terms, it hard wires his cerebral computer. This lofty objective for the oldest old teacher differs significantly from the classic image of a medical instructor who provides a list of facts to be memorized in order to pass a certifying examination. The game book for the elderly clinical teacher thus differs significantly from his younger colleagues. Properly performed, the combination of science and art properly presented by the elderly teacher introduces the student into a life time of enjoying clinical practice.

Conferences and Rounds

Once the elderly teacher finds his niche in teaching he should identify the key conferences, rounds and individual teaching sessions and make a point of reliable participation. Recently retired clinicians often show initial enthusiasm but within a few months find competing enticements and fail to appear. Those who stay the course soon become unofficial members of the intellectual family of students and academicians. The retired clinician frequently has the enormous advantage of availability. The door to his office should remain open as long as the fire warden and security forces allow.

The Oldest Old clinical teacher often finds a unique role in the Mortality and Morbidity Conference where unfortunate clinical outcomes are reviewed. Young clinicians, who present the story, usually, identify a technical management error or failure to get or interpret a certain laboratory test. Middle aged clinicians frequently assign fault in decision making. The Oldest Old, with the benefit of historical perspective, may question whether the error resulted from use of an incompatible, outmoded method in a new operational environment. Sometimes an outsider can suspect a system mismatch sooner than others.

Mentoring

The classic role of an elderly medical faculty person is as a mentor to students, residents or faculty members. Frequently this involves advice concerning career strategies where the student's needs and the elder statesman's qualifications are well matched. The current training and certifying system for physicians is shamefully wasteful of the most intellectually productive years of life. Each new sub-specialty compounds the problem. Experienced mentors with widespread experience and contacts can often provide personal advice and open communication for the student with friends in high level national or international positions in the specialty.

Disciplined medical students and house staff, properly accustomed to working through the chain of command, are often dumbfounded as to how easy it is for an established medical elder statesman to lift up the phone from its cradle (not from his vest pocket) and call an old friend elsewhere in the world and ask help in advancing the career of a worthy protégé. Such powerful networking contacts do not appear on organizational charts.

Mentoring requires two way communication in which both parties identify with each other in what obviously resembles a maternal or paternal relationship.

The Mentor serves as a role model, an advisor, and facilitator. The aging Mentor subconsciously identifies with the young aspiring student and as a thinly veiled technique for achieving immortality. Mentors for the remainder of their lives vicariously enjoy the

triumphs of their protégés who at best feel their mentor continues to be looking over their shoulders.

Summary

Forces changing modern health care threaten the traditional professionalism of academic medicine.

This challenge must be met by altering methods for training students and residents both for clinical practice and for the few who will become leaders in teaching and research within the demanding changes of a new health care system.

We suggest two methods for such change. The first creates a two-tier Residency system to protect time for teaching and research for Faculty with academic aspirations. The Second suggests more effective use of ageing clinicians who might significantly contribute to an academic program.

The potential roles for use of oldest old Physicians within the modern academic medical paradigm are discussed.

References

1. Eberstadt N. The demographic Future. What Population Growth And Decline Means for the Global Economy. Foreign Affairs 89; 210: 54-64
2. Carey RM. Academic Medicine Meets Managed

Care: A High-impact Collision. Academic Med 1996 Aug; 71(8): 839-45
3. 4.Gallin J, HL Smits. Managing the Interface between Medical Schools, Hospitals and Clinical Research. JAMA 1997; Feb 26,277(18):651-4
4. Aryian S. Restructuring Academic Departments of Surgery at University Medical Centers. Am J Surg 1997; 173:351-357
5. Santilli SM. Current Issues Facing Academic Surgery Departments: Stakeholders' Views. Academic Medicine 83; 1 Jan 2008:66-73
6. Ball, CG, F Sutherland AW Klrkpatrick ET al. Dramatic Innovations in Modern Surgical Subspecialties, J Can Chir 63, 5; October 2010
7. Mandelbaum M. The Frugal Superpower; America's Global Leadership in a Cash-Strapped Era. Public Affairs 2010
8. Bader B. Time for a New Model for Hospital Physician Collaboration. Great Boards. www.GreatBoards.org Aug

2002; 3:1-3

9. Wijnen-Meijer M, OTJ Cate, M Vd Schaaf, JCC Bordette. Vertical Integration in Medical School: Effect on the Transition to Postgraduate Training Medical Education 2010: 44 272-279

10. J Clough (Editor) 4 Th Edition. To Act as Unit. Chapters 14, 20 http//www.clevelandclinic.org/act/

11. G. Steele. Re-engineering Systems of Care: Surgical Leadership. Ann. Surg 210, 1, 1-5

12. DH Meadows Thinking in Systems. A Primer. 2008 Chelsea Green Press