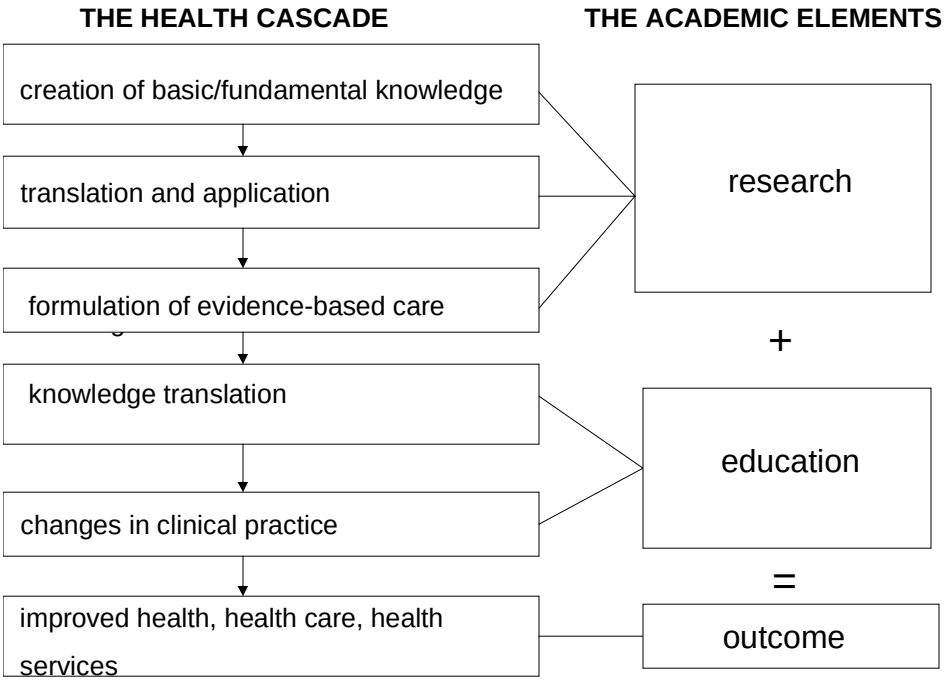
THE BMJ CAMPAIGN TO PROMOTE ACADEMIC MEDICINE

What Are the Problems with Academic Medicine?

The challenges faced by academic medicine are complex, involving motivational, structural, and economic elements. Furthermore, the challenges differ between developed and developing countries; and even among developed countries, because of major differences in the environmental and value systems within which academic medicine functions, in mechanisms for support of universities and of the academic research enterprise, and in health care delivery systems. Therefore, there is no simple answer to the question "What are the problems with academic medicine?" However, several issues can be identified that, to a greater or lesser extent, challenge academic medicine in the 21st century in most developed, if not developing, countries.

In broad terms, the health cascade can be considered as a continuum from the creation of new knowledge (whether from basic scientific experimentation, clinical observation, or epidemiological investigation) to improvements in health, health care, and health services (see Figure). Each step in the health cascade is ultimately dependent on parallel academic elements that can be grouped under the headings of research and education. The challenges faced by academic medicine in the 21st century, although complex, can be classified under these two headings, recognizing that several of the challenges span both elements. The following list is representative of these challenges, but is not intended to be exhaustive.



a) Research Challenges

- Governments and societies need to be re-educated on the fundamental importance of academic medicine and the critical role played by research in improving health, health care, and health services. While governments are understandably preoccupied with the crushing costs and inequitable distribution of health care services, they need to be reminded that a major health care problem facing society is that for many diseases, science and medicine still have no answers, and that if answers are to be found, it will be through research.

- There is a widespread failure of many health care delivery systems, governments, the media, community physicians, and other health care workers to appreciate that many important advances in clinical medicine have their origins in basic scientific research, that at the time it was performed was completely unrelated to the later clinical advance to which it contributed.

- Conversely, research funding agencies and members of the basic science research community often fail to appreciate that many advances in clinical medicine do not begin with advances in basic scientific knowledge, but rather with clinical, epidemiological, and behavioural research.

- There are insufficient human and financial resources at the interface between basic science and its clinical application – in the domain known as "translational" research. This deficiency reflects the fact that the last decades of the 20th century were the era of "genomics" (i.e. molecular genetics) on the one hand, and "evidence-based" medicine (i.e. clinical epidemiology and health outcomes research) on the other; and that these two powerful forces drove the career choices of a generation of clinical investigators.

- Furthermore, as a result of the increased sophistication and specialization of both basic and clinical research, the gulf between the two domains has widened; and, given the relative paucity of translational investigators and clinicians who are fluent in both languages, the gap between advances in basic science and clinical innovation and application has also widened.

- There are obstacles to the training and recruitment of physician-scientists (and investigators in all health care disciplines) because of a lengthening of clinical training programs, the need for intensive and prolonged research training in order to be competitive in today's research funding environment, the resulting financial debt that accumulates during the training period, and the differences (real or perceived) in financial compensation and life style offered by private community practice.

b) Educational Challenges

- Medical school admissions committees are often so influenced by the pressure to produce more family, community, and primary care physicians, and by the need to ensure the admission of appropriate numbers of under-represented minorities (both laudable goals), that they may neglect (or even consciously resist) the admission of applicants who express a strong interest in science and academic medicine.

- Most medical education curricula and postgraduate training programs have failed to keep pace with the burgeoning science and complexity of medicine (basic and clinical), technological advances in health care, shifts in health care delivery from the in-patient to ambulatory setting, and advances in information technology and learning innovation.

- Health care is increasingly delivered by multidisciplinary teams of health care workers; but, for the most part, the education of health care workers, including physicians, is still delivered in separate silos (medicine, nursing, etc) that do not reflect the integrated nature of health care delivery.

- In many medical schools, there is not a coherent career pathway for clinical faculty members who are involved in teaching and creative professional activities, resulting in lack of recognition, academic promotion, and financial remuneration.

- There is a need for better understanding of the knowledge translation process and of the best approaches to continuing education and to changing physician practices and behaviour.

What Should be the Aims of the Campaign?

In broad terms, the aims of the campaign should be:

- to systematically identify the challenges faced by academic medicine in the context of the changing environment in which it functions, including the explosion of knowledge in the basic sciences, changes in health care delivery systems, and the impact of globalization.

- to develop strategies to address these challenges

What Might the Campaign Do?

Among several possible activities, the campaign might:

- engage the active participation of a broad range of experts on an international level.

- solicit financial support for its work from research agencies, educational institutions, the health care professions, private foundations, philanthropic sources, and governments.

- using Internet technology, facilitate the broadest possible discussion of the challenges facing academic medicine and the possible solutions to these challenges.

- develop innovative models of research and education that reflect the changing health care environment in most countries.

- disseminate its findings widely to the general and academic health communities, the medical and other health care professions, governments, and society.

My Attributes for the Role

- extensive experience in academic medicine and in leadership positions, including 32 years of continuous research funding from the Medical Research Council of Canada and the Canadian Institutes of Health Research; 10 years as Physician-in-Chief (Head of the Department of Medicine) of a major teaching hospital (Mount Sinai Hospital, Toronto); and

11 years as Chair of the Department of Medicine of the University of Toronto, one of the largest such departments in North America.

- record of innovation in creation of faculty development programs, including a clinician-scientist training program, clinician-educator training program, and master-teacher program.

- extensive record of faculty recruitment as Department Chair (over 225 new full-time faculty members during the past 10 years).

- innovative approach to faculty career advancement, including academic promotion on the basis of excellence in teaching and in creative professional activity, in addition to the traditional route to promotion through research accomplishment.

- have thought deeply about many of the challenges facing academic medicine, and have developed strategies to address several of them (see attached articles).

- ability to communicate ideas (see attached articles).

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