

Growth and Scale of Health Economics Organizations

Growth:

How many health economists are there in total? When the first professional meetings were started in the 1970s there were perhaps 25 in the UK and 25 in the USA. Twenty-five years later there were probably ten times as many in the UK and fifty times as many in the USA. A rough estimate can be made by considering the "HE:Pop" ratio. In the UK there were by the year 2000 more than 200 members of HESG, 250+ in the French CES, over 300 in the Nordic group, 1000 members of the American Economic Association self-designating themselves category "I" (health), about 150 in the Canadian Health Economics Association, and 100 in the Australian group. Averaging across groups, that indicates a ratio of health economists:population of about 5 per million. That ratio is probably a reasonable baseline for the developed countries today. The developing countries a rather less---between 1 to just ¼ per million population. The recent meeting of the African health economics group suggests a significantly lower ratio among the poorer countries, about 1 per 10 million.

The quantity of health economics research and number of health economists at any given point in time is hard to pin down precisely, but has clearly been growing substantially over recent decades. Such rapid expansion has put great demands on the existing meetings and system of peer-review. Most health economists do research for which critical comments are required both to improve the research and polish for final publication, and also to establish professional credentials used in informal and formal (e.g., promotion) rankings. Some health economists may produce a dozen independent pieces of research in a single year, while others may produce that many (or less) in a career. How many "presentations" at health economics meetings are required each year to meet the needs for peer-review and professional advancement? Probably something between 1 and 10 per health economist per year. Some of these will come at their home university, or at a seminar nearby, while others will be in the larger regional, national and international meetings. As a solitary researcher, or as part of a research group containing perhaps a dozen academics from different fields, one is rarely aware of how many thousands of other health economists are seeking the same scarce resource - quality review, assessment and understanding by peers.

What do these ratios imply regarding the total number of health economists seeking to present their research at professional meetings? The OECD countries that have been the traditional source of the bulk of iHEA attendance have a population of about 1.5 billion, suggesting a current total of 7500 health economists from that group. This seems in line with an informal review done by iHEA a few years ago when it was estimated that its membership of 2,800 contained about one of every three health economists. Holding to those ratios, this implies that health economists worldwide produce over 10,000 articles each year, would like to make about 30,000 presentations at meetings (ranging from university seminars to international congresses). The big growth spurt in the UK (from 25 to 250) and in the USA (25 to 1250) from 1975-2000 will not be repeated in the next twenty-five years, but the numbers in the middle-income and developing countries will expand considerably as they rise toward the 5:million ratio. It would be surprising if, given current trends, the volume of health economics research did not double well before 2025.

Scale

Health Economics "meetings" vary from local university seminars where one person presents a single paper with perhaps a dozen health economists and others making comments, to an international congress where hundreds of papers are presented with over a thousand health economists in attendance. The classic example of peer review was once the "royal society" but is now more commonly a "seminar" or "workshop," a small group meeting regularly to critically review just one (or perhaps a few) pieces of research at each meeting. The format varies, but it is usual to devote 1 to 2 hours to the presentation and discussion of a piece of research in

progress. There is a social networking element at such a small meeting, but it is limited. A regional group (e.g., London, Boston, Midwestern Pharmacoeconomists) has a larger networking component, and proportionately less time devoted to presentation and discussion. By the time the scale approaches that of a major national meeting in the US or a Continental meeting in Europe or Latin America, the opportunity for academic presentation is limited, critical commentary is mostly provided outside the formal program (i.e., discussions in the hall or over lunch), and networking benefits outweigh the feedback on one's own paper. Many national meetings (AEA, MLA, APHA) also act as "job fairs" for a significant number of participants, a rite of passage from student status to member of the profession.

While the purpose of a "meeting" has some constancies across the span from university to global, it is quite different at the two ends. Meetings do not simply "scale up," with seminars being piled on top of each other to make a local meeting, and piled higher to make a national one. The use of time and goals differ as one moves along the span university - regional - national - global.

Emergence of Health Economics as an Interdisciplinary Field

Health economics split off from economics and medicine as a specific interdisciplinary sub-field as the quantity of research and number of scholars in the field increased and strong specialized programs (York, Harvard, etc.) developed during the 1960s. The nascent professional organizations (HESG, HERO) began to form in the 1970s. These in turn grew and subdivided as the quantity of Health Economics grew - thus HESG helped give rise to the Scandinavian (NHESG) and Australian (AES) groups, and a sub-sub-disciplinary group on health econometrics. In the 1980s occasional publications were replaced by recognized academic economics journals (JHE, HE). National associations grew up in many other countries over the decades, the number of journals multiplied, and regional and continental groups began to form. The first "global" event was arguably the Zurich meeting of 1990 with about 400 attendees (earlier conference in Tokyo and Leiden were more like international seminars having a small group by invitation). Some might have questioned the existence of "health economics" as a distinct specialty in 1965, but by the turn of the century academic and professional structures for health economics were well established, and the questions were more likely to revolve around whether certain sub-specializations were large or distinct enough that they in turn should be separated out (pharmacoeconomics, health econometrics, quality of life measurement, etc.).

Scope

Some purposes are most effectively accomplished at a global level that includes all (or some fraction) of the recognized members of academic profession. Others are much more effectively accomplished at a national, regional or local level. It is likely that the most significant source of peer input will always occur at the most local level, from one's own colleagues or a group of colleagues at another university where one has been invited (or invited oneself) to present. The job of a thesis advisor cannot be done by a roomful of attendees at a national meeting (half of whom are more worried about how their research will be received than providing good comments on your student's research). It is not helpful to send an unprepared PhD candidate to give their first talk at a major national or international meeting. Those venues serve many purposes for PhD students -but not that of making the first research presentation. Job talks and employment "screening" are usefully done at national meetings, but with the clear expectation of local follow-up. International meetings are rather less useful in this regard, except perhaps for that small group that intends to work for international agencies. Since most health systems and most jobs are national in scope, what then is the purpose of having an international World Congress?

The science of health economics, if not the practice, is global in scope. Measurements of cost effectiveness, genomics and econometrics are not bounded by national borders, even if quality-of-life, utility trade-offs, political regimes, laws, social values and institutional features are quite country-specific. Assessment of a national health system inherently involves comparisons across countries, and technical assessment of dosage and cost per therapeutic

increment of a drug may be quite independent of nationality. The broadest network is, like the Internet, global, and a data archive or list of experts can now be most effectively maintained at a global scale. To search for cost-effectiveness of tamoxifen or the substitution of physical therapists for MDs it should be possible to search one unified database, and to get the best thinking on the theory and construction of risk-adjustment or insurance contracting it is advisable to look beyond a single country. Some professional societies are effectively global or international while not being explicitly so labeled. Most economists, physicists, mathematicians, biologists, chemists and medical doctors belong to “American” or “European” or sub-discipline societies rather than a designated “Global” or “International” association. However, these societies are similar in serving the purpose of the profession worldwide rather than just locally. They maintain the journals, blogs, professional awards, accreditation programs, curricular standards and other implements of scholarly identity that academics from almost every country aspires to participate in.

Size and Purpose of the iHEA World Congress

iHEA is not intended to, and should not, replicate the Swiss or European or Asian health economics society, and its meetings should conform to the distinctive purpose of a global society. There are constraints on both the size and objectives of an iHEA World Congress. You would not invite a researcher to come thousands of kilometers to attend a local university seminar and put up a poster, nor should you expect your MSc or PhD student to make their first presentation at a major international conference and get an hour of engaged but gentle feedback from a tolerant audience. A global meeting gathers researchers from many lands across many specialized topics, providing snippets and snapshots, a selection of the best and access to the rest—the full range and scope of health economics research being done worldwide (some 20,000 papers per year). It provides a linking point and gateway to participation at diverse local seminars—a place to meet or learn about the three or thirty or 300 other people who share a particular interest and would like to have you come to present your current research, or join a specialized interest group symposium in Boston, Bali or Brussels.

There are trade-offs with regard to the size of the association and the size of the meeting that fortunately have been greatly eased by the expansion of email, the internet and accessible archives such as SSRN. The HEN database can contain every working paper by health economists in a multitude of countries and provide linkage through a common portal. While listening to twenty presentations can be overwhelming, searching through 20,000 can be done from a university office in a few seconds. Face-to-face interaction is necessary, but inevitably scarce and limited (nb: it is for this reason that iHEA has since 1996 included lunches and dinners as an integral part of the conference registration—otherwise the mixing that makes for internationalism tends to get lost—lunch and dinner are far more conducive to social interaction than sitting in a lecture room with eighty other filled seats). As a meeting expands beyond a significant size it becomes harder and harder to meet up with colleagues, and to have those chance encounters with unknown colleagues that lead to significant future engagement. An agglomeration of 10,000 tends to be more like a crowd than a meeting. Well before that, a world congress may begin to fragment and become less effective as a gateway to collegial interaction and debate.

Optimal Size and Scheduling of Meetings

University departmental seminars typically present a single paper, with a schedule varying from three or four per year to three or four per week. Once per year is clearly not enough to maintain departmental momentum and about once per week is modal, and seems close to optimal (around 15 to 30 per year given academic breaks and the need to attend other meetings). Size varies from a half-dozen to several dozen participants. Anything much outside of this range seems not to work as well.

Most national groups meet once per year, with a few meeting biannually (HESG) or biennially (ASHEcon). Looking at related scientific societies, it appears that some exceed the

size for effective participation (APHA, AEA), and that there is a critical size at which sub-divisions begin to split off and claim the primary allegiance of members. Comments received after the 2005 Barcelona World Congress suggest that iHEA members were quite comfortable with having a thousand or 1500 participants, but that many more could compromise the spirit of the meeting and make networking less rather than more effective. Also, anything above this size makes a plenary meeting for all participants difficult logistically (there are very few venues for 10,000 in most cities, and anything that size is usually not intimate enough to encourage colleagues to hang around afterward for a chat). Some questions to ponder regarding the scheduling of iHEA World Congress might be:

- 1) How large a number of presentations/delegates can iHEA hold and still function collegially?
- 2) How often should iHEA have a World Congress to stay within that constraint?
- 3) How often should a World Congress meet to facilitate the activities that are ancillary to and yet also vital for effective science and professional standards globally? (e.g., National Health Accounts Symposia, working groups on technical methods, organization of standards for distribution of working papers, sub-disciplinary meetings on special subject such as addictions, palliative care, private insurance, etc.).

Draft: 10 February 2010, Thomas E. Getzen, iHEA and Temple University

Notes: History and Growth of Health Economics Organizations:

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There are relatively few publicly available documents tracing the development of health economics as a field. While there are discussions of a "division of health economics," "working group," "research program," "department" or "journal series" going back more than 100 years, there does not appear to be any organizational continuity dating back before 1960. Listed below are a selection of documents that have been identified dealing with developments since then.

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