LEADERSHIP IN INTERNATIONAL HEALTH DEVELOPMENT:
A PERSPECTIVE

Stephen Tollman, March 1997

These notes aim to stimulate discussion on the dimensions of leadership in international health, review past experiences and provoke debate on future possibilities. In addition, to examine relevant issues in the fast-changing medical and public health education spheres. They are not presented as a comprehensive account and readers should feel free to identify important gaps or contest points of interpretation.

Prefatory note: International Health

"International health" has tended, inappropriately, to be a term applied primarily to health development in poor countries (more recently, "low and middle income" and the countries of eastern europe). No geographical distinction is implied in its usage here; the presumption is that collaborations and flows of knowledge and expertise can be in all directions (1). Further, that international leadership incorporates important national as well as global roles.

LEADERSHIP ADDRESSED

What is leadership ?

Much has been written attempting to define or describe the qualities necessary to demonstrate "leadership" (see Neufeld 1995 (2) for a discussion and annotated bibliography). Most acknowledge a complex interplay of tangible and less definable qualities. While a judicious mix of technical, organisational, communication and social understanding is necessary, so too are individual qualities of generating and sharing vision; interpreting reality and articulating long-term goals; and a strategic understanding of place and context, informed by positive values. Qualities of perseverance and determination, patience and tolerance, the ability to motivate: all figure in successful examples of leadership be this at community or institutional level.(3,4).

Recently, business analysts such as Charles Handy, contrasting public and private organisations, and drawing on academic and NGO experience, emphasise the change in organisations -- away from rule-based often hierarchical entities to streamlined, "flattened", task-oriented and mission-driven structures (5). They stress the need to carefully constitute and develop "leadership teams", and give increasing weight to team leaders' abilities to negotiate, balance and resolve competing ideas or interests. Similarly, their ability to "empower" and "potentiate" the skills and capacities of team members thereby augmenting both individual and team capabilities.

In support of this a new terminology is emerging that seeks to describe leadership qualities better attuned to today: emphasis on transformational rather than transactional leadership; the concepts of "stewardship" and "learning organisations"; the need for integrative, systems thinking; and the idea of "leaning"[1] into the future. A consistent strand is the moral dimension which stresses a leader's underlying ethics and values, coupled with the importance of "self-knowledge".

Leadership: a mix of qualities

This note proposes that health leadership entails a mix of qualities, capabilities and competencies. These are:-

1. Content-based, implying a credible (sometimes excellent) grasp of disciplinary areas, policy and practice, and their inter-connections;

[1] leading and learning (6)

2. Context-based, involving a highly tuned sensitivity to prevailing political and social reality, coupled with grasp of the role, "room to manouvre" and opportunities open to institutions big and small, formal and informal;
3. Value-based, recognising the importance of dominant social, political, cultural and moral values, yet appreciating that the values of justice and fairness (with a gender dimension) are the normative principles that underly much of public health discourse[2];
4. Based on heightened abilities and sensitivities, for example superior communication skills, ability to sense opportunity, confidence and insight to take the calculated risk, inspirational to others, a team builder.

Although these qualities are positively expressed, leadership is not always "considerate and kind". Some situations depend on driven, highly energetic individuals with strong beliefs, thick skins and even an element of ruthlessness.

Who exercises it ?

Leadership can be exercised from various positions, although selection of senior institutional leaders tends to be the outcome of a dynamic interplay between circumstances and personal qualities. More generally, leadership can be demonstrated in a variety of ways and circumstances by those formally acknowledged as leaders, holding leadership positions, or displaying exceptional intellectual or practical insight at a critical time. A simple typography might include:-

* those currently in leadership positions, specifically institutional leaders of academic health centres and public health schools, university and free-standing research institutes, government departments, national or provincial health ministries, international organisations, private foundations, trade unions and non-governmental organisations (NGOs);
* leaders of community groups and other groupings from civil society;
* promising, usually younger, members of such institutions and groups;
* unusual or unique individuals with the capacity to inject "new ways of seeing".
* teams with a leadership track record (usually including such leaders as noted above).

How to judge it ?

Leadership is sometimes sought after, usually contested, and not always recognised. In essence it must make a difference. This generally involves changing set ways of doing or thinking, or making the right things happen. Able leaders often have an acute ability to articulate the problem and identify the skills and resources necessary to address it. What makes for effective leadership, and how to judge this, is critical.

DEFINING THE LEADERSHIP CHALLENGE

A number of contemporary analyses present assessments, forecasts and interpretations of the principal health challenges confronting the world community in the early years of the 21st Century. These are not dwelt on in depth here.

Among the most recent are: the Commission on Health Research for Development's "ENHR: Essential link to equity in development" (1990)(9); the World Bank's "World Development Report 1993: Investing in health"(10) and "Better Health in Africa" (1994)(11); and WHO's "Investing in Health Research and Development" (1996)(12). To these can be added such compilations as "Health and Social Change in International Perspective" (eds Chen, Kleinman, Ware)(13); the 1995 special issue of the

[2] recently reaffirmed by diverse sources such as Abeykoon and Mattock (7) discussing medical education in SE Asia, and David Satcher speaking of the lessons learned by CDC over the past half century (8).

Journal of International Development titled "Health Policies in Developing Countries" (eds Zwi and Mills, 1995)(14); and the special issue on international health policy of the Journal of Health Policy (ed Berman 1995)(15).

In parallel with this, several far-reaching consultations have attempted to capture the implications of such challenges for the public health and medical education enterprise. These include the US Institute of Medicine's commissioned study on "The Future of Public Health" (1988)(16); Kerr White's history of INCLEN: "Healing the Schism: Epidemiology, medicine and the public's health" (1991)(17); the carefully selected papers and commentaries contained in "The Medical School's Mission and the Population's Health" (1992)(18); "Leadership for Change in the Education of Health Professionals" produced for the Network of Community Oriented Educational Institutions for the Health Science (COEIHS) by Vic Neufeld, Sumedha Khanna and colleagues (1995)(2); and the Report of the Pew Health Professions Commission: "Critical Challenges: Revitalizing the health professions for the twenty-first century" (1995)(19).

One cannot but be impressed at the complexity of the challenge. Questions to address are:
* What are the major content-based and contextual changes facing the leaders of tomorrow ? &
* Do these pose an exceptional challenge to the core values currently informing international health development ?

Describing the challenge

The importance of particular challenges will vary depending on leadership position (government minister, researcher team leader, university dean, NGO director), institutional base (eg public sector, UN organisation) and work context. Similarly, effective responses will vary. But it is helpful to stand back and distil out, if imperfectly, some of the most testing challenges that lie ahead.

<u>Content-based or technical changes</u>

1. Consequences of health reform, changing role of the state and "marketisation"

    (1) Impact of health reform at macro and micro levels;
    (2) Consequences of bringing market principles and mechanisms into the public sector. New forms of public and private sector organisation that emerge in response;
    (3) The state's role in financing, health care provision and regulation;
    (4) Balancing equity against efficiency-driven reforms.

2. Scientific and technical breakthrough

    (1) The power and possibilities of new information technology; optimising its use in all but especially resource poor environments;
    (2) Transforming evolving understanding of molecular biology into new therapies and population-oriented interventions;
    (3) Greater attention to new and existing technology assessment;
    (4) Greater knowledge and information on the links between environmental change, including climate, and communicable disease outbreaks. Strengthened global surveillance networks.
    (5) Better grasp of the means to operationalise interconnections between health, population and development strategies.

3. Changing burden of illness

    (1) Substantial communicable disease burden with increasing extent of chronic problems including mental illness and inter-personal violence;
    (2) Strategies to retain or strengthen health gains despite the impact of AIDS,

diminished resource availability, and the consequences of an aging population;
(3) Consequences of drug resistance for therapeutic efficacy.

Contextual changes

While not wholly distinct from the content changes discussed, there will also be rapid shifts in the external environment. Overarching changes include accelerating economic globalisation and the expanding power of transnational corporations, accompanied by reduced power of the nation state. Such developments are further reflected in the emergence or redefinition of new forms of economic and social collaboration, usually on a regional basis: the EU, NAFTA, ASEAN, and SADCC for example.

1. All institutions and actors will need to cope with growing financial stringency. They will face the need to mobilise additional resources, undertake institutional "down-sizing or right-sizing", and overcome rivalries that previously could be afforded.

2. A widening gap in the health of populations both between and within nations, with reversals in health status among particular sub-groups. This can lead to national sub-groups and poorer countries falling increasingly behind as the distinction between developed and developing countries continues to blur.

3. Important principles of international solidarity between richer and poorer nations may become severly strained. Funding pressures on academic institutions in industrialised countries are likely to result in strenuous efforts to preserve national standing and maintain income[3] -- with potentially less investment supporting international health issues of common concern.

4. Changes to the familiar post-war balance between international institutions (see appendix 1) has implications for the strategic behaviour of organisations (research, educational, policy and practice) at every level, with considerable impact at the national - international interface.

5. The pace of change, the requirement to respond, and the demands this places on leaders at all levels, will render individual and institutional coping strategies important.

Pressure on the value system

The interplay between knowledge-based and contextual change is bound to stress equity-oriented efforts in public health practice. This will critically challenge international health leadership demanding clarity of vision, strength of purpose and enhanced technical competence, grounded in national and international realities. More than ever, health leaders will need to engage with the public, and will be held accountable for their actions.

The tension between specialist knowledge and general understanding will continue and may well deepen; thus the ability to bridge disciplines, professions, institutions will represent essential competencies in tomorrow's successful leaders. Such can manifest through:

* Successfully grappling with clinical, population and social science paradigms. It is essential to breakout of (not simply accommodate) the predominantly medical, individual-centred paradigm;
* Heightened understanding of "context" through experience and applied study. Thereby appreciating the importance of organisational dynamics, policy processes, group behaviours and team development, together with strengthened skills in negotiation and mediation;
* Drawing together leaders in the applied and fundamental science communities, each to better understand the priorities and concerns of the other.

[3] this is a possible effect of the research assessment exercises in the UK.

The capacity to constitute and direct effective teams will be of singular importance.

TAKING STOCK: TODAY'S WORLD[4]

Numerous institutions, agencies and organisations are today active in the international health arena (see Appendix 2). Competitiveness is high, although initiatives are often collaborative, and the same organisation may well take on a range of roles at different times: agenda-setting, funding, programmatic etc. This contrasts dramatically with the post-war situation in which there were few major actors in international health and WHO's formal and effective mandate, as the UN specialised agency in health, was clear. Today its leadership role and operational capabilities are seriously challenged (20).

Looking back, how does one decide which initiatives truly "showed leadership" ? Certainly, in the second half of the 20th century, the eradication of smallpox and the movement to PHC have defined and driven much subsequent work in international health. Over the past 10 to 15 years several new initiatives have been launched, many in the sphere of research capacity development and targeted particularly at country level. How to evaluate their impact ? These are long-term investments in human resources with impacts to be measured in decades not years alone. Given the scale of human and financial resources committed, an independent, thorough and far-reaching appraisal is indicated and is essential to future efforts.

As with PHC, essential national health research (ENHR) is at once a philosophy, a strategy and an operational approach. Launched at the start of the 1990s the intention was that it would offer an organising framework, and lead to increased focus and upscaled impact of those programmes targeted at capacity development at national level. The extent to which this has been realised, and the obstacles, should be critically assessed.

There is much to learn from the experience in capacity strengthening of WHO's Tropical Disease Research Programme. Over many years a range of strategies, covering the short to long term, have been used to invest in individuals, programmes, institutions and networking arrangements. This has been linked to an explicit, targeted agenda of problems and products. In addition, the Programme has skilfully used both internal and external reviews to revitalise its work.

No doubt it has problems too -- but many see the example of TDR as particularly successful. There is merit, therefore, in recognising that it has an unusually specific agenda which lends itself to concrete indicators of output. In contrast, measuring the impact of programmes that support systems reform, policy change, network collaborations - or leadership development - can prove difficult. Network analysis is useful to establish which individuals and groups took the lead, how issues came to the agenda -- and then addressing whether they have had an impact.

International programmes supporting research and capacity development
(see Appendix 3)

While each of these programmes has its own particular focus, and is not directly concerned with leadership development[5], all, through an emphasis on capacity development and focus on promising individuals, work with elements of the leadership cadre of middle to low income countries.

The programmes are largely concerned with the development of content-based expertise. They therefore do not, in any intentional sense, grapple with other competencies relevant to the exercise of leadership, nor to the blend of elements critical to high leadership performance. For the most part they are closely focused on capacity development at country level with a bias towards academic institutions and, in some

[4] thanks to Gill Walt for critical discussion

[5] recent exceptions are the Takemi Program in International Health, the MacArthur Program in Population and Development and the International Health Leadership Forum at Harvard (21).

cases, the ministry of health. Correspondingly, the programmes are not in touch with programmes of other development sectors or the important national and international contributions of NGOs.

A rough and blunt characterisation of the programmes might argue that: (i) an excess originate in industrialised countries (ii) financial control, and thus programme control, is similarly first-world based (iii) leadership networks are tired and restricted, requiring fresh blood. By the same token, though, it has to be acknowledged that developing country leaders contribute largely as participants in such international health initiatives, and seldom initiate or lead such efforts.

Several of the programmes increasingly invest in strengthening partnerships with policy makers, and in better understanding the connections between research and policy (22). ENHR is by definition premised on partnerships between researchers, planners and providers, and communities. Efforts to achieve benefits of scale and interaction between programmes have been effective in some instances[6] but overall have had limited success. In a context where country-level leadership lacks confidence or feels dependent, and where programmes have a variety of international sponsors, such collaborations may prove difficult and can fall short of expectations.

Comment: International programmes

National-global interface
While perhaps obvious, it bears repeating that these programmes have made major contributions towards strengthening (largely research) capacity at country level. In consequence there now exists, within certain countries, a greatly enhanced capacity to interact in the global agenda-setting process. This capability is not fully grasped and little exploited[7]. Yet it has the potential to contribute to a more balanced engagement between industrialised countries and organisations influential at global level, and leadership from developing settings. At a time when priority setting for the next millenium is a focus of international organisations, this opportunity to better equilibrate the process should not be overlooked. It is essential to enhancing interactions at the national-global interface.

Leadership
While largely implicit, it can be argued that the programmes' overarching objective is in fact that of leadership. Each has the objective that their fellows or graduates radically enhance institutional and national competence. Making allowance for the lead-time needed by such an enterprise, such aspirations are still not likely to be met --- because programme design has primarily concentrated on content competencies and paid little attention to key contextual, interactional and value-based competencies.

Scale
The international programmes have added value and perspective to the difficult challenge of international health development. However, a clear concern today is the scale of the programmes. Can they, in their present form and current level of function, make more than an incremental contribution? Do programme leaders have the strength and dynamism, depth and breadth to match the fast-changing tide and its cross-currents?

New initiatives

International health is in many respects at a fluid stage. Health reform processes characterise virtually every setting; a new reproductive health, population and development agenda is being articulated; there is creeping awareness of the problems faced by refugees and others affected by social instability, along with growing problems of domestic and group violence, and social rehabilitation in post-conflict situations.

[6] for example, annual INCLEN meetings have served as a regular forum for scientific and programmatic interchange, while in Uganda there has been effective collaboration between ENHR-linked initiatives.
[7] In January 1997, a carefully composed group of industrialised and African workers met in Dakar where they took a hard look at the prerequisites for a balanced and fair collaboration on malaria research in Africa.

A range of commissions are taking stock of international research agendas and the future of academic institutions. Dissatisfaction with WHO leadership, and the consequent undermining of the organisation's role and contribution, are prompting serious dialogue (23). The World Bank, following a preoccupation with macro-economic policy, is shifting to vastly increased investments in human development with the health and education sectors as prime beneficiaries. The post-Jim Grant era in UNICEF is bound to see an attempt to redefine the strengths and focus of the organisation. There is also recognition of the role and potential of newer organisations, particularly national and international NGOs.

Thus one senses a rethinking of international initiatives. Current ventures include the International Clearing House for Health Sector Reform, the Essential Health Improvement Project in Tanzania (IDRC and others), and the well-resourced Population and Reproductive Health Programme of the Wellcome Trust (UK) - a new portfolio for the Trust, constituting an extension of its long-standing focus on biomedical and fundamental research.

ISSUES IN MEDICAL AND PUBLIC HEALTH EDUCATION

Appendix 4 lists the primary focus of recent reports targeting the state of health sciences education. These are largely focused on medical schools (increasingly termed "academic health centres") and comment almost uniformly on their lack of a population perspective.

The USA

Notwithstanding major differences between the US health system and those elsewhere, its influence is considerable and may well increase. In addition, its public health schools are major sites for post-graduate education in international health. It is important, therefore, to keep track of the rapidly changing health care environment there, and its knock-on effects for educational institutions.

Reports on the US situation stress the rise in managed care and integration of clinical services at different levels. They forecast rapid and profound consequences for all education and training institutions and urge the need to anticipate and adapt to these. A clear expectation is a major decline in the demand for medical graduates overall, sustained reduction in demand for specialist and sub-specialist physicians, and greatly increased demand for generalists/family practitioners and multi-skilled allied health professionals.

Accompanying this is expected to be a growing community and population orientation, the need for greater understanding of the new practice and organisational environments such changes will bring, and the need for closer and better defined relationships between educators and private providers. A marked change in the form and role of the public sector is envisaged.

In arguing that the only appropriate response is a pro-active and far-sighted restructuring, Richardson has outlined the threats such changes pose to academic health centres (24). The Pew Commission notes that they "will create difficult realities for many health professionals and great opportunities for others"(19), while Breslow argues cogently and timeously the inherent differences between the forces driving private sector care and those of public health (25).

Creating perspective

Medical schools are inherently conservative. With the landmark report of Abraham Flexner (1910), that effectively defined the laboratory-based, hospital-oriented perspective of medical education for most of the 20th century, they have proved remarkably resistant to change[8].

[8] In the words of John Iglehart, "Amidst the world of turbulent change that marks American medical care, one sphere stands out in its capacity to maintain its traditional ways: medical education"(26).

But medical/health sciences education next century will be different, a function of changing health problems, new modes of service delivery and financial pressures, coupled with changing social expectations. It will reflect new methods of learning, a broadened range of practice settings, and draw far more on the measurement and social science disciplines. It may prove more socially responsive.

Much of the experience to inform such change has been gained, over the past thirty years, from a small number of innovative educational institutions -- for example Mc Master in Canada, Newcastle in Australia, Beer Sheva in Israel, Suez Canal in Egypt and U. New Mexico in the USA. They have pioneered work in "problem-based" and "student-centred" learning; and laid the basis for disciplinary strength in clinical epidemiology and technology assessment. Their work has been strongly influenced by "community-oriented" practice strategies pioneered in China, India, South Africa, Thailand, Nigeria and elsewhere.

Efforts to develop the "health care team" have led to improved working relationships between the different professions, with growing diffusion of a range of more appropriate educational strategies.

Networking

These efforts have gained scale and momentum through various avenues, particularly the Network of Community Oriented Educational Institutions for the Health Sciences (COEIHS), and the International Clinical Epidemiology Network (INCLEN). COEIHS differs from many others in its primary concern with context and process: major efforts have targeted the process (politics and all) of educational change in established institutions (27); experimented with university - community partnerships in research and practice; and addressed issues of leadership in academic health centres.

The origins of INCLEN are described with historical sense by Kerr White (18). INCLEN has evolved a network of "Clinical Epidemiology Units" in medical schools (primarily departments of medicine) across the continents that are supported by a dispersed group of Clinical Epidemiology Research and Training Centres. A fully fledged CEU incorporates expertise in economic appraisal and social science methods In all they have broadened the perspectives of numerous clinicians, teachers and graduates, expanded and re-directed published output, and developed an enviable network cameraderie.

White's overriding thesis, central to the vision of the INCLEN movement, is that the absence of a population perspective in medical schools has profoundly restricted their teaching, service and practice; further, that the roots of this lie in the establishment, in the early years of the century, of independent schools of public health[9], quite separate from medical schools. Redress, he argues, is possible through the introduction of epidemiology, the foundation discipline for the study of populations.

A critique

The primary challenge today is bridging the gap between ideal and reality. Medical schools have proved remarkably resilient in their ability to withstand many of the creative, even profound, initiatives directed at implanting this "population perspective". As a result they lose many of the most promising population practitioners from their ranks.

Strategically, INCLEN leadership have not adequately challenged (or seen the need to challenge) the basic organisation of the medical school. The assumption has been that new disciplines (content expertise) on a modest scale, and their champions, can produce radical internal restructuring. Or that clinicians with a population perspective will translate into an institution successfully balancing individual care with population responses. Underestimated is the dominance of the biomedical paradigm; and the fact that there is an intellectual split between approaches based on the body as a sum of cells and organ systems, and those that see individuals as part of communities, groups and social networks. The difference is not simply a division that needs to be bridged; there is a gulf. This has neither been

[9] with establishment grants from the Rockefeller Foundation.

recognised nor articulated -- indeed the widely held view is of a continuum from molecule to community.

Those who have led change in medical schools seem to have demonstrated weakness in three respects:

* seriously underestimating the level and scale of public health skill needed amongst medical school leadership as a prerequisite for change;
* failing to recognise the skills and abilities required to promote effective cross-disciplinary work;
* limited understanding of the health sector: how it works, how it's changing, and where critical opportunities may lie.

Looking forward

Intense pressures on medical schools, together with the pace and momentum of health reform, create a window of opportunity. The vision of the academic health centre that balances individual and population perspectives, and can relate dynamically to changes in the health system, needs to be operationalised. Inevitably this will provoke fresh examination of the role, contribution and structural relationship of public health schools to medical schools. It will also, desireably, lead to Flexner's notion of a uniform and comprehensively trained medical graduate being laid to rest.

Public health education

The last few decades have seen substantial growth in the number of schools of public health in the USA and elsewhere, including the industrialising world. Over the past 10 years certain schools[10] undertook reforms to develop more relevant, practitioner-oriented MPH programmes, while still retaining scope for research. Targeted efforts aimed at mid- to senior-level public health officers has led to field-based degree programmes involving local health ministries and universities: the Public Health Schools Without Walls initiative. There has been a proliferation of MPH/MSc offerings responding to a rapidly growing demand among diverse groups: practitioners, medical graduates, professionals from other sectors, government and NGO workers etc. This is paralleled by an exponential growth in the number of short courses offered, and now an effort to launch a modular MPH through distance learning[11].

Whatever the reasons for this surge of activity, it represents intensifying interest in the health of populations and, arguably, the coming of age of public health.

With this perspective, rather than seeking only a convergence between public health schools and medical schools, a variety of interactions and initiatives should be encouraged. The space is being created for public health institutions to play a far more formative role in health development in coming decades than has been the case in the past. In doing so, schools of public health could explicitly adopt a dual approach: reaching back to medical schools to contribute both content and strategy in the effort to strengthen their population orientation; and reaching forward to other disciplines, professional schools and sectors to create greater breadth, depth - and ultimately effectiveness - in the effort to improve the health of populations.

ASSESSING THE GAPS

Drawing on the discussion thus far, this section highlights a number of gaps and weaknesses in the international health development effort. In the process it aims to foster discussion and debate on programmatic options that the Rockefeller Foundation might consider.

A. <u>Existing international programmes</u>

[10] eg Harvard and London
[11] at London University

Limitations of the current portfolio of international health programmes have been discussed. In general, these include issues of scale, taking only modest advantage of possible interlinkages and complementarities between programmes, limited development of intersectoral connections and (with the exceptions noted) paying little explicit attention to enhancing the leadership skills of programme fellows.

Notably, several of these programmes play a pivotal role in developing national capacities. They thus occupy an interface between national health development and international initiatives.

Many of these programmes were conceived and introduced by the mid-1980s; together they represent major financial and intellectual investment. An in-depth assessment, separately and combined, of their impact, comparative strengths and limitations, is critical to informing any future wave of international initiatives.

Options for Rockefeller:
To the extent the Foundation is involved:
a) Establish whether stated aims best served by present programme form.
b) Introduce specific leadership development components (contextual and value-based)
Appraise scale of operation
Assess inter-relationships between programmes
c) Ongoing programmes could contribute to proposed International Health Leadership Programme (see below)

B. Education and science development

1. A population/public health perspective in medical schools and academic health centres

Bringing a population perspective into the mainstream requires an acute understanding of experience to date, its limitations, and fresh consideration of appropriate strategies and approaches. The past three decades of initiatives have covered much ground, however they provide only part of the solution. Significant progress will not lie in simply providing more of the same and new initiatives are needed.

INCLEN has achievements to its credit. However, its strategy for re-orienting medical schools is strategically limited and unlikely to "heal the schism" between individual and population health. The network also has need for much enhanced interaction with a broader array of population scientists and practitioners.

Options for Rockefeller
a) A new initiative that seeks convergence between public health/population competencies and biomedical capacity within the academic health centre.
Strategy is to call for or invite teams comprising medical and public health leadership from a single institution, networked to health services and other groups as appropriate, to take this on. Team develops strategy; organisational and action plans, timetable etc. External expertise should be available where requested.
Process can draw support, where appropriate, from network of international programmes.
b) INCLEN:
Based on argument in this paper, there is justification to:
- re-examine network objectives
- review strategies / breadth and depth of leadership
- build interactions with broader base of population scientists

2. Two sciences: bridging the gap

The basic and applied science communities continue to grow apart. This has consequences: it undermines the goal of a population-oriented academic health centre and renders more tenuous the understanding needed for one group of scientists to exploit the strengths of others or introduce creative joint initiatives. Yet this dichotomy is essentially spurious; educational/research leadership lies in the ability to define a critical problem and selectively draw on the best combination of skills/capacity available to tackle it.

Options for Rockefeller
In the first instance, proposed Health Leadership Programme (see below).

C. Collaboration between industrialised and lower-income countries

1. North and South: Improving the balance

Increasingly international health research features collaborations between industrialised and southern hemisphere institutions[12]. Despite good intentions, however, few such collaborations originate in the south, and control over the research process tends to reside with the industrialised country partner(s). The search for a healthier balance between partners is an important one. Pre-requisites to take the lead include intellectual strength, financial resources, clear objectives and the confidence and determination to take the initiative. With appropriate support there are research leaders and institutions in the south that could be far more active in shaping the international research agenda, the work conducted, and their interactions with industrialised country institutions.

At the same time it is likely that, over coming years, regional collaborations between middle- and low-income countries will strengthen. These have great potential to focus the regional research effort, boost research productivity, and strengthen local scientific capacity. International organisations should seek the most effective ways to support this.

Options for Rockefeller
A new initiative, potentially with other foundation partners, to place substantial financial resources (perhaps in the form of a Trust) under the control of leading southern hemisphere research leaders.
Purpose:
a) to enable key southern leaders to exercise greater control in their relationships with northern colleagues, be more selective in their choice of institutional partners, and better able to take the lead in designing joint programmes targeted at developing countries;
b) to strengthen the basis for S- S research collaborations;
c) to overcome the almost exclusively N. to S. financial flow, and its consequences for control of the research initiative, in such collaborations.
Such an initiative could take several organisational forms and the pros and cons of each need to be carefully considered. An appropriately constituted founding/steering committee is critical. Key issues include mobilising funds, identifying lead individuals, clarifying scope of activities, monitoring use of resources, and so forth.

2. Third World, Fourth World, One World?

The transfer of technology from developed to developing countries is well-recognised. Less appreciated, however, are situations where the flow of knowledge and expertise has been in the opposite direction. Lucas cites the feasibility of ambulatory care in TB management (based on field studies in India) and community-based care of psychiatric patients (pioneered by Dr Lambo in Aro, Nigeria) as two examples (1).

[12] The European Union now requires consortia of european institutions to partner with southern hemisphere groups as a condition of funding (28).

Increasingly, critical health problems in the so-called Fourth World, for example substance abuse and domestic violence in inner cities, resemble those usually associated with poorer countries. "Healthy cities", as a vision and organising concept, has proved unusually relevant in many settings. Thus there is potential to link practitioners, community groups and researchers around similar problems to foster an interchange of experience and expertise in the common search for solutions. Such interactions could extend to examination of policy responses despite widely differing socio-political environments.

Options for Rockefeller
A 3-year, time-bound initiative that seeks:
a) to generate operational and scholarly exchange between workers from settings with complementary health problems yet widely contrasting social environments and resource bases;
b) an international workshop for in-depth review and analysis of this experience;
c) an edited volume that could be coupled with a targeted media strategy to draw attention to the initiative.

Note: While a productive programme of collaborative R+D might evolve through such an effort, this would constitute a subsequent phase to be independently assessed on its merits.

3. "Partnerships in Practice": seeing links, taking opportunities

The complementarities between international health initiatives tend, in practice, to be inadequately exploited. Often initiatives that exist in parallel could be mutually reinforcing. Failure to appreciate this, or the inability to operationalise it, has led to missed opportunities most apparent at national level.

For example, in many countries the decision to decentralise health services is part of a broader political agenda as well as an operational strategy. Thus, decentralisation may be coupled with efforts to strengthen local government. Soon, awareness grows of weak managerial capacity at local level, lack of information to inform decision-making, and unmet expectations regarding governance and accountability to community.

Such a scenario contains opportunities for those engaged in a range of initiatives: "health sector reform"; "public sector management"; "community-based health care";"community oriented health sciences education"; "information based policy and practice", "partnerships with civil society". Skill lies in knitting together elements of these apparently distinct initiatives.

Options for Rockefeller
In the first instance, proposed Health Leadership Programme (see below)

D. Health sector reform

1. Public sector leadership and its response to reform

Rapid and widespread health reforms, with decentralisation and market related strategies often as central elements, impose excessive demands on public sector leadership. The sector, traditionally, is rule-bound, slow to change and employs large numbers of personnel. It faces increasing demands for improved performance and better quality care, to access the resources of the private sector and introduce a sound regulatory environment, and to do this in the face of constrained finances. The knowledge and skill base of old styles of leadership and management are bound to prove inadequate.

The challenge is two-fold: (i) to greatly strengthen public sector leadership, and (ii) for the public sector itself to become a "learning organisation": one that encourages rather than shuns experimentation, that seeks partners and collaborators instead of avoiding them, and rewards not punishes initiative.

Options for Rockefeller

In the first instance, proposed Health Leadership Programme (see below).

2. NGO's: greater role in international health ?

Nationally (eg BRAC[13], numerous primary health care and development initiatives) and internationally (eg Medicines Sans Frontier, International Women's Health Coalition), NGO's have contributed profoundly to health development. Like any institutional form they have weaknesses and vulnerabilities[14], but they frequently demonstrate great qualities of flexibility, determination, intellectual depth and innovation, and commitment to social justice.

NGO's are not a substitute for a capable public sector or vigorous private sector. However they represent an underutilised resource, both nationally and internationally. Partnerships and collaborations between NGO's and government, NGO's and educational institutions[15] or research groups, and even NGO's with private-for-profit groups, deserve more attention and could prove highly fruitful. NGO leaders need opportunities to extend their grasp of these institutions, and to explore the potential for collaboration.

Options for Rockefeller
In the first instance, proposed Health Leadership Programme (see below).

E. International Health Leadership Programme
A systematic approach to strengthening leadership in international health

The argument for strengthened leadership in international health is a powerful one. Leadership capacity -- whether in the academy or in the field, in government or in NGOs, in district systems or international programmes -- will be a prime determinant of the health community's ability to successfully negotiate the complex times ahead. Qualities required in leaders include contextual understanding as well as content expertise, a value framework and enhancement of personal attributes.

There is little in international health along these lines[16].There are strong grounds to formulate and introduce such; in the process to grapple (as has seldom been done) with the best interplay between individual need, programme self-design and structured offerings. Informed by experience of the LEAD programme[17], such a programme might comprise of the following elements:-

International Health Leadership Programme

** Participants: promising professionals, scholars, activists at different stages of career development, and from a mix of backgrounds (scholarly, NGO, government and public sector, international organisation etc);*
** Content : would derive from a well-formulated problem; will aim to develop and strengthen a blend of competencies; essential to include different, well-conceptualised, strands or tracks to adequately meet the leadership needs of the different groups (research, public sector, NGO etc) as detailed above;*

[13] Bangladesh Rural Advancement Committee.
[14] see Green and Mathias for a discussion (29)
[15] Two NGOs, the Organisation of Rural Associations for Progress (Zimbabwe) and the Centre for Development Management (BRAC), together with World Learning's School for International Training, (USA) have just launched an NGO Leadership and Management Programme. Aimed at "....building organisational capacity through programmes specifically designed around the realities of NGO leaders at all levels...", courses lead to diploma, bachelors or masters qualifications (30).
[16] The Kellogg International Leadership Program, introduced in 1989, has a purpose quite different from that proposed here.The Takemi and MacArthur programs mentioned earlier contain elements; note their university base with 6 to 12 month attachments.
[17] Rockefeller's Leadership for Environment and Development Programme introduced in 1991(31).

** Direction : a carefully constituted planning and steering group is essential, coupled with an on-line capacity for technical (and other forms of) support. Selection process will be critical.*

A key feature must be the opportunity for programme graduates to access subsequent fellowship or project funding. While criteria are clearly needed, the most promising should be enabled to take modest or major project or programmatic initiatives consistent with the objectives of the overall programme. Desireably, examples would tackle several of the gaps discussed above. Innovative links between customarily separated disciplines, efforts to bridge traditional divisions between institutions, projects drawing together activists and practitioners from different spheres of endeavour would all be sought after. Programme participants should be enabled to draw on the Foundation's unique network in support of project development efforts.

Potential links between this new initiative and existing international programmes should be examined: there are a range of possibilities. Finally, the programme should aim to achieve considerable scale.

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REFERENCES

1. Ade Lucas, What is international health? Unpublished note, 1997
2. Neufeld, Khanna et al Leadership for change in education of health professionals, 1995
3. Ken Cox, World Health Forum, 1988
4. Glick, Leadership column, COEIHS, 1992
5. Charles Handy, 199?
6. Binney G, Williams C. Leaning into the future, 199?
7. Abeykoon P, Mattock N (eds). Medical education in South-East Asia. WHO, 1996
8. Satcher D. CDC's first 50 years: Lessons learned and relearned. AJPH 1996:1705-1708
9. ENHR, Commission on Health Research for Development, OUP 1990
10. World Bank: World Development Report, 1993
11. World Bank: Better Health in Africa, 1994
12. WHO: Investing in Health R+D, 1996
13. Chen, Kleinman, Ware, Harvard,1994
14. Zwi and Mills (eds), Jnl of International Development 1995;7
15. Berman, Jnl of Health Policy, 1995;32
16. Institute of Medicine, Future of Public Health, 1988
17. White KL. Healing the schism, 1991
18. White KL, Connelly JE. The Medical school's mission and the population's health, 1992
19. Pew Commission report, 1995
20. Lee, Collinson et al. Who should be doing what in international health. BMJ 1996;302-07
21. Harvard, Biennial Report, Department of Population and International Health. 1994
22. IHPP occasional paper. How can research influence health policy? 1996
23. Pocantico Retreat 1996
24. Richardson, New York Academy of Sciences, 1996
25. Breslow. Public health and managed care: California perspective. Health Affairs1996:93
26. Iglehart J. Medical schools and the public interest. Health Affairs, Supplemt 1988:108-20
27. Kantrowitz et al. Introducing change at established med. institutions. Springer publ. 198?
28. de Bruycker, Hagar. European Jnl: Tropical Medicine and International Health 1996;553
29. Green and Matthias, Development in Practice, 1995
30. BRAC, ORAP. Global Partnership Programmes prospectus, 1996
31. LEAD, Rockefeller Annual Report, 1995

APPENDIX 1

UN AGENCIES AND INTERNATIONAL HEALTH

The World Health Organisation was established half a century ago as the lead organisation for health in the family of United Nations agencies. In recent years, other UN agencies have expanded their health related programmes. At the country level, the field of international co-operation in health is rather full involving WHO, UNICEF, World Bank, UNFPA, UNDP, ILO. In this profusion of actors there are examples of inter-agency collaboration and also of unnecessary duplication of effort. The question now asked is: "Who should be doing what in international health?"

THE CURRENT SCENARIO

ORGANISATION	KEY AREAS OF INTEREST
World Health Organisation	• Global health policy formulation and advocacy; • Health research standards; • Development of country health systems policies and strategies; • Support for country implementation of health programmes.
UNICEF	Welfare of children
World Bank	• Organisation and management of health services • Financing of health care
UNDP	• Human development • Women's issues
UNFPA	Population and family planning
ILO	Workers' health
FAO	• Food and nutrition • Health of farmers

Reference: A.O Lucas, 1997 (1)

APPENDIX 2

A PARTIAL LISTING OF ORGANISATIONS ACTIVE IN INTERNATIONAL HEALTH

This listing of type and number of organisations, with their institutional links/origins, conveys an idea of the variety and complexity of international health interactions. A network diagram would add a further level of complexity.

GOVERNMENT SECTOR

Intergovernmental
UN Agencies: WHO, World Bank, UNICEF, UNDP, UNFPA, ILO, FAO, UNHCR

Government linked (bilateral/multilateral relationships)
British ODA, CIDA, DANIDA, EU, FINNIDA, GTZ, JICA, NORAD, SIDA, USAID etc

Independent government agencies: IDRC, SAREC

Special groupings
Commonwealth Health Secretariat, INCAP, SADCC, SEAMEO-TROPMED

Other international: Centres for Disease Control, Atlanta

PRIVATE SECTOR

Foundations
Aga Khan, Carnegie, Kaiser Family , Kellogg, MacArthur, Mellon, Pew, Rockefeller, Sasakawa, Wellcome

NGOs: Medecine du Monde, MSF, Oxfam, SCF .....

Voluntary organisations: British/Irish VO, US Peace Corps .....

Business: Management Sciences for Health, John Snow Inc. .....

Others: Population Council .....

UNIVERSITY/RESEARCH INITIATIVES

International Centre for Diarrhoeal Disease Research, Bangladesh
Emory (Carter Centre), Harvard (HIID), Johns Hopkins, Tulane and others

APPENDIX 3

EXAMPLES OF INTERNATIONAL PROGRAMS SUPPORTING RESEARCH AND CAPACITY DEVELOPMENT
(Table in draft form)

Focus is epidemiology, social sciences including economics, policy and management, and educational support. A few recent initiatives have a leadership component.

PROGRAM	FOCUS	TARGET	APPROACHES TO TRAINING	YEAR ESTABLISHED	FELLOWS OR TRAINEES	PRINCIPAL GEOGRAPHIC FOCUS	PRIMARY SPONSORS
WHO-sponsored							
HRP	Fertility regulation, infertility;emphasis on evidence-based approaches	Scientists, policymakers	Fellowships, workshops, degree courses	1971-72		China, Latin America, Sub-Saharan Africa	UNDP, INFPA, World Bank, WHO
TDR	Tropical diseases	Scientists, managers, policymakers	Fellowships, workshops, degree courses, institution strengthening	1974		Targeted at 6 specified tropical diseases	UNDP, World Bank, WHO, Rockefeller
Other sponsors							
COHRED[1]	Promoting, strengthening ENHR	Research process and output at country level; seeks to involve all relevant constituencies	Country-level research initiatives; regional netwks	1990	Secretariat in Geneva; regional coordinators and networks	Global	Broad-based (IDRC, SIDA, UNDP, others)
COEIHS[2]	Human resource development for health care	Educators, policymakers, communities	Community-based curricula responsive to priority health	1979	networking, informal exchanges, partnerships	Global	WHO, universities, several fndns (+new Kellogg

			problems				initiative)
IHPP[3]	Health policy	Scientists, policymakers	Institutional support, fellowships	1986	14 active groups	Sub-Saharan Africa, SE Asia	Pew and Carnegie Foundations
INCLEN[4]	Clinical epi., biostat, hlth econ, social sciences	Clinical faculty	Fellowships and institutional support	1981	several hundred	Africa, Asia, Latin America, India	Rockefeller Foundation, USAID and others
IFSSH[5]	Strengthening social science infrastructure	INCLEN social scientists, others		1992			Carnegie
FETP[6]	Public health applications of epi.	Public health officers	Short courses; in-service training, backed by CDC	1980	few hundred graduates and trainees	Americas, W. Pacific, E.Mediterranean SE Asia	National budgets, CDC, WHO, USAID
University based							
Takemi Programe	mobilising, allocating, managing resources; leadership	mid-career	fellowships, interdisciplinary research	1983	> 80 fellows; network linked		Japan, Carnegie others
MacArthur Program (Bell Fellows)	analytic, managerial, ethical; leadership	young professionals	fellowships, interdisciplinary, intersectoral	1989	~ 10 fellows annually		MacArthur Foundation
IH Leadership Forum (Harvard)	health management, policy & change	ministers / secretaries of health	formal-informal seminars and exchanges	1993	4 fora to-date (~ 10 participants)		Carnegie, Rockefeller, IDRC, WHO

Status uncertain

WHO: Health Systems Research Programme (established 1982; re-launch planned); Health Economics Training Programme

Other: National Epidemiology Boards (Thailand, Mexico, Cameroon); Community Epidemiology and Health Management Network (India, Indonesia);

Applied Diarrhoeal Disease Research Programme (USAID supported; ended 1996; may give rise to new initiative on respiratory and other childhood diseases).

Footnotes for Appendix 3

1 Commission on Health Research for Development (Essential national health research)
2 Network of Community-Oriented Educational Institutions for Health Sciences (plus Kellogg initiative: Community Partnerships in Health Personnel Education)
3 International Health Policy Program
4 International Clinical Epidemiology Network
5 International Forum for Social Sciences in Health
6 Field Epidemiology Training Program of the United States Centers for Disease Control

APPENDIX 4

RECENT REPORTS ON THE CURRENT STATE OF EDUCATION FOR THE HEALTH PROFESSIONS

COMMISSIONING BODY	REPORT	FOCUS
Institute of Medicine, USA (1988)	The Future of Public Health	Need for much stronger education-practice linkages.
Royal Society of Medicine Foundation and Josiah Macy Jr. Foundation (1990)	The Medical School's Mission and the Population's Health. Examined medical education in Canada, the UK, USA and Australia.	Critical need for population perspective in medical schools.
Science Policy Association of the New York Academy of Sciences (1995)	Academic Health Centers Face the Future: Reform, Risk, and Restructuring	Managed care poses a serious threat to academic health centers.
Pew Health Professions Commission (1995)	Critical Challenges: Revitalizing the Health Professions for the Twenty-First Century	Consequences of changes in the organisational, financial and legal framework of US health care for the education and training of health professionals.