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University Clinical Partnership

A New Framework for NHS/University Relations

Tom Smith

Foreword by
John Wyn Owen

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Address: 59 New Cavendish Street
London WIG 7LP
Tel: 020 7631 8450 Fax: 020 7631 8451
email: mail@nuffieldtrust.org.uk
http://www.nuffieldtrust.org.uk

About the Author

Tom Smith joined the NHS as a Management Trainee in a south London teaching hospital and became interested in the interplay between the management of health services, education and research. In 1998, when appointed a Nuffield Trust Associate, he began to explore the associated organisational complexity within university clinical centres, including a six month secondment to the University of Wales College of Medicine as an honorary research fellow, working in the NHS Liason Unit. He continues to work on the relationship between service, knowledge and learning in NHS organisations as a Ph.D candidate and research assistant based at the Judge Institute of Management Studies, University of Cambridge.

FIGURES

FOREWORD

In its fourth and most recent report, the Steering Group on Undergraduate and Medical Education and Research reasserts points made in all previous reports:

'Close collaboration between the universities with medical schools and the NHS is essential [and] the successful outcome of this co-operation is a key factor in determining the quality of the nation's health care.'

A survey of teaching hospital chief executives and heads of medical schools, undertaken by the Nuffield Trust at the end of 1998 confirmed a perception that relationships are not uniformly good. It also revealed a variety of positive initiatives: many organisations are considering new ways of enhancing joint working, with the *New NHS* agenda being a driving force for the emergence of new structures. Leaders in the university and clinical sectors see partnership as an opportunity to develop a better understanding of the partner perspective to inform effective management of their shared agenda.

From December 1998 until January 2000, I chaired a working group that examined the interface between university teaching hospitals and medical schools. Our report *University Clinical Partnership: Harnessing Clinical and Academic Resources,* published in February 2000, supports the emphasis in SGUMDER's Second Report (1990) that 'liaison and consultation are not enough for effective collaboration. Both parties [should] recognise their unity of purpose and combine in a joint enterprise to achieve it'. There are, however, some inherent tensions between the competing priorities of service provision, education and research; these result from university teaching hospitals being both independent and yet interdependent in pursuing a common

mission. Reflecting this paradox, a new term, University Clinical Centre, has been introduced. This term describes a joint venture between university teaching hospital, medical school, and other related academic departments combining to manage the common mission. Recognising this joint purpose, a University Clinical Centre provides the organisational vehicle to speak with one voice, without prejudice to matters which are the prerogative of each corporate organisation.

The foundation of this joint venture is for organisations to have common external focus - a joint strategic commitment. In the Nuffield Trust survey, the absence of an explicit shared agenda was the most cited obstacle to developing closer working and partnership. It is my view that, in collaboration, universities with medical schools and university teaching hospitals make a pivotal contribution to the regional health economy. NHS/university interactions have been at the forefront of change in health services, translating advances to patient care and disseminating these through their educational role. The role of the University Clinical Centre must be seen in the context of a regional and, in the case of Wales, a national perspective. Co-ordination between the NHS and university sectors is vital in exploiting the full potential of education, service and research; this tripartite mission has been described as a three-legged stool that falls over if all legs are not balanced on the ground.

Establishing strategic linkages between research, education and health service provision, and the institutions that manage these missions, is a major challenge for a health service that aspires to become a knowledge based learning organisation, and for universities to meet the changing demands of clinical education and research. Changes in Higher Education and the NHS offer an opportunity to overcome a strategic drift - which has been exacerbated in recent years - and to work closer to ensure efficient management of, and an active dynamic between, the components

of the tripartite mission.

In this monograph, Tom Smith draws together work over the last eighteen months that has considered how to develop organisational relationships. This has included visits to the United States and the Netherlands to explore insights into academic/ clinical governance, a survey of UK relationships, and a project in Cardiff to consider ways to develop the organisational interface, as well as work with the Nuffield Trust Working Group on developing guidance for local governance arrangements.

In 1981 the Trust published Sir Fred Dainton's *Reflections On The Universities And The National Health Service.* He considered the interface between universities and the NHS to be 'the place where the future confronts the present[5] and the challenge 'to make this confrontation productive rather than cause sterile and destructive tensions'. These words aptly describe the challenges ahead and the object of Tom Smith's text.

John Wyn Owen, CB

London, September 2000

INTRODUCTION

Reading *University Clinical Partnership: A New Framework for NHS/Umversity Relationships,* I am struck once again by the startling parallels between the challenges facing academic medical centers in the United States and their sister institutions in the United Kingdom. As this Nuffield Trust monograph makes clear, the UK is struggling with developing effective working alliances between medical schools and their closely related clinical facilities. Interdependent, both parties nevertheless chafe at the constraints imposed by that interdependence. Hospitals must endure the cost and inconvenience of accommodating research and teaching; medical schools must cope with requirements to improve service and constrain costs of care, tasks that appear to many faculty at best tangential to their true missions of expanding knowledge and educating health professionals.

The same dialogue is a constant feature of life in academic health centers in the US. A dramatic illustration of the currency of this issue in the US are recent decisions by a number of universities to sell their teaching hospitals to non-academic companies. Among the medical centers to take this route are Georgetown University Medical Center in Washington, D.C., the University of Minnesota in Minneapolis St. Paul, and the Tulane University in New Orleans. These developments, and others too numerous to mention, have raised a number of questions about how US medical schools and their clinical facilities will relate to one another in the future.

Superficially, the health systems of these two nations could not be more different: the National Health Service is a paradigm of government-owned and managed health care and of frugality in

health care spending; the US health care system is a monument to health care capitalism and excess. What commonalities could possibly explain the shared problems of universities and their clinical partners on the two sides of the Atlantic?

The answer is, in my view, simple - perhaps deceptively so. Academic medical institutions in the US and the UK do the same kind of work, and are increasingly subject to common forces that transcend national boundaries. Shared functions lead these to organize their work in similar ways, and force them, under pressure from common global influences, to consider similar reforms in those processes of work.

The common work performed by academic medical institutions in the US and the UK is, of course, teaching, research and clinical service. Leading academic medical centers in both countries aspire to be world-class in each of these domains. This requires similar resources, organized similarly, regardless of geographic location.

For effective teaching, the required resources are talented students, committed faculty with the necessary expertise and time, access to patients with a broad and representative range of clinical problems, and the required capital to provide educational infrastructure. The latter increasingly involves information technology that is reducing the hours that students and trainees used to spend in lecture halls and medical libraries. Many also believe that in the modern era, effective clinical education requires some exposure to research and its methodologies, if only to teach the skills necessary for life-long learning, which is facilitated by internalization scientific reasoning.

Once these resources are in place, the process of education - at least in the clinical context - necessarily involves a series of apprenticeship experiences in which students and residents observe how more advanced trainees and faculty provide diagnostic and therapeutic services, and then attempt to do the same themselves, under the guidance of more experienced physicians. Depending on the field of medicine and level of specialization, physicians in training will require exposure to somewhat different types and numbers of patients for varying periods of time. They may also require more or less formal didactic material with varying content and access to differing types of technology. Nevertheless, the fundamental need for access to patients in real clinical settings and to faculty with the necessary time and skills are common to all areas of medicine. This means, in turn, that regardless of how a given health care system is governed and financed, effective education of health professionals cannot occur without close partnerships between medical schools and operating health care facilities.

The requirements for conducting world-class research similarly dictate such partnerships. While superb basic biomedical investigation occurs on university campuses and in research institutes with no clinical connections, the translation of new biological insights into practical applications requires access to patients. The nature of that access varies with the type of research. Thus, epidemiological studies using survey methodologies can proceed without strong and enduring partnerships between researchers and clinicians. But the same cannot be said for so-called 'translational' investigation, in which clinician-scientists conduct the first tentative studies of whether new bench discoveries shed insight into human disease or in which new agents are first tested in humans after they have been investigated in animal models.

Furthermore, an optimal or world-class system for generating new biomedical knowledge creates the opportunity for effortless interaction between clinical and non-clinical investigators. Exposure to patients in all their confusing variety refines the hypotheses of basic scientists with an interest in clinical application. Exposure to the laboratory improves the ability of clinical investigators to interpret the data they derive from patient-base experimentation. To make this effortless interaction possible, putting excellent laboratories in close physical proximity to clinical institutions with sufficient volumes and diversity of patients makes enormous sense. The individuals who work in these two settings need not be employed by the same institutions, but it certainly helps. And to some degree, the ideal way to create communication is to train a cadre of clinician-scientists, such as MD-Ph.Ds, who can themselves move back and forth between the clinical setting and the laboratory. Partnerships between medical schools and hospitals provide an attractive home for such individuals.

Finally, world-class clinical care also requires certain resources and processes that benefit from medical school-hospital partnerships. This is particularly true of highly specialized and high technology care required to manage problems that exceed the expertise of the average clinician or clinical facility. In principle, there is no reason that referral centers specializing in rare and complex conditions have to provide academic positions to their expert clinicians, or have to rely on medical school faculty to manage their patients. Superb referral centers do exist in the United States that have distant, if any, relationships with medical schools. The Cleveland Clinic in Cleveland, Ohio or the Cedars-Sinai Medical Center in Los Angeles, California are examples. Nevertheless, as a practical matter, the types of individuals who enjoy the challenge of treating problems that defy easy solution, or that

require the application of newly developed technologies, are often intellectually curious and drawn to the challenge of educating young physicians. Attracting those individuals and keeping them motivated is facilitated by offering them opportunities to conduct research and to educate students and residents, and by recognizing those activities through academic promotion. Thus, the need for medical school linkages at many world-class clinical institutions.

If commonalties in the necessary resources and processes for conducting superb education, research and clinical care link academic medical centers around the world together, so do the challenges created by global trends in health care. And these challenges are creating similar tensions for all academic medical centers, regardless of where they are located or how their health cafe systems are organized. In education, common challenges include the development of new technologies that are increasing the scope and variety of care that can be effectively provided in community settings. Less invasive techniques, such as laporoscopy and interventional radiology, are moving procedures out of hospitals. New drugs enable family doctors to prevent and manage chronic illness that used to require the services of specialists. Around the world, therefore, health care education must expose professionals-in-training to out-of-hospital care so as to prepare them for modern careers. For medical school-hospital partnerships, this creates new stresses. Hospitals and medical schools must develop the necessary community relationships, and reduce the time students and residents spend with hospital-based faculty. Hospitals must find alternative ways to provide inpatient services that residents used to provide, or hire more trainees. But the volume of clinical material and available funds may not support these changes.

In the area of research, global challenges take the shape of fierce national and international competition for research funds. To a

striking degree, the market for research and researchers has become international. Multi-national pharmaceutical companies roam the globe looking for promising research opportunities, whether in universities or start-up biotechnology companies. Academic medical centers recruit for talented investigators world-wide. To be competitive in this new global research market requires resources, among which access to large and diverse patient populations can be vital. Thus, medical schools need clinical partners more than ever, but not just any partners. They need partners of sufficient size and reach that can draw patient populations that will make their faculty competitive for pharmaceutical research funds, and will enable them to recruit and retain nationally and internationally recognized clinical investigators. Since clinical research often increases costs of care, and since teaching hospitals may not weigh research needs as heavily as medical schools do in their strategic plans, opportunities arise for tension between medical schools and traditional clinical partners.

Finally, in the clinical arena, all western systems share the need to control health care expenditures. Though the mechanisms for exerting such controls vary in the UK and the US, the restraints force clinical institutions to scrutinize the efficiency and productivity of medical school faculty who provide services at their facilities. This scrutiny is new and troubling for these academic clinicians, who tend to blame the messengers, the clinical administrators.

This description of the nature of academic medical centers' work and of the new challenges they face necessarily obscures important differences between UK and US institutions that reflect variations in their health care systems, cultures, and political institutions. Nevertheless, the recent history of the medical school-hospital

partnerships that lie at the core of the institutions that we call academic medical centers suggests that, in important ways, form follows function in academic medicine. Function, in turn, is heavily influenced by basic human, technological and biological forces that span national boundaries. The way humans learn complex new skills, the way new knowledge is discovered and applied, the way expert clinicians use the latest technology to care for the human body - these processes condition the work of academic medical centers, and make all such institutions part of the same dynamic and troubled family.

David Blumenthal, MD, MPP
Boston, Ma.: September 2000

Professor of Medicine and Health Care Policy,
Harvard Medical School and Executive Director,
Commonwealth Fund Task Force on Academic
Health Centers.

1. UNIVERSITY CLINICAL PARTNERSHIP

This monograph is a synthesis of recent work in the UK to develop the interface between university teaching hospitals and medical schools. Inevitably, it touches on the totality of the NHS/university interface, but it is principally concerned with the major centres in which the complex components of health service provision, research and education are combined across organisational boundaries.

These activities are collectively referred to as a tripartite mission, a mission which has traditionally been managed within specialist centres. While these centres have a pivotal role in this mission, an examination of the current NHS/university interface in its totality, shows that the interface cannot be practically or conceptually confined within specialist centres. The tripartite mission has a critical mass in specialist centres but academic activity is broadening, this total activity might be conceptualised as a broad university clinical partnership.

There is a need for a new framework for NHS/university relations; it is needed to provide a modern strategic context and greater flexibility to enable a variety of partners to address all aspects of the partnership. The context of NHS/university relations has become increasingly complex and has outgrown the current framework.

In the main, efforts to develop the NHS/university interface have taken the form of concordats between the health and higher education sectors. Policy makers and advisors have been reticent to recommend models of governance or structures for academic centres, reasonably believing them to be the preserve of local centres. Recommendations have been largely strategic. The Ten Key Principles for joint working is the best-known example. Ensuring strategic alignment between the two sectors is critical,

but there is a consensus that current guidance has been outgrown by tremendous change in each component of the tripartite mission - service, education and research.

Tensions between the sectors have increased substantially over the last *5* years and made the management of specialist centres very difficult. The 1999 report on good practice by the UK Higher Education Funding Body's joint Medical Advisory Committee summarised the changes that have led to a fragmentation of operational partnerships. For universities, the Research Assessment Exercise (RAE) has focused them principally on the importance of research. During the same period medical schools have also been addressing the recommendations of the General Medical Council's report *Tomorrow's Doctors* with the need to develop and implement a new curriculum, including adaptation to changing patterns in health care and an emphasis on education in non-specialist settings. While fundamental change has made partnership with the NHS a lesser priority for universities, NHS policy has also contributed to the fragmentation of the NHS/university interface. NHS partners have been under pressure to meet growing service demands within national and local contract driven performance standards. Changes in postgraduate education have further increased the delivery workload for consultant staff. The NHS has also seen an increased and changing emphasis to research following the implementation of the Culyer reforms.

NHS Trusts and universities are separately accountable and have differing priorities; they have struggled to manage the paradox of interdependence as independent organisations. The NHS is predominantly focused on service, whereas in universities the priorities are research and education. The changes in the external environment outlined above have created incentives for organisations to pursue strategies that point in different directions. There are at present very few incentives to align

research, education and clinical service strategies.

This is, in part, a legacy of the Conservative administration's promotion of competition between organisations, which had the unintended consequence of indirectly eroding the organisational partnership that is the foundation of the tripartite mission. The New Labour administration is committed to replacing the ethos of competition with partnership. Under the mantel of modernisation many of its commitments to health-related education, research and provision, and to higher education generally, sum up to a restatement of the need for a tripartite approach.

These policies have not developed in isolation, but in part (see David Blumenthal's introduction for a medical perspective) are a response to global drivers that have resulted in organisations being increasingly focused on quality, learning and knowledge. Each suggests a continuous interplay and engagement between practice, education, and knowledge. There are growing pressures for practice and management to be evidence-based, and there has been a resultant elevation in the status of information, research and knowledge. In addition an implicit emphasis has been placed on 'life-long learning' for individuals, and 'organisational learning' for teams, organisations and for the NHS as a whole system. There is a new approach to 'learning' for organisations, with an emphasis on collective appraisal of knowledge, reflection on practice, and inter-professional working, research and education. For individuals the emphasis is on self-managed learning, with a need for increased understanding of research methodologies, inter-disciplinary issues, reflective skills, informatics - including e-learning - new technologies, as well as exposure to a variety of different experiences and settings.

In the context of these opportunities and challenges, the

tripartite mission is critical to achieving ambitious goals, for example, by institutionalising Research and Development, ensuring service quality through protocols, guidelines, as well as adding to the knowledge base, with contributions from non-medical disciplines, and developing new methods of inter-professional training and working. Centres have a critical responsibility in managing the inherent tensions between the clinical and academic missions of the NHS and universities in order to create a healthy tension that ensures a dynamic between health service provision, research and education.

Although new directions in health and education can be analysed as supporting a new emphasis on the tripartite mission, they have not been articulated as such. The Government's view seems to be that an engagement between health service provision, research and education should take place at all levels of the NHS and is not as such the exclusive property of specialist centres. Medical schools have an increasingly complicated network of relationships with many NHS Trusts and academic activity is broadening beyond traditional centres.

As Part Two shows, local relationships between NHS and university partners are not uniformly good. Part of meeting the challenge they face is a fundamental need for organisational partners to re-examine the ways they work together and ways they can jointly manage the tripartite mission across institutional boundaries.

The changes in the environment: new priorities for research, service and education, the erosion of partnership, and an emerging recognition of the need for tripartite approaches all add up to a very different environment for a university/NHS partnership than that faced even five years ago. In order to harness partnership more focused mechanisms than concordats are needed to manage this critical relationship. Strategic alignment

needs to be modernised to produce a more dynamic engagement between the sectors at UK, governmental and departmental/ agency levels. This has very recently begun to happen with, for example, the publication at the end of last year of a report by the Joint Department of Health/Higher Education Funding Council for England task groups - chaired by Professor Alasdair Breckenridge - on *Developing a joint university'/NHS planning culture.* The report argues for an alignment of the partnership at national, regional and local levels.

Recommending forms of governance has not been usual and in general this monograph agrees with the principle of subsidiarity this reticence reflects. However, the monograph outlines a range of structural and cultural approaches that have emerged through discussions with leaders of centres in the UK and abroad. These are practical mechanisms that each aim to generate discussion between NHS and university partners as to how they can harness the synergies in the tripartite mission.

Interdependence of missions in specialist centres is such that decisions taken in one organisation impact significantly on the other. This interdependence requires that institutions seek joint approaches to problem solving.

It is argued in this monograph that specialist centres have a particular role in university/clinical partnership. It is a role that is not widely appreciated or necessarily promoted by the organisations themselves. This particular role is re-conceptualised using the introduction of a new term -University Clinical 'Centre' to capture the unique contribution of university teaching hospitals, medical schools and other academic departments, for example nursing, co-working in a partnership that embraces all providers of medical teaching and research. The organisational components of University Clinical Centres each have equal responsibility for the tripartite mission; between them

they provide general professional education and specialised graduate training, lead in biomedical, clinical and health services research, champion the application of new knowledge for the alleviation of suffering, rehabilitation of injury, and are essential to accomplishing important national objectives.

A University Clinical 'Centre' should be thought of as a virtual body and partnership; its composition, beyond the core membership of university hospitals and a medical school is flexible and will develop over time. It might expand for example to incorporate new NHS Trusts, academic disciplines, and the whole spectrum of health professionals. The term 'centre' does not, in this context, relate to a centralised body nor necessarily imply physical co-location.

This opening section has highlighted the fragmentation of the NHS/university partnership as a critical problem. It has suggested that the challenge for the components of this partnership is to re-conceptualise their shared agenda and re-examine their methods of working in order to create a dynamic synergy in the tripartite mission. In examining this challenge, the remainder of this monograph is organised into four parts. The first traces the recent history of efforts to improve NHS/university relations over the last decade or so. The second part explores current UK local relationships and draws on a Nuffield Trust survey of November 1998. It lays out some of the key operational challenges to the development of closer working.

The third part outlines a research project undertaken in Wales in 1999 to examine the potential for strategic and operational partnership between the (then) University Hospital of Wales and the University of Wales College of Medicine. This case study illuminates the complexities in ensuring coherence between service provision, research and education. It highlights the need for partners to develop an explicit common strategy and

organisational mechanisms to support that vision. To inform this work visits were made to international centres and discussed and developed in Cardiff.

A new framework for NHS/university relations is proposed in part four. It outlines a vision for strategic partnership between NHS and university partners, ways to align academic and clinical objectives at the UK and regional level, and defines the function of university clinical centres and the way these centres might relate to academic activity outside specialist centres. It then discusses a variety of governance mechanisms to develop the organisational interface between partners.

In the concluding discussion possible future trends for the university clinical partnership are discussed. The pivotal role that might be played by University Clinical Centres is outlined and the immediate challenges faced by institutions if they are to fulfil this role.

2. RECENT DEVELOPMENTS IN NHS/UNIVERSITY RELATIONS

In 1981 the Nuffield Provincial Hospitals Trust published Sir Fred Dainton's *Reflections on the Universities and the National Health Service.* He considered the interface between universities and the NHS to be 'the place where the future confronts the present' and the challenge 'to make this confrontation productive rather than cause sterile and destructive tensions'.

There has been an explosion of change in both the NHS and the universities since 1981. Since Dainton's reflections, a body of work on the NHS/university interface has emerged and evolved from technical liaison arrangements to a much stronger recognition of organisational interdependence and the need for a culture of partnership. This section summarises in chronological order the major reports on the NHS/university interface over the last thirteen years, from 1987 to 2000.

The Croham Report

In February 1987 the Croham Report on the University Grants Committee drew attention to the need for better co-ordination and planning of medical education at all levels. The report noted that 'the triple commitment of clinical academic staff to teaching, research and patient care and the diversity of the medical schools' sources of funding make for administrative complexity'. The advent of a more rigorous financial climate for both health and education exposed organisational weaknesses and heightened the need for the funding departments to co-ordinate their activities and consult each other about the effect of the policies pursued.

Steering Group on Undergraduate Medical and Dental Education, Interim report, June 1989

Following the Croham report, in November 1987, the Permanent

Secretaries of the Departments of Health and Social Security and Education and Science convened a conference involving all the main bodies with direct interests in medical education. The conference established a Steering Group with the following terms of reference:

'To consider how the current arrangements for undergraduate medical education can be improved to ensure that the policies and programmes of the bodies concerned are properly co-ordinated and directed'.

The group saw a challenge in finding equilibrium between the pressures of teaching, research and service provision: 'this can never be static, and the continuing need to keep this balance under review needs to be set in the context of agreed local policy for medical education'. To strengthen co-ordination, the Group recommended a common agenda for planning, embracing the need for those involved to share information and views on existing services and plans, current issues and progress, and future progress.

A Second Report was published in June 1990 that subsumed the interim report and reflected new terms of reference adopted for its second phase of work in May 1989.

Steering Group on Undergraduate Medical and Dental Education, Second Report, June 1990
The report began with a message from the Secretaries of State for Health and for Education. The message endorsed the report and emphasised that the 'organisational and financial arrangements must encourage those responsible in both the universities and the NHS to work together to teach students, advance knowledge through research and provide and develop services for patients. These three functions are integral'.

The report encouraged an agreed approach to the management of the tripartite mission, 'in which the universities and the NHS must engage together in responsibilities which neither can discharge alone'.

The report concluded that a wide variety of organisational arrangements are compatible with effective collaboration between universities and the NHS. The report did not propose any of these as it aimed not to be prescriptive. Instead, it argued that Ten Key Principles (Figure 1) should guide universities and the NHS in collaboration.

Figure 1 The Ten Key Principles

1. The aim of the undergraduate medical and dental education is to produce doctors and dentists who are able to meet the present and future needs of the health services; to this end, future doctors and dentists should be educated in an atmosphere which combines high professional standards with a spirit of intellectual enquiry and innovation based on active research and development programmes;

2. The universities and the NHS have a shared responsibility for undergraduate medical and dental education;

3. Undergraduate medical and dental education should be provided efficently and cost-effectively within the programmes of the universities and the NHS;

4. The local provision of undergraduate medical and dental education should be guided by clearly defined and co-ordinated national policies;

5. Local policies and plans relevant to undergraduate medical and dental education should be agreed and regularly reviewed by both parties; once established, local policies and plans should be disseminated;

6. The planning and review process for undergraduate medical and dental education should involve senior staff in universities and the NHS, and other relevant bodies;

7. Information required for the formulation of plans and reviews should be shared by both sides;

8. In their plans, the universities and the NHS should take into account the implications of research for teaching and service provision, and should foster both the application of current research and the development of high quality new projects;

9. The universities and the NHS should consult each other on the nature and special interest of senior medical appointments;

10. SIFT (or ACT in Scotland) should be allocated on the basis of jointly agreed plans to support teaching and research.

Universities and the NHS, it was argued, have a shared responsibility for undergraduate medical and dental education. Since effective clinical teaching depends on a partnership between clinical academic staff and NHS staff, it is important that universities and the NHS work closely in the planning and management of medical and dental education and research.

Importantly, the authors of the Second Report were 'convinced that effective collaboration between universities and the NHS at all levels is essential for the maintenance and improvement of the high standards of medical and dental education and research. If collaboration is to be effective, then information, liaison and consultation are not enough. Both parties must recognise their unity of purpose and jointly plan the service and educational arrangements towards their shared objectives'.

Universities Funding Council Medical Committee's First & Second reports on the effects of the NHS reforms on medical and dental education and research, March 1991 and March 1992
The Universities Funding Council undertook its own monitoring exercise during the period between the Steering Group's Second and Third Reports and issued two Reports, in March 1991 and March 1992, on the *Effects of the NHS Reforms on Undergraduate Medical and Dental Education and Research.*

The reports drew attention to potential problems for medical and dental education and research arising from the NHS Reforms and noted that the creation of Trusts had led to an increased number of providers for medical schools to relate to and an increase in the complexity of NHS/university relations.

It noted, for some prophetically, that the NHS reforms - the introduction of a purchaser/provider split and competition between trusts to win service contracts from providers - had the potential to squeeze out the academic mission from NHS providers.

Steering Group on Undergraduate Medical and Dental Education and Research (SGUMDER), Third (interim) Report, January 1993
The third phase of the Steering Group's work, from October 1990 to November 1992, began with a change in the terms of reference to include clinical research with service

implications, as recommended in the Second Report. The new terms reflected a growing realisation that complex NHS/ university interaction necessitates a focus on the whole relationship.

The report agreed that improved accountability for funding at a local level should remain a priority and that all Regional Health Authorities should agree contracts with universities. The report found no evidence of problems with joint working, in the spirit of the Ten Key Principles at the local level, but anticipated trends that might separate NHS and Higher Education strategies across the tripartite mission.

Tomorrow's Doctors - changes in the undergraduate medical education curriculum, December 1993
Although not directly addressing the NHS/university interface, the General Medical Council's *Tomorrow's Doctors* signalled important changes that marked the beginning of a broader emphasis on medical education beyond specialist intervention. Changes to the undergraduate curriculum were introduced to ensure that future doctors have an improved capacity to respond to changing patterns of disease and to take advantage of modern patterns of health care delivery.

Supporting Research & Development in the NHS, (Culyer) September 1994
The Government announced in November 1993 its intention to set up a Task Force to examine the funding and support of R&D in the NHS. The Task Force was headed by Professor Anthony Culyer. Its report, published in September 1994, contained a number of proposals designed to improve mechanisms for determining priorities for R&D in all NHS settings and to provide better management and accountability for NHS resources devoted to R&D. The principle was that money would follow research activity wherever it was taking place.

New arrangements for competition, assessment and contracting for funding were introduced. This report catalysed a disentanglement of the tripartite mission within specialist centres. The new external arrangements for directing each of the three streams meant that the strings became more difficult to hold together within organisations.

SIFT, **Knock-for-Knock,** and the Winyard report But the enmeshed close working within specialist centres has proved difficult to disentangle. Apart from sharing premises and support services, clinical staff of the university are involved in delivering NHS services to patients, while NHS staff are involved in teaching students. Hospitals in which teaching and research takes place incur additional costs as a result. SIFT (service increment for teaching) is intended to cover the additional costs so that hospitals are not disadvantaged when setting prices for their services. Although the external aim was to disentangle sources of funding for education, service and research, organisations have not usually engaged in quantification and cross-charging when the staff of one performs duties for the other. The costs have usually been treated as part of a ᶜknock-for-knock' (informal cost-sharing) arrangements.

SGUMDER's Second Report recognised the complexity in unravelling the costs but remained hopeful that this would be made easier by the introduction of job plans, and more explicit agreement on the distribution of SIFT. Although the general trend was toward contracting for each service, these were not proposed within specialist centres. The report opposed the introduction of expensive and time-consuming accounting mechanisms as they might threaten harmonious and constructive working relationships, but also recognised there may be value in better defining the support each party provides for the other's activities.

In December 1993, Dr Graham Winyard was invited to chair an advisory group to examine the future arrangements for allocating

funds and contracting for service support and facilities for teaching medical undergraduates. The Advisory Group's main objective was to identify a funding system to improve accountability and give flexible NHS financial support to high quality and innovative medical education. In response, the group recommended that General Practitioners who teach undergraduates should be paid from the same SIFT funds as hospitals. It proposed the division of SIFT into two funding streams, initially 20 per cent for clinical placements and 80 per cent for facilities. The Winyard report stressed the need for the NHS and universities to work closely together in planning and contracting for SIFT.

The Higher Education Funding Council's Joint Medical Advisory Committee (JMAC) report on University/NHS interactions, March 1995
The Joint Medical Advisory Committee's report *University/NHS Interactions* was published in March 1995. JMAC conducted a monitoring exercise on the interaction between universities and the NHS and suggested that SGUMDER should revise the Ten Key Principles 'to ensure their wording fully reflects the current situation', and suggested 'continual careful monitoring of the balance of clinical and academic work conducted by university staff if the quality of teaching and research is to be maintained'.

House of Lords' Select Committee on Science and Technology, Report on Medical Research and the NHS reforms, May 1995 The House of Lords' Select Committee on Science and Technology also raised the issue of clinical workload in its report; they were concerned that increasing clinical demands eclipsed the needs of education and research. The Committee considered that 'the resulting disincentives to a clinical academic career are now so great as to warrant an immediate enquiry in their own right'. The Department for Education and Employment asked for the views of the Committee of Vice Chancellors and Principals, as representatives of the employers, on the difficulties in recruiting

clinical academic staff. The CVCP agreed to establish an enquiry, chaired by Sir Rex Richards, and its findings were published in 1997 (see summary below).

SGUMDER, Fourth Report, March 1996
A message from the Secretaries of State, introducing SGUMDER's most recent report, acknowledged the preceding period of considerable change and reasserted close co-operation between the NHS and the universities as essential for the successful management of education and research. 'The outcome of this co-operation is a key factor in determining the future quality of the nation's health'.

The Report recommended the introduction of mechanisms for bringing together representatives of the interested parties and concluded with a revision of the Ten Key Principles (Figure 2), implementing JMAC's recommendation that they be updated.

Figure 2 - The revised and refocused Ten Key Principles

Strategic principles

1. The aim of the undergraduate medical and dental education is to produce doctors and dentists who are able to meet the present and future health and health care needs. To this end, future doctors and dentists should be educated in an atmosphere which combines high professional standards with a spirit of intellectual enquiry and innovation based on active research and development programmes;

2. The objective of medical and dental research is to maintain and improve the nation's health and health care by contributing to the promotion of health and the understanding of disease;

3. The universities and the NHS have a shared responsibility for ensuring high standards are achieved and maintained in undergraduate medical and dental education and in research;

Operational principles

4. The local provision of undergraduatemedical and dental education, g

5. Universities, health authorities, trusts and, where appropriate, GP fundholders, should share relevant information and consult one another about their plans. Once established, policies and plans should be disseminated locally and reviewed regularly;

6 The NHS and universities should consult one another about the special interest and contribution to service, teaching and research of senior medical and dental appointments;

7. Where agreement cannot be reached locally, the NHS Executive Regional Director and the Vice-Chancellor of the University should confer;

Funding principles

8. The NHS and universities should ensure that undergraduate medical and dental education and research are undertaken efficiently and cost-effectively;

9. The universities and NHS should work closely together in funding research & development within

the NHS in England;

10. SIFT should be allocated on the basis of mutually agreed service plans to support teaching. Universities should be joint signatories to all SIFT contracts.

Report of an Independent Task Force, Clinical Academic Careers (The Richards Report), July 1997
Following the concerns expressed by the House of Lords Select Committee on Science and Technology, the Committee of Vice-Chancellors and Principals established a task force to consider problems for clinical academics. The report found that the conflicting demands of the two. systems (NHS and university), though frequently problematic, are potentially a source of great strength, particularly as it allows for a strong link between theory and practice.

In recognition of the close NHS/university interdependence, the report suggested that the relationship between the two should be reviewed, with a view to exploring the possibility of a unitary governance system so that the tripartite mission might be effectively balanced.

HEFCE, 'Good practice in NHS/Academic Links, Joint Medical Advisory Committee, March 1999
In 1998 JMAC commissioned a study of good practice in NHS/university relationships. The study was undertaken by the Health Services Management Unit at the University of Manchester and was concerned with three issues: competing pressures on staff time; curriculum change and the patterns of clinical placements; issues arising from the implementation of the Culyer Report.

The study focused on good practice in five sites (including Cardiff, which is used as a case study in this report). Examples of exemplar approaches include aligning the specialist services of a trust with

the research strategy; joint research strategies; joint appraisal for clinical academic staff; and cross representation of academic and NHS staff in organisational planning.

Joint Department of Health/Higher Education Funding Council for England task groups, 'Developing a joint university/NHS planning culture, November 1999
This task group was set up in 1997 to examine how best to take account of the interdependency of research, teaching and patient care in the funding of university medical and dental schools in England. The report concludes that 'it is important to have effective liaison arrangements at all levels (national, regional and local) to facilitate the exchange of information and management of the interface'. 'There is [also a] need to improve the quality of management information and make it more widely available at all levels to enable stakeholders to assess the issues and make informed decisions'. It recommends that 'local and regional stock-takes should be undertaken of the issues affecting the joint management of the interface'. Although the task group had an English focus the issues it raised are of interest throughout the UK.

Nuffield Trust Working Group, 'University Clinical Partnership: harnessing clinical and academic resources', March 2000
The Nuffield Trust Working Group report is concerned with local management of the NHS/university interface. It recommends a strategic alliance between local partners to form a University Clinical Centre, in which the components of this virtual organisation (the university teaching hospital, medical school, and other departments) together agree a strategic framework for managing research, education and service within the centre, and to work with regional networks to allow co-ordination research, education and service across the centre.

3. A SURVEY OF UK RELATIONSHIPS

This monograph provides some of the background, and is complementary to, the Nuffield Trust report. The recent history of NHS/university relations has shown a shift in emphasis from coping with administrative complexity to strategic and organisational development associated with the tripartite mission. Recent work has explored the realities of the current situation through discussion with heads of medical schools, university hospital chief executives, and with a survey of UK relations.

The Nuffield Trust's involvement in this area followed a meeting in June 1998 between the chief executive of the NHS Executive and the chairs of the Council of Heads of Medical Schools and the Medical Committee of the Committee of Vice-Chancellors and Principals. The meeting noted a perception that relationships between medical schools and teaching hospitals were not uniformly good. It was agreed that the Ten Key Principles provide a framework to facilitate joint working, but it was suggested that the operation of the Ten Key Principles at local level could be facilitated by the development of a code of practice or supplementary guidance. At that meeting it was suggested that the Nuffield Trust should be invited to host an exploratory meeting on this issue between representatives of health and higher education.

In advance of this meeting, the Nuffield Trust carried out a survey of UK relations in order to establish the realities at ground level, based on the perceptions of heads of medical schools and university teaching hospitals (the questions are reproduced in Figure 3 on page 41). The results confirmed a perception that relationships are not uniformly good, but it showed a strong desire from both sectors for a closer working relationship. The survey also revealed a broader than expected spectrum in organisational relationships.

Cross-representation

The most common form of cross-representation between medical schools and university teaching trusts is for a medical school representative to sit on the Trust Board as a nonexecutive director, but without any reciprocal arrangements. This is true for most respondents. In some cases, NHS representation is facilitated by a trust chair having ex-officio status as an observer to the medical faculty board or university council. In very few cases is there full cross representation. Where this is the case, it is thought to benefit joint planning. Many institutions commented that they were considering ways to advance and formalise their structural relationships.

Consensual decision making

Regular meetings between the Chief Executive and Dean are, for many, the only formal mechanism to ensure that managerial decisions are taken in the context of the partner institution. However, even with regular meetings, it was noted that decisions are often taken independently and without consultation. An interesting and recurring point in the responses is that organisational interaction based around good personal working relations can be effective yet also vulnerable to personalities and to organisational priorities. Almost all of those who responded noted the importance of individuals in determining the strength of relationships. One Dean commented that 'it may, finally, come down to the personalities in the senior positions at any one time[5].

Aside from liaison between the heads of institutions, there are a number of other mechanisms to link the activities of the interdependent organisations. Some have cross-representation on key decision-making committees. Other institutions hold regular meetings at executive levels. A couple of institutions have representative forums for service, education and research so that university and NHS staff can plan decisions together.

A number of institutions are making efforts to further develop inclusive decision-making beyond committee representation and meetings. These include instituting liaison offices, which sit between the two organisational structures and shape formal interaction between the two organisations, or joint strategy groups to align direction. Another idea, closely related to liaison, is nominating senior individuals to play interface roles.

It is a common aspiration that the strategies of each organisation should coincide rather than conflict, and that joint arrangements are needed to facilitate a sensible balance between service, teaching and research. The lack of a formal and explicit agenda was thought the chief obstacle to joint working. Many institutions would like to see development in this area and the starting point as developing an understanding of the partner institution perspective and to provide good communication between executive management.

Service review

There are very few formal arrangements for joint service review other than informal discussions between senior NHS and university staff and it was noted that this was an area in need of development. A quarter felt that joint structure - while not specifically for service - allowed joint appraisal on a regular basis. Mechanisms that are reported to work well include liaison groups, academically led directorates, and joint strategy groups. A number of institutions are making efforts to reinforce dialogue and to facilitate discussion specifically around service provision.

Research

Collaboration in research is a developing area; a variety of initiatives exist within a number of institutions to adopt a shared strategy for R&D through a joint research committee or a joint strategy group. One centre was discussing harmonising research grants and contracts across the university and the Trust with the university taking over the responsibility for administration.

Research featured regularly in opinions of the strengths, weaknesses and obstacles for joint arrangements. From the NHS perspective, a Scottish Trust felt that research was increasingly abrogated from the NHS agenda. From the university perspective, one fear was that under joint arrangements basic science would suffer, joint strategy might constrain academic research if NHS partners were reluctant, or incapable of implementing the results.

Figure 3 - Survey questions

1. Is there cross-representation on the Trust Board / University Council?

2. What mechanisms are there to ensure that managerial decisions are taken in the full context of your NHS/Academic partners, in recognition of their interests and that those issues are discussed?

3. Do you have any mechanisms for joint service review?

4. Do you have any mechanisms for joint research review?

5. Do you have any mechanisms for joint curriculum planning?

6. What personnel arrangements are in place to ensure that the balance between the service and academic activities of clinical academics are appropriately balanced? Does this differ for NHS or University staff members?

7. What systems are in place for Universities to agree the spend of SIFT and R&D monies? What systems

are in place to ensure that clinical spends by the universities match NHS priorities?

8. On which committees are there joint representation?

9. Are there plans to enhance joint planning?

10. What from your perspective, are the strengths and weaknesses of joint arrangements?

11. What do you think are the principal obstacles to be overcome in relation to enhancing a joint relationship?

Research co-ordination, however, is seen as a clear potential strength of joint arrangements. One respondent sees potential in a streamlined portfolio of Trust R&D and University research: 'our wish is to see these as overlapping circles, clear dialogue is often not enough to help develop research in a co-ordinated fashion'. The divorce of the HEFCE Research Assessment Exercise and the Culyer Assessment Process was expressed as an obstacle. It 'can result in the same joint institution receiving completely different ratings on the same R&D portfolio'. There are few external incentives to joint working.

Curriculum planning

Over a third had no arrangements for dialogue on the development of the curriculum. Half have committee representation, although perceptions around the success of this arrangement vary. A common Trust view is that curriculum planning is driven by the university and takes little account of the NHS ability to teach or its potential impact on clinical service.

Others have a fruitful and inclusive relationship in this area. A number have instituted specific joint reviews, and two Trusts have

appointed a director of medical education to work with the medical school in developing curriculum.

Clinical academics
Almost half said that there were no specific measures to ensure balance in the activities of clinical academics, but the common perception is that clinical academics work over and above their contracted service responsibilities. This is thought to be a particular problem and source of friction where an academic was the sole provider of a clinical speciality.

One centre has merged academic and clinical departments £to achieve balance and congruence between the three core activities of service, education and research'. Where strategic groups exist, they are felt to play a positive role in balancing the activities of staff against the tripartite mission. Another has recently undertaken a full joint review of departmental job plans and another introduced joint appraisal of both NHS and University staff.

A lack of contractual flexibility is cited as an obstacle. A need for a clearer understanding of the responsibilities and objectives of both partners in cross-funded posts is seen as an important area for development.

Quality
The vast majority had, at the time of the survey, no specific or formal joint quality review. A third of respondents said that quality issues were raised and addressed within existing structures and audit meetings. Some felt that their audit system was strong, particularly where audit was multi-disciplinary.

Clinical Governance is likely to be the driving force for new systems to emerge. A large number of institutions said that they were examining systems in the light of the Government's

consultation document on quality.

Financial allocation

Stratification of opinion is in terms of contentment with the systems for allocation. No institution is entirely happy with their system, and the majority appear to be at the discontented end of the scale. Financial allocation was presented as a major obstacle to joint working. Although most financial allocations require joint signature, this is not necessarily regarded as agreement. The majority feel that more work is needed in strengthening the monitoring of SIFT contracts.

Where dialogue does exist, progress has been made in making allocation more transparent - for example, ensuring that spending is strictly on teaching-related activity. In some centres, a considerable amount of work over the years has been done to make the process more accountable, for example, introducing a system of student feedback geared to identifying both quality and reliability of teaching.

Despite the intention of the Winyard Report to produce guidance to assist the NHS and the associated medical schools to manage SIFT in a more uniform way, no two medical schools or regions handle SIFT in the same way. There needs to be consensus on the principles for allocation of SIFT.

Financial obstacles are the second most cited weaknesses for implementing joint planning. If transparency and accountability can be developed, then a principle obstacle to closer working will be removed.

Developing closer working

More than two thirds of respondents are discussing ways to enhance their joint relationship in some way. One respondent felt that the *New NHS* agenda was undeliverable without further

co-operation. Two institutions stated that they wanted to do this without creating a plethora of committees and were exploring models of Academic Health Centres.

Some think that the interface will evolve over time, that structures are in place and it is just a matter of making them more effective. A minority felt that little more could be done and tensions between each agenda were irreconcilable.

Opportunities and weaknesses of closer collaboration

Developing a better understanding is the major advantage of joint arrangements, in order to harmonise priorities and reduce the 'them and us' mindset within organisational partners. Joint arrangements are thought to promote effective working and shared ownership of mission. The tripartite mission of service, teaching and research means that institutions are interdependent and this shared agenda only effectively delivered through partnership. Another key emphasis is the possibility of developing joint approaches to research, and the benefits this might provide to either side, particularly in demonstrating the dynamic within university centres.

The historical relationship, and in many cases, the proximity of partners, was also considered a strength.

Cited weaknesses of closer working, from the university perspective, include the potential for the relationship between the university and medical school relations to be weakened; medical schools might be isolated between the two. From the NHS side, there is a perception that clinical service has become less important to universities. Many make the point that personnel arrangements presented a weakness to formulating a shared strategy.

Obstacles to partnership

Many of the obstacles cited are reflections of both the strengths and weaknesses of joint arrangements. There are differing objectives - this was summed up well by one respondent: 'the strategies for patient care, teaching and research are pointing in different directions and driving the integrated ethos into history unless we strive for its preservation'. Obstacles within the systems for financial allocation are mentioned by almost everyone. There is also a feeling that the lack of integrating structures mean that the capacity for joint working depends too much on personal relations between senior management.

A perception of 'priority overload' presents an obstacle to any further development 'as there simply is not enough time available'. The politicised environment of the NHS was felt to be an obstacle to planning. The logistics of joint planning and the required joint understanding is a real obstacle for universities dealing with a plethora of NHS trusts.

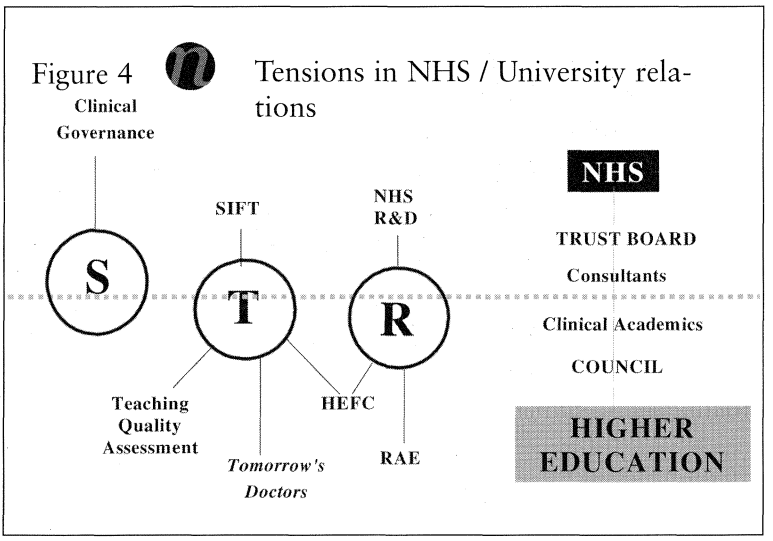


Figure 4 Tensions in NHS / University relations

Organisational structures in the NHS and higher education are thought by some to be incompatible, joint working would require fundamental reorganisation - 'this would not be welcomed'. Other perceived obstacles are the lack of spare managerial capacity to develop joint arrangements, the different external indicators of success for the NHS and for universities, and the divergence of external assessment. Until these are better aligned, organisations will inevitably work according to their differing agendas,

The implications of the survey

Pressures on both sectors are intensifying pressures for an explicit unpacking of shared responsibilities, but it is thought that 'we should not reach the stage where the relationship becomes about invoicing each other'. Incentives have been created to adopt organisational strategies that point in different directions. At a Nuffield Trust meeting to discuss the survey results, discomfort was expressed at hearing organisations with an integrated basic mission speak as two different and distinct voices. Those attending the meeting made the simple but telling observation that this meeting was the first occasion at which a significant number of heads of medical schools and teaching hospitals had sat down together

Figure 4 conceptualises the tensions presented by different accountability arrangements. The resulting complexity for managing the tensions between service provision (S), teaching (T) and research (R) present the fundamental challenge for closer working between medical schools and university teaching hospitals over the tripartite mission; they must balance these missions.

Either side of the dotted line, though tied together through a common mission, the NHS and universities have separate accountability and priorities. The NHS is predominantly focused

on service; while in universities the Research Assessment Exercise (RAE), for example, has led to universities giving greater priority to research. At present there are few incentives to align research, education and clinical service strategies.

Effective governance jointly determines the appropriate alignment of the circles. The organisational challenge is to manage the shared mission across organisational boundaries.

While the survey paints a bleak picture of current relations, and perhaps under-represents the developing relationships between medical schools and other NHS providers, it also provides a starting point in exploring good practice. These include mechanisms for consensual decision making; partnership in service provision; partnership in financial allocation; and joint research initiatives.

4. DEVELOPING THE ORGANISATIONAL INTERFACE

The survey identified the principal problems in developing joint working between university teaching hospitals and medical schools and showed a general desire to improve this organisational relationship.

To pursue this the Nuffield Trust set two initiatives in motion. A meeting of chief executives and heads of medical schools hosted by the Nuffield Trust agreed to form a smaller representative group to consider how the local organisational interface might be better supported. At the same time a project began in Cardiff to consider ways in which the organisational relationship between the (then) University Hospital of Wales and the University of Wales College of Medicine could be developed.

This section discusses the Cardiff project to provide a case study of these complex issues and is divided into four parts.

The first introduces Cardiff as a case study of organisational development in NHS/university relations and describes some of the strategic and operational challenges to the centre. The second outlines some key insights provided by visits and interviews to Academic Health Centres in the United States and in the Netherlands. The third part describes how these discussions were developed in Cardiff and the resulting vision for the contribution and relationship of the Cardiff centre and the management of the tripartite mission across the system.

(a) Cardiff as a case study of planning organisational development in NHS/university relations

Both the Vice-Chancellor of the University of Wales College of Medicine and the Chief Executive of the (then) University

Hospital of Wales participated in the Nuffield Trust survey and attended the meeting to discuss its results.

From the positive end of the spectrum of NHS/university relations they looked to further progress the relationship. A project to consider closer working was instigated at the end of 1998. In April 1999 the University Hospital of Wales merged with Llandough Trust. In April 2000 the new Trust merged again, this time with the Cardiff Community and the Dental Trust to form the Cardiff and Vale NHS Trust. These changes clearly present severe managerial complexities for the NHS, but, to the extent that the Trust will embrace the spectrum of health services, the merger offers an opportunity for integrating all aspects of research, education and health services - throughout the continuum of primary to tertiary care.

Experience in Cardiff is cited here as a case study to lay out some of the particular challenges when considering how to redesign partnership between institutions in the UK. Individual NHS/ university relationships have developed largely as a result of institutional history and culture. A phrase coined in America is as true in Britain: Tf you've seen one academic medical centre, you've seen one academic medical centre'.

The Medical Teaching Centre Cardiff, as it was named, was opened in 1971 as the first purpose-built and completely integrated hospital and medical school in Britain. The Queen opened the new Centre on Friday 19 November 1971 commenting that 'a great hospital and a school of medicine have been so skilfully combined'. This quote forms the title of a paper by Alun Roberts, the Director of the College/NHS liaison unit in Cardiff, on the origins and development of the centre. He cites a *Western Mail* commemorative supplement, which noted: 'It is not only a fine modern building with the best possible equipment and facilities; it is the first of the new integrated teaching

hospital/medical schools designed for patient care, medical education and research'.

Although the centre has never achieved the full potential of its architectural philosophy, collaboration in Cardiff is amongst the closest in the UK. Its liaison unit was highlighted by JMAC's study of *Good Practice in NHS/University relations* as the most distinctive example of consensual decision making.

The College/NHS liaison unit was established in 1996 under the direction of Dr Alun Roberts, formerly Registrar and Secretary of the College. A point made by JMAC in their report on good practice in NHS/university relations cannot be over emphasised, 'the previous role and status of the Director has established the credibility of the unit and facilitated very positive relationships across the divide'.

Wales provides a useful context for discussion of the complexities of governance for connected reasons. The College of Medicine has a strong relationship with many NHS provider organisations throughout Wales, which are as important as its relationship with University Hospital Wales. The College of Medicine and the trust are physically integrated, which provides quite separate challenges. This organisational complexity is further complicated by devolution from London rule and an explosion of change in the Welsh political landscape.

Effective relations between the College and hospitals throughout Wales have a good tradition and are essential, but the single biggest challenge is effective management of the relationship between the College and the main teaching hospital. Despite curricular changes and the expansion of student numbers in recent years - meaning that students are more widely dispersed across Wales - the Trust is still responsible for forty per cent of hospital-based clinical training, and no other Trust provides the

breadth of specialties or the infrastructure needed to support this activity. The Trust also plays the largest part in the hospital-based training of the College's students in nursing and in the professions allied to medicine.

As Alun Roberts - the Director of the College/NHS liaison unit -has noted, the tensions inherent in this environment rarely exist in other contexts. These tensions have been accentuated by an increase in demand on the service contribution of clinical academics at the same time as research has become more important to the financial position of medical schools. In its service provision a university teaching hospital must take into account the impact on its day-to-day operations of clinical academic departments, which, from time to time may have different priorities and special interests which may not always coincide. The close proximity of a university teaching hospital and its medical school imposes management challenges that are different in character from those experienced by other NHS providers. When the medical school is physically embedded, as is the case in Cardiff, it presents uniquely complex challenges in respect to site management, shared facilities, and the provision of the sort of facilities normally available to university students.

In thinking through these issues, the Chief Executive of the Trust and Vice-Chancellor of the College initiated a project that started in January 1999. The aim of the project was to scope possibilities for a closer working relationship, including the possibility of joint management of the centre by the two institutions. The research involved in-depth interviews with key stakeholders in the relationship a number of times over the course of the project, to discuss how the organisational interface might be further developed.

To aid this iterative process visits were made to a number of

Academic Health Centres in the US and to two centres in the Netherlands. From initial discussions in Cardiff some assumptions could be made: everyone agreed partnership is essential; there is great potential for closer working to make an enhanced contribution to health and the health system in Wales; the performance and status of each partner is inevitably enhanced by a close relationship with the other; current arrangements for the interface do not adequately manage the tensions in the relationship; change is required to facilitate a shared strategic and operational approach.

The insights gained from international visits are listed below and extrapolated through the following two sections that explore strategic and operational development of the interface. The points became the structure for continuing discussion about the development of the organisational relationship.

(b) Ten insights from international experience

The key insight from these visits relates to a common misconception about 'joint management' of Academic Clinical Centres. It is often assumed in the UK that these are single organisations that result from merger. This model of governance exists, but is being transformed. Many centres in the US, including Johns Hopkins, are better described as virtual centres; they are not single organisations, but strategic alliances formed through academic and clinical partnership.

The individual centres visited are not discussed as specific examples, this is in part because of space limitations, but more importantly it is because the different contexts in which these systems operate make direct comparison difficult and of limited use. The importance of the insights from these visits is more about an approach to partnership and the mechanisms for developing partnership than the particular governance structure employed. Joint management, in this conception, is more fluid than a

merger implies and is not necessarily about integrating structures, which might be better thought of as joined management, but is more about effectively managing the overlapping areas of the tripartite mission and creating an active dynamic between its components, which is the source of the added value created by these institutions. It is critical that each partnership thinks through its shared agenda and how this should be supported; there are no off-the-shelf solutions.

1. The key issue in the relationship between medical schools and teaching hospitals is the way three principal resources - research, teaching and service - are managed. Conceptualising in this way allows organisations to overcome institutional and structural barriers.

2. The aim of a joint venture or of partnership between medical schools and teaching hospitals is to integrate the management of the tripartite mission. In this way Centres are able to demonstrate the additional value they - as academic centres - contribute to health services. That service is based on the latest and best knowledge and education probes and supports this interaction. Each component of the academic/clinical mission should provide a quality loop.

3. Research, service and teaching should all be complementary but instead compete. The reason they compete is that usually the medical school has responsibility for research while the teaching hospital is held accountable for the quality of clinical care. Education is more shared, though the university is monitored, but at times can become the lost relation, crowded out in a tug of war between partners.

4. International comparison has some important lessons. In Britain we have traditionally built institutional and accountability walls between service (the responsibility of the NHS) and research and teaching (principally the responsibility of the university sector). International attempts to overcome these barriers include the appointment of a university Vice-President for health who mediates between the hospital CEO and the Dean of Medicine. This has not removed the tensions but has to an extent mitigated them. An approach adopted in many US centres is the transfer of accountability for all three components into the hands of one individual at corporate and departmental level. Tensions are most successfully removed where the three components are organised and managed across institutional boundaries. This has been particularly successful at Johns Hopkins University, Baltimore and the Academic Medical Centre at the University of Amsterdam. In these institutions service, research and teaching all retain their individual balance through integrating their functions. An individual at Johns Hopkins described the relationship between research, service and teaching as a three legged stool that will not stand if one component is removed.

5. The unique contribution of an academic clinical centre is made through the managerial dynamic between the tripartite mission. For example, in a research continuum, from the bench to the bedside, where discoveries in basic science are transferred quickly to the clinical setting. The AMC at the University of Amsterdam has a health services research department which writes clinical protocols for their institution, some of which have been adopted regionally and nationally.

6. Mission statements can be an effective managerial tool. The formulation process offers an inclusive approach to developing a shared agenda and common purpose across organisational components. At the University of Maryland, for example, a 9-month consultation with staff, which helped develop a culture of partnership, produced the statement: 'we heal, we teach, we discover'. Mission statements are perhaps an example of something that does not translate easily across the Atlantic. In the UK we should perhaps think of 'a joint strategic commitment'. The important part is the process of creating such a statement - they are not necessarily hollow, only if constructed in isolation of staff. They can help to ensure that staff and corporate entities all pull in the same direction, and can give patients and external bodies a clear understanding of the values and role of the institutions.

7. To keep research, service and teaching in proportion it is important to find methods of 'mission management', financial accounting systems that are able to disaggregate the finances between each component.

8. Where shared governance works well there is a clear regional approach to research, service and health services incorporating whole system thinking and overcoming fragmentation in the interface between primary and secondary care, secondary and tertiary, tertiary and quaternary care.

9. An important aspect of 'whole system thinking' is the establishment of regional networks for service, teaching and research, including established clinical

pathways determined by disease or illness area.

10. The final lesson from international governance is where the tripartite mission is successfully integrated: it is the result of a common external focus. Internal governance arrangements should reflect the external vision.

There is no single definition of joint governance and no template for how academic and clinical partners should approach their joint mission. However, based on these visits and interviews in the US and the Netherlands, there can be a common approach to thinking through the development of closer working.

(c) Developing a common external focus

There are challenges to be engaged before joint governance can be achieved. The starting point is to consider the strategic relationship

Figure 5 External Obstacles to Shared Governance

- **Lack of external appreciation of unique challenges for Cardiff and Vale NHS Trust (and associated funding)**
- **Resentment and anti-Cardiff mood**
- **NHS/University perverse incentives to pursue strategies that point in different directions**
- **Strategic uncertainty - the role of the Assembly**
- **Non-alignment of R&D and RAE**
- **Trend towards DGH teaching**
- **Change overload - bad timing**

between Trust and College and between them and with the rest of the health system(s) in Wales. While the situation was thought to present many challenges, it was also thought that change on a number of fronts presented an opportunity to fundamentally rethink the direction of the relationship between Trust and College. The changes in the external environment - the introduction of the Welsh Assembly, Trust Reconfiguration, Clinical Governance, and an expansion of student numbers - all require fundamental realignment of strategy.
There are a number of potential environmental obstacles to developing a joint approach in Cardiff; these are summarised in Figure 5. Thinking through the implications of these challenges is a key part of thinking through the shared agenda of each party.

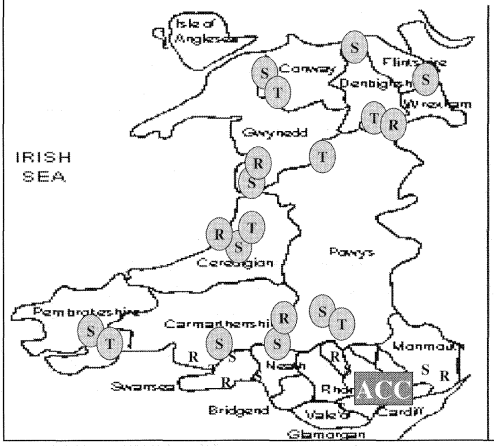
The chief challenge to shared governance is thought to be the attitude towards the initiative in the rest of Wales; it is thought that other institutions would see shared governance and increased alignment as 'unfair' and to the detriment of the contribution of others in Wales. Related to this is a perception of resentment and anti-Cardiff feeling, that it takes disproportionate resources at the expense of other areas in Wales.

A second set of obstacles relate to strategic uncertainty as a result of NHS Cymru coming under the management of the devolved Assembly rather than the Welsh Office. However, there are also thought to be clear opportunities resulting from devolution, including opportunities for new forms of dialogue with decision makers and a holistic approach to health policy from a Welsh perspective.

A third set of obstacles relate to the implications of partners having seperate accountability systems. There is a sense that new policy, and associated systems for accountability are driving these further apart and the integrated ethos into history.

Figure 6

A network for University Clinical Partnership in Wales



NHS Wales is given strategic direction from the Assembly and underpinned by planned networks for Service, Research & Teaching

The Academic Clinical Centre for Wales provides specialist services, leads on health research and co-ordinates medical education.

Discussions with stakeholders about the development of a strategic vision to overcome these obstacles, based on the insights of holistic approaches of Centres internationally, led to the idea of a Health Network for Wales (Figure 6). Through discussion this emerged as a desirable vision. The basic approach behind this vision is that networks for research, service and education should be established throughout Wales to reap maximum benefit from the investment in the tripartite mission across Wales.

A network for national service provision is seen as a logical progression to a more planned approach in NHS Wales, this network would plan service provision across Wales. Throughout the 1990s, following the introduction of a quasi-market culture,

with a reduced emphasis on central planning and regulation, fragmentation has increased in the NHS and left few incentives for collaboration or for planning regional and national service provision.

Reducing this fragmentation will be necessary for the introduction of a University Clinical Partnership in Wales. The figure below conceptualises a vision of the Cardiff centre in this network where it would provide tertiary services and exploit its economies of scale for Wales as well as provide secondary services to Cardiff and its surrounding area. The relative proximity of Liverpool and Manchester to North Wales may mean that specialist services in North Wales would be provided across the English border.

Already in place, and an impetus for supporting the overall vision, is the existence of a well established teaching network. As the only medical school in Wales, the College of Medicine has an important relationships with NHS Trusts around Wales. The College/NHS liaison unit has been very successful at building effective relations and has redistributed resources as it has increased student numbers in Trusts around Wales.

It is an important point, that the network has the potential to redistribute academic clinical resources across Wales, for example, in appointing clinical academic staff in key DGHs to support the growing teaching activity outside the Cardiff centre. The movement of students from Cardiff to other parts of Wales has implications for SIFT resources; increasing its specialist services role could counterbalance the resources that increased distribution of students take from the Cardiff centre.

Although basic science requires a critical mass of resources, there are thought to be real possibilities for developing partnership throughout Wales in health service research, public

health, primary care, epidemiology, audit, and clinical trials. The announcement in 1999 of Welsh Office of Research and Development (WORD) research units offer real opportunities for the vision of a network; these will establish networks across Wales for collaborative research in key NHS issues, such as mental health and primary care.

In a network across Wales, the centre in Cardiff has a very particular role. To emphasise this role, the Trust and College in Cardiff were together conceptualised as the University Clinical Centre for Wales. This term is introduced to capture the pivotal contribution that is made by such centres to the health system they work within. In partnership, university hospitals, medical schools and other related academic departments, for example, Nursing, make a unique contribution by providing a primary site for education and research and in the provision of specialist services.

Following a round of discussions that conceptualised a vision for the Academic Clinical Centre, discussion moved on to how this concept might be communicated to the rest of Wales. It is thought to be of vital importance that stakeholders should not be alienated. There will inevitably be some apprehension. The value added by the Academic Clinical Centre needs to be emphasised. Dr Alun Roberts, director of the College/NHS liaison unit recognises the importance of sensitivity in communicating partnership to the rest of Wales.

> 'Both organisations would have to work hard to reassure the wider NHS in Wales that closer partnership between the College of Medicine and the premier teaching hospital Trust in Wales would not diminish the teaching, research and service contributions made by the rest of the NHS and HE sector. Indeed the NHS in Wales would need to be convinced that a strong partnership would lead to the overall benefit of all, because at the present time [the Trust] is too often regarded by other health care

providers with suspicion, even hostility. In other words there needs to be a culture change in the rest of Wales too'.

Communicating the concepts of planned clinical networks, and the benefits of an integrated regional view have been important in winning the acceptance of successful jointly managed institutions (for example at the University of Amsterdam's Academic Medical Centre). One of the lessons from international experience is that governance is most effective where it is underpinned and driven by a common external focus.

(d) Developing the organisational interface

In order to develop the organisational relationship and to facilitate the integration of clinical and academic objectives into a single mission, it is important for organisational partners to agree a joint approach and to develop the organisational capacity to agree a shared strategic approach. Discussions agreed that the organisational interface in Cardiff would be developed in an incremental approach. The first stage is to develop a shared image of itself, its current and potential role and for this to be communicated externally and sustained internally.

Progressing the shared agenda will require the formulation of joint objectives at corporate, executive and operational levels. In Cardiff, a majority think structural changes necessary to embed a change of direction into both organisations. It is thought important that the corporate entities adopt structural and cultural change to demonstrate a change in direction.

Pragmatically, the immediate focus for many is to identify areas where benefits can be gained early on in areas of mutual interest. Operationally, changes might be piloted and change introduced unevenly. One possibility might be to consider joint ownership of some activity, such as R&D or appraisals for staff. Another option

is to take an area-by-area approach, which would begin with an analysis of the elements of research, education and service undertaken and a consideration of how they might be better integrated. Moving to joint management in one step is thought not to be feasible and can only be considered when the culture has absorbed partnership as an ethos. Developing the organisational interface is seen to require a combination of top-down and bottom-up initiatives.

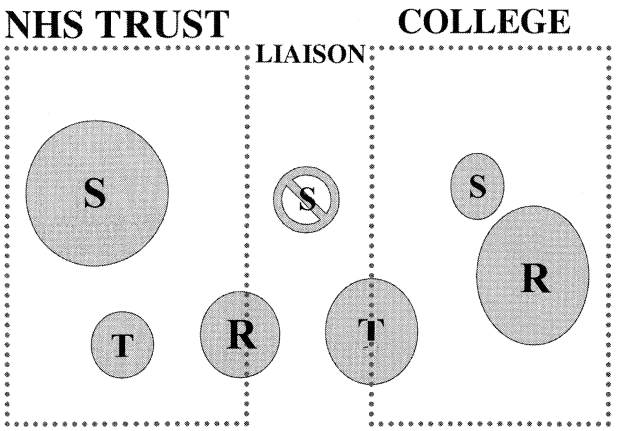
Formalising a joint strategic direction

The starting point is a fundamental assessment of partnership. One interesting insight from the US is the development of mission statements as a process for developing new direction and promoting discussion within organisational partners about their shared objectives. In general terms an inclusive approach facilitates discussion around developing joint strategic direction and is a critical first step in implementing closer working.

If strategy is developed through consultation with staff it is likely to be more robust and owned by the organisational components. Developing a joint strategic commitment is unlikely to be effective if it is drafted without considering, a range of serious questions. These depend upon the situation of the partners. In Wales these might include: to what extent does the Trust have an all-Wales role? Should the developed strategy be hospital based or should it reflect the wider role that the college plays in, for example, primary care and public health? There are important issues to be pursued collectively; issues that require further discussion and clarification.

It is strongly felt that underpinning any joint strategic commitment should be an agreement, signed by the Chief Executive of the Trust and the Vice-Chancellor of the university, which has measurable objectives - expectations of

Figure 7 The Organisational Interface in Cardiff



joint working - for example, planning changes in student numbers; agreeing and implementing clinical standards; and reviewing the balance of staff activities as they affect clinical and academic objectives.

Developing depth in liaison

Figure 7 lays out the fundamental problems with the interface arrangements in Cardiff. The priorities of the Trust and College are inverse and not well aligned. The liaison unit does not liaise over service issues. Committee meetings designed to create a senior management link are vulnerable to the urgent and, because it is a single forum, can be difficult to focus on the breadth of common issues.

The liaison unit, as it relates to the relationship between the university hospital and the college, acts as a diplomatic buffer

zone. Interviews with stakeholders suggest there are two important steps for the liaison unit to facilitate integration between the two organisations on key issues.

Firstly, depth is required in the unit. There need to be issue-focussed forums for liaison. These topic-focused forums on, for example, service areas, research, education, human resources, and estates, give the opportunity to align strategies and priorities and become self-sustaining organisational links.

Secondly, the liaison committee should be transformed into a strategic body overseeing the managerial integration of the two organisations and providing a top level forum for the resolution of urgent issues.

The long term aim of the liaison unit should be to broaden College/NHS links beyond the relationship between the hospital and medical school by engaging other academic departments such as Nursing and PAMs with the NHS.

A second aim for the liaison unit should be to communicate the aims of the Cardiff partnership to higher education and NHS organisations across Wales as a complementary and unique contribution to the health network, which is different in character to the activities outside of the specialist centre.

Bridging the management structures

The two organisations need to institutionalise forums to assess operational joint priorities.

There are a number of overlapping functions between the Trust and College. Bringing these individuals together can align strategies and priorities. Examples include IT, estates, HR, and finance. The danger is to avoid impotent committees operating between the two and instead to facilitate insights into better ways

of working jointly.

Clinical and academic relations at directorate level

A suggestion that clinical and academic departments might merge received a mix response. On the whole it is thought that relationships at this level are good but what is more important is to establish a formal and robust interface between clinical and academic departments. These are not necessarily coterminous and in many cases have genuinely different priorities, but should relate over the shared agenda. Although departments have different objectives, the challenge is to ensure that these do not conflict and are complementary.

It is thought that personalities are too fragile a basis on which to base the interface and that interface should be formally organised around research, service and education. Shared objectives need also to be set at directorate level. Departments, within both institutions, will answer questions of partnership differently and consequently have different approaches: is the department driven by service, or by research? Does it have a local, regional or national focus. Once a common focus is established it will be clearer how this joint approach will proceed in each directorate.

The conclusion of the work in Wales is that closer working is desirable and the next steps are for the partnership to agree joint strategic commitments. Operational changes in the interface should be based around joint functions and allowed to progress incrementally and unevenly. There is a tremendous recognition amongst senior staff on both sides of the potential for joint working and to work together as an Academic Clinical Centre for Wales.

5. A NEW FRAMEWORK FOR NHS/UNIVERSITY RELATIONS

The emphasis given by SGUMDER's Second Report, in which ten key principles for NHS/university interaction were first promulgated, was that 'liaison and consultation are not enough for effective collaboration. Both parties [should] recognise their unity of purpose and combine in a joint enterprise to achieve it'. NHS/university relations are broader than implied by the Ten Key Principles: the NHS must support the academic mission and the medical school has an important role in supporting high quality NHS service delivery in university teaching hospitals. As such, joint planning should facilitate a shared strategy for research, education and health services.

In presenting a new framework for NHS/university relations, the emphasis is not to promote a radical restructure, but instead to suggest mechanisms that better align clinical and academic objectives at national and regional levels and to highlight forms of local governance that are the local foundations of this partnership.

(a) **Developing a common strategic focus**

National alignment

SGUMDER's Interim and Second Reports recommend that national policy between health and higher education bodies should be better co-ordinated and that national guidance should be consistent with these policies. It might be suggested that the Group itself became the focus for the development and co-ordination of policies. An estimated £6 billion is spent on the components of university clinical centres in the UK. It is a critical area of public spending and the greatest efforts required to exploit the maximum benefit from this investment.

The Nuffield Trust Working Group report - *University Clinical*

Partnership: harnessing clinical and academic resources - recommended that a UK-wide forum for university clinical partnership should be established. The report argued that such a body would help alleviate the pressures at local level by producing partnership strategies to deal with the sorts of issues discussed in Chapter 2 on current UK relationships. This UK-wide forum would bring together chief executives of university teaching hospitals, the NHS executive, heads of medical schools, nursing and other related academic departments, and the private sector.

The Nuffield Trust Working Group report was principally concerned with local relationships. Many of those leading local centres are of the opinion that the current bodies that address this relationship are disjointed. There is no UK forum charged with entirety of the tripartite mission. Current committees address separate aspects of the relationship and, at times, talk at cross-purposes. It is not the intention of the Nuffield Trust report to recommend an additional layer of bureaucracy, but to see a representative forum of the UK university clinical partnership to help coordinate and support this complex and critical relationship.

In addition to supporting local relationships and providing some coordination of local policy, the UK forum could play three additional roles.

Firstly, as is argued in this monograph, a conceptualisation of university clinical partnership shows a proliferation in our understanding of the components of this partnership. There has also been an increase in the activity of education and research both within and outside university clinical centres. There is a need to find forums and mechanisms to harness this work, build partnership and overcome professional, disciplinary and geographical fragmentation. A UK-wide forum, as well as representing all countries within the UK, would represent and

provide a focus for non-medical professionals, academic disciplines and private sector organisations working in this partnership, in addition to representatives of university clinical centres.

This breadth of representation is required for a second potential function of the partnership which, for want of a better term might be called 'horizon scanning'. This anticipatory function is necessary in a fast changing area. The UK forum might, for example, consider the impact, threats and opportunities of globalisation, and consider what response the UK should be making. It might also consider other long-term (fast becoming medium-term) issues such as genomics and its service, education and research implications.

A third function has already been alluded to and involves considering the potential practical synergies of partnership between the two sectors, for example, in approaches to 'learning' in the university clinical partnership. These issues are numerous and are pressing political priorities. These include organisational elements such as the governance of research and knowledge, information management, new uses in informatics, the relationship between research and service development, and also issues of individual training and working, such as developing skills for multi-disciplinary working, self managed learning, reflective and critical appraisal skills.

Exploiting the synergies of the university clinical partnership is an implicit aim of the current policy (discussed in chapter 1) and gives an added imperative to the effective management of this relationship. The sectors of health and education add value through the synergies their management of this relationship creates.

This partnership is a national resource and its development essen-

tial to accomplishing UK objectives. Government and interdepartmental alignment of strategies for health service provision, education and research should be reviewed annually at UK level to agree direction and priorities. The partnership between the sectors of health and education needs to be reinforced at every level to mitigate the inevitable tensions between the university and NHS missions.

Regional alignment: forming university clinical partnerships

One of the consequences of the 1991 NHS reforms has been the creation of an environment in which there are few incentives for a regional approach to planning. In effect, competition between providers has fragmented the concept of the NHS as a total entity. It is difficult to think of a university clinical partnership reaching fruition without a focus on what they can offer to the surrounding area, or if academic activity in the surrounding area is not harnessed into a local partnership. To reap the maximum return on investment in clinical and academic partnership, mechanisms need to be found that harness research, education and service across health economies.

It is difficult to find exactly the right word for the jurisdiction I want to refer to. 'Region' in the NHS is synonymous with NHS Region. The area I want to refer to sometimes involves regional networks of activity, sometimes sub-regional levels that span across health authority boundaries, and sometimes are bigger, as in the case of Wales. They vary because the area refers to the jurisdiction of the university clinical partnership, which inevitably varies with the distribution of clinical and academic resources across regions and countries. It is difficult to find a term that directly captures the situation across the UK because there is so little uniformity in either the English Regions or non-English countries. In the English Eastern region, for example, there is at present only one University Clinical Centre and so that one university clinical partnership is

essentially regional, although there will soon be a new medical school based in Norwich and the potential for the establishment of a new partnership.

In Wales, the situation is more complex. The College of Medicine in Cardiff places its students throughout Wales, and its educational network is essentially national. Research networks in Wales are regional, though the College is involved with each, and its service network is district wide, predominantly within southeast Wales. In London, the situation is more complex with five centres within one NHS Region, and in Trent there are three medical schools (Sheffield, Leicester and Nottingham). Although each has well-defined areas of activity, clearly some activity will flow across boundaries. The area described relates to areas of coverage for the university clinical partnership.

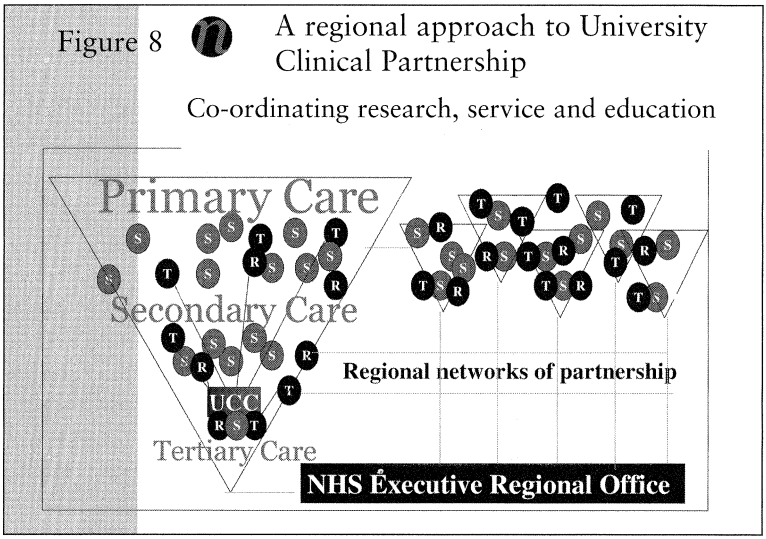
Because health authorities no longer have discretion over the funding of SIFT and R&D money to providers, there is a perception that they are no longer directly engaged with the academic mission and are slow to appreciate university hospital roles in education and research. However, although in the main they no longer commission services directly, they have strategic responsibility for planning the delivery of health care in their areas, working closely with NHS Trusts, Primary Care Groups and academic and research interests. Indeed, Health Authorities that have Trusts with significant teaching responsibilities in their areas have university nominees on their Boards. In Wales, Health Authorities have a clear strategic role in relation to training and research. For example, they distribute SIFT allocations and are co-signatories of the Educational Agreements. But even if health authorities have no discretion in the fund allocation process, the involvement of health authorities in networks and regional discussions is important to give a greater understanding of the various pressures competing for the time and resources of the trusts to which they relate.

The growth of academic activity outside university teaching hospitals and in the primary care sector should be both encouraged and better harnessed. Collaborative networks of university clinical partners could help to harness these efforts. There is a role for a partnership forum that provides an opportunity for the co-ordination of strategy across these areas. These forums, attended by health authorities, medical schools, NHS trusts and Primary Care Groups help strengthen NHS/ university relations.

Each region will operate in ways relevant to its environment and circumstances. It is not necessary for Regional Offices to attempt to manage relations across the region. The NHS Executive South East region, for example, encompasses both Southampton and Oxford, which clearly operate within different areas within the same region, but Regional Offices should actively promote a culture that is conducive to a network approach across districts. There should be a formally agreed mechanism for bringing together, within the region, the senior representatives of the major interested parties at least once a year.

Figure 8 lays out the framework for partnerships at the network levels and the network's relationship to the Regional Office. University clinical partnership aims to harness regional activity in education and research. In many areas, local networks will clearly not be as neat, nor in some cases as complex, as the one modelled in Figure 8. The intention of this section is to conceptualise partnership within local networks of activity.

There are important reasons why a network view should be taken. Evidence is emerging that tertiary referrals to specialist centres in university teaching hospitals are increasing as clinical risk becomes a more important factor. The Audit Commission's report *Higher Purchase* recommends that specialist services should be



mapped on a regional basis. The continuing trends of placing students away from the main teaching hospital further reinforces the need for a holistic, network view, particularly for curriculum development. There is also the potential for best practice, and knowledge and research networks, and for associated resources to be effectively harnessed.

University Clinical Centres

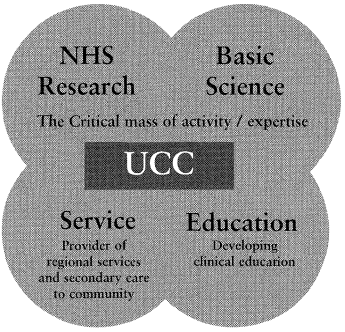
Figure 9 shows the contribution of the University Clinical Centre to the regional partnership. It harnesses the tripartite mission into an active dynamic between education, research - health services and basic sciences - and health service delivery.

University Clinical Centres have been at the forefront of change in health services, translating laboratory research into advances in patient care and disseminating changes in clinical practice through their educational role. In collaboration, medical schools and

university teaching hospitals offer a pivotal contribution to the region in developing new and rare clinical interventions, training a variety of clinical professionals to work in the NHS across the region, and in generating and disseminating new research and knowledge. For these

Figure 9

The contribution of the University Clinical Centre to local networks



The challenge is to effectively manage the overlap between the circles, andd to fully demonstrate the value added by the University Clinical Centre.

University Clinical Centres to be seen as a regional resource pursuing a unique mission, component partners need to first examine how they work with each other and how they relate to the surrounding health economies.

(b) Developing local governance

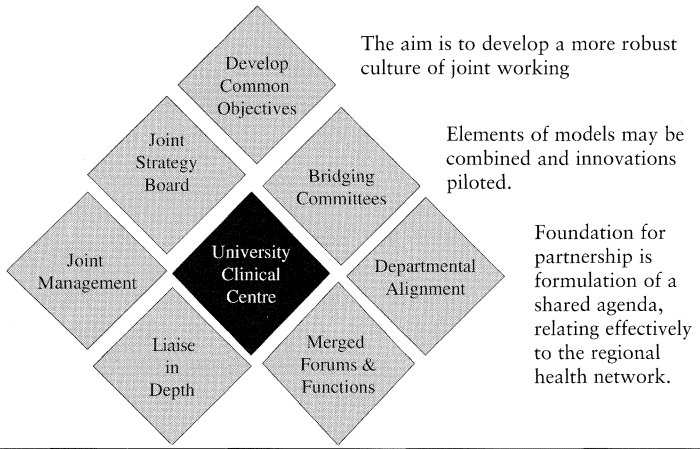
Local circumstances should be the primary consideration when developing partnership, but a common approach should guide these choices. The following sections outline an approach to developing partnership and describe a number of operational mechanisms for effective governance - recognising that there are a spectrum of university/NHS relations and a variety of different circumstances in which they operate. Arrangements for governance must be systemically desirable and culturally feasible.

Figure 10 lists a variety of mechanisms to support joint working. These have been developed from the experience of centres in the UK and abroad. Some of the mechanisms might be combined and piloted, or change introduced unevenly. One possibility might be to consider joint activity in which both organisations have a shared interest. Another is to take a department-by-department approach. Forms of local governance will be determined by the local context and organisational needs.

Developing common objectives

The absence of an explicit shared agenda was thought to be the most fundamental obstacle to developing closer working and partnership at the time of the Nuffield Trust Survey. Partners need to think through their joint objectives. As discussed earlier, an inclusive process of developing joint strategic statements can be very effective in developing a partnership culture and assessing the feasibility of joint working.

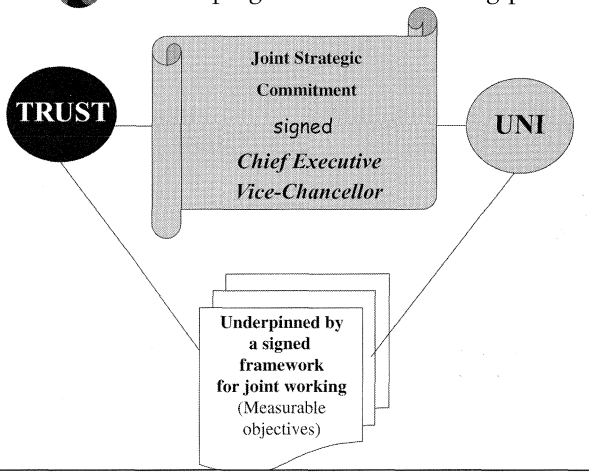
Figure 10 Local options for supporting the vision



The aims and role of the university clinical centre - the joint initiative - should be embodied in a joint strategic statement -mission statement, common objectives, shared agenda or whatever title is appropriate locally. Such statements communicate purpose to a variety of stakeholders, including the local health economy, executive management, politicians and local communities. The statement needs to be clearly defined before considering governance arrangements to support it.

In the US the development of mission statements has been an important process in the ownership and establishment of joint working. A mission statement is developed through active engagement with staff and regularly reviewed. Measures to monitor performance against the statement can also be developed in a signed agreement underpinning the statement. The agreement would be signed by the Vice-Chancellor and trust's Chief Executive (an excellent example of this exists in Birmingham and

Figure 11 Developing and communicating partnership

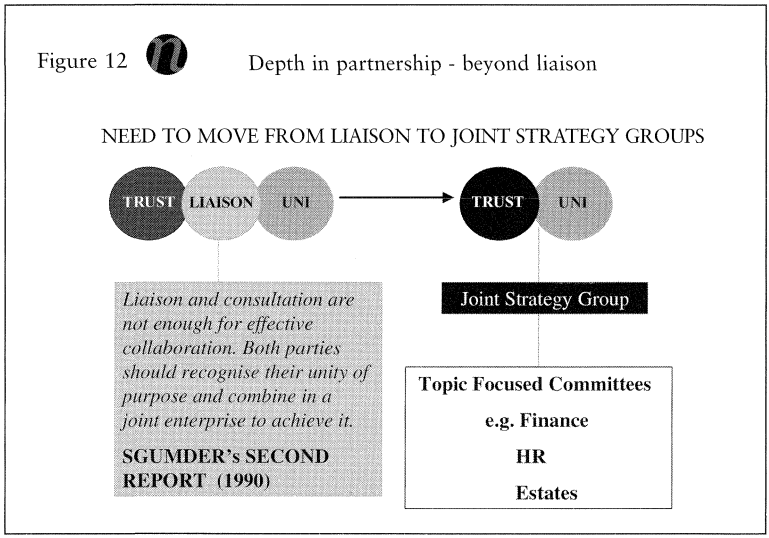


was included as an appendix in the Nuffield Trust report University Clinical Partnership) and covers the breadth of joint service, teaching and research interests.

Beyond liaison

Experience in the UK suggests that the most effective relationships result from building representation around specific tasks and functions. Functional and issue-based joint committees provide a more effective forum for a collaborative approach to strategy than one single all-embracing liaison committee. Liaison arrangements can be important in engaging two sides in discussion, but what they often have are not decision making forums and can at critical times create an entity, political buffer zone, between the organisations and can be difficult to focus on specific problems. Problems are more effectively addressed through joint forums that bridge the teaching hospital and medical school. Figure 12 illustrates ways in which liaison can be

Figure 12 Depth in partnership - beyond liaison



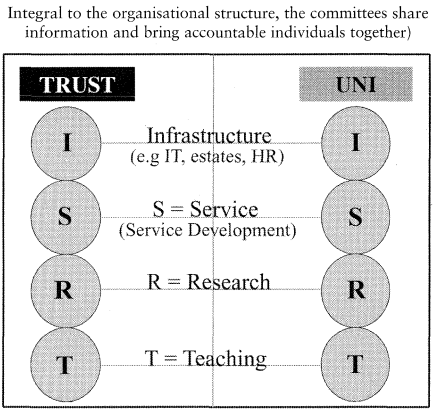
transformed into a more direct managerial link by providing a strategic forum and direct 'bridging' links between the two organisations.

Senior management serving in liaison groups can be an effective focus for strategic liaison, but joint working cannot be effective solely through a liaison committee. Regular meetings bringing together NHS and University staff from related speciality areas and focused on common tasks can help to prevent friction between the two sides. These groups should be representative and provide input into the general management structures. Direct bridging links and topic focused committees can be created around common functions such as finance, estates or employment issues.

Bridging functions

Figure 13 shows bridging committees between organisations focused around overlapping issues on the shared agenda. The

Figure 13 Aligning priorities



challenge is to avoid impotent buffer zones. These committees should align strategy, priority and operational decisions. There are various successful examples of where this works effectively.

It is important to work towards gaining explicit recognition of responsibilities of staff to either mission. Clinical academics have a service obligation in their honorary contracts, but NHS staff rarely have fixed teaching sessions. Job plans should offer clarity of obligation to a single master whilst avoiding rigidity.

Forums focusing on a review of clinical service have been successful in gaining a better understanding of individual services, informing short term strategic decisions and informing each others strategy.

There are some very good examples of collaboration in the management of research, through collaborative committees or joint offices for R&D. In a joint approach, the medical school has a real say in the allocation of funds and the trust benefits from focused and dynamic research that is fed back into service.

Some trusts have appointed full or part-time Directors of Clinical/Medical Education. Clinical Curriculum Committees can support this function through, for example, working parties in the various specialities, each of which has strong NHS representation. These play an important role in determining SIFT allocation within the trust.

Clinical and Academic Departments

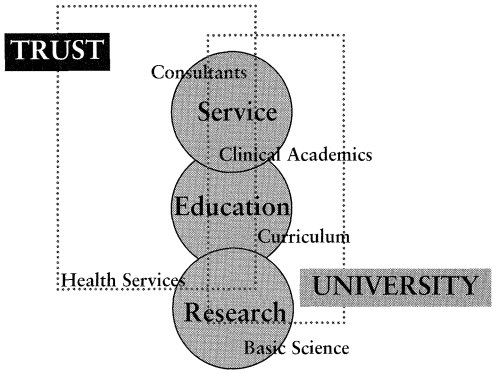
In some centres, clinical and academic departments are merged. There should not be any rigid separation between clinical service departments and university departments in any specialty area, but in many cases departments are not coterminous and separation can be beneficial. University staff should be full participants in the clinical service department relevant to their sub-specialty. There is

no 'one size fits all' model for internal governance but consistency is needed between the university and NHS departments.

Figure 14 attempts to illustrate an alignment of clinical and academic interests. It shows the differing objectives between the two organisations. The challenge is to make the circles whole. Departments should interface over the shared agenda. Objectives are complementary rather than merged. Individuals should be apportioned responsibility for feeding back the research and education agenda to the clinical department.

The point has been made that departments may be less easily defined in the future, and groupings will be increasingly multi-disciplinary. The intention is to align clinical and academic resources for maximum impact. Management should ensure that research, education and health service delivery is aligned at departmental level. **Aligning management functions**

Figure 14 Aligning departments
(Interface over the shared agenda)



Bridging forums have the potential to create managerial forums that work across both organisations. Figure 15 shows these forums as effectively taking management decisions on behalf of the two organisations. Examples of aligned managerial forums include staff appraisal, estates, and the administration of research. There are good examples of joint working in research management. For example, there are gains to be made in commercial research. As with much of the shared agenda, partnership is incremental and should develop from this point. Developing an interface between pre-clinical and applied research is a very important step.

JMAC note the success of the joint working group at King's College London. The SIFT contract developed at King's covers the requirements of the various specialities, the input from teaching staff required, accommodation needs, appropriate case mix, patient throughput and other support services such as library, diagnostic investigation facilities, medical records, information systems, educational services, clothing and equipment, and administrative structure. The monitoring of this service provision is currently undertaken by means of six monthly questionnaires to teaching staff enquiring whether the service support for their teaching and data from the casemix office meets their needs. Any problems are dealt with though the SIFT contract manager of the trust. Service agreements are being developed with each individual care group. There is also an agreement that the clinical placement SIFT revenue will be distributed to the care groups in proportion to their actual teaching activity so that resource follows the student.

Joint Strategy Board

The establishment of a joint strategy board for the academic clinical centre is a mature point in establishing managerial coherence, but is likely to emerge only if the culture has developed toward collaboration among a number of key functions

Separate accountabilities remain for the NHS and university, but strategic planning at this level may mitigate many of the tensions. There are clear divisions in responsibilities and executive management bodies remain separate.

The joint strategy board is a unified body to jointly plan and manage the shared agenda. The bridging committees or aligned managerial functions will report to the strategy board who will oversee the development of joint working. Its principal aim is to ensure strategic coherence and to manage effectively a dynamic integration of research, education and health services.

Figure 15 Aligning Managerial forums / functions

(joint, collaborative problem solving forums for the overlapping agenda)

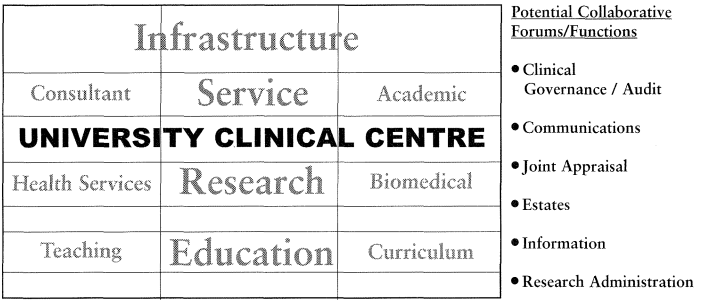
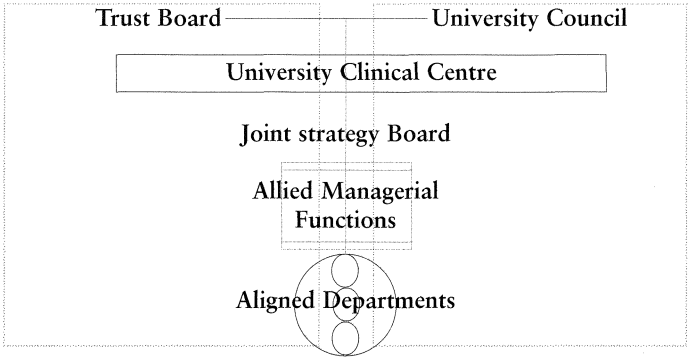


Figure 16 Joint Strategy Board



6. CONCLUDING DISCUSSION: RETHINKING NHS/UNIVERSITY RELATIONS

This monograph has outlined the recent history of NHS/ university relations, the state of current relations and the contemporary challenges that face this partnership at different levels. There has been a growing recognition that these critical challenges relate to strategic alignment and organisational and cultural development rather than administrative coordination between the health and higher education sectors.

David Blumenthal (Professor of Medicine and Health Care Policy at Harvard Medical School and Chair of The Commonwealth Task Force on Academic Health Centres in the US) has considered the trends in academic health on both sides of the Atlantic and concludes that drivers for change are similar. Regardless of health systems, both British and American centres must better manage resource streams, their integration, and relationship with the health system in which they are located.

There are universal pressures to reduce the costs of clinical care, cope with increased demand and find new, more effective and efficient ways of delivering care. Research has become subject to competition and pressure has grown to demonstrate the relationship of research to health service issues. Another trend in both countries is the greater distribution of medical students across different health sectors and organisations.

These changes in the external organisational and political environment reflect the new context in which Academic Health Centres operate. Organisations have had to rethink the way they work: information has become a key factor in society, as has the need to demonstrate the value of organisational activity and to organise in flexible ways so that organisations can be responsive to the increased pace of change.

In one respect the UK has a distinct advantage over the US in that we operate in a relatively coordinated system, which has implications for the potential to develop a common strategy and organisational development.

University Clinical Partnership aims to harness research, education and service provision within the health system. A strong emphasis in the new NHS policy is the aspiration to become a knowledge based, learning organisation in which education, research and the sharing of good practice are valued and expected. Increasingly, NHS providers will be accountable for the management of information and an evidence base. University Clinical Centres have a special contribution to the development of these systems and should be the standard setting arena for high quality clinical care. These Centres have a pivotal role to play in a knowledge based NHS, as both a critical mass of expertise and as an arena in which there is a dynamic between education, research and health services

There is a need to marry up the R&D (NHS) and RAE (University) research objectives. At the root of increased tensions in recent years are the conflicting objectives of research strategies. In the competition for research funds universities have adopted strategies that focus on their strengths, particularly basic science. There is a perception that the RAE has downgraded clinical research and a need to redefine it and increase its credibility. How this is seen in the next RAE will be defining, it will be an opportunity to align the two research agendas.

The unique contribution of an academic clinical centre is made through the managerial dynamic between the tripartite mission. For example, in a research continuum, from the bench to the bedside, the discoveries in basic science are transferred quickly to the clinical setting.

Michael Peckham, in the 1999 Nuffield Trust Rock Carling Lecture, offers a working definition of the development function 'as the process of health service change in which innovative use is made of knowledge and information to turn ideas and technologies into better ways of providing health care'.

An important future challenge for NHS/university relations will be to find ways for the clinical partnership to address development. One innovative approach are departments that seek to bridge the academic and clinical perspectives. These have various titles, for example, a Department for Health Services Research or Clinical Epidemiology. These departments who are broadly focused on knowledge management, provide access to databases and act as a receptor function to external research. Such departments are concerned with the transfer of evidence and develop internal clinical protocols and guidance for implementation for their institution. In the case of the University of Amsterdam, these protocols have been adopted by the surrounding region. These departments should provide development forums, involve staff, and pilot and test new services. Academic clinical centres have a key role to play in taking forward these concepts.

The concept of counterbalancing research with development and creating development forums in academic clinical centres would help shift the emphasis towards a broader view of health issues and recruit a wider range of science inputs to tackle the broader health agenda.

The aim of university and NHS partnership is to integrate the management of the tripartite mission. In this way, Centres are able to demonstrate the additional value they, as academic centres, contribute to health services, that service is based on best practice, the latest knowledge, which then feed into education. Each component of the university/clinical mission should provide a quality loop.

University Clinical Partnership in the UK will need to consider:

1. The relationship between University Clinical Centres and the surrounding health system.

2. Ways of exploiting the full contribution of the tripartite mission within this system.

3. Ways of developing relationships at all levels in the system to maximise this contribution.

4. The development of a joint strategic commitment between organisational components of University Clinical Centres to support shared governance of the tripartite mission.

5. The most effective form of organisational governance to transform potentially destructive tensions between the academic and clinical missions to a healthy and dynamic tensions.

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Appendix One - Institutions who returned the Nuffield Trust survey

University of Newcastle

St. George's Healthcare NHS Trust

St. George's Hospital Medical School

University of Birmingham

University Hospital Birmingham NHS Trust

University of Oxford

Oxford Radcliffe Hospitals NHS Trust

University of Leicester

Leicester Royal Infirmary

University of Cambridge

University of Dundee

Dundee Teaching Hospital NHS Trust

Guy's, King's College and St. Thomas' Hospital School of Medicine and Dentistry

St. James' University Hospital NHS Trust

University of Liverpool

The Royal Liverpool University NHS Trust

University of Aberdeen

Aberdeen Royal Hospitals NHS Trust

United Bristol Healthcare NHS Trust

University of Nottingham

Queen's Medical Centre, Nottingham

University of St. Andrews

Victoria Hospital

Queen's University of Belfast

The Royal Hospitals

University of Manchester

Central Manchester Healthcare Trust

Royal Free and University College Medical School of UCL

Royal Free Hospital NHS Trust

University of Wales College of Medicine

University Hospital of Wales Healthcare NHS Trust

Northern General Hospital NHS Trust

University of Southampton

Southampton University Hospital NHS Trust

University, of Glasgow

Glasgow Royal Infirmary University NHS Trust

Imperial College of Science, Technology and Medicine

Hammersmith Hospital NHS Trust

Chelsea & Westminster NHS Healthcare Trust

St Mary's Healthcare NHS Trust