

Appendix 6.1 Leadership and clinically managed networks

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September 2005

New types of clinical leadership

There are basically 2 types of clinical leadership, the first as yet much more common and widely accepted than the second

- *Traditional professional* This type is derived from the central ethical responsibility of ensuring the best possible outcomes for an individual patient. The key ingredients are high levels of knowledge, technical and cognitive skill, wide experience, and an ability to communicate these professional attributes to a peer group in a form consistent with their ethos and aspirations. Leadership of this type is measured through the volume of patient referrals from colleagues, election to office in professional associations, acclaim as a teacher, published peer reviewed research, and invitations to speak at scientific conferences. It places high value on competitive success and unfettered autonomy and less on standardised team based approaches to health care¹.
- *Systems improvement* In recent times it has become apparent that the above type of leadership, though still necessary, is no longer sufficient. This is due in part, and ironically, to the successes of the traditional leadership of research driven innovation. This has stimulated exponential growth in the range and power of diagnostic and therapeutic interventions. Although these have brought enormous benefits for patients there have also been substantial costs, both direct and indirect. The direct costs are well recognised, both in total financial burden, and lost opportunity costs within capped budgets. The indirect costs are less obvious and arise from the interactive complexity of all these interventions.

This special and unpredictable form of complexity contributes to the increasing difficulty of managing healthcare within conventional bureaucratic organisational structures, and to deficiencies in safety and quality of care.² It has also generated increased specialisation and fragmentation of services. This often leads to a mindset known to economists as 'bounded rationality'.³ This occurs where individuals who are part of a larger, complex, and incomprehensible system restrict their activities and interest to the immediate environment that they can understand and control. Their behaviour may be locally quite rational but globally irrational.

There is thus a need for more sophisticated forms of service integration and new forms of leadership for this environment⁴. In this context it is relevant that:

- deficiencies in team development, inter-professional communication, coordination and standardised care processes are associated with higher hospital mortality^{5,6}
- the need for clinician education in organisational systems, processes and interdependencies, collaborative communication for clinicians to reduce these risks has been identified⁷

- the Royal College of Physicians and Surgeons of Canada has expanded the role expectation of specialist physicians, beyond the traditional professional, scholar, and medical expert, to include communicator, collaborator, manager, and health advocate.⁸
- the ex-president of the UK General Medical Council has suggested that the collegiality and professional ethos that evolved for valid reasons in an earlier age may no longer be sufficient for today's complex healthcare environment.⁹
- practical guides to the required skill sets for service improvement leadership of this type have been published^{10,11}

This new type of service improvement leadership thus requires a willingness to acquire and promote a new set of organisational skills, and to consider opportunity costs and cost-benefit equations for whole populations as well as the needs of the individual patient. It is essential to recognise however that this type of leadership may generate a dilemma for clinicians as the overall benefits for a population may conflict with the optimal care for individual patients. This may diminish the status of the new type of leader in the eyes of colleagues more attuned to traditional leadership.

Resolving clinician disaffection

It is widely acknowledged that it is essential but difficult to engage clinicians in the broad managerial aspects of service improvement. This is part due to the intrinsic conflicts discussed above, but recent reforms based on financial and efficiency targets as primary goals at the cost of quality of care has probably led to further disaffection that has been recognized worldwide,¹² as well in this review. This has led to suggestions that healthcare organisations should compete on outcomes rather than costs alone.¹³ As discussed below alternative delivery systems are emerging that seem to provide a better vehicle for engaging clinicians in improving the integration and quality of health care, and for exploring new and more usefully focused funding models.

New network structures as vehicles for new leadership roles

Coordination of any complex inter-related set of tasks is generally managed in one of 3 ways – markets, hierarchies and networks.¹⁴ It is well known that markets have significant limitations when applied to health care because of:

- the asymmetry of information between healthcare professionals and patients, and
- community expectations of access exceeding their ability or willingness to pay the real costs directly or via taxation.

It is also recognised that orthodox hierarchies or bureaucracies are no longer sufficient for the rapidly changing and interactive complexity of the healthcare.^{15,16} Any organisation with a large professional workforce will also manifest asymmetry in control and authority:

*“The more general lesson here is that hospitals and other health-care organisations have an inverted power structure, in which people at the bottom generally have greater influence over decision-making on a day-to-day basis than do those who are nominally in control at the top. In these disconnected hierarchies, organisational leaders have to negotiate rather than impose new policies and practices. Failure to recognise this fact and to carry professionals along with change will invariably result in part implementation of reform efforts”.*¹⁷

It is not surprising therefore that attention has recently turned to networks:

*“In general, the differences between hierarchical and network relations can be summarised as follows: in hierarchies, people look to their superior for authority; in networks, people look to their most competent colleagues wherever they may be. Hierarchies are focussed on formal control, accountability and extrinsic motivation, while networks are based on expertise, collegial values and intrinsic motivation. Hierarchies bring structure, control and accountability, while networks bring knowledge, innovation and capability. Managers, politicians and policymakers tend to be more comfortable with hierarchies while professionals gain more from networks.”*¹⁸

Networks can take many forms from loose voluntary associations of clinicians who cooperate and exchange ideas about service improvement such as Queensland Collaborative for Healthcare Improvement,¹⁹ through the flat structures of the postgraduate colleges that focus on education and professional standards, to the various clinical service networks that have been developed as advisory bodies to the zonal authorities in Queensland.

Over the last few years another interesting hybrid type of network has emerged that would seem to combine a number of desirable elements, most notably active clinician leadership, service planning and improvement and outcome based funding. The most advanced networks of this type are the Managed Clinical Networks in the UK (Scotland) NHS^{20, 21, 22}, and those developed by the New South Wales Greater Metropolitan Clinical Taskforce:^{23, 24}

UK NHS Managed Clinical Networks

These networks originated as recommendation of the Report on Acute Services in Scotland in 1998 and have been defined as :

*“.. linked groups of health professionals and organisations from primary, secondary and tertiary care, working in a co-ordinated manner, unconstrained by existing professional and Health Board boundaries, to ensure equitable provision of high quality clinically effective services”*²⁵

They have been designed to integrate primary, secondary and tertiary care and are guided by some important principles:

- Clinician management and leadership of the networks.
- A primary focus on improving the patient care in terms of quality, access and appropriateness.
- All programs are evidence based.
- All outcomes are measured.
- All quality improvement activities are consistent with national standards
- An annual report is produced.

- A multidisciplinary approach is used.
- Patients are involved in shaping the network
- An active role is required in service planning
- Standardised best practice pathways and guidelines are used at each stage of the patient journey.

These networks have been implemented in a wide range of conditions including stroke, cardiac disease and cancer, and have been found to have several advantages including flexibility, speed of implementation, and responsiveness to a rapidly changing environment.^{26, 27, 28, 29}

New South Wales Greater Metropolitan Transition Task Force

The NSW networks were developed as a consequence of a Government Action Plan published in 2002 and the work of subsequent Greater Metropolitan Services Implementation Group. This gave rise to 3 key principles that have guided the development of the networks, and which were to improve:

- The quality of care and safety of patients
- Equity of access and equity of outcome within the hospital system
- Clinician and consumer driven planning

15 programs or networks were initially established:

- Severe burns
- Spinal cord injury
- Complex transplantation
- Ophthalmology
- Cardiac
- Brain Injury rehabilitation
- Bone marrow transplantation
- Neurosciences including stroke
- Renal
- Maternity
- Gynaecological oncology
- Major trauma
- District (Metropolitan) hospitals
- Metropolitan / Rural networking

8 other programs have since been added:

- Cochlear implantation
- Orthopaedic services
- Imaging services
- Acute traumatic hand surgery
- Transitional care for young people with chronic childhood injury
- Bone and soft tissue sarcoma
- Care of the acutely ill older person in metropolitan hospitals
- Home enteral nutrition

In a short space of time these programs seem to have generated a remarkable degree of clinician involvement in service planning and improvement. A recurrent budget of \$64.6 million and a capital budget of \$9 million have been allocated for this work. The overall program was externally evaluated in 2004, the consultants finding substantial evidence of success:

“ The GMTT process has created a fundamental change in health service planning in NSW. This is being achieved by providing meaningful clinician engagement in planning and decision making by broadening the base of this engagement. There has been real diversification of the involvement which previously didn’t exist. The process has diluted the influence of traditional networks and vested interests. This broad based engagement, which includes all health professional groups, is fostering a high level of cooperation and consideration of all aspects of care delivery. One discipline’s priority is now more likely to be seen in the context of the whole rather than the discipline specific component. In other words, the process has exposed a greater number of clinicians to the ‘bigger picture’ of health. “ (Embracing Change report)

Areas in need of attention or with potential for future gains were noted to be:

- project planning, evaluation and monitoring
- clarification of line of financial accountability
- increased linkage with primary health care providers
- lack of coordination / interaction with Area Health Services

Nonetheless the achievements of GMTT in a short space of time demonstrate the impact of clinician leadership in networked structures that are specifically constructed around service improvement objectives.

Opportunities for ‘Clinically Managed Networks’ in Queensland

There are thus valuable opportunities in Queensland at the moment for the development of Clinically Managed Networks. These should be encouraged and should:

- Utilise the experience, and combine the best features of the Scottish and NSW networks.
- Integrate the service improvement roles of the existing Queensland collaboratives and the operational / service improvement roles of the networks that have been developed in the zones (Table 1). These networks should also be closely integrated with, or subsume other relevant state wide and programs such as the Cardiac Plan, Chronic Disease, and Election commitment initiatives. In many cases the same limited pool of clinicians is used as source of leaders and advisors for all these activities, often with significant duplication and waste of energies.

Operational Principles and Practice

1. The primary purpose should be to improve :

- Health care outcomes
- Equity of access
- Service planning
- Staff learning and skills development in service improvement

2. The model should :

- Be clinician led
- Be multidisciplinary
- Involve and integrate primary / secondary / tertiary services
- Involve healthcare consumers
- Explore innovative models of service delivery, education and staffing

3. Implementation mechanisms should include:

- Designated operational funds for pre-defined clinical outcomes
- Statistically robust outcome measurement and analysis systems
- 3 yr term (renewable) clinical chairs with paid sessions
- Adequate managerial support
- Service improvement and outcome measurement to utilise the skills and capacities of the Clinical Practice Improvement Centre
- High level line management reporting ie to area manager or to DG or deputy
- Single state-wide format in most cases
- A staged implementation on a rolling 3 year basis subject to successful review at 24-30 months after commencement.

4. Subject Selection

Subjects for networks should be selected from a combination of strategic and operational priorities that would be broadly determined by:

- A high impact disease burden eg high incidence, mortality, or morbidity.
- The presence of significant inter-district variances in clinical outcomes or access inequities, rapidly increasing demand for services, or other substantial gaps between evidence based best practice and current practice.
- The ability to recruit clinician leaders with the ability to generate solutions for these problems

It would be advisable to develop the first set of networks by combing the service improvement and operational components of existing and successful collaboratives and zonal networks.

5. Recommended networks

Based on the above criteria the following networks are therefore recommended in the first stage implementation:

- Cardiac
- Renal
- Stroke
- Diabetes
- Orthopaedics
- Surgical mortality
- Cancer
- Mental health
- Aged care
- Maternal care
- Neonatal care

- Critical care
- Patient flow – inpatient access

6. Funding criteria

For this new type of networks to succeed it is essential that:

- The funding model is shifted from the present historical / activity basis to an outcomes derived formula
- The desired outcomes are pre-defined in a measurable form and agreed by all parties so that the success may be judged.
- Service agreements with both clinicians and managers are defined in these terms.

If this does not occur, the service improvement activities of the present collaborative networks will remain the preserve of a small band of enthusiasts, and the operational service delivery activities of the present zonal networks will remain essentially advisory and subject the conflicting pressures of day to day activities and budgets.

The choice of appropriate targets and measurements will obviously vary from network to network but the essential principles are that:

- process measurements should be used in the short term
- only those processes that are known to improve patient outcomes should be selected.
- patient outcomes should be measured in the longer term

As an example, and purely for illustration, - it is known that there is a high rate of amputation of limbs in patients with diabetes in Queensland, and that poor control of diabetes, blood pressure and blood lipids, and inadequate management of foot ulcers are all contributory factors to the loss of limbs. A diabetes network might therefore be funded and judged in the short term on whether all the relevant evidence based markers of control and complications were regularly being measured and care was following best practice. It is important to emphasise that funds would be required in this model for operational resources as well as improvement activities. In the longer term the rate of amputation and other vascular complications would be assessed.

Table 1

	SERVICE IMPROVEMENT	OPERATIONAL		
	Collab/ (C) Pathways (P)	Southern Zone	Central Zone	Northern Zone
Cardiac (including rehab)	+ (C)			
Renal	+ (C)	+	+	+
Stroke (acute and rehab)	+ (C)			+
Emergency Dept	+ (C)	+		+
Maternal care	+ (P)	+	+	
Orthopaedics	+ (P)	+	+	
Cancer	+ (C)			+
Diabetes	+ (C)			
Mental Health	Planned (C)			+
Oral Health	Planned (C)			+
Child Health		+		+
Intensive care		+	+	+
Imaging				+
Perinatal				+
Rehabilitation				+
Surgical	(Audit of Surgical Mortality)			
Primary care				+
General Medicine		+		

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