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Realising the value of primary care

對基層醫護價值的認同

The immediate task in primary care is to respond to patient demand. In the absence of other influences, the resulting system of care tends to be both inefficient and inequitable. Primary care has been shown to be increasingly capable of making important contributions to public health, however, by delaying or reducing the complications of established conditions, and by reversing risks in people who are otherwise well. Increasingly, quality of care depends on continuity of care with better communication and cooperation between all concerned. Whether such possibilities are realised depends on the nature and volume of publicly funded support for education and training in primary care, and the types of support given for decisions taken at many levels. Greater integration is needed within primary care to improve its internal effectiveness and efficiency, and as a basis for better integration with secondary care. Primary care needs to be cultivated rather than managed, because of the complexity and importance of clinical decision-making at this level, and because of variations in the needs of individual patients, and local populations.

基層醫護的當前任務是要對病人的需要作出回應。沒有其他因素影響下，現時的醫護體制趨向低效率和不公平。儘管如此，透過延遲或減低現行制度複雜繁鎖的程序，以及幫助公眾預防疾病，基層醫護漸漸證明對公眾健康貢獻甚大。要提高醫護服務的質素，實有賴各有關方面之間不斷的溝通和協作，以及醫護服務的連貫性。這些可能性是否被認同，要視乎公營撥款對基層醫護的教育及培訓的質與量，以及對於各階層所作決策的支持程度。基層醫護內的一體化不但能改善其內部的成效及效率，也可替基層醫護服務與中層醫護服務連成一體奠下基礎。由於在基層醫護的層面上所牽涉的複雜問題和臨牀決策的重要性，以及每個病人和地區性人口不同的需要，我們要做的並非要管理基層醫護，而是要建立好基層醫護。

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Introduction

The proposals for health care reform in Hong Kong include plans to reorganise primary medical care, with the development of family medicine, and closer integration of primary and secondary care services.[1] It may be useful, thus, to reflect on recent developments and mechanisms of change affecting primary care in the UK.

Since the inception of the National Health Service (NHS) in 1948, UK general practitioners (GPs) have retained their non-salaried, independent contractor status. Essentially, general practices work as small businesses, albeit via a common national GP contract and target income, based on a mixture of capitation, items of service, and other payments. There is very little private practice. Apart from some rural areas, GPs do not have direct access to hospital beds, but provide a 'gate-keeping' role

and a single, common route of access to specialists in secondary care. Although the achievements of this system have been masked in recent years by chronic underfunding, there is no doubt that the UK's primary care system is largely responsible for the fairness and efficiency of the NHS, compared with many other national health systems.[2] There is a great deal still to do, however, in realising the full potential of primary care within the NHS.

At the outset of the NHS, a raw medical graduate could immediately enter general practice as a 'safe doctor' without the need for postgraduate training or continuing education. With academic activities and other forms of medical prestige largely confined to teaching hospitals, GPs were considered by some to be doctors who had 'fallen off the hospital career ladder'. The transformation of general practice, and its increasingly important role in the health service as a whole, are considered, hence, as a major reform in British medicine.[3] Developments in Australia have followed a similar path, with public investment in the training and continuing education of GPs.[4]

The establishment of the NHS removed financial barriers to care, and based payment of GPs on a list system, which not only covered the complete population, but also largely dissociated professional earnings from the outcome of clinical transactions. These features have shown two important benefits. Firstly, the list system allows for monitoring and improvement in the delivery of effective care to everyone who could benefit. Secondly, since patients do not pay for each encounter, it is easier to end consultations without generating new investigations and treatments.

Improving access to care was only a first step, however, and did little to address the inverse care law, which states that the availability of good medical care tends to vary inversely with the need for it in the population served.[5] This observation is true of all health care systems driven by market forces. That it is still true in the NHS reflects the more subtle processes, whereby some patients and providers make better use of health services.

Reviewing general practices in industrial areas of the UK at the outset of the NHS, Collings noted, "the worst elements of general practice are to be found in those places where there is the greatest and most urgent demand for good medical service…Some conditions of general practice are bad enough to change a good doctor into a bad doctor in a very short time".[5] Recognition of the need to invest in premises and the people who work in them, was the first step in addressing this situation.

Major developments

In 1966, the national GP contract was amended to encourage and support investment in GP premises, group practices, and the employment of nursing and other ancillary staff. These structural changes helped provide appropriate resourcing for general practice clinics. Another important development was the establishment of postgraduate training for general practice. This not only standardised the training and assessment of GPs (employing educational principles and methods which were years ahead of training programmes in other specialities), but also required training practices to establish themselves as leaders in the provision of quality services. Twenty years later, the common experience of postgraduate training, and in particular, of a professional approach to medical education, has been the foundation on which new developments in community-based undergraduate medical education have been built. As the delivery of undergraduate teaching in hospitals has become more difficult, GP tutors have been ready and willing to take up the challenge, not only to teach basic clinical skills but also transferable professional skills in communication, working with others, and ethical reasoning.

In Scotland, another important development has been government investment in software for primary care computing—General Practice Administration and Support System (GPASS). This is provided free of charge to participating practices, with an expanding range of functions. It now covers approximately 90% of practices and patient populations throughout the country. Although the initiative is still in the early stages in terms of making use of the resulting data, GPASS has enormous potential to assist the description and explanation of variations in clinical processes and outcomes. A parallel development has been seen in the analysis and feedback of prescribing information, whereby individual practitioners receive detailed analyses of their prescribing behaviour and how it compares with that of colleagues. A common feature of these developments is that they encourage and enable health professionals to take the initiative, from the bottom up. In the last decade, governments have tried to steer primary care more directly via a series of top-down initiatives.

General practitioner fundholding

General practitioner fundholding came and went by political decree—introduced by the Conservatives and

abolished by New Labour. The basic idea was that money should follow the patient, and that GPs were best placed to buy care for their patients. Secondary care was expected to become more efficient and more responsive to patients' needs and wants as a result. Various forms of fundholding were tried, with GPs being responsible for different proportions of the total budget for their patients' health care needs.

From the limited evaluations which were carried out, it is clear that GP fundholding had advantages and disadvantages.[6] Many practices managed to reduce their prescribing costs. Reducing expenditure on hospital services proved more difficult to achieve. Smaller practices were able to adapt more quickly than larger ones. Some savings were used to develop novel services for patients, but few such innovations were evaluated, and even fewer were transferred to other practices.

The 'first wave' of fundholding GPs tended to be a self-selected, entrepreneurial group, working in the more affluent areas of the country, where change is easier to pursue. None of the various attempts to evaluate fundholding could disentangle the effects of fundholding per se from the characteristics of the GPs who became fundholders.

Patient groups whose care could more easily be quantified and managed—for example, those with diabetes, hypertension, or chronic bronchitis—appeared to receive better care under fundholding, whereas patients with less quantifiable conditions such as chronic pain, skin conditions, and digestive complaints did not.[7] In retrospect, fundholding brought change in some parts of primary care, at the cost of increasing unfairness within the system as a whole. It showed that progress could be made in taking a more strategic approach to the management of primary care. If fundholding had survived, the challenge would have been to build on these achievements, while avoiding its divisive and inequitable effects.

Financial carrots and sticks

At the same time, the Conservative administration redrafted the GP contract in 1990 to include financial incentives for new activities. Such incentives can prove effective, as has been shown by their successful use in promoting high levels of population coverage for immunisation and cervical screening. They can also be disruptive, however.

General practitioners were rewarded in the new contract for providing a wide range of health promotion activities, many of which lacked an appropriate evidence base. The government's justification for these changes was that they were popular with patients. As no new funds were provided, GPs had to adopt the new activities if they wished to maintain their income. The then President of the Royal College of General Practitioners described this situation as 'a form of professional prostitution'. Eventually, the targets were removed and the profession was given the responsibility for deciding where effort was best invested in health promotion.

The contract also included a postgraduate education allowance, which linked a portion of GP income to attendance at a given number of postgraduate educational activities across the areas of clinical activity, health promotion, and service management. As no new funds were provided, GPs saw this as yet another hurdle to negotiate in order to maintain income. As a result, 'recruits' to this new system of educational activities comprised 'conscripts' rather than 'volunteers'. This system is also being replaced, mainly due to a lack of demonstrable educational value.[8] Many GPs appeared to select educational activities that they preferred, rather than those which they needed. The emphasis currently is on personal and/or practice development plans, based on educational needs assessment. As an editorial in the *British Medical Journal* concluded, "In the end, carrots and sticks may make general practitioners behave more like donkeys than doctors".[9]

Primary care developments in London

An exception to the style and spirit of these national developments was the London Initiative Zone Educational Incentives scheme, which followed from an inquiry into the poor state of primary care services in London. This scheme sought to improve recruitment, retention, and educational opportunities for GPs in the inner city.[10] This experience of education-based activities supporting primary care development was found to be effective, and provided much of the basis for the King's Fund Report on developing primary care in London.[11]

Current reforms

The latest round of reforms groups general practices in local health care cooperatives (LHCCs) in Scotland and primary care groups (PCGs) in England.[12] The latter will have a commissioning role with respect to secondary care services,[13] whereas the former will not. Allied to a range of measures denoted clinical

governance,[14] the establishment of LHCCs is intended to engender greater corporate responsibility within groups of practices serving defined areas, for the quality of service they provide. They are charged not only with responsibility for overseeing clinical effectiveness—the traditional clinical concern of general practice—but also to look beyond such concerns, to work with other professionals and with local community groups, in improving the general health and environment in their respective areas.

It is too early to judge the success of LHCCs and PCGs.[15] The basic unit of organisation remains the practice, and the reality for most clinicians remains the daily task of responding to patient demand. The new structures imply new ways of thinking about clinical care—applying a population-based approach, using evidence, working with colleagues, and addressing local health problems. Whether, and to what extent GPs are able to embrace this wider agenda, remains to be seen.

Local health care cooperatives and PCGs can be viewed, however, as the latest stage in a process of increasing collaboration among GPs. Initially, individual doctors formed partnerships. Then, practices collectively shared out-of-hours cover, first in informal, local arrangements, but more recently via large, well-resourced organisations. For many doctors, the reorganisation of out-of-hours care has demonstrated the value of professional collaboration. It seems only a matter of time before further types of collaboration are developed.

Clinical governance

Clinical governance has been defined by government as "a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care, by creating an environment in which excellence in clinical care will flourish".[14]

According to the Minister of Health, clinical governance "is not intended to replace professional self-regulation and individual clinical judgement, concepts that lie at the heart of health care in this country, but will add an extra dimension that will provide the public with guarantees about standards of clinical care".

Clinical governance includes:[14]
(1) Research and development;
(2) Implementation of evidence-based practice;
(3) Clinical audit;
(4) Significant event analysis/risk management;
(5) Analysis of complaints;
(6) Continuing professional development; and
(7) Professional leadership within functional clinical teams.

A feature of the system is the central support for local developments. For example, the Royal College of General Practitioners has developed new data gathering screens within GPASS, which allow voluntary participation in clinical audit activities (the Scottish Programme for Improving Clinical Effectiveness [the SPICE project]) involving seven areas of care (Box).[16]

Box. The Scottish Programme for Improving Clinical Effectiveness

Areas of care for clinical audit:
- Availability of services
- Continuity of care in mental health
- Hypertension detection and management
- Secondary prevention of ischaemic heart disease
- The management of leg ulcers
- The management of non-insulin dependent diabetes
- Monitoring of dose critical medication

The strengths and limitations of clinical guidelines

A new source of decision-making support has been in the development of clinical guidelines, produced by the Scottish Intercollegiate Guideline Network.[17] Over 40 guidelines have been produced. Initially, guidelines were welcomed as an overdue and useful distillation of research evidence, but initial enthusiasm has since been tempered—first, by 'guideline fatigue', as guidelines arrived in increasing numbers, and second, by ambivalence, as the limitations of clinical guidelines have become more apparent.

Many patients seen in primary care do not fit the neat case definitions described in guidelines, and have more complicated problems requiring individual solutions. Notwithstanding the need for integrated programmes of care, there is also a need for holistic care management, addressing all of a patient's needs.

Guidelines are also collectively impossible to apply. Although each may be justified within its own terms, when assimilated within the context of everyday primary care, there is insufficient time to follow all guideline recommendations. By making every decision explicit, guidelines generally involve less tolerance of clinical uncertainty than is usual in normal practice. The ability to tolerate uncertainty is, however, very important.

General population surveys in the UK show that 87% of health service contacts take place in general practice, whereas 13% take place in hospital. This ratio is the reason why the UK health service, underfunded as it is, is relatively efficient compared to many others.[2]

Of course, between practitioners there can be problems of under-referral, leading to inequalities in access to health care, and over-referral, leading to increased health care costs, but in general, tolerance of clinical uncertainty in primary care serves patients and hospitals well. If primary health care is reduced to a system with protocols and guidelines, at the expense of discounting clinical judgement, the system may become *less* rather than *more* efficient.

In addition, guidelines can prove unpredictable in terms of their effects. A randomised controlled trial in Glasgow demonstrates this point.[18] Guidelines to improve the prereferral management of couples with infertility in primary care were successful in increasing the number of appropriate investigations carried out in primary care itself, but unsuccessful in achieving a commensurate reduction in investigations in secondary care.[18] The guidelines thus increased health service costs with no effect on outcomes. Accordingly, the conclusion was reached that the cost-effectiveness of clinical guidelines cannot be assumed, at least for interventions which span primary and secondary care services.

Changing definitions of the quality of health care

Historically, the role of medical practice has been to respond to clinical events. Quality has been defined in terms of achieving the best outcome that is possible for the patient and considered as the sum of the output of all clinical encounters.

These aspects of quality are still essential but they are no longer sufficient. Increasingly, clinical practice is concerned with preventing ill health, by delaying or reducing the complications of established conditions, and by reversing risks in people who are otherwise well.

Quality is now defined in terms of all the patients who can benefit from a proven intervention. The focus on numerators has shifted to include a focus on denominators. Important public health benefits can be achieved by implementing simple strategies for large numbers of people. Contrary to the view espoused by McKeown in the 1970s,[19] health services can and should make a difference to public health.

The shift from individual medicine to population-based medicine is a major conceptual and practical change, which medicine as a whole has been slow to embrace. This is demonstrated by the continuing validity of the so-called 'rule of halves', which states that for any condition requiring long-term control, approximately half of the patients who could benefit are known, whereas about half of these patients are treated and about half are controlled.[20] Even for one of the most cost-effective interventions in medicine—the treatment of high blood pressure in the elderly to prevent strokes—the 'rule of halves' still prevails.[21]

New partnerships in preventive care

The new models of working require good information systems, the sharing of tasks between team members, and regular audits to identify and respond to gaps in care.[22,23] Most of all, however, they require partnerships between patients and health professionals, in which long-term outcomes are achieved by shared understanding and working together.[24]

Preventive work can only sensibly be achieved in primary care. Of course, hospital specialists can be involved in prevention but it is not cost-effective for them to do the work of generalists, or to become consumed in outreach activity. In Scotland, randomised controlled trials have investigated the effects of shifting the balance of clinical work involved in the long-term management of asthma and diabetes, from hospital outpatient clinics to primary care.[25] No difference in clinical outcomes were seen and patients were more satisfied with follow-up in primary care, and saved on transport costs. There were few cost savings for the health service as a whole, but it could be argued that these interventions released specialists from duplicating the primary care role. If these examples were followed more widely, specialists could alternatively have more time to work with local networks of primary care doctors, providing specialist advice and support.

Combined professional development

Professional development needs to be seen as a collaborative activity rather than as a one-way flow of advice and information. It is far from fanciful to think of better, closer links between clinicians working in primary and secondary care.[26] For several years the Department of General Practice, University of Glasgow, has run a series of evening sessions facilitating discourse between generalists and specialists.

What routinely transpires is a rich exchange between generalists and a specialist, usually covering the 'grey areas' of clinical practice, where decisions may draw on evidence but also depend on experience and values. Both generalists and specialists learn from the exchange, which is rooted in local clinical experience and values what everyone has to offer. Recently, these exchanges have been reported online to allow colleagues who could not attend, to share the benefits of this dialogue.[27] This model of professional development has great potential in the current environment.

Conclusions

Decisions made in primary care are important for patients, for hospitals, for health service expenditure, and for public health. There is considerable scope for improving what primary care achieves. A wide variety of measures are needed, however, to support and review decisions influencing primary care.

The independence of the primary care sector is a weakness, as it can be associated with professional isolation, large variations in practice, and inefficiencies in care. It is also a strength, for the future of primary care depends upon strong leadership and high quality decision-making at the local level. Greater integration within primary care is needed, to improve its internal effectiveness and efficiency, and as a basis for better integration with secondary care. The challenge is how to combine these necessary elements of integration and independence.

The last decade has seen an almost continual process of change in primary care in the UK. Some of the changes have been structural, structure determining function. Others have been educational, in anticipation of both specific short-term changes in clinical behaviour and long-term cultural shifts in practice. Financial incentives have been used with, and without success. Some initiatives have sought to advance the 'leading edge' of practice, whereas others have tried to improve the 'trailing edge' of practices which are unacceptable, or behind the times. Some changes have affected a few, while others have involved the majority of practitioners. Some changes have found favour and been welcomed into mainstream practice, whereas others have not worked and have been withdrawn.

The challenge for health services, including those responsible for budgets and planning, is to cultivate rather than to manage primary care. A wide variety of initiatives is needed to shape, support and review the decisions that are made by primary care practitioners. Integrated care is as much about the sharing of ideas, values and activities, as it is about establishing common structures and procedures.

Part of the process should include measures to promote better relationships between professionals in primary and secondary care. These measures should be locality based, and should include the sharing of educational, social, and other activities. For example, the teaching hospital becomes the teaching community, with services for particular conditions, such as cancer and coronary heart disease, reviewed, planned and developed in their entirety. In this way, continuity of care and its many elements,[28] including better communication and the sharing of expertise and information, can occur. For quality of care in a modern health service, this should not only be between professionals in primary and secondary care, but also between professionals and their patients in both sectors.

References

1. Health and Welfare Bureau. Lifelong Investment in Health: consultation document on health care reform. Government of the Hong Kong Special Administrative Region, People's Republic of China, Hong Kong; 2000.
2. Starfield B. Is primary care essential? Lancet 1994;344: 1129-33.
3. Rivett G. From cradle to grave; fifty years of the NHS. London: King's Fund; 1998.
4. Commonwealth Department of Health and Aged Care. General practice in Australia: 2000. Department of Health and Aged Care, Canberra, 2000.
5. Hart JT. The inverse care law. Lancet 1971;1:405-12.
6. Petchey R. General practitioner fundholding: weighing the evidence. Lancet 1995;346:1139-42.
7. Howie JG, Heaney DJ, Maxwell M. Care of patients with selected health problems in fundholding practices in Scotland in 1990 and 1992. Br J Gen Pract 1995;45:121-6.
8. Elwyn GJ. Professional and practice development plans for primary care teams. Life after the postgraduate education allowance. BMJ 1998;316:1619-20.
9. Iliffe S, Munro J. General practitioners and incentives. BMJ 1993;307:1156-7.
10. Hilton S, Hill A, Jones R. Developing primary care through education. Fam Pract 1997;14:191-3.
11. Florin D, Arora S, Gillam S, Lewis R, Malbon G, Morley V. Developing primary care in London. From 1990 to PCGs. London: King's Fund; 1999.
12. Groves T. Reforming British primary care (again). BMJ 1999; 318:747-8.
13. Chappel D, Miller P, Parkin D, Thomson R. Models of commissioning health services in the British National Service: a literature review. J Public Health Med 1999;21:221-7.
14. Roland M, Baker R. Clinical Governance. A practical guide for primary care teams. National Primary Care Research and Development Centre, University of Manchester; 1999.
15. Shapiro J. The new primary care organisations: one year on.

Some successes-but many issues remain to be resolved. BMJ 2000;320:886-7.
16. Royal College of General Practitioners. Scottish Programme for Improving Clinical Effectiveness in Primary Care. Royal College of General Practitioners. Edinburgh; 1999.
17. Scottish Intercollegiate Guidelines Network. SIGN Guidelines. An introduction to SIGN methodology for the development of evidence-based clinical guidelines. Scottish Intercollegiate Guidelines Network. Edinburgh; 1999.
18. Morrison J, Carroll L, Twaddle SE, et al. A pragmatic randomised trial to evaluate guidelines for the management of infertility across the primary-secondary interface. BMJ 2001; 322:1282-4.
19. McKeown T. The role of medicine. Dream, mirage or nemesis? Blackwell: Oxford; 1979.
20. Hart JT. Rule of halves: implications of increasing diagnosis and reducing dropout for future workload and prescribing costs in primary care. Br J Gen Pract 1992;42:116-9.
21. Hypertension in Older People. A National Clinical Guideline. Scottish Intercollegiate Guidelines Network. Edinburgh; 2000.
22. Hart JT, Thomas C, Gibbons B, et al. Twenty five years of case finding and audit in a socially deprived community. BMJ 1991;302:1509-13.
23. Davis RM, Wagner EH, Groves T. Managing chronic disease. BMJ 1999;318:1090-1.
24. Holman H, Lorig K. Patients as partners in managing chronic disease. Partnership is a prerequisite for effective and efficient health care. BMJ 2000;320:526-7.
25. Scott A. Primary or secondary care? What can economics contribute to evaluation at the interface? J Public Health Med 1996; 18:19-26.
26. Marshall MN. How well do general practitioners and hospital consultants work together? A qualitative study of cooperation and conflict within the medical profession. Br J Gen Pract 1998; 48:1379-82.
27. Continuing professional development. Summaries of PGEA meetings 2000/2001. http://www.gla.ac.uk/Acad/GeneralPractice/pgea_pts.htm
28. Freeman G, Hjortdahl P. What future for continuity of care in general practice? BMJ 1997;314:1870-3.