BRIEFING

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GP commissioning: insights from medical groups in the United States

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GP commissioning forms one of the most radical proposals set out in the NHS White Paper *Equity and Excellence: Liberating the NHS* (Department of Health, 2010a): groups of GPs will be responsible for deciding how to spend NHS resources to meet local health needs. For the past two decades some doctors' groups in the United States have held the equivalent of a commissioning budget. This briefing is based on a study visit to four such groups in California, and highlights some of the challenges and opportunities associated with implementing GP commissioning in the English NHS.

Key points

- These four US medical groups are all owned and led by doctors and place a high value on engaging their members in decision-making.
- Heading medical groups is a highly complex task – successful groups have had continuity of medical and managerial leadership for a decade or more.
- Groups negotiate a fixed budget with insurers for delivering services to a defined patient population. Savings come from avoiding unnecessary hospital admissions and ensuring appropriate use of specialist care, via high-quality primary care and alternatives to hospital admission.
- Groups have developed a clear sense of which service costs they can control, and are able to negotiate with insurers to hand back services where they cannot easily manage the financial risks.
- The groups are multi-specialty, with specialists employed (or contracted) alongside primary care doctors. This is seen as essential to the delivery of coordinated and efficient care.
- Specialist and primary care doctors are closely managed by the groups, through peer review of performance data based on process, outcome and patient experience indicators. An element of pay is also performance-related; to avoid conflicts of interest, the groups link financial incentives to quality rather than referral or utilisation rates.
- There has been significant investment in the high-quality, professional management support needed for contracting, financial management, organisational development and IT. Groups report that the value of investing in these areas is often underestimated.

Policy context

In July 2010 the Government announced its intention to transfer responsibility for commissioning the majority of NHS services in England from primary care trusts (PCTs) to groups of general practitioners (GPs) (Department of Health, 2010a). All GPs in England will be required to join a group, known as a GP consortium. These are to be established across the NHS in England and be fully operational by April 2013. After this date PCTs will be abolished (Department of Health, 2010b).

The Government's objectives for this reform include:

- better clinical outcomes
- enhanced local accountability for NHS funds
- services that are better coordinated (especially between primary and secondary care)
- greater efficiency.

(Department of Health, 2010a).

The reform takes place against a backdrop of sharply reduced growth in NHS funding which will require, according to the Government's own calculations, £20 billion of efficiency savings by 2014. These are to be achieved through a range of measures, including a 45 per cent reduction in management costs. The Government expects that GP commissioning will play an important role in generating these savings as GPs can strip out "activities that do not have appreciable benefits for patients' health or healthcare" (Department of Health, 2010a).

Overall accountability for GP commissioning will be to the new NHS Commissioning Board, which will allocate money to GP consortia and manage contracts for general practice. Financial incentives are being developed to encourage cost-effective use of the GP commissioning budget, and rules will be drawn up to cover over- and underspends by consortia.

GP commissioning is the latest stage of development in a 20-year history of the NHS giving GPs budgets with which to purchase some services on behalf of their practice population. From GP fundholding in the 1990s, through multifunds, locality commissioning, total purchasing and primary care groups, to the current arrangements where PCTs devolve some budgets to groups of practices to create 'practice-based commissioners', there has been a desire to involve GPs in decision-making about local resource allocation and service development.

These latest proposed reforms represent a major change to the role of GPs within the NHS and effective implementation will need to draw on the best available evidence, not only from the history of GP commissioning in the NHS (see, for example, Mays and others, 2001; Smith and others, 2004), but from abroad. To contribute to this evidence base we undertook case study visits to four medical groups in California: Bristol Park Medical Group, HealthCare Partners, Mills-Peninsula Medical Group and Monarch HealthCare. These groups were chosen because they have functioned in a manner similar to proposed GP commissioning consortia. The aim of our visits was to explore the factors associated with high performance in these medical groups and draw out lessons for the NHS. A broader perspective on the experience of medical groups in the US as a whole is also available (Casalino, forthcoming).

About this report

This report presents a summary of findings from the case studies and is intended to inform the development and practical implementation of GP consortia in the NHS. The first section of the report outlines the development of medical groups and the context in which they currently operate in the US. We then highlight eight key lessons that emerged from our analysis of the case studies and discuss their implications for GP commissioning consortia.

US context and background

Compared to other countries, the US health care system has been characterised as fragmented, costly and lacking universal coverage (Davis and others, 2010a). The Affordable Care Act passed by the United States Congress in 2010 aims to tackle some of these weaknesses, including the inexorable rise in health care costs (Davis and others, 2010b). This rise has been blamed in part on the dominance of a 'fee-for-service' payment structure within both government and privately-funded healthcare. Doctors and hospitals have had strong financial incentives to over-treat and these costs have been passed on to taxpayers (to pay for the over-65s' Medicare programme), as well as consumers and employers, in the form of higher health insurance premiums. It has also resulted in poorly coordinated care, with high levels of potentially avoidable hospital admissions, particularly for older patients with chronic conditions.

There are, however, notable exceptions to this pattern of care in the US, in the form of fully integrated health systems, such as Kaiser Permanente and Geisinger, which have been studied as potential models for the NHS (see, for example, Dixon and

others, 2004; Gleave, 2009; Ham, 2010a). They have shown that it is possible to build integrated care systems with a strong primary care base that place a major emphasis on quality, prevention and minimising use of expensive hospital-based care. These organisations are still relatively rare and other models are being explored for funders to achieve the same results, for example 'accountable care organisations' where healthcare organisations and medical groups cooperate to take on a fixed budget with which to commission outcome-based care for a population (Orszag and Emanuel, 2010).

The allocation of fixed budgets to medical groups as an alternative to fee-for-service practice is not a new idea (Shortell and Casalino, 2008). In a few areas in the US, including California, groups have been using fixed budgets to provide primary and specialist care for more than two decades. It is their experience of assuming and managing these budgets, together with the associated financial and service risk, that is of interest as potential learning for the NHS (Ham, 2010b; Casalino, forthcoming).

Medical groups and independent practitioner associations

There are two main variants of these medical groups in the US: medical groups and independent practitioner associations (IPAs) (see Box 1). These are generally multi-specialty, combining primary care doctors with specialists.

Box 1: Two kinds of medical group

Medical groups: These groups *employ* their member doctors, who typically work in clinics owned by the medical group, or as *hospitalists*, working for the group in local hospitals. Doctors – many of them specialists – are salaried and usually receive a bonus for providing high-quality care in line with agreed standards and guidelines. These groups have some similarities to large English group practices, although US medical groups generally include GPs *and* specialists.

Independent practitioner associations (IPAs): IPAs formed as corporate structures through which physicians could come together to negotiate and administer health maintenance organisation (HMO) contracts on behalf of their members (Robinson and Casalino, 1996). IPAs are networks of doctors who continue to own and run their own clinics, but who join an IPA to get access to contracts while also obtaining administrative and technical support.

Many organisations – including the case studies outlined in this document – combine features of a medical group with an IPA model.

Most of these groups were formed from the late 1980s after legal changes allowed them access to the 'managed care movement' in the US. Health maintenance organisations (HMOs) were generally owned by insurance companies that used the techniques of managed care to control costs. These included using primary care as a gate-keeper to specialist care, and trying to reduce the use of unnecessary hospital services by intensive management of patients with chronic illness and complex needs.

In many areas, HMOs coordinated patients' care themselves and gave capitated budgets to individual primary care doctors for general practice services. But in other areas, doctors came together in groups and IPAs to contract with the HMOs and take on responsibility for managing and coordinating care across a wider range of services. Up to 2,000 of these groups took root across the US in the late 1980s. However, many failed to manage risk-bearing budgets successfully (Casalino, forthcoming).

In California, medical groups were particularly prevalent and some have proved to be long-lived. This peculiarity of California is perhaps due to the success of Kaiser Permanente and its associated Medical Group, which acted as a powerful stimulant for the HMO industry in California (Robinson, 2001). As large insurers mounted a competitive response to Kaiser, they sought out multi-specialty medical groups rather than building networks of small practices themselves. Offering fixed budgets to these groups, they transferred insurance risk by requiring them to manage a range of health care services within an agreed budget, and to specified quality standards.

In the 1980s, as these groups were forming, the financial environment was favourable and they were often able to negotiate progressively larger annual budgets with insurers, while the public was initially tolerant of the drive to control costs through the techniques of managed care (Robinson, 2001). During this time, many of the California groups proved that they could reduce hospital admissions amongst their patients to well below national averages (Robinson and Casalino, 1995). A leaner period followed in the 1990s, as growth in annual budgets flattened or declined, driven partly by consumers and employers losing their appetite for managed care (perceiving it as a way of reducing choice and limiting access to services). Some medical groups and IPAs went bankrupt, others merged into larger groups and many abandoned risk contracting

(Casalino, forthcoming). The public's hostility to managed care has persisted – doctors are wary of being seen to deny care on the grounds of cost.

Those medical groups and IPAs that have survived are generally associated with higher-quality care, as evidenced by greater adherence to clinical guidelines and adoption of electronic medical records (Shortell and Casalino, 2008).

Case studies

We chose our case studies from variants of the two types of groups described in Box 1. Details of the four groups selected for study are set out below, in Table 1. We aimed to generate a sample with a variety of size and ownership models. The organisations include both profit and non-profit status.

In each organisation, we interviewed senior managers (clinicians and non-clinicians) and doctors who were members of the group or IPA. As can be seen from Table 1, the groups vary in size and form, but what unites them is that they all manage fixed budgets for an enrolled patient population.

The groups negotiate annually with the health plans (insurers) for a 'capitated' budget, which is paid monthly to the group (see Figure 1). This budget is calculated as a fixed amount per head of population enrolled with the group (capitation), adjusted for age and sex and, in the case of Medicare patients (the over-65 age group funded by the federal government for their care), on the severity of existing health conditions. A single medical group or IPA will typically hold contracts with several health plans. Budgets are paid monthly to the groups, from which they pay their doctors and a range of other service providers, including hospitals and diagnostic services. It should be noted that the medical groups do not rely solely on business from capitated patients but also provide services for patients with different kinds of insurance products, which have in recent years been growing in popularity relative to fixed-budget insurance.

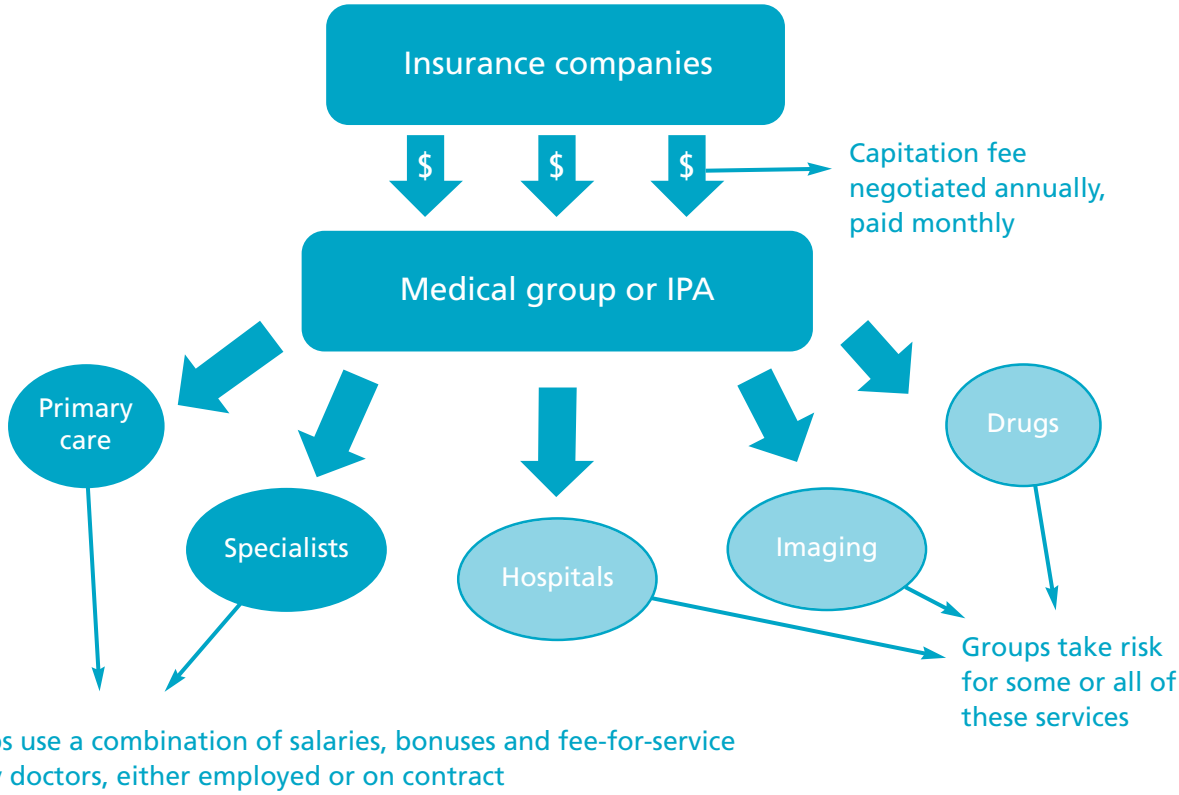
Limitations of our research

There are two main limitations of this research. The first concerns the US context – these groups are not responsible for the health of all patients in their geographical area in the way that GP consortia will be. In addition, they are not required to involve patients or communities in the design and delivery of services, as we assume will be the case with GP consortia in the NHS. Patients are primarily seen as consumers in the US healthcare system, and are able to exercise choice by switching health plans or doctor, although in practice choice is often heavily curtailed by income or type of health plan.

Table 1: Characteristics of case studies

Name	Date formed	Type	Capitated patients	Number of GPs	Specialists	Total employed doctors
Bristol Park Medical Group	1961	Group + IPA for specialists	68,000	89 employed	700 contracted, 6 employed	95
HealthCare Partners	1992	Group + IPA	650,000 (3 states)	1,400 contracted, 480 employed	2,600 contracted, 120 employed	600
Monarch HealthCare	1994	IPA + employed doctors	170,000	800 contracted, 6 employed	1,200 contracted, 27 employed	33
Mills-Peninsula Medical Group	1994	IPA + employed doctors	45,000	112 contracted, 26 employed	254 contracted, 9 employed	35

Figure 1: Financial flows within IPAs and medical groups



Second, these groups are survivors of an intense process of evolution, particularly through the difficult financial environment of the late 1990s. It is tempting to view their attributes – as expressed by their leadership – as the sole determinants of success. It is however possible that there are wider contextual reasons why some groups succeeded, which were beyond the scope of this study to explore.

Case study findings

In this section we summarise the key findings from our visits to the four medical groups, including their characteristics, functions and achievements. This is followed by an exploration of the main themes that emerged from our analysis of the groups and the learning offered for GP commissioning in the NHS.

Summary points

- All four groups are owned and led by doctors. The groups have evolved over several decades and have enjoyed substantial continuity of leadership over this period.
- The groups have varying forms of ownership arrangements, including full shareholding for some or all doctors, and varying governance structures which aim to enable engagement with member physicians.
- The number of enrolled patients ranges from 45,000 to over 650,000 patients. Larger size minimises financial risk, but creates greater leadership and management challenges.
- The groups negotiate risk-bearing budgets for a wide range of services, but can also negotiate to hand back coverage to insurance companies (who then organise these services for patients) where they do not feel able to control an area of financial risk. This flexibility has been important to the some of the groups' financial survival.
- All groups see themselves as businesses, in which success hinges on delivering high-quality care at a cost lower than the commissioning budget. A key leadership skill involves reconciling business goals

with clinical quality and doctors' autonomy, thus avoiding perceptions of care being denied to patients on cost grounds.

- Savings are made from efficient provision of high-quality care, by managing chronic disease, avoiding unnecessary hospital admissions and minimising readmissions. Groups monitor referrals into specialist care and require prior authorisation for some procedures.
- Success is built on high-quality primary care, and all groups closely performance manage their primary care doctors by feeding back data on performance and using financial incentives linked to quality indicators.
- Success also depends on judicious use of specialist care by the groups' doctors. All the groups have specialists as part of their membership (either employed or on contract) and 'hospitalists' to manage their patients' care when in hospital.
- Groups have either developed, or contracted with, alternatives to hospital care, including skilled nursing facilities, urgent care centres and 24-hour support for their most frail patients.
- There has been substantial investment in data collection, IT systems and analysts, and in professional staff to negotiate contracts, organise billing and manage doctors' performance.

Emerging themes

Clinical ownership

All groups described themselves as 'physician-owned', but there were different forms of ownership. In the IPA model (where doctors own their premises, similar to GPs), doctors could belong to several IPAs at once, so the two IPAs (Monarch HealthCare and Mills-Peninsula Medical Group) open the offer of shareholding to all their doctors with a significant contractual relationship with the group. For the two employed medical groups, a tiered approach to ownership was used. For example, one group assigned new recruits to an initial period of purely salaried employment, followed by the opportunity to become a partner or a shareholder. Partnership brought increasing financial benefits but also meant that a greater proportion of a doctor's income was tied to performance. In addition to shareholding or partnership, doctors were given opportunities to own stakes in capital projects.

Although there was some variation, a common theme in the interviews was the importance of building a sense of ownership and belonging among the member doctors.

> *"It's owned by physicians and governed by physicians. It's a concept which is really important to our success."*
>
> Medical director, medical group

A sense of ownership was perceived as important because it enabled the group to take decisions about investment or measures to improve the quality of care in the confidence that all (or many) of its doctors would cooperate actively. One group, Bristol Park, allowed all doctors access to monthly board meetings (which were very well attended), and had a smaller executive committee that was able to take decisions more swiftly. This committee combined executive officers and board members (the overall governance arrangements for Bristol Park are set out in Figure 2).

Leaders in all groups described a fine line between physician ownership and 'excessive democracy', where rank-and-file doctors could be overly influential on executive decisions. It was felt to be very important to have an executive board (or equivalent) that was mandated to take decisions in the interests of the group, on behalf of the wider membership.

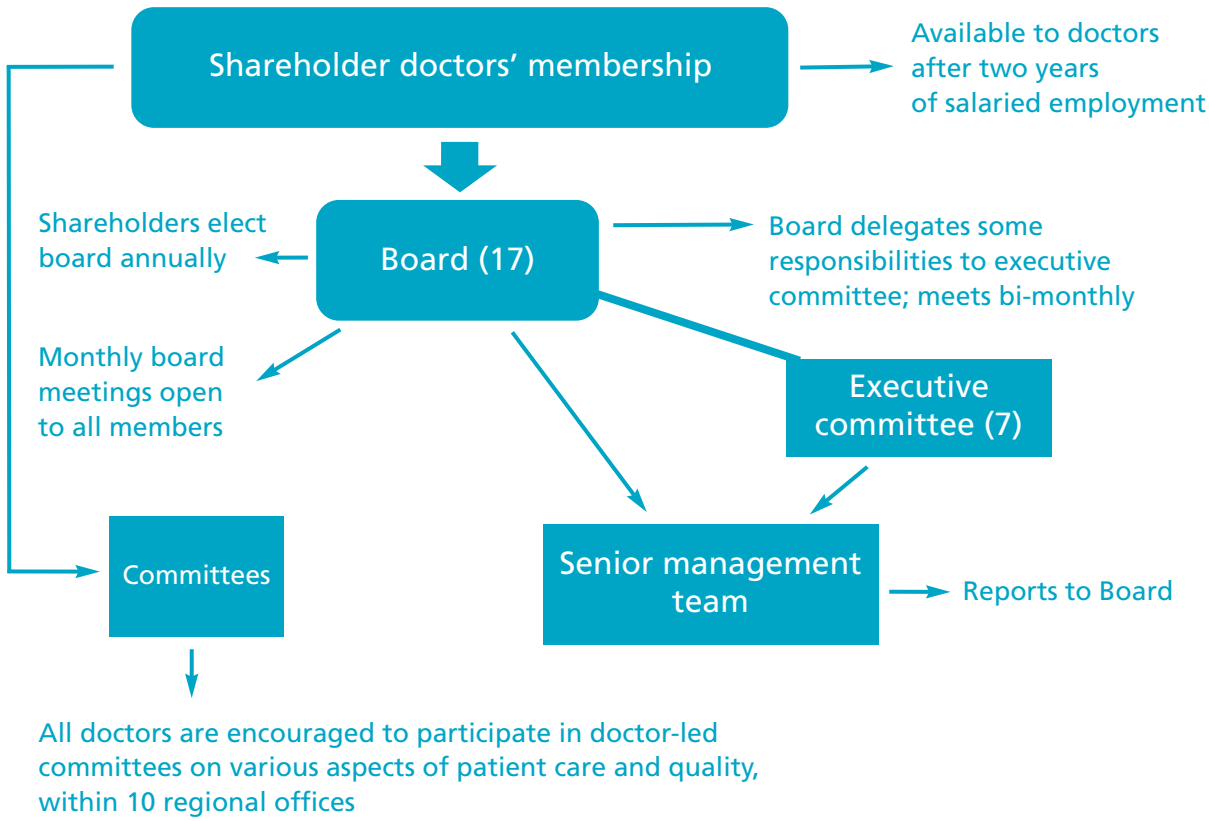
Strength and longevity of leadership

Interviewees were unequivocal in asserting the importance of sustained and stable medical leadership of the organisation. They were clear that their groups had thrived because they were run as businesses, and felt that their success was rooted in an ability to negotiate adequate capitated rates with insurance companies and then deliver care at a lower cost than the budget.

To do this, groups needed to negotiate contracts with specialists and hospitals, and to manage the performance of their doctors so that they are able to deliver high-quality primary care. Medical leadership was considered crucial to these functions – for example, to encourage primary care doctors to make appropriate use of specialist care and use services developed as alternatives to hospital admission.

> *"Having physician leaders makes a big difference. Deep down you know they've walked in your shoes, so there's more trust.*
>
> Doctor, IPA

Figure 2: Governance structure of Bristol Park Medical Group



The experience of doctors leading colleagues through the hard economic times of the late 1990s was central to the story of each organisation. Some of the groups had experienced consecutive years with minimal or negative growth in doctors' income, and believed that clinical leaders had the ability to retain the confidence of doctors in these lean times where lay managers would have failed.

For other aspects of medical group business, it was reported as being very important to understand when professional managers and leaders were needed. The leaders of one of the IPAs considered that their fortunes had been saved by the decision to hire professional managers after the founding doctors became out of their depth and ill-equipped to discharge the roles for which they had volunteered. With hindsight, the recruitment of non-doctors had been an essential step, but at the time it was perceived negatively by doctors.

"It was very challenging because doctors like to control everything. But we had to realise that physicians would be more successful in partnership with non-physicians. That's a very difficult step for physicians to take."

CEO, IPA

It was notable that amongst the leaders we interviewed, many were founder members and had been in post for at least one, sometimes two, decades. Continuity of leadership was clearly perceived to be a virtue, and an emphasis was also placed on the need to identify and nurture future leaders, although this was acknowledged to be challenging in practice. Encouraging active participation through committees was one way of building a cadre of future leaders, particularly where committees handle core topics, such as setting standards for quality improvement. Some of the groups felt that

more energy should be spent on building future leaders and regarded the involvement of more women who often wanted to work part-time as a challenge that had not yet been fully addressed.

Engagement of doctors

Physician leaders invested considerable amounts of time in developing and maintaining relationships with rank-and-file doctors. There was a range of opportunities for doctors to be involved in governance of the group, for example attendance at general membership meetings, or monthly board meetings, which offered a chance for all doctors to catch up on organisational and policy developments.

Work on committees likewise represented an important route for doctors to interact with the leadership and a wider body of peers. All four medical groups had a wide range of committees with different functions, including for setting quality standards, negotiating rates of compensation for specialists, or reviewing referrals. Doctors were generally compensated for attendance at committees.

In addition, some groups had developed other mechanisms for involvement, for example assigning new doctors a mentor for their first two years in the groups, or offering educational opportunities such as short courses, or a two-year mini-MBA programme. These covered a range of topics, including how to run meetings, the intricacies of coding and contracting, negotiation skills, and more conventional clinical education. Offering educational input was described as an important way of enabling doctors to understand the business of the group and develop the organisational culture. There was a strong sense that it was important to reach out to all doctors, even though this could be challenging in practice, particularly for the IPAs, which have a looser, non-employed structure.

> *"We struggle to get the attention of doctors who don't come [to meetings] even though their local leaders come. We try emails, we try meetings, no one single thing works."*
>
> Medical director, IPA

On the other hand, the message was clear that if a doctor did not fit into the ethos of the group, then the ultimate sanction was for them to be excluded.

> *"We work with physicians and if they can't get comfortable with our system and our way of working, they move on."*
>
> Medical director, medical group

The interviewees reported this to be a relatively uncommon event. However, they described how they viewed their organisations as appealing to a particular kind of doctor: those wanting to avoid the administrative burden and long hours of solo practice, but nevertheless retain some autonomy. This was reflected in the comments of doctors about why they had chosen to join physician groups or IPAs, as outlined in Box 2.

Box 2: Doctors' perspectives on group membership

"I have a young family and working here has given me predictable hours and allowed flexibility over my life that wouldn't otherwise be possible."

Employed group doctor

"What attracted me here is that it was an organised group, with a lot of organised processes of care in place to manage care. Here, I can just be a physician and not worry about running a day-to-day business."

Employed group doctor

"It's a nice way to practise because even though you are part of a big group, day-to-day it still feels like a small office but you've got this big infrastructure supporting you."

IPA doctor

"I don't have to worry about hiring and firing or any of the IT support, that's all taken care of, but of course we do get final say over hiring people to work in our office."

IPA doctor

Management of risk

There was significant variation in the scope of the services for which groups took financial risk, in other words, in the range of services for which they held a commissioning budget. There was no standard package of services across primary and secondary care, and groups dropped and picked up the budget for some services each year, based

on negotiations with their funders. Some of these decisions related to 'insurance risk' – the likelihood of a few patients needing expensive but rare drugs or procedures. However some related to judgments about 'service risk'; the group's ability to manage the use of routine drugs or hospital services needed by the enrolled patient population. The decision about whether or not to bear financial risk for a specific service was underpinned by a strong sense of what a group could influence and control, based on their experience of handling budgets and historical data on patients' utilisation of services.

"We don't take risks over things we can't control. We are constantly scanning the horizon and negotiating about what's in and what's out."

Finance director, medical group

In relation to the risk of more routine care (service risk) there was no consensus about what was the ideal mix of services to include in the commissioning budget. The largest group believed that taking on the widest possible risk was best, no doubt reflecting their larger risk pool.

"There are savings at all levels, not just hospital, but you have to have all the risk or it just won't work: pre-admission and post-admission is key: if there's no hospital risk, there's no incentive not to refer."

CEO, medical group

For the smaller groups, there were examples of decisions to drop whole categories of care, such as risk for all drugs or the facility (non-physician) costs of inpatient care. Interviewees explained that the process of understanding what services and budgets they could control had been built slowly and over a long period of time, and had involved, by necessity, a degree of learning by trial and error.

"We had to refocus on what we could control, for example if outpatient surgery is done in an ambulatory centre rather than a hospital, it's about 50 per cent cheaper, so we took that on, we were happy to take that on."

CEO, IPA

There was no standard size of patient population served by these groups, but there was general agreement that larger was better for taking on more risk, especially for secondary care, and some of the groups had grown significantly over time. Most respondents felt that the logic of capitation meant growing bigger over time, to reduce risk and increase leverage with hospitals and specialists. However, they also described downsides as a result of larger size, for example the risk of becoming more remote from front-line doctors and staff, and reduced agility in implementing change.

"I wish we could be more agile, more nimble, more responsive. The size of this organisation is ponderous and it takes months to get something changed. It makes me nervous, down the road, if we lose that agility, we will be at risk of not being responsive to changes in the community and what our customers want."

Medical director, medical group

Strategies to improve quality and efficiency

The profitability of groups depended above all on their ability to deliver high-quality care at a cost lower than their capitation (commissioning) budget. Interviewees spoke about the importance of framing these business objectives as essentially quality-oriented, partly as a consequence of the public backlash against the managed care movement in the 1990s, when many patients (and doctors) believed that quality suffered and care was being denied on cost grounds. The groups in our study were highly sensitive to the potentially negative perception of rationing care, and argued that good quality care was also efficient care.

The main strategy for business success was described as controlling the rate of referrals into specialist care and reducing avoidable hospital admissions, particularly amongst older patients with one or more chronic conditions. The groups employed a range of techniques to achieve these goals and these varied depending on whether doctors were employed, as in the medical groups, or contracted to the group as with an IPA.

Medical groups that employed doctors were able to standardise staff skill mix in primary care, influence the organisation of services and determine processes of care across clinics owned by the group with member doctors

practising within these 'norms'. This was harder for IPAs to achieve across a cluster of independent practices yet, despite these differences, there were some common themes from the groups' experience with influencing clinical behaviour.

All groups had mechanisms for controlling referrals, including requirements that doctors adhere to national clinical guidelines and seek pre-authorisation for some types of referrals. Groups typically employed staff to collect and analyse utilisation data, which was fed back to both the medical group leadership and to individual doctors for performance management and peer review purposes. In addition, several groups also held regular committees for face-to-face peer review of individual cases. For example, one group held weekly meetings at physician office (general practice) level, in which doctors and other clinical staff reviewed individual cases where referral decisions had been difficult.

A common strategy used by the groups was the employment of 'hospitalists', doctors who act as agents of the medical group within hospitals. Hospitalists ensured that admissions and length of stay were appropriate, and organised support for patients on discharge in order to reduce the risk of readmission. The hospitalist, always a doctor but often supported by nursing staff, acted as a crucial point of contact between the primary care doctor, relevant specialists, and the patient while in hospital.

> *"Every admission is coordinated by a hospitalist. They explore options for the patient and it needs good relationships between the hospitalists and specialists."*
>
> Medical director, medical group

In the case of emergency admissions, one IPA described how their hospitalist met the patient in the accident and emergency department and, where appropriate, diverted them home or a to a skilled nursing facility, thereby ensuring patients were seen in the most appropriate setting for their condition. The medical group had to have a critical mass of patients at the relevant hospital to justify the cost of the hospitalist post. Alternatively, hospitalists could move between different hospitals.

The medical groups had all developed access to alternative forms of urgent care, sometimes by building the facilities themselves, or, in the case of one IPA, contracting with an urgent care facility. Patients were encouraged to come to the urgent care centre rather than admit themselves to the accident and emergency department.

> *"Over the years we've developed a culture in our physicians and staff and [done] a lot of education amongst our patients, telling them that it's much more advantageous to go to one of our urgent care centres than go to a hospital emergency room – we have your records, we can see you faster, it's much more convenient."*
>
> Medical director, medical group

In addition, many of the groups had access to services such as: skilled nursing facilities; a step-down facility bridging home and hospital; nurse practitioners who acted as case managers for frail patients with complex needs; and contracts with social workers and home help agencies to ensure that patients could return home for their ongoing care.

Integration of primary and secondary care

Specialist involvement was a striking feature of all four groups and no group attempted to operate as an exclusively primary care service. This was argued on the basis that efficient and high quality care necessitated careful coordination and integration of care across community and hospital settings.

> *"Primary care cannot be successful without specialist buy-in. I think that's a fatal flaw [to ignore that]. For example, with chronic care, much of the care is provided by the specialists. You need their buy-in, you need them to be committed."*
>
> CEO, IPA

In the US, many specialist physicians still work in solo practices or single-specialty groups, typically with five to 20 physicians, with admitting rights to multiple hospitals, although more are now seeking employment within hospitals. There are two approaches taken by the medical groups in working with consultant colleagues: bringing specialists into the group as employees; or letting contracts with individual specialists or groups of specialists. A medical director of a group electing to employ, rather than contract with, specialists commented:

"One of the complaints from our primary care physicians was [about] the neurologists, who were never available, and there was a backlog. So we decided that [contracting] wasn't working, we had a lot of patients and we're growing, so we hired six neurologists and brought them in-house."

Medical director, medical group

Other specialties that had come into the groups as employees included cardiology, gastroenterology and anaesthetics, with these doctors working at local hospitals on behalf of the medical groups, delivering services according to the care pathways determined by the groups.

More commonly, however, specialists were linked to the group through contracts. Contract negotiations focused on getting the right volume, quality and price of specialist care, and this was reported to be a time-consuming process. The decision about which specialist to contract with was driven, at least to some extent, by data on the quality of care given by specialists.

"Which specialty groups provide the best care? How's their access? How's their satisfaction levels? Here's a blended scorecard on their performance. Do you still want to refer to this cardiologist because he's your best friend or try this one over here?"

Senior manager, medical group

Some interviewees reported that there was a lack of good outcomes data and that they had to rely instead on patient experience and softer data, sometimes based on word of mouth. Groups spoke about building up knowledge over time about which specialists to use, based on the experience of their patients and group doctors. Negotiations with specialists were often conducted by senior clinical staff, for example the medical director. Groups also reported placing restrictions within the contracts on specialists' scope of action, for example ensuring that onward (secondary) referrals were sent back to the primary care doctor first.

Contracted specialists were paid through a variety of mechanisms, including sub-capitation (negotiating a fixed fee to the specialist to cover each patient's overall care, that is, a delegated capitated budget), fee-for-service (paying for separate items of care or service), and bonus payments based on service quality and patient satisfaction. It was important for groups that they could vary the form of reimbursement – fee-for-service was a useful way to incentivise a particular type of treatment when needed, whereas sub-capitation was useful for keeping overall costs down in specialties where there was a large range of potentially expensive diagnostic tests.

"We sub-capitate some of our specialists. It's very good for influencing their behaviour as they are incentivised to control costs. An angiogram, for example, is included in the capitation fee, we negotiate that."

Medical director, medical group

Interviewees described how they aspired to create constructive working relationships between primary care doctors and specialists. They wanted specialists to help build up the skills of primary care doctors, as a way of encouraging appropriate referrals to specialist care and maximising primary care-based services. One primary care physician described the experience of having direct and timely access to both in-house and contracted specialists:

"One of the benefits is being able to send the patient to see our internist or paediatrician before referring the patients on. I can also call the cardiologist before sending someone: they answer the phone. It's money for them."

Doctor, medical group

There were examples of groups encouraging primary care doctors to do their own specialist procedures, for example minor skin surgery, sometimes under the supervision of specialists. As well as being more efficient for the medical group, this was reported to expand the skills of primary care doctors, and to make primary care more attractive to medical graduates.

A peculiarity of the US system compared to the NHS is the historical separation between hospitals and specialists in most states. The groups in this study held separate contract negotiations with hospitals, which can be paid either on a *per diem* basis or using diagnostic-related

groups (DRGs). As with specialists, the threat of moving patients was a powerful lever in negotiations, although it might not often be used:

"We deal with 35 hospitals. We do have choices but we have preferred hospitals. The long-term relationship is as important, if not more important, than moving our patients on."

Finance director, medical group

Performance management of doctors in the group

The techniques mentioned above were underpinned by close scrutiny of performance and quality by the leadership of the organisation. Quality metrics included clinical outcomes, rates of referral into specialist care, patient satisfaction ratings and use of generic drugs. It was common for data to be reported back to individual physicians, usually with names attached. The leadership of medical groups was clear that intra-peer competition was a powerful tool for improvement.

"Seeing the data can be uncomfortable, but it spurs you to do better. We see everyone's names next to their hospital admits and referrals."

Doctor, IPA

Data feedback was accompanied by visits from physician leaders to explore reasons for outlier performance and provide support to improve the practice of weaker doctors.

In addition to data feedback, all the groups used financial incentives to influence the productivity and quality of care delivered by doctors. Two groups used salaries as the basic mechanism for paying their physicians, coupled with bonus payments for quality of up to 15 per cent. Another group added an 'encounter payment' (for each patient seen) to the basic salary of primary care doctors when they found there had been a decline in the volume of patients seen on a daily basis. They had also introduced fee-for-service payments to incentivise primary care doctors to undertake specific specialist procedures in a practice setting and so avoid referral to secondary care.

A key lever was the use of annual bonuses linked to data on clinical quality in priority areas. Examples included meeting diabetes, mammography and colorectal screening goals. Some groups had also introduced productivity metrics, for example how many patients each doctor had on their list or saw during a day. Examples of efficiency metrics included the use of generic drugs, and referrals to ambulatory care centres as an alternative to hospital admission. These bonuses were based on a small number of quality metrics (usually between five and eight) that were changed by the group annually, and agreed with members by clinician leaders well in advance. Importantly, as mentioned earlier, the allocation of bonuses was never directly linked to measures of referral for specialist care.

"We don't want to pay them for not referring. The organisation is influenced by the rate of referrals, but it should not figure at the level of the individual physician."

Medical director

"There are no utilisation [reduction] incentives in contracts with our doctors. We could be crucified if it was in our contracts. And we have to call it something else, like 'variability reduction'."

Medical director

This was clearly a legacy of the managed care era and the backlash that occurred when physician income was seen to be linked to restricting patients' access to health services. The collective organisation that linked individual practices (either the IPA office or the medical group headquarters) was clearly seen by our case study groups as the 'level' at which risk management had to take place, while acknowledging that reducing the need for unnecessary services was something to be presented as good medicine at the level of the individual clinician and practice.

Management and IT infrastructure

The leaders of all the groups emphasised that their survival hinged on the presence of rigorous business processes that underpinned their activities, and that were not normally to be found in the average small, independent practice. One of the larger groups commented that good management processes were critically important as organisations grew, and it was no longer possible to manage through personal relationships between leaders

and physicians, although leaders attempted to stay visible to their members. Three areas in particular were singled out in relation to organisational infrastructure:

Investment in high-calibre managers

Several interviewees described a journey from their origins as small networks with part-time, amateur managers to professional organisations employing skilled senior business managers. In the case of one IPA, their initial management group involved enthusiastic doctors who volunteered for key roles, based on who had enough time available and interest for a specific role. They estimated that it took six years to fully professionalise their management when recruiting from outside.

Timely and accurate data and information

The groups all stressed the importance of having robust, reliable sources of data about the quantity, quality and cost of their activities.

> *"Information is key. You have to have the data. You have to be able to analyse the data. You will not be successful in this venture without understanding the data. You need data on procedures and costs to enable you to negotiate the appropriate funding with the HMOs."*
>
> CEO, IPA

All the groups had invested heavily in IT systems and electronic health records, and described how the decision to make this investment was often problematic, as it sometimes meant reduced, or no, bonuses for physicians for at least one year.

Rigorous financial management and accounting processes

The groups needed detailed financial reporting to monitor ongoing activity, identify trends in profitable and loss-making lines of business, and guide negotiations with funders. It was particularly important for these data to be timely so that groups could understand where their costs were on a day-to-day basis, particularly when a referral to hospital might mean a cost 'incurred but not reported' for several months – in other words, a hidden debt. Failure to understand what had been spent on high-cost care was considered to have been a factor in the financial undoing of many of the Californian medical groups that went bankrupt in the 1990s.

One group reported that they spent between 15 and 20 per cent of their budget on IT and management. It should be noted, however, for the purposes of any comparisons with the NHS, that this reflects the costs of negotiating and contracting with multiple insurers, as well as carrying out separate negotiations with specialists and hospitals.

Implications for the NHS

The experience of these medical groups offers a number of important lessons for the NHS as it prepares to establish GP consortia.

Clinical ownership

These groups demonstrate the central importance of medical leadership, ownership and control, underpinned by effective governance structures that assure the active involvement of doctors in the decision making of the group. In the NHS, there will need to be mechanisms for grass-roots GPs to participate actively in, and steer, GP consortia. This is likely to require a range of forms of governance for consortia, depending on the size, history and preferred way of working of the consortium and its members.

The Coalition Government has promised that consortia will be allowed to form spontaneously and decide on the structure that suits them best – this will, however, have to be balanced with the requirement that consortia must be statutory bodies and account for significant sums of public money, together with the health outcomes of local people. The experience of the Californian groups illustrates the benefits of autonomous development and suggests some value in the Government's current strategy of standing back and encouraging local formation of GP consortia. There will, however, be costs associated with this strategy, as GP consortia in some areas will deviate from the coterminous boundaries that PCTs shared with local government, with a potential loss of efficiency and integration of services.

In the US, a sense of ownership by doctors is underpinned by the essentially voluntary nature of doctors' enrolment in these organisations. Within California and other US states, there are a range of employment models for doctors to choose between, including the option to be an entirely independent contractor, to join a network or IPA or, at the other end of the spectrum, to be fully employed as part of a large

medical group. Medical groups also aim to cultivate a distinctive 'mission' which is also used to attract like-minded doctors to the group. This diversity allows doctors to choose the group that suits them best, and many doctors move from one to another over time as priorities change. For example, the organised processes and predictable hours of the larger groups were considered to be attractive to the growing number of younger doctors (men as well as women) looking to balance family and work commitments.

In the NHS, when GP consortia have matured, they may well be able to provide a similar variety of culture and work environments to draw in a committed workforce well matched to each consortium. In the short run, however, the mandatory nature of GP consortia is likely to bring together disparate groups of GPs in some areas, which will create a particular challenge for their leaders, who will need sophisticated management skills to build a robust and healthy corporate culture for the consortium.

Strength and longevity of leadership

A striking message from the Californian medical groups is that their leadership has often been in place for many years and, as such, has extensive organisational memory, and significant support and respect among group members and the wider health care community.

The need to grow a cadre of medical leaders to make GP commissioning a success has been recognised by the Coalition Government and resources will have to be committed to this in the short and long term. The experience of the leaders in our Californian case studies suggests that the skills needed to make this sort of organisation a success extend considerably beyond the usual range of clinical skills. These include: negotiation; communication and public relations; finance and accounting; risk management; clinical performance assessment and development; and organisational development. Above all there is a requirement to understand when to hire professional help in specialised areas, as opposed to developing expertise within the group members and support team.

Building longevity of leadership for GP consortia implies tolerance of variable performance in the short run as individual clinicians grow into their new roles. Whilst many consortium leaders will come from the body of GPs who already have experience of practice-based commissioning and other managerial roles, some will be new to GP commissioning, and will find those roles to be more extensive and challenging that anything that has gone before. Tolerance of emerging GP leaders will, however, need to be balanced with the need for accountability for significant levels of public funds and the commissioning of high-quality services that can secure improved health outcomes. This may in turn lead to a requirement for the NHS Commissioning Board to allocate commissioning risk to consortia on a gradual basis, increasing the responsibility of a consortium as its leadership proves its competence to handle such risk and deliver the desired results.

Furthermore, the imperative to develop the first generation of GP commissioning consortium leaders should not obscure the need to develop the next. All the organisations in our study felt they could invest more energy in growing the next generation of leaders, so that the potential downsides of long-lived leadership, such as complacency, lack of new ideas, and a closed culture, are avoided.

Engagement of doctors

The Californian groups recognise that senior leadership needs to be supported by active involvement of other doctors, across the ranks of the group. Attendance and participation in committees and other leadership roles is encouraged as a core part of a doctor's role. It is seen as a way of ensuring clinical engagement with peer review and service development, and at the same time as a means of communicating with front-line clinicians and building future leaders. These committee roles are nearly always compensated, rather than being at the expense of clinical work. Consortia will therefore need to engage GPs (and other clinical staff) with a range of managerial, analytical and service development tasks, and be prepared to reimburse clinicians for time spent away from clinics. It is vital to GPs' engagement in consortium work that there does not appear to be an unreasonable trade-off between management and clinical work. Such reimbursement needs to be seen as integral to the consortium and not as a diversion of funds away from patient care.

Management of risk

Learning how to manage the financial risk of capitated budgets represents one of the biggest challenges for GP commissioners. It is difficult to understand fully the

scale of this while the detail of what will be in the commissioning budget is still to be worked out. The most recent plans suggest that some low-volume, specialist services, for example high-security psychiatric care, will be centrally commissioned but that there should be some flexibility over time as GP consortia develop commissioning expertise (Department of Health, 2010e).

The experience of our American case study sites suggests that the ability to handle risk is not only dependent on size, but also on the landscape of other providers in the area relative to the negotiating power of an individual medical group. For example, it will depend on whether the group has meaningful leverage over the price of inpatient care at local hospitals. In the case of the NHS, it may be important to build in some local flexibility about which commissioning responsibilities are undertaken by a consortium, and at what point in time. In the US, groups took several years to learn which risks they could handle successfully, and were able to hand back some risks when faced with the impossible challenges of matching financial and service pressures. The current proposals for reform in the NHS make implementing such a flexible approach to risk appear problematic. In the US, physician groups could hand back the responsibility for purchasing a service to the insurers. With the abolition of PCTs, it is not clear what body will exist above the level of GP consortia to handle any residual local commissioning, apart from the NHS Commissioning Board, whose scope will inevitably be large and perhaps insensitive to local needs.

There is an obvious logic to growing the scope of service responsibility within commissioning based on capitated budgets. Covering more patients brings greater negotiating leverage with hospitals and specialists. Larger numbers also reduce the insurance risk of unforeseen expensive medical events – the larger the size of the risk pool, the more easily a budget-holding medical group can absorb financial shocks. Experience from the US medical groups suggests that there are, however, unwanted side effects of larger size. In particular, there is a risk of remoteness from front-line doctors which can make leadership of the group more difficult, particularly if challenging decisions need to be taken. The larger groups in California had attempted to resolve this by creating regional structures within their group, with autonomy delegated to these regions or localities, for example for contracting with specialists. This did, however, reinforce the need for very clear, standardised clinical and business processes and systems across the group as a whole.

Strategies to improve quality and efficiency

The groups in this study employed numerous strategies to deliver their business aims, and they were clear that the main objective was to achieve high-quality care that was lower or equal in cost to the capitated budget. A large part of their early profitability had come from being able to reduce unnecessary admissions to hospital, bringing their admission rates for people over 65 down to levels considerably below the average for the state or nation.

Although the NHS is unlikely to experience the levels of over-utilisation of the US, there are obvious opportunities to deliver more efficient care. On the provider side, the productivity opportunities from more efficient use of acute hospital beds are substantial. If all acute trusts could improve their performance (on a range of measures including length of stay and pre-operative bed days) to the standard of the top 25 per cent, the productive opportunity is equivalent to £4.5 billion (Appleby and others, 2010). However, it is not clear under the current payment mechanisms for hospital care, whether these opportunities can or will be translated into savings for GP consortia rather then acute trusts.

More promising for GP consortia are the potential savings from reducing emergency admissions, which have been rising across the NHS and are not fully explained by demographic or morbidity trends (Blunt and others, 2010). There are gains to be made from reducing variations in admissions for chronic conditions, for example large variations in emergency admissions for chronic obstructive pulmonary disease (COPD) and asthma in both the old and young (Department of Health, 2010c). There are also unexplained variations in the rates of elective procedures such as cataract surgery or knee replacements, which suggest there is over-utilisation in some areas that could be reduced by adhering to referral guidelines. Conversely, in other areas, particularly deprived areas, referral rates for elective surgery might have to increase to meet need (Department of Health, 2010c). Whether these savings can be realised by the new GP commissioners depends on whether GP consortia can invest in the sort of services needed to avoid or reduce admissions; something that appears to have largely eluded their predecessor, PCTs (Blunt and others, 2010; Smith and others, 2010).

The US groups had considerable scope to 'make or buy' a range of services, for example urgent care centres or skilled nursing facilities, that in turn ensured lower rates of hospital admission and shorter lengths of stay. GP consortia will need similar freedom to invest in alternatives to hospitals, and these might include such facilities. Consortia may, however, need contractual flexibility to employ new kinds of staff, for example versions of the 'hospitalists' used by the Californian groups as a way of carefully managing the care of medical group patients when in hospital, or specialist nursing case managers to coordinate the care of people with complex, long-term health and social care conditions.

It will be important for GP consortia to be clear which of their service investment decisions need to be subject to procurement under full competition rules and the 'any willing provider' policy, whereby any provider who is licensed by the economic regulator will be able to compete for NHS patients (Department of Health, 2010a). The Department of Health has published procurement guidelines that set out the processes for commissioners wishing to let or terminate contracts: under conditions of full and open competition these are demanding of both time and resources (Department of Health, 2010d). Again, a balance will need to be struck between the need for transparency required by a competitive market and the need to avoid overly bureaucratic processes that could hinder innovation amongst GP consortia.

Integration of primary and secondary care

Taking action to reduce inappropriate hospital admissions will depend on close relationships between hospital specialists and primary care doctors, for it is arguably due to the relative separation of these two medical communities within the NHS that commissioners and providers have struggled to make progress in this area. One of the biggest tasks for GP consortia will be to bridge the specialist–primary care divide in the way American groups have done.

This represents a major challenge because of the structural differences between the US and the NHS. The medical groups in our study were able to either employ specialists directly, and therefore able to ensure collaborative working with primary care doctors, or contract with them, using the leverage of guaranteed patient referrals and flexibility in payment mechanisms to incentivise collaboration. The unity of specialists and hospital trusts in the case of the NHS makes it unlikely that there will be any immediate widespread adoption of the US model of specialist or multi-specialty groups of doctors that function independently of a hospital and contract with medical groups or insurers. It is possible that, over time, consortia will seek to develop such provider networks that can integrate, virtually or in reality, and take on a budget and responsibility for the care of a whole patient population with a specific condition.

In the meantime, GP consortia will need to work with specialists, either in integrated networks or employing them to deliver service, while negotiating contracts with hospitals for direct GP access to the advice and expertise of other specialists. For this to happen, the potentially adversarial relationship between primary and secondary care fostered by the national payment system and the mission of foundation trusts (in particular) to generate surpluses will need to be overcome. Collaboration between primary and secondary is possible but financial incentives need substantial redesign to support it (Ham and Smith, 2010).

Performance management of doctors in the group

All of the US groups in this study aimed to performance manage their doctors, both specialists and primary care. For primary care physicians especially, where quality indicators were more prevalent, peer review of performance data on productivity and quality was relied upon as a valuable route to improved performance. This reliance on the natural competitiveness of doctors was sharpened by the link with income. A consistently strong theme from the US medical groups was the use of bonuses to motivate and reward doctors for delivering good-quality care. In the context of GP commissioning, the question of how incentives should be used has not yet been resolved. The possibility of redirecting savings from efficient care to GP private incomes is controversial and could be unpalatable to the public. It is however likely that there will need to be some sort of incentive for GPs to perform well as commissioners. At a minimum, savings will need to be retained by consortia to plough back into improving local services.

There may also be a lesson from the US medical group leaders' extreme caution about incentivising lower utilisation of specialist care. If GP consortia attempt to link financial incentives directly to rates of referrals into secondary care or specialist advice at an individual GP

level, this could backfire, with patients, GPs and the media making common cause against GP leaders.

It is notable that the US medical group leaders were clear that the financial interests should never interfere with decisions about what was best for individual patients. In containing utilisation, they attempted to appeal primarily to doctors' clinical professionalism, emphasising the overlap between high-quality service provision and the efficiency of avoiding unnecessary admissions, readmissions or excessive diagnostic tests. GP consortia leaders will also have to make a convincing clinical case to their rank-and-file GPs for efficiency, based on evidence about service quality. Without this, GPs are unlikely to cooperate with a consortium's wider goal of achieving cost-effective care.

Performance-managing the quality of secondary care raises some further challenges. In contracting with specialists, the US groups needed good data on quality, price and volume of cases. The US groups felt they did not always have adequate data about the clinical quality of specialist care. The NHS may be in a stronger position with respect to its national datasets, for example with the gradual expansion of Patient Reported Outcome Measures (PROMs). It will be essential for GP consortia to become adept at analysing data on outcomes. They will also need to take into account the verdict of national quality regulators and be vigilant about the anecdotal evidence from patients and local communities, which often act as sentinel warnings of serious quality failings.

The US groups use what data they have on quality to negotiate on price. What underpins these negotiations is the guarantee of a certain volume of patients, which could be withdrawn if necessary. In the case of the NHS, it is not clear that GP consortia will be able to exercise any leverage about volume. 'Preferred' hospital providers would be in direct conflict with the policy of patient choice, that theoretically offers patients a more or less free choice of hospital anywhere in England. There is no apparent appetite at a national policy level to row back from the current broad offer of patient choice of any hospital at the point of referral, but it does appear to constrain the ability of a GP consortium in respect of contracting for quality services on behalf of its local patients.

Management and IT

The experience of the US groups underlines the importance of investment in high-calibre managers, analysts and IT systems. GP consortia will need to be willing to follow the same path, although it is not clear whether the 'management allowance' currently being calculated for GP consortia will be adequate to support the full management functions of consortia. In relation to IT and data, the NHS is potentially in a stronger position than the US, which has been traditionally weak on the use of electronic medical records, particularly in primary care. The introduction of a national system of prices (Payment by Results) and a strong focus on solid financial management, following the deficits of the mid-2000s, has meant that many PCTs have more timely information about the cost and volume of many services being used locally. Some PCTs are now able to link datasets across primary, secondary and social care. These datasets and the skills to use them need to be transferred to GP consortia. It will also be important to fill gaps about cost and quality of many services not covered by national prices, such as chemotherapy and radiotherapy services (National Audit Office, 2010).

Conclusion

The experience of these medical groups demonstrates the challenges and the opportunities associated with implementing GP commissioning in the English NHS. These successful physician-led medical groups in the US have shown that holding risk-bearing budgets can motivate doctors to deliver care that reduces avoidable and repeat admissions to hospital. For equivalent groups to be established in the NHS, there needs to be substantial investment in infrastructure, including IT and management support, and sustained attention to the development of clinical leadership, both of current and future generations.

When developing GP commissioning in a highly constrained financial environment, such investment will be hard to make and justify, and the temptation will be to focus any investment on clinical activity rather than activities or roles that are not obviously connected to 'front-line' services. The message from the US medical groups is however unequivocal: without a relentless focus on securing and sustaining high quality leadership and management of local services and clinicians, many of these GP consortia could struggle. This would not only be a failure for the clinicians committing time and energy to GP commissioning but, more importantly, a lost opportunity for both clinically-led service improvement and a reduction in avoidable hospital admissions.

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