

RECONFIGURING HOSPITAL SERVICES

Lessons from South East London

Keith Palmer

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Foreword

The NHS is entering a period of unprecedented financial challenges that will result in major changes to the provision of health services. While all areas of health care will be affected, acute hospitals face particular challenges because of the high proportion of the NHS budget spent in hospitals. Add in the need to reconfigure specialist services in many parts of the country to deliver improvements in outcomes and the requirement that all NHS trusts should become foundation trusts by 2014, and a period of fundamental service and organisational change is in prospect.

Keith Palmer's analysis of the reconfiguration of acute hospital services in south-east London offers a timely and sobering contribution to the emerging debate on how service and organisational change should be taken forward across the NHS in England. His painstaking account of the trials and tribulations of bringing together four acute hospital trusts with a history of financial problems, the challenge of funding large and long-term private finance initiative (PFI) commitments and difficulties in sustaining high-quality specialist care in hospitals in close proximity to each other offers important learning for the future. Three major implications for policy-makers stand out.

First, Palmer argues that market forces are unlikely to deliver desirable service reconfiguration, and only 'strong commissioning' stands a chance of bringing about the changes needed to improve quality and drive down costs. As he shows, in the case of south-east London, primary care trusts (PCTs) were either unwilling or unable to intervene to tackle the challenges facing acute hospitals, and only when the strategic health authority (SHA) became involved was some progress made. General practice commissioners face formidable obstacles in being more effective than PCTs in leading complex service reconfigurations, raising questions as to where responsibility for taking forward this work will rest when SHAs are abolished.

Second, Palmer questions the strategy of merging acute hospitals providing broadly similar services. His preferred alternative is to support acquisitions of financially challenged NHS trusts by high-performing foundation trusts on the grounds that this will facilitate improvements in quality and outcomes through the accelerated adoption of best practice models of care. Although provider consolidation along these lines might reduce competition in the health care market, the consequences have to be weighed against the risk that quality will deteriorate if Monitor in its role as the economic regulator rules against such acquisitions. The implication is that organisational changes need to be based on a thorough assessment of how to bring about improvements in quality, particularly through organisations that perform well lending support to those that are challenged.

Third, Palmer contends that the government will need to find a way of dealing with legacy debt and the costs of PFI commitments to support the acquisition of financially challenged trusts. Neither high-performing foundation trusts nor private sector providers are likely to be willing to take on challenged trusts without such support, and competition law requires that all parties should be treated equally if a market in acquisitions opens up. At a time of public spending constraint it will not be easy to identify additional resources

but failure to do so may simply increase the financial and service challenges facing the NHS and store up even greater problems in future.

The lessons from this paper need to be acted on in a context in which ministers have emphasised that service reconfigurations should be based on support from general practice commissioners and public and patient involvement. They have also argued that service changes should be consistent with clinical evidence and help to facilitate patient choice. The government's decision to bring a halt to the work being undertaken by Healthcare for London to concentrate some specialist services to improve outcomes underlines the challenges in acting on the evidence presented in this paper.

In reality, the requirement to find up to £20 billion of efficiency savings by 2015 and to establish all NHS trusts as foundation trusts by 2014 will necessitate a stronger approach to commissioning than currently envisaged to ensure that quality is improved at the same time as costs are brought under control. The expertise of general practice commissioners needs to be married with the ability to lead complex service reconfigurations across large populations if the lessons from south-east London are to have lasting impact.

Chris Ham

Chief Executive
The King's Fund

Executive summary

The paper considers whether reconfiguration of services across hospitals sites is an appropriate response to the need to drive up quality and drive down costs in the NHS in England. It uses detailed information on the reconfiguration of hospital services in the South East London sector to explore the quality and cost implications of reconfiguration. It then draws six key lessons that can inform the wider debate and aid decision-making about reconfiguration of NHS hospital services elsewhere in England.

First, reconfiguration of services across hospitals sites is likely to be the only way that some trusts can achieve financial balance while avoiding an unacceptable deterioration in the quality of care, given the cold financial climate, which is here for at least the next five years. The necessary rapid growth of productivity and slower growth of hospital activity will result in excess capacity and stranded costs. Without reconfiguration, some financially challenged trusts will suffer a downward spiral of increasing deficits, declining quality of care and a further widening of the existing quality gap between the best and worst performers.

Second, the large deficits and high legacy debts of financially challenged trusts with whole-hospital private finance initiative (PFI) schemes are caused in part by under-funding of fixed capital charges in Payment by Results (PbR) tariffs. Making funding of capital charges more cost reflective would reduce the deficits of those trusts at no net cost to the NHS. It would make funding of patient care more equitable; reduce the pressures for reconfiguration across hospitals sites; reduce the current large financial leakage from the NHS; and enable more NHS trusts to become foundation trusts sooner.

Third, reconfiguration should focus on achieving the best patient outcomes and patient experience for all NHS patients, and on narrowing the quality gap between the best and worst performers. This is best achieved by designing reconfiguration to drive accelerated adoption of best practice models of care in as many services as possible. This in turn is best achieved by designing reconfiguration along patient pathways involving specialist/tertiary hospitals, district general hospitals (DGHs) and primary care providers. It requires a significant change in the way emergency and network services are currently provided.

Fourth, competition and choice in contestable services may inadvertently cause deterioration in the quality of essential services provided by financially challenged trusts. Market forces alone will rarely drive trusts into voluntary agreement to reconfigure services in ways that will improve the quality of patient care as well as drive down costs. In many cases the most likely outcome will be continued deterioration in both the quality of care and the financial position. The NHS will have no alternative but to continue to fund their deficits or allow them to fail.

Fifth, strong commissioning of emergency and network services across a large catchment area is necessary to bring about major improvements in patient outcomes for all patients. Individual primary care trusts (PCTs) in London are too small to drive major service change even when they join forces to form larger joint commissioning groups. The transfer of commissioning responsibility to even smaller GP consortia will

further weaken commissioning levers to bring about service improvement across trust boundaries in major network services, such as cancer, cardiac, stroke and renal services. Recent successes by the PCTs (with support from their strategic health authorities (SHAs)) in reconfiguring stroke and trauma services highlight the potential of strong commissioning to bring about markedly improved patient outcomes in other network services. If this potential is to be exploited, the new NHS Commissioning Board will need to be given the statutory powers and the capability to perform the role effectively.

Sixth, the best available means of bringing about reconfiguration along patient pathways will often be to support acquisitions of financially challenged trusts by high-performing foundation trusts. Acquisitions of failing trusts are the logical outcome of competition and choice in health care services. Acquisitions by foundation trusts which have existing networks of care and high performance ratings will often be the best way to drive accelerated adoption of best practice for the benefit of all patients served by the enlarged trust. They are also the most practicable means by which the NHS Commissioning Board can use strong commissioning powers to bring about desirable service reconfiguration locally. Concerns about adverse impacts on quality of contestable services arising from reduced competition if acquisitions do go ahead should be weighed against the deterioration in quality and loss of opportunities to improve quality if they do not. In any event, acquisitions of financially challenged trusts (by foundation trusts or anyone else) will remain a purely theoretical option unless the Department of Health/NHS provides funding to defray the large one-off restructuring costs and agrees to refinance legacy debt.

1 Introduction

Despite the rapid growth in NHS funding throughout most of the past decade, about 70 hospital trusts in England have failed to achieve the financial performance and quality of care required for them to become foundation trusts. A significant number of them have large recurrent deficits and high 'legacy' debt (reflecting the cumulative cost of deficits incurred in previous years). There is evidence of correlation between trusts with poor financial performance and those that provide poor-quality care.¹ In some services dealing with life-threatening conditions, such as stroke and heart attack, patients are much more likely to die if taken to one hospital than to another one in close proximity.²

Strategic health authorities (SHAs) and primary care trusts (PCTs) have often responded to problems of financial performance and poor-quality care by promoting schemes to reconfigure services across hospital sites. In particular, NHS London has orchestrated reconfigurations principally involving mergers of financially challenged district general hospitals (DGHs), combined with a policy of shifting some services out of hospital and closer to people's homes. The case for reconfiguration has generally been presented as a means of addressing shortcomings in both quality of care and financial performance.

As the NHS confronts a cold financial climate – negligible real growth in health spending and the requirement to generate efficiency savings of up to £20 billion by the end of 2013/14 – it is clear that financial pressures will increase considerably on all hospital trusts.³ Some trusts that are currently achieving financial balance are likely to slide into deficit, while others with large deficits are unlikely to see them reduce significantly, despite aggressive cost-reduction measures. There is a serious risk that actions taken to respond to the cold financial climate will result in deterioration in the quality of patient care at some hospital trusts, and a further widening of the gap in quality between the best and worst performers.

A key issue facing the coalition government is whether reconfiguration of hospital services is an appropriate response to concerns about quality of care and financial pressures. Following the 2010 election, the new government announced a moratorium on, and review of, all hospital reconfiguration proposals.⁴ It is, therefore, timely to consider whether the evidence shows that reconfiguration of hospital services can play an important role in driving up quality and driving down costs of hospital care in the NHS in England.

The South East London health economy⁵ has been immersed in a major and protracted reconfiguration exercise (called A Picture of Health) for the past six years.

¹ The inquiry into Maidstone and Tunbridge Wells NHS Trust (Commission for Healthcare Audit and Inspection 2007) and Mid Staffordshire NHS Foundation Trust (Francis 2010) both noted instances where financial deficits have contributed to poor quality of care. More generally, the National Audit Office report (2008) on financial management in the NHS, and Dr Foster Intelligence's 'Hospital Guide' (2010) show correlation between quality and financial weakness.

² The evidence about variation in patient outcomes across adjacent trusts is set out in a later section, see Reconfiguration of services along patient pathways.

³ Department of Health/NHS Finance, Performance and Operations (2010).

⁴ Lansley (2010).

⁵ We refer here to the sector, rather than the geographical area of south-east London.

Reconfiguration proposals were approved by the Joint Committee of PCTs (JCPCT) in 2008,⁶ after three years of work following expressions of support for the scheme from the National Clinical Advisory Team and an extensive public consultation. Vocal local opposition to change resulted in significant delays to implementation, as proposals have been subject to repeated opposition and review.

Following referral by the Joint Overview and Scrutiny Committee in May 2009, the then Secretary of State endorsed the Independent Reconfiguration Panel's recommendations to support the PCTs' decision. Despite formal approval, the changes were then subject to further scrutiny after the moratorium on service change imposed in May 2010 by the new coalition government. The SHA, NHS London, subsequently reviewed the plans to ensure they meet the four tests set out for reconfiguration processes by the Secretary of State for Health (Lansley 2010).

It was not until December 2010 that the SHA confirmed that A Picture of Health met the four tests for reconfiguration, with explicit but not universal support from local GP commissioners. This decision came at the same time as A&E and maternity services at Queen Mary's, Sidcup, were forced to close on a 'temporary' basis on the grounds of safety. Now that approval for the proposals has been given, these changes will become permanent and the existing site will be re-developed as planned.

A Picture for Health's exercise has generated a wealth of information about the expected benefits of reconfiguration in terms of improving quality of care and financial performance; and about the effectiveness of the policy levers available to bring about reconfiguration in ways that will improve quality and reduce costs.

This paper analyses the reconfiguration proposals in South East London and draws out lessons to inform the wider debate about the pros and cons of hospital reconfiguration elsewhere in England. It answers the following questions:

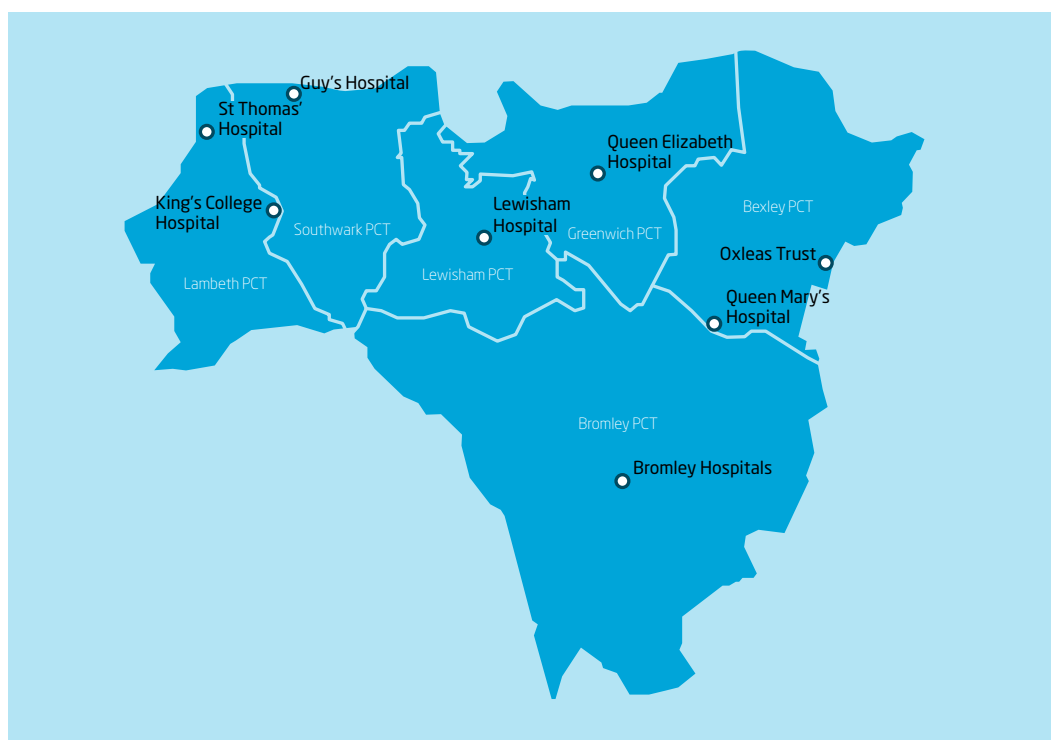
- Why reconfigure services across hospital sites?
- What types of reconfiguration are most likely to drive up quality and drive down costs?
- What policy levers are available to bring about desirable service reconfiguration?
- What are the wider lessons for the NHS in England?

The South East London health economy

The South East London health economy is typical of the whole of NHS London. There are six small PCTs commissioning services for a population of about 1.8 million people. There are two major teaching and research hospitals (Guy's and St Thomas', and King's) each providing DGH-type services (principally for people in Lambeth and Southwark), network services for the whole of South East London and specialist services for the whole of south-east England and beyond. There are four DGHs: Queen Elizabeth, Woolwich; Bromley Hospitals NHS Trust; University Hospital, Lewisham; and Queen Mary's, Sidcup (*see* Figure 1 opposite). Each DGH provides a full range of admitting and outpatient services for elective, non-elective and emergency care, principally for the population of their respective boroughs.

⁶ The A Picture of Health exercise was led by the Joint Committee of Primary Care Trusts (JCPCT) for Bexley, Bromley, Greenwich and Lewisham from 2007. Earlier, it had been led by the Service Redesign and Sustainability Project (SRSP) board, consisting of the Chief Executive Officers of all 14 PCTs, hospital trusts and mental health trusts in the sector. The author of this paper was a member of the SRSP board from 2005 to 2007.

Figure 1 Map of South East London PCTs and hospitals



What were the drivers for reconfiguration in South East London?

The reconfiguration proposals were driven by concerns about chronic financial problems and poor quality of care.

Financial problems

All four DGHs in South East London were in chronic financial deficit, despite rapid growth in both NHS funding and hospital activity. In 2005/6 the aggregate underlying deficit of the four DGHs was more than £50 million and legacy debt exceeded £160 million (*see* Table 1 overleaf). Analysis undertaken at the time indicated that they were expected to remain in deficit, and legacy debt was expected to increase further to exceed £300 million by the end of the decade, despite aggressive cost-cutting measures.⁷ Consequently all four DGHs had been formally designated by NHS London as financially challenged trusts.

Analysis of the financial and operational performance of the six acute trusts in south-east London in the mid-2000s revealed:

- the two trusts with whole-hospital private finance initiative (PFI) schemes, Queen Elizabeth, Woolwich and Bromley Hospitals NHS Trust, had large income/expenditure and cash flow deficits and the highest legacy debt
- average productivity of the four DGHs was significantly below the top quartile performance of hospital trusts in England
- there was aggregate excess bed capacity in South East London of more than 400 acute beds – the equivalent of approximately a whole DGH's bed capacity.

⁷ Source: Service Redesign and Sustainability project board (2007).

Table 1 Financial position of hospital trusts in South East London from 2003/4 to 2006/7 in £ million (% of total income)

	Guy's and St Thomas'	King's	University Hospital, Lewisham	Queen Elizabeth, Woolwich	Bromley Hospitals NHS Trust	Queen Mary's, Sidcup	Total	
							4 DGHs	6 trusts
Normalised income/expenditure* £m (% income)								
2004/5	+2.2 (-)	-2.7 (-0.8)	-7.5 (-5.1)	-9.7 (-7.5)	-22.0 (-13.4)	-2.7 (-2.9)	-41.9 (-7.8)	-39.7 (-2.5)
2005/6	+0.3 (-)	0.1 (-)	-1.3 (-0.9)	-11.7 (-8.8)	-24.9 (-16.2)	-13.6 (-15.2)	-51.5 (-9.8)	-51.1 (-3.2)
2006/7	+23.1 (+3.2)	4.3 (+1.0)	1.0 (+0.7)	-6.6 (-5.0)	-6.3 (-4.4)	-3.6 (-4.0)	-15.5 (-3.0)	+11.9
Cash flow before financing (after dividend on public dividend capital (PDC)) £m								
2004/5			-8.0	2.4	4.2	-17.1	-18.5	
2005/6			-9.9	-26.5	-25.8	-4.4	-66.6	
2006/7			13.0	-13.4	-20.0	7.0	-13.4	
Debt outstanding to SHA £m								
End 2005/6	—	—	26.0	52.0	67.0	22.0	167.0	
End 2006/7	—	—	13.0	65.4	87.0	15.0	180.4	

* Normalised income/expenditure (I/E) adjusts the reported accounts for non-recurrent items.

Source: Service Redesign and Sustainability project board (2007).

Quality of patient care

When reconfiguration work began in 2005, there were significant concerns about the quality of patient care in the four DGHs. There were significant variations in quality, as measured by indicators such as the Healthcare Commission ratings (where the foundation trusts scored 'excellent' or 'good' and some of the DGHs were rated 'fair'). Despite a dearth of service-level quality indicators, there were concerns among many clinicians about marked variations in quality of care in a range of services, including emergency medicine and surgery, maternity and neonatal care, and stroke. The greatest concern among clinicians working in the DGHs was that the intense financial pressures would force their trusts to take actions that would result in a deterioration in the quality of care and a further widening of the gap in quality between the foundation trusts and DGHs.

Policy environment and planning assumptions

The period since 2004 has seen major changes in the health policy environment, with the introduction of a raft of new policies, including: mandatory targets for maximum waiting times, infection control and financial balance; Payment by Results (PbR), with a fixed national tariff for many hospital procedures; competition and patient choice; shift of care closer to home; the new GP and medical consultant contracts, Agenda for Change and the European Working Time Directive (EWTD); and the creation of foundation trusts. These new policies had a major impact on all hospital trusts; they also had a highly *differential* impact, with some trusts benefiting at the expense of others.⁸

The ratcheting-up of the efficiency factor in tariffs from 2.5 per cent in 2006/7 to 4 per cent in 2010/11, and the stated intention to keep it at 4 per cent for at least three years, has increased the pressure on hospital trusts to achieve large reductions in average costs.

The national policy to shift care closer to home was interpreted by PCTs in South East London as requiring hospital trusts to plan for a sharp reduction in the growth of hospital

⁸ The shift from block funding to payment for volume of activity provided, combined with very different market forces factor (MFF) values across the six hospital trusts in South East London, benefited the two foundation trusts and disadvantaged the DGHs. See Service Redesign and Sustainability project board (2007).

admissions (from 4 per cent per year in the recent past to less than 1 per cent per year in future),⁹ and the transfer of a significant amount of minor A&E and outpatient care into non-hospital settings. If the PCTs' commissioning intentions were to be delivered, there could be no more 'trading out of deficits'.¹⁰

The combination of much slower growth in hospital admissions, transfer of activity out of hospital and the high efficiency factor in tariffs meant that real (inflation-adjusted) hospital income would fall over the medium term. Cumulative cost reductions of 15–20 per cent over five years would be required of those trusts starting from a position of financial balance. In South East London, even greater cost reductions would be required to restore the four DGHs to financial balance.¹¹

It was clear that achieving such large cost reductions would require unprecedented improvements in productivity by all hospital trusts in the sector. The four DGHs were required to plan on the basis that they would achieve 2005 national top quartile productivity in all services by the end of the decade. As we explain later, such rapid productivity improvement, if achieved, was bound to have major implications for reconfiguration of hospital services in South East London.

What is desirable service reconfiguration?

The term 'desirable service reconfiguration' is used here to refer to reconfiguration that results in improved quality of care as well as lower costs. Financial balance is a must, but reconfiguration cannot be regarded as desirable if it restores financial balance at the expense of deterioration in the quality of patient care. Moreover, quality improvement is not an unambiguous concept. It can refer to improvements in patient safety and clinical outcomes and/or patient experience and/or access to services (how long patients have to wait and how far they have to travel). Hospital reconfiguration may improve some aspects of quality but worsen others. For example, in South East London, certain reconfiguration options were predicted to improve clinical outcomes and patient safety in major services, but result in (slightly) increased travel times and (marginally) reduced patient choice. The subjective weights attributed to these different effects determine whether the overall impact is judged to be positive or negative. Clinicians may attribute greatest weight to improvements in patient outcomes, whereas the public – and possibly politicians – may attribute greater weight to travel times or the ability to choose where to receive treatment. In South East London these trade-offs were made explicit, and incorporated into the consultation and decision-making processes about the A Picture of Health reconfiguration proposals.

⁹ Source: Bromley, Greenwich, Lambeth, Lewisham and Southwark PCTs and Bexley Care Trust (2006).

¹⁰ 'Trading out of deficits' refers to the common practice whereby hospital trusts provide more activity than planned by PCTs and use the extra income to compensate for underperformance in reducing costs. This practice has been common in recent years and partly explains why, despite the efficiency factor in tariffs, hospital trust productivity has gone down (Audit Commission 2010). With no real growth in NHS funding for the foreseeable future, trading out of deficits will no longer be possible if commissioners are to avoid overspending their budgets.

¹¹ See Service Redesign and Sustainability project board (2007).

2 Why reconfigure services across hospital sites?

This section explains why it proved impossible to restore financial balance at each of the four district general hospitals (DGHs) in South East London and maintain acceptable patient safety and quality of care standards; and, therefore, why reconfiguration across hospital sites was judged to be essential.

Understanding the causes of hospital deficits

It is important to understand why some hospital trusts in England have large financial deficits and high legacy debt. The implicit assumption made by the Department of Health has been that they are the result of poor management and inefficiency. Therefore, it followed that with better management and improved efficiency, deficits could generally be eliminated without the need for reconfiguration or organisational change, and without causing deterioration in the quality of care.

In South East London, this premise is false. Two of the DGHs (Queen Elizabeth, Woolwich, and Bromley Hospitals NHS Trust) are whole-hospital private finance initiative (PFI) sites. The annual payments to the PFI service providers are fixed in real terms (and rise in line with inflation) throughout the duration of the contracts. There is almost no scope to change the service specification or to reduce the annual payments for more than 20 years.¹² These annual payments exceed, by a large amount, the Market Forces Factor (MFF)-adjusted funding provided in tariffs to pay for them.¹³

Even if these trusts were *more* efficient than the average trust, because of this underfunding they would still incur significant recurrent deficits, and legacy debt would continue to increase. The corollary is that, were they to cut controllable costs to the level necessary to restore financial balance, then their spending on patient care (to fund staff costs and drugs) would be significantly lower than that of other hospital trusts. Patient care would suffer as a result.

In South East London, the two trusts with whole-hospital PFI schemes have by far the highest capital charges as a percentage of MFF-adjusted income; they are also the trusts with the largest deficits and the highest legacy debt, and provide relatively poorer quality of care. Conversely, those hospital trusts with largely depreciated capital stock and high MFF values have financial surpluses, and the quality of care they offer is much better. There is a striking correlation between each trust's capital charges as a percentage of MFF-adjusted income and the size of its surplus or deficit; and between the size of its surplus or deficit and the observed quality of care (*see* Table 2 opposite).¹⁴

¹² See A Picture of Health Project Team (2007).

¹³ See Palmer (2008); Palmer *et al* (2007).

¹⁴ In South East London, the aggregate surplus of the two foundation trusts was roughly equal to the aggregate deficit of the four DGHs in 2006/7, so rebalancing funding for capital charges would have resulted in financial balance across the sector.

Table 2 Relationship between fixed capital costs and underlying cash flow deficits of hospital trusts in South East London (2006/7)

	Trust 1	Trust 2	Trust 3 (pre-PFI)	Trust 3 (post-PFI)	Queen Elizabeth, Woolwich	Bromley Hospitals NHS Trust	Trust 4
Availability cost* (% of total income)	4.2	4.8	5.3	8.2	10.4	11.3	5.8
MFF value (2006/7)	1.32	1.29	1.23	1.23	1.20	1.20	1.20
Cumulative cash deficit	0.0	0.0	-13.0	—	-65.0	-87.0	-15.0

* Availability cost is the capital charge payable by the trust for use of the site and fixed assets. For PFI hospitals, this is the availability payment in the unitary charge.

Trust 3 had not commissioned its PFI building in 2006/7 but the post-PFI value is based on the expected cost once commissioned (expected in the following year).

Note that the largest cash deficits are at the two trusts with the highest availability costs as a % of income and the lowest MFF values, whereas the trusts with cash flow surplus are those with the lowest availability costs and the highest MFF values.

Source: Palmer K (2008).

Achieving large cost reductions without compromising the quality of care

In South East London, all four DGHs were required to plan on the basis that they would restore recurrent balance in the short term and repay legacy debt over the medium term. As noted above, given the planning assumptions set by the primary care trusts (PCTs) and the magnitude of their deficits in 2005, the four DGHs would have to reduce total costs by up to 30 per cent just to restore financial balance. Since the two whole-hospital PFI sites had high fixed capital costs, they would have to reduce their controllable costs by considerably more than 30 per cent. If legacy debt were to be repaid over the medium term, cost reductions would need to be even greater again.¹⁵

The traditional NHS approach to cutting costs involves identifying a number of incremental cost improvement programmes typically including ‘skill mix reviews’ (meaning replacing more expensive staff with less expensive staff), culling of non-clinical staff (especially in corporate functions), sharper procurement of consumables and cutting back on the use of bank and agency staff.

From 2005 to 2007, three of the four DGHs in South East London successfully implemented aggressive cost improvement programmes. They achieved substantial reductions in non-medical staff numbers, and there was a consequential marked improvement in non-medical staff productivity. In some trusts, cost reductions exceeded 10 per cent of total income in a single year.¹⁶ By the end of 2007, clinicians and managers at those trusts considered that they were close to the limits of what could be achieved using this approach without inducing a significant deterioration in the quality of patient care. Yet they were nowhere close to achieving the required scale of cost savings.

The alternative approach to achieving large cost reductions involves fundamentally redesigning the way that patients flow into, through and out of hospital – patient pathways. The aim is to bring about major improvements in productivity while also improving the quality of patient care. Measures taken to improve hospital productivity include increasing day case rates, reducing lengths of stay, reducing admission and re-admission rates, reducing outpatient ‘did not attends’ (DNAs), and improving

¹⁵ See Service Redesign and Sustainability project board (2007).

¹⁶ *Ibid.*

operating theatre productivity. Less time in hospital, fewer cancelled operations, better planned patient care and fewer unplanned re-admissions should all be good for patients. But will they save much money?

If the rate of productivity improvement is greater than the growth of hospital activity, large cash-releasing savings can be achieved only if annual staff costs are reduced significantly (see Appendix A, p 33). Annual staff costs can be reduced significantly only if staff numbers are similarly reduced – unless there are large sustained cuts in staff pay. Moreover, staff numbers can be reduced significantly without impairing the quality of care only if improvements in productivity permit a *reduction in hospital capacity*. This means either fewer medical staff for a given number of patients, fewer open acute wards (closing acute beds will reduce costs only if ‘excess’ beds can be aggregated to enable the closure of whole wards) and/or fewer outpatient clinics. Fewer open acute wards require fewer three-shift nursing teams and non-clinical support staff. Fewer outpatient clinics require fewer nurses and fewer non-clinical support staff (eg, receptionists, medical secretaries, etc). Higher productivity enables high-quality services to be provided, with less capacity. But it is only when the capacity is closed that large cash-releasing savings will be realised.

In South East London, the required rate of productivity improvement did considerably exceed the planned growth of hospital activity. Therefore, there was projected to be an *excess of capacity* (ie, staff numbers, acute beds, outpatient clinics).¹⁷ This excess capacity needed to be eliminated if the sector were to achieve the large cash-releasing savings required to achieve financial balance.

The problem of fixed costs

But there was a problem – the problem of fixed costs. There are two types of fixed cost to consider. The first is the cost associated with fixed assets such as land, buildings and equipment. These costs remain more or less the same regardless of the productivity of the staff using the facilities. If wards are closed, staff headcount and staff costs may be reduced, but the cost of the land, buildings and equipment, and the cost of maintaining them, remains the same, at least in the short term. So rapid productivity improvement tends to create ‘excess’ estate – in the form of unutilised voids, where previously there were open acute wards or outpatient clinics. Along with the excess estate go ‘stranded’ costs – ie, the costs that must continue to be incurred even though the excess estate is no longer required.

In the medium term, it may be possible to eliminate some of these fixed costs if parts of the excess estate can be ringfenced and rented or sold to third parties. However, this is practically impossible at whole-hospital PFI sites. These are the trusts that have the highest fixed costs and therefore the highest stranded costs resulting from rapid productivity improvement. They are also the trusts with the least scope to eliminate stranded costs by renting or selling excess estate.¹⁸

This was the situation faced by the two whole-hospital PFI sites in South East London: Queen Elizabeth, Woolwich, and Bromley Hospitals NHS Trust. Rapid productivity improvement and the planned slow growth in demand for their services were bound to result in high stranded costs, and therefore continuing financial deficits despite – in fact, caused by – rapid productivity improvement.

The second type of fixed cost is the cost associated with the requirement to maintain minimum medical staffing levels in essential services such as emergency medicine

¹⁷ *Ibid.*

¹⁸ See A Picture of Health Project Team (2007).

and surgery, obstetrics and paediatrics. For any given level of expected peak demand, there are minimum medical staffing levels consistent with timely and safe patient care. These minimum staffing levels have increased in recent years as a consequence of the requirement to comply with the European Working Time Directive (EWTd). Medical staffing costs in these services can be reduced only to the level consistent with providing minimum required cover; thereafter, they are more or less fixed.

In South East London, the problem of fixed medical staffing costs became very serious at Queen Mary's, Sidcup – much the smallest of the DGHs. Following three years of aggressive implementation of large cost improvement programmes, medical staffing costs had already been cut to the bare minimum consistent with providing safe services. Gaps were appearing in medical rotas and there were major problems recruiting permanent staff to fill the gaps (because it was perceived by doctors as a 'problem' trust), which led to excessive reliance on unproven temporary medical staff. In the circumstances, the trust concluded that it could not cut costs to the level necessary to achieve financial balance while continuing to provide safe emergency services.¹⁹ This decision proved to be the catalyst for a clinical consensus in the South East London sector that reconfiguration across hospital sites was essential.

Therefore at Queen Elizabeth, Woolwich, and Bromley Hospitals NHS Trust (the two whole-hospital PFI sites) and Queen Mary's, Sidcup, for slightly different reasons, the conclusion was reached that financial balance could be restored only by taking actions that would degrade the quality of patient care, and in some cases make services unsafe.

There were additional clinical arguments against maintaining the then-current configuration of services across hospital sites.²⁰ According to the Royal College of Physicians and the Royal College of Surgeons, high-quality emergency medicine and surgery services need a critical mass of medical consultants and a minimum amount of immediately available diagnostic equipment and treatment facilities. None of the emergency services in the four DGHs in South East London had this critical mass. The Royal College of Surgeons cited evidence to suggest that around 12–14 per cent of the deaths arising from the (unsatisfactory) configuration of A&E services in South East London were preventable.²¹

Another important clinical argument for changing the configuration of hospital services was the inability of DGHs to maintain recommended minimum consultant cover in maternity and paediatric services. It was shown that consolidation of services across hospital sites would markedly improve consultant cover, with little (if any) increase in cost.

In summary, the case for reconfiguration across hospital sites in South East London was founded on both clinical and financial arguments. Unless services were reconfigured, it would not have been possible to restore financial balance without an unacceptable deterioration in the quality and safety of patient care; and reconfiguration offered the potential to improve the quality of patient care and patient safety in ways that would have been impossible without reconfiguration, with the added benefit of a net reduction in cost.

¹⁹ In November 2010 it was announced that Queen Mary's, Sidcup, would close its emergency services because they were no longer safe for patients, citing precisely the problems identified here. The closure was described as 'temporary'; however, no re-opening date was given in the statement by the Chief Executive of South London Healthcare NHS Trust. See South London Healthcare NHS Trust (2010).

²⁰ See Cameron (2008a).

²¹ *Ibid.*

3 What types of reconfiguration are most likely to drive up quality and drive down costs?

What types of reconfiguration of hospital services will be most effective in driving up quality and driving down costs? Here, we consider two different models:

- reconfiguration of services across district general hospitals (DGHs) providing broadly similar services. In London, this can be thought of as ‘concentric’ reconfiguration because the DGHs form a concentric ring around inner London
- reconfiguration of services along patient pathways, involving specialist/tertiary hospitals, DGHs and community care providers. In London, this can be thought of as ‘radial’ reconfiguration, connecting inner London specialist/tertiary hospitals with DGHs and community services across inner and outer London.

Reconfiguration of services across broadly similar DGHs

NHS London has promoted reconfiguration of hospital services across DGHs providing broadly similar services in the same part of London. A Picture of Health is one such example.²² A summary of its key features and rationale is set out below.²³ There were two components: reconfiguration of hospital services across the four DGH sites; and a planned shift of some minor A&E and outpatient care out of hospital.

The clinical case for change

The key elements of the clinical case for change in south east London are summarised in the box below.

Key elements of the clinical case for change

Consolidating A&E departments

None of the emergency departments is adequately staffed with consultants. There should be 8 to 12 consultants per emergency department, but none [of the four DGHs] come close to this. Queen Mary’s, Sidcup, has the poorest staffing and the smallest volume [of activity], and could be absorbed into one of the other acute trusts. (See Alberti 2006). Currently, acute staff in the [four acute trusts]... [do not have] enough serious emergency cases to maintain a high skill level in any specialist or sub-specialist area. Neither do the hospitals have sufficient numbers of consultants, nor sufficient experienced doctors and nurses, to provide 24-hour coverage across all specialties in any of their A&E departments. Both these factors mean that people with life-threatening conditions are likely to be treated by someone who is not fully trained.

²² A Picture of Health was led by the Joint Committee of Primary Care Trusts (JCPT) for Bexley, Bromley, Greenwich and Lewisham from 2007. Earlier, it had been led by the Service Redesign and Sustainability Project (SRSP) board, consisting of the Chief Executives of all 14 PCTs, hospital trusts and mental health trusts in the sector. The author was a member of the SRSP board from 2005 to 2007.

²³ For a detailed presentation of A Picture of Health proposals and rationale see Cameron (2008b); and Cameron (2008c).

The Royal College of Surgeons recommends that a safe major A&E should serve a population of no fewer than 300,000 (Royal College of Surgeons of England 2006). This means that, with a population of just under a million [in the four boroughs], maintaining the current four A&E departments... is not clinically justified. The evidence indicates that there should be two or three.

The four acute trusts rarely achieved more than three consultants per hospital in any area of specialisation, with an average of nearer to two. Better clinical outcomes could be achieved by creating larger clinical teams, treating more patients.

It is the consensus of clinical opinion that the local population needs fewer, but more specialist, emergency and acute medicine services. With fewer A&E departments, supported by concentrated medical services, hospitals with A&E departments can deploy more specialist and experienced staff and deliver 24-hour coverage, which, according to the evidence, should result in better treatment and reduced mortality from serious illnesses and injuries.

Separating elective and emergency rotas

Separate groups of clinicians providing acute and specialist care will enhance their expertise and improve the quality of patient care. Clinicians have recommended that larger teams of 8 to 12 specialists working together across all hospitals will increase opportunities to sub-specialise and therefore enable them to provide high-quality services. In addition, treating more patients will enable hospitals to staff rotas in line with European Working Time Directive (EWTD) requirements.

Emergency surgery

The Royal College of Surgeons suggests that emergency surgery should serve a population of at least 300,000. Evidence shows that systems of emergency surgery that have centralised treatment into larger units offer significantly improved care and treatment outcomes. Currently, there are four acute hospitals that provide emergency surgery for a population of just under 1 million.

Intensive care unit (ICU) beds

The consensus of clinical opinion is that the four acute trusts should provide Level 2 ICU services at all four hospitals, but fewer Level 3 ICUs at optimally staffed and sized units. Evidence shows that bigger ICUs have better outcomes than smaller ones. Level 3 ICUs need to see at least 400 ventilated patients a year to improve outcomes for patients. None of the ICUs in outer South East London currently treat more than 300.

Urgent care centres

Between 40 and 60 per cent of people who currently attend A&E departments do not require their services. For most patients, providing alternatives to A&E such as urgent care centres offers more convenient access to appropriate primary care services. The proposal is to develop a consultant-led Medical Assessment Service in each [of the four] hospitals to enable people to access timely specialist clinical medical advice... [and] will allow patients, particularly the elderly, access to acute medical support without needing to attend A&E.

Maternity and newborn care

The Royal College of Obstetricians and Gynaecologists has recommended that the ultimate goal should be consultant cover on maternity units for 24 hours a day (168 hours per week) in larger units (defined as those delivering more than 4,000 babies per year (Royal College of Obstetricians and Gynaecologists, Royal College of Midwives 1999; Royal College of Obstetricians and Gynaecologists *et al* 2007). At present, the maternity units in the four acute trusts struggle to achieve 40 hours a week. Local clinicians believe that achieving an intermediate 98 hours a week is a sensible goal in the medium term. To achieve this, most of the consultants locally recommend reconfiguring to fewer obstetric units (ideally two). This would allow for the desired provision of increased consultant presence. Most obstetricians and midwives in the local area advocate development of co-located midwifery-led birthing units, so that a woman can be rapidly transferred to an obstetric unit if complications occur.

Caring for sick or premature babies in intensive care

Local paediatricians have said that concentrating resources in fewer neonatal units with more staff, expertise and equipment will enable them to meet the neonatal network target of caring for 95 per cent of newborns locally.

There is a strong consensus among local clinicians that sustainable paediatric services can only be delivered to a higher standard by consolidating inpatient and neonatal units at fewer hospital sites (ideally two).

There is a strong clinical argument for relocating the most specialised services to a tertiary centre – the new children’s hospital at Guy’s and St Thomas’.

Elective surgery

Separating emergency and elective surgery has proven clinical benefits, as do improvements in staff training and education. Local surgeons have recommended that emergency and more complex elective surgery should be undertaken separately, with as much non-complex elective activity taking place in elective treatment centres as possible. They have recommended that, ideally, there should be two elective inpatient units [in outer South East London].

Source: Cameron 2008b

Key features of the reconfiguration proposals

The key features of the proposals are summarised in Table 3 opposite. The centrepiece is a change in the role of Queen Mary’s, Sidcup, from a fully admitting emergency service to a non-admitting urgent care centre. The bulk of the emergency admissions diverted from Queen Mary’s transfer to Queen Elizabeth, Woolwich, and Bromley Hospitals NHS Trust, the two whole-hospital private finance initiative (PFI) sites. Fully admitting A&E services, obstetrics and paediatric services are consolidated onto three sites. Non-complex surgery is consolidated onto two larger elective treatment centres at University Hospital, Lewisham, and Queen Mary’s, Sidcup.

Table 3 Key features of reconfiguration across DGH sites

Bromley Hospitals NHS Trust	Queen Elizabeth, Woolwich	University Hospital, Lewisham	Queen Mary's, Sidcup
Fully admitting A&E	Fully admitting A&E	Fully admitting A&E	Non-admitting urgent care centre
24/7 surgical emergency admissions	24/7 surgical emergency admissions	Surgical emergency admissions 8am-8pm	
Obstetrics and MLBU	Obstetrics and MLBU	Obstetrics and MLBU	Ante/post natal outpatient care
Inpatient paediatric service	Inpatient paediatric service	Inpatient paediatric service	Outpatient paediatric service
Complex inpatient surgery	Complex inpatient surgery	Complex inpatient surgery	
		Inpatient planned surgery	Inpatient planned surgery
Outpatients and diagnostics	Outpatients and diagnostics	Outpatients and diagnostics	Outpatients and diagnostics
			Intermediate/rehabilitation beds

MLBU = midwife-led birthing unit

Capacity and financial implications of the proposals

The reconfiguration permits a large reduction in required medical and acute bed capacity at the Queen Mary's, Sidcup site with the closure of 284 acute beds and a corresponding reduction in medical, nursing and non-clinical staff headcount. The closure of the site to emergency admissions frees up large parts of the land and buildings, which can be made available for rent or sale and/or used for other NHS purposes. Queen Elizabeth, Woolwich, and Bromley Hospitals NHS Trust are able to handle the bulk of the diverted emergency admissions that would otherwise have gone to Queen Mary's, Sidcup, with only 43 additional acute beds, so long as they achieve the assumed 2005 national top quartile productivity by 2010. Similarly University Hospital, Lewisham, is able to accommodate additional elective patients in its under-utilised elective treatment centre and still reduce its acute bed requirement by 142, so long as it achieves the assumed productivity improvement. As a result it should be able to reduce stranded costs by selling or leasing part of its surplus estate.

Overall, the proposals envisage a gross reduction across the four DGHs of 383 acute beds (see Table 4 below). However, the net reduction across the whole NHS in the wider area is 180 acute beds when account is taken of the need to increase bed requirements at Guy's and St Thomas', King's, Darent Valley (Dartford) and elsewhere, to accommodate some admissions diverted from Queen Mary's.

Table 4 Change in acute bed requirements across four DGH sites in South East London

Acute beds (including maternity)	Pre-reconfiguration (number of open acute beds)	Post-reconfiguration (additional acute beds required)
Bromley Hospitals NHS Trust	462	+18
Queen Elizabeth, Woolwich	451	+25
Queen Mary's, Sidcup	328	-284
University Hospital, Lewisham	481	-142
Total (4 DGHs)	1722	-383 (-22%)

The reduction in costs at Queen Mary's resulting from the large reduction in acute capacity amounts to about £60 million per year. Additional savings will be made when the value of the surplus estate is realised. The increase in recurrent costs at the other three DGHs is estimated at about £30 million per year. Since the incremental cost of providing the extra activity at these three sites is less than the cost savings realised at Queen Mary's,

there is a net saving across the four DGHs of about £30 million per year. The net annual saving across the hospital sector as a whole, when taking into account increased costs at other hospitals treating patients diverted from Queen Mary's, is estimated to be about £25–30 million per year.

The extra savings from reconfiguration, over and above what could be achieved by improving productivity site by site, result from two factors. First, the closure of medical bed capacity at Queen Mary's, Sidcup frees up considerably more staff resources than are required to handle diverted patient flows at adjacent DGHs. Second, by fully utilising the facilities with high fixed costs (the PFI hospitals) and by selling or leasing excess estate at Queen Mary's, Sidcup and University Hospital, Lewisham stranded capital costs are minimised and the productivity of capital across the four sites is much improved.

Winners and losers

Because with Payment by Results (PbR) money follows patients, the shifts in the pattern of patient care and the redistribution of emergency and elective services across the DGH sites generates financial winners and losers. The increase in activity at Queen Elizabeth, Woolwich, Bromley Hospitals NHS Trust, and University Hospital, Lewisham, provided at low marginal cost, improves their financial position. However, the shift of non-elective care from Queen Mary's to Bromley Hospitals NHS Trust, and the corresponding transfer of non-complex elective activity in the opposite direction, worsens the financial position of Bromley Hospitals NHS Trust but improves it at Queen Mary's, Sidcup. This is because Bromley Hospitals NHS Trust loses high-margin elective patients and gains low-margin emergency patients, and vice versa. Therefore, the net financial position across all four DGHs improves significantly but Bromley Hospitals NHS Trust continues to have a significant recurrent deficit (*see* Table 5).

Table 5 Projected financial surplus/deficit of four DGHs post-reconfiguration

	Post-reconfiguration (2010/11 est) (£m pa)
All four DGHs (aggregate)	-6.8
Bromley Hospitals NHS Trust	-7.7
Queen Elizabeth, Woolwich	+0.4
Queen Mary's, Sidcup	+2.3
University Hospital, Lewisham	-1.8

Source: Cameron 2008b

Quality of care implications

The reconfiguration was expected to deliver significant improvements in the quality of care for patients including the following.

- Consolidating emergency services onto three DGH sites would enable provision of 24-hour consultant cover across all medical specialties, resulting in markedly improved patient outcomes.
- Consolidating obstetrics and inpatient paediatric services onto fewer sites would increase consultant cover in those services 'at a stroke', resulting in immediate improvements in care for mothers and babies at no net increase in cost.
- Consolidating non-complex surgery at fewer, higher-throughput NHS elective treatment centres would improve the patient experience and could result in better clinical outcomes.

More generally, the significant additional financial savings resulting from reconfiguration would reduce financial pressures on all four DGHs and therefore reduce the risk of further deterioration in the quality of patient care associated with cost-cutting.

Shifting care out of hospital and closer to home

The corollary of the planned reduction in growth of hospital admissions and reduced minor A&E and outpatient activity in hospital is the creation of new services out of hospital. The proposals from the Joint Committee of Primary Care Trusts (JCPCT) leading A Picture of Health can be summarised as follows:²⁴

- the creation of larger facilities to provide a greater range of outpatient services out of hospital (polyclinics?)
- the provision of additional intermediate care/stepdown beds to facilitate the transfer of patients from acute hospitals
- the provision of additional community nurses and other clinical staff teams in the community to manage patients with long-term conditions.

The proposals largely focused on providing the same hospital outpatient services but in a non-hospital setting. No evidence was presented to show how the new services would stem the unprecedented more than 4 per cent per year rise in hospital admissions (Robinson 2010); nor was any detail given about how the proposals would result in improved quality of care. Whereas the clinical case for change was based in part on the link between high-quality services and services with critical mass – larger clinical teams seeing more patients – the out-of-hospital proposals resulted in exactly the opposite; smaller clinical teams, seeing fewer patients.

Furthermore, no evidence was presented about the cost of providing the new out-of-hospital facilities. It seems likely that they will cost more, not less, than the existing hospital services. They will have to bear the full capital and recurrent costs of providing new services out of hospital, whereas hospital trusts will save only the marginal (avoidable) costs resulting from the reduction in demand for those services.²⁵

Overall assessment of the A Picture of Health proposals

Reconfiguration of services across the four DGHs in the South East London sector is expected to result in significant improvements in the quality of care in key affected services – notably, emergency medicine and surgery, maternity and neonatal care – particularly when compared with the counterfactual (that is, no reconfiguration).

It is also expected to result in meaningful cost savings relative to the ‘no reconfiguration’ counterfactual, so long as the assumptions on which it is based prove to be correct. The net recurrent savings are large enough to eliminate most of the projected aggregate recurrent deficit of the four DGHs in the absence of reconfiguration.²⁶

There are, however, some adverse implications. Reconfiguration results in a small increase in average travel times for certain patients in parts of outer south-east London.²⁷ It also results in a small reduction in the number of providers of certain services, and therefore a small reduction in patient choice. However, because there are many other providers within easy reach of the South East London population, all patients will continue to have

²⁴ The proposals are set out fully in Cameron (2008a).

²⁵ The net saving to the NHS is the ‘avoided’ cost in hospitals resulting from reduced minor A&E and outpatient activity, less the extra cost incurred through providing new services out of hospital.

²⁶ Before allowing for one-off restructuring costs estimated at about £50 million, or roughly two years of net savings.

²⁷ See Operational Research in Health Limited (2007).

a choice of no fewer than three providers for all affected services.²⁸ Therefore, following consultation, it was judged that these adverse implications were acceptable given the nature and magnitude of the expected improvements in patient safety and clinical outcomes.

The proposals to shift care out of hospital are unlikely to improve the quality of outpatient care or bring about the planned sharp reduction in the growth of hospital admissions. Given the projected excess estate in hospitals, it would be more cost-effective and probably result in higher quality care if increased intermediate care bed capacity and outpatient services were located in 'voids' within existing hospital sites.²⁹

There are major risks involved in implementing the A Picture of Health proposals. Successful implementation depends critically on two factors: achieving the projected sharp slowdown in the growth of hospital admissions, and the sharp improvement in hospital productivity. If these objectives are not achieved, there is a risk that hospital capacity will be insufficient to meet demand, in which case waiting times will increase again, the patient experience will deteriorate, and the expected cost savings will not be realised.

Reconfiguration of services along patient pathways

This section focuses on a different model of hospital reconfiguration that is designed to drive accelerated adoption of best practice models of care in network services. The model is referred to here as 'reconfiguration along patient pathways'.

Best practice models of care

By 'best practice models of care', we mean evidence-based descriptions of the ways in which patient care should be provided in a given service to achieve the best possible clinical outcomes and patient experience. Best practice is laid down in, for instance, Royal College guidance, national service frameworks (NSFs) and other publications such as the National Cancer Strategy.³⁰ Here, the focus is on best practice in cardiac, stroke, cancer and renal services – all of which are major services affecting large numbers of patients with life-threatening conditions. They are all network services, which means that patient care is best provided by networks of specialist/tertiary hospitals, DGHs and primary care providers across a whole sector.³¹

The box opposite summarises key elements of best practice in these four major services, focusing on aspects of particular relevance for reconfiguration.

²⁸ In South East London, the greatest distance between the six hospital trusts is less than 10 miles. All hospital trusts are easily accessible, being located on well-developed public transport routes. Other hospital trusts in west Kent and central London are also easily accessible.

²⁹ In South East London, there have been significant reductions in acute capacity in recent years, yet some hospital trusts deny there is any 'excess' estate. This is often because services have 'spread out' and are utilising the voids for non-clinical, non-income earning activities. This is a general tendency in the NHS, encouraged by the fact that services rarely pay for the space they occupy.

³⁰ See for example Department of Health (2000), (2005a), (2005b), (2007a), (2007b). The Wanless report, *Securing Our Future Health* (Wanless 2002), highlighted the potential for much-improved patient outcomes if there were accelerated adoption of best practice as reflected in the NSFs, for example. Although the focus here is on cancer, cardiac, stroke and renal services, there are NSFs for other services, many of which also have implications for reconfiguration if they are to be adopted cost-effectively.

³¹ Here, the term 'network' service refers to a service where different segments of patient care are best provided at different locations – eg, major acute interventions at a specialist centre and rehabilitation and/or routine care at a DGH.

Best practice models of care

Cardiac services: Patients with symptoms of a heart attack should be taken to a specialist centre, and be given an immediate CT scan and access to a specialist cardiac team; appropriate intervention should be completed within 4 hours from first contact. Patients should have a short stay in the acute facility, and then be promptly transferred to a hospital closer to home, or back home.

Developments in interventional cardiology now permit many cardiac patients who previously would have been admitted to a specialist facility for heart surgery, involving a lengthy stay, to be treated on a day case or overnight basis in a local hospital.

Stroke services: Patients with symptoms of stroke should be taken to a specialist centre, and be given an immediate CT scan and access to a specialist stroke team; appropriate intervention should be completed in less than one hour from admission. Patients should have a short stay in the acute facility, and then be transferred for rehabilitation to a hospital closer to home, and supported to return home.

Cancer services: There is a clear trend in cancer care towards fewer specialist inpatient centres, more day case and outpatient treatment, and provision of routine procedures such as chemotherapy closer to home. Depending on the type of cancer, total acute bed days can be substantially reduced and the patient experience much improved.

Renal services: There is a strong trend towards dialysis in non-hospital settings, and for some patients self-dialysis overnight at home is clinically advisable and cost-effective. There are major benefits for renal patients, many of whom must otherwise spend three days a week on dialysis in hospitals.

Best practice models of care are important because there is clear evidence of a direct causal link between adoption of best practice and markedly improved patient outcomes.³² Put simply, if best practice is adopted, fewer patients die, more patients make a quicker, fuller recovery, and the patient experience is much improved.

In South East London, and elsewhere in the NHS, some hospitals can afford to provide best practice care in these services, and are doing so; but others are not providing best practice care, and cannot afford to do so. The result is that the quality of care provided by these services, and patient outcomes, vary starkly depending on where patients are treated. Table 6 overleaf sets out data showing patient outcomes for stroke and heart attacks across specialist centres and DGHs in north-east London. The specialist centres provide best practice models of care but the DGHs do not. The table shows that death from stroke is more than twice as likely for patients treated in centres that do not provide best practice care and average length of stay is more than four times as long. It also shows that death from heart attack is more than twice as likely for patients treated in centres that do not provide best practice care and average length of stay is more than twice as long.³³

³² See, for example, the *National Sentinel Stroke Audit Phase II* (Intercollegiate Stroke Working Party 2009).

³³ National stroke audits have regularly shown huge variations in the quality of care provided to patients with a suspected stroke. For example, within the London SHA, the proportion of patients receiving a brain scan within 24 hours varies from 43 per cent at one trust to 98 per cent at another (Intercollegiate Stroke Working Party 2009). Patient outcomes are closely correlated with the quality of care.

Table 6 Correlation between best practice models of care and patient outcomes

	Specialist centres	DGHs
Stroke mortality rate (%)	15	31–38
Stroke (ALOS in acute facility) (days)	15	62–70
Heart attacks mortality rate (%)	5	12
Heart attacks (ALOS in acute facility) (days)	4	10

ALOS = average length of stay.

Source: The NE London Sentinel stroke survey (2008); and unpublished data on heart attack outcomes at Barts and the London NHS Trust heart attack centre and DGHs in the sector.

Implications for resource allocation

Currently, most DGHs seek to provide as full an acute service as possible locally for patients needing cardiac, stroke, cancer or renal services. However, local services are often too thinly resourced to provide best practice models of care. The result is that they frequently achieve much worse patient outcomes than the best-performing services. Reconfiguration of services along patient pathways would facilitate more widespread adoption of best practice models of care across whole care networks, making it possible to deliver to all patients the high standard of care currently available to only some of them. However, this kind of reconfiguration would require significant changes to the allocation of resources (staff, acute beds, etc) across a sector, including the following.

- Much greater differentiation of roles along patient pathways, with: fewer specialist facilities resourced to provide best practice acute care; enhanced roles for DGHs and community health services providing short stay/ambulatory acute care; expansion of programmes aimed at keeping patients out of hospital, rehabilitating them closer to home and getting them back home as quickly as possible; and more outpatient service points closer to home for routine procedures such as chemotherapy and renal dialysis (where these can be provided cost-effectively).
- Investment to expand the capacity and capability of a smaller number of specialist centres; disinvestment in certain types of acute inpatient capacity; investment to expand capacity of new types of services at DGHs and in the community.
- Specialist hospitals, DGHs and primary care providers would operate a *managed* network of care for these services across an entire sector. A managed network is one in which decisions about the allocation of resources and management of the service are taken by the clinical leadership for the service across the entire network, not on a trust-by-trust basis.³⁴
- There would be changes to the way service providers are paid to reflect the different costs incurred in providing different segments of the patient 'pathway'.³⁵

The evidence shows that the reallocation of resources to support accelerated adoption of best practice models of care has the potential to bring about major and rapid improvements in patient outcomes and the patient experience.³⁶ It should reduce

³⁴ Networks of care currently operate in some network services, notably cancer and cardiac. However, they are not managed networks; they are collaborations between clinicians employed by different trusts. There is considerable duplication of staff resources, equipment and estate across these networks, which could be rationalised if they operated as managed networks.

³⁵ Under current funding arrangements, funding of network services is not linked either to the way services are provided or to patient outcomes. Different funding arrangements would match income more closely to the costs of providing a segment of care at different locations; or involve making a risk-adjusted capitation payment to fund care for a cohort of patients across a managed network of care.

³⁶ For example, The King's Fund has seen as yet unpublished early evaluation findings indicating that the quality of care and patient outcomes for stroke have improved substantially following the recent reconfiguration of stroke services in London (A Rudd, personal communication 2010; see also NHS London 2010; Lomas 2010; BBC London 2010). The author has also seen unpublished data showing much-improved patient outcomes as a result of reconfiguration of services for stroke and heart attack. And the Royal Brompton and Harefield NHS Trust has published information on treatment in specialist centres (2007).

the current wide variations in quality of care and make best outcomes available to all patients. Furthermore, it should result in lower overall costs. But the potential savings will be realised only if the end result is a net reduction in capacity across the network. On paper, these savings are achievable. In practice, they are likely to be realised only if there is unified governance and management of the service across the entire network.

In South East London, the opportunity to embrace this approach was considered early on in the reconfiguration process; the potential to markedly improve patient outcomes across the whole of the sector had been demonstrated on paper.³⁷ However, for reasons explained later, this type of reconfiguration could not be taken forward.

Implications for reconfiguration

In South East London, driving accelerated adoption of best practice models of care in network services requires reconfiguration along patient pathways, involving managed services across the two specialist/tertiary hospitals, the four DGHs and primary care providers in the sector. Clearly, this could not be achieved if options were limited to service redesign involving DGHs only. To deliver the predicted quality improvements and cost savings, there would need to be managed networks of care in which decisions about resource allocation and management cut across trust boundaries.

Reconfiguration along patient pathways in network services is not an alternative to the redesign of emergency services in the way proposed by A Picture of Health – it is additional to it. The most desirable type of reconfiguration is one which results in both accelerated adoption of best practice models of care in network services and improvements in the quality of emergency services, obstetrics and paediatrics. Successfully implemented, this model of reconfiguration would do much more to drive up quality and drive down costs than reconfiguration across DGHs providing similar services. However, reconfiguration along patient pathways can be achieved only with the active involvement of specialist/tertiary hospitals as well as DGHs.

³⁷ See South East London SHA (2004).

4 What policy levers are available to bring about desirable service reconfiguration?

The reconfiguration exercise in South East London generated important lessons for the rest of the NHS about the availability and effectiveness of policy levers to bring about desirable service reconfiguration.

Policy levers are the forces acting on trusts that drive them to act to improve quality and reduce costs by reconfiguring services across hospital sites. In this report, we consider three types of levers, as follows.

- Market forces, whereby independent trusts, responding to the forces created by the policy and market environment (eg, Payment by Results (PbR), competition, and patient choice), enter into voluntary agreements with other trusts to either reconfigure services across trust boundaries and/or merge, with the aim of internalising reconfiguration.
- ‘Strong’ commissioning by primary care trusts (PCTs), and strategic health authorities (SHAs) taking a greater role in directing financially challenged trusts, to ‘force’ desirable service reconfiguration.
- The acquisition of financially challenged trusts by foundation trusts as a means of internalising the costs and benefits of reconfiguration across hospital sites within a single, multi-site hospital trust.

Based on the South East London experience, three propositions about the effectiveness of these policy levers are presented below.

Market forces

Market forces alone rarely deliver desirable service reconfiguration

The most important market forces acting on hospital trusts in South East London in recent years have been the introduction of PbR, the mandatory clinical and financial targets, and policies of competition and patient choice.

Introduction of PbR had a marked differential financial impact, disadvantaging the DGHs (especially the two whole-hospital private finance initiative (PFI) sites) relative to the two foundation trusts.³⁸ The response to the financial pressures induced deterioration in the quality of care. Competition and choice are likely to further widen these gaps. The poorly rated DGHs are likely to lose patients (and income) to easily accessible, high-performing foundation trusts. As a result, their financial position will deteriorate further; their deficits will increase because income will fall by more than they are able to reduce their (fixed) costs. The pressures to respond to a deteriorating financial position will put further downward pressure on the quality of care. In South East London, the result has been a widening of the gap in terms of quality and financial performance, and even hospital failure at Queen Mary’s, Sidcup.

³⁸ See Service Redesign and Sustainability project board (2007).

Will market forces drive trusts to seek voluntary agreement on reconfiguration of services across sites in ways that will drive up quality and drive down costs? The evidence in South East London suggests not. Voluntary participation by the six hospital trusts in discussions about reconfiguration across hospital sites resulted in no agreement at all on meaningful reconfiguration.³⁹ Over a period of more than three years, the discussions resulted in a clear diagnosis of the problems and a long list of options to address them; but there was no agreement whatsoever about which trusts needed to change, and how. The result was deadlock; and consequently the continuation of large deficits and rapidly increasing legacy debt at the DGHs, and a widening of the quality gap between them and the foundation trusts.

The deadlock should not be surprising. There are systemic reasons why voluntary agreements between financially sound trusts (often foundation trusts) and financially challenged trusts (often DGHs) rarely result in desirable service reconfiguration. The first is that with PbR in its current form, reconfiguration of any sort creates financial winners and losers, even as it reduces total system costs. In South East London, although total costs of the four DGHs were expected to fall, the deficit at Bromley Hospitals NHS Trust was projected to increase (*see* Table 5, p 14).

Trust boards and managers of financially challenged trusts are subject to very strong pressures to restore financial balance and repay legacy debt. It is hardly surprising, therefore, that they rarely support service reconfiguration, when this would worsen their already difficult financial position. Nor is it surprising that PCTs, so long as they have a shared responsibility for the performance of the hospital trusts in their area, are rarely enthusiastic about reconfiguration when the local trust expects to be one of the losers.

Unless there are waivers to the financial balance requirement for trusts undertaking reconfiguration, the risk of being a 'loser' as a result of the process will continue to be one of the greatest obstacles to voluntary agreement to implement desirable service reconfiguration. In theory, the problem could be overcome by merging trusts, thereby internalising the changes in financial flows. But that option runs into a similar problem – namely, that both sides of the proposed merger fear they would be merging with a weaker trust, and therefore would be disadvantaged if they supported the merger.

The second systemic reason why voluntary agreement between financially sound and financially challenged trusts rarely results in desirable service reconfiguration is that there are invariably tensions between 'localism' and maximising quality and financial benefits across the NHS as a whole. Localism refers to the coalition of local interests – from clinicians and trust boards to public interest groups, local government and local politicians – that seeks to oppose reconfiguration whenever the result would be downgrading or closure of a local service, regardless of the clinical benefits and wider financial savings. The nature of the consultation and approval processes is such that vocal local opposition, even if a minority view, can prevent service reconfigurations even where evidence suggests the planned changes would bring important benefits for patients.⁴⁰ In South East London, localism influenced the reconfiguration debate in a negative way; reconfiguration options involving the foundation trusts, which could have generated important additional benefits for patients, were taken 'off the table' because of local opposition.

³⁹ The original reconfiguration exercise, the Service Redesign and Sustainability Project (SRSP), was initiated in 2004/5 and involved all 14 hospital trusts, PCTs and mental health trusts in the sector. It undertook a comprehensive diagnostic and formulated a 'long list' of options to reconfigure services. But no agreement could be reached. In 2007, it was replaced by the Joint Committee of four outer London PCTs (JCPC) working with the four DGHs.

⁴⁰ A comprehensive description of the consultation process undertaken in South East London is set out in Cameron (2008d).

Localism often manifests itself in the form of clinicians at DGHs resisting participation in managed care networks; this arises partly from a fear of being treated like second-class citizens and partly from a desire to maintain independence, based on the strongly held belief that clinicians in local hospitals are best placed to decide how to provide local services. This is understandable and, in some services, correct. But in network services, because best practice requires differentiation of roles and collaboration across the network, localism is unlikely to result in the best patient outcomes or the most cost-effective service, as is apparent from a review of available comparative data on patient outcomes.

Irrespective of whether localism is regarded as a 'good' thing (a manifestation of 'voice' expressed at local level) or a 'bad' thing (preventing change that is good for patients), it is clearly another major reason why market forces rarely result in desirable service reconfiguration. The resulting deadlock in South East London led to a widening of the quality gap between the best and worst performers, and the opportunity to achieve better outcomes for patients served by the DGHs was lost.

There are some examples of trusts entering into voluntary agreement to reconfigure certain services across hospital sites in South East London. Typically, these involve consolidation of two small services onto a single site. The evidence suggests that reconfigurations of this sort can improve quality, but that they rarely result in significant cost savings because the clinicians involved are often reluctant to take capacity out of the system.⁴¹

In South East London, the predictable consequences of failure to agree on reconfiguration proposals were that cost pressures on financially challenged trusts intensified, and the quality of care they provided deteriorated (in the case of Queen Mary's, Sidcup, fatally, with the temporary closure of its A&E and maternity units). Eventually, control of the situation was taken out of the trusts' hands when the PCTs and SHA intervened to 'force' desirable service reconfiguration.

Strong commissioning

Strong commissioning is needed to bring about reconfiguration that will drive up quality and drive down costs

If market forces alone cannot deliver desirable service reconfiguration, can strong PCT commissioning and SHA powers of direction deliver it instead? Here the term strong commissioning is used to refer to where commissioners have the powers necessary to drive desirable service reconfiguration. When PCTs were first established in 2002, the system management rules gave them almost no influence over the way services were provided. With fixed average cost tariffs for an increasing proportion of hospital activity and an obligation to pay for all hospital activity provided, PCTs were funders of hospital activity, not commissioners of services. More recently, with new enhanced powers to unbundle tariffs locally, greater influence over the volume of activity that receives the full tariff in some services, and price discounts if quality of care is sub-standard, they now have somewhat greater scope to drive reconfiguration of services across hospital sites.

If strong commissioning were a reality, PCTs would be able to refuse to purchase services (or pay less than the full tariff) unless they were provided in accordance with best practice; and they would be able to devise new ways of paying for services so as to incentivise improvements in patient outcomes. In recent years, PCTs have begun to

⁴¹ Based on discussions with clinicians in South East London.

adopt this approach to commissioning, but so far in only a few services such as stroke and trauma.

In South East London, during the A Picture of Health process, individual PCTs realised that they had very limited ability to drive service improvement. They were very small, had limited commissioning capacity, and lacked the information, medical expertise and management resources available to hospitals. Even when they were given stronger commissioning powers, the PCTs recognised that they were individually too small to get traction with the hospital trusts; so four of them decided to combine forces to create a joint commissioning group to maximise their influence over the hospital reconfiguration process.

Despite forming the joint commissioning group to strengthen their position, the four PCTs could not have succeeded in implementing A Picture of Health without the strong role played by the SHA. But SHAs have strong powers only over financially challenged trusts; they have no powers at all over foundation trusts. This is why hospital reconfiguration in South East London ended up focusing on the four DGHs only; and, therefore, why reconfiguration along patient pathways (which would have required the active involvement of the two foundation trusts) could not be progressed.

SHA powers over financially challenged trusts are essentially negative. They can use their powers to force through service change, but only by changing the managers and boards of NHS trusts that fail to achieve the mandatory targets. In South East London, even when reconfiguration proposals had been agreed, the only way commissioners could drive through implementation was by getting the SHA to use these powers. It did this by, in effect, forcing a *merger* of three of the four financially challenged DGHs – Queen Elizabeth, Woolwich, Bromley Hospitals NHS Trust and Queen Mary's, Sidcup. Since a formal merger was not possible at the time, the same effect was achieved by creating a unified governance structure 'on top of' the three trust boards and appointing a single senior management team with responsibility for managing services across all three DGHs.⁴² This step internalised the planning, decision-making and execution of service redesign across the three sites and authorised the new leadership to 'make it happen.'

There are three important lessons here. First, the PCTs, even with stronger commissioning powers, were unable to drive desirable service reconfiguration without the support of the SHA. Second, the SHA had real leverage only over financially challenged trusts. Third, major service change could be implemented only by the SHA *forcing through organisational change* – in this case, a merger of three of the financially challenged DGHs.

Strong commissioning has had some recent successes in single services. For example, PCTs in London, working closely with the SHA, have succeeded in reconfiguring stroke services to conform to best practice models of care. A small number of hyper-acute stroke units have been designated in each sector. London Ambulance Service protocols have been changed so that all symptomatic stroke patients are taken directly to these centres. The role of DGHs has been changed to focus more on rehabilitation of patients closer to home and supporting them to return home as quickly as possible. The tariff has been unbundled to reflect the differential costs of performing different roles at different sites. A similar designation of trauma centres in London is also under way. There is very good reason to believe that the result will be markedly improved outcomes for patients. However, at this stage, it is not clear whether this reconfiguration will also significantly reduce costs.⁴³

The success of strong commissioning in driving up quality in stroke and trauma services highlights the as-yet unexploited potential for the same approach to drive up quality and

⁴² The three trusts were subsequently formally merged to create the South London Healthcare NHS Trust.

⁴³ The rebalancing of tariffs across the hyper-acute centres and the DGHs in north-east London appears to have been broadly income-neutral, neither increasing nor reducing costs of the service across the sector (unpublished data seen by the author).

drive down costs in other major network services. If this is to be achieved, commissioners will need strong powers to accelerate adoption of best practice models of care across a sector, and these powers will have to extend over all hospital trusts in a sector, not just those that are financially challenged. The evidence from South East London shows that successful implementation locally will often require organisational change, resulting in unified governance and management of the change process.

Acquisitions of financially challenged trusts

Acquisitions of financially challenged hospital trusts by foundation trusts offer the best available means of achieving reconfigurations that drive up quality and drive down costs

Mergers between DGHs providing broadly similar services cannot drive accelerated adoption of best practice in network services. Moreover, it is questionable whether, in the cold financial climate, mergers between financially challenged DGHs will result in financially sustainable trusts capable of delivering high-quality services; and, indeed, whether the merged trust will be capable of acquiring foundation trust status. The evidence from South East London indicates that the current NHS London strategy of driving reconfiguration by promoting mergers between financially challenged trusts is not the best approach.

The best type of reconfiguration to drive up quality and drive down costs is reconfiguration along patient pathways. The best way to implement this sort of reconfiguration is to facilitate acquisitions of financially challenged trusts by high-performing foundation trusts. The aim should be to create multi-site hospital trusts, with unified governance and management able to roll out best practice models of care for the benefit of all patients served by the enlarged trust.

The proposed lever is acquisition, not merger. Successful implementation of desirable service reconfiguration requires strong leadership and unified governance and management – something that is possible with acquisitions but rarely achieved with mergers. It also needs: a strong evidence-based clinical case for change; buy-in by the medical and other senior clinical staff of the enlarged trust; and acceptance by a majority of the affected population that the result will be better outcomes for all patients. If these conditions can be met, then the basis exists to implement successful service reconfigurations that will drive the greatest possible improvements in quality and reductions in cost.

There are two advantages of adopting the acquisition route. First, services can be planned and provided across the whole catchment of all sites within the trust, rather than for each site independently. Consequently, the excellent patient outcomes provided by high-performing foundation trusts can be extended to patients of the financially challenged trust that has been acquired. Second, the problem of financial winners and losers is much reduced because changes in income and costs across trust boundaries are internalised. Incentives to remove unnecessary capacity and eliminate stranded costs are much strengthened, and therefore cost pressures and the related risk of deterioration in the quality of care are much reduced.

There are, however, also some disadvantages of the acquisition route. The creation of large trusts providing co-ordinated care along patient pathways across multiple sites carries the

risk of creating local or regional monopolies. This could impede competition and limit patient choice in contestable services.

There are several responses to this point. First, it is clear from South East London that, unless there is reconfiguration, competition between the six hospital trusts is likely to inadvertently cause deterioration in the quality of essential services at the DGHs. They provide both elective and emergency/non-elective services, and many of their costs are *joint* fixed costs. If elective patients – noting the current poor performance of the local hospital – decide to go elsewhere, the trust loses the income, but many of its fixed costs remain.⁴⁴ This further increases the risk of a downward spiral of declining income, increasing deficits and further deterioration in the quality of care and the safety of essential services.

Whenever an acquisition goes ahead, the quality implications of reduced competition in contestable services should be weighed against the likely deterioration in quality and safety of essential services, and the loss of the opportunity to improve quality, if it does not go ahead.

The requirements of competition law are such that a tender for the right to take over a financially challenged trust will, in most cases, be necessary. The Department of Health/NHS may no longer be free to negotiate acquisitions of financially challenged trusts. In that event, and given that competition in health care is based on quality, not cost, a key criterion for considering proposals to acquire NHS trusts should be the extent to which the acquirer has concrete plans to roll out best practice models of care for the benefit of all patients served by the enlarged trust. In emergency and network services, the acquirer will often prove to be an existing high-performing trust providing services in the area.

Competition law also dictates that acquisitions or mergers should not create local or regional monopolies. In South East London, as in most of London, acquisitions of DGHs by high-performing trusts in the sector should not raise insuperable competition problems, because there are many high-quality alternative providers within easy reach. The benefits to patients resulting from acquisition resulting in reconfiguration along patient pathways are likely to be substantial, whereas the costs for patients arising from loss of competition are likely to be very small.

The other disadvantage of acquisitions as a means of bringing about reconfiguration along patient pathways is that the risk that the enlarged trust fails to deliver the promised patient benefits is undoubtedly high. The results of past mergers have been disappointing, and there is clearly a risk that acquisitions would perform no better. Therefore, once larger trusts have been created by way of acquisition, it is vital that they are held to account for delivering improved outcomes for all patients; and there must be sanctions if they abuse a dominant position.

However, acquisitions of financially challenged trusts by foundation trusts will remain a purely theoretical option in most cases unless steps are taken by the Department of Health/NHS to facilitate them. Neither foundation trusts nor any other potential acquirer will have any interest in doing so if, as a result, they become liable for early repayment of large legacy debts; and/or are themselves required to fund the unavoidable, often large, one-off restructuring costs. In South East London, the early reconfiguration discussions included options such as strategic alliances and mergers between the foundation trusts and DGHs; but these were not pursued because the foundation trusts were expected to assume all the DGH liabilities.

⁴⁴ Medical staff, equipment and buildings are all, to some extent, used in both essential and elective services, and the costs are joint costs – meaning that if a trust were to exit entirely from elective care, although they would lose the whole income from elective services, they would still incur many of the costs.

5 Lessons for the NHS in England

There are six key lessons that the rest of the NHS can learn from the South East London sector's experience with hospital reconfiguration.

First, reconfiguration of services across hospital sites is likely to be the only way that some trusts can achieve financial balance while avoiding an unacceptable deterioration in the quality of care, given the cold financial climate, which is here for at least the next five years. All NHS hospital trusts in England will be subject to intense pressures to reduce costs by at least 15–20 per cent. Commissioners must restrain the unprecedented growth in hospital admissions because there will not be sufficient funds to pay for activity if it continues to grow at current rates. There can be no more 'trading out of deficits' or 'topping up' of trusts' non-tariff income.⁴⁵ Hospital trusts will be forced (after a decade with no productivity improvement) to achieve sustained productivity improvement at unprecedented rates.⁴⁶

Other trusts in England will discover that rapid growth of productivity and slow growth of activity results in excess capacity and stranded costs, and that large cost savings can be achieved only if excess capacity is eliminated. They will also discover that large cost savings, without changes in the way that services are provided, will cause deterioration in the quality of care, and in some cases, make essential services unsafe.

There are particular risks facing the many NHS trusts that are entering the cold climate with weak finances and continuing to provide below average quality care. It is highly likely that, without reconfiguration, the existing quality gap between best and worst performers will widen further and, in some cases, a downward spiral of falling income, growing deficit and declining quality will cause hospitals to fail. More situations like those at Queen Mary's, Sidcup, and Mid Staffordshire NHS Foundation Trust, where standards of care were jeopardised by the drive to cut costs, cannot be ruled out.

The most obvious parallels with the situation in South East London are elsewhere in London, where the challenges facing non-foundation trust district general hospitals (DGHs) are very similar.⁴⁷ In those situations as well, reconfiguration across hospital sites will often be necessary to sustain quality of care and financial balance; and the greatest benefits for patients are likely to come from reconfiguration along patient pathways.

Second, the large deficits and high legacy debts of some financially challenged trusts are caused, in part, by under-funding of fixed capital charges in Payment by Results (PbR)

⁴⁵ Despite the efficiency factor in tariffs, average prices paid to hospital trusts have not fallen in real terms because extra payments have been made for non-tariff activities (Audit Commission 2010).

⁴⁶ Over the past decade, there has actually been a *decline* in NHS productivity (Audit Commission 2010).

⁴⁷ The picture in North East London is very similar to South East London. Queen's Hospital, part of the Barking, Havering and Redbridge University Hospitals NHS Trust, is a whole-hospital PFI site with serious financial and quality of care problems – the former caused in part by under-funding of its PFI-related capital charges, and the latter induced by the urgent need to address its financial problems. Also in North East London, Whipps Cross University Hospital NHS Trust, Newham University Hospital NHS Trust and Homerton University Hospital NHS Foundation Trust are being encouraged to reconfigure services across broadly similar DGHs, and potentially to merge, as a response to financial problems and issues around quality of care. See Whipps Cross University Hospital NHS Trust (2010).

tariffs.⁴⁸ Increased funding for trusts with higher than average capital charges, and reduced funding for those with lower than average capital charges, would reduce deficits in the former and surpluses in the latter – at no net cost to the NHS. Funding per patient to pay for staff and drug costs would be more equitable. Financial imbalances across hospital trusts would be reduced and therefore *the pressure for reconfiguration across hospital sites would reduce.*

There would also be less financial ‘leakage’ from the NHS. Currently, the aggregate unspent surpluses of foundation trusts (amounting to several billion pounds) are not available to finance the deficits of financially challenged trusts. Yet a part of the foundation trusts’ aggregate surplus results from over-funding of capital charges, not efficiency gains. Rebalancing of funding for capital charges would reduce this leakage and, by reducing the chronic deficits of those trusts with high capital charges, enable more of them to acquire foundation trust status sooner.

Third, reconfiguration should focus on achieving the best patient outcomes and patient experience for all NHS patients, and on narrowing the quality gap between the best and worst performers. This is best achieved by designing reconfiguration to drive accelerated adoption of best practice models of care (as reflected in national service frameworks (NSFs) and other guidance) in as many services as possible. This requires a significant change in the way emergency and network services are currently provided, from a system where all hospital trusts provide a full range of broadly similar secondary services to one in which there is greater differentiation of roles along patient pathways.

Although mergers between DGHs providing broadly similar services can bring about worthwhile quality improvements and cost savings, they cannot bring about the major improvements in patient outcomes that accelerated adoption of best practice in network services will deliver. Reconfiguration along patient pathways can be achieved only with the involvement and commitment of specialist/tertiary providers as well as DGHs.

The planned shift of non-admitting hospital services into non-hospital settings should be subject to rigorous review. Re-providing services in the same way in non-hospital settings is unlikely to improve quality or reduce costs. Since rapid productivity improvement is expected to create excess estate on hospital sites, it will often be both clinically more beneficial and cheaper to locate new or expanded services within hospital trust boundaries. However, there *is* an urgent need to develop new models of out-of-hospital care that aim to keep patients out of hospital for longer. Unless these models are developed and rolled out quickly, demand for hospital services will grow at an unaffordable rate and/or will be ‘choked off’ by arbitrarily denying patients referrals to appropriate care.

There are good evidence-based reasons why, in some services, larger units serving a wider catchment area produce better patient outcomes and are more cost-effective.⁴⁹ It follows, therefore, that there are good reasons why consolidation of those services onto fewer hospital sites can be expected to drive up quality and drive down costs. Examples cited in this report include A&E, maternity and neonatal services, hyper-acute stroke units and heart attack centres – but there are many others.

Fourth, competition and choice in contestable services may inadvertently cause deterioration in the quality of essential services provided by financially challenged trusts, and therefore widen the quality gap between the best and worst performers. Market forces alone will rarely drive trusts into voluntary agreement to reconfigure in ways that will improve quality and reduce costs. In most cases, the most likely outcome is that

⁴⁸ According to data listed on the HM Treasury website, as at February 2010, more than 60 acute trusts had current signed PFI projects. Most of them will have higher than average capital charges as a percentage of MFF adjusted income.

⁴⁹ See Harrison and NHS Evidence (forthcoming).

financially challenged trusts will suffer a downward spiral of continuing financial deficits, deterioration in the quality of care and a further widening of the quality gap.⁵⁰ The NHS will have no alternative but to continue to fund these deficits or allow the trusts to fail. Few, if any of them, will ever become foundation trusts. This conclusion is important in view of the considerable emphasis placed by the coalition government on 'making the market work'.

Fifth, strong commissioning of emergency and network services across a large catchment area is necessary to bring about major improvements in patient outcomes, for all patients. Individual primary care trusts (PCTs) in London are too small to drive major service change and have limited ability to do so. In South East London this was the case even when they joined forces to form larger joint commissioning groups. Moreover, PCTs need the support of the strategic health authority (SHA) to drive successful implementation of major service change and, to achieve this, the SHA will usually need to bring about organisational change.

The coalition government's decision to transfer commissioning responsibility from PCTs to smaller GP consortia will further weaken commissioning levers to effect service improvement across trust boundaries in emergency and network services. GP consortia will have even less expertise and commissioning experience than PCTs; information asymmetries will be even more pronounced; and understanding of how to shape the 'quasi-market' will be even less developed. Since GP consortia will be much smaller than PCT joint commissioning groups, and SHAs are to be scrapped, it is unlikely that GP consortia will be successful in driving major service improvement in emergency and network services.

Recent successes in stroke and trauma services highlight the potential of strong commissioning to markedly improve patient outcomes in ways that are cost-effective, especially in emergency and network services. This raises the important question of whether strategic planning of non-elective and emergency services to deliver best practice care for all patients is to take place in future. If so, who will be responsible for making it happen? Since, for the reasons given above, GP consortia are unlikely to be able to fulfil this role, the new NHS Commissioning Board will need to be given the statutory powers and the capability to perform it effectively; and its powers will need to extend to all hospital providers, not just financially challenged trusts. If the NHS Commissioning Board is not given appropriate powers, then the system will gravitate closer to a pure 'market forces' model – with the adverse consequences noted above.

Sixth, the best available means of bringing about reconfiguration along patient pathways will often be to support acquisitions of financially challenged trusts by high-performing foundation trusts. Those foundation trusts which have existing networks of care and high performance ratings will often be best placed to drive accelerated adoption of best practice models of care, bringing much better patient outcomes for all patients served by the enlarged trust. Acquisitions of 'failing' trusts, by foundation trusts or anyone else, are the logical outcome of competition and choice in health care services. They are also the most practicable means by which the NHS Commissioning Board can use strong commissioning powers to effect desirable service reconfiguration locally. Concerns about adverse impacts on quality of contestable services arising from reduced competition if acquisitions do go ahead should be weighed against the deterioration in quality and loss of opportunities to improve quality if they do not.

However, acquisitions of financially challenged trusts (by foundation trusts or anyone else) will remain a purely theoretical option unless the Department of Health/NHS provides transitional funding to pay for the large, one-off restructuring costs and agrees

⁵⁰ The existing large variations in quality of care are highlighted in 'The NHS Atlas of Variation in Healthcare' (QIPP Right Care 2010).

to refinance legacy debt (in ways compatible with competition law). The net cost of doing so is likely to be much less than the cost of continuing to fund the deficits of financially challenged trusts so that they can continue providing sub-standard care until they fail, and then picking up the pieces.

The government has some tough decisions to make. It can decide to leave the problem to be sorted out by the market, with predictable adverse consequences for patients (especially those served by financially challenged trusts) and the taxpayer; or it can give the NHS Commissioning Board strong levers to commission strategically, across a whole sector, those services that cannot sensibly be commissioned locally. A further option is to support and facilitate high-performing foundation trusts to acquire financially challenged trusts as a means of bringing about desirable service reconfiguration that drives up quality and drives down costs. Given the scale of the challenge presented by the cold financial climate, these decisions have to be made soon.

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Appendix A: Explanation of technical terms

Productivity level is a measure of the inputs required to provide care to a given number of patients. Inputs are people, capital (land, buildings, equipment, etc) and consumables (drugs, etc). In a typical hospital, people costs make up 65–70% of total costs; capital and capital maintenance costs, 10–20%; and consumables 15–20%.

$$P = N/Q + K/Q + C/Q$$

where P = productivity

N = staff numbers (average over the year)

K = capital employed (average over the year)

C = volume of consumables used (over a year)

Q = number of patients (over a year).

Productivity improvement is a measure of the reduction in inputs needed to care for a given number of patients. Since capital employed is fixed in the short term and consumables are closely linked to the number of patients, major productivity improvement requires large improvements in staff productivity.

For a given number of patients, large improvements in labour productivity must involve a significant reduction in the total number of staff employed over a year.

Example

Staff productivity = N/Q

Year 1 Assume $N = 1,000$ staff, $Q = 100,000$ patients

Staff productivity = 1 staff/100 patients

Year 2 Assume $N = 950$ $Q = 100,000$

Staff productivity = 0.95 staff/100 patients (so 5% reduction in staff = 5% staff productivity improvement)

If staff productivity increases more rapidly than growth of activity, then staff headcount must fall. An $x\%$ increase in productivity and a $y\%$ increase in activity implies an approx $(x-y)$ percentage reduction in staff headcount.

Example

Year 1 $N = 1,000$ $Q = 100,000$

Staff productivity = 1 staff/100 patients

Year 2 Assume 5% productivity improvement and 2% activity growth

So activity grows to 102,000

Staff productivity = 0.95 staff/patient

... and so $N = 969$ (an approx 3% reduction compared to year 1)

Average cost is an important concept because Payment by Results (PbR) tariffs are based on the average cost of providing services across all hospital trusts in England. To restore financial balance, a trust in deficit must reduce its average cost to the level funded in tariffs.

Average cost per patient in a service is the annual cost of providing the service divided by the number of patients treated. The annual cost of providing the service is the number of people employed times the average pay rate, plus the amount of capital employed times the cost of capital, plus the amount of consumables used times the average cost of consumables.

$$AC = N/Q(CN) + K/Q(CK) + C/Q(CC)$$

where N,K,C and Q have the meaning as in the productivity formula above, and:

CN is the average pay cost per staff number

CK is the average cost of capital employed

CC is the average cost of consumables used.

It is apparent that average cost can fall only if:

- productivity improves or
- the unit cost of inputs goes down.

The cost of capital is fixed and the cost of consumables is largely determined by factors outside the control of hospital management. Staff pay costs are set nationally, and, although reductions in real wage rates may be feasible in the short term (viz the current pay freeze), in the medium term, pay costs are unlikely to fall sharply and permanently. Therefore, the only way in which large average cost reductions can be achieved is by large improvements in productivity; this requires a significant reduction in staff numbers treating an increasing number of patients without any deterioration in quality of care.

What are the mechanisms by which staff numbers can be reduced without causing any deterioration in the quality of patient care?

Hospital staff can be crudely categorised into medical, nursing and non-clinical staff.

$$N = M + NS + CS$$

where N = total staff numbers

M = medical staff numbers

NS = nursing staff numbers

CS = non-clinical staff numbers.

The number of medical staff required to maintain essential services 24 hours a day, 7 days a week (24/7) is determined by the minimum required medical staffing levels and limits on the number of hours that medical staff may work. In practice, even if staffing levels are above the minimum requirement, reducing medical staff numbers, at least in the short term, is extremely difficult. Therefore, once 'obvious' medical staffing inefficiencies have been eliminated, medical staffing costs are more or less fixed. Moreover, medical staff are the most expensive category of staff employed by trusts.

Nursing staff numbers are most strongly correlated with the number of open acute wards. Each acute ward must maintain three-shift nursing teams at full strength providing nursing care 24/7. Reducing the number of acute beds will have little impact on costs unless whole wards can be closed. If whole wards can be closed, then the reduced need for three-shift nursing teams will allow significant reductions in nursing staff costs.

Meaningful, if somewhat lower, savings can be achieved if acute wards are converted into intermediate care/stepdown wards. The number of nurses required per patient is significantly lower than on acute wards.

Non-clinical staff fall broadly into three categories: nursing support staff (porters, ward assistants, outpatient receptionists, etc); facilities management staff (cleaners, building maintenance, etc); and corporate staff (Human Resources, Finance, IT, general management). Nursing support staff numbers are roughly correlated with the number of open acute wards. Facilities management staff numbers are a function of the size of the estate. In PFI hospitals, these are fixed costs because the trust is contractually bound to pay for them at the pre-agreed cost for the duration of the contract.

Understanding stranded costs

Example

Cost of operating acute ward per annum £2 million

BEFORE CLOSURE	Fixed costs	Nursing staff costs	Consumables
Trust 1 (%)	10	65	25
Trust 1 (£m)	0.2	1.3	0.5
Trust 2 (%)	20	60	20
Trust 2 (£m)	0.4	1.2	0.4

Both trusts close a ward, fixed costs remain unchanged, consumables and staff costs assumed to go down to zero in both trusts.

AFTER CLOSURE	Fixed costs (£m)	Nursing staff costs (£m)	Consumables (£m)
Trust 1	0.2	—	—
Trust 2	0.4	—	—

Stranded costs of Trust 1 (lower fixed costs) = £0.2 million

Stranded costs of Trust 2 (higher fixed costs) = £0.4 million

Economies of scale in essential services

Essential services such as emergency medicine and surgery are sized to meet expected peak demand given the population served by the service. For any given required capacity, costs are substantially fixed, at least in the short term. With high fixed costs, average costs are a function of the level of demand for the service. If the volume of activity falls, then average costs will tend to increase. If the volume of activity increases, then average costs will tend to fall. The higher the fixed costs, the higher the sensitivity of average costs to changes in the volume of activity. Since PFI hospitals have high fixed costs, financial performance is highly geared to the volume of activity. If reconfiguration increases the volume of activity then financial performance is likely to improve significantly. Conversely, if reconfiguration reduces the volume of activity at these sites then the financial performance will deteriorate and the response to restore financial balance is likely to induce a deterioration in quality as well.

Competition and choice tends to shift activity from poor performers to good performers. If the poor performer also has high fixed costs, then the loss of income will tend to increase average costs and worsen the financial position more than would be the case for a trust with lower fixed costs. The risk is that the greater financial pressures will cause a downward spiral of worsening finances and quality of care, and further loss of patients and income.

Rapid productivity improvement creates additional effective capacity

If a hospital trust improves productivity more rapidly than the growth of activity then the result is an effective increase in available capacity. More patients can be treated without an increase in staff or capital. An individual trust may be able to attract more patients and use the additional capacity to provide care for more patients; in doing so it will also improve its financial performance. However, in a cash-constrained world, it is not possible for all trusts to attract more patients (because there is not enough money to pay for all the activity). Some trusts must therefore take out excess capacity and eliminate stranded costs. Reductions in staff headcount and closure of some services at some sites does not mean that services are being cut back or patients are not receiving good care across the NHS as a whole. Rather cutbacks at some trusts are the consequence of major improvements in productivity achieved by other trusts, which enable the NHS to provide high-quality care for all patients within budget, as a result of resources being used more productively.