

A local hospital model
for London

Contents

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1. An overview and key findings	3
1.1 Clinical issues	4
1.2 Financial and organisational issues	4
2. Introduction	5
2.1 Purpose of the project	5
2.2 Context for the project	7
2.3 Assessing the change and its impact	9
2.4 The methodology of the project	9
3. The organisation of clinical services in the local hospital	12
3.1 The local hospital – An overview	12
3.2 Key service areas of the local hospital – Acute assessment and general medicine	16
3.3 Key service areas of the local hospital – Surgical specialties	21
3.4 Key service areas of the local hospital – Critical care	25
3.5 Key service areas of the local hospital – Paediatrics	28
3.6 Key service areas of the local hospital – Obstetrics	31
3.7 Issues arising for the workforce	34
3.8 Further work on clinical issues	37
4. The financial implications of the local hospital model	40
4.1 Background	40
4.2 Methodology	41
4.3 Results	45
4.4 Transitional costs	51
4.5 Clinical costs and productivity	51
4.6 Payment by Results	52

5. Managing the changes	53
5.1 Perceptions of the proposed models in acute trusts	53
5.2 The organisational features of local hospitals	53
5.3 Managing the transition	55
5.4 Policy issues	56
5.5 Risks	57
<hr/>	
6. Areas of further work	60
6.1 Areas of further work – Pan-London	60
6.2 Areas of further work – PCTs	61
6.3 Areas of further work – Clinical Advisory Group	61
<hr/>	
7. Conclusion	62
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A technical report *The clinical service model for local hospitals* is available on request by calling **020 7932 3700**.

1. An overview and key findings

Lord Professor Darzi set out a compelling vision for the sustained improvement of health and healthcare across London in *A Framework for Action*. The vision described a renewed focus on health improvement, a reduction in health inequalities, the introduction of new service models and, above all, a determination to significantly enhance quality, outcomes and patient experience.

Healthcare services will be improved in a range of delivery settings – from major acute hospitals providing high-quality specialist care, through to polyclinics providing a wider range of integrated services in local communities. The local hospital is envisaged to play a particularly critical role in this delivery system. It will remain the main provider of acute services to local communities and will assume a role at the centre of a web of important connections. For example, it will connect with polyclinics to care for patients with long-term conditions; and with major acute centres to enable the safe and effective care of patients needing specialist expertise.

This report demonstrates that the local hospital model has the potential to be clinically viable and to improve the quality of care offered to patients. This applies both to services delivered on the local hospital site and those provided as part of a wider network. The improvement in services will be based on:

- the development of effective clinical networks with partner organisations;
- a rigorous approach to the planning of change;
- a strong focus on the workforce requirements in the local hospital;
- effective organisational and clinical leadership;
- strong commissioning – focused on quality, outcomes and patient experience.

While some services will move out of local hospitals, they will not be lost to the community they serve. They will either be more accessible, provided in community settings including polyclinics; or, where there is a clear case to do so, move to major acute hospitals to improve the outcomes from specialist clinical treatment, or to make services more sustainable.

Importantly, the great majority of services that are provided in the local hospital will remain. Local hospitals will still function as, and feel like, acute hospitals. While there may be impact on individual institutions, there will be significant benefits for patients. In addition, there are specific proposals to improve the quality of care provided in local hospitals that have strong support from Healthcare for London's Clinical Advisory Group.

The detailed findings from the project are summarised in sections three and four under the headings of clinical, financial and organisational issues. The work on indicative clinical models (see section three) has been driven by the need to respond to changes in the organisation of services, and by the opportunity to improve the service that is provided to patients in a local hospital.

Financial viability in local hospitals poses a significant challenge but can be achieved if change is planned carefully and managed over an appropriate period. To achieve this, primary care trusts (PCTs) and acute trusts will need to work closely and collaboratively to strike a balance between creating the conditions for innovative solutions, and managing the financial risks inherent in the change process.

It is important to note that there is not, and should not be, a one-size-fits-all version of the local hospital. The range of services provided by a local hospital, and the way it develops needs to be guided by local circumstances and needs. The 'shape' of acute trusts may well vary considerably, depending on where they choose to focus their interests and partnerships.

The task of managing change will not be an easy one. The scale of changes envisaged in *A Framework for Action* are greater than the NHS in London has previously sought to undertake. Such change will only be successful if there is the capability in all parts of the NHS system to deliver strategic transformation.

Some of the key issues that need to be tackled are listed below and are described in more detail in the main body of the report.

1.1 Clinical issues

These include:

- the need to give priority to patient safety when making changes to services;
- the need to change the organisation of clinical services to support improvements in clinical care, for example the organisation of emergency services;
- the importance of developing clinical networks which span organisational boundaries and which are clearly managed, in order to provide services in different settings to the required standard. These would be different from some existing clinical networks, in that they would have responsibility for governing and delivering services across the network;
- ensuring that the skills of the workforce are appropriate to changing service needs and that they are used productively;
- putting protocols and practices in place for managing patients who present at the local hospital but cannot be immediately treated there;
- ensuring that patient transfers are managed effectively, in a tight system of governance, and monitored to confirm that transfers are being well-managed.

1.2 Financial and organisational issues

These include:

- developing the ability to assess the impact of changes on organisations and services through modelling different scenarios, and mitigating any risks that are evident at the level at which the commissioning of acute services takes place;
- developing new organisational forms that will provide a viable business model to support the effective delivery of clinical services;
- enhancing the capability of commissioners and providers to respond to changing circumstances by:
 - developing and commissioning new clinical and organisational configurations;
 - developing and commissioning partnerships to provide services in different ways;
 - determined action to manage costs both in clinical and non-clinical areas;
 - retaining a focus on the financial sustainability of the changes on a system-wide basis;
 - developing capability in change management, including strengthening clinical leadership;
 - tackling the perception that will exist in some places that the local hospital is a second order provider of care. The local hospital will provide essential elements of care, and doing this to a high standard is of great importance for the community served;
 - acknowledging that new organisational forms or alliances may emerge to enable sustainable financial and organisational development.

These issues are discussed further in sections four and five.

2. Introduction

2.1 Purpose of the project









The local hospital project was commissioned by the London Commissioning Group as part of the work to take forward the proposals in *A Framework for Action*.

The purpose of this project was to determine how local hospitals could work in the context of the wider changes taking place in London, and deliver high-quality and sustainable services. The report also undertook to assess the financial implications of the proposed changes, and to identify any issues and risks that would occur in making the transition from the current organisation of services in London, to the future configuration. A primary focus throughout the project was to ensure that services in the local hospital could be provided safely and did not require a significant number of patient transfers or complex arrangements for managing certain patients.

The local hospital is not an established form of organisation for acute services. Consequently, to test the concept a number of assumptions have been made. Some of these assumptions have been chosen to identify and test illustrative scenarios for the local hospital, particularly financially, rather than to reflect an explicit view of what will happen. This was done specifically to make the scale and impact of the changes transparent for commissioners and acute trusts, so that they can plan effectively to manage the consequences of their decisions. The local hospital project report needs to be read as one which is seeking to illuminate the debate, rather than providing a comprehensive and definitive answer.

The work on the project was informed by the description of the local hospital, and the services it would provide, proposed in *A Framework for Action* and illustrated in figure one overleaf.

Figure one: The services proposed for a local hospital (*A Framework for Action*)

Activities	Hours open per day
 Inpatient bed-based community rehabilitation with full range of community services	12
 A&E Acute non-complex medicine Emergency non-complex surgery	24 24 12
 Outpatient services requiring hospital infrastructure	12
 HDU for non-ventilated patients, facility for intubation and transfer of patients	24
 Regular attendees, e.g. renal dialysis	12
 Paediatric assessment unit	18
 Obstetric unit with a MLU and level 1/2 NICU (in some local hospitals)	24
 Diagnostics including CT	24**

Infrastructure

- Consulting rooms for outpatient services
- Procedure rooms
- Theatres
- HDU (but not ITU)
- Rehabilitation and intermediate care
- Acute admissions unit
- Inpatient beds
- Pathology satellite laboratory*
- Diagnostic imaging including CT scanning

Patients and staff

- Open 24/7
- Serve a population of around 200,000-250,000
- Have a similar staff composition to current district general hospitals

*Pathology satellite laboratories provide rapid test results needed by A&Es. Key staff will include consultant haematologists
**Core services only

Source: Healthcare for London, *A Framework for Action*

2.2 Context for the project

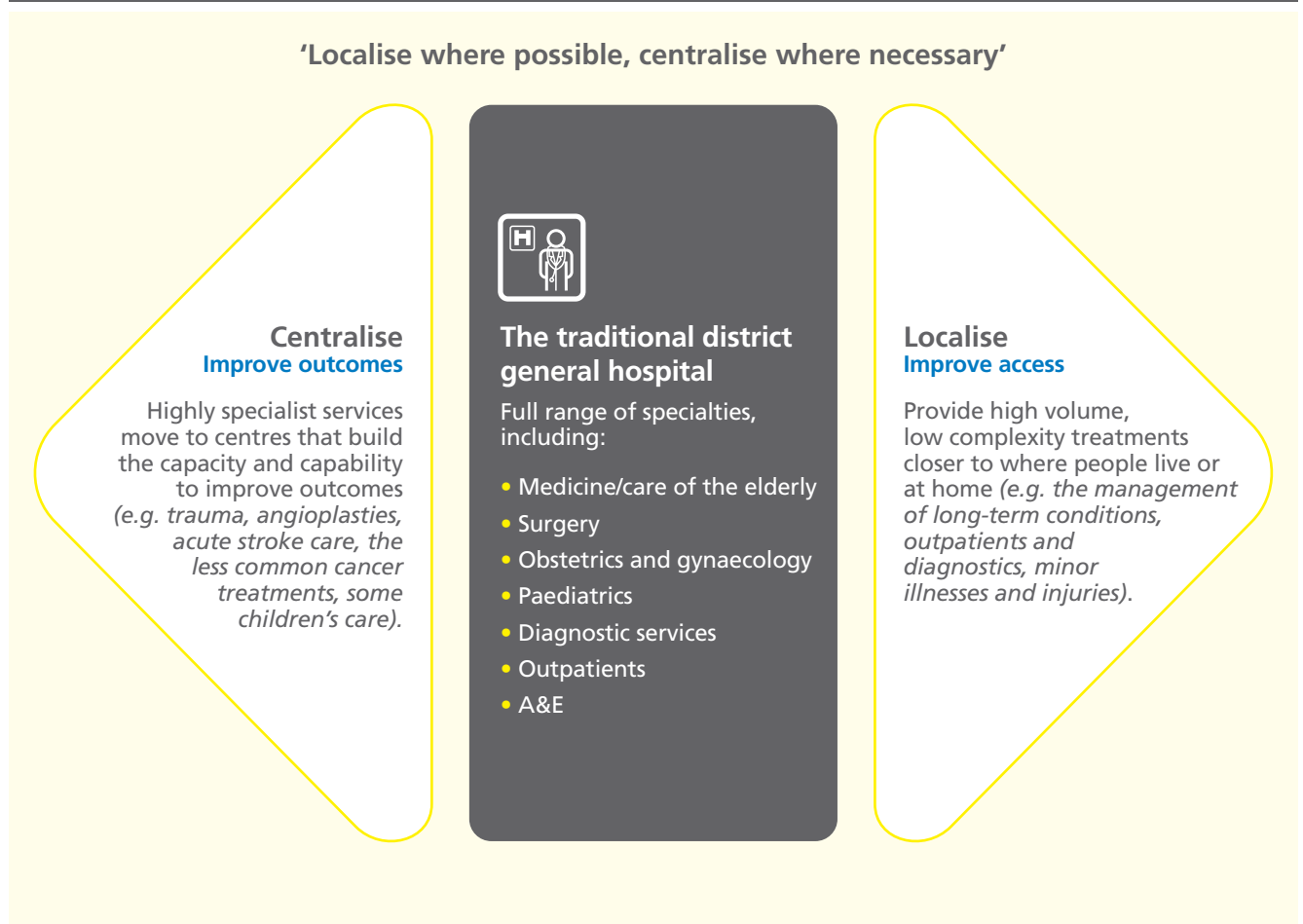
The proposals set out in *A Framework for Action* provide the immediate context for the commissioning of the project. These proposals were the subject of a public consultation, *Consulting the Capital*, and were endorsed by a joint committee of PCTs (JCPCT). There is also a wider context of reform in the NHS and an increased expectation from the public. These are driving improvements in effectiveness and efficiency, and enabling more responsive services.

The case for change for health and healthcare services in London was identified in *A Framework for Action*. Of particular relevance to this project

are proposals to regionalise some specialist services, and to develop significantly the range and volume of care delivered in local and community settings.

Figure two illustrates the impact of the changes on district general hospitals, based on the 'localise where possible, centralise where necessary' principle set out in *A Framework for Action*. This figure shows that the traditional district general hospital will inevitably experience change as we develop service models that enhance local access and improve quality.

Figure two: The impact on the district general hospital



It is important to stress that the strategy to improve healthcare, which is focused on improving the clinical standards of services and/or making services more accessible for people in London, is driving changes to the historical model of the district general hospital.

The UK, and London in particular, has fallen behind international best practice in some areas of healthcare. For example, many parts of America have introduced major trauma centres and reduced deaths from major trauma by up to 40%, whereas the UK has not implemented the same changes. Subject to consultation, London will soon lead the country in making this change. Another example of change seen in parts of Europe and North America is the introduction of polyclinics or community-based care models, which group services in a way that provides patients with more accessible services focused around their needs. These examples illustrate some of the changes flowing from the implementation of the proposals in *A Framework for Action*. They are designed to improve the healthcare system and deliver a wide range of benefits.

Changes to district general hospitals have to be viewed as part of the overall system of healthcare that will develop as improvements are implemented. Services may no longer be provided in the same physical location as before, but services will not be lost to the community they serve. They will be relocated to improve the quality of service provided, and for many services they will be more accessible. It is evident that some services will not be provided at all hospitals. However, the reasons for change are clear – to improve outcomes and access for the patient.

The changes will have an impact on the institutions themselves. This report describes the nature of these changes and makes recommendations about how they can best be managed.

The model of a district general hospital was developed in the 1960s. Since then, medical practice, technology, disease patterns and staffing requirements have all made the organisation of services more difficult to sustain, particularly in smaller hospitals. In this context it is unsurprising that changes to the way many services are organised and delivered need to occur, and in many ways these changes are overdue. There are ways to provide more responsive services and to improve the value for money which the NHS delivers for Londoners. Healthcare for London articulates the opportunities for improvement in health and healthcare in a coherent strategic framework and its implications need to be analysed and understood.

It is important to note that some of the clinical interdependencies traditionally present in a district general hospital are affected by the proposed changes. For example, the relationship between emergency medicine and surgery (particularly in the clinical management of people presenting with abdominal pain), and the relationship between 24 hour paediatric cover and maternity services. These relationships became an important focus of the clinical discussions throughout the project.

2.3 Assessing the change and its impact

The proposals for the improved delivery of healthcare services set out in *A Framework for Action* would require a change to the traditional grouping of services found in a district general hospital. While many hospitals have some of the features found in the description of a local hospital, none at present are operating in a delivery environment characterised by designated major acute hospitals and specialised centres, identified elective centres and polyclinics.

As the local hospital does not represent an established way of working the project had to combine:

- clinical discussion on the proposed service models and questions about the organisation and safety of those models;
- use of live examples where available;
- informed thinking about the indicative clinical models that have been developed;
- modelling of the financial impact on acute trusts based on the development and application of assumptions about the case mix a local hospital could provide.

As part of the project, a set of case studies on existing hospitals that have some, or many, elements of the type of facility described in this report as a local hospital has been compiled. These are available in the technical report.

2.4 The methodology of the project

The project comprised three main elements which form the basis of this report.

These elements were:

i) Assessing the clinical impact of applying the local hospital model

Four acute trusts volunteered to participate in the project. These were:

- Barking, Havering and Redbridge Hospitals NHS Trust (BHRT)
- Ealing Hospital NHS Trust (EHT)
- Epsom and St. Helier University Hospitals NHS Trust (E&StHT)
- West Middlesex University Hospital NHS Trust (WMUHT).

The clinical assessment included discussions with clinical staff from the four acute trusts on the implications of applying the service models described in *A Framework for Action*, and the activity assumptions used in the technical paper which informed *A Framework for Action*. The acute trusts were asked to modify these assumptions where they judged this to be clinically appropriate. These discussions also informed some of the views on the organisational issues for acute trusts, and for the wider system, in implementing these changes. The commissioning of services was also discussed with PCT representatives.

Linked to the changes in the provision of services, the issue of clinical interdependencies, and the impact of changes on clinical organisation, a number of important questions emerged regarding the local hospital model, which were:

- What impact will the development of urgent care centres (UCC) have on A&E and how best can acute assessment be organised to deliver high-quality care?
- How would acute admissions be affected if overnight emergency surgery was consolidated and how could patients be safely managed?
- How can emergency surgery be organised to improve the consistency and quality of care, with the emergency service in the local hospital functioning 12 hours a day?
- What would the impact be of having a level two critical care service in the local hospital?
- How should a paediatric assessment unit (PAU) function, and what is the best form of organisation of paediatric services for the local hospital and beyond?
- How can obstetrics deliver a safe service if paediatric cover is not available 24/7?

These were addressed by developing proposals for the organisation of these clinical services, described in section three. In some cases, the clinical response to these questions has led to a proposed modification to the core services of the local hospital.

ii) Developing clinical models

Work was undertaken in conjunction with members of the Clinical Advisory Group and other clinical advisors to develop clinical models for key services, focused on delivering a safe, high-quality service. The workforce required for the delivery of each service was taken into account when assessing how to develop and improve the service.

In addition, research was undertaken to find evidence of the working of different elements of the local hospital model nationally and internationally. This research is detailed in the technical report.

iii) Modelling the financial impact

Two approaches were taken to the financial modelling of a local hospital. The first approach was used to provide the information for this report. It was based on the application of the activity mapping to different care settings developed for the *A Framework for Action* technical paper. This mapping took a proportion of the highest volume Health Resource Groups (HRGs) for different types of activity, covering the main specialties. The total activity for London in these HRGs was then mapped to the setting where it could be delivered.

Based on the delivery of the services listed in figure one, this activity mapping process was applied to the existing activity of the four acute trusts. Some adjustments were made to reflect the extent to which activity already flows to larger hospitals in the local area for each. To derive the income and expenditure (I&E) position of each acute trust, assumptions were made about the cost reductions which would be associated with reductions in activity levels. This model is referred to as the 'base case'.

As part of this approach, modifications to the clinical assumptions and case mix were determined by the acute trusts, based on their judgement of what would be clinically safe. This is referred to as the 'adapted case'.

As with the base case, cost reductions were applied to derive each acute trust's income and expenditure position. The adapted case provides an important comparator with the base case, and indicates the range of activity and income in which the local hospital might function. The assumptions made do not reflect the local intentions of commissioners, but illustrate the breadth of the impact of different scenarios on acute trusts.


The second approach to the financial modelling involved constructing a template of income and costs at a service line level, for the main services in the local hospital. These were based on clinical models developed in conjunction with the Clinical Advisory Group. This financial model was built up by identifying the workforce requirements for services and applying acute trust information to add on further elements of cost.

As the project developed, it became clear that there was scope for the differentiation of service provision beyond the local hospital services identified in *A Framework for Action*. As a result, a template was developed which described the range of services that could potentially be provided in the local hospital. These are described as 'core' and 'additional'. The core services correspond to the description in *A Framework for Action*. The additional services illustrate some of the potential for other services to be provided, and give an indication of some of the debate that took place about the diversity of provision in a local hospital that could be considered. These are shown in figure three.

Both models, and supporting user guides, are available for PCTs and acute trusts to use, to test different scenarios. The second financial model will also allow them to test the economics of different service lines and their sensitivity to cost variations in different elements of service provision, including assumptions about productivity.

For the purposes of clarity, the work on clinical services is presented in one section and the analysis of financial impact in a separate section.

Figure three: Core and additional services for the local hospital

Minimum core services model for a local hospital	Additional services dependent on quality and sustainability
 <p>A&E (24 hours – medical management and surgical assessment)</p>	 <p>Emergency surgery (24 hours)</p>
 <p>Paediatric assessment unit</p>	 <p>Elective surgery</p>
 <p>Urgent care</p>	 <p>Critical care/ITU</p>
 <p>Emergency non-complex surgery (12 hours)</p>	 <p>Primary care centre/polyclinic</p>
 <p>Non-complex acute medicine (inpatient)</p>	 <p>Oncology/chemotherapy</p>
 <p>HDU/intubation facility</p>	 <p>Paediatric inpatients</p>
 <p>Multi-disc specialist palliative & end-of-life care team</p>	 <p>Midwife-led birth unit</p>
 <p>Rehabilitation and community services (inpatient)</p>	 <p>Other diagnostics (e.g. MRI)</p>
 <p>Outpatients and regular attendees</p>	 <p>Full pathology</p>
 <p>Consultant-led obstetrics with level one neonatal care</p>	
 <p>X-ray, ultrasound, CT</p>	
 <p>Pathology satellite laboratory</p>	

Source: Healthcare for London

3. The organisation of clinical services in the local hospital

This section focuses on the main messages from the discussions with acute trusts and highlights some of the key features of the indicative clinical models. These clinical models have been developed in conjunction with the Clinical Advisory Group and other clinical advisors. They have been developed to take account of the proposed changes in services and to identify ways in which services can be improved.

3.1 The local hospital – An overview

The local hospital can readily provide a high proportion of the elective activity that is undertaken currently in district general hospitals, and retain the emergency element of its services in a number of specialties. New clinical delivery models will be required and a number of risks and challenges will need to be addressed.

If developed effectively the local hospital will provide a bridge between specialist services and community-based services. The local hospital will have strong links both into the community and into specialist services provided in major acute hospitals. The local hospital can also play a role in enhancing and developing services such as rehabilitation and care of long-term conditions, palliative and end-of-life care, both as a part of direct delivery and as a co-ordinator of services. In addition, there will be opportunities to work more closely with social care and to co-locate services or teams where this is appropriate to the area in which the hospital functions.

3.1.1 Clinical networks – From the community to specialist units

The development of clinical networks emerges as a major issue in the development of services that will focus on the 'right person, right time, right place' maxim. Networks will enable acute trusts to maintain agreed standards, enable the implementation of commissioned care pathways and allow clinical staff to apply their skills in the most appropriate setting for patients. For organisations, this new way of delivering clinical services could prove to be challenging unless they find ways of making networks function effectively, whilst straddling organisational boundaries.

The physicians in the local hospital can, and should, look more to providing services in the community including integrated provision of the management of long-term conditions, outreach acute services and integrated admission prevention services, particularly for older people and children.

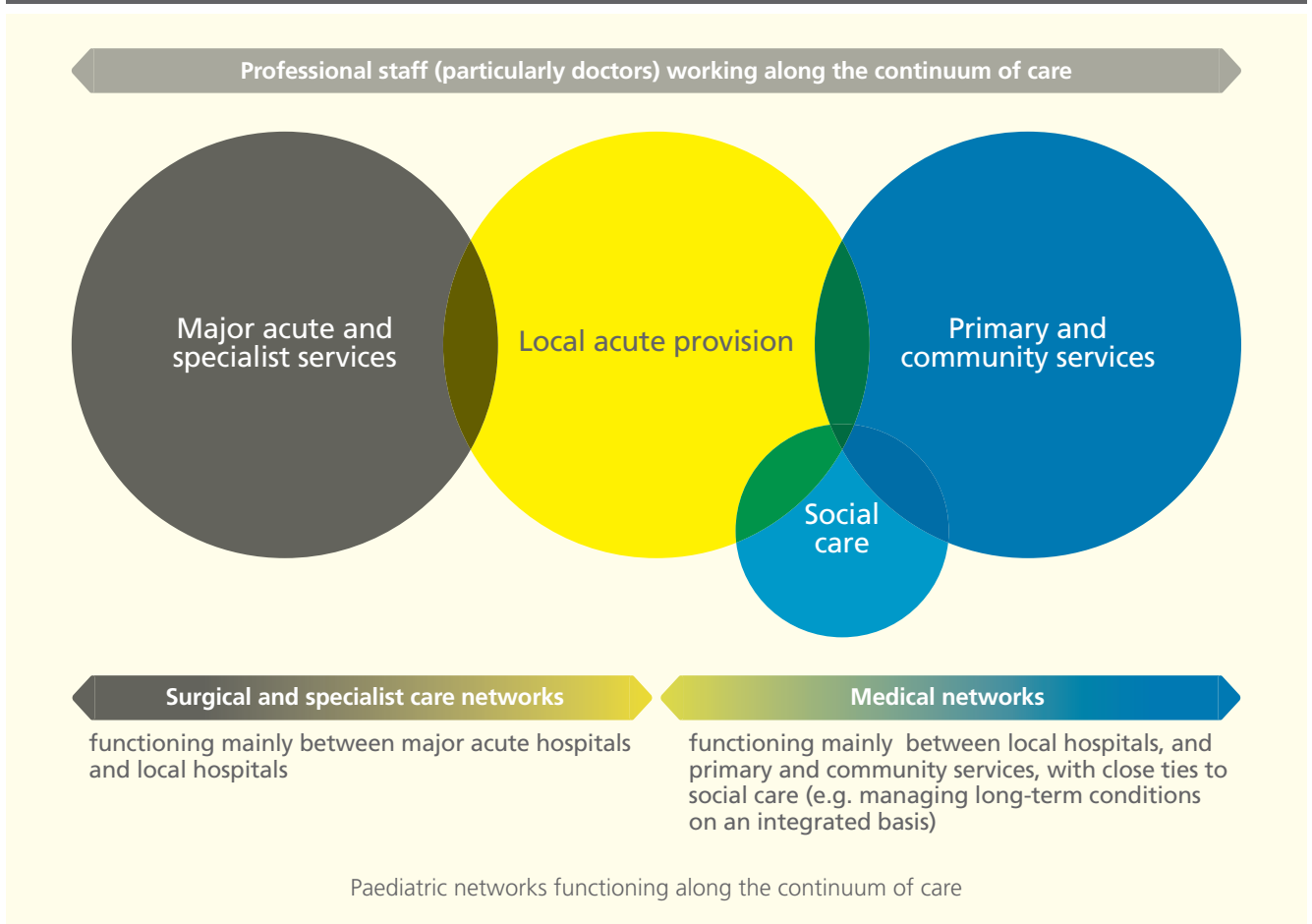
Surgeons and paediatricians will increasingly work in clinical networks, providing services to two or more sites, with paediatricians also working in the community. The rotas associated with this need to be constructed to ensure the best use of clinicians' time. For example, staff would work on a particular site for a whole day and ideally not work on more than two sites in total.

Networks also need to be developed for interventional radiology and endoscopy to ensure access to these services out-of-hours and in emergencies .

The development of clinical networks presents a major opportunity to reduce the impact of organisational barriers, and place patients and clinical staff at the heart of patient pathways as illustrated in figure four.

Attention needs to be given, as a priority, to the development of clinical networks. They will require new leadership, resources and governance arrangements. Commissioners can drive this change by starting to commission networks, and by agreeing and setting standards for the delivery of care within networks. This also raises issues about the payment for services (see section 4.7).

Figure four: A model for clinical networks



3.1.2 Clinical safety

During the course of the project a number of potential risks, which could result from making changes to the current organisation of clinical services, were recurrent themes. Many of these risks are discussed in the sections on specific clinical services. When making any changes, these risks need to be carefully considered, to provide assurance both to the public and professionals. The risks include:

- The management of serious abdominal cases which present at the local hospital, if 24 hour operating is not available. The vast majority of these can be fully managed within the local hospital, although there is a need for clear protocols for patients who require very urgent attention at night;
- The management of critically-ill patients if there is only a high dependency service operating with an undifferentiated medical take. The clear view which emerged was that it would be both necessary and feasible to sustain level three provision of critical care in the local hospital;
- Transfer of patients which is likely to increase in volume and will demand careful planning and organisation;
- Managing patients who self-present at the local hospital with urgent conditions such as aortic aneurysm or ectopic pregnancy. Well-developed protocols will be required to ensure the safe management of such patients;
- Running obstetrics without 24/7 paediatric cover, when there is a need for 24 hour access to resuscitation for very unwell babies. A number of different options for covering this service have been put forward;
- Sustaining safe maternity services. A number of factors are relevant in this regard including accepted workforce standards, overall volume of births and the management of high-risk births. If service reconfiguration is agreed to be necessary – with options including merger or networking of units – then there will be a requirement for excellent planning and implementation.

It is important to acknowledge that the current arrangement of services also involves risks, which have to be managed across the NHS. Healthcare for London provides an opportunity to seek, pursue and implement improvements that minimise risks to the greatest possible extent.

3.1.3 Case studies

As part of the work to test the concept of the local hospital, a study was commissioned and undertaken to find hospitals with some elements of the clinical configuration described in *A Framework for Action*.

The search involved contacting a number of hospital organisations, nationally and internationally, where it was understood some of these clinical characteristics existed. A full report on the study is included in the technical report.

A number of general points arose from this study. Firstly, it is clear that a number of organisations are seeking innovative solutions to the issues which face healthcare across the developed world. A number of examples have been found where service configurations have been, or are being, developed which move away from the traditional construct of a district general hospital. As a general theme these examples have the following characteristics:

- the separation of a full surgical service from an acute medical facility;
- the ability to provide obstetric care without necessarily having 24 hour paediatric services;
- the ability to manage patients who present at a hospital that has differentiated service provision and need to be treated at another hospital. Such patients need to be stabilised and have a safe transfer.

Of the hospitals found, which have these features, all operate as part of a wider network of provision. They have all been innovative in their development of staff roles, and often in the use of technology to support the implementation of changes. They also all seem to be motivated by the desire to sustain local access to acute care in different forms. Another characteristic is that they have developed particular areas of expertise, linked to the needs of their local community.

A number of hospitals have been identified, which have separated their full surgical provision from an acute medical facility. These hospitals have put in place arrangements with another part of their organisation to manage the consequences of this change, focusing on the immediate management and transfer of patients.

The PAU appears to be a feature more commonly found in the NHS. There are examples of this shown amongst the case studies, with different hours of opening and a differing range of service provision.

There are examples of obstetric units in hospitals without 24 hour paediatric cover, all of which have developed the role of the advanced neonatal nurse practitioner to provide first-line resuscitation for sick babies.

In the UK, the hospitals which have characteristics of the local hospital have level three critical care provision. Internationally, there are examples of hospitals which have a medical take with only level 2 critical care provision.

The case studies are provided as a reference document, intended to stimulate debate and discussion about ways in which changes to services can be managed. They do indicate that services have been established which reflect the main elements of the local hospital clinical model. Evidence of the impact of these examples is limited, but where available it indicates continued provision of high standards of care.

The fullest piece of research available was on the implementation of change at Central Middlesex Hospital, part of the *North West London Hospitals NHS Trust's Evaluation of the Working Time Directive/BECaD project at Central Middlesex Hospital* (J. Gore et al). The areas of study were: evidence of successful change management; ability of nurse practitioners to cover for junior doctors; improved efficiency of the 'majors' care pathway; and maintenance and/or improvement of hospital performance.

The findings were that:

- The organisation of clinical services (merged rotas and multidisciplinary teams such as the hospital at night team) where successfully established nurse practitioners took on some of the roles and functions of junior doctors, did not impact adversely on the journey for patients. The difference in median A&E completion times between nurse practitioners (two hours and 34 minutes) and junior doctors (two hours and 26 minutes), was clinically unremarkable and the perceptions of nurse practitioners were very positive.
- Efficiency of pathways improved in cases where a multidisciplinary approach was used 'optimally'. Further areas for improvement were identified.
- Hospital performance indicators were favourable:
 - throughput remained steady;
 - mean length of stay was significantly reduced in acute care by 3.2 days;
 - mean length of stay in emergency surgery was reduced by two days;
 - inpatient deaths fell by around two percent;
 - readmission rates remained steady at around 8-10%;
 - average A&E completion times remained steady at around two hours and 20 minutes, with some slight improvement and less variability.

The evaluation used a robust methodology but could not focus on all areas of the local hospital model and, as in all research, has its limitations.

3.2 Key service areas of the local hospital – Acute assessment and general medicine

3.2.1 Organisation of the service

The consensus from the project is that general medicine, which currently accounts for the majority of admissions to, and for the majority of bed days in, the acute hospitals, can function effectively and efficiently at a population level of around 200,000-250,000.

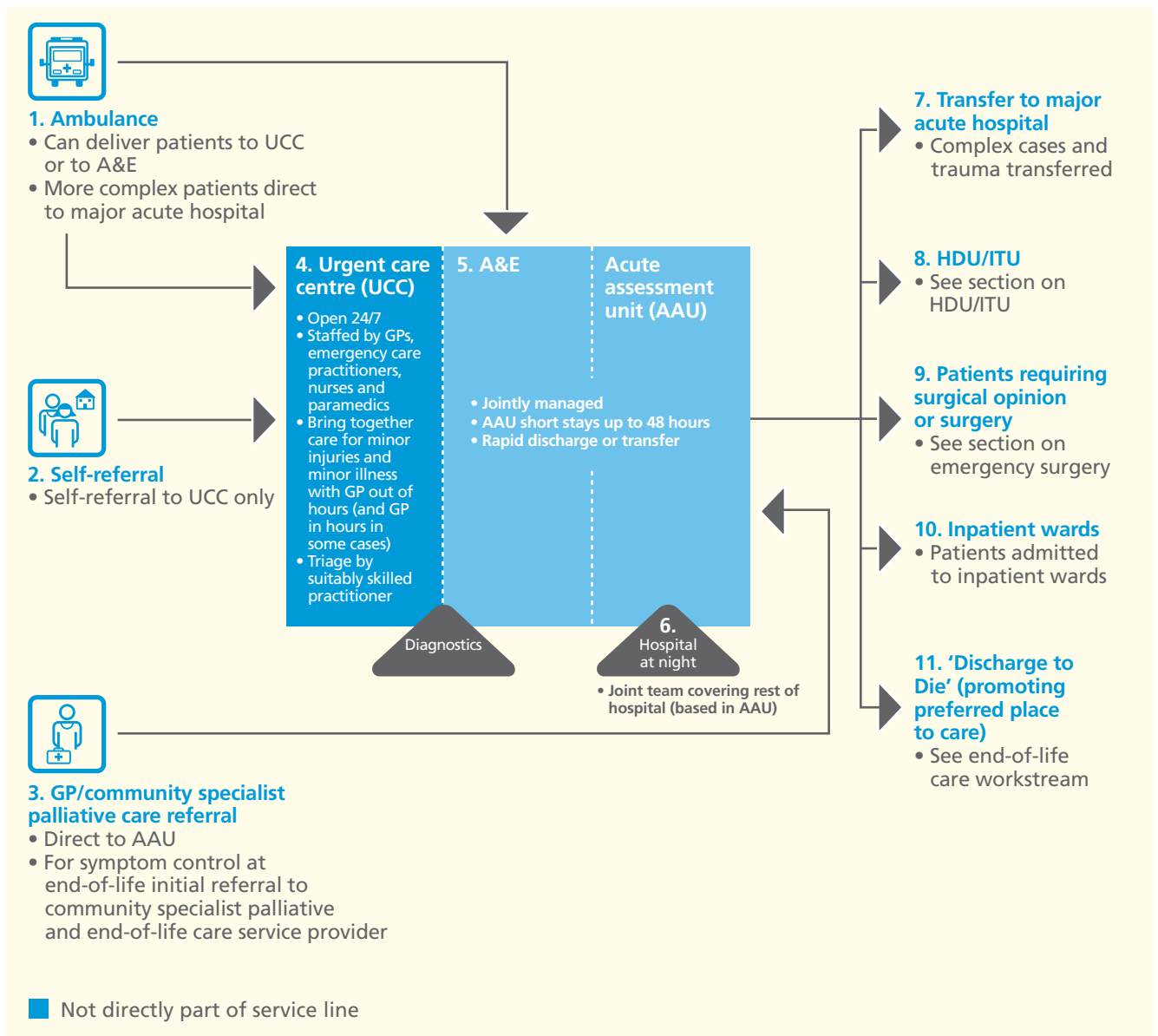
The organisation of acute assessments needs to change to improve the service to patients and to use resources more efficiently, not least because of the impact of establishing urgent care centres as a discrete entity, even if at the front door of the local hospital. Urgent care provision can work very effectively with the necessary skills in place. This would best be achieved by combining the skills of general practitioners, emergency nurse practitioners and emergency care practitioners (paramedics), to treat minor illness and injury.

The Royal College of Physicians (RCP) recommendations in *Acute Medical Care: The right person, in the right setting – first time*, published in October 2007, described the organisational arrangements that hospitals should be putting in place to manage the assessment of acutely-ill patients. The model (shown in figure five) was developed by the Clinical Advisory Group and contains many of the features of the system proposed by the RCP.

The main features of this model would be:

- clear separation of the local hospital acute assessment unit from the urgent care centre but with the ability to move patients flexibly between services, with effective streaming and triage, to ensure patients are managed appropriately. Where transfers occur, time spent in the urgent care centre should count towards the four hour target;
- a single integrated assessment process, with merger of A&E and medical teams, and dedicated time for emergency work;
- early access to senior opinion and diagnostics to expedite decision-making and commencement of treatment;
- well-planned service adjacencies, taking account of the need for staff skills to be used in different parts of the 'front end';
- integrated working with the discharge team to ensure that patients who can be appropriately managed in the community are discharged as early as practical.

Figure five: Indicative model for urgent care and acute assessment



3.2.2 Clinicians' views on the proposed organisation of acute assessment

The indicative clinical model, shown in figure five, was developed in conjunction with the Clinical Advisory Group and other clinical advisors, who supported the principles of organising acute assessment in this way.

In discussions with the acute trusts, it was clear that there is strong adherence to current forms of organisation of the assessment process. The advantages of the proposed form of organisation would need to be clearly demonstrated to persuade clinicians that the change will be of benefit to the effective management of patients.

3.2.3 Discussion

It is essential that the necessary skills are in place to ensure the effective management of patients. Flexing staff requirements to reflect demand has been undertaken by many trusts. This work needs to continue so that the cover provided by senior staff is extended into the evening and at weekends. This will mean substantial changes in working practice and will need to be specified by commissioners and be negotiated with individual acute trusts. The development of staff in the unit is described in section 3.7.

Commissioners should consider stipulating standards in their service specifications, as well as setting standards in their specification for the acute assessment process as a whole. Such beneficial changes could include stipulating the timeliness and seniority of opinion that should be met in the assessment of acutely-ill patients.

Clinicians considered that evidence-based protocols can be extensively used in the assessment of patients, to support effective decision-making and clinical management by all staff. Currently, the uptake of protocols is variable and needs to be more consistent. The 'Bedside Clinical Guidelines Partnership' is one example of a helpful, collaborative innovation in the development and application of protocols. This model could be adopted more broadly to support consistency of management of patients. The Map of Medicine online clinical knowledge resource could also be used as a vehicle to deliver guidelines for management. Acute trusts and PCTs should agree an approach to the use of guidelines to support safe, effective care.

The concentration of skills and resources in the first 48 hours of a patient's stay in hospital is estimated to result in around half of patients being discharged from the acute assessment unit. This has been demonstrated in the Atrium Medical Group in Holland, and this view was broadly supported by the Clinical Advisory Group members involved in the project. Patients who need to stay longer would be managed in a pool of beds for general medical patients. If the acute assessment unit is working effectively, the patients who are most ill would be managed there, and those going into medical beds would be more stable. Staffing would need to reflect how acuity changes through the hospital. An area will need to be designated for end-of-life care to ensure that particular attention is paid to privacy, quiet and adequate measures to promote comfort and dignity for dying patients and their loved ones.

There are a number of national and international examples of hospitals which provide medical care without onsite emergency surgery, and have developed safe practices to do so. The Academy of Royal Colleges also presented the view that medicine can be provided without 24 hour surgical operating in its document *Acute Health Care Services – Report of a Working Party* published in September 2007.

Another major aspect of general medical care discussed, was that of the management of patients with long-term conditions. There is enthusiasm from many hospital physicians for the further development of out-of-hospital care for people with long-term conditions. There is also a keenness to create joint working arrangements with primary care and community services for the management of these conditions. Improving the management of long-term conditions will come through intervening at an earlier point in exacerbations of the condition, and reducing admissions. This change in practice will benefit patients by providing a more responsive service and reducing their reliance on hospitals by managing their care more actively. It will reduce pressure on acute trusts, making the service more manageable and the delivery of timely care for those patients who are in hospital, easier to achieve. The development of integrated models of care was actively supported in a recent publication produced by the Royal College of Physicians, the Royal College of General Practitioners and the Royal College of Paediatric and Child Health. The document provides some examples of integrated care. The Department of Health's *National Primary and Community Care Strategy (NPCCS)* also gives emphasis to integrated care provision, driven by practice-based commissioning groups.

Another area highlighted in discussions with the Clinical Advisory Group was that of end-of-life care. There is strong evidence, extensively cited in the NPCCS, that hospitals do not manage care of the dying as well as they could. This is reinforced by the fact that around 54% of all complaints to the Healthcare Commission relate to patients' end-of-life care. The complaints were mainly about poor communication, and lack of basic comfort, privacy and psychological care. The basic care of people who are dying needs to be addressed in all hospitals and work on the NPCCS will be undertaken in London. While this strategy is focused on supporting people to die in their place of choice, where choice is an option, it is clear that many people will still die in hospital and need to receive better care. There is an opportunity to develop a more hospice-like environment in some hospitals as they adapt to the changes they will experience, and where this fulfils a need for the local community and is supported by commissioners. Early intervention and advanced planning for patients who may be coming to the end of their life ought to shift the emphasis of provision towards care at home. Various specialist palliative care services across the capital have developed integrated, multidisciplinary models with primary care between the hospital, home and hospice. For example, in addition to suitable hospital environments that aid care for the dying, protocols should also exist for rapid discharge of terminally ill patients who express the wish to die at home.

Conclusions

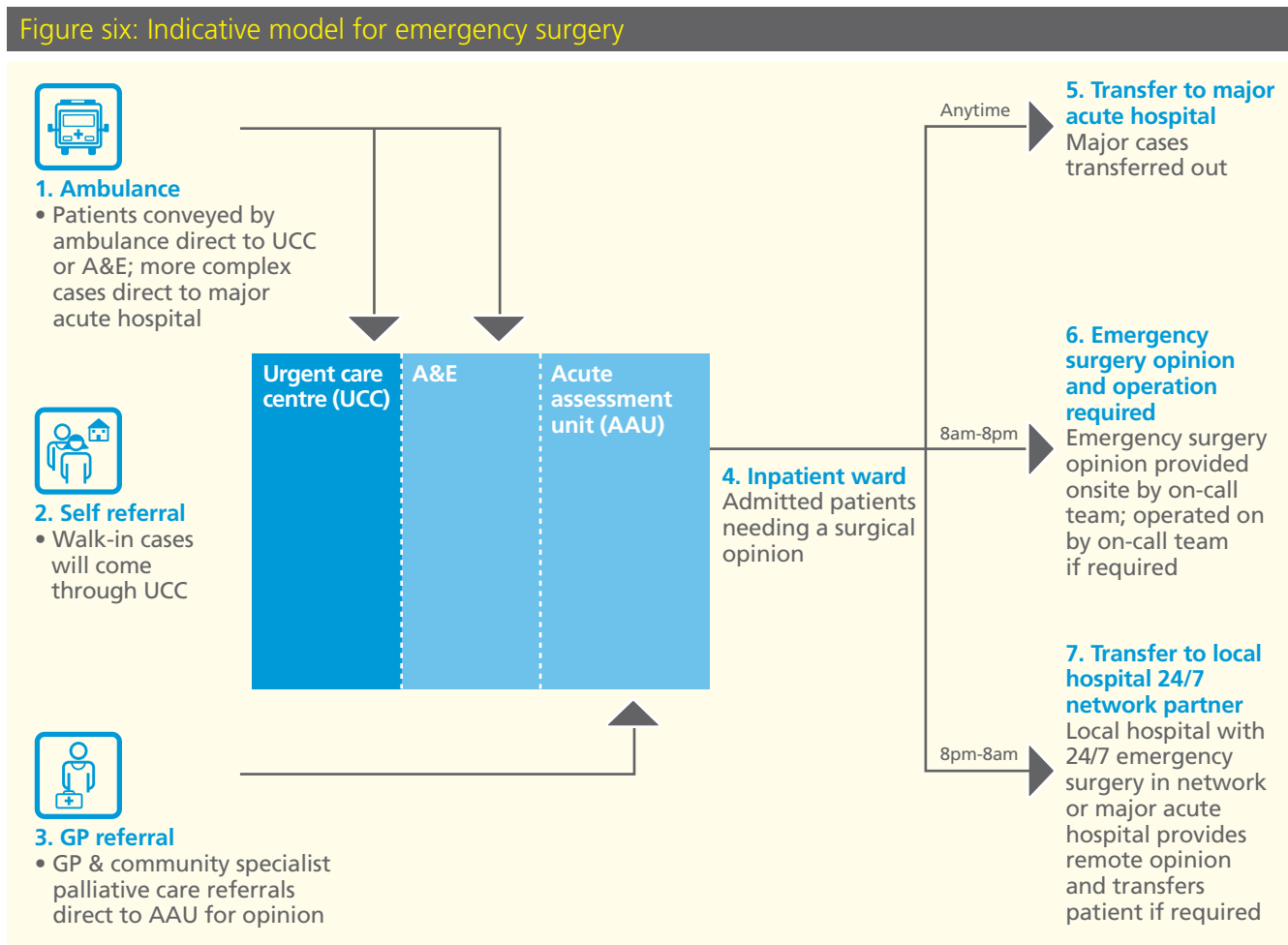
- Acute assessment and general medicine can be provided in a local hospital environment.
- Clear protocols would be required for the management of patients who need a surgical intervention that cannot be provided on a timely basis onsite (see section 3.6).
- The organisation of patient assessment would need to change with the separation of urgent care provision to provide a good quality, economic service. The indicative model has the potential to deliver these benefits but the application will be a local issue.
- The skills of the workforce are critical to the delivery of a safe service. There is a requirement for some development of skills and roles to support the model (see section 3.9).
- Commissioners should consider developing specific standards for the management of the acute assessment process, focused on delivering high-quality and safe care.
- The scope for delivering integrated management of long-term conditions, using the skills of primary, community and acute services, should be fully explored.

3.3 Key service areas of the local hospital – Surgical specialties

3.3.1 Organisation of the service

The local hospital can sustain provision of emergency surgery, but the organisation of the service needs to change. It is a widely held view that the surgical specialties need to draw on a broader population base than the one currently served by an acute general hospital in London. The number of surgical patients presenting at smaller hospitals, combined with the number of consultants available for a rota makes it impractical to provide a dedicated, consultant-delivered emergency service while sustaining performance in elective care.

The Royal College of Surgeons has indicated that a population of 400,000-500,000 would provide sufficient levels of activity to use the skills and resources of a dedicated emergency team effectively. Where catchment populations for emergency surgery are below this level, networks across two or more providers will be required to deliver both a dedicated emergency service and to manage the elective work for a specialty. General surgery was used as the template for the organisation of clinical services, and an indicative model is shown in figure six.



Source: Team analysis; interviews with clinicians

The solutions and the nature of the networks will vary according to the specialty, but general surgery could be based on the teams of surgeons from two hospitals working together. There are advantages to the development of a dedicated emergency service. It will provide a more timely service than is possible in small and medium-sized hospitals, where the on-call surgical team will often be undertaking elective work as well as covering emergencies. It would also balance resources to demand more effectively.

There are situations, which are relatively small in number, where a patient would either need to be transferred from a local hospital to receive the treatment they need, or the local hospital would need the capability to open a theatre in an emergency. It is critical that effective protocols are in place for the management of such situations. For patients who need surgery urgently the alternatives would be to stabilise and transfer, or to have a contingency to open a theatre at short notice on the local hospital site. The latter option would enable the local hospital to manage a higher proportion of patients presenting.

Two options were developed by the Clinical Advisory Group and clinical leads for the organisation of general surgery in a local hospital. One would be to retain emergency surgery on the local hospital site for 12-16 hours a day and the other would be to consolidate emergency surgery on another site, but ensure that there is ready access to a surgical opinion on the local hospital site.

The option of retaining surgery on the local hospital site for 12-16 hours a day (option one) gives a greater presence and more direct support to the assessment and management of patients. The majority of emergency cases can be scheduled and a proportion can be performed as day cases, particularly in general surgery and gynaecology.

The alternative option of 24 hour surgery on one site, and no emergency operations on the other site (option two), may be more manageable in terms of staffing the rotas but is likely to increase the number of transfers taking place between the hospitals. A surgical opinion would reduce this requirement but would need to be at least at the experience level of an ST3.

3.3.2 Clinicians' views on the proposed organisation of emergency surgery

In the acute trusts involved with the project, it was acknowledged that there are advantages to delivering a dedicated emergency service, and that the number of cases which require night-time operating are very small in number, leading to a poor use of the skills and resources. There was however, considerable debate about the management of patients who may present at a local hospital needing treatment that could not be provided onsite. Although these are very small in number, there is a critical need to be confident about the ability to manage such patients appropriately. The most practical way to demonstrate this would be to develop and test the model of a networked service, ensuring that patient safety is the primary objective of any pilot.

There was general support for the option of having theatres available for 16 hours a day in the local hospital, as this would provide more flexibility in responding to urgent situations.

3.3.3 Discussion

Of the specialties, general surgery has the closest link to the management of many medical patients, particularly those presenting with abdominal pain. It is important that an effective and timely general surgical opinion is maintained at a local hospital. The issue of how patients presenting with abdominal pain should be managed was discussed; this included the decisions that should be made about where to take patients at the pre-hospital stage.

The London Ambulance Service (LAS) cited its experience at Queen Mary's in Roehampton, where accreditation of junior surgical staff was withdrawn. The LAS no longer took patients with abdominal pain to the hospital, which resulted in around 40% of the general medical patients being diverted, and ultimately led to the hospital's emergency services being transferred. In discussion of this issue, the LAS indicated that the difficulty it experienced was that of different protocols for different hospitals, which is hard for ambulance crews to manage. If, with the development of the local hospital model, there were a common position on where patients should be taken, this would be a manageable situation for the LAS.

The broadly agreed view on the management of patients with abdominal pain was that the vast majority of patients either do not need surgery, or do not need it so urgently that the work could not be scheduled for an emergency list the following day. The first line of treatment would be to diagnose and stabilise, which could be effectively managed within the local hospital. The options for patients who need urgent surgery are as previously described.

There are a number of UK and international hospitals that have organised surgical services on a networked basis and have developed the practice and infrastructure to manage this safely (see the technical report).

3.3.4 Other specialties

Orthopaedics is another high volume service with a significant amount of emergency activity. Orthopaedic emergencies will primarily be different forms of fractures. This was not discussed extensively during the project and the management of patients, and particularly where they would be treated, would need to be specified according to the severity of the injury. Particular attention would need to be paid to the management of paediatric fractures, ensuring the appropriate skills are available to manage both the operation and post-operative care, for example a child with a supra-condylar fracture of the humerus, who would require surgery quickly after diagnosis.

One element of the orthopaedic service, which attracts particular attention, is the management of patients with fractured hips. The local hospital can manage this service and retain a local service, but this needs to be on the basis that patients can be operated on within the National Institute for Health Clinical Excellence (NICE) recommended time limit of taking patients to theatres in 24 hours or ideally less. If this proves unachievable, the option of reducing the number of sites where this is managed should be considered.

Other surgical specialties, such as urology and the head and neck specialties, tend to have low volumes of emergency work and will need larger populations to deliver a dedicated emergency service, but opinions from other surgical disciplines are required at the local hospital. Surgical networks would need to ensure that these opinions were available on a well-organised and timely basis.

3.3.5 Elective surgery

During discussions, a clear and well-supported view emerged regarding the advantages of separating elective surgery from emergency surgery. There was also a view that having elective surgery on a local hospital site helps the functioning of the service by supporting access to surgical opinions. A point emphasised by many who commented on surgical issues, was that there is scope to move some activity from major acute

hospitals to local hospitals, particularly day case work. This would use capacity effectively and redress some of the activity and financial shifts going to the major acute hospitals. PCTs commented that the Department of Health's Patient Choice policy would make it difficult to commission such a movement of activity.

Case study

Following discussions with Epsom and St. Helier University Hospitals NHS Trust, there was further investigation of the service provided in the South West London Elective Orthopaedic Centre. The centre developed as a consequence of pressures around orthopaedic performance in south-west London. The centre is jointly 'owned' by the four acute trusts in the area, and hosted by Epsom and St. Helier University Hospitals NHS Trust.

Consultants from the four trusts do a proportion of their elective joint replacement surgery at the centre, which replaces over 4,000 joints a year. This is the largest such centre in western Europe and has used this scale to negotiate with prostheses suppliers, to drive innovation and to achieve improvements in performance.

The centre now:

- delivers a surplus for the four trusts;
- has had no MRSA infections and has had a 0.1% infection rate overall for a full year;
- achieves the 18 week target;
- has a low average length of stay for hip and knee replacements;
- achieves theatre utilisation around 95% and there have been no complaints received in a full year.

Given the success of this model, it is recommended that further work should be undertaken to assess the extent to which this can be replicated, the advantages this would bring and what the wider implications would be. There is clearly a counterpoint to this argument, which is to be found in the former Ravenscourt Park Hospital Diagnostic and Treatment Centre. The reasons why South West London Elective Orthopaedic Centre has succeeded and the Ravenscourt Park centre did not, need to be understood.

Conclusions

- The local hospital can function with a surgical service not providing operations 24 hours a day. To do this, clinical networks need to be established, with staff working across two or more hospitals to provide out-of-hours emergency surgery. The networks are likely to vary in size according to specialty and local circumstances.
- Options exist for the way in which emergency surgery might be organised, and commissioners should explore these with local providers to specify working arrangements between sites, and to agree hours of operating at a local hospital.
- The management of patients requiring surgery very urgently, who have presented at the local hospital, must be fully addressed if the proposed model of working is to be safe and supportable.
- The organisation of paediatric surgery needs to be informed by the way in which general paediatrics is organised.
- There are clear advantages to separating elective work from emergency work and the possibility of organising elective care on a larger scale should be considered; but how this affects the finances of individual acute trusts is very important (see section four). There are also advantages in retaining elective surgery on the local hospital site, in that it supports ready access to a range of surgical opinions.

3.4 Key service areas of the local hospital – Critical care

3.4.1 The organisation of the service

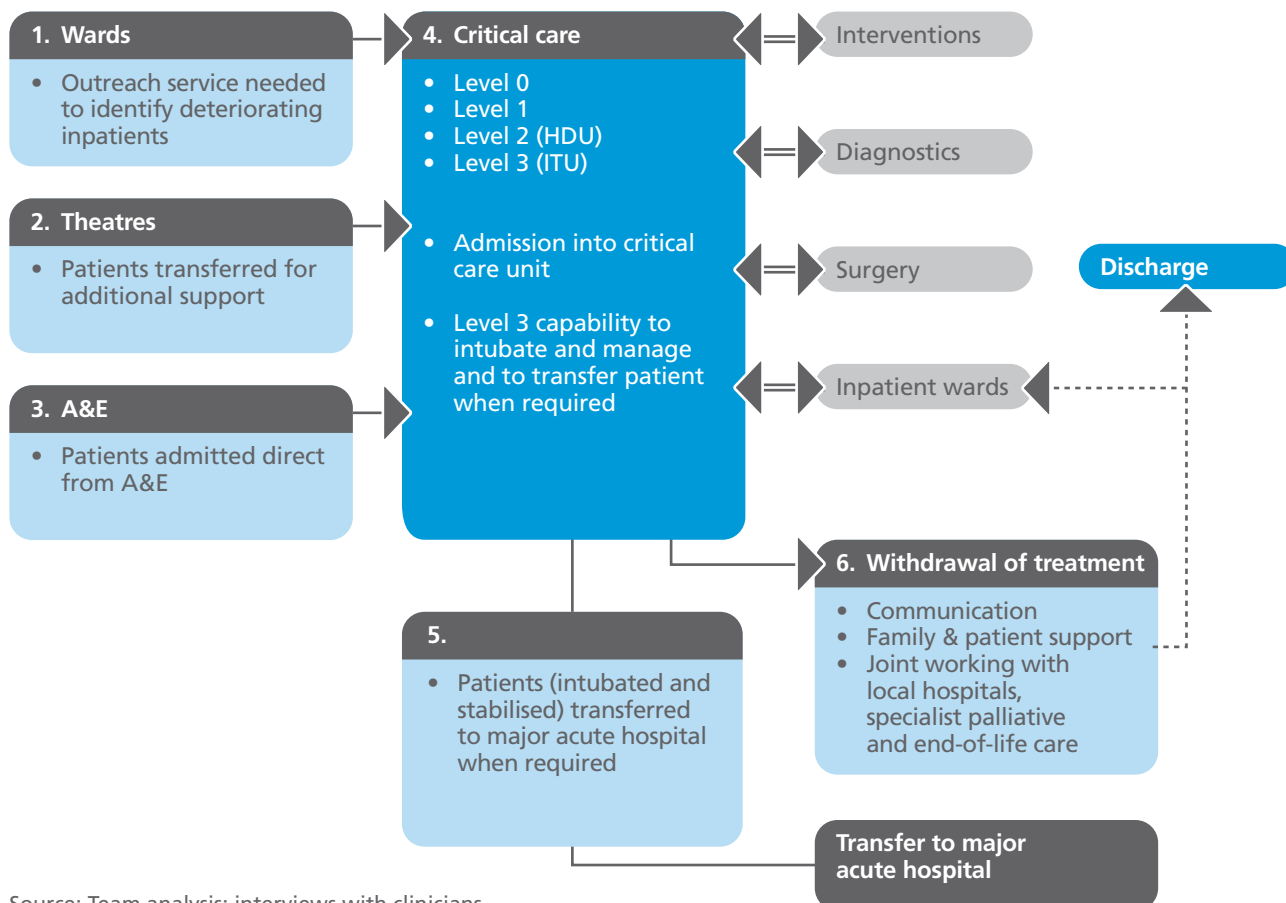
The local hospital needs a service that can manage both high dependency (level two) and intensive care (level three), and specifically can manage most intubated patients for the duration of their treatment in the local hospital. The service would provide for the majority of needs of patients admitted to the hospital. These would primarily be medical patients admitted through the acute assessment unit. The clinical model developed by the Clinical Advisory Group, following discussions with the acute trusts involved in the project, was based on this widely held view.

Surgical patients undergoing major bowel or cancer surgery could under one option be managed in major acute units, reducing the surgical demand for the critical care service in the local hospital.

However, a unit in the local hospital would be able to cope with post-operative management of those patients where complications occurred during surgery, where a local hospital has the ability to open a theatre at night.

Critical care services in local hospitals should be organised on an integrated basis, for example, a single area managing both ITU and HDU patients (see figure seven). Locating this service close to the assessment area offers scope to use staff flexibly to manage the more acutely-ill patients and should be considered both by acute trusts and by commissioners in specifying services.

Figure seven: Indicative clinical model for critical care



Source: Team analysis; interviews with clinicians

3.4.2 Clinicians' views on the organisation of critical care

Among the acute trusts involved, and members of the Clinical Advisory Group, there is a strong and clearly expressed view that the ability to manage intubated patients in the critical care unit of a local hospital is essential if the hospital is to have an undifferentiated medical take. It was also the view of the broad range of clinicians involved in the project that, if the capability to intubate and manage patients exists in an acute trust, then there is no strong rationale for the transfer of most patients. It was, however, accepted that some patients would still be more appropriately managed in specialist critical care units, for example, patients with neurological problems.

3.4.3 Discussion

Examples were provided by the Clinical Advisory Group of the types of patients who would be admitted to a local hospital and would need critical care provision:

- Patients with pneumonia are a significant element of general medical admissions of whom around 10% need critical care. Delayed effective management is associated with increased mortality;
- Sepsis is another condition which would require management in critical care. Early and effective management of sepsis is undoubtedly associated with decreased mortality.

Other organisations are supportive of the need for level three critical care. The Royal College of Physicians has investigated, and recommended closure of, units with an undifferentiated medical take and no level three facilities. The Academy of Medical Royal Colleges' *Acute health care services report* published in 2007, took the view that local hospitals would need level three critical care facilities.

In discussions with acute trusts, a concern was also expressed that working in an environment, in which patients were only stabilised and transferred, would result in a loss of skills for those staff. This could be overcome by regularly rotating staff through different units to maintain skills. In any event, rotation of staff may still be worth considering, to sustain and develop skills.

The response of the North West London Critical Care Network to *A Framework for Action*, provides an indication of the service requirements for patients with different conditions in different settings, and has received wide support as a very clear statement of critical care needs. It discusses the viable level for a critical care service and indicates that a four-bedded level three unit, admitting over 200 patients a year, is broadly the size required to sustain the skills needed to manage patients safely. Data gathered during this project indicates that local hospitals would generate around this level of activity but further work is required to be confident that skills can be effectively maintained, and good outcomes achieved for patients.

The National Confidential Enquiry into Patient Outcome and Death 2005 identified the poor care of patients prior to admission to critical care as a major factor in morbidity and mortality. There are a number of ways to respond to this situation. One would be by improving the clinical recognition and organisation of care for more acutely-ill patients. A second option would be to cohort the more acutely-ill patients and have an expansion of critical care capacity, as a proportion of the available beds. A third option would be to ensure effective outreach from critical care to identify and manage patients whose condition is deteriorating, as recommended by the National Patient Safety Agency report of 2007. This involves staff trained in critical care working with the general wards to identify and manage the more acutely-ill patients.

All options have the potential to deliver better outcomes and could reduce overall costs by avoiding deterioration of patients.

To assist in sustaining the volume of activity required to maintain skills, it was proposed that some patients needing longer term support on a critical care unit, but who could be effectively managed in a local hospital, could be transferred from the major acute units where appropriate. An example would be those patients being weaned from dependence on a ventilator. This would also reduce the pressure on the larger units and make good use of the overall capacity in the healthcare system. The availability of anaesthetists to provide the service may be affected by some of the other service changes proposed and by the specific configuration of services in a particular local hospital.

The increasing use of intensivists from a general medical background (often respiratory physicians) would ensure the ability to sustain these units.

The competencies of nurses are key in managing critical care services, both in critical care units and across the 'front end' of the hospital. Training is time-consuming but to ensure there is a broad base of skills, a focus should be given to ensuring sufficient staff benefit from these training programmes.

Critical care skills are also required to support maternity services and neonatology. Some of these will be generic, particularly for women, but the skills for managing babies could be provided by different groups of staff (see section 3.6).

Conclusions

- **The local hospital needs to be able to manage patients who require intubation (level three care) if there is an undifferentiated medical take. If there is the ability to stabilise patients then their continuing management can be in the local hospital, unless they have specialist critical care needs.**
- **More work is required to give a clear view on the level of activity a local hospital would manage in critical care and whether this would sustain skills at a requisite level. The possibility of local hospitals taking activity from major acute hospitals, where appropriate, also requires further investigation.**
- **To use resources effectively, high dependency and intensive care beds should be co-located and it should be possible to flex their use.**
- **The skills of staff in managing critically-ill patients can be used across the 'front end' of the hospital, and need to be enhanced to improve the quality of care and outcomes for patients. More physician intensivists should be trained to support services in the local hospital.**

3.5 Key service areas of the local hospital – Paediatrics

3.5.1 The organisation of the service

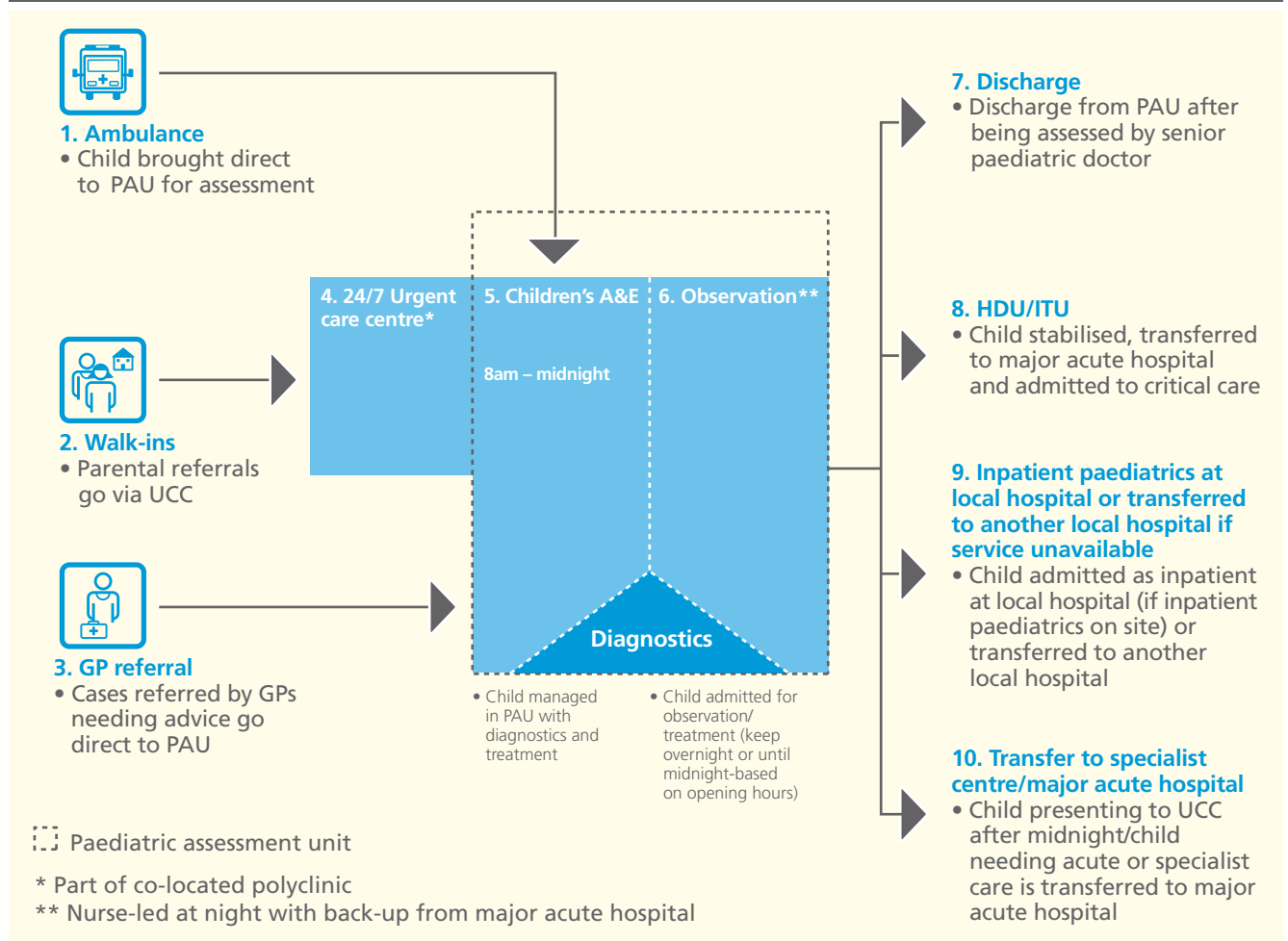
The local hospital can provide a large proportion of the activity for children currently undertaken by a hospital through the development of PAUs, working as part of a wider network of services. The aim of these PAUs would be to provide fast and effective assessment and treatment of children, and to minimise the need for admission to hospital. The network should reach into community and tertiary services.

The clinical model developed with the Clinical Advisory Group was informed by the proposals put forward in Healthcare for London's *Final Report of the London Children and Young People's Pathway Group*.

The PAU would need to be delivered by consultants and supported by the wider paediatric team. PAUs should be integrated with the community service for children, with staff rotating through hospital and community settings. The community service should be primarily delivered by community children's nurses who support early discharge and provide continuing support to children at home.

Developing PAUs, as part of a wider clinical network for paediatrics, would provide a sustainable basis for children's services in the local hospital. Overnight observation beds may be sustainable as part of the paediatric service in a local hospital. However, further work is required to make a fuller assessment. The relationship between the urgent care centre and the PAU in managing children also needs to be clearly determined.

Figure eight: Indicative clinical model for paediatrics



It would be feasible to link two local hospitals and to have a PAU and inpatient unit in one, and a PAU in the other. Alternatively, local hospitals could partner with major acute hospitals on this basis. Whether there would be advantages to networks being established between more than two trusts requires further investigation. This may be of benefit for paediatric surgery, where the requirements for managing children, particularly very young children, means moving towards a larger catchment population.

Children with more complex needs or more serious conditions would be managed in major acute units, with the threshold for this being based on an assessment of the competencies required to manage a child with a particular condition.

The requirements for a network could be reflected in the service specification drawn up by a PCT.

3.5.2 Clinicians' views on the organisation of paediatrics

Among the acute trusts involved in the project there was a wish to sustain access to local services, but the extent to which current services are stretched, particularly at consultant level, was acknowledged. Local access can be provided by PAUs and by provision of local outpatient services.

There was also a wish to avoid transfers for children where possible. Many children who are admitted have very short stays, and the ability to retain this capacity locally was seen as providing a responsive, appropriate service for children. Whether a unit could develop this capacity would depend on existing staffing, and the extent to which it adapts working patterns to deliver an enhanced PAU. Dedicated transport between PAUs and inpatient units has proved very effective in ensuring timely transfers between sites when required.

The provision of immediate support to maternity units, and particularly support for resuscitation of sick babies if there is not a 24 hour paediatric service on the local hospital site, was heavily debated during the project. One option would be to provide cover from a paediatric network, however further work is required on the way in which rotas can be constructed to provide cover for this and for the spectrum of paediatric services – from the community to tertiary. The scale of networks to achieve the best usage of skills needs to be assessed.

3.5.3 Discussion

For paediatrics, there is recognition of the advantages of fewer inpatient units, as numbers of children admitted to hospital reduces, and for the development of consultant managed PAUs as described in *A Framework for Action*. Enhancing out-of-hospital provision for children would be more readily deliverable if there were fewer inpatient units, but there is also the fundamental issue of providing effective support for neonates if 24 hour paediatric inpatients are not on a local hospital site.

It may be possible to develop and organise clinical networks to support appropriate resourcing of the different services discussed, including the neonatal service. The extent to which services for children can operate on a more distributed basis, for example in polyclinics, will be dependent on having sufficient, appropriately skilled staff to resource this. There are examples nationally of well-developed PAUs (see the technical report).

Conclusions

- Paediatrics needs to be organised on a networked basis, with acute trusts combining to provide a service across more than one site. This will ensure senior cover of emergency services, enable networks to develop further services out of hospital and use the workforce effectively. Further work is required to define the optimal size of a paediatric network.
- A PAU, delivered by senior staff, can function effectively in the local hospital and may be able to sustain a small pool of observation beds, depending on decisions about how best to use workforce skills to meet different demands on the service. Community services should be integrated with the PAU.
- The role of urgent care centres in managing children needs to be defined, based on the availability of the competencies required for different forms of illness, injury and treatment.
- The impact of changes to the organisation of paediatric services on other services, and most specifically on obstetric services, needs to be the subject of more detailed work.

3.6 Key service areas of the local hospital – Obstetrics

3.6.1 The organisation of the service

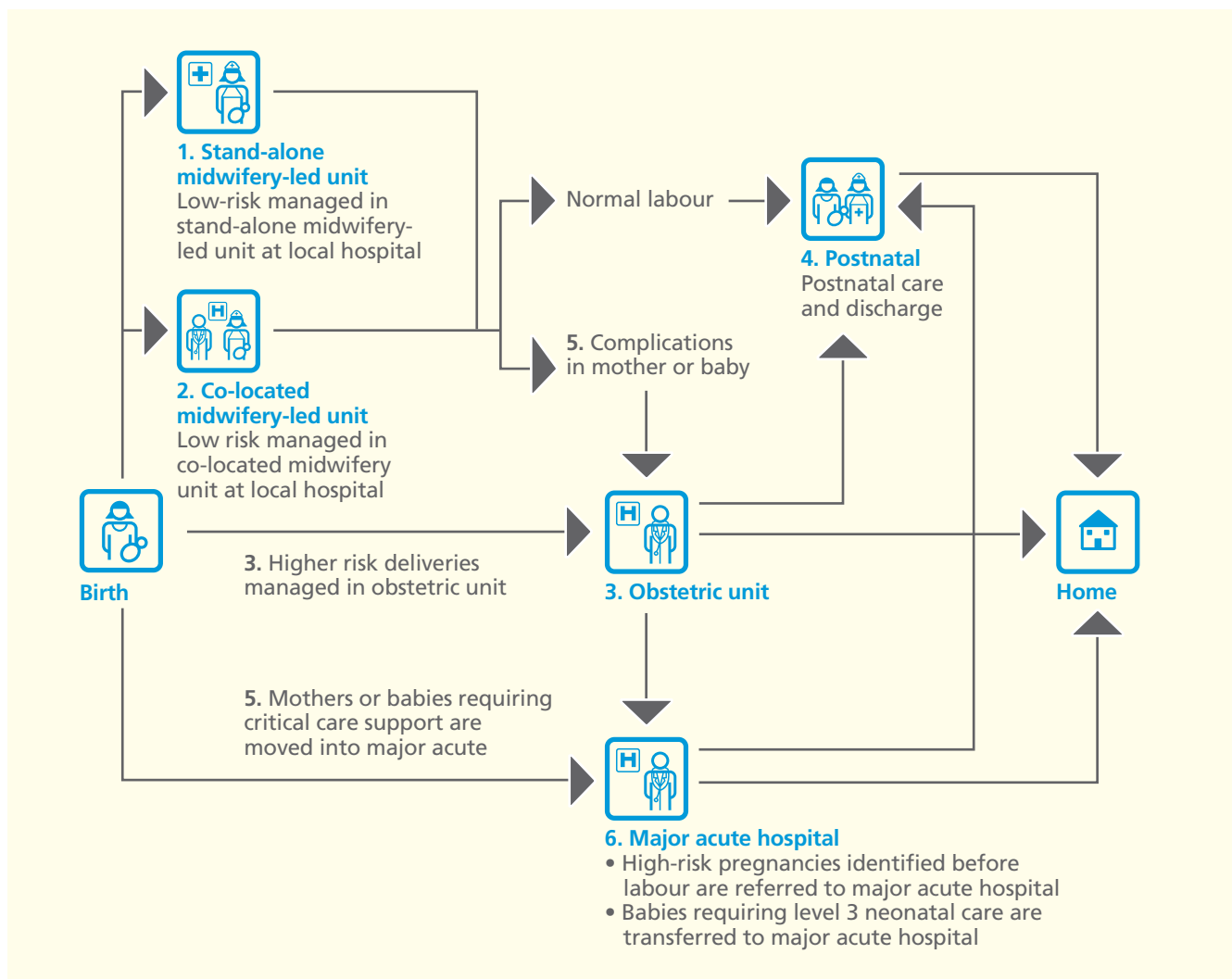
The core element of a maternity service need not change substantially as a result of the development of local hospitals. The service would provide for the majority of women, such as those who are not identified as high-risk prior to delivery. Such units could have a co-located midwifery-led unit to offer choice to women about the type of service provided. The advantage of co-location is the ability to transfer women where complications arise in labour on the same site.

The unit would have a special care baby unit (level one NICU), with the ability to stabilise and intubate very sick babies.

Where level one care was not sufficient to meet the needs of a baby, transfer to a higher level unit would need to take place, as is currently the practice. Transfer of mothers may also be necessary in circumstances where the local hospital could not provide the appropriate level of care.

Units will need to meet the requirements for labour ward cover, which may prove challenging for some of the smaller services. If this cover could not be sustained, it would be feasible for the local hospital to provide a stand-alone midwifery-led unit.

Figure nine: Indicative clinical model for maternity



Source: Team analysis; Maternity Matters report (Department of Health)

3.6.2 Clinicians' views on the organisation of maternity services

Acute trusts involved in the project were all keen to sustain their services and to provide local access for women in their catchment area. There was a shared view that the majority of local women could be managed in the type of unit previously described.

Discussions about maternity services centred around a number of issues:

- the management of neonatal care in units without 24/7 paediatric cover;
- the role of midwifery-led units in providing choice for women;
- the improvement of antenatal services and associated changes to the organisation of midwifery practice;
- the optimum size for a safe service, linked particularly to the level of consultant cover.

Substantial concern was expressed about the potential impact of a reduced number of inpatient paediatric services, and specifically the ability to provide effective resuscitation support to maternity. As complications do occur during labour, these units would need to be able to manage these complications both for women and for babies. The capability to manage babies means being able to stabilise a sick baby and transfer them, as referred to previously. Currently, this is managed by paediatricians.

If there were not 24 hour paediatric cover, either networked paediatric support or the development of resuscitation skills in other parts of the workforce would need to be in place before a change to the provision of paediatrics occurs. The options discussed included developing the necessary skills in: anaesthetists; midwives; advanced neonatal nurse practitioners; obstetrics and gynaecological (O&G) middle grade trainees, or providing cover from a paediatric network. There are examples of maternity units functioning without 24 hour paediatric cover, but there would clearly be a lead-in time to make this feasible.

There are national examples of obstetric units functioning with different forms of 24 hour cover for the neonatal service (see the technical report).

3.6.3 Discussion

The question of stand-alone midwifery-led units creates great debate and often leads people to adopt positions informed by different philosophies about how to manage pregnancy and labour. The evidence for, or against, such units is unclear, although the safety of delivery in these units is no different from that of a home birth. The economics of midwifery-led units are different, and in order to make them more viable they would need to manage more deliveries than they have to date. This may be achievable if the organisation of antenatal care were focused around low-risk units and women are given the information to make informed choices about places of delivery. Research into place of birth, due for publication in 2009 will provide a clearer picture on the safety of such units and should inform the decisions commissioners make about this model of care.

The scope for development of different forms of organisation for midwives needs to be assessed. Caseload practices can be developed to specialise in different aspects of care and can provide a high level of continuity for women during pregnancy. These practices can co-exist with existing patterns of organisation. The role of maternity support workers needs to be further developed to ensure effective use of the skills of midwives.

No consistent view was reached on the size of maternity units. As this is a question of safety, any judgement on this question should be informed by an assessment of the outcomes of any unit and should be taken up as an issue in any future review of maternity services.

Conclusions

- Obstetrics can be retained in local hospitals. This would be supported by a special care baby unit (level one NICU) and would manage women who were not classified as high-risk before labour, i.e. the vast majority of cases. An assessment of the relationship between the size of units and their safety needs to be made.
- If changes to paediatrics were to occur, the best way to provide safe provision of neonatal resuscitation would need to be determined. The options discussed in the project need to be critically appraised.
- If an inpatient obstetric unit could not be sustained on some sites, a midwifery-led unit is an option, but the viability of units will be determined by the number of deliveries they can manage.
- Staffing issues need to be addressed, in part, by looking at skill-mix issues and the organisation of midwives.

3.7 Issues arising for the workforce

There are some essential areas of development for the workforce to support the broad range of changes proposed in *A Framework for Action*, and some issues which are specific to the local hospital model. A striking fact is that the majority of people currently working in the NHS in London will still be working there in 10 years time. This emphasises the need for the introduction of training and development programmes, focused on existing staff, which will enhance the skills required to deliver the changes needed in London's healthcare.

3.7.1 The medical workforce

An objective for all hospitals, including local hospitals, should be to have a senior presence in their assessment facility for longer hours and at weekends, as this will provide more expert decision-making and improve patient outcomes. This will become more readily achievable as consultant numbers increase in the coming years, but the changes can be planned and initiated in the near future. Early senior decision-making should also lead to reductions in length of stay and costs in hospitals.

The development of the role of acute physicians, which has recently occurred, needs to be accelerated to support the different way of organising the acute assessment process. Some existing physicians may also decide to practice in this way and should be supported to do so. The role of A&E consultants will be vital to the implementation of these changes, given their expertise in diagnosing and initiating treatment of critically and acutely-ill patients. A&E doctors (emergency physicians) can work in partnership with acute physicians in managing the acute assessment process. This will support some skills transfer between the respective disciplines and make it more feasible to provide extended cover for the assessment process.

An area that must not be overlooked in seeking to reduce inappropriate admissions is adequate and appropriate end-of-life care. Apart from the important sharing and transfer of these skills, the *National End of Life Care Strategy* (Department of Health, July 2008) emphasises that "a major workforce development initiative is now needed, with particular emphasis on staff for whom end-of-life care is only one aspect of their work. This will include the provision of communications skills training programmes and other programmes based on the competences needed by different staff groups."

3.7.2 The nursing and therapy workforce

The development of more nurse specialist roles will support the functioning of the local hospital, particularly in:

- surgery
- paediatrics
- neonatology.

Nurse specialists have proved very effective in supporting the management of inpatients in these specialties and they reduce the need for junior doctor cover. An example being the specialist surgical nurse practitioners who have completed the course provided at St Mary's Hospital and work in a number of different acute trusts.

Developing roles in these areas will support local hospitals manage care effectively and address the requirements of the Working Time Directive (WTD).

Advanced neonatal practitioners could provide the first-line management of babies who need resuscitation, but this has proved a difficult area in which to develop specialist practitioners and consideration needs to be given to the incentives that can be created to develop this element of the workforce.

In addition, there are some generic skills in assessing and managing patients which need to be developed. For nurses this will mean changing the view that a nursing assessment should be entirely separate from the medical assessment. While it is true that nurses will assess some different areas, which will not be covered by doctors or therapists, the basis for assessment should be the system review taught to all medical students. This system review should be taught to all nurses and therapists working in the 'front end' of a hospital. There is agreement from nurses working in the field that this assessment method is vital. It should form the basis of the further educational modules that would make up a training programme. Creating a broad skill base will allow staff to work flexibly in different parts of the system to assess and manage acutely-ill patients.

Other areas in which nursing staff would need to be competent to support effective patient management in the assessment unit include:

- respiratory care: airway management; CPAP/BiPAP; ABG's; chest drains;
- cardiovascular: ECG interpretation; invasive monitoring; CVP line management; blood sample analysis;
- renal/urinary system: catheterisation;
- basic/advanced life support;
- identifying the sick patient;
- diagnosing dying;
- communication skills to deal with dying patients.

The need for continuing education is vital and this should be provided by a clinical educator based on a unit, and not in a remote facility.

3.7.3 General issues

Team working is critical to the delivery of effective, high-quality care, as shown in a study by Aston University, and workforce development plans should take account of this more fully than has been done to date. Teams need to share responsibility for initiating appropriate clinical decisions and be prepared to work in a flexible manner. The leadership of teams is a skill which has not been developed sufficiently widely, and this must be fully addressed.

For the local hospital, consideration should be given to the hospital at-night team covering the whole hospital and working out of the assessment unit. The team would manage any patients requiring treatment, regardless of where the patient is.

3.7.4 Compliance with the European Working Time Directive

Both clinical networks and the development of nurse specialist roles will be important in ensuring local hospitals can comply with the WTD.

Rotas will need to be carefully planned to ensure coverage of services.

Conclusions

There are some specific areas where an enhancement of skills will support the implementation of the local hospital model, and some general issues have arisen during the project. These include the need to:

- continue with the acute physician programme and developing a programme for A&E consultants to support acute assessment;
- develop a focus on the clinical management of the acutely-ill patient and enhancing the skills of nursing and therapy staff;
- develop a fast track approach for advanced neonatal nurse practitioners to support the model of organisation of the local hospital;
- develop a fast track approach to enhancing capacity to manage long-term conditions in the community;
- fast track development of maternity support workers;
- improve end-of-life care by developing appropriate skills and competencies across the hospital workforce, a suitable environment for terminal care, and initiatives for rapid discharge home to die, to improve patients' dignity and choice.

A focus on team working should be given detailed attention, particularly as the nature of teams will change with the development of clinical networks and a higher level of cross-organisational working.

3.8 Further work on clinical issues

This project was established to assess the impact of a specific range of changes to the organisation of clinical services in London. In conducting the work, and after extensive discussions with clinical staff in acute trusts and members of the Clinical Advisory Group, it is clear that there are important areas of further work which need to be undertaken.

3.8.1 Benefits criteria

Clear criteria should be developed to assess the benefits of moving services to major acute hospitals or to the community. A service change should achieve a benefit on the quality-access-cost axis. If this is the case, then implementation must be vigorously pursued. Conversely, if this cannot be demonstrated it is important to avoid inappropriate movements of care, which may then have to be reversed. Such criteria will make the decision-making process transparent for the public and professionals, and help to counter the arguments of those with a sectional interest in opposing change.

3.8.2 Clinical networks

One of the strongest messages to emerge from the project is that clinical networks will be essential if the changes to healthcare envisaged in *A Framework for Action* are to be delivered effectively. Detailed work is needed on the requirements, and the process for the creation, of effective clinical networks in certain specialties, for example emergency surgery and paediatrics. Current networks have made strong progress in areas like cancer, cardiology and neonatal care, and learning should be taken from the way in which these networks have developed. With the changes proposed, the management of networks will need clear decision processes, accountability and governance arrangements to ensure they are effective, whilst operating across two or more NHS organisations. Different ways in which clinical networks could be established and run should be fully explored. Options for different forms of networks should be developed to give clinical staff and organisations flexibility in how they choose to proceed with them.

Clinical networks present an opportunity to enhance the role of clinical leaders and clinical managers in the NHS. The value of effective leadership in clinical teams is highlighted by a report from Aston University which showed it can improve outcomes for patients. To support the development of networks, and the improvement in clinical outcomes, a programme of development to enhance clinical leadership capability and capacity is required. This can deliver significant benefits in terms of the health and healthcare of Londoners.

PCTs will need to commission, where appropriate, on the basis of networks, and will need to develop specifications and standards for services working on a networked basis. Again, learning from existing practice and work to develop specifications for clinical networks should be commenced at an early stage.

3.8.3 Neonatal care

An outstanding issue from the project is the provision of resuscitation to neonates if there is not a 24 hour inpatient paediatric unit onsite, so that maternity services can continue to be provided in the local hospital. A number of options were discussed, but they boil down to two possible approaches:

- cover from a paediatric network;
- developing skills in other parts of the workforce (midwives, anaesthetists, O&G middle grades and advance neonatal nurse practitioners).

Different views are expressed about the practicality or feasibility of these approaches, but the decisions on how to tackle this issue need to be based on a fuller assessment of the options. Solutions to this issue will enable the proposals for children's services to be implemented without compromising maternity services.

3.8.4 Patient transfers

One of the areas of current practice that has been discussed at some length, and which has substantial deficiencies, is that of patient transfers between hospitals. This is compounded by concerns about transferring patients with infections, both in terms of managing the patients and the impact on the number of infections in a hospital. The proposed changes would be likely to increase the number of transfers taking place. There is an urgent need to develop clear standards and practices for patient transfers, which do not leave the patient in the wrong environment for their care.

It is essential that the London Ambulance Service (LAS) is fully involved in the work on transfers. A decision will need to be made about the development of specialist retrieval services for patients, if the number of transfers does increase. Clinical evidence is that a specialist service improves outcomes for patients and also decreases the impact on existing services of managing transfers, which are resource intensive. The lead commissioners for the LAS should initiate this assessment.

3.8.5 The London Ambulance Service

The role of the LAS in supporting the changes has been highlighted as fundamental. Decisions about where to take patients need to be adjusted to reflect the changes that occur in the organisation of services. Clear protocols are required to ensure that patients are taken to the appropriate place for their needs. There is also the potential to develop the role of paramedics in first-line treatment, working in conjunction with other staff in unscheduled care services. Pilot studies are planned to examine the enhanced roles for LAS necessary for effective end-of-life care in hospitals, the community and hospices.

3.8.6 Capacity to support change

The ability of major acute hospitals to absorb additional work from local hospitals was constantly questioned. The modelling work may understate the impact of changing the management of long-term conditions in all hospitals. This change in the management of patients could reduce the bed requirements in all hospitals and create capacity to manage the changes, but the impact needs to be modelled across London. The other proposition which came forward was that some work from the major acute hospitals could be managed in local hospitals. This would go some way to address the capacity issue. The flow of activity to major acute hospitals needs to be modelled for a sector to assess the impact and the capacity requirements in different parts of the system.

The generic capacity issues, which were regularly referred to in discussions with clinicians, related to both adult critical care and neonatal care. In adult critical care, there is a strong argument for earlier intervention in patients whose condition is deteriorating. Currently in England, admission to a critical care unit is generally triggered by a patient reaching a threshold of illness. Earlier intervention, based on effective monitoring, could reduce morbidity and mortality. One way of achieving earlier intervention would be to provide additional capacity in critical care units. This area should be the subject of further work to assess the benefits of earlier intervention, and the changes should be commissioned if demonstrated to be effective.

These areas of further clinical work are essential in taking forward the changes proposed in *A Framework for Action*. They will address important issues raised during the course of the project and will enhance the case for making changes to services.

4. The financial implications of the local hospital model

4.1 Background

As part of the feasibility assessment of the local hospital delivery model, financial modelling of the nature and scale of the impact on existing organisations was undertaken. This section describes the main financial model that has been used, the methodology applied to populate the model and the main points arising from that work.

It has been necessary to make a number of simplifying assumptions to produce the model. These assumptions are based on the delivery model described in *A Framework for Action*. The modelling has supported an assessment of the range and scale of the impact of changes to where patients are managed for current district general hospitals.

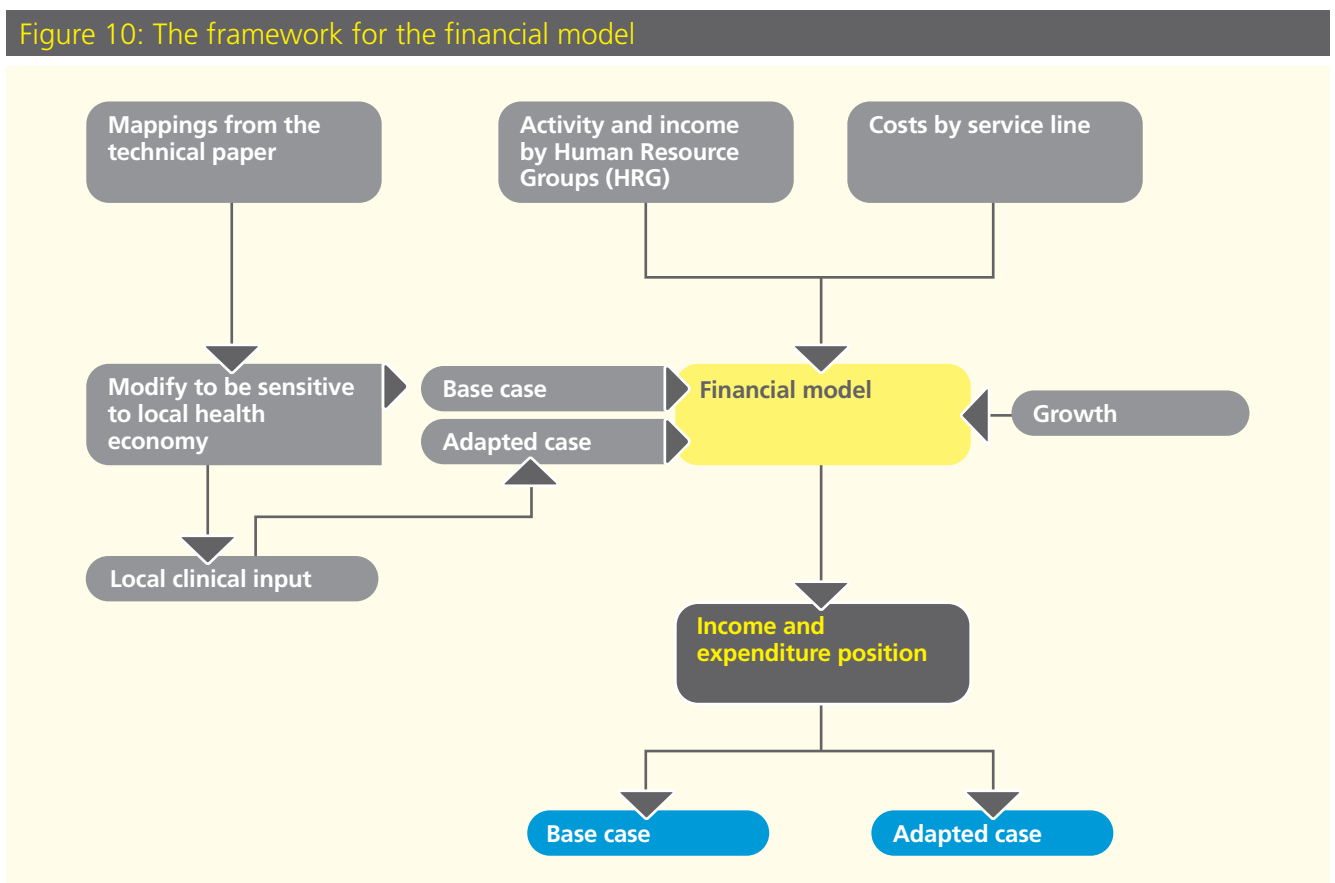
It is important that the information produced from the modelling is not regarded as a definitive position or as providing 'the answer' on the financial viability of the local hospital. It is also important to note that the assumptions have been chosen to illustrate the range of impact and not to describe what should happen. Further detailed modelling at a more local level will be necessary to understand the specific impact of different commissioning intentions. The advantage of this approach is that it presents an uncluttered picture of the impact of different assumptions on the hospitals involved.

A second model has been produced to support the work on the different service lines described in section three. This model requires some further refinement. It will be a valuable tool to support PCTs and acute trusts in developing bottom-up costing for services lines to differentiate between different methods of service provision.

4.2 Methodology

Healthcare for London commissioned PricewaterhouseCoopers (PwC) to develop a financial model. The model is illustrated in figure 10.

Figure 10: The framework for the financial model



The model's key features are that it took the baseline activity of the four participating acute trusts and applied assumptions to this baseline about where the activity would be performed under the revised arrangements. The shift of activity drove changes in income, which developed into a revised income and expenditure position after the trusts applied changes to their respective expenditure bases.

The activity side of the model used activity at specialty\HRG\point-of-delivery (inpatient, day case and outpatient) level and the cost side took costs at service line and subjective level (for example, staff, supplies and overheads). For simplicity, the model is being used to present the financial effect of the different options against a base year. Trusts have been allowed to incorporate any known and certain developments into the base year position, although this does not have a material effect on the outcome from the model.

The model does have the flexibility to consider phasing of changes to the cost base over a timescale of many years. However, this phasing has not been applied as it would have added a significant complication to the modelling and would be speculative as to when phasing would occur.

Variable percentages for cost reduction have been applied by the acute trusts in order to model the reduction in costs associated with the reductions in income. The figures have been derived by each acute trust and are broadly consistent between the trusts. The figures reflect the fact that:

- the change in activity considered is of a material size;
- the assumption is that the changes proposed would take place over a period of many years, even though the changes are modelled to show a direct comparison with the current position (i.e. not allowing for a transitional period and growth in activity);
- it is anticipated that if activity moves (for example, to a polyclinic or elective centre), then whether the acute trust subsequently 'owns' the activity or not, the staffing resource would also move.

All of these factors contribute to the direct and indirect costs being more variable than simple marginal costs. In this respect, the modelling shows a variability of costs that would in practice be challenging.

Other key modelling assumptions are described in table one.

Table one: Further key assumptions used to populate the model

Issue	Assumption
Inflation	Income and cost inflation not applied.
Activity growth	For the results presented in this section, growth has been excluded primarily for clarity and simplicity. The model itself can allow for growth and this is considered in the PwC report as a scenario.
CIP	Not applied, as will likely be used to combat in-year pressures.

4.2.1 Option one – the ‘base case’

The first option modelled is referred to as the ‘base case’.

There were two elements used to inform the modelling. Firstly, the definition of the local hospital used was directly drawn from that described in *A Framework for Action* (see figure one). Secondly, the activity mappings from the *A Framework for Action* technical paper were applied to each acute trust’s activity. These mappings were based on a pattern of future service provision for London as a whole and showed the most common Health Resource Groups mapped to the following six delivery models:

- major acute/specialist hospital*
- elective centre
- GP
- home
- polyclinic
- local hospital.

In addition, the mappings also identify ‘activity not taking place’.

*A specific assumption was made for BHRT, since the Queen’s Hospital site provides a number of services that would be deemed to be specialist. Accordingly, a simplifying assumption has been made for the acute trust that there is no flow of activity of these services to another specialist/major acute hospital. This applies to all of the options for this acute trust.

For each acute trust, a modification was made to the activity mapping to allow for activity shifts that have already taken place in the four local health economies, between the larger acute hospitals and the participating trusts. For example, where interventional cardiology or some complex surgery is already managed in a larger, more specialist hospital.

Two variants of the base case were considered:

- The ‘core base case’ maps activity in line with the six delivery models in *A Framework for Action*, and reflects the description of elective centres and polyclinics as discrete entities. As would be expected, exclusion of elective centre and polyclinic activity has a significant effect on income.
- The ‘extended base case’ retains the activity mapped to elective centres and to polyclinics in the local hospital. This analysis serves to illustrate clearly the range of activity that a local hospital might manage. The full loss of this activity (elective and polyclinic) or its full retention, set the parameters, but in reality the activity levels will fall between these points depending on local commissioning decisions. The two options are summarised in table two.

The core base case and the extended base case describe a range of activity and make clear the impact of different assumptions on the income of a local hospital.

Table two: Summary of the ‘base case’ options modelled

Case	Option	Activity mapping	Retention of activity mapped to elective centre and polyclinic
1(a) Base case	Core	Drawn from <i>A Framework for Action</i> technical paper	No
1(b) Base case	Extended		Yes

4.2.2 Option two – the ‘adapted case’

The ‘adapted case’ (option two) was developed by each acute trust following discussions with their clinicians about the proposed clinical models for their respective services. Some of the main assumptions were changed, for example, because there was a common view about local hospitals retaining level three critical care this was shown as retained in all of the acute trusts. Other changes were made to the percentage of specific HRGs that would be managed by the local hospital, with notable impacts on general medicine and

obstetrics. Each acute trust developed its own assumptions about what could be provided safely in the local hospital. These assumptions need to be reviewed by the Clinical Advisory Group.

As with the base case, two options have been created for the adapted case depending on whether activity mapped to elective centres and polyclinics is included, or excluded, as activity and income for the local hospital. Again, these are called the ‘core’ and ‘extended’ options, and are summarised in table three.

Table three: Summary of the ‘adapted case’ options modelled

Case	Option	Activity mapping	Retention of activity mapped to elective centre and polyclinic
2(a) Adapted case	Core	Trust local interpretation	No
2(b) Adapted case	Extended		Yes

4.2.3 Key features of the participating acute trusts

The modelling has focused on the four participating acute trusts. These have a number of similarities and differences. The key elements are summarised in table four.

Of the four trusts, BHRT is the most different in that it has a significant underlying deficit and was modelled as a specialist/major acute hospital (see section 4.2.1).

Table four: Key features of participating trusts

	Barking, Havering and Redbridge NHS Trust (BHRT)	Ealing Hospital NHS Trust (EHT)	Epsom and St. Helier University Hospitals NHS Trust (EpStHT)	West Middlesex University Hospital NHS Trust (WMUHT)
2007/08 Turnover (£m) *	351	122	296	127
2007/08 Profitability (£m) *	(35.6)	1.1	0.8	0.0
Numbers of sites	2 (King George Hospital & Queens Hospital)	1	2 (Epsom Hospital and Helier Hospital)	1
PFI Unitary Payment	Yes	No	Yes	No
Considered major acute for modelling purposes	Yes	No	Yes	No

* As per draft final accounts. The actual figures used in the modelling were an early version of the 2007/08 outturn, but this does not have a material impact on the findings.

4.3. Results

Details of the results for each trust are shown in the report from PwC. The following information is a summary of the position for all four acute trusts under the four modelling options described in table two and three.

It is important to note that, as work progressed on the model, it was clear that the base case overstates the extent to which activity would move to major acute hospitals. The clinicians advising the project were firmly of this opinion, and this was endorsed by the work with the hospitals that participated in the project. For this reason, it is appropriate to focus on the adapted case as the likely scenario in terms of the impact on acute trusts. The adapted case indicates reductions in income of around 15%, which, when managed over time, can be matched by reductions in expenditure.

4.3.1 The core base case and core adapted case – Options 1a and 2a

The effect of reductions in income for the four acute trusts was analysed for the 'core' options.

The core base case is seen as overstating the movement in activity away from local hospitals, and consequently overstates the reduction in income that would be experienced by acute trusts. The core adapted case shows that trusts (with the exception of BHRT) would experience an income reduction of around 25% but this excludes significant income from elective surgery, which is not likely to change to a great extent given that the Patient Choice system already operates and people are actively choosing to go to local hospitals.

The effect on the profitability (as measured by the bottom-line income and expenditure position) of the four acute trusts for the core base and adapted case, compared to the base year, was also analysed. Under the base case the gap between income and expenditure is overstated by overestimates of the outflow of major acute activity. In the adapted case, the gap between income and expenditure would be between 15-20%.

In the core options, the acute trusts do not retain or manage the activity mapped to an elective centre or polyclinic. Therefore these options have the most dramatic effect on the trusts' income and profitability both for the base case and adapted case. The difference between the base case and the adapted case is primarily due to the acute trusts changing the assumptions about whether specialist activity moves out of the trusts, which has a significant impact. These shifts were based on local assumptions of the case mix which a local hospital could undertake, and as stated, needs to be reviewed by the Clinical Advisory Group. It is, however, broadly agreed amongst clinicians involved in the process that the base case overstates the movement of activity away from the local hospital to the major acute hospital.

Despite using a significant variability in cost base, the income reduction would lead to a loss of such a size that it would be difficult to sustain financial viability, particularly under the base case. The effect is less dramatic for BHRT than the other acute trusts, as the specialist activity that moves out of the immediate local health economy in the others, is retained (see footnote* on page 43), and the loss of income is consequently less.

4.3.2 The extended base and adapted case – Options 1b and 2b

The effect of a reduction in the income of the four acute trusts for the extended options is shown in figure 11.

The effect on the profitability of the four acute trusts for the extended base and adapted case compared to the current model is shown in figure 12.

Figure 11: The impact on trusts' PbR-type income as a percentage of base year income for extended options

Percentage change in income from the current model

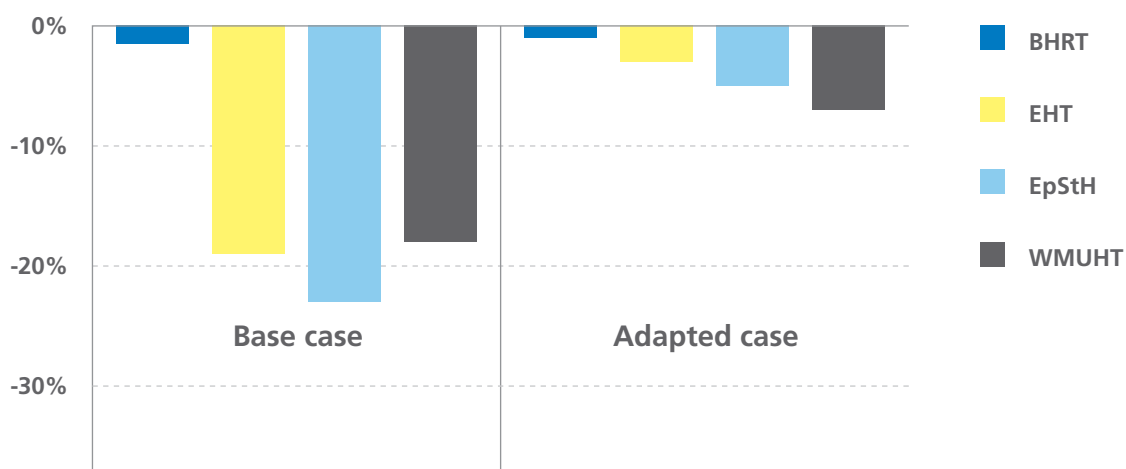
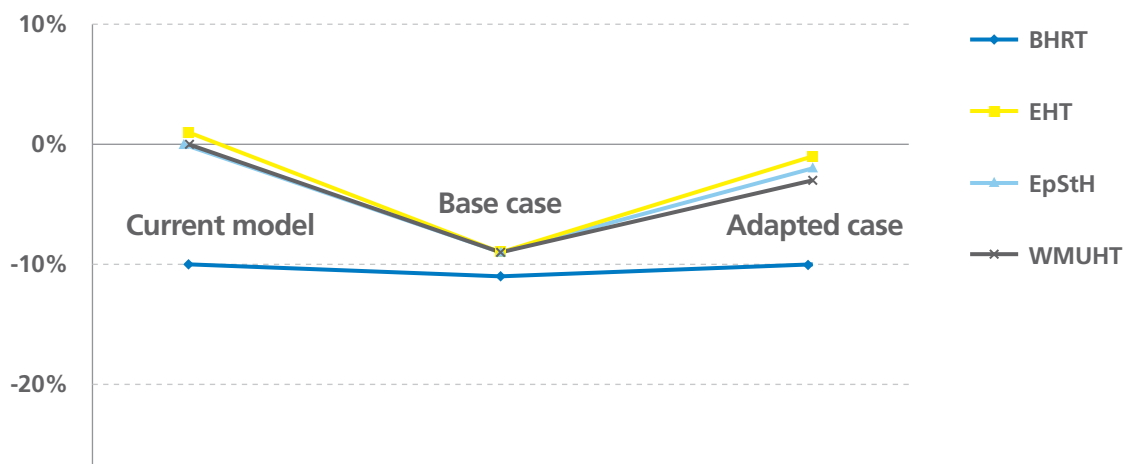


Figure 12: Income and expenditure profitability (as %) for current model, base case and adapted case

Percentage change in profitability from the current model



For option 1b, with the elective centre and polyclinic activity retained, each acute trust's income position improves by approximately 20 percentage points when compared with option 1a. However, the underlying income loss is such that it would still leave each acute trust with a deficit. For BHRT the income position is little changed from the current model and so the profitability is little changed.

For option 2b, the assumptions from the previous adapted case are retained, but the acute trusts are shown retaining the activity previously moved to an elective centre and polyclinics. In all cases, by including this activity the acute trusts are brought close to the income and expenditure position in the current model. For all the acute trusts, other than BHRT which starts with a significant deficit, this is close to breakeven.

Both of the extended options are based on full retention and/or ownership of activity mapped to elective centres and polyclinics, and so the extended options are likely to present the most favourable impact on an organisation.

4.3.3 Understanding the income shifts to other delivery models

Figure 13 shows the overall loss of income (as a percentage of contracting income averaged across the four trusts), and to which of the other five

delivery models the income is lost and the proportion of activity not undertaken.

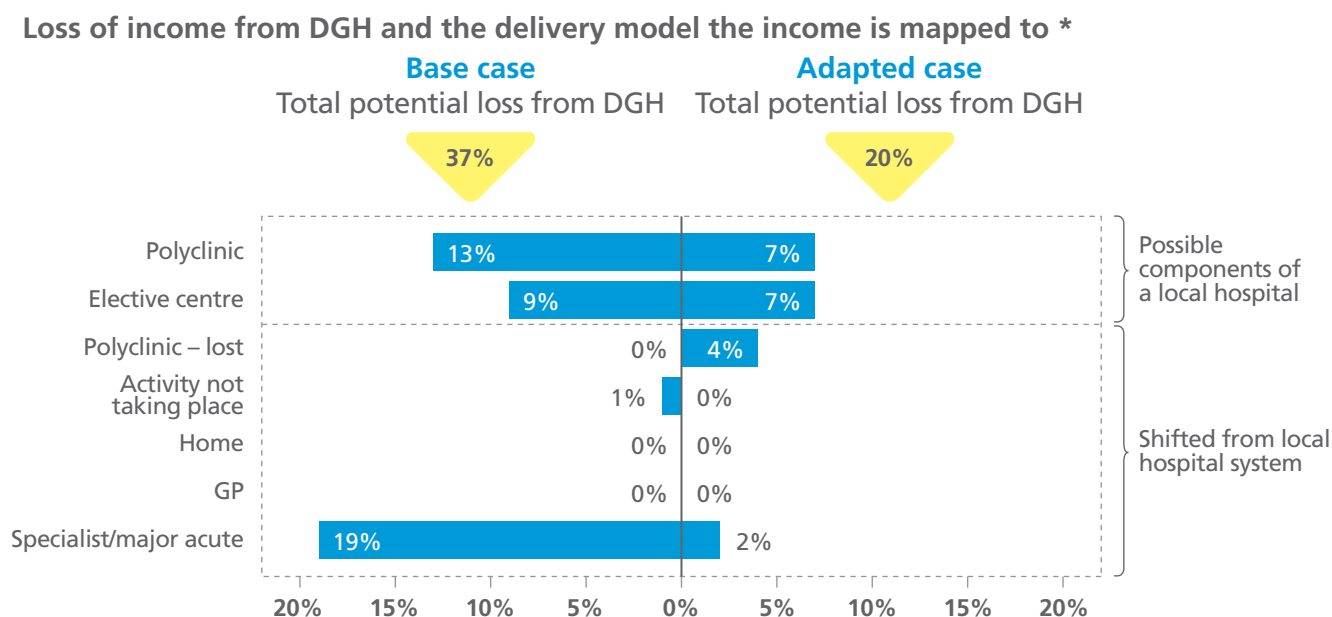
It is worth noting that the upper two bars on the charts, showing the activity mapped to the elective centre and polyclinics, form the basis of the differentiation between the core and extended options, as this is the activity that is modelled as retained and/or owned, or not, by the acute trusts under these options.

The major distinguishing feature between the base case and adapted case is the reduction in local hospital activity that is subsequently mapped to specialist/major acute hospitals. This affects the elective activity as well, which is why this figure is lower in the adapted case.

The figure of two percent for specialist/major acute activity that emerged from the work with acute trusts (and endorsed by clinical advisors), is seen as very close to what is more likely to occur with the changes that will take place, rather than the 19% figure in the base case. This movement of activity to major acute hospitals will vary with local circumstances, therefore the 19% figure is not an accurate reflection of what will happen locally.

Note: The specialist/major acute element in the below figure represents the average percentage change for EHT, EpStH and WMUHT, whilst all of the other bars represent the average loss for all four acute trusts. This is why the individual percentage losses do not add up to the overall loss.

Figure 13: Average redistribution of income across the A Framework for Action delivery models for both the base and adapted cases



* Income changes are expressed as a percentage of total contract income

4.3.4 Understanding the type of activity and income moving from existing hospitals

Figure 14 shows the income change by specialty group (as a percentage of that specialty's contracting income), averaged across all the participating acute trusts, between the base year and each of the two cases. The figures are based on the core options, and as such assume no retention of the activity and income mapped to elective centres and polyclinics.

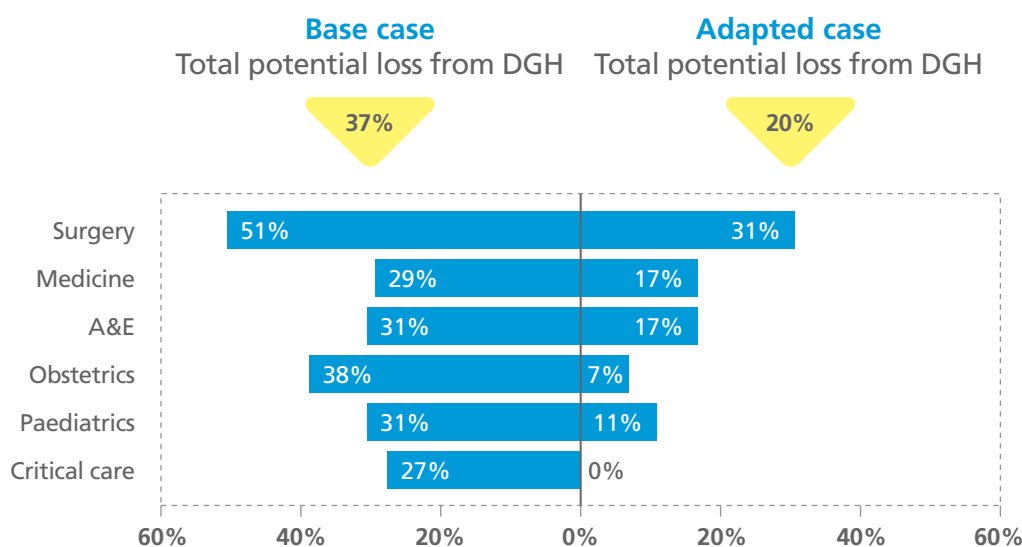
Figure 14 shows the scale of the reduction in each specialty group under both the core base case and core adapted case. Under the core base case, there are significant volumes of activity moving across all the specialty groups to both the major acute hospitals and into community settings. As stated previously this overstates considerably the extent to which this will happen.

Figure 14 shows that in all specialties, the income loss under the adapted case is lower than for the base case. For the first three specialty groups, this primarily represents the retention of activity previously mapped to the major acute hospitals. For obstetrics, there was a unanimous view that the base case mappings significantly understated the deliveries that could be provided at the local hospital. For paediatrics a higher proportion of activity managed within the PAU was modelled by all trusts. For critical care, the retention of all activity, rather than transferring patients after 24 hours, was specified by all acute trusts as necessary to support an undifferentiated medical take. This would then enable the retention of more major bowel surgical and medical work.

With the indicative clinical models developed for the main clinical services, it should be feasible to retain the higher volumes of activity associated with the adapted case.

Figure 14: Average income loss by specialty group for the four trusts for both core base and core adapted case

The average loss of income from DGH and income change by specialty group *



* Income changes are expressed as a percentage of total contract income for each specialty

4.4.5 General comments on the adapted case and base case

A summary of the overall effect on acute trust profitability across all options is shown in table five.

Table five: Summary of bottom-line profitability margin

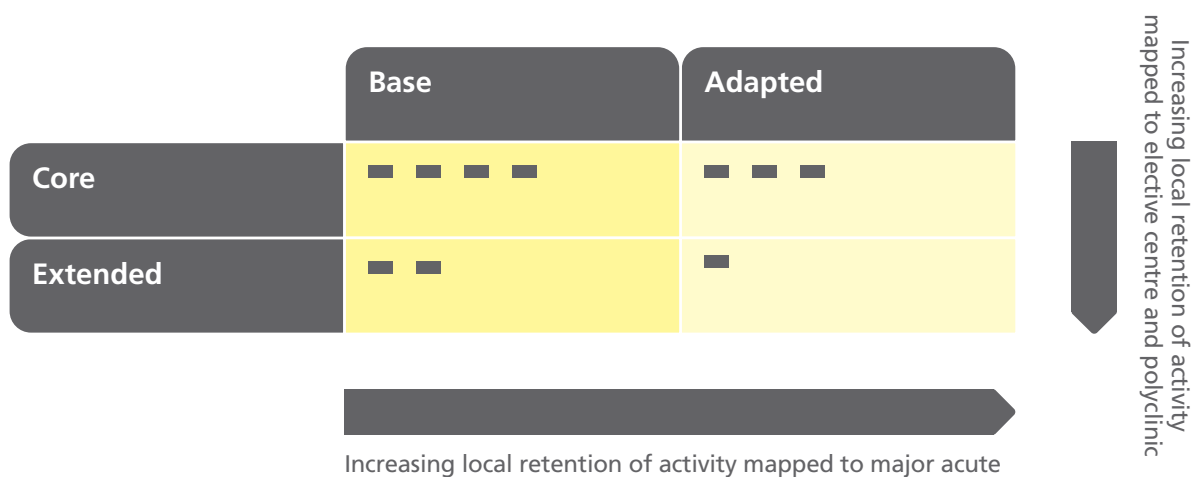
Trust	Current position	Base case		Adapted case	
		Core	Extended	Core	Extended
BHRT	-10.2%	-26.3%	-10.6%	-13.4%	-10.3%
EHT	1.0%	-28.9%	-9.0%	-13.6%	-0.3%
EpStH	0.3%	-28.8%	-9.3%	-16.0%	-1.5%
WMUHT	0.0%	-27.4%	-8.6%	-21.6%	-3.4%

Two clear messages arise from this:

- In all cases, the adapted case retains more activity and income at the acute trust compared with the base case, and so retains profitability.
- The extended options show the impact for acute trusts of retaining the activity and income otherwise mapped to an elective centre and polyclinics under the core case. This makes the extended option less financially challenging for the trusts.

The relative impact of the options can therefore be summarised as in figure 15.

Figure 15: Relative impact of the options (not to scale)



Retention of polyclinic activity is advisable where it provides an accessible service to the local community. However, the blanket retention of polyclinic activity in the local hospital as shown in the extended cases, does overstate the extent to which this is likely to occur. Even if polyclinics were commissioned and 'owned' on local hospital sites, it is unlikely the local hospital would retain this proportion of the activity. As outpatient income makes a significant contribution to acute trust's income and overheads, this area requires more sophisticated modelling, based on local commissioning intentions, to understand fully the implications of moving activity to other settings.

The core and extended options represent, in effect, the two ends of the spectrum of how activity may be affected by the changes in respect of elective and polyclinic activity. The reality will lie somewhere between these polar positions. The extent to which acute trusts might provide some of the activity in the polyclinic needs to be modelled to assess the impact of retaining some of this provision on trust income, even if the activity is not on the local hospital site.

It is evident that elective surgery will usually need to be part of the trust's portfolio to retain financial viability. In addition, there are clinical advantages in having elective activity on the local hospital site, as surgical opinions for patients in the hospital can be built into days of elective operating. From the studies referred to in section 3.4, there are also economies of scale in retaining elective work.

It is important to restate that the assumptions used have been taken to illustrate the potential range of impact of the implementation of changes in service provision in London's healthcare.

The overriding message is that the scale of change will be significant, and PCTs and acute trusts will need to substantially develop their capability to manage change of this order of magnitude.

The following sections identify some of the main issues that have arisen from the project that will need to be tackled to assure successful implementation.

4.3.6 Managing a trust's income and cost base

Other than under option 2b, acute trusts would face a significant reduction to their income base. To remain financially viable would require proportionate reductions in direct and indirect costs, and also large reductions in the overhead costs of an acute trust. Given that a significant proportion of activity is being transferred to other settings, there would be a need to manage the workforce in a way that supports these movements of activity. For example, providing opportunities for staff to transfer to new locations for the provision of care and, if required, to new employers.

An area of fixed costs, which presents a particular issue for some acute trusts, is the unitary payment for a PFI building. Two of the acute trusts involved in the feasibility study have PFI buildings within their asset base. This represents a fully fixed cost given the nature of the contracts which exist. This will have to be taken into account when developing commissioning and service strategies both by PCTs and acute trusts.

One possibility with the changes envisaged across London, is that there will be redundant estate if the creation of new, purpose-built facilities takes place. While these will improve the environment for the delivery of care considerably and are much-needed, the disposal of redundant estate is usually poorly perceived by the public and would need clear explanation.

Income reduction for acute trusts could be compensated for by diversifying the range of provision on their sites, to meet local needs and to develop more integrated services for patients. This could include:

- greater provision of rehabilitation and intermediate care services for patients from major acute hospitals, as well as from within the hospital and local community;
- provision of a polyclinic onsite;
- weaning critical care patients from the major acute sites;
- hosting services from other providers to enhance access for the local community;
- re-providing work from the major acute providers in areas where the trust excels;
- providing a base for social care to support integration of services;
- hospitals differentiating themselves to achieve clinical and financial mass in certain specialties. (For example, local hospital A might provide service A on behalf of a number of other hospitals and local hospital B might do likewise with service B.)

All acute trusts will be affected by the proposals to move some services into the community and the implications of this need to be fully understood. As a result, there will be ongoing pressure to continuously review the overheads of acute trusts, for example sharing financial or recruitment functions.

4.4 Transitional costs

A critical issue, given the spectrum of changes proposed, is the potential impact of transitional costs while the NHS in London moves from one pattern of service delivery to a new one. These will occur as new services are established, while existing costs cannot be fully removed from other providers in the same timescale. It is beyond the scope of the project to be clear about the way in which these costs will play through the system, however the financial analysis does indicate how substantial the costs could be if the transition is not carefully managed.

The largest element of NHS costs is staff. To support the movement of services, and the development of new services, staff will need to change where and how they work, as many existing staff will be involved in providing these new services. Establishing an effective clearing house will be critical to ensuring the appropriate skills are available and that a significant element of potential transitional cost is managed effectively.

Clear plans need to be established in advance of service changes for managing asset costs and overheads. This will require PCTs to work closely with providers to plan for these changes and to act on these plans. Trusts will need to be motivated to release fixed costs but consideration should also be given to some risk-sharing arrangements, to give all parties an incentive to manage the impact of transitional costs as tightly as possible.

4.5 Clinical costs and productivity

The project has identified and emphasised the importance of clinical networks to the delivery of the changes. The clinical and management implications of clinical networks require further work, and the costs of running networked services need further assessment.

The importance of a high level of productivity in the workforce has been highlighted by the project. The proportion of direct patient contact for clinical staff can be increased and small changes in this make a substantial contribution to making services financially viable. Both commissioners and providers should pay considerable attention to productivity, be clear about their expectations and monitor against agreed standards.

4.6 Payment by Results

A strong view was expressed by clinicians that Payment by Results (PbR) does not support change and innovation in the delivery of clinical services. For example, acute trusts receive payments largely for admitting patients or seeing them in outpatient clinics. The thrust of policy, with regard to the management of long-term conditions, is now to avoid admissions wherever possible, by developing a more active management strategy and preventing exacerbations of the condition. It is these exacerbations which can often lead to an avoidable admission. Equally, the regime of follow-up appointments for people with long-term conditions is an inflexible system for patients and does not reflect the pattern of their condition. Exacerbations do not occur at three or six monthly intervals and providing outreach services is a far more flexible system. However, this is not fully recognised in the way the payment system is currently being used between organisations, nor is the benefit of preventing admissions to hospital. Payments based on programmes of care or pathways should be examined to calibrate payments to the resources used to provide care.

An example, which has clearly demonstrated there will be issues with PbR, is the payment for paediatric attendances and admissions. The PAU model is designed to avoid admissions as far as possible and to reduce length of stay in line with best practice. It also concentrates resources at the early point of a child's contact with the service, and is more costly to run than a standard A&E function for children. The tariff does not reflect the additional cost of the change in the clinical model and, if the model is to be developed, a different level of payment will be required. The second element of financial modelling showed how sensitive the service is to this, by running the figures with either a £400 or £500 payment for an attendance. At £400 per attendance paediatrics makes a loss and at £500 it moves to surplus.

The same principle will apply to the acute assessment process; where enhancement of skills at the first point of contact is designed to expedite a person's treatment. The PbR taper for short stays, and the marginal rate for additional treatments in A&E, may act as disincentives to establishing a model which could reduce the overall cost of treatment in hospital.

Another area of potential clinical change, which will impact on payments to providers, is the development of clinical networks. By definition, these will be developed by linking people who currently work in different acute trusts. One or more mechanisms for paying for this activity needs to be developed. They could include:

- developing a host provider for the network and having a service agreement for the provision of services to other acute trusts served by the network;
- developing a profit-share arrangement between the acute trusts;
- sharing income from the network between the acute trusts on the basis of historical levels of activity.

Any option will have its advantages and disadvantages. Any payment models will have to take into account the impact of changes on the acute trusts involved, and the incentives for them to participate in the network.

In implementing the changes in service, it is critical that the payment system reflects how costs will change across pathways of care. The PbR system, as it stands, does have flexibilities. However, take up of these flexibilities varies across health economies. A more lateral consensus from PCTs and trusts is needed to ensure that the payment mechanism does not impede progress to new models of care. A specific, London-wide process to make recommendations about how tariffs could be flexed should be established, and focus initially on the management of long-term conditions and children.

5. Managing the changes

The following comments reflect some of the discussions regarding the local hospital proposals that took place during the course of the project, and are included to give an insight into current perceptions and to inform the management of change.

5.1 Perceptions of the proposed models in acute trusts

5.1.1 Discussion

Currently, the reaction to the proposed changes is variable, as might be expected. There is an acceptance of the arguments for change, particularly around consolidation of specialist areas of care, coupled with some reservations about the proposals, due to the perceived impact on individuals, organisations and services. There was also a frequently expressed doubt that localising services in the community could be as economic as the current pattern of provision, for example for diagnostics. This issue needs to be addressed through a cost assessment of a more distributed system of provision. It is important to note that changes to the location of services should also change patterns of delivery and usage, which would give compensating cost reductions for the system. This needs to be taken into account when assessing the economics of a more distributed model of care.

Concern was expressed about the possible loss or underuse of skills if specialist work is moved to other centres; for example an acute trust which had developed capability in the sub-specialty of foetal medicine, possibly not retaining this work if more complex cases went to major acute hospitals.

Issues of professional development and satisfaction were also raised, for example surgeons would not be able to perform some of the most complex work in a local hospital. The development of clinical networks would, however, allow consultants and juniors to have a broad range of practice and would support sub-specialisation.

5.2 The organisational features of local hospitals

5.2.1 Discussion

As stated, the local hospital is not a fixed entity. It will have some core, common components – such as delivering acute medicine for the local population, providing obstetrics and paediatric assessment – but will also need to respond to local circumstances by providing further elements of care.

It is clear that local hospitals will not be able to exist as an ‘island.’ They can retain an independent status but they must function as part of a network of services, linking both into the community and into other hospitals.

From the work of the project, it is reasonable to suggest that the clinical model of the local hospital can be delivered and will improve the health of the local population. This is not an easy task and there are risks in the implementation of changes that will need to be managed. The business model for the local hospital is, however, far less clear. The current organisational constructs may well need to be modified to deliver a viable organisation. It is essential that a workable business model, which can deliver organisational stability and sustainability, is developed. It is emphatically the case that organisational boundaries should not be allowed to stand in the way of developing a viable clinical model. Figure 16 provides an illustration of the way in which service changes will impact on the local hospital.

Figure 16: Impact on the organisational model for the local hospital

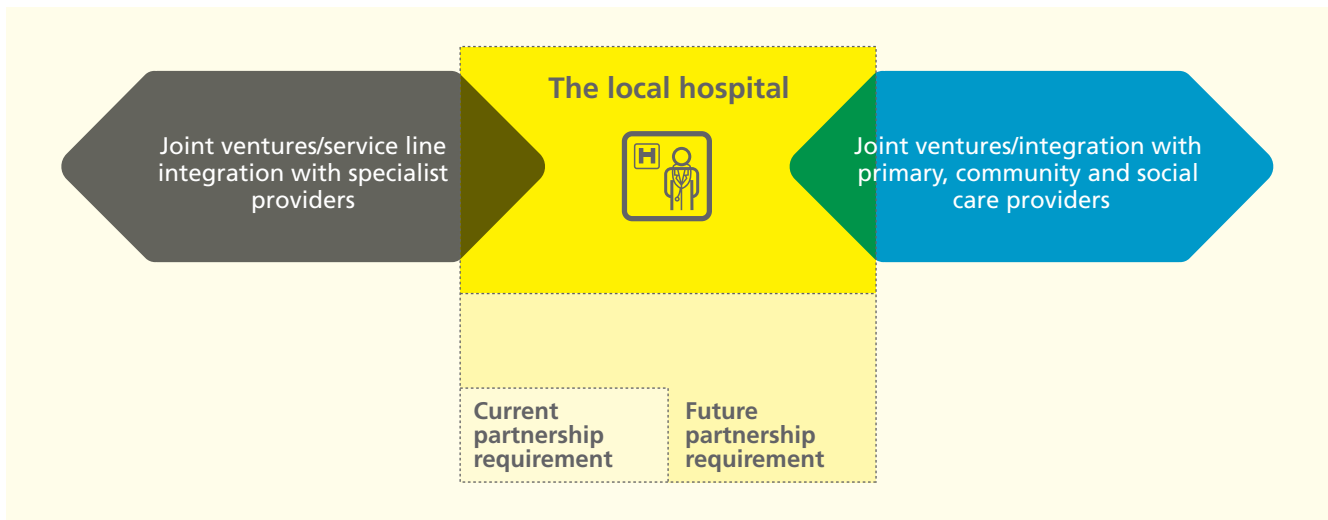


Figure 16 indicates the importance of partnerships but these could take different forms, ranging from acting as a landlord for the provision of services, to full joint ventures or integration between organisations. Partnerships could include income sharing for the provision of networked services or a hosting arrangement with an agreement to provide services in different locations.

An obvious solution would be to pursue mergers between organisations to create the clinical mass to support networks. The history of mergers in the NHS is not, however, one which indicates that this would necessarily be the optimal route to choose. They are often time-consuming, use important clinical and management resources, and struggle to deliver the perceived benefits because of cultural conflicts between organisations. While mergers may work in some cases, other forms of partnership and collaboration should be actively considered. These could include joint working between two local hospitals to obtain the critical mass they need for various services. Between the hospitals, services could be differentiated so that each specialises in certain areas of service provision.

If these partnerships and collaborations are to work effectively, expertise in managing joint ventures needs to be enhanced and the scope for different ways of managing clinical networks should be explored. How staff function and are held to account in networks also needs detailed thought, as does the way in which training for medical staff can be provided.

The development of clinical networks is essential to the delivery of the local hospital model. The governance arrangements for clinical networks need to be developed, using learning from existing networks. Integrated working with general practice and community services for the management of long-term conditions could deliver greater continuity of care for patients, and reduce the emergency demand on hospitals. Again, the way in which this could be delivered needs to be addressed and it would be worth pursuing pilots to assess the most effective form of working arrangement.

The option of integration with social care was considered in one acute trust. Even if full integration is not pursued, the changes in working patterns and use of facilities do present an opportunity to develop closer working relationships with social care, which should be fully explored.

The local hospital is clearly different from the traditional pattern of district general hospitals, and its development presents a broad range of opportunities to change working practices. Many medical staff have broken away from the notion of working in a single location and this will increasingly become the norm for most specialties, but it is not always a favoured way of working.

The barriers between hospitals, and between hospitals and the community, need to come down in order to provide integrated, high-quality care for patients. Increasingly, the hospital should be seen as just one of the locations where people work, and different professionals may use it as a facility from which to provide services, rather than belonging to it exclusively. If this is the case, the sense of belonging which creates an identity and pride in an institution, will need to be aligned to networks. Equally, for those who remain based largely in, or working out of, one location, retaining that sense of pride will be important.

The acute trusts which succeed in this environment will be the ones which are prepared to be adaptive and innovative in the way in which they provide services. Success will also be found in those acute trusts which become effective at creating partnerships with other organisations.

5.3 Managing the transition

5.3.1 Discussion

Changing the organisation of health services inevitably poses challenges and in London this has proved difficult in the past. To deliver this change, a combination of strong commitment and engagement with professionals and the public will be essential. To manage the change successfully there needs to be a positive view of the range of changes being pursued. Leading and informing opinion will be critical to the successful implementation of these changes, and has to be clearly focused in a number of different organisations.

The task for leaders of acute trusts, which make the transition to become a local hospital, is not an easy one. They will have to sell the concept of the

local hospital and manage the risks associated with change, which include a loss of income and associated financial risks, and the need to implement changes in clinical practice and organisation. How best to prepare and support those leaders needs to be given some consideration, as does the question of the incentives and levers that will support the changes.

Trusts will generally need to be more adaptable in anticipating and responding to changes in income. The service model is viable and retains local access to important services, so there must be a strong drive to find solutions to financial issues, which arise from the implementation of changes. In this context, the financial challenges should not be allowed to impede the development of the clinical model.

Options about the range of services to be provided at a local hospital need to be developed locally by PCTs and acute trusts at an early stage, to manage some of the risks of financial instability described by the project.

The project gives a strong indication of the importance of clinical productivity on the economic viability of local hospitals (see section 4.6) and there needs to be a strong focus on ensuring that productivity is enhanced, to deliver best value in the service. The workforce strategy developed by the SHA needs to be strongly connected through to commissioners and providers.

Currently PCTs in London have an average population similar to that of a local hospital (200,000 – 250,000). PCTs also function at a sector level in Collaborative Commissioning Groups (CCGs). Effective commissioning of acute services will increasingly have to operate at a larger population level than that of individual PCTs. This will be particularly true for services commissioned on a networked basis, and for more specialist services like stroke and trauma. The skills and information required for commissioning at this level will need to be enhanced and there will need to be clear governance arrangements between individual PCTs and any group acting on their behalf.

Planning tools need to be developed which enable PCTs to work with providers, to assess the impact of changes and plan accordingly. While it is not the responsibility of PCTs to sustain specific organisations, it is their responsibility to ensure that providers are 'going concerns'. For example, if PCTs are commissioning from an independent sector organisation they will undertake a 'due diligence' on that provider. The risks inherent in making changes to current providers of acute care could lead to financial instability, if they are not carefully planned, and could lead to adverse consequences. Hence, it is important to understand and manage the implications of commissioning changes to services. Equally, there is a risk that change is stifled because organisations do not respond innovatively and flexibly enough to manage the risks that change will bring. Commissioners will, therefore, have to balance the drive for change and improvement in services with a measured approach to the sustainability of services in an organisation.

Allowance needs to be made for transitional costs as change occurs, partly through careful planning and the development of plans which mitigate some of the transitional costs. Improved productivity would also give some headroom to manage transitional costs. Financial risk sharing should be considered to support the change process, and give incentives to all parties to manage the changes effectively.

5.4 Policy issues

The changes discussed in this report will be impacted by, and have an impact on, a number of policy drivers. The policy areas which will bear most on the changes are discussed.

For the whole system, but particularly for PCTs, choice, co-operation and competition and how this is managed will be critical. PCTs will have to balance the need for sustainability with the need to pursue contestability for service provision. There may need to be some flexibility in the application of contestability during the transitional period, if it were understood to run counter to the stability of an organisation delivering key local services. This must not be seen as an invitation to acute trusts to shroud the issue of financial impact and viability, and there must be a process of rigorous challenge on these issues. Some guidance on the application of contestability in a rapidly changing environment should be considered.

For acute trusts, foundation trust status is essential to their futures. One of the criteria used to judge acute trusts applying for foundation trust status, is their current and future financial viability. Changes which may affect their financial position need to be clearly understood and described in an acute trust's integrated business plan. Trusts will need to understand commissioning intentions in order to be able to produce a clear business plan, which takes account of any adverse financial consequences of changes to services. This will require acute trusts and PCTs to work closely on the modelling of the impact of changes. Developing different scenarios will also help inform decisions, by identifying the potential consequences. Given the potential impact on the applications for foundation trust status, this work needs to be taken ahead as a priority.

The development of integrated care organisations is being examined as part of the discussions around the NPCCS. These changes provide an outstanding opportunity to develop integrated service provision along pathways, and to look at whether integrating organisations would also bring benefits in the delivery of patient care. Practice based commissioning groups could provide an effective basis for such organisations.

Strengthening commissioning is a major strand of development within the NHS. PCTs will need to improve competencies in skills that will make them effective commissioners of acute care. Specifically, they should:

- use research evidence to specify clinical standards for services;
- make greater use of independent clinical skills and knowledge to support commissioning decisions;
- better understand the organisational dynamics of acute care, particularly in a changing environment;
- develop scenario modelling capability to understand the consequences of different actions and enhance change management skills.

The need for flexibility in the application of PbR is discussed in section 4.7.

5.5 Risks

5.5.1 Discussion

There are some clinical risks, which have been described in section 3.8. A number of other risks have been identified during the course of the project and these are described below.

The scale of change, and the impact of losing activity and income on acute trusts, are two of the most significant risks, particularly as they will influence attitudes to the proposals. These will be mitigated over time by growth in activity, which is one of the reasons why managing the transitional period is of great importance. The planning of the changes, and their implementation, needs to be based on the development and application of a timetable which takes into account the financial impact and the time required to take costs out of an organisation.

The adapted cases show that the loss of income to out-of-hospital services is likely to be far greater than the movement of activity to major acute hospitals. This shift of activity into different community settings will also affect the major acute hospitals, particularly those which have a significant secondary care element to their service. The extent of this movement will, in part, be determined by the success of the development of polyclinics, but the impact of reducing admissions of patients with long-term conditions could also be significant. This change will be mitigated by the projected increase in the number of people with long-term conditions.

Conversely, there is a risk that the NHS in London is not as successful as it needs to be in changing the organisation of services for people with long-term conditions. Given the indications of growth and the impact on bed usage, if this were the case, the risk would be that hospitals were unable to cope with the level of inpatient activity this generates. The importance of changing the management of long-term conditions on an industrial scale (for example, moving away from a pilot or ad hoc basis) is of great importance. High priority should be given to this as an area of activity and clear markers of the change should be set and monitored rigorously.

The capacity of acute trusts receiving additional activity is also something which needs clear planning. In the short term, it would be difficult for these acute trusts to cope with that additional work unless there was some compensating move of activity to local hospitals or to the community. This also raises another point, which has been brought up during the course of the project, as to whether there should, as a matter of policy, be some trading of activity between major acute and local hospitals. This would provide an incentive to the local hospitals and balance the sense of loss associated with activity moving away.

Access being reduced for some services and the impact on the local community, particularly on more deprived groups, was raised as a risk by the acute trusts involved. Geographical accessibility does influence the use of healthcare and there is a real possibility of this risk materialising. Services need to be commissioned in a way that manages this risk, keeping a 'front door' to locally accessible services .

The public and political reaction to change is always a significant issue for the health service. *Consulting the Capital* has indicated a good degree of support from the public for the proposals that have been put forward. This needs to be built on, by sustaining a dialogue with local communities. Clinical support for change is an important factor in determining public attitudes, positively or negatively, so the engagement of clinicians in the process will make success more achievable. On the basis of the discussions which have already taken place with clinical staff, there are some areas of concern which need to be addressed for clinical staff to become more fully supportive of the proposals that result in the emergence of local hospitals. These include the clinical safety issues referred to in section 3.8.

While there is evidence of services being organised successfully on the lines of the local hospital model, this will still appear a rather theoretical position to many. Working examples of changed organisations, supported and promoted by clinical colleagues, can have a profound impact on clinical opinion. It is recommended that the examples which exist are more fully assessed, and that sites for early implementation and assessment for

the different services are identified, to create an information base that will support the arguments in a compelling way.

There are also the issues of the impact of changes for clinical staff. This could include practising between the hospital and community to a greater extent, or working on more than one site. Clinical networks have some complex aspects to them, but there are also practical issues such as staff being able to move between sites, parking, access to work areas, and working with a broader range of staff. The compensating factors for clinicians might include:

- working less onerous on-calls;
- being able to specialise more in an area of interest;
- developing joint working arrangements with other professionals;
- a variety of roles and working environments.

If these questions of personal interest and impact are not addressed, they will become underlying sources of resistance to the change, which will make delivery more difficult.

There are specific risks for those leading change, particularly if there are points of resistance inside and outside the NHS. Leaders can become the target of the discontented. This is part of the dynamic of leadership, but it is worth considering how best to prepare and support effective leadership of the process of change. New leadership development programmes are underway in NHS London and these must continue to be supported at the highest level if the NHS in London is to create the sort of leaders required to deliver such significant changes in the delivery of healthcare.

The importance of high-quality training of doctors has already been raised. The current system still relies quite heavily on junior staff being the first line of contact for patients, particularly in emergency services. The model of management of the acute assessment process described in this report shifts this practice and proposes a senior opinion more usually being the first point of contact, in the interests of improving patient care. The way in which training takes place will have to change as a consequence of this, but there are a number of suggestions that have emerged. The deanery and other bodies with an influence

on training programmes will need to be engaged to modify these programmes and ensure the continued development of skilled, experienced medics. The local hospital must become a place in which high-quality training can be delivered and important experience gained.

Finally, but perhaps most importantly, the skills and competencies to support the changes in clinical practice and the organisation of services need to be in place. As well as preparing new staff for these changes, a great deal of attention needs to be paid to the skills of the existing workforce and how these skills will need to be adapted. Training programmes need to focus on practical skills and competencies. There are a number of examples where this is the case, but the example of those required to manage long-term conditions in the community is a useful illustration of what would be required. For this service to be delivered to good effect for patients, clinical staff (working with a high degree of autonomy) will have to make judgements about the safe management of individuals. More staff with a wider range of specific and general competencies are required in the community to make the move to a systematic management of long-term conditions in London. Training programmes need to be put in place which include a strong local component, reflecting how the service will be managed in that area, and to develop the clinical relationships that are so important in this type of service.

The risks associated with the changes proposed are considerable. This has to be set against the risks of the status quo, which, as described in *A Framework for Action*, falls short of patients' expectations, does not always deliver the best possible outcomes for patients, can be inflexible and difficult to access, and is not delivering equality of outcomes across the capital. On this basis, the benefits that can be obtained from change, and from managing the risks well, are enormous.

These benefits include:

- improvements in the outcomes for patients needing more specialist care, as for trauma and stroke;
- improved organisation of care to ensure a senior opinion early in a patient's treatment, which can lead to better clinical outcomes, reduced length of stay and exposure to risk, and better use of resources in hospitals;
- dedicated emergency surgical services that will provide a more senior opinion, which can lead to reduced admissions, reduced time to surgery, and fewer night time operations;
- the retention of local access to the majority of services currently undertaken by district general hospitals;
- more accessible provision of services that can be provided more locally, such as some outpatient and diagnostic services;
- the development of services which are more responsive to individual needs, such as for people with long-term conditions, taking care into people's homes and local settings, avoiding unnecessary admissions, therefore raising people's satisfaction with the service.

6. Areas of further work

The local hospital project has identified some important issues for the implementation of the clinical, financial and organisational arrangements that would be required to make the local hospital a viable proposition. Below are some areas of potential further work which should be considered.

6.1 Areas of further work – Pan-London

The following have been identified as areas for further action on a pan-London basis:

- The Senior Responsible Officer for the project, with staff from Healthcare for London, should ensure the dissemination of the findings from the report to PCTs and to acute trusts.
- Consideration should be given to the development of one or more live test sites to understand the issues which arise from application of changes to clinical services. This work could be undertaken in an individual organisation and/or in a sector of London. The benefit of working across a sector would be that there would be more opportunity to differentiate services between the hospitals in the area. For a single organisation it is important that it is well-placed to implement the clinical models associated with the local hospital and should undertake an audit of the impact of a number of key criteria, including patient safety and cost-effectiveness.
- Linked to the national review, work should be commissioned on how PbR can be flexed to provide incentives for different models of care. This could include payment for care pathways with sub-contracting, payment for care programmes for chronic disease, and refining paediatric tariffs to reflect different models of care.
- The project should inform the SHA's acute trust transformation exercise assessing acute trusts' prospects for becoming a foundation trust.
- Consideration to be given as to how support can be provided to the change process and the development of the capability to manage the changes, including:
 - providing support to leaders of the process;
 - learning from change processes in London and elsewhere;
 - commissioning and using planning tools to inform local decision-making;
 - broadening the clinical leadership programme and developing a strong focus on change management skills.
- A programme of workforce development based on a fast track approach, to develop enough capacity to support changes in practice, including:
 - early work on skills for managing long-term conditions in the community;
 - continue with acute physician programme and develop programme for A&E consultants to support acute assessment;
 - managing acutely-ill patients;
 - development of advanced neonatal nurse practitioners;
 - development of maternity support workers.
- As the programme of change develops it should be supported by the ability to match existing staff to changes in the provision of care, to make best use of the skills available to provide services, and to reduce transitional costs.
- Work on productivity should be rigorously pursued. PCTs and acute trusts should focus on the ways in which productivity can be improved to ensure the viability of all the proposed changes.

6.2 Areas of further work – PCTs

The following have been identified as areas of further action for the PCTs:

- It is essential that the local hospital is clearly seen and planned as part of a system of healthcare provision. To support this, PCTs should take ownership of the financial models, and consider running the models in one sector to assess the wider ramifications of the movement of services and changes to service provision. To do so would require close working with the acute trusts in a sector. In undertaking this work, PCTs and acute trusts should include consideration of the way in which any surplus estate might be managed to provide care needed by their local community.
- PCTs should commission work on the incentives for change and how they can apply the leverage to deliver the full range of changes to clinical services, but with a specific view on the local hospital model.

6.3 Areas of further work – Clinical Advisory Group

The following have been identified as areas of further action for the Clinical Advisory Group:

- The Clinical Advisory Group should commission work to develop options for the organisation of clinical networks.
- A review and validation of the clinical assumptions for the activity retained in the local hospital under the adapted case should be commissioned by the Clinical Advisory Group.
- The development of the capacity to act as an advisory body for acute trusts on the indicative clinical models.

7. Conclusion

The local hospital project had to develop a methodology to test the concept of the local hospital, which recognised that it is not an established form of organisation of clinical services.

Using the adopted methodology, the project has developed a body of information which can be used as a resource for PCTs, acute trusts and others interested in the impact of changes to the healthcare system in London.

These resources include:

- indicative clinical models for a number of key service lines and an analysis of issues associated with their implementation;
- case studies of hospitals with some, or many, of the characteristics of a local hospital, both nationally and internationally;
- an analysis of the impact of the financial changes supported by a modelling tool that can be more broadly applied at a greater level of detail to understand the more specific impact of changes;
- a model for developing service line costs, which will allow PCTs and acute trusts to vary assumptions about different elements of costs, to understand what is critical to making a service economic.

The work of the project indicates the clinical models, which make up the local hospital, can be delivered but the path to delivering this will be far from easy to tread. The indicative clinical models describe the way in which the clinical services might work, but there are important issues of patient safety and clinical management which need to be addressed for this to be the case. The need to develop clinical networks has come across emphatically from the project and requires particular attention.

The financial modelling undertaken highlights the scope and nature of the risks involved in making substantial changes to the current organisation of services. To deliver the changes without serious unintended consequences, meticulous planning and change management work will be required.

The question of the future shape of organisations that will deliver services in the local hospital and across related networks, is as challenging as implementing the changes to the clinical services. There is less clarity about the form the organisations managing services could take, than about the potential shape of clinical service that could be offered. This represents a major issue, as it is important for the stability of services that they are housed in stable organisations.

Importantly, the perception of changes, amongst professionals and the public will be critical to successful implementation. The overall advantages of the changes proposed in *A Framework for Action* need to be continually restated, and the importance of delivering changes to improve the health and healthcare of Londoners must be emphasised.

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