AGENDA ITEM NO. 7

BRISTOL CITY COUNCIL

JOINT HEALTH SCRUTINY COMMITTEE

27TH SEPTEMBER 2010

Report of: North Bristol NHS Trust

Title: Consolidation of both Medical Admissions Units on to the Frenchay site, in addition to collocating respiratory and cardiology services as part of the redevelopment of Southmead and to improve patient care

Ward: Population Catchment Area for Southmead and Frenchay Hospitals for full range of District General Services and Tertiary Referral Catchment Area for Specialist Services

Officers Presenting Report:

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RECOMMENDATION

The committee is asked to consider and note the temporary transfer of C Ward (the Medical Admission Unit) at Southmead Hospital to Frenchay Hospital and the collocation of respiratory and cardiology services as part of the redevelopment of the Southmead site. This is in line with the Bristol Health Services Plan (BHSP) that aims to modernise health services and hospital facilities in Bristol, North Somerset and South Gloucestershire. The move will provide an improved patient experience and prepare the way for consolidating the Southmead and Frenchay Medical Admissions Units into one medical team, ahead of the move to the new hospital in 2014.

Summary

The report outlines the detail surrounding the proposed temporary moves and collocation of services onto the Frenchay site.

The significant issues in the report are:

The temporary transfer of services from Southmead to Frenchay.

Consultation

1. Internal

Whilst the BHSP has already been extensively consulted upon as has the business case for the new hospital at Southmead, and temporary collocation of existing services, ongoing engagement with internal and external stakeholders is of paramount importance, to ensure that our plans are robust during this transitional period.

- Nursing Staff
- Medical Staff
- Hotel Services Staff (Domestic and Portering staff)
- Allied Health Professionals
- Estates staff
- Staff side/unions
- Corporate teams

2. External

- Great Western Ambulance Service (GWAS)
- University Hospitals Bristol NHS Foundation Trust (UHB)
- Professional Executive Committees (PECs) - North Somerset (September), South Gloucestershire and NHS Bristol, (October)
- United Bristol Hospitals NHS Trust
- LINK
- Patient Panel

Context

The proposed move of the Medical Admissions Unit and collocating respiratory and cardiology from Southmead to the Frenchay site brings together both Medical Admissions Units on the Frenchay site. This will enable redevelopment of the Southmead site and will improve patient care and will provide an enhanced patient experience.

- The move enables service reconfiguration to deliver streamlined patient pathways, leading to better patient experience and care and allowing us to prepare for the new hospital.
- Enables the new “model of care” for modern assessment with increased availability of expertise leading to increased discharge and reduced length of stay
- Embed new ways of working prior to moving to the new hospital in 2014
- Increasing the number of side rooms in Frenchay facilities improves patient experience and safety and supports privacy & dignity work
- The co-location of services will reduce inefficiencies which currently impact effective care delivery during winter pressures during lead up to new hospital build
- Estate to be used more efficiently and in some cases completely vacated, delivering a financial benefit for the new hospital build.

Bringing the two MAUs together and collocating respiratory and cardiology will improve the quality of care that NHS Bristol NHS Trust provides. By having all the MAU expertise on one site and being closer to Accident and Emergency some of the patients will receive quicker

assessment.

Without the move of C Ward at Southmead to the Frenchay site work cannot begin on the new model of care for an integrated assessment unit. The new model of care will streamline patient pathways and reduce admissions for the benefit of patients. The trust needs to begin developing new care pathways for acutely ill patients to ensure that they are managed at a consistently high and safe level ahead of the move to the new hospital. The earlier the Trust is are able to start this work, the better it will become with new ways of working. This will be in our patients' best interests.

Some patients will have a quicker transfer time from Accident and Emergency to assessment.

By providing a working environment that is better for our patients we hope our staff's job satisfaction will improve.

This change will make delivering care during our winter pressures months much better, once the building work and moves have finished.

Impact on Patients:

- Centralisation of MAU expertise, enabling improved decision making.
- Increased rate of discharge from MAU.
- Minimise transfer time from ED to MAU, improving the opportunity to reduce ED waiting times.
- Travel time for patients and relatives who would have previously been located on the Southmead site.

Proposal

The changes proposed are:

- Ward 205 (Frenchay) will close due to increasing the number of patients we discharge and some patients being cared for on alternative wards.
- Ward 107 (Frenchay) will move to ward 205.
- C Ward (Southmead) will move to 107.
- Ward 105 will remain a MAU but staff will now work closely with ward 107 as one joint Medical Admission Unit.
- Collocation of respiratory and cardiology to one hospital.

Other Options Considered

Several options were considered for the location of the MAU. These included the building of new premises at Frenchay and the re-organisation and upgrading of Wards 12 – 15, with better connections between the ward areas.

These options were not appropriate; they did not deliver the potential to improve patient care that we had hoped and/or were very expensive at the time of investigation. The option of doing nothing was also considered however this change is fully focused on improving patient care and "doing nothing" would not do that.

Risk Assessment

- Relocation of C Ward at Southmead to the Frenchay site. If the relocation does not take place it will be more difficult to proceed with the new build on the Southmead site
- Embed new ways of working prior to moving to the new hospital in 2014. If the move does not take place then staff will not be able to develop and assess the new Model of

Care that is planned for the Integrated Assessment Unit which will part of the 'Emergency Zone' in the new hospital.

- The proposed new location for C Ward at Frenchay has fewer single side rooms than its current location. This may result in an infection control/single sex accommodation risk. Additional side rooms to be added to 107 to mitigate this risk.
- Co-locating medical services on the Frenchay site will mean a change in doctor levels at the Southmead site which will change the numbers but is consistent with the bed reductions.

Equalities Impact Assessment

An impact assessment was completed at the time of the original public consultation into the building of the new hospital, but a separate up to date impact assessment is currently being undertaken.

Legal and Resource Implications

Legal – no impact anticipated

Financial – some capital spend to increase the number of side rooms at Frenchay.

(a) Revenue

- £24,000

(b) Capital

- £294,350

Land

Not applicable

Personnel

A number of staff will be affected by these changes which is currently out to consultation through the Trusts HR policies.

LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985 Background Papers:

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1. BHSP Consultation Report 2005 - http://www.avon.nhs.uk/bhsp/documents/2005_Reports/050101_BHSP_Consultation_Report_Jan05.pdf
2. BHSP Model of Care Summary December 2005 - http://www.avon.nhs.uk/bhsp/documents/2005_Reports/051201_BHSP_Model_of_Care_Summary_Dec05.pdf
3. BHSP North Bristol Trust Business Case Executive Summary December 2005 – http://www.avon.nhs.uk/bhsp/documents/2005_Reports/051201_BHSP_NBT_Business_Case_Executive_Summary_Dec05.pdf
4. BHSP North Bristol Trust Travel & Access Assessment February 2006 - http://www.avon.nhs.uk/bhsp/documents/2006_Reports/060202_BHSP_North_Bristol_Trust_Travel_and_Access_Assessment_Feb06.pdf
5. North Bristol & South Gloucestershire Outline Business Case January 2006

PART A: INTRODUCTION AND OVERVIEW

SECTION 1: INTRODUCTION

1.1 PURPOSE OF THE BUSINESS CASE

This Outline Business Case (OBC) proposes to rationalise acute services at Southmead and Frenchay hospitals on to a single acute site at Southmead and to develop a supporting infrastructure of community services. This development is a component part of the Bristol Health Service Plan (BHSP) that aims to modernise health services and hospital facilities in Bristol, North Somerset and South Gloucestershire. It follows on from a major public consultation and a Strategic Outline Case (SOC) which was prepared by North Bristol Trust, South Gloucestershire PCT and Bristol North PCT and was approved by the Department of Health in July 2004.

This OBC sets out an intention to create:

- A single acute hospital on the Southmead site containing 947 beds integrated with a 28bed community hospital on the Southmead hospital site;

- An 84 bed community hospital on the Frenchay site

The aim is to open these facilities in 2013.

The main aims of the investment are to:

- Concentrate acute and specialist services on a single site and improve the safety and sustainability of care.
- Provide improved access to services by increasing the range of community based services around North Bristol and South Gloucestershire.
- Improve the efficiency and effectiveness of services by harmonising primary care, social care and local hospital services to prevent inefficiencies, gaps in provision, delays and duplication of effort.
- Improve the very poor patient environment and working conditions in the old hospitals and provide buildings fit for purpose.
- Contribute to the wider objective of neighbourhood renewal and regeneration.

The OBC is a joint proposal by the three Trusts in the North Bristol and South Gloucestershire area:

- Bristol North PCT (BNPCT)
- South Gloucestershire PCT (SGPCT)
- North Bristol NHS Trust (NBT)

1.2 STRUCTURE OF THE BUSINESS CASE

The document has been structured into four key parts:

PART A – INTRODUCTION AND OVERVIEW

Section 1 – Introduction
Section 2 – Strategic Context

PART B –FUTURE SERVICE MODEL AND CASE FOR CHANGE

Section 3 – Model of Healthcare Provision
Section 4 – Activity and Capacity
Section 5 – Case for Change

PART C – OPTION APPRAISAL

Section 6 – Overview of Option Appraisal Process
Section 7 – Short-listing the Options
Section 8 – Benefits Appraisal
Section 9 – Financial Appraisal

PART D – PREFERRED OPTION

Section 10 – Description of Preferred Option
Section 11 – Financial Affordability
Section 12 – Workforce
Section 13 – Risk Management
Section 14 – Programme Management and Timetable
Section 15 - Preparing for Procurement

1.3 RECONCILIATION WITH THE ORIGINAL SOC

The development of the OBC follows approval of a Strategic Outline Case (SOC) for healthcare in NB&SG in July 2004. This OBC differs from the Strategic Outline Case submitted in July 2004 in the following key areas:

1.3.1 Scope of the OBC

The SOC encompassed plans for community facilities at Yate and Thornbury. These plans are being taken forward now as separate procurements, with complementary OBCs, and no longer fall within the scope of this OBC.

There are now plans to provide cardiac catheterisation services within the acute core of the scheme, whereas these services were excluded from the SOC.

The scheme has been restructured to ensure that elective and diagnostic services, which could potentially be provided by the Independent Sector are retained in existing facilities within the Avon Orthopaedic Centre on the Southmead site. This will allow the Trusts to scale the facilities to meet changes in the market without compromising the new build core of the hospital.

1.3.2 Activity

Since the SOC, a more detailed assessment of the likely changes in activity over the planning period has been undertaken. These assessments have covered the following areas:-

(a) Growth

The SOC included growth, from a base year of 2002/03 to 2012/13 of 6.4% cumulatively over the period (0.6% per annum), net of the impact of alternatives to acute care. A detailed analysis for the OBC has assessed growth from a base year of 2004/05 through to 2013/14 of 9.8% cumulatively over the period (1% per annum), net of the impact of alternatives to acute care. This is described in detail in Section 4.2.

(b) Transfers

The impact of transfers in three areas was not considered as part of the SOC. These are:

- Transfers as a result of acute flows.
- The impact of the Independent Sector.
- Interventional cardiology transferring form UBHT.

The consequences of these three transfers have now been taken into account in this business case and are therefore reflected in the capacity requirements.

The net effect of all these changes in activity is summarised below:-

	SOC	OBC
Base year admissions	109,634	112,408
Admissions in year of re-development	112,757	106,162
% increase in admissions	**2.8%**	**-5.6%**

1.3.3 Finance

Since the SOC, a wide range of actions have been taken to maximise the affordability of the scheme. The two main thrusts of this are outlined below:-

- A more aggressive stance has been taken on performance levels, with current upper decile performance being targeted, rather than the previous upper quartile performance. This both reduces the size of the scheme from what it would otherwise have been, and also enables revenue savings from bed reductions to be achieved which can contribute to the financing of the scheme (after taking account of FRP requirements). This stance on inpatient performance has also been carried through to other areas such as theatres, outpatients and diagnostics.
- More existing estate is being retained than was previously planned, and that is being retained is being used more intensively. Examples include the retention of the gynaecology and obstetric units on the Southmead site. The Frenchay Phase I building is being used more intensively in a number of ways. More of the community beds than previously are in that building (84 against 48 previously). 28 AWPT beds are also being included in the building (bringing in rental income). Simple elective surgery is planned to be undertaken within the existing AOC building. This also addresses the national drive to avoid or minimise new build for contestable services. All these changes reduce the area and therefore the cost of new build.

Clearly, notwithstanding these actions, the capital cost is higher than it was projected to be at SOC. The projected capital cost is now £374m for Southmead and £46m for Frenchay. This is due to:-

- Inflation. The SOC and the February exercise were at MIPS 385. The current figures representing 2005/6 prices are at MIPS 445.
- At SOC stage the scheme did not address consumerism sufficiently in two main ways. Firstly, it assumed 25% single rooms and 28m2 per bed. The national drive to improve space standards in ward accommodation especially in the context of increasing concern over infection control, is now very strong. The minimum standard is now at least 50% single rooms and 35m2 to 40m2 per bed. This has had a huge impact on space requirements. Secondly, the construction costs assumed previously did not properly take account of consumerism requirements around building quality and finish. This is now mandatory, and including it again increases costs significantly.
- Some clinical functions (e.g. the number of X ray rooms) were simply undersized at SOC stage as the capacity planning and sizing work at that stage, outside beds, was less well developed.

1.4 APPROVALS PROCESS

The OBC is submitted for approval by the Avon Gloucestershire and Wiltshire Strategic Health Authority (AGW) and the Department of Health.

Following approval, it is intended that the Southmead component of the scheme will be procured through the Private Finance Initiative (PFI) with a decision still to be made on the procurement method for Frenchay. Both schemes will be completed by 2012/13.

1.5 SUPPORT FOR THIS OBC

This OBC is supported by:

- North Bristol Trust
- Bristol North PCT
- South Gloucestershire PCT
- Bristol South & West PCT
- North Somerset PCT
- Bristol Health Services Plan Programme Board.

1.6 RELATIONSHIP WITH OTHER CAPITAL INVESTMENT BUSINESS CASES

This OBC fits within the wider context of capital investment in Bristol, North Somerset and South Gloucestershire. These investments are governed by an overall framework provided by the Bristol Health Services Plan (BHSP) and include:

- Development of Primary Care Infrastructure and a network of Community Hospitals and Community Health Care Centres;
- Modernisation of acute hospital services across the BNSSG area including the re-provision of the old hospital facilities at the BRI;
- Centralisation and enhancement of Specialist and support services including Children's services, ENT/OMF, Breast services Pathology services, and cardiac services
- Centralisation of Pathology services across Bristol.

In addition, the local health community has developed an integrated Health Informatics Strategy (HIS) for IM&T linking primary care and hospital information systems.

1.7 NBSG PROGRAMME STRUCTURE

The development of the NBSG programme (including this business case) has taken place under the guidance of the North Bristol and South Gloucestershire Cluster Board. This is chaired by the North Bristol Trust Chief Executive and includes representatives from Bristol North PCT, South Gloucestershire PCT, the Strategic Health Authority, Social Services and other key stakeholders.

This Cluster Board reports into the Bristol Health Services Plan Programme structure and is responsible to the Boards of the North Bristol NHS Trust, Bristol North PCT and the South Gloucestershire PCT. The programme is supported by a Project Board and Project Team.

SECTION 2: STRATEGIC CONTEXT

2.1 INTRODUCTION

This section addresses the strategic context for the proposed development including:

- The national policy context, and healthcare trends
- Local strategy for healthcare and the Bristol Health Services Plan

This section also describes:

- Local context and current services.
- The involvement, consultation, scrutiny and decision making process leading to this OBC being developed, and key messages which have shaped these proposals.

2.2 NATIONAL POLICY CONTEXT AND HEALTHCARE TRENDS

Following the NHS Plan (2000) and the NHS Implementation Plan (2004), the key emphasis of national policy now is to ensure that services are patient-led, and patients benefit from:

- Options, choice and control over the services they receive.
- Strong national standards and safeguards in how their care is delivered, including more integrated networks of care.
- Clear pathways of care centred on an understanding of their needs, not the needs of the service.
- Enhanced services more locally in primary and community care.
- An NHS focussed on health improvement and protection, not just the treatment of sickness and illness.

This policy is being updated and a consultation process: '*Your health, your care, your say''* is being conducted by the Department of Health. The results of this process will be consolidated in a forthcoming policy document '*Out of Hospital*'.

The service model and proposals set out in the OBC reflect these patient-led themes and aims.

The national policy and key trends in health care provision, most relevant to this business case, are summarised below.

2.2.1 Plurality and choice

Patients are already being offered more choice as to where they receive their treatment. The Choice Initiative is now being extended to offer even more options to more patients (Creating a patient led NHS', Department of Health, Mar 05). New, independent sector providers are being introduced to the healthcare market to facilitate wider choice and PCTs are obliged to purchase services from a range of providers including those in the Independent sector.

As a result, NHS Trusts face greater competition in retaining their current activity and income streams, whilst at the same time having the opportunity to win more work from other providers should patients choose to move. There is also a substantial incentive for Trusts to improve their processes and efficiency to enable them to retain or increase workload and income.

Choice and provider plurality may change overall volumes of activity, or the case mix of activity that individual Trusts deal with.

The demand plans in this OBC reflect projections about the impact of the more competitive market, choice and provider plurality.

2.2.2 Payment by Results (PbR)

The new NHS financial regime means that Trusts will only be paid for the work they do for an increasing range of activity, and will be paid for that activity at a national tariff, irrespective of the local cost of delivery. This means that there are very real financial consequences to changes in activity flows generated by choice and provider plurality. Furthermore, Trusts' operating costs need to be in line with or below the national tariff to remain financially viable. The advantage of the new system is that there is financial incentive for Trusts who are able to deliver services at more efficient rates and this is a real stimulus for change. In particular there is a benefit for Trusts to provide new streamlined processes in built-for-purpose facilities.

The costs of providing services under the plans set out in this OBC will need to be affordable at national tariff. There will be risks and sensitivities around these calculations as PbR is still being introduced, and the tariff is being revised annually as Trust operating costs improve nationally. The financial projections underpinning this OBC include several sensitivity tests on how the affordability of the case responds to PbR.

2.2.3 Practice Based Commissioning

Commissioning of services is being devolved to groups of GPs with indicative commissioning budgets allocated to GP practices. This will provide Practices with an incentive to manage referrals and will require a new level of dialogue between Primary Care commissioners and hospital services. The development of specifications for the new NBSG services, with the joint working between GPs and hospital clinicians, has laid a useful foundation for the requirements of the future.

2.2.4 Access

Shortening waiting times at all levels across the health service continues to be a core improvement goal and key targets include:

- By 2008 a maximum 18 week 'end to end' wait should be achieved from the time of GP referral to hospital treatment starting. This compares to a current maximum 13 week wait from GP referral to first outpatient appointment, no maximum wait for diagnostics between first outpatient appointment and decision to treat, and a maximum six month wait from decision to treat to surgery. To meet the targets, the new services in North Bristol and South Gloucestershire will need to deliver rapid access and high throughput and this is the focus of the clinical redesign work being undertaken by the local Trusts.

- Waiting times in A&E, and delays in discharge to other community care settings, are key measures of how well the health system is working. The service model and operational policies underpinning this business case will ensure that the patient's journey through the system is smooth and without bottlenecks at each step in the process. Strategies include separating emergency and elective activity where possible and introducing an Urgent Care network with a team dedicated to this area of work.

- Waiting lists will be abolished with patients able to book a convenient time for their appointment or treatment at the time of referral. The Trusts will need clear and streamlined referral processes backed up by information technology and communications systems to deliver against this national objective.
- Minimising the number of trips that a patient has to make to hospital by providing care on a one stop basis, and providing as much care close to home as possible. More people with minor illnesses and injuries or long term conditions want to be looked after in or near their own homes. There is an increased move away from the idea of "institutional care" and this is a major focus for the BHSP.

The national drive to establish a number of locally based treatment centres providing diagnostics and minor surgery has been part of this strategy. The NSFs for long term conditions and enhanced urgent care services in primary care (e.g. out of hours services) will also contribute and the local Trusts are developing a specialist team system aimed at tackling this issue.

All the above access themes are reflected in the proposed new service model for North Bristol and South Gloucestershire and this model is described in more detail later in this case.

2.2.5 Advances in medical technology

New technology and skills allow care to be delivered in new and better ways. For example, many people who used to need to stay in hospital for several days for a surgical procedure now can be treated as a day case. Diagnostic equipment can frequently be provided cheaply and effectively in local settings, when in the past it was only possible to have it at major acute hospitals.

Also, the development of diagnostic networks based on latest digital imaging techniques and equipment allows for centralised reporting and supervision of services including the potential for 'Virtual Hospital at Night' schemes, linking a number of acute services. This technology also makes it possible to connect acute sites with out-posted community based services enabling the provision of more services e.g. urgent care in a variety of locations.

Another benefit is the ability to link up tertiary/specialist sites with local DGH sites to provide a more integrated service.

These advances in technology encourage the NHS to redirect investment away from traditional building structures towards a new type of environment with more diagnostics and more communication infrastructure.

2.2.6 Trends in provision of specialist services

The way in which acute services are provided is changing in response to new standards, knowledge and legislation. The proposed new service model takes account of these trends. The most significant trends include:

- Increasing sub-specialisation in clinical practice, such that patients are not treated by generalists but are treated by clinicians particularly skilled in their area of clinical need. This trend has led to a pressure to centralise these more specialist teams in acute sites where they can provide cross-cover and round-the clock interventions and opinions. This trend in medical practice, whilst improving the outcomes of individual treatments and interventions, has made it more difficult to sustain the traditional pattern of District General Hospital teams.

- The need to improve the working conditions of junior doctors and overhaul medical training (*Modernising Medical Careers)* and to comply with the European Working Time Directive. This is a difficult proposition in Bristol with staff split between three acute sites and required to cover three different sets of rotas. This requirement is adding to the pressure to concentrate specialist teams in central sites and locations to enable the construction of sustainable rotas.

2.2.7 Stakeholder involvement - 'Keeping the NHS local – a new direction of travel'

This policy provides a framework for stakeholder involvement and consultation. It also sets out the importance of redesigning services to improve configuration and access, not simply relocating them. Service redesign is best achieved by taking a whole systems view. The service model set out in this OBC achieves this through improved team working and network arrangements, avoiding unnecessary relocations and capital investment wherever possible.

2.2.8 Modernisation and process improvement

The Modernisation Agency has identified ten improvement strategies known to have a significant impact on patient throughput and operational efficiency. These are described in 'Ten High Impact Changes'. These high impact changes have been embedded in the future service model and operational policies.

2.2.9 Management of long term conditions

The NHS Implementation Plan (2004) ensures that the focus over the second half of the ten year NHS Plan period is on effective management of long term conditions. This is through local, early treatment, high quality personal care, and reduced emergency admissions. The Long Term Conditions National Service Framework provides detailed guidance and models for local implementation. A major theme in these proposals is the integration of services provided to patients with these conditions and the emphasis on packages of care that combine hospital and community services.

The service models described in the OBC are designed to support this strategy with the adoption of a number of new approaches including case management and vertical integration between community and hospital teams.

2.2.10 National standards

The NHS needs to deliver services in line with a range of standards and indicators, including those set by the Healthcare Commission, NICE and the National Service Frameworks (NSFs). NSFs have been published over the last five years setting out national standards and guidance for the delivery of key clinical services.

There are also a number of standards around Control of Infection and reducing the incidence of outbreaks of Hospital Acquired Infections/Virus such as MRSA and Norovirus.

The assumptions and models set out in the NSFs are reflected in the overall service model. There is also a major emphasis in the design specification on control of infection with a target of 75% single rooms and separation of routes throughout the hospital as well as a number of other strategies to mitigate the impact of outbreaks of Norovirus, MRSA etc. that can prove fatal to patients and highly disruptive to the way hospitals organise themselves to deliver efficient patient care.

2.2.11 Public health and health improvement

The government White Paper 'Choosing Health' sets further targets for the NHS in terms of health improvement. These include:

- Greater focus on reducing obesity, smoking and sexually transmitted diseases.
- Specific health improvement targets to reduce death rates by 40% in heart disease and stroke in the under 75s, by 20% in cancer, and by 20% from suicides by the year 2010.

The NBSG service model includes the creation of whole pathways of care including prevention and promotion. In addition, investment is being made in new diagnostics and treatment facilities including catheterisation facilities.

2.2.12 Changing workforce and education

Significant changes are being made to the healthcare workforce including new roles and ways of working (e.g. advanced practitioners, and non-medical consultants), and their terms and conditions of service (e.g. compliance with the European Working Time Directive, and implementation of Agenda for Change). These changes are reflected in the type and number of staff planned to deliver future services in North Bristol and South Gloucestershire.

To reflect the changes in workforce across the country, there are changing trends in the way education is provided with an emphasis on:

- Competency based pay structures with a requirement to standardise and systemise the way Trusts link training and development to service provision;
- Front-line training with a move away from the classroom to teaching by the patient's bedside;
- Development of simulation and skills laboratory techniques to deliver less theoretical programmes of training and development.

The specifications for the new NBSG services address these themes and propose a new type of purpose-built academic accommodation.

2.2.13 Improving the NHS estate

There is recognition in the NHS plan that the NHS estate needs to be modernised and there are a number of national estates related targets designed to improve the healthcare estate, including:

- 3000 GP premises to be refurbished or replaced by the end of 2004.
- 40% of the total value of the NHS estate to be less than 15 years old by 2010.
- Establish additional hospital capacity to meet access and clinical priority targets.

The NHS plan stipulates that hospital environments should be upgraded to provide excellent environments for patients and staff.

The local estate in North Bristol and South Gloucestershire falls well short of these national standards with 90% of the current hospital estate being more than 15years old and the substantial part more than 50years old. The problems of the local estate are described in more detail later in this section.

The plans set out in this OBC will enable these national targets to be addressed and the chronic local problems to be addressed.

2.2.14 Summary of National Context

The range of policies and national initiatives detailed above summarise how NHS services will be expected to adapt and improve to provide truly "patient-led" services:

Achieving this overall system vision will pose important challenges for NHS acute hospitals and their partner PCTs– alongside a range of important external challenges which must also be met in coming years.

The introduction of system reform (i.e. choice, payment by results, plurality of provision etc.) will promote competition between hospitals and other providers; shifts in activity between providers have the potential to create important pressures for change in service delivery. At the same time, considerable work is still required to improve service integration and to strengthen the operation of managed clinical networks, especially in the area of urgent and emergency care, paediatrics and maternity services. The White Paper that will emerge from the *Your Health, Your Care, Your Say* exercise is likely to contain important initiatives aimed at extending the range of secondary care services which can be accessed by patients closer to home and outside hospitals, which will clearly impact on the future delivery of hospital services.

Meanwhile, the NHS will continue to face shortfalls in the supply of key health professionals for several years. Achieving compliance with the European Working Time Directive 2009 will require further redesign of service models and ways of working than was the case for WTD 2004, with less scope to employ additional staff to take up the slack. Combined with a more rigorous and comprehensive approach to ensuring patient safety, all acute hospitals (but especially smaller hospitals) will face renewed pressure to rethink their working patterns and to recognise the growing interdependencies between hospitals.

The implementation of *Modernising Medical Careers* will require new approaches to balancing training and service delivery, while improving the future base of skills to support acute care.

A crucial challenge will be to ensure that the future vision for acute hospitals is financially sustainable, especially as the NHS transitions from its current period of expansionary funding growth to a "steady state" of lower annual growth.

There are major threats to health in the future, from rising rates of obesity, alcohol consumption and high levels of smoking. These, combined with growing numbers of older people, could put significant burdens on services unless current trends are reversed. Sustained or increasing demand on health services is likely to be seen in major disease areas, such as musculoskeletal disorders, respiratory disease, heart disease, cancer, diabetes and renal disease. Meanwhile, health inequalities will continue to present a challenge to the NHS.

However, there are also important opportunities to provide better and more effective healthcare. Conditions which were once fatal can now be cured. Medical advance, supported by advances in information technology, will continue to improve health outcomes, but will also create budgetary pressures – as will rising public expectations of health and health services. Given the rate of change and uncertainty about the future, health care providers will need to be able to adapt their services continuously to this rapidly changing environment.

The population as a whole is looking to NHS Trusts, PCTs and Strategic Health Authorities to develop joined up plans and initiatives to meet the national agenda.

2.3 THE BRISTOL HEALTH SERVICES PLAN

2.3.1 Introduction

This section describes the strategic planning context for the local health community of Bristol, North Somerset and South Gloucestershire (BNSSG). This defines the overall pattern of service provision within which the proposals set out in this OBC are being made and how the Local NHS community is looking to respond to the national requirements for change.

To respond to these national requirements, the organisations around Bristol recognised that a concerted programme of change was required to mobilise all the resources of local Trusts and to generate a single approach to the modernisation of services.

To achieve this concerted approach the "Bristol Health Services Plan" (BHSP) was developed in 2003 to represent all the local stakeholder organisations and to provide a vehicle for change. Its key elements are described below.

2.3.2 Bristol Health Services Plan Strategic Approach

The BHSP builds on the original conclusions of the Avon Acute Services Strategic Framework (AASSF) started in 2000. The BHSP has two core strategies guiding the reshaping of health services across BNSSG:

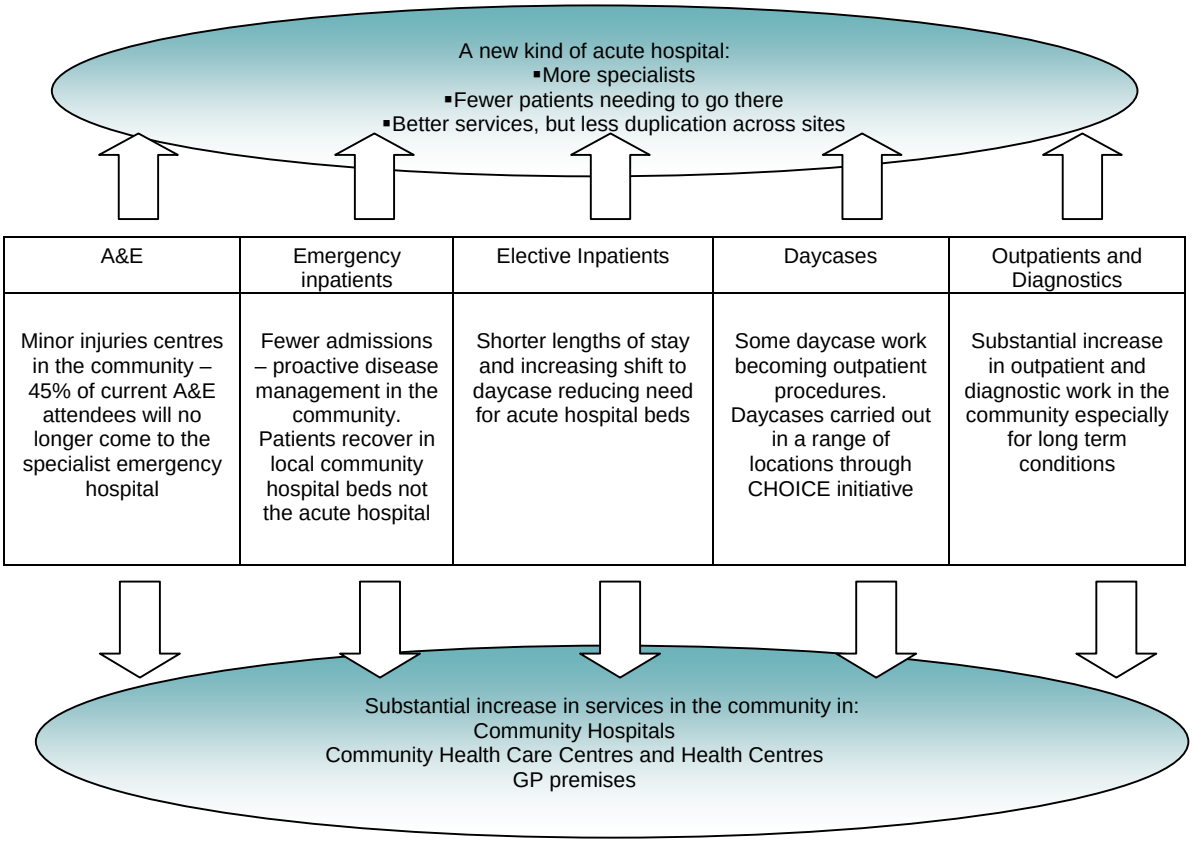
Strategy 1: Wherever possible and appropriate, provide care closer to people's homes through the development of new facilities in the community, and community hospitals.

Strategy 2: Improve the care that can be provided to patients when they require emergency and specialist hospital services by concentrating specialised expertise and equipment together

In light of these 2 strategic areas, the BHSP identifies the following key objectives for service redesign and the future service model across the area:

- Provide care closer to patients' homes, wherever this is possible and appropriate;
- Concentrate acute and specialist services on a single site and improve the safety and sustainability of care;
- Improve the efficiency and effectiveness of services by harmonising primary care, social care and local hospital services to prevent inefficiencies, gaps in provision, delays and duplication of effort;
- Improve the very poor patient environment and working conditions in the old hospitals and provide buildings fit for the 21st Century;
- Contribute to the wider objective of neighbourhood renewal and re-generation
- Provide a vibrant learning and education culture

Guided by these principles, health organisations within the BNSSG area have developed a shared vision for services across BNSSG. This is illustrated below:



2.3.3 Model of Care

This vision has been turned into a model of care that covers six main areas:

2.3.3.1 Public health

Public health initiatives tackle a range of health issues including health inequalities. Current work focuses on community health development, quality of cancer care, coronary heart disease, diabetic retinopathy and children's health.

2.3.3.2 Self-care

Support for self-care will improve health outcomes. Key initiatives include:

- The 'Expert Patient' Programme,
- Long term conditions management in primary care,
- Secondary prevention, including exercise, weight and smoking cessation and enhanced preventive services for heart and lung diseases.

2.3.3.3 Primary Healthcare

Primary healthcare will remain central to community-based care and the coordinating point for integrated primary healthcare teams. Practice-based commissioning will enable GPs to innovate and transform patient pathways. Primary care will provide:

- First contact with patients, diagnosis, care, treatment and referral
- 'Whole of life' care for patients
- Provision of extended and enhanced care for all
- Diagnostic services, including those in mobile facilities, where appropriate.

Increasingly, additional services will be provided in Primary Care (e.g. therapy services, care of long term conditions, sexual health, Mental Health). These will be based in a small number of Primary Care Centres, probably as an extension to an existing GP practice. There will be more capacity to provide higher levels of service and greater population coverage for long term conditions like heart disease and diabetes. Healthcare premises will be improved.

2.3.3.4 Community-based services

A network of community-based healthcare services will be expanded and developed, to increase the range and volume of health services provided closer to people's homes. The community facilities will include:

- High volume and low complexity outpatient services
- Local anaesthetic minor surgery
- Renal Dialysis
- Minor injury/illness services
- Diagnostics (e.g. routine x-ray, ultrasound, endoscopies)
- Some inpatient beds
- Rehabilitation services, including therapies

This model will be flexible to ensure service provision is based on health need and populations in each locality. This should also lead to a greater emphasis on 'in-reach' rather than 'out-reach'. The range of services available in the community will expand, to include a shift of diagnostic and treatment services currently only available in acute hospitals.

Strong primary and community services and facilities will be developed with reduced reliance on acute hospitals. Local community service developments will complement wider action on regeneration and renewal e.g. creating local employment, and supporting and encouraging local provision for higher levels of physical activity.

2.3.3.5 Acute, emergency and specialist services

The acute hospitals will provide major accident and emergency services, complex elective work and low volume, highly complex and multi-speciality outpatient work. They will focus on solving problems and returning people to their homes as quickly as possible. Services will be rationalised to avoid duplication, and this will lead to centralisation of some services on single sites. Features of the new services will include:

- A more responsive interface with primary care including a greater emphasis on immediate diagnosis and assessment;
- A substantial expansion in designated day case surgery
- Accelerated recovery programmes for major elective surgery
- Integrated front-door arrangements with increase emphasis on returning patients home at the earliest opportunity

The service model relies on a concentration of A&E and acute assessment services within Bristol into 2 main receiving centres at Southmead and the BRI. These will complement services at Weston. This strategy allows the provision of an acute core that can respond flexibly to changes in demand and work as a single acute/emergency system. This integrated core will be characterised by a range of single processes including:

- Networked receiving arrangements for emergency patients to allow ambulance service in line with capacity at the acute sites Routing of GP referrals for a bed, based upon capacity and specialist treatment
- Flexibility including potential to open or close operating theatres for periods out of hours;
- Single clinical teams e.g. for cardiology to allow for “round-the-clock” interventional/emergency rotas;
- Networking of imaging and telemedicine to enable decision-making at distance;
- Joint adoption of modern technological solutions

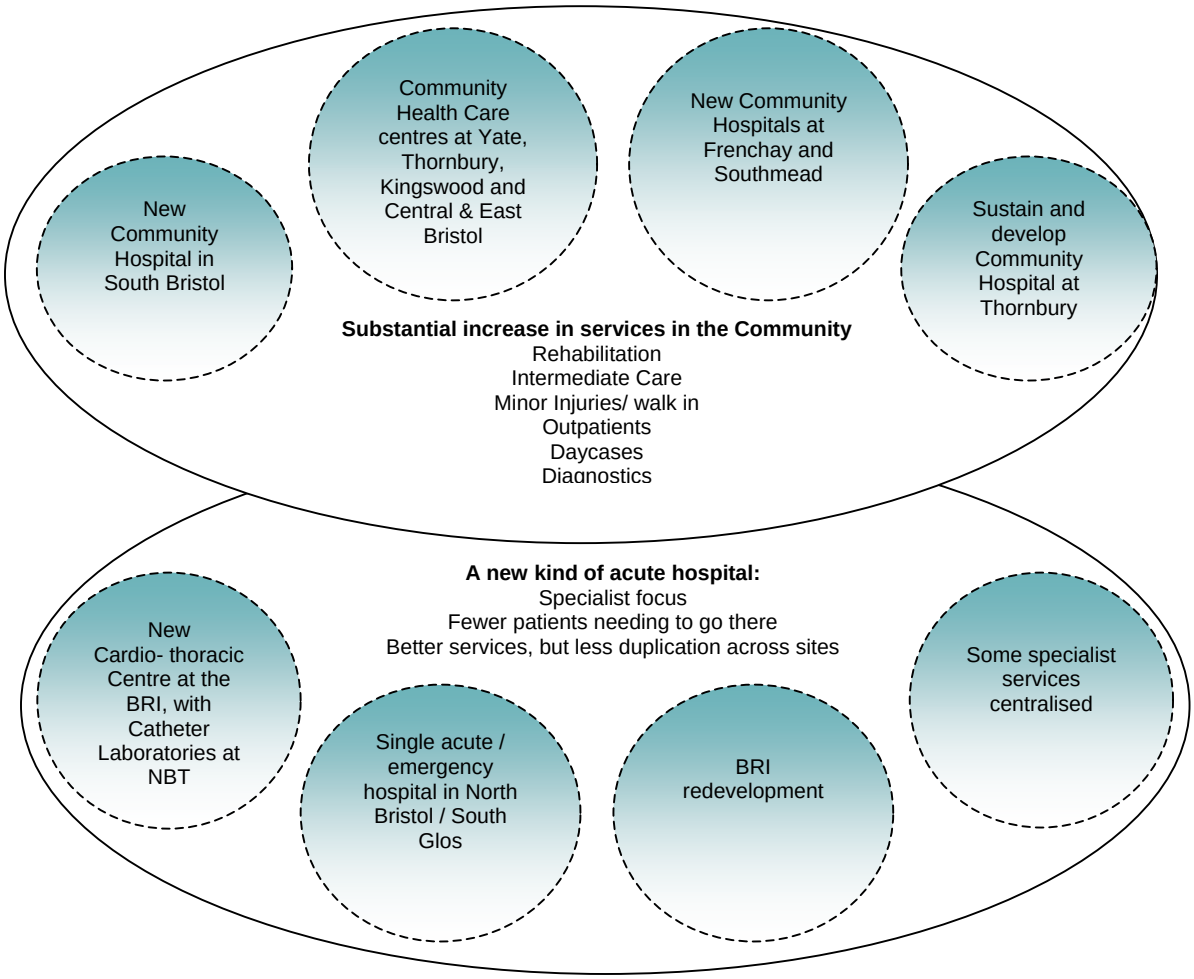
2.3.3.6 Tertiary services

The BHSP aims to introduce a network approach to specialist services. This approach will harmonise the provision of tertiary services between specialist hubs and out-posted services at other sites. This approach will entail:

- Concentration of some specialist services to create coherent hubs e.g. Head and Neck specialties and children’s services;
- Agreement of joint protocols to assist access and flow of patients between services;
- Development of communication networks including digital imaging and telemedicine;
- Development of research and translational strategies allowing rapid transfer from laboratory bench to clinical application. This is most likely to occur in key tertiary services for example oncology, neurosciences, renal and cardiac services.

2.3.4 BHSP Development Proposals

In response to the model of care, the BHSP has created a series of proposals for development and they are summarised in the following diagram:



The diagram illustrates a number of initiatives including:

- Enhanced primary care premises and facilities – e.g. development of Fishponds Primary Care Centre, and Shirehampton Primary Care Centre.
- Development of Community Health Care Centres at Yate, Kingswood and Central & East Bristol – providing a wide range of diagnostic and outpatient services, but not inpatient care.
- Development of Community Hospitals at South Bristol, Thornbury, Frenchay, and Southmead – providing inpatient care for people recovering from illness and a wide range of diagnostic and outpatient services.
- A single acute hospital for North Bristol and South Gloucestershire – in place of the current configuration (acute hospitals on both the Frenchay and Southmead sites).
- Investment in the Bristol Royal Infirmary - capital investment to address the quality of buildings and the patient care environment.
- Centralisation of some specialist services – This includes an interim centralisation of Accident & Emergency services for major emergencies in North Bristol and South Gloucestershire at Frenchay until the single acute hospital for North Bristol and South Gloucestershire is developed.
- Centralisation of specialist children's services at the Bristol Children's Hospital.
- Centralisation of adult Ear Nose and Throat (ENT) and Oral Maxillo-Facial (OMF) services within NBT.
- Transfer of breast services from Frenchay to UBHT.

- Centralisation of pan-Bristol pathology services.
- Transformation of adult cardiothoracic services – building a new, modern facility in the BRI precinct. Expanding capacity by providing two new cardiac catheter laboratories at North Bristol Trust.
- Modernisation of community facilities at Clevedon and Weston.

2.3.6 BHSP Summary and Link to the NBSG OBC

The BHSP has provided a detailed strategic context for the development of services around Bristol and has provided a method of ensuring consistency between developments as well as a strategic/affordability framework to govern the activities of individual Trusts.

A report from the BHSP to the Strategic Health authority was considered on 20th October 2005. This report included a number of elements including:

- A refined clinical model that has been used to steer the development of a clinical strategy for NBSG;
- An affordability review of the whole of the BHSP that is used as a financial framework for this OBC;
- A sense-check on current National policy and the relationship with the BHSP that includes a strategic approach on the provision of contestable elective services. This has been used to limit the scope of new development in this Business Case;
- A risk management strategy that has produced a sequence of capital investment to support the NBSG development;
- A timetable and programme of development for all schemes within the BHSP that has provided a framework for the development of this OBC

In particular the BHSP Steering Group highlighted the following issues in the affordability assessment, which are directly relevant to the NBSG OBC:

i) A savings requirement of £13.5m for NBT was not unreasonable in light of their scope for efficiency and redesign benefits realisation.

ii) In their outline business case NBT should set out the reasons why it was not appropriate to phase their £420m scheme.

iii) The assumption by Trusts of a 1.5% pa growth in income from activity increases was appropriate to phase their £420m scheme.

iv) The assumption by Trusts of a transfer to the independent sector of activity valued at £20m in BNSSG was appropriate in light of DH policy initiatives of approximately £38m in AGW. This transfer is after the 1.5% pa activity increase referred to at (iii) above.

v) Business cases should be prepared taking account of the potential use of vacant beds at West Area Healthcare Trust and should maximise the use of good quality existing estate.'

In response, the Strategic Health Authority welcomed the progress made by the BHSP project and supported the local NHS planned model of care.

With respect to Outline Business Cases which would be prepared within the framework of the BHSP, the SHA endorsed the Programme Board and Steering Group position that:

"the Affordability Assessment was not a substitute for properly scrutinised Outline Business Cases (OBCs). This issue would be the subject of further work prior to submission of Outline Business Cases".

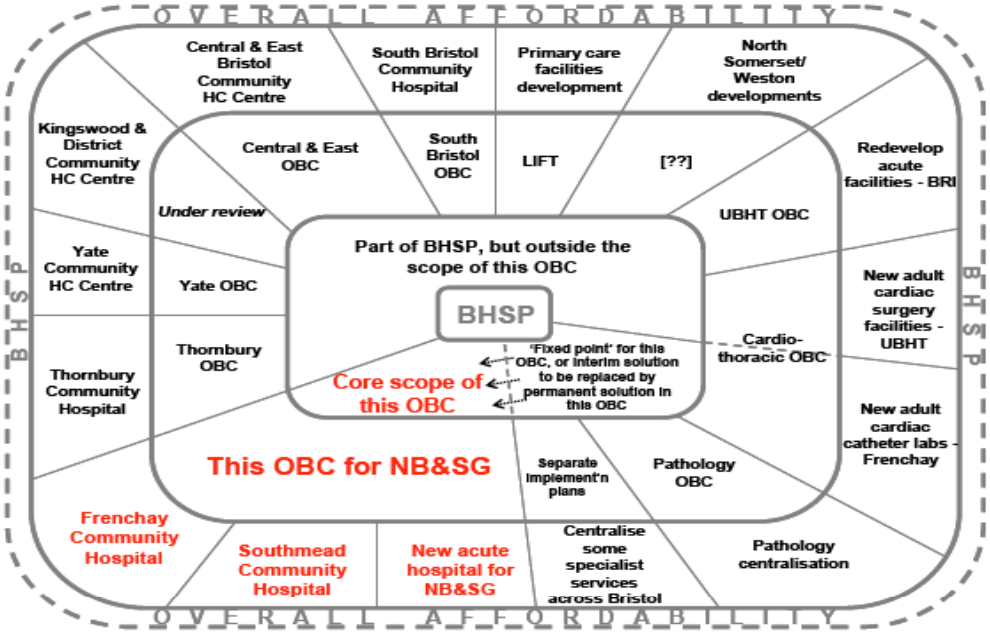
The affordability assumptions of the NBSG developments are addressed in Section 8 of the OBC.

The SHA report also concluded that:

- The SHA should require the BHSP Steering Group to ensure that OBCs are robust in the context of the potential for a future service reconfiguration across acute hospitals, and to ensure that the configuration of community provision is taken forward by the new PCT in the context of implementing the organisational changes resulting from the Commissioning and the Patient Led NHS in AGW.
- The OBCs for capital schemes should have explicit sensitivity analysis within the BHSP envelope.
- The travel and access assessment report should be reported back to the SHA by the end of November.

Following the 20th October milestone, the Trusts have produced this OBC as part of the overall BHSP programme.

The figure below shows the scope of this OBC in the context of the other BHSP development plans:



The other schemes in the BHSP that are outside the scope of this OBC have been taken into consideration in developing this case with careful consideration of the interface with developments such as Pathology, ENT and Cardiology. The case has applied the following principles:

- Interim schemes have been developed where possible with a view to securing long-term value e.g. incorporating the interim Cardiac accommodation as part of the final Frenchay campus by developing a multi-purpose design;
- The scheme at Southmead should have the flexibility to connect to Pathology, Obstetrics or other schemes that might develop on the site

2.4 LOCAL CONTEXT AND CURRENT SERVICES

2.4.1 Introduction

This section describes the current services provided in the area. It also sets out a profile of the three key commissioning and providing organisations – North Bristol NHS Trust, Bristol North PCT, South Gloucestershire PCT. For each of the two PCT areas information is also provided on:

- Population and demographics
- A profile of the PCT as an organisation, including its facilities and workforce.
- A description of services that are provided across the whole area (mainly by the North Bristol Trust, but also to some extent by the PCTs)

2.4.2 Population and demographics in North Bristol & South Gloucestershire

An analysis of the population of North Bristol and South Gloucestershire is shown in the following table:

Table 2.4.2: Population of North Bristol and South Gloucestershire

Description	BNPCT	% of total where applicable	% Change 2005 - 2030	SGPCT	% of total where applicable	% Change 2005-2030
Registered patients at September 2005	233,604			248,844		
Males	118,405	51%		126,699	51%	
Females	115,199	49%		122,145	49%	
Number of patients aged 65 and over	32,843	14%		36,774	15%	
Estimated population growth over the next 25 years	21,024		9%	44, 000		18%

Source: Bristol North & South Gloucestershire PCTs

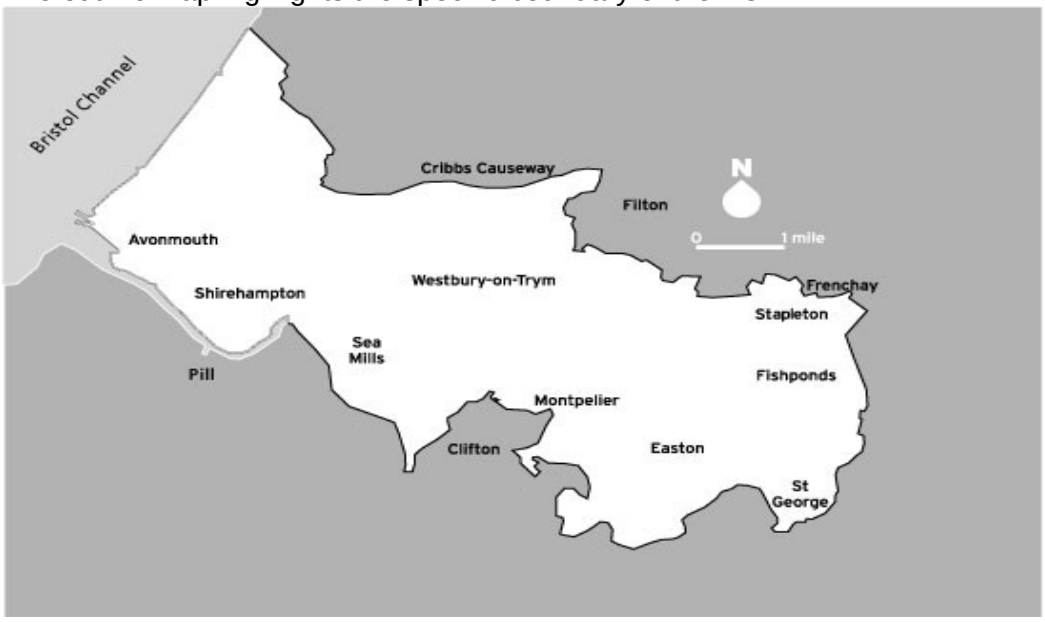
Bristol North includes about half the city of Bristol, from Avonmouth in the west to St George in the east, and the inner city. There is a registered population of around 234,000. The 2001 census showed that 10.4% of the population are from black or minority ethnic groups. This compares with an English average of 9.1%. Although there are many affluent areas, 15% of the population lives in wards that rank within the most deprived 10% of wards in England. 22% of the population in more deprived areas within North Bristol reported a limiting long-standing illness compared with only 12% of people in the area as a whole.

The registered population of South Gloucestershire is around 249,000 patients. South Gloucestershire is one of the fastest growing Unitary Authorities in the South West. Around half of the population lives in urban communities such as Kingswood, Filton, Patchway, Bradley Stoke and Hanham. Just under 20% live in the market towns of Yate, Chipping Sodbury and Thornbury. There is a small but growing black and minority ethnic population that makes up 2.5% of the population. The average age is slightly lower than the average in England and Wales with more 30-59 year olds and slightly more under 16 year olds. The proportion of elderly is estimated to rise steeply over the coming years.

2.4.3 Bristol North PCT

2.4.3.1 Introduction

The outline map highlights the specific boundary of the PCT:



BNPCT manages and coordinates its planning and service provision around two localities, 'North West' (around 120,000 patients) and 'inner city & East' (around 114,000 patients). Each locality is subdivided into three areas covering a population of 30-50,000, which are known as patches. These are clustered around groups of practices and health centres.

2.4.3.2 Strategic direction

BNPCT strategies take account of the national strategic context outlined in this business case. The key strategic themes supported by these plans include: -

- Extending the range of services delivered across Primary Care to provide real choice of alternatives to secondary care intervention wherever possible.
- Managing demand and activity wherever possible in primary care.
- Fully integrated services that operate across the primary and secondary care interface to support admissions avoidance and community discharge support.
- A common proactive programme of care management for chronic diseases
- Changing practitioner roles and extending skills
- Improved access to a range of diagnostic services
- Creating a financially stable healthcare system
- Increasing the role of the independent sector in delivering services.
- Ensuring that good quality buildings are available to support a greater role for primary and community based care.
- Supporting the objectives of local practice based consortia

2.4.3.3 Financial context

The table below outlines how the £278 million PCT budget was spent during 2004/ 2005:

Table: 2.4.3.3: Financial Spend - BNPCT

Description	Amount (millions)	% of total expenditure
Main hospital services	£132m	48%
Mental health services	£ 28m	10%
Prescribing	£ 28m	10%
GP and related services	£ 27m	10%
North Bristol Trust Bank Support	£ 20m	7%
Learning difficulties	£ 13m	5%
Community services	£ 11m	4%
Partnership and programmes	£ 11m	4%
Ambulance services	£ 4m	1%
Management	£ 4m	1%
Total	**£278m**	**100%**

Source: Bristol North PCT Annual Report 2004/ 2005

For the last year of audited accounts, BNPCT remained within its cash limit, revenue limit and capital resource limit and provided services within budget.

2.4.3.4 Primary care

There are 31 general medical/ personal medical services practices operating within the BNPCT boundary with an average list size of around 7,500 (UK average of around 6,000 patients). There are around 136 WTE GP principals or salaried GPs employed by practices with 246 GPs registered on the BNPCT Performers list. A typical practice will also employ around 20 staff including nurses, management, administrative and other support staff. This equates to around 650 individuals across the PCT. The PCT owns or uses a range of premises to provide and commission Primary Care services. Of the 31 practices (including branch sites) nineteen surgeries are owned by GPs, eleven are owned by the PCT, and one owned by Social Services (provides social care and well being services as well as primary care).

2.4.3.5 Workforce

BNPCT directly employs around 800 whole time equivalent staff, including salaried GPs, GPs with special interests, Nurses with special Interests, Health Visitors, Community Nurses, Podiatrists, some Prison Health Care Staff, Senior Managers, and administrative staff. BNPCT continues to work with other local health and social care providers to develop robust employment systems.

2.4.3.6 Hospital activity

Table 2.4.3.6 below highlights key activity for providers for the year 2004/ 2005. It highlights that most of the activity is provided by the two local hospitals for the registered population.

Table: 2.4.3.6 – Key Activity for Providers 2004/05

Description	Total Number	NBT Totals	UBHT Totals	Other Totals
New outpatients (consultant, AHP, nurse-led)	64,095	43,388	20,257	460
Follow up outpatients (consultant, AHP, nurse-led)	162,746	102,013	59,272	1461
Emergency admissions	35,346	23,245	11,334	767
Elective inpatients	8,403	5,086	2,582	735
Daycases	19,669	9,613	9,919	137

Source: Avon IM&T Consortium

2.4.3.7 *Delivering performance and key challenges*

The PCT is performing well in a number of areas against national targets and indicators, including access to GP and primary care professional, smoking cessation, drug users in treatment, delayed transfers of care, and availability of equipment and adaptations, and medicines management – delivering savings on budget. However, there are performance pressures in delivering some key targets particularly around elective waits, outpatient waiting times and accident & emergency waiting times.

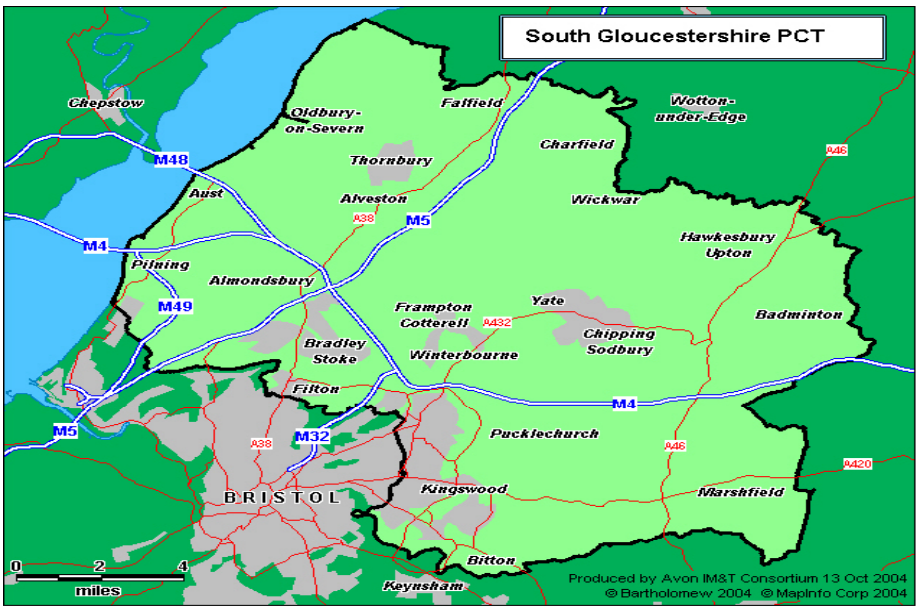
Other key challenges include:

- Currently, insufficient facilities are available to expand the role of primary and community services to realise the ambitions of the Bristol Health Services Plan.
- Lack of appropriate expertise in primary care and in development of new practitioner roles
- Need to ensure that demand is managed to ensure that secondary care activity is kept within predicted levels
- Ensuring that the proposed clinical model is financially sustainable

2.4.4 South Gloucestershire PCT

2.4.4.1 *Introduction*

South Gloucestershire PCT manages and co-ordinates its planning and service provision around three localities as shown in the map below; Kingswood (104,000 population), Severnvale (85,000 population) and Yate (73,000) population).



2.4.4.2 *Strategic direction*

The strategy of South Gloucestershire PCT takes account of the national strategic context set out in this business case. The key strategic themes supported by PCT plans include: -

- A 3 year plan covering national priorities
- Developing and supporting the range of services delivered in primary care to provide real choice of alternatives to secondary care intervention.

- Managing demand and activity wherever possible in primary care
- Fully integrated services that operate across the primary and secondary care interface to support admissions avoidance and intensive community discharge.
- A common pro-active programme of care management for a range of chronic diseases
- Changing practitioner roles and extending skills
- Improved access to a range of diagnostic services to support timely and efficient services
- Modernising mental health services.
- Creating a financially stable healthcare system.
- Increasing the role of the independent sector in delivering services.
- Good quality buildings to support a greater role for primary & community based care.

2.4.4.3 Financial context

The table below outlines how the PCT budget was spent during 2004/ 2005.

Table: 2.4.4.3 – Financial Spend - SGPCT

Description	Amount (£Millions)	% of Total Expenditure
Main hospital services	124.3	53.3
Mental health services	15.8	6.8
Prescribing	29.8	12.8
GP and related services	28.7	12.3
Learning difficulties	17.2	7.4
Community services	7.9	3.4
Partnership and programmes	0.3	0.1
Ambulance services	3.4	1.4
Management inc capital charges	5.9	2.5
Total	233.3	100

Source: South Gloucestershire PCT Annual Report 2004/ 2005

In 2004/5 the PCT achieved the 5 national financial targets and the PCT operates stringent financial controls on expenditure.

2.4.4.4 Primary care

There are 29 GP or general medical practices in South Gloucestershire with 157 GPs. There are also 39 community pharmacies in this PCT area. A typical practice will also employ around 20 staff including nurses, management, administrative and other support staff. This equates to around 580 individuals across the PCT

2.4.4.5 Workforce

South Gloucestershire PCT directly employs around 491 whole time equivalent staff, including specialist nurses, health visitors, community nurses, physiotherapists, occupational therapists, speech and language therapists, pharmacists, podiatrists, prison health care staff, managers, clinical support staff and administrative staff. South Gloucestershire PCT continues to work with other local health and social care providers to develop robust systems to ensure we employ the staff in the right numbers with the right skills in the right places.

2.4.4.6 *Hospital activity*

The table below highlights key activity for all providers and also split for North Bristol NHS Trust and United Bristol Healthcare Trust (UBHT) for the year 2004/05. It highlights that nearly all key activity for the registered population is provided by these two local hospital trusts.

Table 2.4.4.6: Hospital Activity

Description	Total Number	NBT Totals	UBHT Totals	Other Totals
New outpatients (consultant, AHP, nurse-led)	65,623	52,683	10,727	2,213
Follow up outpatients (consultant, AHP, nurse-led)	164,855	119,181	40,840	4,834
Emergency admissions	30,046	24,842	3,142	2,062
Elective inpatients	8,661	5,945	1,844	872
Daycases	19,206	11,149	7,490	567

Source: Avon IM&T Consortium

2.4.4.7 *Delivering performance and key challenges*

SGPCT performance is good in a number of areas against national targets and indicators, including access to GP and primary care professional, smoking cessation, and flu vaccinations. As for BNPCT, there are performance pressures in delivering some key targets particularly around elective waits, outpatient waiting times and accident & emergency waiting times. Other key challenges include:

- Insufficient facilities available to expand the role of primary and community services to realise the ambitions of the Bristol Health Services Plan;
- Lack of appropriate expertise in primary care and will need to develop new practitioner roles;
- Risk around management of demand to levels confirmed with secondary care;
- Financial sustainability of the proposed clinical model.

2.4.5 Services currently provided across North Bristol and South Gloucestershire

A small number of services that were traditionally provided by secondary care are now delivered in primary care. However, the number of these services provided from the community is relatively small and the ability to care for more patients locally is hampered by the lack of available facilities. The following services are currently provided in primary care:

Day case/minor operations: In 2004/5, around 5,600 minor procedures were carried out in primary care in BNPCT, compared with nearly 10,,000 daycase procedures carried out by NBT for BNPCT patients.

Intermediate care: Historically inpatient intermediate care has been provided mainly by NBT from Southmead, Frenchay, Blackberry Hill and Thornbury hospital sites. Some intermediate care has been provided via primary care primarily via therapy and rehabilitation services and largely on a domiciliary or outpatient basis. A programme of intermediate care development within primary care is in place and includes the following:

- Both PCTs have set up significant intermediate care teams working in the community providing active rehabilitation and re-ablement care in patients' own homes. This has facilitated shorter stays in the acute hospitals.

- SGPCT has taken over the management of inpatient beds at Thornbury Hospital which provides general rehabilitation to patients in South Gloucestershire. This is enabling better integration between community-based intermediate care teams and primary care teams.
- A range of long term conditions are managed by SGPCT in the community via the Primary Care Quality Outcomes Framework.
- The community heart failure service covers both PCTs and is run by two General Practitioners with a Special Interest and two specialist nurses.

However, this configuration of primary and intermediate care still means that there are significant proportions of the population (including Central & East Bristol with a population of 113,000, and Yate with a population of over 73,000) with poor access to enhanced non-acute services within their local community. These are also some of the areas with the highest levels of deprivation and health need.

In addition to this problem, there is a need to integrate intermediate care and rehabilitation services between the PCTs and the acute trust to deliver a more seamless approach to services.

Outpatient and diagnostic services: A number of outpatient appointments and examinations are provided in local community settings, including at Cossham and Thornbury hospitals. For example, 32 clinics are held at Cossham Hospital each week, equating to approximately 14,500 attendances per year. Plain film x-ray, ultrasound, echo-cardiograms and physiotherapy are provided out of the community hospital, however these community-based services are not well integrated with primary care teams.

NBSG are looking to improve the way specialist opinions are provided and change the emphasis in outpatient services away from batched sets of patients with minimal consultation times to a more fluid consultation service providing rapid access consultations to primary care and patients. This approach requires a redirection of resource away from general administrative and outpatient facilities to facilities with state-of-the-art diagnostics.

Urgent care and minor injuries: BNPCT and SGPCT have recently taken over the provision of the out of hours services in each locality. These are still GP-led services, but both PCTs are pursuing options to involve nurses and emergency care practitioners to a much greater degree in the provision of urgent and out of hours care. There are two Walk-In Centres in Bristol based in the city centre and in Knowle in the South of Bristol. The city centre facility is used heavily by BNPCT PCT patients living in the city. There are no Walk-In Centres in the North of the city or in South Gloucestershire.

Until 2005 all minor injury services for North Bristol and South Gloucestershire residents were provided from the Frenchay and Southmead A&E Departments. In June 2005, a major service review resulted in the creation of a nurse-led minor injuries unit at Southmead but more community based minor injuries services are required in other parts of the local community.

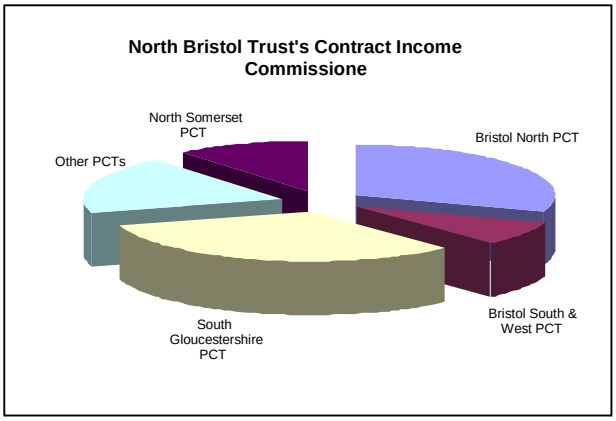
2.4.6 North Bristol NHS Trust

2.4.6.1 Overview

North Bristol NHS Trust is one of the largest healthcare Trusts in the UK, employing over 6,600 whole time equivalents. The Trust provides a full range of secondary and acute care services for a local population of around half a million people in North Bristol and South Gloucestershire area – see maps attached at Appendix 1. It provides a range of tertiary services to this population, and also to patients in Somerset, Wiltshire and Gloucestershire. Very specialist services such as neurosurgery and nephrology are provided to patients from further afield.

The following table shows NBT income from PCTs:

	£'000
Bristol North PCT	83,264
Bristol South & West PCT	21,739
South Gloucestershire PCT	88,479
Other PCTs	50,721
North Somerset PCT	29,604
TOTAL	**273,807**



In 2004/05, North Bristol Trust delivered:

- 82,000 inpatient episodes;
- 31,000 day case procedures;
- 315,000 outpatient attendances, including 200,000 follow-up appointments;
- 94,000 A&E attendances;
- 186,000 plain film exams, (of which 21,000 were at Cossham);
- 39,000 ultrasound exams;
- 27,000 CT scans;
- 16,000 MRI scans.

Current capacity available to deliver these services includes:

- 1,319 inpatient beds;
- 37 day case beds;
- 29 operating theatres;
- 3 MRI scanners and 2 CT scanners;

2.4.6.2 Services provided

NBT provides the full range of services across both the Frenchay and Southmead sites, with each site providing a number of specialist services the other. Details of the current provision are set out below:

Elective care: Elective and day-case services are provided on both the Frenchay and Southmead sites. Southmead, however, is increasingly becoming the focus for elective care and carries out all elective orthopaedics for NBT.

Lengths of stay for elective cases are in excess of national averages. In 2004/05, for example, elective orthopaedics had an average length of stay of 5.6 days which compares to the national mean of 5.0 days.

Day case surgery rates are below average. 60% of elective procedures were carried out as day cases in 2004/05, compared to a mean day case rate of 60.5% and an upper quartile day case rate of 70%. In terms of the Audit Commission's 'basket' of 25 day surgery procedures, the Trust delivered 45.8% as day cases compared to a peer group of similar trusts who delivered 66.6%..

NBT recognises that it needs to move towards more efficient services with rapid assessment capability and short lengths of stay. To enable this, the Trust needs to invest in diagnostics and state-of-the-art laparoscopic equipment. Supporting facilities including theatres need to be modernised to accommodate the latest interventional techniques.

Emergency care: Frenchay Hospital is the major A&E department for NBT with Southmead providing a nurse-led minor injuries service. Emergency care at Frenchay includes accident and emergency "majors", trauma services and emergency surgery.

Both sites provide acute medical care, including general medicine, respiratory medicine, and intensive and high dependency care.

In 2004/05, NBT dealt with 94,000 A&E attendances. Given the Trust's catchment population of around 500,000, this equates to 188 attendances per thousand population.

Compared to national averages, emergency patients stay a relatively long time in hospital. For example, in 2004/05 emergency spell length of stay in general medicine was 10 days which is considerably higher than the national mean of 8.1 days.

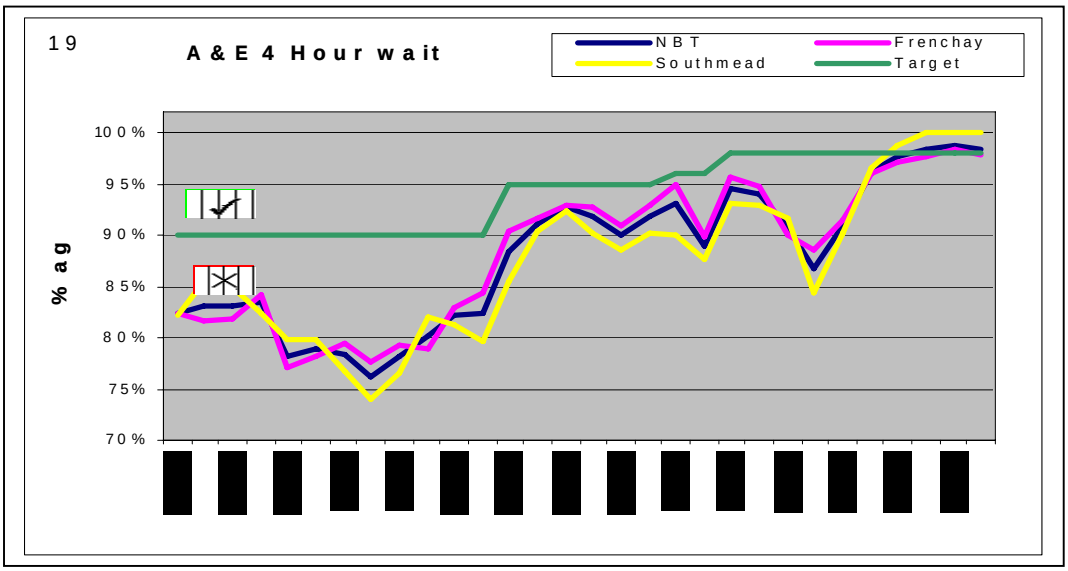
NBT is looking to develop the way in which emergency and acute services are provided by integrating the receiving functions at both hospitals. This will allow concentration of senior decision-making skill and consistency of approach irrespective of how the patient presents to the hospital. This ambition is limited by the provision of acute services across both sites.

Tertiary care: The Frenchay and Southmead Hospitals provide tertiary services including pathology, renal, (including transplantation), urology and ENT/OMF from the Southmead site and neurosciences, trauma and plastic surgery including burns from the Frenchay site. The current provision of supporting services across two sites means that high tech equipment intensive care services are dispersed and there are associated staffing difficulties.

2.4.6.3 Key performance issues

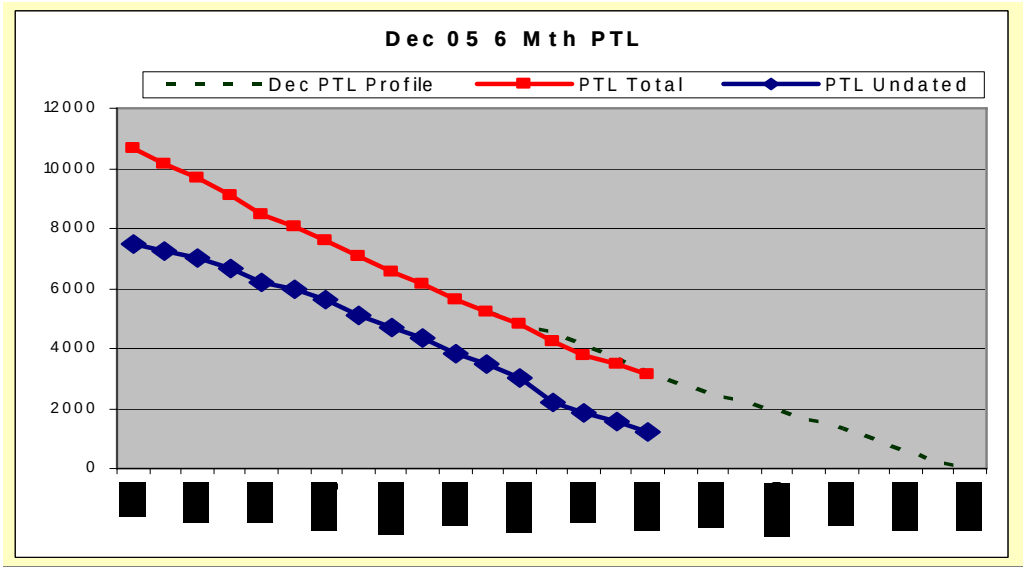
NBT has made significant improvements against most of its main target areas and has moved from a 0 star organisation to a 2 star organisation over the past 2 years.

Emergency and Acute: The Trust has delivered a huge improvement in performance against its 4hour A&E target as indicated in the following chart:

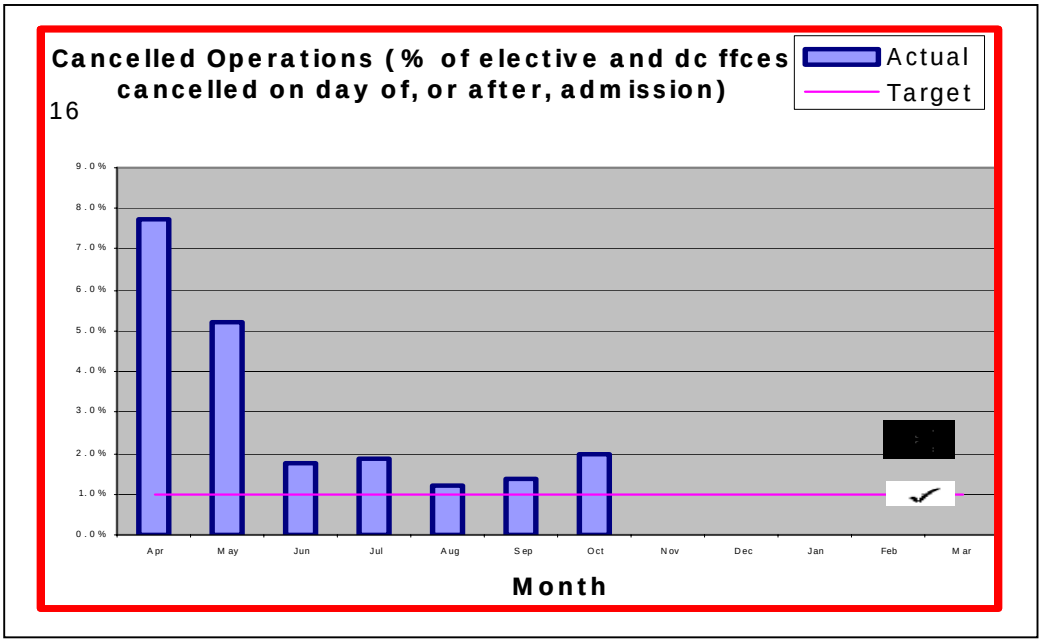


This diagram shows the Trust moving from around 80% of patients waiting less than 4hours in A&E in 2003 to over 98% by the end of 2005. This improvement coincides with a short-term centralisation of the major A&E at Frenchay. There are issues however, with sustaining the target as indicated by a recent review from the Department of Health Performance Support Team, and the scattering of acute services across both sites is still creating a difficulty in managing emergency patient flows effectively. The target was also adversely affected by an outbreak of Norovirus in spring 2005 and the current lay-out of wards with a combination of Nightingale wards and multi-bed bays with less than 10% of beds in single rooms meant that NBT found it difficult to react effectively and maintain performance.

Planned and Ambulatory: The Trust is performing to target on elective and outpatient waiting times but it has difficulties in sustaining services due to a scattering of outpatient facilities around the sites and difficulties in maintaining the required capacity to treat elective inpatients. Current performance is shown in the following charts:



This diagram shows a significant reduction in the number of patients waiting 6 months for an elective operation. There are, however a lot of pressures on the current elective system as illustrated by the number of cancelled elective operations shown in the chart below:



The ability of NBT and its commissioning PCTs, to continue to deliver and indeed improve on existing performance in order to meet future targets, is significantly challenged by the current configuration of services. The developing new model of care will support the achievement of new targets, but sustaining them will require investment as set out in this business case.

2.4.6.4 Financial context

The Trust made a £44m loss in 2002/3. Following major changes in both the Executive and Non-Executive Directors the Trust is now in the third year of a Financial Recovery Plan to bring the organisation back into recurrent balance. It is fully on track with the programme, having made cumulative savings over 2003/2004 to 2005/2006 of £47.8m, with further savings planned of £23.5m over 2006/2007 and 2007/2008 to reach recurrent balance. Further detail is provided on progress with financial recovery in the affordability section of the Business Case.

The Trust has been held up by the National Audit Office as a case study of good practice in financial recovery. The improvements in management capability and the more general cultural changes, that have been made in the course of achieving these savings, puts the Trust in a good position to deliver on the required OBC performance improvement and savings.

2.4.6.5 Workforce

Across Bristol, North Somerset and South Gloucestershire the NHS employs nearly 20,000 staff, which represents 5% of the total working population in the area. Over half of all staff are employed in qualified healthcare roles (54%), whilst 22% occupy healthcare support roles. The total NHS Trusts and PCTs are therefore major employers within the local economy.

As at 31 March 2006, North Bristol Trust will have a staff establishment of 7150 WTE, with the South Gloucestershire PCT 440 WTE and Bristol North PCT 638 WTE. Full details of the breakdown by staff group are given in Section 12.2.2.

The Trusts are fully committed to the modernisation of the workforce, and therefore a number of initiatives are being taken forward to develop new roles, for example Emergency Care Practitioners, Advanced Primary Care Nurses and Anaesthetic Assistants. The development of these roles will contribute to the implementation of the new clinical model of care, and to the ability across the health community to sustain future primary, community and acute services.

North Bristol Trust faces considerable problems in sustaining a workforce with the full portfolio of knowledge and skills across both the acute hospital sites. In particular this relates to the ability to sustain the medical workforce on both sites, taking into account the implications of the European Working Time Directive. From 2009 the maximum duty hours per week will be 48, and whilst these changes are positive in terms of the provision of good quality care, they will have a major impact on the organisation of junior doctor rotas. The implementation of Modernising Medical Careers will further reduce the service commitment of doctors in training, and therefore both these initiatives mean that the introduction of new roles to support and cover work previously undertaken by doctors in training becomes an imperative.

The Primary Care Trusts are undertaking considerable workforce development, to underpin the development of primary and community care. In particular the development of case management skills and the implementation of the Advanced Primary Nurse role (Community Matron) will form a very important part of the community infrastructure.

2.4.6.6 Education and research

As a major teaching Trust, North Bristol Trust is a very significant provider of work based learning placements for medical, nursing, midwifery, allied health professions and clinical scientist students. It has key research and education relationships with the University of Bristol and the University of the West of England and also works with a wide range of other universities in specific areas of research and education. The Trust is fully committed to the continuing education development of all of its staff and it is a leading organisation in the Bristol North Academy.

The Trust has a major contract with the Severn and Wessex Medical Deanery for the foundation education of junior doctors and works closely with the Deanery and the various Royal Colleges to provide more advanced specialist medical education.

Research activity in the Trust has expanded rapidly over the last five years and is now regarded by the Department of Health as ‘strong’ in all programmes. There are particular strengths in translational research and the Trust is well positioned in the new UK Clinical Research Collaboration Network set up between the Department of Health the Medical Research Council and major health research charities.

Knowledge management is a significant component of all education and research activity and also contributes importantly to the day to day delivery of high quality care and to the achievement of sound clinical governance. The Trust has worked in partnership with the National Electronic Library for Health to develop its custom built Knowledge for Health portal which provides 'two click' desktop access to a wide range of health relevant databases for all staff and students of NBT and other partner health and social care organisations.

The difficulties the Trust faces currently are connected to three main features:

- A lack of integration of all the various academic activities around the Trust's sites. There are currently a wide scattering of academic activities on the Frenchay, Southmead and Blackberry Hill sites and this is leading to difficulties in co-ordination and maintaining a systematic approach to learning;
- An absence of educational and learning space in most of the Trust's front-line clinical environments. This makes it difficult to meet the developing trend in health service education to provide teaching at the 'patients' bedside'.
- An under-investment in state-of-the art skills laboratories that allow the Trust to develop the latest teaching techniques based around simulation.

The Trust's academic strategy given at Appendix 2 aims to address this issue by pulling together all the academic functions into a single concentrated programme, trying to create space for front-line education opportunities and modernising simulation and skills laboratory facilities and programmes. This will be enabled by the concentration of services onto one site.

2.4.6.7 Estates Strategy

NBT provides services from a number of sites, the details of which are as follows:

- **Frenchay Hospital:** Frenchay Hospital is located on a 28 hectare site in South Gloucestershire, immediately to the east of the M32. The site includes a significant area of conservation land (8.2 hectares). The original hospital was built in the 1920s as a Tuberculosis sanatorium. Many of the 1940s single storey wards built as a Second World War facility, located in long rows across the site, are still in use. The horizontal layout is extensive and many patients requiring surgery have to be transported considerable distances between buildings, wards and operating theatres. The first phase of redevelopment to provide over 200 beds and a purpose built day surgical suite was completed in the early 1990s.

  Since then a number of small scale facilities have been developed across the site including the Brain Injury Rehabilitation Unit, the Burden Institute, the Barbara Russell Children's Unit and the Macmillan Unit.

  Generally, whilst many high quality clinical services are provided at this hospital, the environment and underlying infrastructure fall far short of the standard required for a modern health service.

- **Southmead Hospital:** provides emergency and elective secondary acute services (excluding emergency general surgery, trauma, and a full accident & emergency service). The site has a nurse-led MIU. Tertiary level services; renal, including transplantation, urology, ENT, orthopaedics, and infectious disease are provided from Southmead. Southmead Hospital is located on a 27 Hectare site in North Bristol just over two miles to the west of the M32. It was constructed as a workhouse and infirmary at the beginning of the 20th century. New facilities were constructed in the early 1990s to allow the rationalisation of the Ham Green Hospital in Pill and the transfer of the Winford Hospital (a specialist Orthopaedic Hospital) to the then new Avon Orthopaedic Centre on the Southmead site.

  Since then investment has largely been concentrated on providing a leading edge advanced clinical information system and a number of ambulatory care units for gynaecology and oral surgery and on upgrading the basic infrastructure. Virtually all the accommodation is housed in one or two storeys. The resulting horizontal layout of the hospital means that the distance between outpatient, diagnostic, operating theatre and critical care facilities can be extensive. Only a small number of services have a patient centred design. These include musculo-skeletal, women's health, renal and respiratory medicine.

- **Blackberry Hill Hospital:** Previously provided inpatient rehabilitation services for medical patients who did not need the full facilities of a major acute hospital. These were transferred to the Frenchay and Southmead acute sites or into the community in 2005. A number of other services including therapies, training and research are scheduled for transfer to other locations during 2006/7 after which the hospital will close. Mental health services are also provided on site by the Avon and Wiltshire Partnership Trust.

  Blackberry Hill Hospital is a 14 hectare site located one mile to the south of Frenchay Hospital. It was originally a prison constructed at the time of the Napoleonic Wars. North Bristol NHS Trust also manages an inpatient facility for child and adolescent psychiatry on this site.

- **Thornbury Hospital:** is a 1.6 hectare site. It consists principally of a 2-storey building built in 1993 which accommodates a 24 bed GP ward (this service and its staff are managed by SGPCT). The Thornbury Hospital estate continues to be owned and managed by NBT. Outpatient services are provided in part of a 1970s built former maternity unit, but the remainder of this building is vacant. The site is adjacent to Thornbury Health Centre.

- **Cossham Hospital:** provides outpatient and diagnostic services and physiotherapy. It is also a base for community mental healthcare teams and intermediate healthcare teams. Cossham Hospital is a 2.44 hectare site which has existed on the site since 1907.

- **Ham Green:** is a 0.65 hectare site. The remaining NHS facility is Orchard View, a 16 bed respite care centre for younger physically disabled plus day unit. This was built in 1972 and is the only remaining part of what was a 300 bed general hospital built from 1910 onwards, which was closed in 1992.

- **Wendover:** is a 0.21 hectare site. It is used as offices for the Women and Children's Health Directorate, and was the former Wendover Maternity Hospital. It is situated between Fishponds and Downend and is adjacent to Downend Day Centre (Social Services).

The Trust has developed an estate strategy that summarises the current building infrastructure and the plans for development. As part of developing the estate strategy and then subsequently preparing the sites for development, the Trust has reviewed the existing estate and its findings include:

- Functional Suitability: Only 57% of the Frenchay estate has been graded A or B whilst 80% of the Southmead site is in this condition. Wards on each hospital site are of varying sizes, with different space allowances per bed. A large number of wards are non-compliant with NHS consumerism standards, with inadequate en-suite accommodation and gender separation of bathroom and other sanitary facilities. There are also a number of difficulties in providing services because interdependent departments are spread around the site. A typical example of this problem is the location of the A&E and assessment units at completely opposite ends of the Frenchay site, with an additional assessment unit on the Southmead site.

  The previous section has discussed academic strategy and the need to provide a more integrated function. The current estate fights against this with a scattering of academic facilities in buildings not designed for purpose with poor acoustics and lack of technology to facilitate education.

- Physical condition: Only 54% of the Frenchay estate and 66% of the Southmead estate has been graded in condition B. This classification reflects the considerable quantity of ageing and unsuitable estate that requires substantial investment to bring it to a suitable standard. A summary of the condition of the Southmead and Frenchay sites is shown in the following diagrams:

- Space utilisation: A review of space utilisation by the Trust identified a number of areas that could be utilised more effectively. The 6-facet survey showed that 87% of the facilities were fully utilised at Frenchay, with 77% at Southmead. Between 4% and 7% of the space was overcrowded. The main limitation on the Trust was the arbitrary way in which some of the estate has grown and the wide arrangement of small bespoke buildings. A targeted space utilisation study was commissioned in 2005 that looked at certain key departments and concluded that a number of these departments were under-utilised.

- Quality of Estate: The strategy includes an estate age profile and shows that the majority of the estate is over 40 years old, 25% of the overall floor area being built post 1990, and 49% of the site being built pre-1960. This estate generally shows its age with poor ratings. The Estate Strategy concluded that: 'The infrastructure (heating, ventilation, power etc.) is gradually deteriorating to an unacceptable condition. It requires significant investment to ensure it can support hospital services over the long term.' The design of all wards falls short of the standards currently expected for the maintenance of patients' dignity and privacy. With the introduction of updated standards for ward accommodation, in terms of increased proportion of single en-suite rooms and increased space in other patient areas, the difference between the older ward areas and new standards has become more marked.

- Statutory Compliance: There are substantial constraints to meeting statutory targets in the internal arrangement of the ward areas. Given the shortcomings in the design of the older areas of the Hospitals, many areas do not comply with the requirements of the Disability Discrimination Act. Full compliance could only be achieved throughout the Hospitals with significant investment, due to the physical limitations of the sites and many of the buildings. With regard to fire compliance only 60% of the Southmead Estate and 55% of Frenchay are condition B with regard to General Fire Condition.

- Environmental Management: The Trust Estate is in major need of an overhaul with, for example, water at Frenchay being assessed at 52% below condition B. There are a range of difficulties with providing an energy efficient estate including the need to replace windows, a prevalence of temporary thin-skin buildings and a scattering of low-rise buildings across the Trust' sites that inevitable mean long distances of travel for steam along ageing pipe-work.

- Backlog Maintenance: The poor quality of the existing estate inevitably leads to a high backlog maintenance requirement, as this is identified in the following tables. The figures are those provided in the ERIC return, and are at MIPS 447. VAT and fees are not included.

The main statistics relating to the estate are summarised below:

Table 2.4.6.7i

Southmead Hospital	2005
Total Site Area	27.10 hectares
Building Floor Area	84,589 square metres
Value of land	£32,010,000
Value of Buildings	£93,144,623
Energy Liability	231,579 Giga-joules
% Condition A & B	65.7%
Backlog Maintenance	£34,439,000

Table 2.4.6.7ii

Frenchay Hospital	2005
Total Site Area	28.10 hectares
Building Floor Area	67,776 square metres
Value of land	£37,192,000
Value of Buildings	£67,054,065
Energy Liability	154,144 Giga-joules
% Condition A & B	53.5%
Backlog Maintenance	£38,252,000

The Trust's financial recovery plan has so far resulted in the following estate related changes:

- Rationalisation of the Blackberry Hill Hospital site, making significant savings on capital charges.
- Revaluation of the estate.

The Trust is also seeking to rationalise its property portfolio, disposing of some smaller facilities and land plots altogether.

Planned strategic capital investments over the next five years include investments to enable the completion of the following projects (many on an interim basis):

- ENT/OMF centralisation.
- Cardiac catheter laboratories.
- Centralisation of pathology.
- Theatres upgrade.
- NICU upgrade.
- Statutory compliance works.
- HDU works.
- Medical assessment unit.

The Trust has agreed a Travel Plan for both the Frenchay and Southmead sites (Appendix 3). Whilst the main driver for the development of 'A Better Way to Work' has been the need to address the specific problems of poor access and parking at Trust sites, the Trust is also responding to the obligations of transport and healthcare policy, and by the need to consider the transport impact of future healthcare infrastructure development.

2.4.7 Information Management & Technology (IM&T)

The Trust is developing an IM&T strategy (Appendix 4) with a thorough modernisation of:

- IM&T infrastructure;
- Applications Systems
- Information Systems.

The IM&T infrastructure will be underpinned by:

- A full Trust network, with wireless capability, especially in clinical areas, allowing access from any desirable location to IT systems and information, and for all staff.
- High levels of PC penetration, allowing access to information and systems, and supporting the organisation directly. People to PC ratios, generally, will be in the region of 2:1.
- Modern, personalised telecommunications systems, supporting patient access to information and aiding communication within the organisation, will be available.
- Standardised, streamlined processes (from PC requesting to systems access, from extension changing to video conferencing set up).
- Infrastructure to carry a range of digital services, covering security, pass card information and images and alarms;

The Trust's infrastructure will be supported by first class customer service, from a central Help Desk facility, working alongside Facilities, to provide a combined support organisation.

Applications Systems will provide:

- A single, modern IT system supporting administration and clinical requirements, including prescribing, decision support and clinical documentation. This will integrate with partner organisations systems across the Health economy to assist with care delivery across the patient pathway.
- Integration of this single system with those of other NHS organisations in the areas, including PCT's, allowing easy sharing of information and moving of patient record information.
- No more than 50,000 paper records stored on site, with a 90% computerised/ electronic patient record, with full flexibility to move beyond the "hospital boundary", utilising the same record in community and primary care settings. This is vital to deliver many of the new models of care.
- Electronically delivered x-rays and other images, direct to PC/workstation screens. Actual "film" movement will be minimal.

Robust Information systems will provide:

- Accurate information across a range of systems, to provide clinical, operational, managerial, financial and patient information.

- Accurate and timely clinical coding, coupled with modern financial systems will assist with providing financial information to help manage the operational services, within the financial envelope.
- Knowledge management services available from education facilities, libraries, information points, and indeed, across the Trust, enabling clinical and non-clinical educational information to be available to all staff.

IM&T will support the new models of care, and deliver real benefits to the Trust and health community to provide the necessary information and technology infrastructure, required to deliver the development and new services.

2.4.8 Regeneration and Neighbourhood Renewal

Bristol's Community Strategy produced by the Bristol Partnership, the Local Strategic Partnership, describes how the vision of Bristol as a thriving, vibrant, learning and diverse city can be achieved.

The strategy has five aims:

- Achieving lifelong learning;
- Building a thriving economy;
- Strengthening local communities;
- Promoting health and well being;
- Investing in a sustainable environment.

The local targets for health and wellbeing are to reduce death rates from Cancer, Stroke, and Heart Disease, to reduce exposure to second hand smoke, to increase the number of people reporting improved mental health and wellbeing and to halve the number of teenage pregnancies. Priorities to address these include projects for young people, support for community projects and priorities where there is evidence of successfully building community capacity, income maximization, promoting healthy lifestyles and improve workplace health promotion.

The Bristol Partnership also aims to improve neighbourhoods and the quality of life in the city so that by 2011 no one is seriously disadvantaged by where they live. To achieve this, the Bristol Partnership has developed the Neighbourhood Renewal Strategy.

There are ten neighbourhood renewal areas across Bristol including Knowle West, Hartcliffe & Withywood, Ashley, Barton Hill, Easton, Hillfields, Lawrence Weston, Lawrence Hill, Lockleaze and Southmead

The Neighbourhood Renewal Strategy includes a number of key points on health:

- Neighbourhood Renewal has invested in a support worker for teenage mothers. Money is being invested in sexual health services in Knowle West and Southmead.
- Evidence suggests that young people are reluctant to access primary care services especially for sexual health. A recent survey of GPs also showed that they are unclear about seeing under-16s without a parent or guardian. If young people can be encouraged to use primary care services, they are much more likely to continue to do so in later life.
- Further work will be commissioned with schools in Neighbourhood Renewal areas where link workers would make services more accessible.

- The approach, agreed with the Primary Care Trusts, is to focus on access to primary care provision, including culturally sensitive provision and advice for black and minority ethnic communities. A heath promotion specialist has recently been recruited by South Bristol Primary Care Trust to work with Neighbourhood Renewal partnerships in addressing local needs.

In addition, the Bristol Partnership's regeneration strategy, supported by the PCTs, aims to create communities where people live within walking distance of community services and ensure that hospitals among other services are accessible through good and reliable public transport.

PCTs are involved at all levels in neighbourhood renewal. The Bristol partnership now has a health and wellbeing delivery group chaired by the Joint Director of Public Health overseeing the local work of the health theme groups in each neighbourhood renewal areas. An Assistant Director of Public Health sits on the Regeneration Delivery Group, the Health & Wellbeing Delivery Group and the Equalities Action Group of the Bristol Partnership. Senior Health Promotion Specialists support each local neighbourhood Renewal area group and health theme groups.

One of the main aims of neighbourhood renewal funding has been to change the way that mainstream services operate (mainstreaming). When the PCTs have been involved in the development of a proposal they have a fairly good record of mainstreaming. However, in the majority of cases the funded projects have been small scale and short term and haven't had the prior involvement of the mainstream agencies and very few of these have been mainstreamed. As a result of this, the Directorate of Public Health & Community Development has been awarded £33K to look at what and how health services should change as a result of neighbourhood renewal funding to allow for further mainstreaming.

The Trusts aim to assist with this agenda of urban renewal and there is an ambition in North Bristol and South Gloucestershire to link the overall health benefits associated with neighbourhood development with the specific delivery of Health Services.

2.5 PUBLIC ENGAGEMENT, CONSULTATION AND SCRUTINY

To underpin the response to the range of national and local strategic initiatives highlighted above, the local health community has conducted extensive public engagement and consultation on these proposals. See Appendix 5 for an overview of the engagement and consultation process.

During 2002/03 the local NHS consulted widely on options for the future of health services across Bristol. In particular, it explored whether it would be best in the long term to have a single major hospital to serve the Bristol area (excluding Weston). Feedback from the public was very clear. There was considerable support for moving services out of hospital and into the community, but people were worried about the idea of a single 'super hospital' for Bristol. Local Councils were also concerned about this model, both in terms of access and in terms of the economic impact of potentially losing a city centre hospital presence.

In January 2004, the local NHS launched a three month period of public engagement on the Bristol Health Services Plan. This took account of the 2002 exercise and contained proposals for providing many more services in community settings whilst maintaining major hospitals, in both central Bristol (the Bristol Royal Infirmary) and in North Bristol and South Gloucestershire.

The public engagement process set out options for concentrating all hospital services at either Frenchay or Southmead, or for concentrating acute services on one of the sites and developing a community hospital on the other site. It also set out options for developing a network of community hospitals and healthcare centres throughout South Gloucestershire and North Bristol.

The feedback from the public engagement process was clear:

- The public wanted to see some ongoing hospital presence on both Frenchay and Southmead sites.
- There was strong support for the development of community hospitals and community healthcare centres.

The local NHS initiated a period of public consultation between September and December 2004. This took account of the feedback from public engagement and removed the option of concentrating all services at either Southmead or Frenchay, thus ensuring that a hospital presence remained at both existing sites.
The Bristol Health Services Plan consultation document also sought feedback on the ten criteria, which the local NHS proposed should be used to determine which site should be selected as the major acute hospital site for North Bristol and South Gloucestershire. These criteria were:

- What will the options mean for the quality of care that patients receive?
- What will the options mean for the development of community services?
- Will the options help us in recruiting doctors and the other specialist staff we need to run services?
- Will the options help in recruiting nurses, other clinical staff and support staff (such as porters)?
- What will the options mean for people's travel times?
- How will the options impact on the local communities in South Gloucestershire and North Bristol?
- Will the options provide high quality modern buildings, which provide the best environment for patients to recover from their illness?
- How quickly and easily can we implement the option?
- How flexible are the options, so that if things change in the future we can still meet patients' needs?
- Will the options be good value for money?

Prior to consultation and throughout the process the local NHS worked with the Joint Health Scrutiny Committee (JHSC), comprising members from the Councils principally affected by the proposals – Bristol City, South Gloucestershire and North Somerset.
Before the start of the consultation process, the local NHS agreed with the JHSC on a consultation strategy and process for the Bristol Health Services Plan.

The JHSC held 7 meetings from July 2004 until February 2005 and took evidence from a wide range of organisations, and visited relevant sites. Clinicians and senior managers from the local NHS attended these meetings, and also the respective Councils' own Health Scrutiny Committees.

Following the completion of the consultation process, the local NHS prepared a report on the outcomes of consultation in January 2005 which it submitted to the Joint Health Scrutiny Committee (JHSC).

The JHSC responded formally to the consultation proposals in its report in February 2005 with a series of recommendations. This stated the JHSC's support for the criteria to be used for the selection of the acute site.

The recommendations of the JHSC were then addressed in the Bristol Health Services Plan Assessment Report, which was prepared by the local NHS to inform decision making by Boards in March 2005. A Joint Decision Making Committee of local organisations met on 14 March 2005 to consider the recommendations as set out in this report. The organisations comprising the committee were:

- Bristol North PCT
- North Bristol NHS Trust
- North Somerset PCT
- Bristol South and West PCT
- United Bristol Healthcare Trust (UBHT)
- South Gloucestershire PCT

Following on from the decision making process, and in the context of concerns expressed by local residents about the location of the major acute hospital, the South Gloucestershire Health Scrutiny met on 6th July to consider the conclusions of the Joint Decision Making Committee. The Sub-Committee concluded that it would write to the Secretary of State for Health to request that she should refer the decision on the selection of the major acute hospital site to the Independent Reconfiguration Panel. In support of this request the Sub-Committee cited five grounds which they argued demonstrated there had been inadequate consultation and flawed decision-making.

In response to the letter sent to the Secretary of State by the South Gloucestershire Sub- Committee, the equivalent Scrutiny Committee's in Bristol City and North Somerset wrote to the Secretary of State opposing the South Gloucestershire position. In addition, support for the decision to select the Southmead site for the major acute hospital was reiterated by the NBT Patient and Public Involvement Forum (PPIF), the NBT Medical Advisory Committee and the NBT Joint Union Committee.

On October 21st 2005 Lord Warner responded on behalf of the Secretary of State to the letter from the South Gloucestershire Health Scrutiny Sub-Committee. The letter from Lord Warner considered the five grounds presented by the Sub-Committee and concluded that he could see no reason to refer the decision to the Independent Reconfiguration Panel.

An integral part of involving the public in this project has been through the OBC Public Involvement Group. It was first established in May 2004. The group has helped shape the development of the project by discussing issues such as finance, changing hospital services, transport and access, option appraisal process [via two workshops which assisted in designing effective criteria to assist the public to differentiate between the options and lay out of the BHSP Consultation Document], direct input into Project Board discussions via a Project Board Template that enabled the Group to ask questions and receive responses and later by two Public Involvement Group Representatives sitting on the Project Board from February 2004 onwards].

Post decisions being taken in March 2005, the Group has discussed the terms of reference for the adadditional transport and access worked requested by the SHA, the outline planning process, bed modelling, design work and option appraisal. The Group had 25% voting rights in the non-financial option appraisal process.

Representatives of the Public Involvement Group are members of the Design Group and will participate in the Gateway Reviews. It is intended that they will also be represented on the Clinical Development Steering Committee which oversees the work of the clinical Development Groups.

A Clinical Model of Care workshop was also held in September 2005, so that the Group could help shape the new model of care.

Besides working closely with this Public Involvement Group, regular updates have also been given to NBT's Patient Panel, a voluntary body which represents patients' interests, NBT's Patient and Public Involvement Forum, and staff. Appendix 6 sets out the Communication Strategy and Implementation Plan.

2.6 SUMMARY OF STRATEGIC CONTEXT

The national pressures described above have led to the development of the Bristol Health Services Plan and an ambition to change the way services are provided. To underpin this change programme, the Trusts have developed a new clinical model to govern the way that services are provided and have then assessed the impact this model will have on future demand and capacity. This work is explained in Part B.

PART B: FUTURE SERVICE MODEL AND CASE FOR CHANGE

SECTION 3: MODEL OF HEALTHCARE PROVISION

3.1 INTRODUCTION

3.1.1 Purpose

This section describes the underlying strategy for the OBC development, which has been created through a joint process between the PCTs and NBT leading up to and following the sign-off of a Strategic Outline Case in July 2004. This work builds on the high level clinical model which was formulated as part of the Strategic Outline Case and sets out a greater level of detail. This strategy is a close relative of the BHSP strategic clinical model and develops the BHSP themes into a local model for NBSG.

The purpose of this clinical strategy is to provide a context for a major rethink of how local health services are provided and how the new hospital will look. The intention is to develop this strategy from a patient's perspective and is intended to lead to:

- An implementation plan to put in place the proposed strategy
- A specification for the new hospital and community facilities
- A workforce plan describing the redesigned and new roles that will be in place for future healthcare delivery.

This strategy is a 'live' document and will need to be adjusted to reflect the changing scope of services in the area. This changing scope will need to respond to local and national reviews of service configurations.

This clinical strategy should be applicable to any configuration of organisations including any restructuring arising from patient choice and from 'Commissioning a Patient-led NHS'. Essentially the model will continue to apply when PCTs divest themselves of provider services, as contestability emerges in primary and community care services, as the independent sector take on increasing secondary care work and as NHS Trusts become Foundation Trusts.

This model should be used to help any restructuring process by testing whether the proposed restructure produces a configuration of services capable of delivering the clinical strategy.

The model has been developed taking into account the need for all elements of the local health system to improve their productivity. Implementation of the model with its proposals for seamless services between primary and secondary care will result in significant efficiencies to the local health economy.

The North Bristol and South Gloucestershire development covers 2 main strategic areas:

- The provision of a local health system within which all the component parts work smoothly together. This part of the strategy looks at how the key parts of primary and secondary care work together, and with other key elements such as Social Services. This strategy considers how the local services can be structured into new systems that promote health and deliver emergency, planned and general healthcare. The strategy also addresses how a fundamental shift towards primary care and community based services can be achieved.

- The construction of a network linking local services with more acute and specialist provision. Part of this strategy concerns developing some of these specialist networks with UBHT and looks at how these specialties can be configured across the acute trusts to add to the quality of local services.

3.1.2 Objectives

The major drive for the development is improved patient care and better health for the local population. The overall objectives are to:

- Provide care closer to the patient's home where clinically appropriate;
- Provide effective local health services by harmonising primary care, social care and local hospital services to prevent inefficiencies, gaps in provision, delays and duplication of effort;
- Develop specialist services and networks for a wider group of patients within the NHS, providing high quality and faster access to specialist opinion with care provided closer to home where appropriate;
- Provide a vibrant learning and education culture that benefits clinical services;
- Improve the efficiency and value for money of services.
- Enable local services to respond to national initiatives including Patient Choice and 'Creating a Patient-Led NHS'

Staff, patients and the local community have been, and will continue to be, involved in the development, implementation and communication of the project.

3.1.3 Main Principles

The development will put the patient at the centre of the new care systems, and is characterised by a set of first principles as follows:

Our Services:

- **Enhancement of Primary Care:** The role of primary care as the principle orchestrator of patient's care will be enhanced and developed. The clinical model will enable Primary care to support the patient, maintain the patient's independence and reach rapid and accurate diagnoses. Admission to inpatient services will be avoided where appropriate. The role of Primary care is developing to manage a greater proportion of the patient's care and to manage the patient's overall journey through the health system. Care will be provided closer to the patient's home wherever possible and clinically appropriate.
- **Joined up Hospital and Community services:** Better outcomes can be achieved by joining up hospital, community and social care services more effectively facilitated by use of technology including the National Care Record Service. The aim is to work together to provide better care for our patients;
- **Concentration of Acute Services:** More rapid and effective decision-making, avoidance of duplication and increase in quality, flexibility and speed of throughput can be achieved by a concentration of acute and specialist resources and expertise in a smaller number of places.
- **Patient Empowerment:** Patients and carers will be supported and encouraged to make informed decisions regarding their health and condition and will be full partners in the development and delivery of care plans.

Delivering Our Services

- **Rapid Access and Rapid Throughput:** Patients will get treatment as soon as they are clinically ready and will not be waiting in queues for a diagnosis or treatment. Immediate expert assessment will be provided to patients with acute problems when required, leading to better health outcomes, more efficiency and prevention of crises. Services will concentrate on solving problems promptly and returning people to their homes as quickly as possible through close liaison between hospital and community services, active case management and accelerated recovery programmes, e.g. fast tracking elective surgical patients through the acute phase of their care).
- **Harmonisation of Approach:** Equity of access for patients will be achieved by a more systematic approach across the community including the adoption of joint protocols by community providers and Social Services.
- **Case Management:** Patients in all parts of the health system will receive co-ordination of their care by staff who will be responsible for them. To enable this co-ordination, there will be an integration of assessment and planning processes for patients.
- **Flexibility:** Services will be designed that have the ability to flex and change in response to changes in technology, service approach and overall clinical process. They will be responsive to local needs and national drivers. This will dictate a more generic approach to the provision of beds, theatres and diagnostics;
- **Governance:** Shared governance arrangements will support the models of care with an emphasis on enabling patients to move smoothly between services regardless of organisation. There will be mechanisms in place to ensure clear lines of responsibility and accountability for care across organisations. These mechanisms will be described as each system or service is developed in more detail.

3.1.4 Scope

This strategy is based on a new configuration of services that is set out in the BHSP and is intended to provide the most efficient set of services in each location in Bristol.

Central to this new configuration is a concentration of A&E and acute assessment services within Bristol into 2 main receiving centres at Southmead and the BRI. These will complement services at Weston General Hospital. This strategy allows the provision of an acute core that can respond flexibly to changes in demand and work as a single acute and emergency system. This integrated core will be characterised by a range of single processes including:

- Networked receiving arrangements for emergency patients to allow ambulance services to direct activity in line with capacity at either site.
- Routing of GP referrals for a bed, based upon capacity.
- Potential to open or close operating theatres at either site for periods out-of-hours.
- Single clinical teams e.g. for cardiology to allow for round-the-clock interventional/emergency rotas.
- Networking of imaging and telemedicine to enable decision-making at distance.
- Joint adoption of modern technological solutions.

Services will be located at either site, with a principle that service configuration takes into account;

- Location at both sites of services that are required to support the effective running of A&E services.
- Concentration of other services where economies of scale can lead to more efficient working and safer outcomes e.g. children's services, head and neck services and pathology.

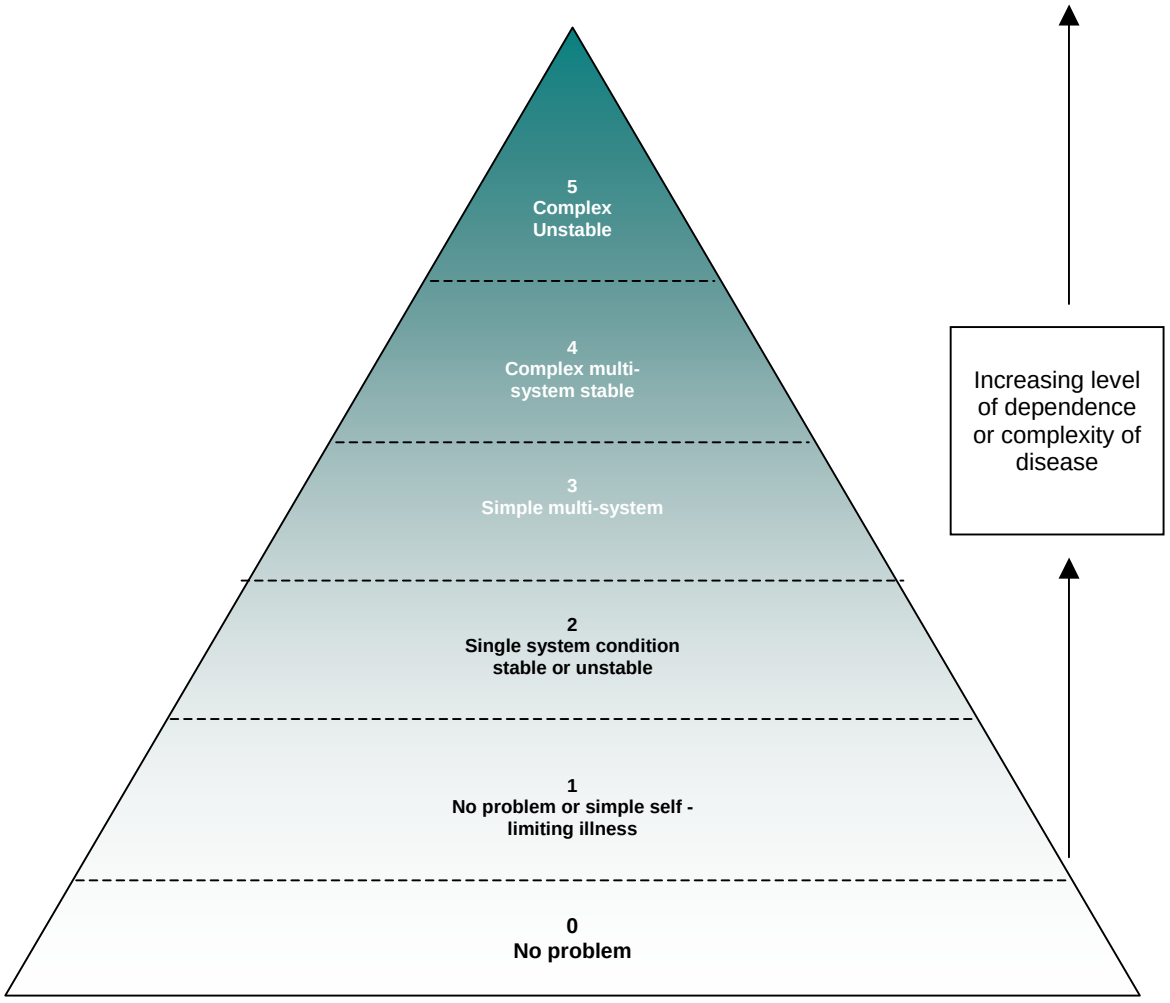
3.2 MAIN STREAMS OF PATIENTS

To develop the clinical model, patients who use the service have been categorised into main streams. This categorisation is used in the document to show how these main flows of patients interact with the various elements of the overall health system.

The main categories of patients are illustrated in the diagram below and examples given in the subsequent table.

3.2.1 Population Pyramid of Health and Social Need

The pyramid represents the whole population. When an individual is located in the higher levels, it represents high need and high complexity of need. This does not necessarily represent greater demand on hospital service, but greater need of complex health, social and voluntary sector input. The examples in the table below illustrate where individuals may be placed, and how they move between levels.



	Overall Category	Description	Example
0	No problem	Person at risk of problem but with no current use of services.	Young smoker
1	Simple self limiting illness	Simple self limiting illness that leads patient into single system problem but then returns to full health	Acute appendicitis or simple chest infection (simple system condition until returns to full health)
2a/b	Single system condition – stable or unstable	2a – Single system problem. Need for long term supervision or acute complex short term input 2b – Single system problem that develops into a complex and/or multi-system problem	2a - Diabetes mellitus or myocardial infarction in the past. 2b) – Diabetic patient develops myocardial infarction, renal failure and acute heart failure (complex unstable), recovers from acute episode but continue with more complex needs (simple multi-system)
3	Simple multi-system conditions	Simple multi-system problem, high level of dependence and support needs. Surgery complex because of risks of infection and respiratory compromise but post surgery and rehabilitation is able to return to higher level of function.	Patient with COPD and osteoarthritis.
4	Complex multi-system stable	Complex multi-system stable. This situation can easily break down with changes in social situation or by acute infection leading to a complex unstable situation. Good communication of both health and social care networks are vital in these situations.	COPD, diabetes with dementia or mental health problems.
5	Complex unstable	Complex multi-system, possibly including social, patient requiring intensive multi-disciplinary / agency input. Usually a transient phase but requires rapid response to condition in all cases.	Patient with a medical or social crisis requiring immediate resolution such as by providing intensive support in a domiciliary placement, admission to acute hospital or care home.

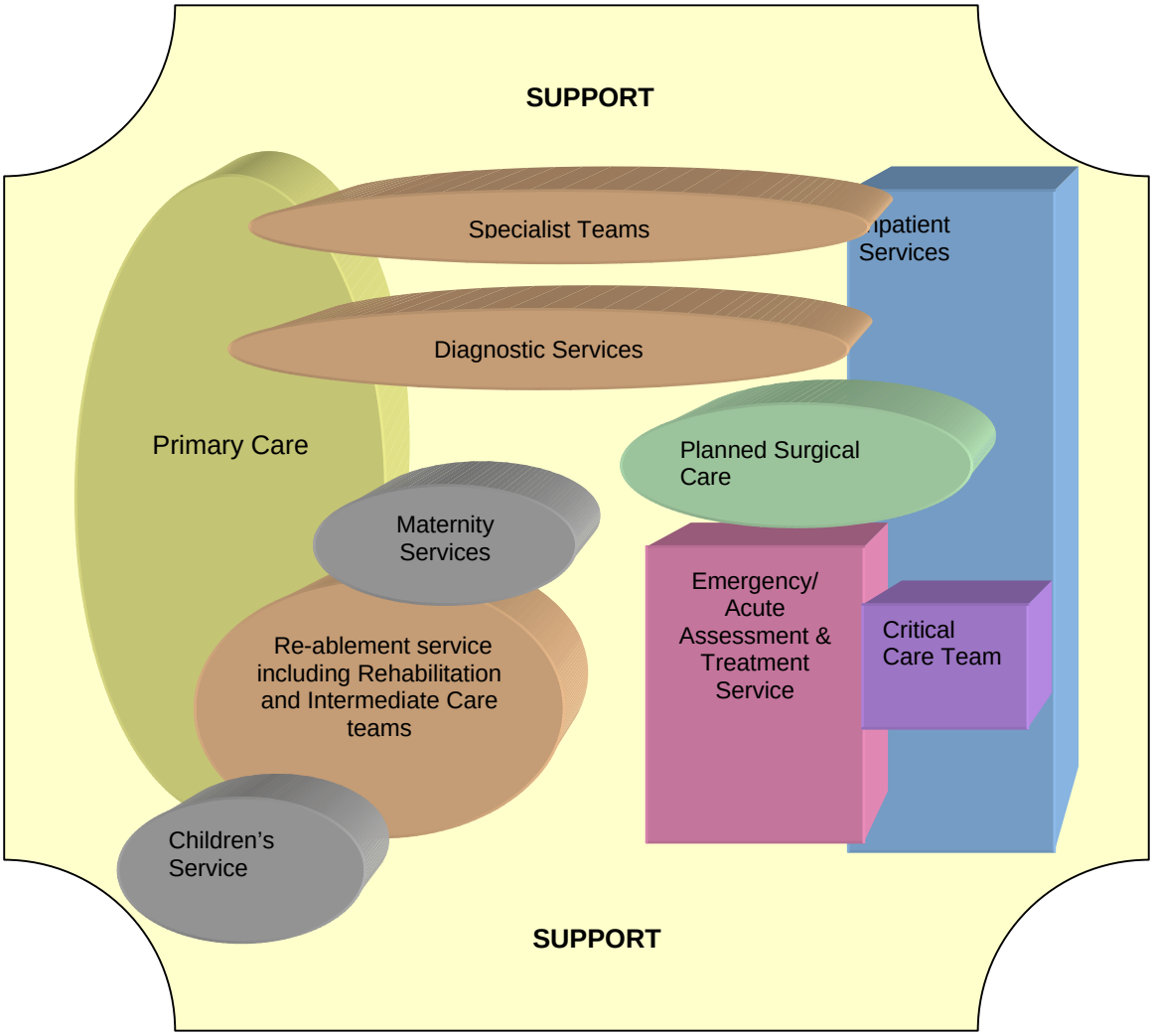
3.3 MAIN SYSTEMS

3.3.1 Summary

The new Health system in North Bristol and South Gloucestershire is built up of a number of systems. These are not distinct and separate systems but will overlap and work together so that there will not be hand-offs and difficult transfers of care for individuals. The systems are listed below:

i) A strengthened **Primary Care** system;
ii) An integrated **Re-Ablement** service for North Bristol and South Gloucestershire including rehabilitation and intermediate care;
iii) A range of **Specialist Teams** combining hospital and community expertise;
iv) A comprehensive **Urgent Care** network
v) An **Emergency/Acute Assessment and Treatment Service;**
vi) A strengthened **Critical Care Team;**
vii) Flexible I**npatient services;**
viii) A systematic **Planned Surgical Service**;
ix) A community based health and social **Children's Service;**
x) Rapid response **Diagnostic Services;**
xi) Responsive **Support Services.**

These systems are summarised in the following diagram:



3.3.2 A Strengthened Primary Care System

Primary care will be a fundamental part of all the care systems and will be the main orchestrator of care for most patients. GPs in their role as practice based commissioners will play a significant role in determining effective and efficient pathways of care for their patients. They will be supported in taking a greater role than currently in the diagnosis and treatment of patients in community settings through ease of access to diagnostics and specialist opinions and through locally based facilities which will be in place to support them to do this.

The main features of the new strengthened primary care infrastructure in North Bristol and South Gloucestershire will be:

- Orchestration of care to co-ordinate patient care and treatment.
- Agreement and implementation of protocols and best practice standards.
- Full access to diagnostic facilities where investigation in the community is appropriate.
- Improved access to specialist opinions, diagnostics, intermediate care and support from specialist and hospital care.
- Shared care with cooperative working between hospital and primary care teams.
- Improved communication infrastructure including e-mail access to opinions and electronic test results.
- Enhanced development and training opportunities including development of Practitioners with Special Interests (PWSI) roles.
- Appropriate hospital support to enable the care of long term conditions in primary care.
- Empowerment of patients including access to information and education services, expert patient programmes and direct access into services.

3.3.3 Integrated Re-Ablement system for North Bristol and South Gloucestershire

This service will combine community hospital nursing teams, therapy teams, social care teams and home and practice-based services, to provide joined up assessment, planning and delivery of care. The team will overlap with and have strong working relationships with Primary Health and Social Care services and improve the capacity of local services to maintain the independence of people with a range of health and social care problems. The service will have a range of beds in community hospitals that will be used to rehabilitate patients.

The service will have 3 main arms:

- An integrated community based assessment and case management team combining social and healthcare skills;
- A front-door reception and assessment function that will assess and prepare plans for patients arriving at the emergency and acute assessment service;
- A community hospital bed management team with a close relationship with the community based support service and other teams;

Key features of this service will be:

- Case management of patients coupled with clear care planning;
- A focus on building cohesive, well-led, multidisciplinary teams;

- A clinically appropriate pull through system orchestrated by the team with the emphasis on pulling people back towards home once they have attended and been admitted to hospital;
- Community hospital beds run by the team with easy access to other services and close connection with the acute service;
- An arm of the team based by the front door of the hospital to redirect patients or to start care and recovery plans immediately from the point of admission.

3.3.4 A Range of Networked Specialist Teams Combining Hospital and Community Expertise

The local population will be served by a series of specialist teams with strong community focus whose function will be to provide a seamless and integrated service for patients all the way from prevention and promotion through to intensive care and support. These teams will support the delivery of primary care services when specific specialist support is required and will improve the capacity of local services to manage populations of patients with specific conditions (or with the potential to acquire these conditions) and maintain them at home where possible. This will include outpatient, inpatient and community services.

Key features of these teams will be:

- They combine primary care and hospital expertise to provide a single, full spectrum service for a patient population or specialty area (e.g. respiratory services to include consultants, physiotherapists, admin staff, nurses, General Practitioners with Special Interests (GPSI) and expert patients).
- Systemisation of these team activities so that a continuous service can be provided to patients in acute and community settings (e.g. 1 consultant being in charge of acute duties whilst another covers consultations and advice with Primary care whilst a third member of the team is on leave).
- Shared governance approach to individual patient care.
- Self management by the teams with the responsibility for delivery of services and adherence to targets (with incentives to deliver against targets) and the ability to control the care planning and treatment of patients from first point of contact with services.
- Rapid access to specialist expertise opinion with on-going care provided closer to the patient's home.
- Multi-disciplinary team approach making best use of all the members of the team.
- A clinically appropriate pull through system orchestrated by the team with the emphasis on pulling people back towards home once they have attended and been admitted to hospital.
- No-wait services without backlogs and with protocol led access for all members of the multi-disciplinary team.
- Easy and informal access to specialists through e-mail etc.
- Empowered patients with enhanced advice and support.
- Protocols to govern patient pathways with full agreement from specialist teams and primary care teams.
- Adoption of case managers (nurses or therapists) to give patients under chronic care management direct access to support.

3.3.5 A Comprehensive Urgent Care Network

This primary care led system, which is closely linked to the Emergency and Acute Assessment and Treatment Service will be accessed by patients on a 24 hour basis through the telephone (for example through ringing the practice, NHS Direct or 999) or through presentation at a minor injuries unit or walk in centre either in a community setting or on the main acute hospital site. A triage process will lead to assessment and treatment either at home, in an ambulance (for example by an Emergency Care Practitioner), at a GP practice, or in the minor injuries unit/walk in centre and in the case of minor illness or injury (including, for example, simple fractures), once treated, the patient will return home. If triage highlights a major illness or injury then there would be direct access to the Emergency and Acute Assessment and Treatment Service (see below).

This service will incorporate out-of-hours GP teams and a network of facilities based in other community centres, such as Central and East Bristol Community Healthcare Centre. The service will provide training opportunities for junior medical and other health staff and will construct these training programmes in tandem with the emergency and acute teams.

On the hospital site this service will give the main hospital a primary care front door providing the opportunity to re-route patients attending the main hospital into community services and to provide access into the main primary care system.

3.3.6 An Emergency and Acute Assessment and Treatment Service

This service will include the A&E and Acute Assessment teams, and will provide a rapid decision-making and treatment service for patients with major illness or injuries. The team will have a primary focus of rerouting patients back to the community through rapid access to assessment, diagnosis and treatment and preventing inpatient admissions unless absolutely necessary. It will have a strong working relationship with the comprehensive urgent care network described above. It is anticipated that patients will not self refer to the service but will access it after triage, either through the ambulance service, the practice or the walk in centres or minor injuries units in the community or on the hospital site. The development of this team will give the specialist medical teams and the primary care team facilities where their patients can be assessed and treated in dedicated areas run by dedicated staff.

The main features of the new service will be:

- A see and treat principle.
- A multi-disciplinary approach.
- Integrated working between ED department and Acute Assessment team.
- Concentrated on processing patients and preventing admission into inpatient beds.
- Ability to hold patients until a clear decision is made.
- Principle that this service initiates the hospital based care pathway.
- Assessment and stabilisation of children prior to transfer.

3.3.7 A Strengthened Critical Care Team

This team will have a central core of high intensity services that will support the other teams. The team will run a central area as well as providing outreach advice and support to other teams.

There will be three main groups of patients accommodated in the service:

- Level 3 patients (ventilated and/or in multi-organ failure);
- Level 2 physiologically unstable patients; (single organ failure and/or 'stepping down' from higher levels of care)
- Level 2 physiologically stable but high-risk patients that need monitoring. Risk may be due to both the nature of surgery, and/or to patient co-morbidity.

The main principles of the new service are:

- Harmonisation of critical care services, including improved provision for the detection and early treatment of critically ill ward patients across all specialties and diagnoses;
- Networks of critical care provision; the new service will work in harmony with services at UBHT and other nearby hospitals, and has a responsibility to provide its share of sector-wide level 3 bed requirements. Inbound transfers due to external requirements for level 3 beds to support other Trusts, will form a small but significant route of entry to the hospital;
- Flexible, highly trained workforce; the service will rely on a pool of staff with elements of multi-skilling to enable the service to be resilient to change and to be able to absorb peaks and flows in demand;
- Leadership; the service will have a team of intensivists that will take responsibility for the overall clinical management of the unit. The intensivists will work closely with the emergency and acute specialists and with individual surgeons and physicians who have patients on the unit.

3.3.8 A Flexible Inpatient Service

This service will be run as a single aggregated service that is capable of moving patients through quickly, safely and efficiently, and that has maximum flexibility. This service will be organised into units and clusters which recognise specialty adjacencies so that services are appropriately grouped together. The boundaries between these areas of specialism will, however, be fluid.

The key features of the service are:

- In order to preserve maximum flexibility of bed use, there will be no ring-fencing of elective and emergency beds;
- A bed and theatre slot will be pre-booked for the patient;
- Patients admitted to an inpatient bed for an elective procedure (except patients requiring complex pre-operative treatment or stabilisation) will be allocated a bed after the procedure has taken place;
- Patients admitted to an inpatient bed as an emergency will have been stabilised and will have had initial diagnostics before admission to the inpatient facility.

Clinical teams will not own beds except in the case of specialist services which are dependent on key adjacencies, equipment and facilities.

3.3.9 A Systematic Planned Surgical Service

There will be whole-system planned care services that will provide one-stop, assessment and treatment for the majority of elective work. These services will include:

- Rapid access services for minor and intermediate elective work with associated diagnostics;
- Whole-system complex surgery services based on systematic pre-planning and accelerated recovery techniques

Key characteristics will be:

- Pooling of referrals into broad streams of work for the purpose of assessment and booking and treatment;
- Rapid access to assessment and booking of treatments;
- One-stop process for minor electives where appropriate i.e. diagnosis followed by immediate treatment;
- Health and social care pre-operative assessment in primary care with consenting and final confirmation of appropriateness for surgery undertaken in the acute setting;
- Systematic case-management of major electives including timely pre-assessment (mainly community based), check-back on all results pre-admission, management of follow-up pathways;
- Admission on the day of surgery except for those patients requiring complex pre-operative treatment or stabilisation;
- Organisation of reception and arrival, same-day in the majority of cases, through a theatre holding area;
- Responsiveness to technological advancements and maximising day case treatments and minimally invasive procedures wherever clinically appropriate;
- Fast-track recovery processes in dedicated unit with co-ordination of anaesthetic techniques and assertive recovery support to ensure minimum time in hospital;
- Enhanced home support pre and post admission from the surgical teams to supplement general Primary Care support

3.3.10 Rapid Response Diagnostic Services

The key characteristics of these services will be:

- Networks of provision across the locality structured to reflect economies of scale and local access. These networks will be developed in more detail as the service is designed and will need to be able to reflect Patient Choice.
- Access by patient need rather than requesting clinician or patient location.
- Rapid access and reporting matching capacity to demand.
- Digital imaging coupled with electronic ordering and access to reports.
- Spread of expertise to allow widening of process bottlenecks.
- Access to specialist advice on investigation to support appropriate use by primary care.
- Maximum use of telemedicine and latest technologies to allow decision-making at distance.

3.3.11 Support Services

The new system will be backed-up by a range of responsive support services making the best use of modern technology and approaches.

There will be some general themes in the development including:

- Technology advancement including 'Connecting for Health' will continue and add real value to the clinical processes, enabling rapid change and improved efficiency;
- Process improvement, including but not restricted to the use of technology, will continue and add real value to the clinical processes.

3.4 PATIENT FLOWS THROUGH SYSTEMS

3.4.1 Summary

This section looks at examples of how the patient groupings identified in section 2 interact with the new health system outlined in section 3**.**

3.4.2 Example 1: First time patient with single system condition

Traditional System	New Health System
A patient presents to a GP with a potential condition requiring some kind of specialist or additional diagnostic back-up to decision-making. The GP has little specialist back up directly to hand and therefore is likely to refer the patient to outpatients to see a specialist. The GP may have to choose between an emergency admission and a several-week wait for an outpatient appointment.	The GP will have access to immediate support from specialists in the **Specialist Teams** by e-mail or telephone together with access to rapid reporting diagnostics. The GP may therefore be able to diagnose the potential problem without a formal hand-over of care to the hospital.
The threshold for this referral will depend on the GP and their approach, knowledge and experience.	The GP as part of the **Enhanced Primary Care** system will have access to PCT guidelines on the approach to take together with advice and support from PwSI. This should produce a more equitable access to the service for the patient.
The patient may then be put on a queue of several weeks.	If a specialist opinion is required it will be accessed rapidly within the next 1-2weeks from the **Specialist Team** and the patient will potentially have a 1-stop assessment of their requirements with an immediate diagnosis.

3.4.3 Example 2: Single system condition becomes long term unstable

The patient in the above example may graduate to a long term patient and their care might change as follows:

Traditional System	New Health System
Where a problem occurred such as exacerbation of the condition the patient might see their GP.	The patient is likely to have a greater understanding of their problem and will be more assertive in contacting services. Better case management will provide continuing support and integrated care. This will be provided by the **Primary Care** Team, including pharmacy, social services, voluntary agencies and carers, district nursing and community matrons, and from the **Specialist Team** including PwSI and nurse practitioner.
The GP may refer to a specialist and the patient may be put on a waiting list. During this time the exacerbation might worsen and they may get admitted to hospital through A&E.	The specialist assessment and treatment will be accessed immediately from the **Specialist Team** either by the GP or the PwSI and this should minimise the need to turn up as a hospital emergency.
Whilst in hospital, access to previous care plans, patient history can be limited.	If the patient does have an acute attack, they could contact a nurse practitioner within the **Specialist Team** who may be able to provide medication adjustments/other interventions that prevent admission. If admission is still necessary, the case manager, who knows the patient, will be able to liaise with staff in the **Emergency and Acute assessment service** to case manage the treatment.
Although very sick, the patient may end up on a ward with less sick patients on the basis of age or specialty rather than any criteria of need.	Whilst they are very ill, the patient will be nursed by the **Critical Care Team** with staff whose main skill-set is the treatment of sick patients.
Planning the discharge for the patient can start quite late in the inpatient process leading to delays.	The process of recovery and return to home will be case managed for the patient as soon as the crisis arises by the practitioner in the **Specialist Team**.
Once back at home, the patient does not have access to ongoing specialist support for their condition and they may have little information or knowledge of their problem. This could lead to a delay in returning to home where there is little support and also a repeat of the exacerbation and hospital admission.	The patient will receive support at home from the community arm of the **Specialist Team.**

3.4.4 Example 3: Complex multi-system unstable patient

Traditional System	New Health System
A person with complex long term problems and an equally frail carer has support from a variety of sources including social services, district nursing general practitioner, and occupational therapist. These interventions are not always co-ordinated.	The patient will have an identified case manager who will ensure that interventions are orchestrated and that the patient receives a continuous network of support. This case manager will be part of the re-ablement team.
Should the person have a problem due to a fall or exacerbation of an existing condition they may be admitted to hospital through A&E. They may then have their immediate problem fixed and be admitted to hospital but there may not be any reference to an existing care plan.	The case manager in the re-ablement team will organise a care plan as soon as the problem occurs. This plan will be co-ordinated with the various agencies involved in the patient's care.

The patient's stay in hospital may take several weeks and they may lose their independence altogether. There will be a risk of infection for the patient and there may be other problems in getting the carer confident about supporting the patient once they have returned home.	The episode will involve a brief stay in the acute hospital followed by rehabilitation in the community hospital run by the re-ablement team and then return to home. During the stay in hospital, the route home will be planned carefully and will take into account support required for the carer.
The process of care will be very stop start with no sense of an overall co-ordinated plan between social, primary and secondary care.	The whole episode will be characterised by an individually tailored care plan that runs through the whole process of care and that takes into account both health and social needs.

3.4.5 Example 4: Planned surgical patient

The example below refers to a patient with a relatively minor condition.

Traditional System	New Health System
A GP is presented with a patient where they are fairly clear as to the condition but it may take a few weeks to access the diagnostic test result required to confirm the opinion (or they may not be able to access the test directly).	The GP will be able to organise diagnostic tests and get an immediate diagnostic result to confirm their assessment. There will be clear protocolised guidance to allow consistent decision-making across the area
The GP may refer to an individual specialist and the patient put on a waiting list. The specialist may require the patient to undergo a diagnostic test after they have attended for a consultation and then return again for a further consultation.	The GP will be able to refer into a general pool for a particular condition and book the patient into a one-stop assessment and treatment clinic where the patient will be assessed, diagnosed and have a procedure where necessary in one visit. The pre-assessment processes will be conducted at home or by the **Primary Care** team.

Where the patient has a more serious condition the first part of the pathway will be the same but there will be additional steps as follows:

Traditional System	New Health System
Once the patient has been assessed for an operation they will be placed on a waiting list and will remain there largely unmanaged until the date of operation. Pre-assessment processes undertaken in this period tend to be one-off exercises and cancellations of the operation can occur due to inadequate planning	Under the new system the **Planned Surgical Service** will provide case management of the patient and the pre-assessment process will be more of an on-going process that will bring the patient to the point of operation in a planned and methodical way.
The operation may be cancelled due to organisational issues such as bed availability. This can lead to patients being admitted in advance of the operation in order to secure the bed.	The new **Planned Surgical** service will ensure that a bed and a theatre are booked for the operation and that there are no organisational cancellations. The patient will turn up on the day of operation where clinically appropriate and will arrive at a dedicated receiving area.

The patient may stay in hospital for 2-3weeks and there may be some issues in discharging the patient back home. The process of recovery and rehabilitation may not start immediately after the operation.	The patient will undergo a fast-track surgical process including optimised anaesthesia such as neural blockade and regionalised anaesthesia, minimally invasive surgery and intensive therapy and rehabilitation for the patient. This will lead to the patient having lengths of stay of a few days in hospital followed by support at home or in community hospital by the re-ablement team.

3.4.6 Example 5: Patient with Minor Injury/Illness

Traditional System	New Health System
A patient with a minor injury/illness may contact NHS Direct, GP OOH services or the A&E department and receive differing levels of treatment and approach.	The new system will provide a consistent level of service across the area for patients with a minor illness or injury. A higher proportion of their care can be managed in a community setting due to the development of extended roles and a network system.
A patient attending A&E with a minor problem will receive a treatment to solve the immediate problem but if they have more long-standing conditions, they may not get these resolved.	A patient attending the minor illness/injury service can have their short-term condition managed and appropriately linked with the **Primary Care** team to ensure that their long term condition is reviewed.

3.5 IMPLICATIONS FOR THE WORKFORCE

The new clinical system has significant implications throughout the workforce which have been assessed by a joint “Cluster” group working in co-ordination with the BHSP-wide workforce panel.

The first, and predominant feature, is that the NHS workforce throughout the country will anyway undergo considerable development in the years ahead through the benefits realisation of the flexibilities created by Agenda for Change, and our challenge will be to ensure that there is mutual strength gained by integrating workforce developments with changes required to support the models of care. The key issue for the workforce is how the recruitment, retention and development of staff needs to adjust to ensure that the agreed models of care can be delivered. Key features include staff development, sustaining the changes expected and full utilisation of Agenda for Change as a catalyst for redesigning roles within a competency framework.

We should expect significant role redesign and skill mix with a radical review of which roles deliver specific aspects of care. Consideration needs to be made in regard to IT systems, improved processes, strategic outsourcing of services within the plurality of providers’ context and the development of speciality teams working across organisational boundaries. More groups of staff will become “peripatetic”, following the patient through the whole care pathway

The main themes that arise from the proposed models of care are:

- The premise that primary care will be the co-ordinating aspect of care.
- That there will be plurality of providers who provide care within a primary and community setting.
- Break-up of traditional functional departments into new services will require re-adjustment of some professional boundaries e.g. relationship between acute/medical assessment and A&E.

- Integration of working between primary and secondary care sectors will lead to new role definitions e.g. role of GP in minor injuries/illness.
- An increased emphasis on competence-based and cross-organisational team-working as opposed to hierarchical and organisational systems.
- The focus on active rehabilitation and fast-track recovery will reinforce the role of therapists and nurses with rehabilitation skills.
- Creation of fairly generic departments and teams will lead to a degree of multi-skilling.
- Development of the bed-cluster within the acute hospital rather than the speciality-specific ward, will require greater flexibility.
- Introduction of a more fluid interface between specialists and GPs will require a more flexible and qualified administration team;
- The increasing emphasis on do-now diagnostics requires a diagnostic team that identifies with the patient processes as a whole as opposed to the processes within the department. There is a real issue around incentivisation and alignment with overall organisational goals.
- The increasing integration between health and social care and the advent of practice based commissioning.

3.6 SUMMARY

Overall, the new clinical model for health services in North Bristol and South Gloucestershire will provide a far more systematic approach to care. This approach will include services and teams constructed around patient pathways and that will run across traditional primary, secondary and social care boundaries. The clinical model involves changes to the way care is currently provided, releasing bottlenecks and improving efficiency through the use of technologies to support the care that is provided.

There is a strong focus on caring for patients as close to their homes as possible where clinically appropriate and on using a case management approach to ensuring that the general health of our patients is regularly reviewed and managed and the whole patient journey is carefully managed through the health and social care system.

This new clinical model is built to respond to the changes in demand, described more in the following section, and demands changes to the physical environment to enable successful implementation. This requirement for change is summarised in Section 5.

SECTION 4: ACTIVITY AND CAPACITY

4.1 INTRODUCTION

This section describes how the health community has assessed the future demand for health services in North Bristol and South Gloucestershire which will be met by the acute and community hospital proposals for Southmead and Frenchay. It takes account of the new model of care set out in the previous section and identifies the capacity requirements for the future taking account of this new model of care, demand, as well as performance improvements.

The section :-

- Describes the key factors affecting the level of future demand by considering population growth, historical growth in activity and initiatives to provide alternatives to acute care.
- Discusses the key factors affecting the capacity required in the future to meet this demand, including the impact of transfers to community health facilities, to the independent sector and between acute trusts
- Explains the overall conclusion the health community has come to in terms of the capacity it will require to be delivered from the acute and community hospital proposals for Southmead and Frenchay.

4.2 DEMAND AND CAPACITY

This section takes account of the very detailed activity and capacity analysis which has been developed across the local health community. The assumptions and projections used in the development of the activity and capacity modeling have been agreed across the health community and take account of national information on demographic change. The activity modeling for the future, which has derived the capacity to be provided in the new development within the scope of this OBC, has taken account of the following factors:

- Trends in the population.
- Historic growth in demand.
- Demographic growth.
- Likely levels of alternatives to admission or consultation in an acute setting.
- Agreed service transfers between acute trusts.
- Transfers of services to community settings.
- Transfers to independent sector treatment centres (ISTCs).
- Changes in acute flows across the city driven by the location of the acute Trusts in Bristol in the future.
- Changes in clinical practice.

4.2.1 Population Trends

Avon, Gloucestershire and Wiltshire Health Authority (AGW) Strategic Health Authority covers a population of 2.2 million. Within this Health Authority, the Bristol, North Somerset and South Gloucestershire health community has a population of around 840,000.

The population for the NBT catchment within BNSSG is projected to increase from 402,000 to 424,000 during the period 2004/05 to 2013/14 (5.5%). The age weighted population (taking account of higher health needs of elderly people) is projected to increase by 8.9% over the same period. This is an annual increase of 0.9%.

When calculating the growth in population, the Trusts have considered local council plans for housing developments within the Bristol area. The Government's Regional Association is currently drafting plans for their Regional Spatial Strategy, which will cover the period 2006-2026. This report has not yet been published. However, the Trust has discussed proposed local housing developments within NBT's catchment area, with the local council, and believes that these developments are reasonably consistent with the ONS population growth in the table below.

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The relevant unweighted and weighted population statistics for 2004 and projected to 2013/14 are shown in Tables 4.2.1i and 4.2.1ii and also in Appendix 7.

Table 4.2.1i:: 2004 Unweighted and weighted population ('000)

	City of Bristol '000	Bristol North PCT '000	Bristol South & West PCT '000	South Glos PCT '000	North Somerset PCT '000	Total '000
Unweighted population	391.9	205.3	186.6	248.9	193.1	833.9
Weighted population	387.0	202.7	184.3	244.8	207.9	839.7
% Relating to NBT	-	62%	15%	80%	25%	-
NBT unweighted population	-	126.7	28.0	199.1	48.3	402.0
NBT Weighted Population	-	125.1	27.6	195.8	52.0	400.5

Table 4.2.1ii:: 2012/13 Unweighted and weighted population ('000)

	City of Bristol '000	Bristol North PCT '000	Bristol South & West PCT '000	South Glos PCT '000	North Somerset PCT '000	Total '000
Unweighted population	403.0	211.1	191.9	266.5	208.2	877.7
Weighted population	398.2	208.6	189.6	275.6	233.6	907.4
% Relating to NBT	-	62%	15%	80%	25%	-
NBT Unweighted Population	-	130.2	28.8	213.2	52.1	424.3
NBT Weighted Population	-	128.7	28.4	220.5	58.4	436.0
Unweighted Population						
% increase	-	2.8%	2.8%	7.1%	7.8%	5.5%
Annual increase	-	0.3%	0.3%	0.8%	0.8%	0.6%
Weighted Population						
% increase	-	2.9%	2.9%	12.6%	12.4%	8.9%
Annual increase	-	0.3%	0.3%	1.3%	1.3%	0.9%

NBT also provides services outside the BNSSG catchment area. These are predominantly tertiary services, but also include a small amount of secondary care services to the population immediately outside BNSSG (within Somerset, Wiltshire and Gloucestershire). The tertiary services provided are predominantly neurosciences, renal and burns. Their catchment populations vary from around 1.5 million for core renal service through to 2.5 million for core neurosurgery. Some individual sub-specialty areas have very wide catchment areas populations. Approximately 11% of NBT activity is from outside BNSSG and accounts for 19% of PCT income.

4.2.2 Historic growth

The base year for future activity projections is actual activity undertaken in 2004/5. The starting point for assessing growth in activity from the 2004/5 base is historical annual growth trends over the last 7 years. These growth trends have been reviewed and adjusted to take account of local clinical knowledge. The base activity and the adjusted growth projections from 2004/5 to 2013/14 are summarised in the tables below and shown in detail in Appendix 8.

Table: 4.2.2i - Growth in inpatient and daycase demand 2004-05 to 2013/14

	2004-05 actual activity	Adjusted historical growth	Impact of alternatives to acute care	2013-14 projected activity before transfers
Elective IP/DC	50,807	6,594	-772	56,629
Non-elective IP	61,601	13,467	-8,280	66,788
Total IP activity	112,408	20,061	-9,052	123,417

Table: 4.2.2ii - Growth in outpatient demand 2004-05 to 2013/14

	2004-05 actual activity	Adjusted historical growth	Impact of alternatives to acute care	2013-14 projected activity before transfers
New OP appts	90,529	26,154	-17,517	99,166
Follow-up OP appts	224,168	78,613	-37,954	264,827
Total OP appts	314,697	104,767	-55,471	363,993

4.2.3 Alternatives to acute care

Over the 7 year historical reference period, initiatives to provide alternatives to acute care have been very limited. The future plans set out by the local PCTs include a greater range of services to be provided in the community. This will have the effect of reducing the rate of growth in demand for acute care, particularly in relation to outpatient and emergency inpatient activity.

In respect of outpatient demand, a phased programme between 2005/06 and 2013/14 will mean that by 2013/14, the PCTs plan to avoid a growth in total outpatient activity of 18%. This will be achieved as a result of two key strategies. Firstly, new specialist roles will be developed in primary care to triage appropriate patients and building on some roles already established. The main specialty areas include: -

- Cardiology
- Neurosurgery
- Pain Management
- Urology
- Orthopaedic
- ENT

- Diabetes
- Neurology
- Rheumatology
- Dermatology

This strategy will be developed by PCTs providing extensive support to practices in establishing and implementing practice based commissioning. Initial plans of local consortia highlight that practices are seeking to improve outpatient referral processes and to manage more follow up care in primary care. Over the next five years, there will be increased use of protocols, additional clinical professional development and greater focus on patients being discharged back to primary health care teams.

Secondly, it is planned that as a consequence of these new organisational arrangements, the growth in referral rates and usage of follow up activity by members of GP commissioning consortia, will reduce in comparison with historical trends. The main specialty areas are:

- Orthopaedics
- Respiratory medicine
- Dermatology
- ENT
- Rheumatology
- Urology
- Diabetes
- Care of the Elderly

In respect of inpatient activity to be avoided, the PCTs have already invested in schemes such as advanced primary nursing and expanded intermediate care services. These are already helping to reduce growth in emergency admissions. The PCTs have a number of further schemes covering areas such as falls prevention, podiatry, community based urology re-catheterisation, expansion of Rapid Response and Parkinson's Disease services. The PCTs project that the expansion of existing services together with the establishment of new services means that by 2013/14, community alternatives will prevent 8,280 emergency admissions that otherwise would have occurred. This equates to a 13% reduction in the historic level of growth by 2013/14.

Table 4.2.3 sets out the projected impact of the increased availability of alternatives to acute care in offsetting historic growth on total inpatient activity.

Table 4.2.3: Total Inpatient Activity 2004-05 to 2013/14

All PCTs	2004-05 Actual activity	Adjusted historical growth		Impact of Alternatives to Acute Care		2013-14 projected activity before transfers
Specialty	**FCEs**	**FCEs**	**%**	**FCEs**	**%**	**FCEs**
General Surgery	13,298	-628	-5%	-151	-1%	12,519
Urology	8,144	1,684	21%	-248	-3%	9,580
Trauma & Orthopaedics	9,038	1,967	22%	-275	-3%	10,730
ENT	2,457	502	20%	-28	-1%	2,931
Oral Surgery	958	-59	-6%	-7	-1%	892
Neurosurgery	3,617	670	19%	-10	0%	4,277
Plastic Surgery	7,177	1,568	22%	-68	-1%	8,677
Paediatric Surgery	218	0	0%	-3	-1%	215
Accident & Emergency	1,425	499	35%	-127	-9%	1,797
Anaesthetics	1	0	0%	0	0%	1
Pain Management	1,335	306	23%	-27	-2%	1,614
General Medicine	32,223	9,140	28%	-7,844	-24%	33,519
Clinical Haematology	3,339	615	18%	-59	-2%	3,895
Immunology	715	151	21%	-18	-3%	848
Infectious Diseases	128	66	52%	0	0%	194
Nephrology	3,703	797	22%	-45	-1%	4,455
Neurology	1,470	490	33%	-41	-3%	1,919
Rheumatology	494	41	8%	-4	-1%	531
Paediatrics	3,861	554	14%	-54	-1%	4,361
Paediatric Neurology	184	271	147%	-3	-2%	452
Neonatology/SCBU	673	0	0%	0	0%	673
Obstetrics	13,172	1,889	14%	0	0%	15,061
Gynaecology	4,535	-462	-10%	-39	-1%	4,034
Neuropsychiatry	207	0	0%	-1	0%	206
Child and Adolescent Psychiatry	36	0	0%	0	0%	36
Total	**112,408**	**20,061**	**18%**	**-9,052**	**-8%**	**123,417**

4.2.4 Planned growth – acute hospital

The activity modelling that has generated the capacity required for the new acute hospital development based on growth in activity from 2004/05 to 2013/14, is based on the historic growth trends described in section 4.2.2. This has been offset by the impact of increased availability of alternatives to acute care described in section 4.2.3. The detailed build up of the projections by specialty and patient type is shown in Appendix 8. A breakdown of the planned growth by PCT is shown in Appendix 9. Both Appendices incorporate an assessment of growth in activity from outside the BNSSG health community.

The resulting overall planned growth for inpatients and daycases is summarised as: -

Table: 4.2.4 – Planned growth for inpatients and daycases

	Annual Growth Per Year %	Cumulative Growth 2004/05 – 2013/14 %
Historic projected growth (adjusted for local clinical knowledge)	1.9	17.9
Impact of alternatives to acute care	(0.9)	(8.1)
Resulting planned growth	**1.0**	**9.8**

The resulting planned growth in activity (9.8%) is greater than the projected growth in age weighted population over the same period (8.9%). Essentially the initiatives to increase the availability of alternatives to acute care are projected to reduce the historically high level of activity growth and bring it more in line with underlying population growth.

4.2.5 Transfers

Having assessed the level of growth in activity, the impact of transfers of activity between different providers is assessed in this section.

4.2.5.1 Service Transfers within the Bristol Health Services Plan (BHSP)

The transfers of services between acute trusts previously identified within the wider BHSP proposals that are due to take place between 2005/6 and 2013/14 are summarised below. The impact of all of these service transfers has been quantified and built in to the assessment of activity transfers:

- ENT inpatients and daycases and OMF inpatients services transferring from UBHT to NBT (planned transfer in 2008/09)
- Inpatient breast surgery services transferring from NBT to UBHT (2008/09)
- Inpatient and daycase general paediatric services transferring from NBT to UBHT (2006/07)
- Inpatient and daycases specialist paediatric services transferring from NBT to UBHT (2011/12)
- Inpatient and daycase interventional cardiology services being provided by both NBT and UBHT for their local populations (currently provided by just UBHT) (2007/08)

The impact on outpatients is minimal and keeping the outpatient element of these services at a local level is seen as a high priority. The only outpatient services that are transferring are paediatric rheumatology and cleft lip and palate services. These services require a strong connection to the paediatric inpatient service so that separating the services would result in both poor patient care and a severe duplication of resources across the city.

4.2.5.2 Transfers to community settings

Detailed work has been completed with clinicians in primary and secondary care to agree the proposed model of care, and to understand its implications in terms of what activity will be carried out, where in the future. A number of planning assumptions have been made to determine the level of activity that will transfer to community settings by 2013/14.

Community beds: The work completed on the model of care identified the mix of patients who would be appropriate for 'step-down' inpatient care in the community. It also looked at the patients who would not need to be referred to the acute hospital if alternative inpatient community services were available. Based on this mix of patients, bed numbers have been generated from hospital data which have taken account of the assumed proportions of current inpatient stays that would require step-down care. The tables set out in Appendix 6 take account of the reduced lengths of stay for patients appropriate for the community but do not show a full FCE transfer to the community as the early part of the admission will be held in the acute hospital. This has been corroborated by a review of data derived from a detailed point prevalence study which assessed the care requirements of all patients in NBT beds over a given period. This study showed that approximately 100 patients could be have been treated in an alternative facility such as a community hospital providing step-down care.

Work was then undertaken to assess the services already in existence in the community for inpatient step-down care or for avoidance of admission. This work also looked at the likely care needs of the populations of North Bristol and South Gloucestershire. The results of this work are set out in the following table:

Table: 4.2.5.2i

	Frenchay Community Hospital	Southmead Community Hospital
Stroke rehabilitation Care for patients after acute stroke care and once they are medically stable (for the NB/SG population)	30 beds	
Admission avoidance Care for patients that require admission to a safe environment but do not require high level medical input (input from visiting medical staff such as GPs with Special Interests. These beds will predominantly be nurse/ therapy lead		10 beds
General rehabilitation The patients in these beds will typically be frail older people who require intensive therapeutic input to enable them to return home or be placed in a lower care setting (e.g. residential rather than nursing care). Typical specialties from which these patients step down will be general medicine (care of the elderly), particularly where patients have complex multifactoral needs, and trauma. In all cases, transfer would only take place once patients were medically stable.	54 beds	22 beds
Total	**84 beds**	**32 beds**

Outpatients: Specialty-based discussions have taken place between clinicians from primary and secondary care and agreement has been reached on the level and types of outpatient activity that can be transferred to community settings by 2013/14. These are summarised in the table below:

Table: 4.2.5.2ii

2013-14 OP appointments	Transfers to Frenchay Community Hospital	Transfers to Southmead Community Hospital	Transfers to other community settings	Total planned activity in acute setting 2013-14
New OP appts	3,212	6,552	13,897	65,553
Follow-up OP appts	10,029	19,690	39,930	158,705
Total OP appts	**13,241**	**26,242**	**53,827**	224,258

Diagnostics: The elements of diagnostic tests that are assumed to transfer to community settings are :-

- All GP direct access referrals for plain film and gynaecology/obstetric ultrasound.
- The plain film and ultrasound examinations associated with the transfer of outpatients as mentioned above

Minor Injuries Units: All minor injuries attendances are assumed to transfer to community settings by 2013/14. This represents approximately 56% of all accident and emergency department attendances.

Table 4.2.5.2iii: Diagnostic services: Acute Hospital

Diagnostic facilities	Total Examinations	Total Rooms
2004/05 Acute hospital activity	291,616	47
Projected growth	79,857	
Transfers to the independent sector	-11,748	
Transfers to the community	-117,066	
2013-14 acute hospital activity	**242,659**	**33**

Table 4.2.5.2iv:: Diagnostic services: Community Hospitals

Diagnostic facilities	Total Examinations	Total Rooms
2013/14 Southmead Community Hospital	33,661	3
2013/14 Frenchay Community Hospital	19,953	3
Total	**53,614**	**6**

Endoscopies: Endoscopy facilities will be provided in the Southmead hospital and in the Frenchay community hospital. These are complemented by an existing facility in Clevedon hospital that will be retained for the future.

4.2.5.3 Transfers to Independent Sector

NBSG has examined the level of relatively uncomplicated elective cases that could be transferred to the Independent Sector, taking account of the range of elective surgical procedures being undertaken by existing Independent Sector Treatment Centres (ISTCs). This level of non-complicated or "contestable" work is estimated to be around 23,000 cases per year by 2013/14 and is detailed in Appendix 10.

NBT have been advised by BNSSG PCTs to assume around £10 million of activity (inpatient and outpatient combined) transferring to an ISTC as part of Wave 2 of the National IS Procurement. (The total level of activity proposed to transfer to ISTCs in wave 2 for AGW is around £38million).

Therefore, an assessment of the proportion of contestable work, including an element of outpatient attendances, consistent with a £10m value has been established and included in the transfer assumptions.

Table: 4.2.5.3: Transfers to the independent sector

	Transfers to independent sector 2013/14
Elective IP/DC FCEs	-8,010
Non-elective IP FCEs	0
Total IP FCEs	**-8,010**

New OP appts	-8,095
Follow-up OP appts	-19,900
Total OP appts	**-27,995**

4.2.5.4 Acute Flows transfers

The decision to move to a single acute hospital in the North Bristol and South Gloucestershire area will result in a flow of patients to other acute trusts in the area. This is due to the fact that for some of the patients currently being treated at Frenchay, hospitals other than Southmead would provide better access on the closure of Frenchay for acute admissions.

A piece of work was undertaken by the Avon Information Management and Technology Consortium which assessed this likely flow to other acute hospitals. The impact on both Emergency Department attendances and non-elective inpatient admissions is included in the transfer assumptions.

In addition to this outflow of work, Weston Area Health Trust (WAHT) have assessed that they will have a level of spare capacity by 2013/14 due to performance improvements and transfers to ISTCs, and have therefore identified a potential ability to treat more patients within their existing capacity. In response to this, PCTs are planning for patients from certain areas currently treated at either North Bristol Trust or UBHT to be treated instead at WAHT. NBSG has estimated the impact of this to be a transfer of 2,480 FCEs, and this has therefore also been incorporated into the transfer assumptions.

There is also flow of work anticipated to go to the Royal United Hospital in Bath on the same basis, but this is expected to be fully offset by a compensating flow of specialist cases back to NBT from the Bath area. Therefore, no net transfer to or from the RUH is assumed at this stage.

There is also an expectation that the level of specialised work flowing to NBT from outside the immediate area will increase as specialist commissioning becomes more prevalent and the number of centres accredited to provide services such as neurosurgery, plastics and burns, neurology and renal medicine will reduce over the coming years. The inflow associated with this work is incorporated into the transfer assumptions.

Table: 4.2.5.4 - Service transfers: Elective and non-elective inpatients

All PCTs	2013-14 projected activity before transfers	BHSP Service Transfers	Transfers to Independent sector	Acute flows to UBHT	Acute transfers to Weston	Acute flow of specialist work	Sub-total
Specialty	**FCEs**	**FCEs**	**FCEs**	**FCEs**	**FCEs**	**FCEs**	**FCEs**
General Surgery	12,519	-321	-2,163	-410	-1,269	0	8,356
Urology	9,580	-142	-1,520	0	-527	0	7,391
Trauma & Orthopaedics	10,730	-722	-1,808	-412	-689	0	7,099
ENT	2,931	1,044	-469	0	0	0	3,506
Oral Surgery	892	-262	-151	0	0	0	479
Neurosurgery	4,277	-805	0	0	0	609	4,081
Plastic Surgery	8,677	-1,612	-903	0	0	600	6,762
Paediatric Surgery	215	-215	0	0	0	0	0
A&E	1,797	-30	0	-35	-2	0	1,730
Anaesthetics	1	0	0	0	0	0	1
Pain Management	1,614	-2	0	0	0	0	1,612
General Medicine	33,519	4,131	-225	-3,122	-384	0	33,919
Clinical Haematology	3,895	-1	0	0	0	0	3,894
Immunology	848	-1	0	0	0	0	847
Infectious Diseases	194	0	0	0	0	0	194
Nephrology	4,455	0	0	0	0	515	4,970
Neurology	1,919	-10	0	0	0	0	1,909
Rheumatology	531	-101	0	0	0	0	430
Paediatrics	4,361	-4,361	0	0	0	0	0
Paediatric Neurology	452	-452	0	0	0	0	0
Neonatology / SCBU	673	0	0	0	0	0	673
Obstetrics	15,061	0	0	0	0	0	15,061
Gynaecology	4,034	0	-771	0	-234	0	3,029
Neuropsychiatry	206	0	0	0	0	0	206
Child and Adolescent Psychiatry	36	-23	0	0	0	0	13
Total	**123,417**	**-3,885**	**-8,010**	**-3,979**	**-3,105**	**1,724**	**106,162**

This section has set out the range of transfers that have been agreed across the health community. The detailed activity analysis at specialty level is set out in Appendix 10.

4.2.6 Demand and Capacity Summary

A detailed analysis of demand and capacity has been completed, taking account of the new model of care and of national policy. Growth assumptions have been adjusted for changes in demand and activity projections take account of transfers to other settings The changes in inpatient and outpatient activity relating to growth, alternatives to acute care and transfers are summarised in the table below :-

Table 4.2.6:: Summary of Activity to 2013/14

	Elective Inpatients & Daycases FCEs	Non-Elective Inpatients FCEs	Total Outpatients Attendances
2004/05 Activity	50,807	61,601	314,697
Growth to 2013/14	6,594	13,467	104,767
Demand Management	-772	-8,280	-55,471
SUB-TOTAL	56,629	66,788	363,993
BHSP service transfers	-202	-3,683	-2,027
Transfers to community settings	0	0	-93,310
Transfers to Independent Sector	-8,010	0	-27,995
Effect of acute flows	-826	-4,534	0
Change in clinical practice	0	0	-16,403
2013/14 projected activity	**47,591**	**58,571**	**224,258**
2013/14 activity in Community settings	0	0	93,310
2013/14 activity in acute settings	47.591	58,571	224,258

4.3 PERFORMANCE IMPROVEMENT

An assessment has been made of the level of performance improvement that could be achieved as a result of the service redesign proposals and the new facilities. The impact of performance improvement on the capacity requirements for the new facilities has been assessed in relation to:

- Length of stay
- Daycase rates
- Utilisation of beds and theatres
- Outpatient new to follow-up ratios

Performance improvement assumptions are described in the following sections.

4.3.1 Length of Stay

For the majority of specialties, NBT is planning on a length of stay that is around the upper decile level of current performance, based on relevant benchmarks for general and specialised services. Where this has not been considered to be achievable, taking account of local circumstances and the uncertainties around some of the benchmarking information, a reduced level of performance has been planned. In these circumstances, planned performance is still at the current upper quartile or better.

A breakdown of the planned lengths of stay by specialty, split between elective and non-elective inpatients, follows in Tables 4.3.1i and 4.3.1ii.

Table 4.3.1i: Length of Stay Non-Elective

Non-elective

Specialty	2004-05 Actual	Benchmark Upper Quartile	Benchmark Upper Decile	2013-14 Proposed
General Surgery	6.0	4.6	4.1	4.1
Urology	4.7	3.9	3.2	3.2
Trauma & Orthopaedics	15.1	7.4	6.1	6.8
ENT	3.6	2.4	2.0	2.0
Oral Surgery	2.6	1.7	1.4	1.4
Neurosurgery	9.6	8.9	8.1	9.2
Plastic Surgery	4.0	2.4	1.7	3.0
A&E	0.3	0.5	0.4	0.4
Anaesthetics	N/A	4.5	2.5	2.5
Pain Management	1.0	4.5	2.5	2.5
General Medicine	8.1	5.9	5.0	5.3
Clinical Haematology	7.0	6.4	4.6	4.6
Immunology	12.7	11.3	11.3	11.3
Infectious Diseases	16.7	6.4	4.3	6.4
Nephrology	9.9	7.3	3.3	8.5
Neurology	12.9	9.6	7.2	7.2
Rheumatology	21.0	8.3	5.7	6.0
Neonatology/SCBU	16.0	N/A	N/A	13.5
Obstetrics	1.1	N/A	N/A	1.1
Gynaecology	1.8	1.4	1.0	1.0
Neuropsychiatry	30.7	29.7	21.2	25.0
Total	6.3	4.6	3.9	4.1

Table: 4.3.1ii - Length of Stay –Elective

Elective

Specialty	2004-05 Actual	Benchmark Upper Quartile	Benchmark Upper Decile	2013-14 Proposed
General Surgery	3.8	3.7	3.4	3.4
Urology	4.0	3.0	2.5	2.5
Trauma & Orthopaedics	5.5	4.5	3.9	4.3
ENT	2.1	1.1	1.0	1.4
Oral Surgery	2.6	1.2	0.7	0.7
Neurosurgery	5.6	5.3	4.3	5.3
Plastic Surgery	3.4	2.6	2.2	3.0
General Medicine	6.2	3.7	3.0	3.3
Clinical Haematology	3.1	3.9	2.5	2.5
Immunology	8.5	N/A	N/A	8.5
Infectious Diseases	9.3	3.6	2.4	8.0
Nephrology	5.2	2.7	1.7	4.2
Neurology	4.9	4.6	3.5	3.5
Rheumatology	8.8	5.4	3.0	5.0
Gynaecology	3.4	2.8	2.4	2.6
Neuropsychiatry	19.9	22.6	10.8	15.0
Total	4.7	3.8	3.1	3.8

For the community hospital, there is an assumption that length of stay will be between ten and fifteen days. This is based on best practice in other similar settings, together with NBT's current lengths of stay for these patients and likely improvements that can be made to this.

4.3.2 Daycase Rates

Discussions with clinicians within NBT have led to agreement that substantial improvements in current daycase rates will be achieved and sustained.

A considerable amount of work has taken place with clinical colleagues to identify achievable daycase rates base on CHKS upper decile benchmarks. The national basket of 25 procedures has been taken into account and the recommended percentage of daycases has been adopted in the vast majority of cases. However, it should be noted that NBT has some particular case mix issues or other local factors, which means that the benchmark is sometimes unrealistic (e.g. both UBHT and NBT perform orthopaedic daycases but all inpatients are carried out at NBT). Where this is the case, adjustments have been made to the benchmarks for the relevant procedures.

Table 4.3.2 sets out the current and proposed daycases rates by speciality.

Table 4.3.2: Daycase rates by specialty

Specialty	2004-05 Actual	Benchmark Upper Quartile	Benchmark Upper Decile	2013-14 Proposed
General Surgery	60%	65%	72%	72%
Urology	76%	75%	84%	84%
Trauma & Orthopaedics	23%	50%	58%	40%
ENT	15%	58%	99%	58%
Oral Surgery	73%	97%	99%	90%
Neurosurgery	12%	18%	37%	15%
Plastic Surgery	67%	96%	100%	80%
Pain Management	98%	100%	100%	100%
General Medicine	86%	89%	93%	93%
Clinical Haematology	99%	96%	98%	100%
Immunology	99%	100%	100%	100%
Infectious Diseases	19%	73%	88%	78%
Nephrology	61%	59%	92%	61%
Neurology	2%	85%	100%	85%
Rheumatology	9%	96%	99%	96%
Gynaecology	60%	72%	80%	80%
Neuropsychiatry	1%	3%	40%	11%
Total	**60%**	**73%**	**82%**	**74%**

4.3.3 Utilisation of beds and theatres

4.3.3.1 Beds

Bed occupancy plans have been made for each specialty. These take account of :-

- Planned turnover intervals
- The impact of reduced weekend occupancy for surgical specialties due to 5 day operating
- An allowance for volatility in activity

The detailed assumptions and the resulting occupancy levels by specialty are shown in the tables below. The overall planned occupancy resulting is 77% for elective beds and 82.4% for non-elective beds, an overall level of 81.5%. This is consistent with the National Beds Inquiry which recognised that hospitals cannot operate efficiently if they have limited spare capacity. Limited capacity leads to difficulties in managing peaks and troughs in demand. It identified 82% as an optimal occupancy level.

Table: 4.3.3.1.i - Elective Inpatient Occupancy levels

Specialty	Base occupancy with 0.5 day turnover interval	5-day working adjustment	Volatility factor	Occupancy rate
General Surgery	87%	11%	2%	74%
Urology	83%	11%	2%	70%
Trauma & Orthopaedics	89%	11%	2%	76%
ENT	74%	11%	2%	60%
Oral Surgery	58%	11%	2%	45%
Neurosurgery	91%	11%	2%	78%
Plastic surgery	85%	11%	2%	72%
General Medicine	89%	0%	2%	87%
Infectious Diseases	94%	0%	2%	92%
Nephrology	89%	0%	2%	87%
Neurology	88%	0%	2%	86%
Rheumatology	91%	0%	2%	89%
Neonatology/SCBU	67%	0%	4%	63%
Obstetrics	67%	0%	4%	63%
Gynaecology	84%	11%	2%	71%
Neuropsychiatry	97%	0%	2%	95%
All specialties				**77.0%**

Table: 4.3.3.1.ii - Non-Elective Inpatient Occupancy levels

Specialty	Base occupancy with 0.5 day turnover interval	5-day working adjustment	Volatility factor	Occupancy rate
General Surgery	89%	0%	6%	83%
Urology	86%	0%	6%	81%
Trauma & Orthopaedics	93%	0%	6%	87%
ENT	80%	0%	6%	74%
Oral Surgery	74%	0%	6%	68%
Neurosurgery	95%	0%	6%	89%
Plastic surgery	87%	0%	6%	81%
A&E	44%	0%	6%	39%
Anaesthetics	83%	0%	6%	78%
Pain Management	83%	0%	6%	78%
General Medicine	91%	0%	6%	86%
Clinical Haematology	90%	0%	6%	84%
Infectious Diseases	93%	0%	6%	87%
Nephrology	94%	0%	6%	89%
Neurology	94%	0%	6%	88%
Rheumatology	92%	0%	6%	87%
Neonatology/SCBU	93%	0%	10%	83%
Obstetrics	71%	0%	10%	61%
Gynaecology	67%	0%	6%	61%
Neuropsychiatry	98%	0%	6%	92%
All specialties				**82.4%**

Overall occupancy rate				**81.5%**

4.3.3.2 *Theatres*

There are no national models available to project the number of theatres required for a given level of activity. It is also difficult to compare theatre usage between hospitals, as it is so dependent on the model of care practised and the case mix.

In planning the number of new theatres required for the future, NBSG has worked on moving to two four hour sessions per day per theatre and all-day sessions where appropriate for some specialties. It has not assumed weekend working, as an assessment of operating practice elsewhere has shown that there is no evidence to suggest that this could be staffed and operated on a sustainable and cost effective basis.

It assumes that best practice will be achieved in terms of the usage of staffed sessions, with lists starting and ending on time. The aim is to achieve average utilisation rates of 88% in elective theatre sessions (defined as the percentage of time in the session spent “needle to skin”). In addition it is assumed that theatres will run for 48 weeks for the year and all available session will be utilised. This equates to a requirement for 18 elective theatres and 5 emergency theatres.

Section 4.4.3 summarises the number of theatres required based upon:

- Projected FCEs for 2013/14
- The proportion of those FCEs proceeding to surgery
- Estimated theatre operations
- Average hours per operation
- Operating hours per year
- Percentage utilisation

4.3.3.3 Outpatient first to follow up rates

The BNSSG PCTs' planning assumption is to achieve a first to follow-up ratio for outpatients of 1:2. This has been built into the future capacity requirements with the exception of chronic diseases such as renal medicine, rheumatology, haematology, neurology, HIV and diabetes.

As a result of allowing for these chronic conditions, the planned overall first to follow up ratio is 1: 2.0, an improvement on the current ratio 1:2.2.

4.4 CAPACITY REQUIREMENTS

Based on the demand, activity flows and performance assumptions, proposed capacity levels for the new facilities to meet future needs of the local health community have been developed. The capacity assumptions take account of the need for

- Beds
- Daycase trolleys
- Theatres
- Outpatient clinics
- Diagnostic rooms

These capacity requirements are set out in the sections below:

4.4.1 Bed numbers

The above analysis has made clear the range of assumptions and scenarios the health community has considered in terms of overall growth, service transfers and capacity.

Future bed requirements based on those assumptions are shown in the table below :

Table 2 : Bed Requirements

ACUTE BEDS	
Current beds in 2005/6	1320
Growth	286
Impact of alternatives to admission	(189)
Assumed increase in specialist work	30
Reduction in length of stay	(224)
Increase in daycase rates	(101)
Decrease in occupancy rates	108
Total beds required in 2013/14	1230
Transfers to community hospitals	(112)
BHSP Service transfers	(54)
Transfer to ISTCs	(16)
Transfers from changed acute flows	(73)
Weston additional transfer	(28)
2013/14 acute beds required by NBT	*947*
SUMMARY OF BEDS IN 2013/14	
NBT acute	947
Community	112
Transferred to other Trusts	155
Transferred to ISTCs	16
TOTAL	**1230**

The breakdown of the 1230 beds by speciality is shown in Appendix 11.

Within the schedule of accommodation, the 947 NBSG acute beds are broken down as follows:

- General acute beds 666
- ITU/HDU beds 48
- Acute Assessment & Clinical Decision Unit 112
- Obstetrics, Gynaecology and NICU in retained accommodation 121

4.4.2 Daycase trolleys

There will be a significant increase in the level of daycase activity in total, due to the rise in daycase rates discussed in section 4.3.2 above. However, a significant proportion of daycase surgery work is likely to be performed by an ISTC, rather than the acute hospital. This has therefore been given due consideration.

The number of daycase trolleys within the schedule of accommodation is 34. This has been calculated by assessing current patient throughput and improved models of care to maximise efficiency.

4.4.3 Theatre capacity

The calculation of theatre capacity needed as described above is shown in detail in Appendix 12. The new acute hospital will require 18 elective theatres and a further 5 emergency theatres. The latter theatres are based upon the Trust's current provision of emergency theatre coverage and anticipated growth, with weighting given for the Trust's specialist areas such as Neurosurgery and Plastic Surgery.

The requirement for theatre capacity has largely been affected by the change in activity levels, due to growth, and the specialty service transfers discussed previously. The Trust anticipates an improvement in theatre working practices, based upon an ongoing operational service improvement programme and increased throughputs due to increased daycase procedures.

4.4.4 Outpatient care capacity requirements

Capacity requirements in outpatient care are driven by the volume of activity and, more significantly, by the new model of care.

The level of activity to be treated in the acute hospital has been translated into estimated numbers of outpatient clinics by calculating new and follow up appointment times, assuming a DNA rate of 5%, clinic utilisation rate of 80% and assuming that the clinics run for 4 hours, 50 weeks per year. These factors can vary significantly and have been considered on a specialty and subspecialty basis. Once the number of clinics per specialty was determined, this was translated into the number of outpatient rooms and clusters of rooms required. The calculation to arrive at the number of clusters of outpatient rooms needed is shown in Appendix 13. This calculation indicates a requirement for 16 outpatient clusters in the acute hospital, with a further 4 clusters in the community hospitals.

4.4.5 Diagnostic requirements

Capacity requirements in diagnostics are based on projected activity levels and performance improvements. Projected activity levels take account of changes in the model of care for outpatients, A&E attendances and GP direct access, with associated plain-film and ultrasound transferring to community settings.

The future diagnostic requirements assume a range of working hours for different diagnostic rooms to match the patient type including A&E attender, and outpatient. Therefore depending on the patient type, the length of usage of a room may vary from 10-24 hours per day. Extended days and routine weekend working has been factored in to support inpatient services and maximise the use of expensive equipment.

Diagnostic activity and numbers of rooms are shown in Appendix 14.

SECTION 5: CASE FOR CHANGE

5.1 INTRODUCTION

The previous sections on strategic context and the new clinical model have looked at national policy and initiatives, Bristol-wide and local issues and have concluded that:

There is a need to develop a new system of healthcare, which both addresses the changing needs of patients, and also enables the delivery of high quality services by NHS staff. This new model of healthcare includes the following main objectives:

- Provide care closer to the patient's home where clinically appropriate;
- Provide effective local health services by harmonising primary care, social care and local hospital services to prevent inefficiencies, gaps in provision, delays and duplication of effort;
- Develop specialist services and clinical networks for a wider group of patients within the NHS, providing high quality and faster access to specialist opinion with care provided closer to home where appropriate;
- Provide a vibrant learning and education culture that benefits clinical services;
- Improve the efficiency and value for money of services.
- Enable local services to respond to national initiatives including Patient Choice and 'Creating a Patient-Led NHS'

In addition, there is a need to address the problems with hospital accommodation and environment with the intention to:

- Put an end to the cramped overcrowded wards within NBT, by providing high quality facilities which support care and recovery, thereby improving patient safety and ensuring privacy and dignity for patients.
- Provide a greatly improved working environment and facilities for staff.
- Contribute to the wider objective of neighbourhood renewal and regeneration

This section considers the ability of the current configuration of services and the current health service estate to achieve these objective.

5.2 OBJECTIVE ONE: PROVIDE CARE CLOSER TO THE PATIENT'S HOME

At present many patients have to travel to either Frenchay or Southmead Hospitals in order to access services which need not be provided from an acute site. There is a strong case for providing these services in a community or primary care setting. This Business Case recognises the need to bring care closer to the patients in a way which is cost effective and maintains clinical standards, with the added benefit of convenience.

The services which could and should be provided locally include:

Service	Patients that could be treated in Community Facilities
Minor Injuries	Around 45% of patients attending the A&E Department at Frenchay have problems which could easily be dealt with by a local minor injuries service (such as minor cuts and sprains). The area would benefit from a re-investment away from a centralised minor injuries service run out of an A&E department to a network of units across the community.
Outpatients/ Chronic Disease/Diagnostics	It is estimated that up to 50% of the outpatient attendances which currently take place at Frenchay or Southmead do not need to be in an acute/emergency hospital. There is a need to spread these services around the locality to meet the aim of providing local care where appropriate.
Rehabilitation	A busy acute hospital is often not the best place to recover from an illness or an operation – people can often recover better in their own homes if they have the appropriate support, or in a community focused in-patient facility, specially designed for rehabilitation.

Current community and primary care facilities are incapable of supporting the large-scale shifts of emphasis and activity and other changes proposed by this Business Case. To date there has been limited progress in shifting services away from the acute teaching hospitals, into primary care directed community alternatives.

There is a need for new community hospitals to provide facilities, which offer improved clinical practice and better outcomes for patients. The facilities will also provide accessible diagnostic services to help GPs in caring for their patients more comprehensively and promptly in the community, and create space for GPs to deliver improved services for patients with long-term conditions.

Without significant investment in new community facilities, the local health community will fail in its core objectives of providing a more accessible infrastructure of services.

Conclusion

The achievement of the objective of a substantial transfer of care into local settings will require a restructuring of the current healthcare facilities and the build-up of a comprehensive community network.

5.3 OBJECTIVE TWO: PROVIDE EFFECTIVE LOCAL HEALTH SERVICES

The present situation, described in the strategic context section, in which acute and emergency services for the local population are split across two main acute hospital sites, has long been a cause of serious clinical concern. Services are either provided on one acute site but not the other, or split across the two sites. This inevitably leads to fragmentation or duplication of services, both of which lead to unnecessary difficulty in the effective provision of patient care. The increasing trend towards clinical sub specialisation makes it imperative that acute specialities are brought together to provide high quality care for patients who are acutely or seriously ill, enabling patients to have rapid accurate diagnosis and treatment. The provision of all acute and emergency services for the local population from one hospital site will remove the need for patients to be transported between hospitals as part of their care pathway, and for staff to travel between hospitals to provide that care, both situations being inefficient and ineffective. Concentration of these services will lead to much improved patient care and safety.

The new model of care requires integration of front-door receiving teams for sick patients and this requires the physical merging of the acute assessment and A&E services currently located around the two acute sites. These front-door services need to be backed up with diagnostic services, critical care, operating and inpatient facilities to allow patients ease of movement into well staffed high quality acute environments.

The development of services capable of meeting demand also requires a change in the way assessment services are provided, with a shift away from scattered outpatient facilities into a combination of:

- Concentrated hi-tech diagnostic and assessment facilities;
- Out-posted low-tech consulting and diagnostic facilities.

Conclusion

The achievement of the objective of the provision of an effective local system of healthcare for the people of North Bristol and South Gloucestershire requires investment in a new integrated core of acute services on a single site (Southmead), replacing the two existing hospitals at Frenchay and Southmead.

5.4 OBJECTIVE THREE: DEVELOP SPECIALIST SERVICES AND CLINICAL NETWORKS

The strategic context section discusses the requirement for, and the plans for the integration of specialist services across Bristol. This is necessary in order to ensure the provision of the best possible service, recognising the need to make the most effective use of specialist skills and equipment. The BHSP identified a range of initiatives including:

- The concentration and restructuring of certain specialties such as children's services, breast services, ENT and Oral Maxilla-Facial.
- The connection of specialist services using new technology.

These initiatives require significant development of facilities to deliver purpose built environments for this new configuration of services. Detailed planning is in hand for the transfer of both general and specialist paediatric services to the Bristol Children's Hospital. It is important to ensure that children are cared for in a specialist children's hospital with the appropriate environment and skill mix. The concentration of ENT clinical expertise within the North Bristol Trust will ensure the best possible service for patients, and the development of expert, high quality services for patients requiring complex interventions.

Without a major restructure of services, the strategic objective within the BHSP of the centralisation of key services such as those for Children will not be achieved with the associated increase in clinical risk, and inefficiency of provision.

Conclusion

The achievement of the objective to develop and concentrate specialist services across Bristol requires investment in new configurations of hospital buildings, accompanied by investment in technological networks.

5.5 OBJECTIVE FOUR: PROVIDE A VIBRANT LEARNING AND EDUCATION CULTURE THAT BENEFITS CLINICAL SERVICES

The strategic context describes the academic strategy for North Bristol and South Gloucestershire and identifies the main problems with delivery of this strategy, namely:

- A lack of integration of the various academic activities around the North Bristol Trust sites. There is currently a wide scattering of academic activities on the Frenchay, Southmead and Blackberry Hill sites, and this leads to difficulties in co-ordination, and in maintaining a systematic approach to learning;
- An absence of educational and learning space in the majority of the PCTs' and NBT's front-line clinical environments, makes it difficult to meet the developing trend in health service education, to provide teaching at the 'patients' bedside'.
- An under-investment in state-of-the art clinical skills laboratories that would allow the Trust to develop modern teaching techniques, based around simulation.

Several national educational bodies have pointed out the difficulties that arise from the current site configuration in respect of specialist training for qualified clinical staff, as well as for general training for the clinical staff of the future. Such training will be significantly improved by a move to a single acute hospital model

A vibrant learning, education, and training culture benefits both the design and the delivery of clinical services. A major restructuring of the educational environment will therefore lead to improved services for patients, will enable new national standards for teaching to be met, and will improve the attractiveness of the local health community to high level academic staff.

Conclusion

The achievement of the implementation of a modern academic strategy, designed to meet the needs of national and local imperatives requires investment in a complete overhaul of the current estate, providing educational space designed for purpose.

5.6 OBJECTIVE FIVE: IMPROVE THE EFFICIENCY AND VALUE FOR MONEY OF SERVICES

The aging acute estate has a number of problems as discussed earlier in the case. Many of the buildings are non compliant with modern building standards. Maintenance costs are increasing and there is a constant struggle to maintain appropriate temperatures across a disjointed and fragmented estate. Roofing and service failures are frequent and disruption can last for extended periods given the difficulty of patching to seriously deteriorated adjacent fabric. Theatre time is often lost because of the need for maintenance of old facilities and the current problems with maintaining the theatre estate at Frenchay is leading to severe problems in meeting waiting list targets. This inefficiency will increase further over time as physical deterioration and increasing cost of fuel impact.

Whilst improving the quality of individual buildings within the current estate would be helpful, to do so does not begin to address the underlying fundamental difficulty that many of the existing buildings are completely inappropriate for the delivery of modern health care and are often positioned in such a way as to complicate patient care pathways. This therefore diminishes both the quality of care given to patients, and ultimately their safety.

The distribution of acute services over 2 sites presents a significant efficiency problem to the Trusts as it means that for every site where there are emergency admissions, there is a need for expert doctors in every area 24 hours a day, 7 days a week to maintain effective emergency cover. The cost of maintaining such services, particularly given recent national changes in contracts for clinical staff, together with employment legislation such as the European Working Time Directive, means that the provision of acute services from one site will release significant savings in staffing costs which will be directly invested into patient care.

Conclusion

The achievement of the objective of improving efficiency and value for money in services requires a fundamental restructure of the healthcare estate in South Gloucestershire and North Bristol.

5.7 OBJECTIVE SIX: ENABLE LOCAL SERVICES TO RESPOND TO NATIONAL INITIATIVES

This Business Case recognises the impact of patient consumerism and the creation of a competitive market within the provision of healthcare. The local providers want to be seen as 'providers of choice' by the people of North Bristol and South Gloucestershire, but loyalty can only be justified if local services are competitive and delivered to an acceptable level of quality. It would not be advantageous to either local people or local providers if there was a shortfall in the quality and capacity of local providers to become competitive. Local provision needs to be transformed in line with the change agenda proposed within this Business Case.

Without a change in the way services are provided, the Trusts will fail to meet the ever-tightening standards being set by the government for healthcare and fail to respond to the need to meet Patient Choice.

Conclusion

The level of transformation required to meet the Patient Choice agenda requires a high level of investment in services across North Bristol and South Gloucestershire, and significant improvement in the clinical environment.

5.8 OBJECTIVE SEVEN: PUT AN END TO CRAMPED, OVERCROWDED WARDS, PROVIDING HIGH QUALITY FACILITIES WHICH SUPPORT CARE AND RECOVERY, AND ENSURE PRIVACY AND SAFETY FOR PATIENTS.

The strategic context section summarized some of the problems with the current estate. Approximately 50% or the Trust's buildings are now in the position that they are not considered to provide an acceptable environment for patient care. Services, which should be located close together, are often too far apart. In particular, theatres, critical care, admissions wards and rapid diagnostics all clearly need to be close to one another and they are not. Patients at both hospitals often have to travel long distances between different facilities on those sites, and in some cases inpatients have to be wheeled in their beds or their trolleys across roadways and other external areas, in all weathers, to reach certain departments. Many buildings are scattered across the site and are not joined by corridors. This general lack of cohesion presents an unwelcoming and confusing environment to patients and visitors alike, with patients frequently having to park a long way from the services they need to access. The resultant level of dissatisfaction can be measured in part by the number of complaints received,

Patient Dignity & Privacy

- Many wards and toilet areas do not provide an acceptable standard of privacy for patients. In some wards, particularly at Frenchay Hospital, bathroom facilities are so cramped that patients have to undress at the bedside or behind screens in ward entrance corridors.
- The layout in the nightingale wards works against any attempts by staff to mitigate against the lack of privacy and dignity.
- Bed spaces are cramped in some in-patient wards, limiting privacy, and causing mobility problems for some patients.
- Many waiting areas are often too small or inadequate so that patients have to wait on trolleys in open spaces.

Patient Safety

- Patient safety is compromised by the design of the estate; considerable distances separate key patient areas and departments. Therefore patients are constantly required to be moved on trolleys to diagnostic services and operating theatres throughout the estate, often involving across public access routes. The new hospital will provide appropriate adjacencies of clinical departments, allowing patients to have rapid access to specialist staff and equipment.
- Across the present estate, patient safety is compromised by designs, which take no account of the difficulties of modern hospital acquired infections. The new hospital will include a high proportion of single rooms, which, together with its overall design, will enable patients with such infections to be rapidly quarantined and the infection contained, rather than allowing those infections to spread rapidly through open wards.
- The current split of specialties and of elective and non-elective admissions between Southmead and Frenchay Hospital has led to an increasing number of patients who require to be transferred between the two hospitals. This can be a distressing experience for patients, and introduces additional risk into the in-patient experience.

General Health Safety & Security Considerations

- Both sites have many buildings, which pose an asbestos hazard.
- Good security is very difficult to maintain on what are large fragmented sites.
- Due to insufficient localised storage space in many areas, many corridors are cluttered with vital equipment posing a risk.
- Some of the ward areas, particularly at Frenchay are difficult to maintain at appropriate temperatures.

Conclusion

The major shortcomings of the ageing acute estate, and the requirement for additional capacity in community facilities can only be corrected by considerable and well-planned investment across the health community.

5.9 OBJECTIVE EIGHT: PROVIDE A GREATLY IMPROVED WORKING ENVIRONMENT AND FACILITIES FOR STAFF.

Staff environments are very mixed in the current estate. Some departments have adequate facilities but there are a number of buildings that are difficult to work in due to:

- Inadequate temperature control;
- Lack of basic changing facilities;
- Security issues linked to distant parking and lack of security infrastructure;
- The requirement to walk long distances sometimes out of doors whilst transporting patients between services

Competition to recruit expert clinical staff has increased in recent years. Whilst staff continue to be attracted to the local health community because of its clinical reputation, many clinicians have made it clear that the appalling condition of the estate has been the sole reason why they have chosen not to work here.

Conclusion

Due to the major shortcomings of the aging acute estate, the creation of a suitable environment for staff requires a major investment, in order to provide an acceptable standard of facilities for staff.

5.10 OBJECTIVE NINE: CONTRIBUTE TO THE WIDER OBJECTIVE OF NEIGHBOURHOOD RENEWAL AND REGENERATION

The strategic context section looks at the objectives for neighbourhood renewal and contribution to urban regeneration. The current Southmead Hospital is buried behind road-front housing and delivers very little in the way of civic presence. The development of a new acute site in Southmead allows the opportunity to:

- Provide a new hospital building with civic presence to help uplift the local area;
- Provide employment opportunities in one of the most deprived areas in Bristol;
- Act as a catalyst for further development in the area

Conclusion

There is a major opportunity to provide a significant contribution to neighbourhood renewal in a disadvantaged part of Bristol.

5.11 CONCLUSION OF THE CASE FOR CHANGE

The overall case for change draws upon the need to modernise patient care and the requirement to set the delivery of patient care in a physical environment which is enabling, fit for purpose and capable of promoting and encouraging better health outcomes.

The case for change centres on:

- The need to develop and provide a new clinical model which will meet the expectations of, and the demands placed upon modern health care services;
- The need for service modernisation and reconfiguration to meet national initiatives and policy, and local strategic objectives, particularly with regard to the Bristol Health Services Plan;
- The very great need to improve the environment in which health services are provided, and in which staff work;
- The need to contribute to neighbourhood renewal and to provide civic presence

The North Bristol NHS Trust, Bristol North PCT and South Gloucestershire PCT strongly believe that there is a requirement to provide a practical response to the case for change, and this Outline Business Case aims to put forward proposals that are practical and achievable. In particular this Business Case looks to ensure that:

- The new health developments are flexible and future-proof
- The solutions to the identified problems are practical and deliverable
- The proposed solutions are affordable and provide Value for Money

APPENDIX B

Together...

North Bristol NHS Trust

Proposed Reconfiguration of Medical Admissions Unit (MAU) from Southmead Hospital to Frenchay Hospital as a transition to the New Hospital

Dr Sam Patel

Consultant Physician

North Bristol NHS Trust

Exceptional healthcare, personally delivered

September 2010

Together...

1. Content

- Definition of a Medical Assessment Unit (MAU)
- Current situation at North Bristol NHS Trust
- Future Plans at North Bristol NHS Trust
- Drivers for Change
- Proposal
- Benefits to Patients

2. Definition of a Medical Assessment Unit (MAU)

- aka Acute Assessment Unit (AAU)
  or Acute Admissions Unit (AAU)
  or Acute Medical Unit (AMU)
- The MAU is a distinct unit for the initial assessment, investigation and management of acutely ill medical patients referred by Primary Care or the Emergency Department, run by the specialty of Acute Medicine
- Patients are assessed, investigated and initial therapy commenced, followed by discharge or referral to specialty teams
- Staffed by a dedicated team of Acute Physicians and supported by the General Physicians on-call

3. Current Situation at North Bristol NHS Trust

- 2 MAUs – C Ward (Southmead) and Ward 105 (Frenchay)
  ie 2 parallel identical services on sites 3 miles apart
- Assess ~ 18,000 patients per year
- Discharge ~ 30% (ie ~6,000) patients directly home
- 10% of patients never admitted into a bed (seen in the Seated Assessment Area)
- Daily consultant-led Acute Medicine ward rounds
- Various out-patient services to enable rapid discharge
- 3.7 wte Consultants in Acute Medicine split between 2 sites

- Separate Admissions/Assessment areas for Acute Surgery, Acute Trauma/Orthopaedics (both at Frenchay) and Acute Medical patients (Southmead and Frenchay)

- The principle of Single-site Specialty working long established and successful eg in Respiratory Medicine, Acute Stroke, Gastroenterology and Emergency Medicine

4. Future Plans at North Bristol NHS Trust

- New Hospital planned at Southmead (2014)
  - Includes a 96-bed Acute Assessment Unit for all acute surgery, trauma and acute medicine patients next to the Emergency Department (in the 'Emergency Zone')
- Development of an Acute (Integrated) Assessment Unit before the New Hospital, for the assessment of Acute Surgical, Trauma and Medical patients
  - April 2011: Relocate all acute medical assessment/admissions to Frenchay and develop the fully Integrated (Surgery, Trauma and Medicine) Assessment Unit

i.e. put into practice the model of care for acutely ill patients which will be used in the New Hospital in advance of the move

5. Drivers for change

- Issues related to Junior Medical Staff
  - Numbers available (now and in the future)
  - EWTD compliance
- Ensuring compliance with National Guidelines for safe and effective care of acutely ill patients
  - Royal College of Physicians
  - National Institute for Clinical Excellence
  - Society for Acute Medicine
- Working towards the Model of Acute Care in the New Hospital

- *In essence, we need to consolidate acute and emergency care into one area on one site, and use currently existing/develop new care pathways for acutely ill patients to ensure that they are managed at a consistently high and safe level.*

6. Proposal

- That acute medical admissions are admitted to the Frenchay site from April 2011

Together...

7. Benefits to Patients

- Reconfiguration of Acute Medicine services will to deliver streamlined patient pathways, leading to better patient experience and care
  - Early senior Acute Medicine Consultant opinions/reviews
  - Avoid unnecessary investigations
  - Earlier treatment, reduced Length of Stay, earlier discharge
- Enables the new “model of care” for modern assessment
  - Earlier access to specialist care
  - Earlier treatment, reduced Length of Stay, earlier discharge
- Increased number of side rooms at Frenchay facilities
  - Reduced risk of Hospital Acquired Infections, so better patient experience
- Embed new ways of working prior to moving to the new hospital in 2014
  - Better transition to the new hospital and better patient experience
- The co-location of services will reduce inefficiencies which currently impact effective care delivery during winter pressures during lead up to new hospital build