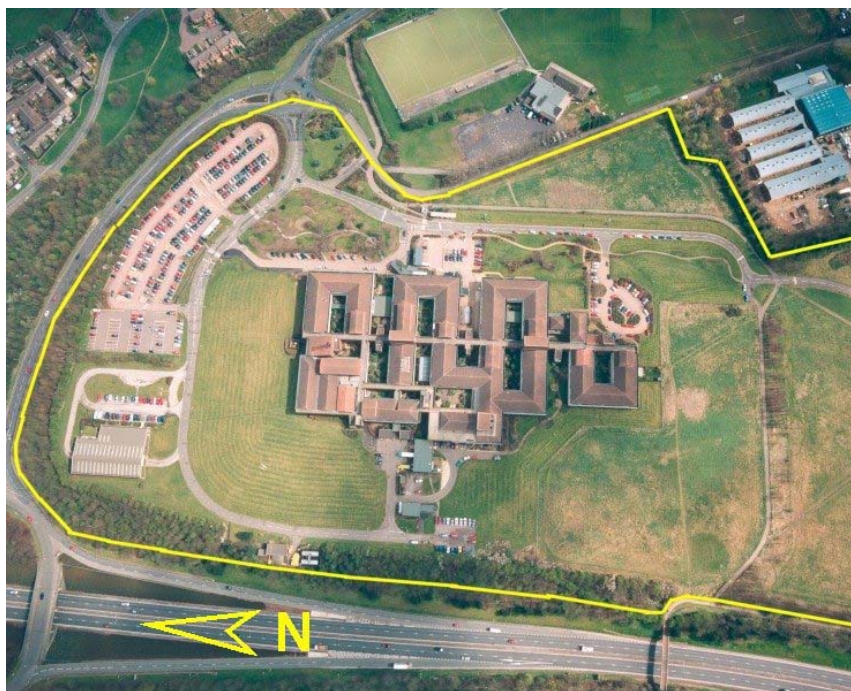


Photograph 2 – The Northern part of the ECH Site



Operation Difficulties

The fragmented service arrangements, together with the high population growth, national efficiency targets, lack of capacity within the health system and the poor quality of many buildings have combined to stretch the system to beyond breaking point.

The most significant problems with the local health system are:

- There is insufficient inpatient capacity to absorb current and future activity growth.
- Duplicated and fragmented hospital services are inefficient, costly and difficult to staff.
- Excessive medical cover, a scarce and costly resource, is required to minimise risks.
- The isolation of some services or parts of services has led to criticisms by the Royal Colleges (notably in medicine). The threatened removal of accreditation would force the hospitals to close.
- High bed occupancy levels at PDH, mostly over 90%, render bed management challenging and impact upon the quality of care. The clinical governance agenda is increasingly difficult to meet.
- Significant numbers of medical patients out-lie of inappropriate wards, particularly at times of peak activity. This results in a massive increase in cancelled operations that creates pressure on elective waiting times. It also causes prolonged and unnecessary lengths of stay.
- There are a high number of patient transfers between wards, and more particularly sites, which are necessary to ensure emergency cases are always admitted.
- Many patients occupy an expensive acute hospital bed when their needs would be better met in a community setting.
- The PDH tower block is of 1960s design that is no longer appropriate for the delivery of modern hospital care. Its solid concrete structure is inflexible and has necessitated many compromises in the delivery of care.
- The PDH site is cramped and landlocked by residential buildings. Parking and road access are very poor and there is no room for expansion.
- 20% of Peterborough GPs are expected to retire by 2007. The current configuration of the health system is causing major problems with recruitment. This is a major risk to continued service provision in the next few years.

- The population growth, lack of capacity and split acute site are causing the local service to struggle to deliver on national performance targets and without change it will be unable to meet these targets in the future.

The health system is operating above capacity, and in the climate of growth it will be unable to provide a fast, responsive and accessible service in the future. In the context of the NHS Plan, the local health service providers face the twin challenges of resolving current operational difficulties while developing a new 'whole system' approach to health care delivery. Neither of these challenges can be fully achieved without a service led reconfiguration of the estate.

2.9 THE HEALTH INVESTMENT PLAN

The Model of Service that covers the 'whole system' and moves services out of hospital into the community and GP practices has been developed collaboratively by all the local NHS providers, local social services, and other key stakeholders. See Chapter 4 for full details of the planned service models. The formal public consultation exercise undertaken between December 2001 and March 2002 was also used as an opportunity for the public and service users to contribute to the Greater Peterborough Health Investment Plan (GPHIP).

The GPHIP spans primary and secondary care, providing a solid foundation for future developments and growth. The model embodies the objectives and values of the NHS Plan and local HImP to provide patients with a modern, dependable service for the 21st century.

Key Elements of the Model

The model is based on the principle that the service should be centred on the needs of the patient, not the convenience of organisations or professional staff. The key components of the model are:

- An increase in the systems overall bed capacity from 698 to 782 in-patient beds, with flexibility for further growth, while making challenging improvements in day case rates and reduced lengths of stay.
- Reconfiguring the hospitals onto one main acute site.
- Separating emergency care from elective care to ensure dedicated facilities are available to honour booked treatments and procedures reducing waiting times and the need for cancellations.
- Separation of acute and non-acute and intermediate inpatient care, to ensure that patients get the most appropriate treatment offered in the most appropriate setting, be it the acute hospital, a community hospital or in their own home.
- Investment in community based diagnostics and therapy services, linked to the non-acute / intermediate care facilities, including 40 intermediate care beds, to provide greater support for the emergency response teams and avoid the need for minor injuries to be referred to the emergency centre at the acute hospital.
- Training for GPs, Allied Health Professionals and nurse specialists to allow them to undertake some of the work currently performed in hospital, including minor surgical procedures, basic diagnostics and chronic disease management.
- More consultants' outreach clinics and greater use of technology links, particularly order communications, results reporting, telemedicine, and computerised booking systems.
- A Diagnostic and Treatment Centre (DTC) providing one-stop access to high-tech diagnostics and surgery not requiring a hospital stay of more than 23 hours.
- The provision of a multi-professional education and training facility on the main acute hospital site with high tech links to primary care and other educational centres.

Many patients will be treated closer to their home, GPs will have more choice for the care of their patients, and hospital care will involve fewer visits. Streamlining care pathways and eliminating unnecessary hospital stays will create more capacity, reduce waiting times and increase operational efficiency.

The GPHIP seeks to identify solutions to the problems with the local health system. Breaking out of the constraining and disjointed health estate is a pre-requisite to the process of change that will impinge upon every part of the local health system. Each option, discussed later in this Business Case, seeks to:

- Provide clinical services that are safe and of good quality.

- Be operationally viable and usable by patients, staff and the public.
- Be acceptable to all the stakeholders.
- Be affordable and not destabilise the local health economy.
- Meet current work demands and be sustainable in the long term.

Impact of the New Model on the Health Estate

To implement the new model of service there will need to be significant investment in the health estate. An estate that provides flexibility for future growth and allows the development of new services will enable Greater Peterborough to deliver the aspirations of the NHS Plan in an efficient and effective way.

The investment will involve:

- Reconfiguring existing facilities to achieve more appropriate service relationships.
- Upgrading and refurbishment of existing facilities to meet NHS Plan standards.
- The provision of new facilities to increase service capacity and allow the introduction of new services.
- Ensuring future flexibility for growth and change.

2.10 JUSTIFICATION FOR THE HEALTH INVESTMENT PLAN

The statements provided below detail why and how the appropriate bodies support the proposals documented in this OBC.

2.10.1 NORFOLK, SUFFOLK AND CAMBRIDGESHIRE HEALTH AUTHORITY STATEMENT

The Norfolk, Suffolk and Cambridgeshire Health Authority (NSCHA) was formed on 1st April 2002. Cambridge Health Authority (CHA) was the preceding organisation and approved the original Strategic Outline Case in 2000. The NSCHA have confirmed the principles and objectives in the CHA draft HImP 2000, on which the GPHIP is partly based are still valid and should be reflected in future Local Delivery Plans.

In the introduction to the Draft HImP 2000, Cambridgeshire Health Authority states:

"The Cambridgeshire Health Improvement Programme (HImP), produced through local partnerships, aims to improve the health of the population of Cambridgeshire Health Authority and reduce inequalities. It is a strategic framework for all partner agencies and the public at large to work together to achieve these ambitious goals. Improving health is explicitly recognised to be dependent on the complicated mix of a range of social, economic, environmental and health service factors."

For the past three years one of the Health Authority's priorities has been improving mental health and learning-disability services. This has culminated in the approval of an outline business case for a £20 million acute adult and elderly psychiatric service and learning disability facility on the Edith Cavell Hospital site. The Health Authority has also successfully led the transition in primary care from the internal market to Primary Care Trusts. This has already produced a number of high priority services that are provided on a whole-system basis, including winter emergency provision.

This OBC sets out the next stage of the strategy for integrating acute and primary care services by focussing on the needs of the patient. The concept on which the HImP and the NHS Plan are based is that health services should be designed around the patient and not around the convenience of organisations or professional staff.

The Integrated Health Investment Plan for Greater Peterborough sets out a strategy to deliver this key objective through a whole-system approach based on the guiding principles that services should:

- Be appropriate to patients' needs.
- Improve equality of access.
- Meet the needs of vulnerable people.
- Deliver high quality and effective services.
- Make efficient use of resources.

Two health authorities have responsibility for 90% of the population of Greater Peterborough. The Norfolk, Suffolk and Cambridgeshire Strategic Health Authority represent approximately 68% and Trent Strategic Health Authority about 22%.

Although this OBC relates to the whole health system its aim is to obtain approval for the capital investment required to provide the infrastructure necessary to support the shared vision of the Model of Service.

A major part of the investment will be by Peterborough Hospitals NHS Trust as the principal acute provider. Therefore the Trust is taking the lead on the estate strategy and will manage the capital investment and procurement process.

2.10.2 PETERBOROUGH HOSPITALS NHS TRUST STATEMENT

The Peterborough health system has a good track record for delivering results. It has been in the vanguard of many initiatives that are now key to the NHS Plan. These include:

- Establishing an ongoing re-engineering initiative in 1996 to change radically the processes for giving care across the health system. Successful projects include:
- Establishing a hospital based medical assessment and admissions unit linked to community based rapid response teams, social services and GPs to avoid hospital admission and provide patients with the right care in the right setting at the right time, 24 hours a day.
- Pioneering tele-medicine for Dermatology between hospital and GPs.
- Developing a shared drug formulary, and switching from 7 to 28-day prescribing of take home drugs by the hospital that will save the health system at least £400,000 per annum.
- Becoming a beacon site for developments in Urology services and Outpatient services.
- Developing a one-stop cataract service (winner of a 2002 HSJ award for excellence in the NHS and the Prime Minister's award for excellence in healthcare management).
- Piloting electronic pathology test ordering and results reporting between the hospital and GP practices.
- Working with local GPs (65 to date) to develop clinical guidance that specifies the hospital or community treatment options for the local population.
- Establishing an active Patients' Council for the hospital.
- Developing a successful MDHU in partnership with the Ministry of Defence.
- Developing communications. The Trust recently won awards from the NHSE and the Health Service Journal for its Communications Department and Internal News Publication.
- In April 2000 Peterborough became the first city in the country to have its health services fully commissioned by PCTs.
- Establishing the country's third NHS Walk-in Centre that was opened by the Prime Minister.
- Delivering a financial recovery plan of over £2 million. The Trust is now in surplus and predicting recurrent financial balance.
- In 1999/2000 meeting all inpatient and outpatient waiting list targets and remaining open to emergency admissions throughout the extended winter 'pressure' period. Peterborough District Hospital has never closed to emergencies.
- Gaining full accreditation from HQS recently renewed for a further three years and level two accreditation from the Clinical Negligence Scheme for Trusts.
- Achieving three star trust status in 2001 and 2002.

Peterborough's health and social care community has worked hard to modernise its services and is proud to be at the leading edge of today's NHS, a position it plans to retain.

Peterborough Hospitals NHS Trust (PHT) provides a full range of acute health services in a district general hospital setting from three sites within Peterborough. These facilities are shared with Cambridgeshire and Peterborough Mental Health Partnership NHS Trust (C&PMHPT). Although each organisation manages a distinct range of services, they are inextricably linked through the sharing of the two sites.

2.11 BUSINESS OBJECTIVES

This sections draws attention to the strategic and business objectives of Peterborough Hospitals and North and South Peterborough Primary Care Trusts.

2.11.1 PETERBOROUGH HOSPITALS TRUST STRATEGIC AIMS AND OBJECTIVES

The need for hospital care is constantly changing, influenced by technical innovations, developments in both GP and specialist care and a growing population. There is a need to plan for these together with national policies and requirements. To provide a framework for the Trust's development, the Trust Board has agreed the five key principles set out in Table 26 below.

Table 26 – Peterborough Hospitals Trust Key Development Principles

Patient Services
<p>We will continually examine all our patient services to determine how and where they are best provided.</p> <ul style="list-style-type: none"> • We will develop services through the active involvement of patients, staff and local partners in our plans. • We will continue to invest and develop services on both of our sites. • We will continue to review and transform our clinical processes with all our staff.
Clinical Standards
<p>We will continue to improve our clinical standards and aim to be a centre of excellence for the benefit of patients:</p> <ul style="list-style-type: none"> • We will systematically assess clinical services with our patient population. • We will continually assess existing standards and practice through a framework of clinical governance including evidence based care and clinical benchmarking. • We will develop information systems and communications which facilitate openness in all our clinical activity.
Staff
<p>We will retain and attract committed staff who want to work with us to develop themselves and our services.</p> <ul style="list-style-type: none"> • We will ensure the continued implementation of Joint Review and Development and personal development plans for all staff. • We will promote staff involvement and provide support for all staff, including training and development, health and safety, improved communications and staff health. • We will continually examine our recruitment and retention plans to ensure that we attract and retain good staff.
Performance
<p>We will ensure the Trust meets essential performance targets to enable us to develop our services.</p> <ul style="list-style-type: none"> • We will operate within the financial resources available to us. • We will continually review the way in which we manage services using national frameworks of corporate governance, risk assessment, performance review and working with the results of independent scrutiny such as the Commission for Health Audit and Inspection, Local Authority Overview and Scrutiny and Patients' Forum. • We will meet waiting time and other service targets in line with modernisation requirements by developing and adopting innovative practices.
Partnership
<p>We will seek the views of patients and work in partnership with primary care, social services, specialist centres, the MoD and other organisations to ensure we continue to provide the best health care for the local population and develop joint strategies for long-term enhancement.</p> <ul style="list-style-type: none"> • We will enhance our links with the local Primary Care Trusts and Peterborough City Council, ensuring that our services across the local area are comprehensive and cohesive. • We will be at the forefront of developing patient and carer input into our services through our Patient Advice and Liaison Service, the evolution of a Patients Forum, and developing patient representation at appropriate Trust meetings. • We will work with all our partners on the implementation of the Health Investment Plan, and the provision of services at Stamford Hospital.

2.11.2 PETERBOROUGH PRIMARY CARE TRUSTS' STRATEGIC AIMS AND OBJECTIVES

The Peterborough Primary Care Trusts' commitments, aims and priorities are set out in Table 27 below:

Table 27 – The PCTs Joint Strategic Aims and Objectives

Commitments
<ul style="list-style-type: none"> • We will ensure our plans, processes, activities and decision making reflect an understanding of our communities and patients' experience. • We will be a supportive, inclusive and reflective organisation, which respects our patients,; public, partners and staff, thereby creating an environment that people want to belong to and work in, to achieve ongoing improvement in health and wellbeing. • We wish to promote a culture of innovation, encouraging ongoing professional development and inclusion of all our partners, to enable us to deliver a modern health service in high quality premises. • We will commit to use all our assets efficiently and effectively to provide and commission high quality clinical care at the appropriate time and place, to target health needs and improve the health of our population.
Aims
<ul style="list-style-type: none"> • To improve the health and well being of the population. • To work with and empower our patients and our population. • To provide timely access to appropriate professionals, modern services and facilities. • To continuously review, improve and develop services to meet the future needs of our population.
Priorities for action
<p>We will work with the local population and other agencies to:</p> <p>1) Improve the health and well being of the population by:</p> <ul style="list-style-type: none"> • Promoting healthier lifestyles, focusing in particular on smoking, healthy eating and physical activity. • Agreeing and implementing the best policies, procedures and initiatives to bring about a reduction in substance misuse. • Promoting sexual health and reducing the numbers of unwanted pregnancies and sexually transmitted diseases. • Working with families to improve and increase opportunities for children and supporting parents in developing the skills to help achieve this. • Developing policies and practices that address inequalities and the wider determinants of health such as housing, the environment and transport. <p>2) Improve access to and capacity within local services by:</p> <ul style="list-style-type: none"> • Developing viable out of hospital services, through such initiatives as: <ul style="list-style-type: none"> ○ GPs with a special interest. ○ Developing other professional roles such as Allied Health Professionals and Nurse consultants. ○ Integration of GP out-of-hours service and the Walk-in-Centre and also closer working with NHS Direct. ○ Developing community facilities, where appropriate, to bring services close to patients through work such as the Greater Peterborough Investment Plan. • Helping to improve systems within the hospital to ensure equity of access and fast tracking patients through initiatives such as: <ul style="list-style-type: none"> ○ Developing a musculoskeletal service. ○ Working with cancer and other networks. ○ Transforming and modernizing services. • Developing an integrated Information Technology system that delivers high quality information to the public, patients and staff to meet their needs. <p>3) Engage with patients and the public in the provision and understanding of their care and that of their community through:</p> <ul style="list-style-type: none"> • Being responsive to local challenges that impact on the health and well being of our population. • Involving patients in decision making processes, in particular regarding service development and design. • Providing information to individuals to empower them to take responsibility and make decisions about their own care. • Supporting local communities and individuals to develop their decision-making and participatory skills.

2.12 KEY ASSUMPTIONS

This OBC is based on a set of core assumptions for changes in activity levels, service performance and the future service models. A spreadsheet model was developed by Secta Consultants that allowed these assumptions to be varied and for the consequential impact on activity, bed, theatre and outpatient requirements. The key assumptions for the OBC are detailed in Table 28.

Table 28 – OBC Assumptions

Population	<ul style="list-style-type: none"> No change in the catchment area or gain/loss to other health systems or trusts. Annual population growth of 1% for adults and zero for the birth rate (local authority forecasts).
Epidemiology	<ul style="list-style-type: none"> No change in the epidemiology of the population. No local environmental considerations that need to be taken into account and only small pockets of deprivation.
Increasing performance level	<ul style="list-style-type: none"> The Trusts will continue to meet targets.
Performance improvements	<ul style="list-style-type: none"> Day case rates are planned to improve, to allow an average of 1.5 cases per day case space each operational day.
Meeting guidance	<ul style="list-style-type: none"> An additional 1% growth in adult elective inpatient activity in line with current trends and allowing for the acceleration in activity required to meet the national waiting times targets by 2004. An additional 2% growth in emergency activity in accordance with the National Beds Inquiry and historical experience.
Care models and service configurations	<ul style="list-style-type: none"> All patients with a current length of stay of one day and 50% of patients with a current length of stay of 2 days, will be treated as day cases. 20% of all emergencies with a current length of stay of 21 days and over will be transferred to an intermediate care bed. 20% of all elective patients with a length of stay of 14 days or over will be transferred to an intermediate care bed. The average inpatient episode will reduce by 0.5 days, except for the elderly. Ward occupancy levels will be in line with national targets (82%).
Medical futures	<ul style="list-style-type: none"> The development of Electronic Patient Records, digital imaging, telemedicine, online ordering and electronic pathology reporting systems have been factored into the capacity and service planning assumptions.

2.13 ACTIVITY FORECASTS

The forecast activity and the facilities required to support the activity have been calculated using the assumptions listed in 2.12. A summary of the current and forecast activity is given in Table 29.

Table 29 – Forecast Activity Levels

Activity Area	Actual (2001/02)	Forecast (2010/11)	Change
Day cases (Admissions)	15,288	28,441	+ 86.0%
Elective Inpatients (Admissions)	9,713	6,998	- 28.0%
Emergency Inpatients (Admission)	21,541	25,910	+ 20.3%
Maternity (Admissions)	6,637	6,444	- 2.9%
Intermediate Care (admissions)	0	2,578	-
Outpatients (Attendances)	187,339	255,564	+ 36.4%

BED REQUIREMENTS

The acute bed requirements have been calculated by specialty, based on the forecast growth in activity, planned changes in access rates and the recommended NBI occupancy levels. The forecasts include small projected increases in average lengths of stay due to the impact of the aging population and conversion of the short stay activity to day cases.

The number of sub-acute beds has been calculated by identifying all bed-days associated with elective admissions over 13 days length of stay and emergency admissions over 20 days length of stay. It has been assumed that 20% of these admissions are appropriate for non-hospital inpatient care and will be located in the integrated care centre. There primary function will be for rehabilitation. The forecast bed requirements are given in Table 30.

Table 30 – Forecast Bed Requirements by Classification

Day Spaces	Total Beds	Acute Beds				Sub Acute		
		Elective	Emergency	Maternity	Total	Hospital Based	ICC	Total
76	774	107	409	40	556	178	40	218

The actual number of inpatient beds provided in the hospital and integrated care centre would be 782. The difference of 8 beds is a result of the general configuration of the wards proposed in the new facilities. The majority of wards are based on a 32 bed template. The number of beds allocated to each specialty has been agreed with the relative clinical management team and the service planning teams.

THEATRE REQUIREMENTS

The planned theatre requirements are based on the forecast activity levels for 2010 by specialty. To ensure correct separation of the specialties and elective workload within the theatre complex the calculations are based on the number of whole sessions required. Where this equates to an odd number of sessions the number of theatres has been rounded upwards. For the emergency theatre capacity the calculation is based on actual theatre requirements rounded up to the next whole number, see Table 31.

The forecast number of elective theatres and sessions has been cross checked against the forecast growth in consultant numbers to ensure there will be sufficient sessions to meet the consultant's probable work plans.

Table 31 – Summary of Forecast Theatre Requirements

Service	Operating Hours per Session	Number of Sessions per Day	Number of Operating Days per Week	Number of Operating Weeks per Year	Number of Operating Days per Year	Number of whole sessions	Number of whole theatres
Day Case	3.5	2	5	50	250	18	9
Elective	3.5	2	5	46	230	14	7
Emergency	12	1	7	52	365	4	4
Obstetric	24	1	7	52	365	4	2
Totals	-	-	-	-	-	40	22

OUTPATIENT CLINICS

The number of outpatient clinics has been calculated using the following assumptions:

- Average appointment time of between 10 and 30 minutes depending on the specialty.
- An expected cancellation rate of 10%.
- 50% of ENT, Ophthalmology and Oral Surgery patients require a specialist clinic.
- 3.5 hour clinic session.
- 10 clinic sessions per week.
- 48 weeks per year.

A summary of the forecast number of clinic sessions and rooms is given in Table 32.

Table 32 – Forecast Outpatient Clinic Sessions and Rooms

Clinic Sessions			Minimum Number of Rooms		
Standard	Specialist	Total	Standard	Specialist	Total
36,300	7,448	43,748	76	16	91