Health and Social Care and Sustainable Development in the East of England

Full Report

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Abbreviations

ABI	Annual Business Inquiry
DfES	Department for Education and Skills
DfT	Department for Transport
DoH	Department of Health
DWP	Department for Work and Pensions
LFS	Labour Force Survey
EEDA	East of England Development Agency
EERA	East of England Regional Assembly
FTE	Full Time Equivalent
GO-EAST	Government Office for the East of England
LSP	Local Strategic Partnerships
IMD	Indices of Multiple Deprivation
NHST	National Health Service Trust
NHS PASA	NHS Purchasing and Supplies Agency
ODPM	Office of the Deputy Prime Minister
PCT	Primary Care Trust
SHA	Strategic Health Authority
SOC	Standard Occupational Classification
SIC	Standard Industrial Classification
SSDA	Sector Skills Development Agency
WHO	World Health Organisation
WTE	Whole Time Equivalent

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Executive Summary

Introduction

The study was commissioned by the Department of Health, East of England Public Health Group from the Centre for Public Services and the Nuffield Institute for Health at the University of Leeds, with assistance from the Policy Research Institute at Leeds Metropolitan University. The purpose of the study is to quantify the present and future role of the health and social care economy (public, private and voluntary sectors) in the regional economy and to identify the impact on, and contribution to, sustainable development and regional economic and social objectives.

Defining Sustainable Development

The NHS, local authorities and other health and social care providers are major employers, purchasers and landlords in the region. The way in which staff are employed, facilities are planned, goods and services are purchased and the management of waste have a crucial impact on the pursuit of sustainable development in the region.

While the adoption of 'corporate citizen' and 'corporate social responsibility' (CSR) concepts and practices by the private sector are a step forward, they do not provide a sufficiently robust and comprehensive framework for the health and social care economy or the public sector generally. Corporate citizen and CSR approaches in the commercial world play a part in the corporate marketing strategies of (particularly) multinational businesses aiming to take advantage of the ethical and environmental concerns of consumers. They are additional to the core objective of a business which is to be commercially successful in a competitive market. Neither the NHS or local authorities are businesses in the normal sense of the term, though they do share some concerns with the business world, such as the importance of efficiency and effectiveness. Corporate citizen and CSR approaches focus on the behaviour of actors within social structures – the citizen concept. However, health and social care are part of the institutional structure of society. They embody the central values of the welfare state such as democracy, social justice and equality. These goals are the core values of the NHS, not a bolt on 'optional extra' or part of a sophisticated marketing strategy.

The study examines definitions of sustainable development ranging from the six key principles of sustainable development drawn from the conclusions of the 1992 United Nations Rio Declaration by the UK Sustainable Development Commission:

- Putting sustainable development at the centre
- Valuing nature
- Fair shares
- Polluter pays
- Good governance
- Adopting a precautionary approach

The region's Sustainable Development Framework identified nine high level objectives and a number of key objectives for health. The government's concept of sustainable communities is essentially a series of high level objectives which draw almost universal agreement. The government has also drawn up a Framework for Sustainable Development on the Government Estate. An assessment of government, NHS and regional documentation concluded that there was a need for a Health and Social Care Sustainable Development Framework. It consists of seven principles of sustainable development and a further seven operational responsibilities that flow from these.

This framework has been used to provide a structure throughout the report for assessing different aspects of the health and social care economy in the East of England.

Health and Social Care Sustainable Development Framework

Principles of Sustainable Development

1. Improving community well-being and public health by taking account of the effect of health and social care policies and resource allocation on production, supply and employment in the local and regional economy.

2. Ensuring health and social care organisations have the capacity, skills and intellectual capital to deliver good quality and sustainable services. Funding and performance management regimes should provide continuity, security and facilitate long-term planning.

3. Promoting positive health and well-being, tackling inequalities in health, the equitable distribution of health and social care resources and recognising the needs of all equalities groups in regeneration and development plans.

4. Enhancing democratic accountability including improving forms of accountability, transparency, access and freedom of information and encouraging user, community and staff participation in the planning, design and delivery of health and social care.

5. Taking account of the direct and indirect social, economic and environmental costs and benefits in the planning, building and procurement of goods and services based on recycling and resource minimisation strategies.

6. Integrating health and social care planning and provision with housing, education, commercial, social facilities and employment in the regeneration and growth of the region and undertaking comprehensive impact and risk assessments for all development.

7. Valuing natural resources and taking account of environmental and ecological issues in health and social care planning and development, including mainstreaming concerns for the well-being of future generations.

Operational Responsibilities

- Service provision
- Employing staff
- Buying - goods and services - food - childcare - energy - waste travel and transport
- Building and maintaining health and social care infrastructure
- Regenerating and tackling health inequalities
- Managing and capacity building
- Planning and assessing impact

Targets and Achievements

Inequalities, health and health inequalities

The sustainable development framework for the NHS suggests that inequality and health inequality are key barriers to the achievement of sustainable development. Early death and ill-health prevent the establishment of sustainable communities and are barriers to the enjoyment of the environment and surroundings. There is overwhelming evidence to suggest that addressing the health needs of the least advantaged is the most urgent priority. However, inequality and health inequality impact upon sustainability in other ways too. Persistent inequality is not only fundamentally unjust, it also makes society and its institutions less stable and prone to social conflict and crime.

The 1998 Acheson Report set out a range of close linkages between social and economic inequality and inequalities in health, and health and social care (Acheson, 1998). They included poverty and relative poverty, education, skills, housing and the environment, access to services and public health and sustainability. Perhaps most pertinent of all, data from the Office for National Statistics shows differences in life expectancy of nearly seven and half years for men and nearly six years for women between those of the highest and lowest social class categories.

While the East of England as a whole is prosperous compared with many other English regions, significant pockets of poverty still persist. The region has 30 electoral wards in the bottom 10% of the national Indices of Multiple Deprivation (IMD) and 91 wards in the bottom 20%. These wards are largely located around the coastal and urban fringes of the region.

These pockets of poverty not only contrast with the general prosperity of the region but often sit side by side with areas of prosperity. For instance, nearly half of all local authority districts in the region contain at least one ward in the most deprived 20% of the national IMD. Where pockets of inequality exist alongside affluence, the impact of relative as well as absolute poverty must be a key concern for policy makers, as Acheson noted.

Health and Social Care Employment in the East of England

The impact of employment in the sector is also greater than the direct impact of employment in the NHS and other public sector organisations such as local authorities. There is a large independent (private and voluntary/community) sector particularly in the provision of social and nursing care. Spending by health and social care organisations in the public and private, voluntary and community sectors also creates employment in other supply chain industries. In addition, spending by employees in health and social care and supply chain industries generates additional employment in the local and regional economy and beyond.

Health and Social Care Employment in the East of England	
Direct employment in the Public Sector	**140,629 Jobs (5.44%)**
Direct Employment by contractors providing services to public sector	**No data available**
Direct employment by private/voluntary health and social care employers	**43,594 jobs (1.69%)**
Indirect employment in the Supply chain	**60,000 (2.32%)**
Indirect induced employment as employees spend their wages in the local economy	**34,762 (1.34%)**
Total	**278,985 (10.78%)**

Health and social care employment in the region is made up of five constituent elements. Direct employment in the public sector accounts for over 140,000 jobs or 5.4% of employment in the East of England region. When employment by contractors, private

and voluntary sector health and social care employers and employment in the supply chain is taken into account, the total rises to over 275,000 jobs or around 11% of total employment in the region.

Terms and conditions

The earnings profile of the health and social care sector is long and unequal. Health care professional groups earn on average more than other professional groups, yet health and social care support service occupational groups have relatively low average earnings compared to other manual workers. Even despite new bargaining and pay structures the lowest paid NHS employees will still earn a maximum annual salary of less than £11,500, some way below the government's own definitions of the poverty threshold for a couple with children and a long way short of the demands of trade unions and campaigners for a 'living wage'. Worse still, many of the lowest paid occupational groups are those who have suffered from successive contracting to the private sector where pay, job security and benefits packages are often even less advantageous. This creates a serious problem for the sustainability of a system requiring large increases in staffing in a context of relatively high pay in the wider economy.

Equalities

A lack of data means that an equalities profile is limited to gender and ethnicity of staff employed in the public sector with no comparable data available for the private and voluntary health and social care sectors. Between 63% - 85% of public health, community health, non-medical and dental staff and local authority social services staff are women but account for only 34% and 36% of hospital medical staff and GPs respectively. Female part-time employment is significant in hospital medical and social care staff. There is also a significant gender pay gap with women's pay varying between 70% - 84% of male earnings across occupational groups. The proportion of black and ethnic minority staff compared to the England average varies between SHAs and between occupations.

Growth in health and social care employment

Increased NHS spending will result in substantial increases in health and social jobs in the region, for example, Essex Strategic Health Authority plans to create 3,535 additional jobs by 2006. Estimates of additional health care staff, based on the Wanless Report projections, over the next two decades, indicate that there will be a need for about 6,800 doctors, nearly 12,000 nurses, 5,000 professionally trained scientists and therapists and over 8,000 health care assistants in the region. These estimates do not take account of local authority or private/voluntary sector requirements, nor do they take account of the growth forecasts for the region.

Procurement of goods and services

Public sector expenditure on health and social care in the East of England totalled £5.5bn in 2000/01 including over £2bn on the purchase of goods and services by the NHS and local authorities for health and social care services. The region spent more than the English average on salaries and wages, general supplies and services, establishment expenses and premises but less than the English average on clinical supplies, usage costs for fixed

Public Spending on Health and Social Care in the East of England	
Total Expenditure	**More than £5.5bn**
Staffing	£2.6bn
Clinical supplies	£364m
General supplies	£401m
Transport	£105m
Purchase of health and social care from private and voluntary sector	£609m

capital assets and the purchase of care from non-NHS bodies.

Expenditure on goods and services included £364m on clinical supplies and services (including £132m on drugs), £5m on postage and £609m on the purchase of health and social care from other providers.

The East of England had 193 NHS suppliers located in the region, representing 10.9% of the NHS PASA national database, in September 2003. However, there is no data on the value of contracts nor is it possible to identify the precise proportion of goods and services which are supplied/produced locally, regionally, nationally or from overseas.

NHS Trusts and PCTs spent nearly £24m on provisions and kitchens in 2001/02 plus a further £41.8m on contract catering. There are nationally recognised innovative projects in the region supplying organic food and providing healthy living teaching and learning resources. Further, the recently launched DEFRA public sector sustainable food procurement initiative could have an important impact in the region.

The Environmental Impact of Health and Social Care in the East of England

In 2002/3 NHS in the East of England …
…produced 39,712 tonnes of waste, costing £5.3m
...produced more than 140,000 tonnes of CO^2
…consumed £10.1m of electricity
…consumed £8.5m of gas
…consumed £5.3m of other fuels

Childcare provision has been significantly improved with a number of new nurseries already operational or planned for 2004. NHS childcare provision ranges from on-site nurseries to play schemes, childminder networks, out-of-school clubs and childcare voucher schemes. Most childcare provision is purchased from the private sector. Gaps in provision, though, remain in many rural areas.

The NHS in the East of England produced 39,712 tonnes of waste in 2002/03 with disposal costs of £5.3m. Clinical waste accounted for just over a quarter of the tonnage but 70% of the disposal cost. Special wastes amounted to 83 tonnes with domestic waste accounting for the remainder. No data is available for specific disposal methods by NHS Trusts in the region but clinical and special waste is usually incinerated whilst most domestic waste is landfilled. The waste recovery/recycling volume was 2.95%. The Regional Waste Management Strategy demonstrates that continued landfill is not sustainable or acceptable.

The NHS spent £66.2m on transport in the region in 2001/02 with local authorities spending an additional £39.3m on social services transport. Travel plans such as the Addenbrookes NHS Trust Employee Travel Plan demonstrate the benefits of reducing car usage.

The NHS is a substantial consumer of energy – electricity (£10.1m), gas (£8.5m) and other fuel (£5.3M) in 2001/02. The government's energy strategy includes targets for the NHS to reduce energy consumption by 15% by 2010 plus improved energy efficiency performance for new capital projects. The NHS spent £4.6m on water and sewage in 2001/02. Water benchmarks have been established which could reduce hospital and nursing home consumption by about 14% producing water, energy and financial savings.

The region has seven major Private Finance Initiative (PFI) health projects (capital value £794m) plus two NHS Local Improvement Finance Trust (LIFT) projects (capital value £40m) to improve local health centres and surgeries. To date there are no local authority social services PFI contracts in the region.

Planned growth and sustainability

Three of the four major growth areas in the South East of England fall in whole or in part within the East of England region:

- Thames Gateway: The Essex proposals envisage four growth areas including Tilbury/Thurrock and Southend/Basildon with about 120,000 new homes by 2016.
- Milton Keynes-South Midlands: The East of England region has two of the five major urban areas - Luton/Dunstable and Bedford - designated for expansion. The overall plan for the Milton Keynes-South Midlands growth area includes 133,000 new homes and up to 150,000 new jobs by 2016.
- London-Stansted-Cambridge: The proposals envisage growth in 4 areas – Harlow, Cambridge, Upper Lea Valley and new settlements in north Essex or south of Cambridge. Initially, 26,000 new homes are planned, with the potential for up to 250,000 – 500,000 by 2031.

The research scrutinised a range of studies of the growth areas to assess the implications for the health and social care economy and the degree to which health and social care planning has been taken into account in the proposals to date. It found:

- A very limited discussion of the provision of health and social care infrastructure.
- References to sustainability and sustainable development were general and there was no NHS or health and social care sustainable development perspective.
- Analysis of the effect of low, intermediate and high growth spatial development models on the existing health and social infrastructure and services was not evident in the studies.
- Even where health is the largest economic sector in the local economy the implications of increased public expenditure and additional employment in new health and social care facilities were rarely considered.
- The studies did not identify either the existing or potential economic linkages between the health and social care economy and regional manufacturing, agriculture, horticulture and services sectors.
- There was a lack of analysis of the location and accessibility issues of existing distribution and location of health facilities to identify current problems.
- Social care was not mentioned.
- Health inequalities were rarely considered, except in the Regional Housing Strategy, with no mention of the health needs of different equalities groups.

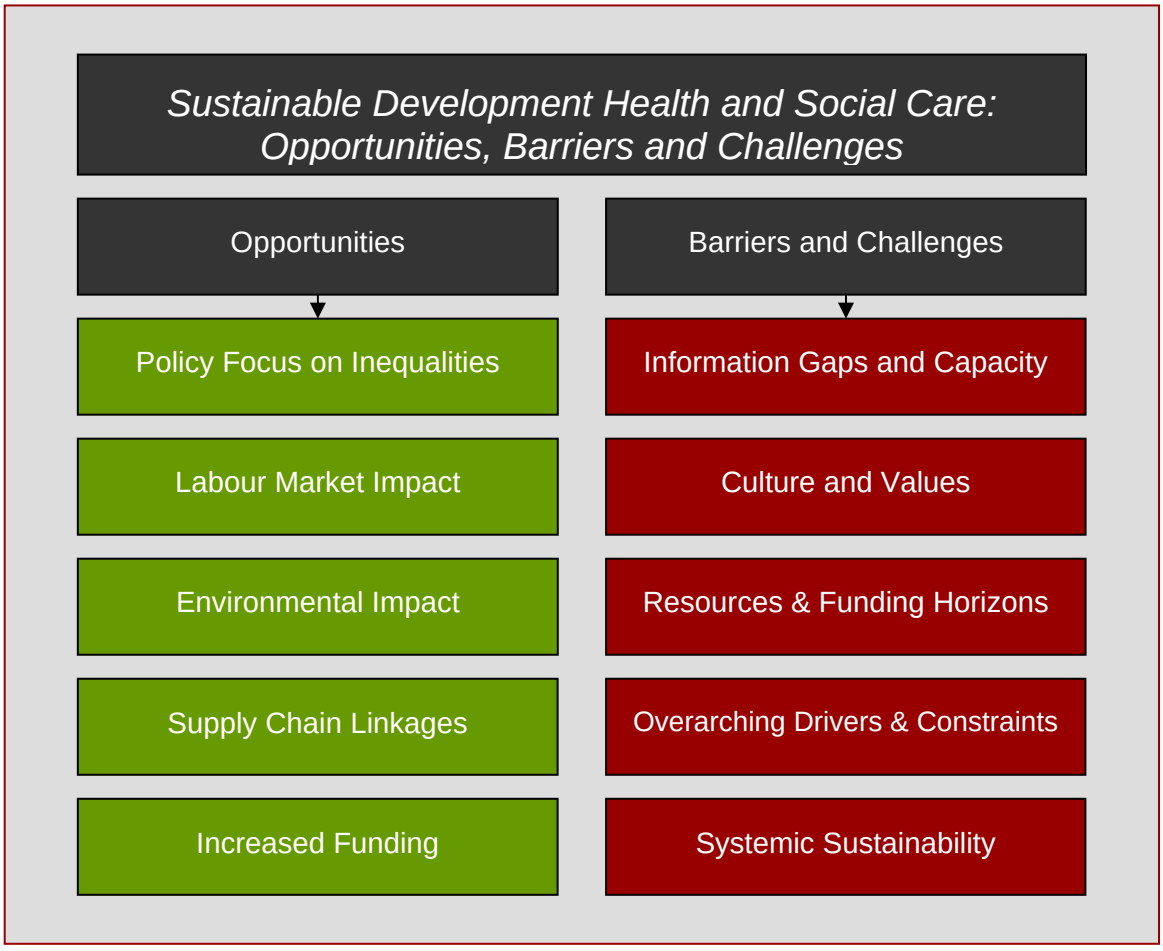
The Department of Health, SHAs, NHS Trusts and PCTs are now engaged with regional agencies, development boards and sub-regional groups in the growth areas to plan future health and social care provision.

Demographic change in the region

The East of England population is forecast to increase by 500,000 by 2021 but this does not take the major growth plans into account. The percentage of the population in the age groups 0 – 5 years, 5 – 15 and 16 – 44 are forecast to decline as a proportion of the population by 8%, 14% and 14% respectively. The 45-74 age group will increase by 16% with the over 75 age group increasing even faster. These changes will have a major impact on the type, range and level of services required by communities in the region.

Opportunities and barriers to sustainable development in health and social care

There are both opportunities and barriers to achieving sustainable development in the region. The opportunities include an increased policy focus on inequalities which provides opportunities to leverage investment and procurement which will reduce inequalities. The impact of the health and social care system on supply chains, the labour market and the consumption of energy and other commodities as well as production of harmful waste products also present clear opportunities to benefit the regional economy and environment. Increased funding over the next spending review period is also an important opportunity. On the other hand, there are also significant barriers and challenges. Information and capacity gaps pose major challenges to health and social care organisations in delivering policies with a beneficial impact on sustainable development in the region. A culture and values system built on short-termism, particularly in funding and performance management horizons also present fundamental barriers to progressive change and to the sustainability of the health and social care system as a whole.



Potential impact of future policy trends

The combination of increased commissioning, the creation of new organisations to deliver health and social care services and policies which increase the role of market forces in the provision of services may have a cumulative negative effect on progress towards sustainable development by making strategic action more difficult to coordinate and implement. On the other hand, a more strategic approach to commissioning may offer the opportunity to influence a range of health and social care providers, from outside the NHS and local authorities to mainstream sustainability concerns. However, in doing so

the NHS and local authorities will face major capacity and resource challenges and information gained in the process of conducting this study indicated that existing systemic capacity in the areas of strategic procurement and commissioning is weak. This issue is addressed in the recommendations.

Existing and potential linkages to regional strategies

The study highlights the need to address key aspects of the health and social care sustainable development framework at national, regional and local level. The study examined a range of regional strategies including the economic strategy, planning guidance, the social, housing, food and farming and environment strategies, the sustainable development framework and the framework for employment and skills to assess the extent to which these strategies made linkages to the health and social care economy.

The contribution of the health and social care sector in the regional economy is only partially recognised in the Regional Economic Strategy. The linkages between public health, health inequalities and health and social care investment and expenditure are insufficiently developed. In addition, linkages between the health and social care economy and the region's Sustainable Development Framework could be given added emphasis. For example, these areas include transport, agriculture and food production, poverty and deprivation, energy, and learning and skills.

The Framework for Regional Employment and Skills Action highlights many of the strategic skills challenges faced by the region. The particular skills needs of the social care sector will need to be addressed in order to avoid serious recruitment and retention problems. The region's Sustainable Farming and Food Strategy Delivery Plan identifies a number of opportunities for localising food production, reducing the distance between producer and consumer, links between public food procurement and regional and local supply chains.

There is a clear link between the Regional Housing Strategy, provision of affordable good quality housing in the region generally and particularly for health and social care workers, and the achievement of sustainable communities in a period of rapid growth in the region.

Recommendations

The Health and Social Care Sustainable Development Framework provides a context for our recommendations.

First, individual NHS Trusts, PCTs, local authorities and other health and social care organisations can take immediate and practical action to:

- Reduce waste (particularly harmful waste).
- Minimise travel (in the whole, recognising both patient/user and staff travel)
- Reduce energy and water consumption.
- Tackle low pay and poor quality (including insecure) employment.
- Promote the stability and sustainability of the local and regional economy and boost employment through purchasing locally produced goods and services.
- Taken together, these actions can make a real difference to the regional economy (including regeneration) and environment and can contribute to achieving sustainable development.

Second, the NHS and local authorities are major employers and purchasers of goods and services in the region and have a significant influence in the regional economy. The quality of health and social care jobs in addition to where employment, goods and

services are sourced from can have an important impact in promoting regeneration, reducing health inequalities, in addition to addressing behavioural issues such as smoking, alcohol and drug use, diet, exercise and health and safety.

Third, the NHS and local authorities are not just service providers and purchasers of goods, services and buildings. They also have a significant impact on community well-being and public health through their role in planning, managing and regenerating communities. This is reflected in the scope of the Health and Social Care Sustainable Development Framework.

Fourth, this report has referred to the 'health and social care economy' in the region not just because of its economic importance, but also because of the need to have a perspective on health and social care as an integrated system of services in a 'continuum of care'. It has focused on the NHS and local authorities as major service providers. Much wider use of commissioning and contracting may be inevitable in the drive to a plurality of service providers, particularly through expanding the role of private health and social care companies and an increased role for social enterprises in the voluntary sector. Hence it is important that the private and voluntary sectors share the commitment of NHS and local government to sustainable development. It will be important that there is a strict and rigid framework for the coordination and management of increased commissioning and diversity in service provision to ensure that sustainable policies and practices are adopted across the full range of service providers, regardless of whether they are in the public, private or voluntary sectors. It is important also that this process involves raising the standard of policies and practices among all partners rather than lowering the standard of all to the lowest common denominator. Otherwise there will be no net gain for the region if service provision is switched from the public to the private/voluntary sector. This is an agenda that cannot be left to chance or watered down to meet the requirements of sectional interest.

Fifth, this study provides clear evidence that it does matter who provides services and how they are provided. Employment, procurement, planning and management policies and practices all have a key bearing on the extent to which sustainable development will be achieved. There are very substantial differences across all these areas between providers and these present a significant barrier to coordinated strategic action.

The penultimate theme concerns performance management, which is a core part of the government's modernisation agenda in the NHS, local government and other public services. There is considerable pressure to meet targets with little time or resources available to carryout work or initiatives that are additional to mainstream work designed to meet the targets. This could mean that sustainability will always be marginalised. It is therefore essential that performance management regimes of targets, assessments and inspections be amended to include sustainable development objectives. This is doubly important because consultation revealed the extent to which NHS, local government and independent sector staff feel that performance management targets set priorities for both strategic and operational policy and therefore constrain their ability to reflect sustainability concerns as part of their mainstream priorities.

The research identified a number of information gaps which will need to be addressed in order to assess progress in meeting sustainable development objectives and reducing health inequalities. There is always a cost attached to additional research and data capture so it will be necessary to critically assess the value to be gained from compiling additional data so that disproportionate effort is not consumed in gaining information of limited use. However, additional information and data on contract employment, the impact of commissioning and the sourcing of procurement will be vitally important in setting sustainability targets.

Finally, the East of England and the South East are unique in having to plan and prepare for expenditure and employment growth in the NHS at the same time as planning for areas of major housing and population growth. How and where this growth is achieved, the quality of development, affordability of housing, the degree of integrated service

provision and the creation of local jobs will have a very significant impact on the future quality of life and community well-being in the region. Balancing the competing demands of NHS job growth, providing genuinely affordable housing, reducing inequalities and creating sustainable development in growth areas will not be easy. It creates both opportunities and threats for the region. Clearly the timely provision of a continuum of integrated health and social care services will only be achieved if the planning and development process involves health and social care planners at an early stage. Success at addressing sustainable development will depend on the incorporation of planned action to improve public health and reduce inequalities.

The recommendations draw on the research carried out as part of this study and the four consultation events held in Cambridge, Chelmsford, Hitchin and Newmarket in September and November 2003. They are organised under the seven elements of the Health and Social Care Sustainable Development Framework.

Improving community well-being and public health in the local and regional economy

Whilst initiatives such as the Kings Fund report *Claiming the Health Dividend* and the adoption of Corporate Social Responsibility by private companies and public bodies begin to address some social, economic and environmental issues, they fail to address the full implications of sustainable development. The Health and Social Care Sustainable Development Framework provides such a mechanism and should be adopted by all NHS, local authorities and other health and social care organisations. It fits with the regional sustainable development framework and is a means of integrating health and social care planning and provision with other regional strategies.

1. All regional partners and individual NHS Trusts, PCTs, local authorities, voluntary sector organisations and trade unions should indicate how they intend to promote the Health and Social Care Sustainable Development Framework and distribute a summary of the findings of this report to their staff, suppliers, service users and the public. In particular they should prepare a checklist of actions designed to implement the recommendations of this report.

2. NHS Trusts, PCTs and local authorities should start with pragmatic and achievable projects and policies at the local level to achieve quick wins and demonstrate good practice which can be mainstreamed to other parts of the organisation and across the region.

3. The Regional Development Agency, the Regional Assembly, the Department of Health and other regional partners in the health and social care sector should jointly agree a host organisation or group of organisations which will be responsible for promoting and monitoring implementation of the Health and Social Care Sustainable Development Framework.

4. A basket of sustainable production and consumption indicators should be developed for the health and social care economy in the region so that progress towards achieving sustainable development can be regularly assessed.

5. Each Strategic Health Authority should consider establishing a fund to finance sustainable development projects and initiatives which require some initial additional investment in order to kick start them. This fund could also help to maximise access to grants to promote and initiate sustainable development from government departments.

6. The Regional partners should examine how they can provide support and advice to increase the quality of product and service inputs from Small and Medium Enterprises (SMEs) in the region so that they can better take advantage of opportunities afforded by NHS and local authority research and procurement.

Building capacity to deliver sustainable development and quality services

7. The Health and Social Care Sustainable Development Framework should be used in conjunction with Health Scrutiny, Health Equity Audits, Health Impact Assessments and Sustainability Appraisals to monitor and evaluate progress and identify barriers.

8. The sustainability, social, economic and environmental criteria and frameworks used in best practice NHS and local authority procurement should be applied to the commissioning of health care from the private and voluntary sectors.

9. Procurement and commissioning officers in NHS Trusts, PCTs and local authorities should be required to have training in the application of the Health and Social Care Sustainable Development Framework for the supply of goods and services and construction projects.

10. All NHS and local authority purchasing of goods and services should develop a coding system to identify the location and level of local/regional production, assembly, distribution and supply of goods and services. This will enable further work to be carried out to identify supply chains and linkages to manufacturing and services in the region.

11. There are likely to be many more examples of good practice in the region than those identified in this report and we recommend that the proposed new Regional Centre of Excellence should be responsible for compiling a databank of good practice and ensuring this is widely available across the region.

12. The NHS and local authorities should request that the government reviews and provides definitive guidance on the scope for the use of social, environmental and sustainability criteria in procurement governed by European Commission regulations. If necessary, it should seek to change the procurement regulations to facilitate local provision to meet local needs.

13. Environmental and sustainability guidelines and frameworks developed by NHS PASA and NHS Estates should be mainstreamed in all procurement by NHS Trusts, PCTs and local authorities irrespective of whether they are procuring directly or through these agencies.

14. The NHS PASA and NHS Estates' environmental, social, economic and sustainability guidelines and frameworks should be a condition of contract in commissioning health and social care from the private and voluntary sectors.

15. NHS trusts and PCTs should be required to report details of service contracts (type of service, number of jobs, terms and conditions) to SHAs, who should hold a central database.

16. NHS organisations should adopt the local government Code of Practice on Workforce Matters (which has statutory force in local government but not in the NHS) for the procurement and commissioning of all services which involve a transfer of staff from one employer to another.

17. The formation of SHA Procurement Confederations should be encouraged and could play a major role in encouraging NHS Trusts and PCTs to implement sustainable procurement and ensure that best practice is exchanged between NHS and local government.

18. Sustainable development should be mainstreamed through the performance management regime. Sustainable development should be non-negotiable and with targets to achieve quick wins and to integrate sustainability criteria into the prevailing performance management culture.

19. Each health and social care organisation should examine how it can mainstream sustainable development, what mechanisms will be needed to take this agenda forward

and the skills which will be needed. This will have financial implications but these should be compared to the cost of doing nothing.

20. Regional partners and the voluntary sector need to carefully assess the role and capacity of the sector in the future provision of health and social care in the region. Whilst the government is encouraging greater involvement of social enterprises in the provision of services this has many significant implications for the sector, not least its role as community advocate, the level of resources required to compete for contracts and the potential commercialisation of the sector. There will be opportunities for community or social enterprise initiatives but these should be progressed carefully to ensure the principles and values of the sector are maintained whilst also mainstreaming sustainable development.

21. Regional partners need to examine further the impact of the increasing use of voluntary and community sector providers on the 'additionality' which was previously offered by this sector on top of statutory services.

Tackling health inequalities

22. Research should be undertaken to identify the impact of commissioning of health and social care services on the quality of service as experienced by users, the quality of employment, the regional economy and its role in reducing health inequalities.

23. More detailed analysis is needed to determine how a health and social care economy approach can have a positive approach for equalities groups (such as race, gender, age, disability, sexual orientation) in the region.

24. Recruitment and training of NHS and local authority staff from regeneration areas and areas of multiple deprivation should be intensified because of the important gains which can be achieved through employment in reducing health and income inequalities. Intermediate Labour Market (ILM) initiatives and job guarantee schemes are routes to pursue.

25. The continued existence of low pay in the NHS and local authority social care must be addressed as part of programmes to reduce health inequalities.

26. The provision of adequate and affordable social and key worker housing in close proximity to major health and social care facilities is essential and should be a key component of local plans, development proposals and Section 106 agreements with developers.

Enhancing democratic accountability

27. Health Scrutiny has an important role in assessing the progress and implementation of the Health and Social Care Sustainable Development Framework and the recommendations of this report. Additional resources may be required to ensure scrutiny is comprehensive, rigorous and effective and engages all stakeholders in the health and social care economy.

28. Democratic accountability and transparency should be major criteria in the formation of any new Trusts, joint ventures and partnerships in the health and social care economy in the region.

29. NHS organisations and local authorities should ensure that community organisations, particularly those representing equalities groups, are fully involved throughout the health and social care planning process, the setting of sustainable development targets and the reconfiguration of services. These principles should also apply to workforce and trade union involvement.

Identifying direct and indirect social, economic and environmental costs and benefits

30. Integrated impact assessments (including sustainability appraisals) should be carried out at an early stage of the planning process for all medium-sized and large development projects.

31. Proposals and business cases for large and medium sized projects should be required to include a travel plan which addresses sustainability issues for staff and patients, users, visitors, NHS and local authority business and the distribution of goods and services to NHS and local authority premises.

32. The Health and Social Care Sustainable Development Framework should be incorporated into all risk management assessments in options appraisals and outline business cases.

33. There is an inevitable tension between traditional Value for Money criteria, which is narrowly based and does not account for the whole cost or impact of a project or policy, and social, economic and environmental criteria which underpin the Health and Social Care Sustainable Development Framework. All project business case and procurement guidelines should be reviewed to ensure that these criteria are fully included at all stages.

34. Training and awareness programmes should be designed for key NHS and local authority staff on the principles of sustainable development and their application in the health and social care economy.

Integrating health and social care planning and provision with regeneration and development

35. The review of the Regional Economic Strategy in 2003/04 should take account of the recommendations of this report and ensure that the health and social care economy and sustainable development framework are integrated into the revised strategy.

36. Where possible new development should be targeted in regeneration areas. This provides an opportunity to link growth and development with regeneration objectives and to integrate the planning of service improvements and job growth to meet community needs.

37. The terms of reference for regional and sub-regional growth, spatial and development studies should include a requirement to integrate health and social planning into their analysis and recommendations.

38. The linkages between the NHS and local government with the science and technology base in Greater Cambridge and across the region should be strengthened in order to maximise the development and application of new technologies and services.

Valuing natural resources and long-term planning

39. The NHS should take a strategic approach to environmental impact as part of its sustainable development strategy.

40. Whole life costs and impacts should be used to identify the total cost and consequences of projects and development.

General Cross-Cutting Recommendations

41. All these strategic recommendations should be operationalised at a local and organisational level by the drawing up of organisational and management checklists to address the issues and recommendations set out in the Health and Social Care Sustainable Development Framework above. These checklists – the extent to which

these recommendations are already operationally implemented or not, should then be used to draw up a scheduled action plan and monitoring framework.

Action programme for implementation of recommendations

We have categorised the recommendations into two groups – immediate and medium term (see Table i). Some recommendations require a longer term period for full implementation but they have been categorised medium term on the basis that implementation needs to start sooner than later.

Many of the recommendations are not financially resource intensive although they will require technical and managerial capacity. Most of the recommendations in the immediate category can be implemented relatively quickly. Some may require approval of NHS and PCT Boards or local authority cabinet/committee but most can be implemented by senior management teams forthwith.

Table i: Recommendations categorised by immediate and medium term action

Sustainable Development Framework	Recommendations	
	Immediate	Medium term
Improving community well being and public health	1, 2, 3, 4	5, 6
Building capacity to deliver sustainable development	7, 8, 9, 11, 13, 14, 15, 16, 19	10, 12, 17, 18, 20, 21
Tackling health inequalities	24, 25, 26	22, 23
Enhancing democratic accountability	28, 29	27
Identifying direct and indirect social, economic, and environmental costs	30, 31, 32	33, 34
Integrating health and social care planning and provision	35	36, 37, 38
Valuing natural resources and long-term planning	40	39
General cross-cutting	41	41

Introduction

The Department of Health East of England Public Health Group commissioned the Centre for Public Services (with the Nuffield Institute for Health at Leeds University and the Policy Research Institute at Leeds Metropolitan University) to quantify the impact of health and social care on sustainable development in the East of England region.

Project objectives

- To quantify the present and future role of the health and social care economy (public, private, community and voluntary sectors) in the regional economy.
- To identify areas in which the health and social care sector impacts on and contributes to regional economic objectives.
- To analyse the sub-regional dynamics of achieving this.
- To identify barriers and opportunities to achieving this.
- To analyse the equalities dimensions of the economic contribution of the health and social care economy.
- To establish best practice approaches in research, analysis and consultation on sustainable development and public policy.

Four consultation events were held. An initial regional consultation event to launch the project was held on the 8th September at the GO-East offices in Cambridge. Three sub-regional consultation events were held on 10, 11 and 12 November 2003 at Chelmsford (Essex SHA), Newmarket (Norfolk, Suffolk and Cambridgeshire SHA) and Offley Hall, Hitchin (Bedfordshire and Hertfordshire SHA). They were attended by representatives from a wide range of organisations including SHAs, NHS Trusts, PCTs, local authorities, regional agencies, voluntary and community organisation and trade unions.

A Steering Committee was formed with representation from the regional partners to oversee the project. It met three times and members also attended the sub-regional consultation events.

The research and report preparation was undertaken between July and December 2003.

Section 1: Health and Social Care Services in the East of England

The health and social care structure in the East of England comprises six distinct elements:

- East of England Public Health Group
- Strategic Health Authorities
- Primary Care Trusts
- NHS Trusts
- Local Authority Social Services Departments
- The private, voluntary and community sectors

1.1 The East of England Public Health Group

The Regional Public Health Groups (RPHGs) are the Department of Health's presence in the Regional Government Offices where they work within teams from seven other Government Departments. RPHGS are part of the Department of Health's Health and Social Care Standards and Quality Group, led by the Chief Medical Officer. The East of England Public Health Group works closely with regional partners such as East of England Development Agency, the East of England Regional Assembly, the Health Development Agency and Strategic Health Authorities.

1.2 Strategic Health Authorities

Strategic Health Authorities (SHAs) engage in strategic planning for local health and healthcare services. They form a bridge between the Department of Health and the local NHS. There are three SHAs in the East of England region:

- Norfolk, Suffolk and Cambridgeshire
- Bedfordshire and Hertfordshire
- Essex

Together their boundaries are coterminous with the Government Office East of England Region.

1.3 Primary Care Trusts

Primary Care Trusts (PCTs) are responsible for the planning and commissioning of health and healthcare services at a local level. They are increasingly the fund holders for both primary and secondary care and hold around 75% of the NHS budget. There are 41 PCTs in the East of England region.

1.4 NHS Trusts

NHS Trusts are primarily healthcare providers. Trusts manage a range of services including hospital, community health and ambulance services, and specialist care. There are 30 NHS hospital, ambulance, mental health and community Trusts in the East of England region.

1.5 Local Authorities

Local authorities are currently responsible for ensuring the provision of social care to people within their boundaries, although this responsibility is increasingly exercised jointly with PCTs. While in the past they also provided care directly themselves, they now increasingly commission this care from the market. However, they retain statutory responsibility for the services and usually take on a strategic planning and managing role as well as the gatekeepers to social care by carrying out assessments of need through social workers and other professionals.

There is a mixture of two-tier and single-tier local government in the region. There are six County Councils and four Unitary Authorities in the region, with responsibility for social care. District Councils do not have statutory responsibility for social care but some housing staff in District Councils will have responsibilities which overlap with health and social care staff.

1.6 The Private, Voluntary and Community Sectors

Private provision of healthcare is marginal but established in the region. There are eleven private hospitals in the region, operated by three major private providers. In addition, the private sector also runs a range of nursing and residential homes and other social care services. These range from large national firms to small independent businesses. Finally, the voluntary and community sector are also increasingly involved in the provision of some social care facilities and also health and healthcare advisory services.

Section 2: Defining Sustainable Development

Defining sustainable development for the health and social care system involves developing various existing understandings of sustainable development to suit the specific requirements of the health and social care system. This section considers first the range of alternative definitions of sustainable development before highlighting the specific contribution made by the health and social care system. It goes on to propose a refined definition tailored to recognise the particular and significant contribution that health and social care can make to achieving sustainable development.

2.1 Definitions of sustainable development

There are many definitions of sustainable development ranging from overly broad, almost utopian, 'wish lists' to very narrow environmentally focused approaches.

More than the environment

Sustainability and sustainable development are often associated primarily with an environmental focus on the use of natural resources, the quality of the atmosphere, air and water, and the quality and quantity of habitats for plant and animal species. However, it is well documented that the concepts extend beyond the natural environment to society, politics and the economy. A further common misunderstanding is that sustainability refers only to 'carrying things'. In reality, however, it refers to radical change. The definition developed below relies on this broader and more sophisticated view of sustainability and sustainable development.

More than corporate citizen/corporate social responsibility

The corporate citizen and Corporate Social Responsibility (CSR) concepts have received a great deal of attention in recent years and have been proposed as a potential model to improve the sustainability of the health and social care systems.

Corporate citizenship and CSR are one and the same thing. They encourage and facilitate business, ranging from multinational corporations to local companies, to take account of the economic, social and environmental impact of the way that they 'do business'. Companies are encouraged to accept that they have a social responsibility to the communities in which they operate with the objective of minimising the negative impact their core business has on the local and global community and environment. The corporate citizen and CSR approach in the commercial world also play a part in the marketing strategies, particularly of multinational businesses aiming to take advantage of the ethical and environmental interests and concerns of consumers. They are additional to the core objective of a business which is to be commercially successful in a competitive market environment. There is also controversy regarding the business practices of many firms who have adopted corporate citizen and CSR policies. For instance, Enron loudly proclaimed its credentials in this regard before its collapse, and other well known multinationals firms have been targeted as a result of their employment and environmental practices in developing countries.

While the adoption of such approaches in the private sector is certainly welcome, they do not provide a sufficiently robust or appropriate conceptual framework for the health and social care providers or the public sector more broadly. Neither the NHS or local authorities are businesses in the normal sense of the term, though they do share some concerns with the business world, such as the importance of efficiency

and effectiveness. However, the NHS and local authorities are also part of a wider welfare state, which incorporates the responsibilities of the state toward its citizens. While popular language usage may ascribe 'corporate' objectives to public bodies, these are more properly organisational objectives which address social need, not sectional and commercial interest. Public bodies do not seek to make a profit and the NHS is entirely funded by the tax-payer.

Corporate citizen and CSR approaches focus on the behaviour of actors within social structures – the citizen concept. However, the NHS is part of the institutional structure of society. It serves citizens, it is not one itself. It embodies the core values of society such as democracy, social justice and equality. These goals are the central values of the NHS, not a bolt on 'optional extra' or part of a sophisticated marketing strategy.

While corporate citizen/CSR approaches have a role to play in improving the accountability and performance of the private sector, *sustainable development* is a more appropriate approach for the NHS and local authorities who have the primary role in addressing health and social need and in managing the 'health and social care economy'.

The Brundtland Report

The Brundtland Report: *Our Common Future* (World Commission on Environment and Development, 1987) drew up the original definition of sustainable development over 15 years ago, in 1987. It stated that:

> "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987).

Sustainable Communities

More recently, the government has promoted the concept of 'sustainable communities'. However, the government's definition of sustainable communities is a series of essentially high level objectives which draw almost universal agreement. There is only one specific reference to health, although most of the objectives can be assumed to have a public health, health and social care component because they are so broadly defined (ODPM, 2003):

- A flourishing local economy.
- Strong leadership that responds positively to change.
- Effective participation by local people, groups and businesses especially in the planning and long term stewardship of their community.
- A safe and healthy local environment with well designed public space.
- Sufficient size, scale and density and the right layout to support basic amenities in the neighbourhood.
- Good public transport.
- A well-integrated mix of decent homes of different types and tenures.
- Good quality local public services.
- A diverse public, vibrant and creative culture.
- A sense of place.

This definition is very broad. To be successful in making the NHS and other health and social care organisations address the challenges of sustainable development a more specific framework will be needed.

Government's Sustainable Development strategy principles

The Rio Earth Summit gave rise to Local Agenda 21, which has since been marginalised. However, the government's approach to sustainable development as set out in *A Better Quality of Life – a Strategy for Sustainable Development for the UK* (1999) did reflect the key themes of the Rio Declaration on the Environment and Development. This report and the UK Sustainable Development Commission maintain that sustainable development can be achieved by meeting four objectives:

- Social progress which recognises the needs of everyone.
- Effective protection of the environment.
- Prudent use of natural resources.
- Maintenance of high and stable levels of growth and employment.

However, many critics deem the reliance on 'high' levels of growth to conflict with the other principles of sustainable development.

A Better Quality of Life adopted the key themes of the Rio Declaration with ten principles and approaches:

- Putting people at the centre
- Taking a long term perspective
- Taking account of costs and benefits
- Creating an open and supportive economic system
- Combating poverty and social exclusion
- Respecting environmental limits
- The precautionary principle
- Using scientific knowledge
- Transparency, information, participation and access to justice
- Making the polluter pay

The UK Sustainable Development Commission has condensed the above into six principles:

- Putting sustainable development at the centre
- Valuing nature
- Fair shares
- Polluter pays
- Good governance
- Adopting a precautionary approach

Sustainable development in the East of England

The East of England Regional Assembly and the East of England Sustainable Development Round Table developed a *Sustainable Development Framework for the*

East of England, which is compatible with the Government's strategy. The framework has nine high-level objectives, each with a number of indicators.

The nine high level objectives are:

- To achieve sustainable levels of prosperity and economic growth.
- To deliver more sustainable patterns of location of development, including employment and housing.
- To protect and maintain our most valuable regional assets such as designated habitats, landscapes of natural beauty and our historic built heritage, and to improve the wider environment by means of adequate investment and management.
- To reduce our consumption of fossil fuels.
- To achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region.
- To use natural resources, both finite and renewable, as efficiently as possible, and re-use finite resources or recycled alternatives wherever possible.
- To minimise our production of by-products or waste, aiming for 'closed systems' where possible.
- To avoid using the global environment to underwrite our own unsustainable way of life (e.g. dependence on unsustainably produced and/or transported food imports or timber).
- To revitalise town centres to promote a return to sustainable urban living.

The Framework recognised the regional strengths in health, with above average life expectancy and relatively lower death rates compared to the national average. It identified a number of challenges, such as reducing the disparity in health experience between deprived and better-off areas, meeting the demand for NHS services in large retirement areas (mainly around the coast), reducing the above average death rate from road accidents and countering the increase in smoking.

The Framework proposed a number of key objectives for health:

- To increase the proportion of years lived when experiencing good health.
- To narrow the income gap between the poorest and wealthiest parts of the region to reduce the health differential.
- To reduce traffic growth, the environmental impacts of traffic, and improve road safety.
- To reduce stress, especially in concentrated areas of deprivation.
- To improve the provision and condition of affordable housing.
- To encourage closer collaboration between health and local authorities in local policy development and strategic planning.
- Strategic planning.
- To make greater use of IT links to specialists by GPs for initial consultations.
- To promote better public transport links to major hospitals.
- To promote the health advantages of walking, cycling and community based activities.
- To improve data collection and projections to identify people most at risk of poor health and low quality of life.

2.2 The provider role of the NHS

The NHS is the main provider of healthcare in the UK. It is the largest organisation in Europe and is recognised by the World Health Organisation as one of the best health services in the world.

Across the country in a typical week:

- 1.4 million people will receive help in their home from the NHS.
- More than 800,000 people will be treated in NHS hospital outpatient clinics.
- 700,000 will visit a NHS dentist for a check-up.
- NHS district nurses will make more than 700,000 visits.
- Over 10,000 babies will be delivered by the NHS.
- NHS chiropodists will inspect over 150,000 pairs of feet.
- NHS ambulances will make over 50,000 emergency journeys.
- NHS Direct nurses will receive around 25,000 calls from people seeking medical advice.
- Pharmacists will dispense approximately 8.5 million items on NHS prescriptions.
- NHS surgeons will perform around 1,200 hip operations, 3,000 heart operations and 1,050 kidney operations.[1]

The NHS faces major challenges in responding to exponentially increasing demand for healthcare services, new types of illness and new types of treatment, an ageing population and tackling persistent health inequalities. The challenges faced by the NHS are similar to those posed as part of a broad approach to sustainable development which is discussed below. The way in which reform aimed at addressing these challenges is achieved will determine the future relationship between the NHS as a healthcare provider with sustainable development.

2.3 The economic role of the NHS

Public expenditure on health and personal social services totalled £79bn in the UK during 2002. The East of England region accounted for £5.5bn of this expenditure (HM Treasury, 2003). Health spending is forecast to rise in real terms by 7.3% per annum to 2007/08. The NHS accounts for about £65bn of this total. Local authorities' social services departments spend a further £15bn per annum, providing and financing care and support for children and their families, older people and those with physical and learning disabilities. The staffing of these services, the purchasing of a wide range of goods and services needed to deliver services and the renewal and maintenance of the health and social care infrastructure (hospitals, health centres, clinics and surgeries, residential care and very sheltered housing facilities) makes health and social care a significant economic sector in the national, regional and local economy. Further, the role of health and social care organisations in promoting health, returning people to health and preventing ill-health has considerable economic benefits.

A study of the health and social care economy must also include private and voluntary sector providers. Although the NHS has a dominant role in health provision,

[1] These facts are edited extracts from the NHS Website.

the private healthcare sector has an established position. The position is somewhat different in social services where local authorities have switched or are in the process of switching to a strategic commissioning role, with a substantial role for the private sector in the provision of care.

Box 1: The Economic Contribution of Health and Social Care

The NHS is the largest employer in Europe and Britain with over 1.1m staff, including around 100,000 in the East of England region. Overall, health and social care supports upwards of 280,000 jobs in the region when the full effect of employment in the NHS, local authorities, the health and social care supply chain and jobs supported in the local economy as health and social care employees spend their wages in the local economy are considered.

The NHS in the East of England spends £1.6bn per annum purchasing goods and services and maintaining its estate. This expenditure is on a wide range of goods and services from clinical supplies and medical equipment to food, office supplies and energy. It is estimated that the health and social care economy supports a total of 60,000 additional jobs in the regional economy, through the supply chain, including more than 22,500 jobs in the manufacture of pharmaceuticals and medical and surgical equipment.

Staff wages account for over 60% of the NHS budget (some £2.5bn annually in the East of England), which makes a significant contribution to the regional economy. This in turn has a knock-on effect by supporting jobs in manufacturing, distribution, retail, leisure and other services.

The extent to which the goods and services purchased by the NHS and local authorities are produced in the region, for example from local farms and factories, is important for the regional economy and labour market. How these goods and services are produced, for example the natural resources consumed in their production, the pollution caused by transportation from farm or factory to hospitals and other facilities, and the pay, conditions and quality of employment of the workforce, also has important knock-on effects for the performance and sustainability of the regional environment and economy. Increased local production of goods and services could strengthen the regional economic base and the viability and security of manufacturing, service and research centres in the region. Additionally, where staff are located and whether they are drawn from the population of the East of England, commute from outside the region or have migrated from other parts of England and the UK or even abroad also has implications for the sustainability of the NHS itself and of the wider economy, society and environment.

The NHS and local authorities have a substantial annual building programme to provide new hospitals and health centres and improve existing facilities and infrastructure. The designated major growth areas in the region, in Thames Gateway, the London-Stansted-Cambridge corridor and in the Milton Keynes-South Midlands area, will require significant spending to provide new health and social care infrastructure capable of coping with the additional demands likely to be placed upon them.

More than employing, buying and building

The NHS is more than a service provider, employer, purchaser and builder. Real growth in general public expenditure on health, and the expansion of the health and social care infrastructure to meet social needs in the growth and development areas in the region, requires the NHS to have a key role in regional strategies and planning. Whether the planned increased investment and spending on health and social care will have an impact beyond the delivery of health and related services is dependent

on appropriate planning, prioritising and targeting of resources as part of an integrated public policy approach. If this approach is adopted then there is considerable scope for health and social care spending to assist in regenerating communities, in tackling persistent inequalities (including health inequalities) and in driving sustainable economic growth and social development.

These roles, in turn, require the NHS and local authorities to have the managerial and technical capacity to plan, employ, procure, build and ensure that health and social care facilities are an integral part of the growth and development of genuinely sustainable communities. This is essential to avoid the gaps and lags in provision which were a common outcome of previous plans and expansion strategies. This additional planning, regenerating and managing role can be summarised as:

- Planning and assessing impact
  - Integrating the provision of health and social care services with new housing, transport and employment.
  - Meeting the health needs of different equality groups.
  - Continuous health, social, economic and environmental impact assessment as part of public policy, economic development and regeneration strategies and action plans.
- Regenerating and tackling health inequalities
  - Recognising that the role of the NHS and other health and social care providers is about more than service provision.
  - Reducing inequalities through investment and planning.
  - Using the health and social care economy as a key lever in social and economic regeneration projects.
- Managing
  - Researching health and social needs.
  - Enhancing the capacity to plan and deliver services.
  - Full and rigorous procurement evaluation.
  - Facilitating meaningful participation and involvement of users and staff.
  - Integrating community well being, economic and environmental targets.
  - Supporting innovation.
  - Embedding a holistic approach to sustainable development in all health and social care organisations.

2.4 Sustainable development in health

The government has also drawn up a *Framework for Sustainable Development on the Government Estate* which is soon to have set targets for travel, waste, energy, procurement, estate management, biodiversity and social impact. The NHS Purchasing and Supply Agency has established a sustainable development policy and has steering groups on such issues as travel and transport and waste management. It has also issued guidance on environmental procurement and facilities management.

The NHS environmental strategy sets out ways in which the Department of Health's commitment to sustainable development can be implemented (NHS Estates, 2002). It proposes that the NHS recognises and appraises the impact that its facilities,

services and activities have on the environment and how social and economic factors impact on health. It recommends a comprehensive approach to planning and providing services, the introduction of Healthy Transport Plans, adopting best practice and innovation in meeting energy, waste, transport and procurement targets and introducing Environmental Management Systems.

A holistic definition of sustainability for the NHS and the health and social care economy

An assessment of all the government and NHS specific documentation, alongside that produced within the East of England region, indicates that there are seven key elements to sustainable development in health and social care. They draw on the principles, strategies and frameworks discussed above. The first is an overarching community well-being and public health objective and the remaining elements apply the six principles of sustainable development to health and social care:

1. Improving community well-being and public health by taking account of the effect of health and social care policies and resource allocation on production, supply and employment in the local and regional economy.
2. Ensuring health and social care organisations have the capacity, skills and intellectual capital to deliver good quality and sustainable services. Funding and performance management regimes should provide continuity, security and facilitate long-term planning (Sustainable development at the centre).
3. Promoting positive health and well-being, tackling inequalities in health, the equitable distribution of health and social care resources and recognising the needs of all equalities groups2 in regeneration and development plans (Well-being and Fair shares).
4. Enhancing democratic accountability including improving forms of accountability, transparency, access and freedom of information and encouraging user, community and staff participation in the planning, design and delivery of health and social care (Good governance).
5. Taking account of the direct and indirect social, economic and environmental costs and benefits in the planning, building and procurement of goods and services based on recycling and resource minimisation strategies (Polluter pays).
6. Integrating health and social care planning and provision with housing, education, commercial, social facilities and employment in the regeneration and growth of the region and undertaking comprehensive impact and risk assessments for all development (Adopting a precautionary approach).
7. Valuing natural resources and taking account of environmental and ecological issues in health and social care planning and development, including mainstreaming concerns for the well-being of future generations (Valuing nature).

[2] The Northern Ireland Act (1998), provides a useful and comprehensive definition of equalities groups as being: religious affiliation, political opinion, racial group, age, marital status or sexual orientation, men and women generally; persons with a disability and persons without; and persons with dependants and persons without.

The Health and Social Care Sustainable Development Framework

Principles of Sustainable Development

1. Improving community well-being and public health by taking account of the effect of health and social care policies and resource allocation on production, supply and employment in the local and regional economy.

2. Ensuring health and social care organisations have the capacity, skills and intellectual capital to deliver good quality and sustainable services. Funding and performance management regimes should provide continuity, security and facilitate long-term planning.

3. Promoting positive health and well-being, tackling inequalities in health, the equitable distribution of health and social care resources and recognising the needs of all equalities groups in regeneration and development plans.

4. Enhancing democratic accountability including improving forms of accountability, transparency, access and freedom of information and encouraging user, community and staff participation in the planning, design and delivery of health and social care.

5. Taking account of the direct and indirect social, economic and environmental costs and benefits in the planning, building and procurement of goods and services based on recycling and resource minimisation strategies.

6. Integrating health and social care planning and provision with housing, education, commercial, social facilities and employment in the regeneration and growth of the region and undertaking comprehensive impact and risk assessments for all development.

7. Valuing natural resources and taking account of environmental and ecological issues in health and social care planning and development, including mainstreaming concerns for the well-being of future generations.

Operational Responsibilities

- Service provision
- Employing staff
- Buying - goods and services - food - childcare - energy - waste travel and transport
- Building and maintaining health and social care infrastructure
- Regenerating and tackling health inequalities
- Managing and capacity building
- Planning and assessing impact

Targets and Achievements

Section 3: Inequality, Health and Health Inequalities

3.1 Inequality, Health Inequality and Sustainable Development

Inequality and health inequality are major barriers to the achievement of sustainable development. The framework set out above for understanding sustainable development in the health and social care context places a key emphasis on addressing issues of well-being and fair shares. Early death and ill-health (which prevents the enjoyment of life) are thus important concerns and there is overwhelming evidence to suggest that addressing the health needs of the least advantaged is the most urgent priority. However, inequality and health inequality impact upon sustainability in other ways too. Persistent inequality is not only fundamentally unjust, it also makes society and its institutions less stable and prone to conflict and crime.

3.2 Health and Inequality

The 1998 Acheson Report set out a range of close linkages between social and economic inequality and inequalities in health and health and social care provision (Acheson, 1998). While the East of England as a whole is prosperous compared with many other English regions, significant pockets of poverty still persist. The region has 30 electoral wards in the bottom 10% of the national Indices of Multiple Deprivation (IMD) and 91 wards in the bottom 20%. These wards are largely located around the coastal and urban fringes of the region in Great Yarmouth, Norwich, Harlow, Tendring, Peterborough, Waveney, Thurrock, Basildon and Ipswich. These pockets of poverty do not only contrast with the general prosperity of the region but often they sit side by side with areas of prosperity. For instance, nearly half of all local authority districts in the region contain at least one ward in the most deprived 20% of the national IMD. Where pockets of inequality exist alongside affluence, the impact of relative as well as absolute poverty must be a key concern for policy makers.

The causes of inequality, though, are complex and varied. The Indices of Multiple Deprivation recognise this and take account of income, employment, health, access to education and quality housing. Deprivation and social exclusion is about the relationship between income and a range of other variables which may impact upon income and poverty but also result from it:

> "Social exclusion is principally about income but it is about more than material poverty. It is also about prospects, networks and life chances" (HM Treasury and DoH, 2002).

3.3 A complex concept

Like deprivation and social exclusion, health is influenced by a range of complex and interrelated factors (JRF, 2002). This has been recognised recently by the government:

> "The root causes of ill health are so varied they cannot be dealt with focussing on illness alone or by defining health simply as the absence of illness." (NRU and DoH: 2002).

3.4 Poverty and relative poverty

There is much evidence that points to a close association between deprivation, poor health and early death. Poor people not only die earlier, they have poorer health throughout their lives (Blane, 1997; Adams, 2001). Data from the Office for National Statistics shows differences in life expectancy of nearly seven and half years for men and nearly six years for women between those of the highest and lowest social class categories (ONS, 2003). Spatially in the region, male life expectancy at birth in PCTs with high concentrations of deprivation like Great Yarmouth or North Peterborough is around 5 years less than for more prosperous areas such as South Cambridgeshire PCT (Norfolk, Suffolk and Cambridgeshire, SHA).

Acheson highlighted the strong link between occurrences of limiting long-term illness, obesity, hypertension, accidents, anxiety, depression and phobias, and social class (Acheson, 1998). Differences also exist across the social spectrum for many of the major causes of death including heart disease, stroke, lung cancer and suicides in men, and respiratory diseases and lung cancer in women (Drever et al 1997).

The importance of relative poverty as a cause of ill-health has also been supported by research findings. The prevalence of affluence and affluent images cause the socially excluded to suffer negative impacts upon their mental and physical health. Research also shows that socially divided societies have a negative effect on the health not only of the excluded and marginalised but also throughout the entire social spectrum (Wilkinson, 1992).

The 1980s and early 1990s saw a rapid widening of inequalities in living standards and income levels in the UK. While overall average incomes grew by 40% in this period, the incomes of the poorest 20% were little or no higher in real terms (Hills, 1998). Structural change in the economy during the 1980s and early 1990s caused high levels of unemployment, particularly in traditional mass production industries, which had large implications for the communities that had relied on them for generations. This was accompanied by well-documented changes in the health of the population and a marked growth in health inequalities, which has persisted despite the efforts of government.

While the East of England may not have suffered the social effects of industrial decline in the same way as some other (particularly Northern) regions, it does have an extremely unequal income distribution with more than 900,000 households (40% of all households in the region) earning less than £15,000 a year (EERA, 2003), which is around 60% of median income; the government's preferred measure of poverty (DWP, 2002). In fact, however, 60% of the median income is higher in the East of England than nationally and, as such, even more households are living in relative poverty than this suggests. Mapping pay is difficult because the position of individuals, families and communities in relation to their surroundings is not easily translated in statistics. Averages hide detail and differential costs are not accurately reflected at a local level. However, official surveys, such as the New Earnings Survey and the Labour Force Survey, show vastly different averages for gross weekly pay throughout the region. For instance, the range in average pay at local authority district level lies between 76.7% and 150% of the regional average. Again, this ignores the location of poverty in pockets, even in broadly affluent areas where the experience of low pay is all the more stark. The East of England Regional Assembly report that over one million people in the region cannot afford essential household items (EERA, 2003).

While the region may not face some of the problems of widespread deprivation faced by other regions, significant pockets of poverty and relative deprivation nevertheless present important challenges in promoting economic growth, social cohesion, good

health and well-being. They also present barriers to the achievement of sustainable development.

3.5 Child Poverty

A good start in life is essential for later health and well-being and can assist in breaking cycles of deprivation that often span generations. Inequalities begin before birth and are rooted in the circumstances of previous generations. Babies of poor families have a greater risk of poverty, early death, impaired development and chronic disease in later life (HM Treasury and DoH, 2002). Research shows that financial hardship in early life can affect life chances of people well into their 30s (EERA, 2003; DfES, 2003).

Families with children are also more likely to be in relative poverty (DWP, 2000). This is recognised by government and substantial reforms to the benefits and welfare system have aimed to redistribute income to families with children, particularly those in work.

The Indices of Multiple Deprivation (IMD) lists 93 electoral wards in the East of England which feature in the most deprived 20% in the country in terms of child poverty (ODPM, 2000). While the regional average of 3.53% percent of households with dependant children and no adults in employment is the third lowest of any of the English regions, this masks very real differences within the region. Dallow (in Luton), North Lynn (in Kings Lynn and West Norfolk) and Vange (in Basildon) all have rates in excess of 12%. Twelve wards have rates in excess of three times the regional average and 68 wards have rates which are double the regional average. The EERA report that 22% of children in the region (242,000) live below the poverty line (EERA, 2003). Norfolk, Suffolk and Cambridgeshire SHA estimates that almost 1 in 3 children in the area are being brought up in poverty (Norfolk, Suffolk and Cambridgeshire SHA, 2003).

3.6 Education

Education is closely associated with health experience and outcome (Hammond, 2002). It is an essential preparation for citizenship and democratic participation and engagement. It prepares an individual to understand themselves and their social environment. As such, education is key to allow children to develop into adults capable of maintaining a healthy lifestyle and contributing positively to society. Educational attainment is also closely linked with earnings and future life chances (DfES, 2003). All of this affects an individual's health over the long-term. Educational underachievement is also an inter-generational issue. Evidence shows that parents' educational levels shape the educational and further achievement of their children in later life (Osborn et al, 1989). In turn, poor health limits the ability of individuals, families and communities to benefit from education.

Regionally, key educational performance indicators are good, but again this masks under-achievement within the region. For instance, at both primary and secondary level, Luton, Peterborough and Thurrock have pupil attainment levels below the national average (DfES, 2002). The picture is more varied for post-16 education, with 8 out of 10 LEAs (2001-2) performing below the national average (DfES, 2002). Above average proportions of young people also choose no further post-16 education or training in 4 of the 6 Learning and Skills Council areas in the region (EERA, 2003).

3.7 Skills

Skills are an important path into work and the social and economic inclusion it brings. Basic skills are particularly important, with those with low literacy and numeracy skills suffering particular disadvantage in the labour market, both through exclusion from work and through poor quality, insecure and low paid work. People with vocational qualifications are much more likely to be employed throughout their lifetime. Evidence from the Labour Force Survey shows that the employment rate is higher among those groups with vocational qualifications than without (DfES, 2003). Low skills levels in adults also have a knock-on impact on their families.

However, the relationship between skills and work is not simple or one way. Recent research conducted on behalf of the Department for Education and Skills (DfES) showed that marked regional variations in skills levels were almost totally accounted for by the proportions of deprivation in those regions. The relationship is clearly not one way because it is widely accepted that people with high skills migrate to areas of high growth, greater opportunity for employment and other multiple indicators or prosperity and better health.

These findings underline the importance of tackling skills issues as part of a broader approach to multiple disadvantage (which includes health) in all regions, regardless of average skills or qualification rates aggregated at a regional level.

Evidence from the same DfES research shows that numeracy and literacy skills rates in the East of England are second only to the South West for literacy and the South East for numeracy. However, mid-ranking IMD wards (i.e. not particularly disadvantaged areas) are roughly the same or only slightly above those of other regions, showing that the difference in regional performance is mostly related to the lower overall levels of concentrated deprivation in the region, which is partly generated by large numbers of high earners and also by low population densities and the rural make-up of the region. Both of these factors mask and accentuate the relative deprivation of the least advantaged and mean that those with low skills levels are likely to be even more marginalised than elsewhere.

Evidence from the Basic Skills Agency and used in the Regional Social Strategy shows that as many as 23% of adults aged 16-60 in Bedfordshire, Norfolk and Suffolk have poor literacy and numeracy skills. The rate is above 20% in all counties in the region (Basic Skills Agency, 2001). In parts of the region (Tendring, Fenland, Basildon, Harlow, Braintree, Thurrock and Ipswich) more than 20% of the working age population lack any formal qualifications (EERA, 2003).

3.8 Unemployment and poor quality employment

Unemployment has a significant negative impact on health. As well as providing income, employment confers status and a sense of purpose and participation. As a result, health greatly suffers with unemployment. Illness and deaths from all major causes are consistently higher in the unemployed and for the partners of unemployed men than for other groups. Unemployment and associated poor health also affects people's ability to find new work and to sustain it (Bartley, 1994).

Poor quality, particularly low paid and insecure, employment also impacts negatively on health. Low pay accentuates the potential for unemployment (DWP, 2002) and insecure employment and low levels of control at work have been shown to have a particularly damaging effect on health and well-being (Acheson, 1998).

Unemployment is at a historic low across the country and the East of England has the third lowest unemployment rate among all the English regions. Nevertheless, there is still significant variation in the unemployment rate at a sub-regional level.

3.9 Discrimination

Discrimination also affects health and well-being and is manifest across all equalities groups including race and ethnicity, gender, disability, age, sexual orientation, religious and political affiliation, marital status, those with children and those without. Unfortunately, discrimination is still embedded in society and in places presents significant barriers to full participation in life and society and to overcoming inequality. Particular social groups also have specific health needs related to their social position and circumstances. For example, women's health is affected by self-image and caring responsibilities for the family. Women are much more likely to report that they are economically inactive or working part time when they would rather be in work or working full-time because of family responsibilities.

Unemployment is highest in the region in those areas where black and ethnic minority communities are most heavily clustered. Many groups who suffer discrimination are the same groups who live in poverty, further compromising their well-being.

3.10 Housing and the environment

Housing and the environment are major determinants of health. The home, the social and built environment, transport, workplaces and the natural environment all impact on health. The natural environment has an integral regenerative capacity but there are fears that current rates of change are not sustainable. Pollution, climate change and atmospheric degeneration all impact on human health and will form a major challenge to public health bodies over the next generation.

Data on pollution and environmental quality is, by its nature, difficult to quantify on a regional basis. However, data on aspects of housing and the built environment is more readily available. Nationally there has been a polarisation in housing tenure as more affluent groups with higher social status have become home owners and long-term renting, particularly in the social housing sector has itself become a perceived marker of disadvantage and deprivation. Particularly alongside the long-term failure to invest sufficiently in public housing, this has accentuated the correlation between socio-economic status, poor housing and degradation of the local environment. Homelessness, increased during the 1980s and early 1990s with clear health implications for those experiencing it, and also (through its link to highly visible inequality, relative poverty and their implications) for society as a whole.

The government has accepted the link between poor quality housing and local environments and unsustainable communities (ODPM, 2003). The East of England has set out a regional strategy for housing aimed at addressing the drive for growth which is described in the government's plans to create sustainable communities. The strategy highlights a series of challenges for the region's housing markets, some of which are strongly accentuated by the drive for additional growth (East of England Housing Forum, 2003):

- **Rapid increases in the demand for new homes in the region**: The strategy estimates that there is demand for an additional 20,000-25,000 homes per year, even before the effects of growth associated with the drive for sustainable communities is accounted for.

- **Rapid increases in house prices in some areas**: The strategy suggests that the ratio of house prices to earnings is in excess of 6:1 in some areas.
- **Affordability problems for key workers and those establishing new households with a need for more than 7,000 affordable (sub-market price) homes needed every year:** The strategy also suggests that there are nearly 30,000 households in housing need on an annual basis and more than 10,300 households were accepted as homeless in the region in 2001/2.
- **Meeting the Decent Homes Standard for social housing:** The strategy suggests that 35% of local authority homes currently fail to meet the government's Decent Homes Standard.
- **High and rising levels of commuting from the region to London**.

The housing strategy also sets out the relationship between housing and health, tackling health inequalities, achieving sustainable economic growth and protecting the environment (East of England Housing Forum, 2003).

3.11 Life transitions

Recent evidence suggests that transition between life 'episodes' are very significant determinants of health and well-being. Birth and early years, transition from primary to secondary school, from education to training and the labour market, establishing an independent home and family, retirement and bereavement are all examples of such transitions (Bartley et al, 1997).

3.12 Access to services

Access to services, including healthcare, is not the most important determinant of health but it does play a part in responding to ill-health, sickness and injury, thereby helping people to return to health. There are important inequality dynamics to access to services and evidence suggests that different ethnic and social groups have unequal access to essential services. This is also found across gender and age (Webb, 1998; Dixon et al, 2003). In a region like the East of England there is also a considerable difference in equality of access to services between urban and rural populations.

3.13 Social cohesiveness, social support and social capital

Cohesive families and communities which offer their members good social support enable swifter and more effective recovery from periods of ill-health. Social support from family, friends and the community also acts as a buffer when people are faced with stressful circumstances. Social capital involves social support as well as social networks, involvement in society and reciprocity. Research has shown that higher levels of social capital bring higher rates of economic growth, lower crime, better health, and better government (Putnam, 1995). As Wilkinson has found:

> "The combination of increasing social status differentials and deteriorating social relations could hardly be a more potent mix for the population's health. Social status and support are perhaps the two most important risk factors for health" (Wilkinson, 1996).

3.14 Public health and sustainable development

The weight of evidence supports a broad view of health and health inequalities in addressing the relationship between the public health and sustainability. However, the traditional public policy response has been focused around responding to ill-health rather than promoting better health in the first instance.

The prominence of the concepts of sustainability and sustainable development offer enhanced opportunities to focus on the broad role of public policy more generally in determining the health of society as a whole. Sustainable development and public health share similar values such as democracy, social justice, participation, equity, partnership, stewardship and conservation and enhancement of the environment. They both stress the central importance of health and well-being in public policy planning across economic development, infrastructural planning and design, public service provision and employment and labour market interventions.

Success in achieving both sustainable development and effective public health promotion requires a culture change. It requires public policy generally to shift from a focus on responding to events and problems to an explicit focus on influencing the social, economic and environmental context in the first place. This requires a holistic understanding of the role of the welfare state in preference to a narrow focus on the welfare state as a social 'safety net' or 'fire brigade'.

However, there are some sympathetic strands in recent government policy. The national PSA target to reduce inequality in health outcomes, the 2002 *Cross Cutting Review of Health Inequalities* (HM Treasury and DoH, 2002) and the recent *Programme For Action* (DoH, 2003) all mark progress in this regard. The National Programme for Action on Inequalities emphasises four themes, all of which use a public health perspective which compliments that of sustainability:

- Supporting families, mothers and children.
- Engaging communities and individuals.
- Preventing illness and providing effective treatment and care.
- Addressing the underlying determinants of health.

The plan also addresses levels of responsibility for achieving this and emphasises the key role to be played by agencies at regional level.

However, while the plan makes welcome progress in focusing attention on the promotion of health, well-being and sustainable development, there are still omissions, particularly with regard to the framework for health inequality highlighted above. Of particular note is a failure to adequately address issues for some vulnerable population groups such as travellers, gays and lesbians, people with physical disabilities and women (except as mothers). The plan also does not adequately deal with issues of discrimination, diversity, equalities, and cohesion. Further, there is little on the importance of social support, health protection, pollution, food safety and relative poverty.

Section 4: Health and Social Care Employment in the East of England

4.1 Introduction

The public sector generally is a major employer throughout the United Kingdom. The health and social care sector make up a significant part of total public sector employment. This has implications for the NHS and sustainability in two ways.

First, the sheer scale of employment in the sector is sufficient to mean that the sustainability implications of employment practices in health and social care will have a major impact on the broader labour market and regional economy and society.

Second, the success of the employment function of health and social care organisations makes a crucial contribution to the sustainability or otherwise of the entire sector, with knock-on implications for the systemic sustainability of the welfare state. Recruitment and retention, training and staff development and other issues related to employment in health and social care have direct implications for the successful continuation of the provision of such services.

The impact of employment in the sector is also greater than the direct impact of employment in the NHS and other public sector organisations such as local authorities. There is a large independent (private and voluntary/community) sector particularly in the provision of social and nursing care. Spending by health and social care organisations in the public and private, voluntary and community sectors also creates employment in other supply chain industries and spending by employees generates additional employment in the local and regional economy and beyond.

4.2 Health and Social Care Employment in the Region

The total effect of health and social care employment on the region[3] is made up of five constituent elements:

- Direct employment by health and social care employers in the public sector (Department of Health, NHS, Local authorities).
- Direct employment by contractors providing services to the NHS, local authorities and General Practioners.
- Direct employment by health and social care employers in the private, social enterprise and voluntary/community sectors.
- Indirect employment in industries and employers supplying these organisations (the supply chain) in the region, in other parts of England and the UK and abroad.
- Induced employment in the local economy generated as employees spend their wages and contribute to demand for goods and services.

Direct employment by public sector organisations/employers

Directly employed staff in the public sector fall into a number of categories:

- Medical and dental NHS staff (consultants, registrars, practitioners and doctors, and other clinical staff).

[3] Data on the general East of England labour market is included in Appendix One.

- Non-medical NHS staff (nursing and midwifery staff, paramedic and ambulance staff, technical staff and scientists, clerical and administrative staff, health and social care support staff, maintenance and works staff).
- Local authority social services staff (managers, social workers, support workers, care workers, grounds and buildings maintenance).
- General Practitioners (GPs), nurses and practice staff employed by GPs.

Medical and Dental NHS Staff

There are 6,813 (6,128 WTE) directly employed medical and dental staff employed in the region, with half being located in Norfolk Suffolk and Cambridge and the other half split equally between the Bedfordshire and Hertfordshire and Essex SHAs (See Table 1).

Table 1: Medical and Dental Employment, by SHA (2002)

	No of Staff	WTE
Norfolk, Suffolk & Cambridgeshire SHA	3446	3027
Bedfordshire & Hertfordshire SHA	1726	1583
Essex SHA	1641	1518
East of England Total	6813	6128

Department of Health (2003).

Non-medical NHS staff

There are a total of 92,165 (71,590 WTE) 'non-medical' directly employed clinical staff in the region (see Table 2). This total is comprised of professionally qualified clinical staff and also nursing, midwifery and health visiting staff.

Table 2: Total Non Medical NHS Hospital and Community Health staff, and by selected occupation, by SHA (30 September 2002)

	Total WTE	Prof. Qualified Clinical Staff (WTE)	Qualified Nursing, midwifery and health visiting staff (WTE)	Total Head Count	Prof. Qualified Clinical Staff (Head count)	Qualified Nursing, midwifery and health visiting staff (Head count)
Norfolk, Suffolk & Cambridgeshire SHA	33194	16,689	11,727	42,827	20,682	14,790
Bedfordshire & Hertfordshire SHA	18,257	9,212	6,646	23,261	11,723	8,645
Essex SHA	20,139	9,507	6,767	26,077	11,983	8,757
East of England Total	**71,590**	**35,408**	**25,140**	**92,165**	**44,388**	**32,192**

Department of Health (2002).

Local authority social services staff

There are a total of 26,320 (18,450 WTE) directly employed staff by local authority social services departments in the region, as shown in Table 3. These jobs are made up of managers and planners, social workers, care home managers and assistants as well as home care workers, nursery staff, play group workers and support staff.

Table 3: Local Authority Social Services Staff (Head count), by gender, by SHA (September 2002)

	Male	Female	Total
Norfolk, Suffolk & Cambridgeshire SHA	1,615	10,670	12,285
Bedfordshire & Hertfordshire SHA	955	4,730	5,685
Essex SHA	1,265	7,085	8,350
East of England Total	**3,835**	**22,485**	**26,320**

Department of Health (2002a).

General Practitioners

Table 4 shows that there are a total of 3,152 (2,769 WTE) General Practioners and equivalent operating in the East of England.

Table 4: General Medical Practioners (Head count), by SHA (September 2002)

	Unrestricted Principals & Equivalents	Restricted Principals	Assistants	PMS Others	Retainers	Total
Norfolk, Suffolk & Cambridgeshire	1269	0	24	23	61	1377
Bedfordshire & Hertfordshire	888	1	13	7	48	957
Essex	798	1	4	0	15	818
East of England Total	**2955**	**2**	**41**	**30**	**124**	**3152**

Department of Health (2002b).

In addition to this, Table 5 shows that there are total of 12,144 (7,326 WTE) practice staff employed in GP practices in the region.

Table 5: General Practice Staff (WTE and Headcount), by SHA (September 2002)

	Practice Nurse WTE	Direct Patient Care WTE	Admin and Clerical WTE	Other WTE	Community Nurse WTE	Total WTE	Total Number Practice Staff	Total Number Practice Nurse
Norfolk, Suffolk & Cambridgeshire	601	406	2,184	30	5	3,222	4,925	1,041
Bedfordshire & Hertfordshire	364	70	1646	52	10	2,132	3,686	685
Essex	373	98	1486	15	4	1,972	3,533	733
East of England Total	**1,338**	**574**	**5,316**	**97**	**19**	**7,326**	**12,144**	**2,459**

Department of Health (2002b).

Vacancies in the NHS

There were 1,635 NHS vacancies in the region which had been open for three months or more at the end of March 2003. Table 6 shows that for the most part the NHS in the region faces similar recruitment and retention challenges to the rest of the country. However, there are specific areas in which individual SHAs face particular problems such as for scientific, therapeutic and technical staff in Bedfordshire and Hertfordshire.

Table 6: NHS Vacancies, by SHA (March 2003)

	All Medical and Dental Staff %	All Consultants %	Qualified Nurses, midwifery and health visiting staff %	Scientific, Therapeutic and Technical Staff %	Allied Health Professionals %	Other Staff %
England Total	4.7	4.7	2.9	3.1	4.8	1.3
Norfolk, Suffolk & Cambridgeshire SHA	3.4	4.4	1.4	3.4	5.4	0.9
Bedfordshire & Hertfordshire SHA	5.3	5.5	4.9	6	7.4	1.7
Essex SHA	3.9	3.7	3.4	3.2	4.1	1.2

Department of Health (2003a). Vacancies are three months vacancies at 31 March 2003.

Total direct employment by public sector health and social care employers in the region

The total employment in the region (Table 7) by public sector employers is 140,629 (106,263 WTE). When NHS vacancies are included, this rises to 142,793 (107,898 WTE).[4]

Table 7: Total Direct Public Sector Health and Social Care Employment in the East of England (Headcount)

	NHS Medical and Dental Staff	NHS Non-Medical Staff	Local Authority Social Services Staff	GMP Primary Care Staff	Total	Vacancies (WTE)
Norfolk, Suffolk & Cambridgeshire	3,446	42,827	12,285	6,302	52,575	532
Bedfordshire & Hertfordshire	1,726	23,261	5,685	4,643	29,630	649
Essex	1,641	26,077	8,350	4,351	32,069	454
East of England Total	**6,813**	**92,165**	**26,320**	**15,296**	**140,629**	**1635**

Adapted from tables above.

Direct employment by contractors providing support services to the NHS, local authorities and General Practitioners

Data on employment by support services contractors is difficult to obtain and no reliable source of data for the region was found, although it was possible to estimate that at least £28.7m was spent on external contract staff by NHS and Social Service departments in the region in 2001/2, although the real figure is likely to be higher than this because spending on other areas will include spending on staffing.[5] Responses from NHS trusts to requests for information on this staff group underlined the problem. Comments that these staff were no longer their concern or that no reporting mechanism was in place were common. One comment was particularly

[4] Assuming the same ratio of WTE to headcount as in the rest of the region.

[5] Discussions with NHS procurement professionals revealed that different departments of the same Trust will often use different categorisations of expenditure so that the 'Miscellaneous' category for instance may also include contract staff in some places which not in others.

revealing in highlighting the operation of narrowly defined performance management targets. It referred to the lack of a Public Service Agreement target for this group of staff as an explanation for the lack of data on them.

The lack of data on this staff group is frustrating in terms of accurately quantifying the true level of employment generated by health and social care, but it is equally revealing in terms of assessing the sustainability impact of employment in the sectors, had the data been available. This is developed below.

Direct employment by health and social care employers in the private, social enterprise and voluntary/community sectors

Health and social care employment in the private, social enterprise and voluntary/community sectors is made up of a number of constituent elements:

- Employment in hospitals and clinics
- Employment in nursing homes
- Employment in residential care homes (non-nursing social care)
- Employment in the provision of home care
- Employment in day centres

In most of these cases reliable and centrally collected data is scarce and as a result it has been necessary to make estimations based on available data on the scale of provision and average staffing ratios for comparable provision in the region, although this may still be an underestimate.

Private nursing homes, hospitals and clinics

Data produced by the Department of Health and displayed in Table 8 shows that there are well in excess of 356 private hospitals, nursing homes and clinics in the region employing 9,740 (WTE) nursing staff.

Table 8: Private Nursing Homes, Hospitals and Clinics: Premises, Bed Ratios and Staffing (2000-2001), by Health Authority*

	No of Premises	Registered Beds	Total Beds per 10,000 Population Aged 18+	Qualified Nursing Staff (WTE)	Other Nursing Staff (WTE)
Bedfordshire	40	1520	35	460	780
Cambridge	49	2042	36	750	1,010
Norfolk	91	2959	46	640	1,370
Suffolk	58	2142	41	590	1,150
North Essex	67	2133	30	610	1,060
South Essex	51	1314	24	610	710
East & North Hertfordshire	N/A	N/A	N/A	320	370
West Hertfordshire	N/A	N/A	N/A	510	540
East of England* Total	**356****	**12110****	**212****	**3660**	**6,080**

Department of Health (2001). * Health Authorities have now been replaced by three Strategic Health Authorities in the region. As a result, the East of England total is indicative only. ** These figures do not include sub-totals for East and North Hertfordshire and West Hertfordshire.

However, this total ignores administrative and support staff in these institutions and so vastly underestimates the actual total figure.

Independent sector residential and home care

In addition to private hospitals, clinics and nursing homes, a large number of jobs are located in independent sector (private, community and voluntary) residential care homes. Over the last decade the balance of provision of residential and home care has moved from being predominantly provided by local authorities to being commissioned from the market. Nationally, the balance between local authority and independent provision of home care is 36%/64%. In the East of England this balance is 26%/74%, and in some local authorities the proportion of care provided in the independent/private sector is much larger (Table 9). For instance, Hertfordshire County Council commissions 100% of its home care from the private sector.

Table 9: Local Authority Purchased Home Care Contact Hours, by Sector (September 2002)

	Total	Provided by Local Authority	% of Total	Provided by Independent/ Private Sector	% of Total
England	*2,975,800*	*1,078,430*	*36.24%*	*1,897,370*	*63.76%*
Bedfordshire	17,030	5,050	29.65%	11,980	70.35%
Cambridgeshire	28,680	9,870	34.41%	18,810	65.59%
Essex	69,180	12,960	18.73%	56,230	81.28%
Hertfordshire	52,800	0	0.00%	52,800	100.00%
Norfolk	42,780	24,040	56.19%	18,740	43.81%
Suffolk	41,780	15,920	38.10%	25,870	61.92%
Luton UA	9,700	3,520	36.29%	6,180	63.71%
Peterborough UA	9,090	700	7.70%	8,390	92.30%
Southend UA	9,070	1,630	17.97%	7,440	82.03%
Thurrock UA	7,460	1,730	23.19%	5,730	76.81%
East of England Total	**287,570**	**75,420**	**26.23%**	**212,170**	**73.78%**

Department of Health, (2002c).

For residential care, the balance nationally between local authority and private provision is 15%/85%, which is around the same as the East of England average, as Table 10 shows.

Table 10: Residential Care Places, by Sector, by Local Authority (2001)

	All Sectors			Local Authority Sector		Independent Sector	
	Total	Residential Care Only	% of All Sectors	Residential Care Only	Dual Registered	Total	% of All Sectors
England	*341,175*	*50,858*	*14.91%*	*252,381*	*37,936*	*290,317*	*85.09%*
Bedfordshire	2,056	127	6.18%	1,701	228	1,929	93.82%
Cambridgeshire	2,869	554	19.31%	1,989	326	2,315	80.69%
Essex	8,221	1,276	15.52%	5,999	946	6,945	84.48%
Hertfordshire			n/a			0	n/a
Norfolk	7,476	1,113	14.89%	5,481	882	6,363	85.11%
Suffolk	4,462	1,069	23.96%	3,064	329	3,393	76.04%
Luton UA	863	294	34.07%	529	40	569	65.93%
Peterborough UA	709	209	29.48%	402	98	500	70.52%
Southend UA	2,059	148	7.19%	1,764	147	1,911	92.81%
Thurrock UA	499	106	21.24%	393	0	393	78.76%
East of England Total	**35,375**	**5,383**	**15.22%**	**26,197**	**3,795**	**29,992**	**84.78%**

Department of Health (2001).

While data on staff employed in the local authority sector is included in the section on directly employed public sector staff, there is little available data on independent residential and home care employment. However, based on average staffing ratios calculated from a 'basket' of local authority residential care home inspection reports, it is possible to estimate that there is a total of around 9,000 (FTE) residential care staff.[6] This can then be converted to an estimated headcount figure, assuming a similar ratio of part-time to full-time working as in the local authority sector. This calculation produces a headcount figure of around 15,700 staff employed by independent sector employers in residential care settings.

It is also possible to make an estimation of the number of staff employed in independent sector home care provision by using a calculation of the ratio of staffing to contact hours in the local authority sector and then applying it to the number of contact hours provided by the independent sector. This can then be applied to the number of places provided in the independent sector. This gives a total of approximately 13,250 staff. This data is presented in Table 11. In reality, however, is it only a conservative estimation for a number of reasons:

- The data for home care provision includes only that proportion of home care commissioned by local authorities and not by self funders. While some of those who pay for their own home care will do so from the public sector, there may still be a marginal effect on the total.
- The data on home care refers only to contact hours and not to other aspects of home care such as travelling time, preparation, training, administration. Notwithstanding the fact that many home care agencies do not pay carers for their travelling time between service users (Centre for Public Services, 2003), this will have a significant effect on the overall staffing required to fulfil the total number of contact hours, especially in rural settings where travelling times are greater.

Table 11: Independent Sector Residential and Home Care Staffing (FTE), estimate, by Local Authority

	Residential Care			Home Care		
	Places	Staff (FTE)	Staff (Head count Estimate)	Contact Hours	Staff (Head count)	Staff (FTE)
Bedfordshire	1929	723	1,247	11,980	749	461
Cambridgeshire	2315	868	1,497	18,810	1,176	723
Essex	6945	2,604	4,490	56,230	3,514	2,163
Hertfordshire	0	0	0	52,800	3,300	2,031
Norfolk	6363	2,386	4,114	18,740	1,171	721
Suffolk	3393	1,272	2,194	25,870	1,617	995
Luton UA	569	213	368	6,180	386	238
Peterborough UA	500	188	323	8,390	524	323
Southend UA	1911	717	1,236	7,440	465	286
Thurrock UA	393	147	254	5,730	358	220
East of England Total	**24318**	**9,119**	**15,723**	**212,170**	**13,261**	**8,160**

Data adapted from tables above.

[6] Method: A sample group of local authority inspection reports for independent sector residential care homes in the region was used to estimate an average staffing ratio per resident of 0.375 [between 1:0.25 to 1:0.5] (FTE). This ratio was then multiplied by the number of places available in the independent sector to estimate the total staffing in the sector within local authorities in the region on an FTE basis. This ratio compares to a local authority staffing ratio of 1:0.66 which can be deduced from actual staffing figures. While it may appear that this invalidates the method it may actually be a product of the generally higher staffing ratios in the LA sector as a result of more organised labour bargaining processes, historical legacies of higher staffing ratios (combined with independent sector under-staffing) and the greater level of dependency on care which may be retained in the LA sector.

Total direct employment by health and social care employers in private, social enterprise, community and voluntary sectors

Table 12 summarises the total employment by private, social enterprise, community and voluntary sector employers in providing health and social care in the region. It shows that there are a total of around 43,600 staff (27,000 FTE).

Table 12: Total Directly Employed Private/Voluntary and Community Sector Health and Social Care Staff

	Total Staff	Total FTE/WTE
Private Nursing Homes, Hospitals and Clinics	14,610*	9,740
Residential Care	15,723	9,119
Home Care	13,261	8,160
East of England Total	**43,594**	**27,019**

Adapted from tables above. * The total staff headcount figure for Private Nursing Homes, Hospitals and Clinics has been estimated from the Total WTE figure at a ratio of 1:1.5. This ratio is derived from the known ratio for residential and home care and then rounded down to take account of the likely higher proportion of full time working in this environment and for the staff that the figure refers to.

Indirect employment in the supply chain

Employment in the provision of health and social care services only makes up part of the overall employment created and sustained by the NHS and other health and social care spending. These organisations purchase huge amounts of goods and services from a range of industries and sectors. These supply chain activities also therefore have a major impact on the economic and employment benefits of the NHS and health and social care sectors. To put this in perspective, NHS spending for the region is around £5bn.

Employment in identifiable supply chain industries

While the level of employment in the direct provision of health and social care is lower than in many other regions evidence from the Annual Business Inquiry (ABI) (Table 13) suggests that, employment in supply chain industries in the East of England is more significant.

Table 13: Employment in selected health and social care supply chain industries by region (2001)

	Manufacture of pharm. etc (244) (%)	Manufacture of medical /surgical equipment etc (3310) (%)	Wholesale of pham. goods (5146) (%)	Dispensing chemists (5231) (%)	Retail sale of medical/ orthopaedic goods (5232) (%)	Total
East of England	0.3	0.2	0.3	0.2	0	1
North East	n/a*	n/a*	n/a*	n/a*	n/a*	0.8
North West	0.4	0.1	0.1	0.3	0	0.9
Yorks & Humber	0.2	0.1	0.1	0.3	0	0.7
East Midlands	0.2	0.1	0.2	0.2	0	0.7
West Midlands	0	0.1	0.1	0.3	0	0.5
London	0.1	0	0.2	0.2	0	0.5
South East	0.4	0.2	0.3	0.2	0	1.1
South West	0.1	0.2	0.1	0.2	0	0.6
Total	**0.2**	**0.1**	**0.2**	**0.2**	**0**	**0.7**

Nomis (2002). * This data is suppressed in line with the Trade Statistics Act (1947) at the request of the Office for National Statistics.

In fact, the actual level of employment in identifiable supply chain activity (manufacture of pharmaceuticals and medical and surgical equipment) in the region, at 22,546 people, is behind only the North West and South East regions. As a proportion of overall employment, this makes employment in related supply chain and associated industries in the East of England the second highest (behind the South East) among all the regions. This is doubly important because these are high value activities which generate high levels of output and productivity.

Employment in these industries is highly uneven across the East of England region but unfortunately many of the specific details of the spatial distribution of this employment are confidential and publication of them is prohibited.

What is also unclear from the evidence is the proportion of these jobs which are supported by spending on health and social care *for* the East of England. A proportion of the total of this employment will be the production of goods and services which are in effect exported from the region to other parts of the UK and abroad.

Economic Linkages by Product Sector

Outside these easily identifiable linkages, it is possible to see further linkages in the economic activity associated with public spending on health. It is possible to provide a breakdown of the demand linkages between health sector output and how this translates through the supply chain. Leontiff inverse multipliers estimate the full impact of output on final demand, taking into account the effect of demand created by supply chain industries themselves.

Table 14: Highest Ranking Fifteen Supply Chain Sectors and Leontiff Multiplier, Public Expenditure in Health and Social Care

Health and Veterinary Services		Social work activities	
Highest Ranked Supply Sectors	**Multiplier**	**Highest Ranked Supply Sectors**	**Multiplier**
Total	***2.213***	***Total***	***1.582***
Health and veterinary services	0.793	Social work activities (pt)	0.276
Pharmaceuticals	0.047	Other business services (pt)	0.030
Wholesale distribution	0.032	Other land transport	0.012
Medical and precision instruments	0.023	Insurance and pension funds (pt)	0.012
Other business services (pt)	0.020	Wholesale distribution	0.012
Other land transport	0.017	Banking and finance	0.011
Banking and finance	0.016	Printing and publishing	0.010
Owning and dealing in real estate	0.013	Recreational services (pt)	0.010
Legal activities	0.012	Agriculture	0.009
Architectural activities and technical consultancy	0.012	Construction	0.009
Research and development (pt)	0.012	Telecommunications	0.008
Electricity production and distribution	0.012	Electricity production and distribution	0.008
Telecommunications	0.012	Motor vehicle distribution and repair, automotive fuel retail	0.008
Ancillary Transport services	0.010	Market research, management consultancy	0.008
Computer services	0.010	Computer services	0.008

Office for National Statistics (1995) table 14.

Table 14 shows these relationships for Health and Veterinary Services and for Social Work Activities. It shows that for health, the most important sub-sector is demand created within private sector health care services. The second most important sector, unsurprisingly, is pharmaceuticals manufacture, followed by wholesale distribution, the manufacture of medical and precision instruments and other business services.

The multiplier column shows that every £1 of increase in output of health and veterinary services produces an increase of just over 79p in output in private health and veterinary services, nearly 5p of output from the pharmaceuticals sector and so on. The overall multiplier figure for public sector health output at 2.213 is relatively high, ranking 7th among all sectors nationally.

Table 15: Demand Multipliers by Public and Private Sector

	Public Sector Multiplier	Private Sector Multiplier
Health & Veterinary Services	2.213	1.383
Social Work Activities	1.582	1.444

Office for National Statistics (1995) table 14.

The high figure for private sector health and veterinary services as a supply chain activity for public sector health output reveals the close correlation between public and private sectors. However, the relationship between the two sectors is asymmetrical, with the private sector not producing the same demand from the public sector. Moreover, the private sector generally creates less demand throughout the supply chain than the public sector and a substantial proportion (nearly 5p) is retained as profit, although it needs to be remembered that the whole sector is very diverse and there is a great deal of difference in rates of profit between pharmaceuticals manufacturers and small independent social care providers. In fact, this suggests that the profit margin in the private sector is similar in proportion to the overall demand created for pharmaceuticals by public sector expenditure.

Table 14 also demonstrates the highest ranking supply chain sectors for social work activities. Again, demand created within the private sector is the largest category. Business services, transport and insurance and pension funds are also important supply chain activities. Again, public sector output in social work creates more demand in the supply chain than private sector output, as Table 15 shows.

A further part of demand created by output in health is absorbed by imports, thereby being lost to the local, regional and national economy. Taken together, the public and private sectors in health and veterinary services and social work activity accounted for over £4bn of imports in 1995. Pharmaceuticals, medical and precision instruments were prominent among imports for health in both public and private sectors, and health and veterinary services themselves are an important import for public sector health outputs.

While the input-output analysis produced by the ONS is based on the UK as a whole, it is possible to disaggregate this analysis using employment as a proxy for the proportion of key supply chain activities based in the East of England. Table 16 presents this analysis and shows an estimation of the overall level of demand created in the region within selected supply chain sectors. However, while this analysis shows an estimate of the proportion of each of these important health supply chain sectors which are based in the East of England it does not estimate the proportion of that final output which is supported by health.

Total indirect employment in supply chain activities

Using the analysis above it is possible to use a generalised proportion of total intermediate demand in each of these sub-sectors supported by health and social care activities. This proportion can then be applied to the amount of employment in each of these sectors in the region to provide a rough estimate of the amount of employment in the region created and sustained by health and social care expenditure. This analysis suggests that the effect of health and social care demand in the supply chain supports around 60,000 jobs (FTE) in the regional economy.[7]

Table 16: Total Intermediate Demand in key supply chain sectors, East of England, (1995)

Sector	1995 Input-Output Analysis Leontiff Inverse Health and Vet Total	East of England Employment as % of GB	Estimated Total Intermediate demand located in East of England (£m)
Health and veterinary services (private/voluntary and comm. Sectors)	1.8858	7.73%	2607.996
Pharmaceuticals	0.0967	12.42%	389.4808
Wholesale distribution	0.0736	10.08%	2761.752
Other land transport	0.0589	8.83%	1869.216
Other business services (pt)	0.0549	9.16%	2051.366
Medical and precision instruments	0.0547	13.15%	418.9204
Banking and finance	0.0478	5.59%	2011.295
Electricity production and distribution	0.0445	7.92%	1420.767
Owning and dealing in real estate	0.0439	8.11%	1687.201
Telecommunications	0.0431	11.76%	1462.143
Research and development (pt)	0.0410	23.84%	929.2189
Computer services	0.0357	362.82%	45149
Insurance and pension funds (pt)	0.0337	12.42%	1285.807
Architectural activities and technical consultancy	0.0335	8.95%	1024.168
Printing and publishing	0.0322	10.44%	1329.353
Legal activities	0.0316	5.40%	425.6272
Construction	0.0314	9.78%	3621.903
Ancillary Transport services	0.0314	10.54%	2406.831
Renting of machinery etc	0.0265	50.64%	4200.998

Office for National Statistics (2002).

Induced employment in the local economy

Additional to the direct and indirect employment associated with health and social care is induced employment. This refers to the effect of employees spending their

[7] The methodology for this calculation is discussed in Appendix Two.

wages on goods and services in the local economy, thereby creating additional demand and thus employment. While the ONS does not produce employment multipliers for the UK, they are produced for Scotland. Using the Scottish employment multipliers for direct health and social care employment in the public, private and independent sectors it is possible to estimate that a further 34,762 (FTE) jobs are supported by spending by health and social care staff (Table 17). The extent to which these jobs are retained in the local or regional economy will be determined by the spending patterns of the individual staff concerned.

Table 17: Multiplier Effect of Public Sector Health and Social Care Employment, East of England

	Employment	T1 Multiplier	T1 Multiplier Effect	T2 Multiplier	T2 Multiplier Effect	Total Induced Employment
Health (including Veterinary) services	87,813	1.988	174,572	2.345	205,921	31,349
Social Work	18,450	1.382	25,498	1.567	28,911	3,413
Total	106,263		200,070		234,833	34,762

Scottish Executive (2002).

The Total Impact of Health and Social Care Employment in the East of England

Direct public sector employment in the health and social care sectors in the region amounts to 142,629 staff or 5.44% of employment in the broader regional labour force. Employment in the private and voluntary/community sectors, indirect employment in the supply chain and induced employment generated as health and social care employees spend their wages in the local economy amount to more than 5% of the total labour market, meaning that the total employment effect of health and social care amounts to just under 11% of total employment in the region. In reality these figures are estimates but they are at least illustrative of the size and impact of the sector on the regional labour market. Table 18 summarises this.

Table 18: Estimated Total Employment Impact of Health and Social Care in the East of England

	Health and Social care Employment	% of total Employment
Direct Public Sector Employment	140,629	5.44%
Direct employment by contractors providing support services to the NHS	N/a	N/a
Direct Private and Vol/comm. Sectors	43,594	1.69%
Indirect employment in industries and employers	*60,000*	2.32%
Induced employment	*34,762*	1.34%
Total	**278,985**	**10.78%+**

Adapted from above tables. Figures in *italics* are estimates.

4.3 Terms and Conditions of Employment in Health and Social Care

It is widely accepted that pay in particular is highly differentiated in health and social care. Many professional occupations attract relatively very high salaries. However, the earnings profile is long and unequal, with those at the bottom often earning relatively little. Table 19 demonstrates this and allows comparison of pay in health and social care occupations with pay for comparable occupations in the wider labour market. The figures in bold refer to the entire occupation group and therefore include employment in those occupations in other sectors. The figures below refer to specific occupations in health and social care.

Table 19: Gross Weekly, Full-time Earnings by Selected Standard Occupational Classification, East of England (2002)

Occupation (SOC 90)	Total
East of England Average all occupations	**374.31**
Professional Occupations (2)	**542.68**
Medical practitioners (220)	865.36
Pharmacists/pharmacologists (221)	661.91
Ophthalmic opticians (222)	552.99
Dental practitioners (223)	*577.58
Social workers, probation officers (293)	390.63
Associate Professional/Technical (3)	**431.92**
Nurses (340)	357.57
Midwives (341)	466.89
Medical radiographers (342)	414.17
Physiotherapists (343)	563.61
Chiropodists (344)	*355.61
Dispensing opticians (345)	*323.54
Medical technicians, dental auxiliaries (346)	361.07
Occupational/speech therapists (347)	351.47
Other health associate professionals (349)	304.17
Clerical/Secretarial Occupations (4)	**255.14**
Medical secretaries (450)	210.47
Craft/Related Occupations (5)	**401.04**
Dental technicians (592)	*319.13
Personal/Protective Service Occupations (6)	**208.2**
Assistant nurses, nursing auxiliaries (640)	211.88
Hospital ward assistants (641)	230.08
Ambulance staff (642)	381.63
Dental nurses (643)	230.33
Care assistants/attendants (644)	181.67
Nursery nurses (650)	204.17
Playgroup leaders (651)	108.8
Educational assistants (652)	120.6
Other childcare/related occupations (659)	62.45
Other Occupations (9)	**204.7**
Hospital porters (950)	240.7

Office for National Statistics, (2002). **Regional data was unavailable and national (England) data has been substituted. ** This data is suppressed by the ONS because the small sample group makes the result statistically unreliable.

Comparison of earnings in health and social care with the wider labour market show that professional groups earn on average more than comparator occupational groups in the wider labour market. Indeed, medical practitioners had the second highest

gross weekly earnings behind management consultants/business analysts (SOC 253).

However, the health and social care earnings profile is long and, outside of the professional occupations, most occupations attract earnings less than the average for their SOC category, although there are a small number of noticeable exceptions (physiotherapists, medical and dental technicians, ambulance staff). This is perhaps most graphically illustrated by the information which is not easily obtained, such as information on the pay and terms of conditions of independent social and nursing care staff which are often very poor indeed. It is nationally recognised, for instance that agency residential and home care staff receive some of the lowest earnings while carrying out a very demanding and responsible role (Centre for Public Services, 2003; Henwood and Waddington, 2002). It is also recognised that this is creating major difficulties in the recruitment and retention of suitably qualified and experienced care staff.

4.4 Equalities Profile of Health and Social Care Employment

Data on the equalities profile of health and social care employment is difficult to obtain and is only available across gender and ethnicity aspects of equality. Additionally, this information is only available for staff employed in the public sector, meaning that it is impossible to compare the equalities impact of health and social care employment in the different sectors (public, private, voluntary/community).

Gender

The Gender Balance of Health and Social Care Employment

The overall gender balance of employment in health and social care is markedly different among different occupation groups.

Table 20: Gender Balance of Direct Public Sector Health and Social Care Employment by category in the East of England (September 2002)

	Male	Female
Hospital Medical Staff*	64.99%	34.17%
Public Health, Community Health and Community Dental Services Medical and Dental Staff*	36.66%	63.34%
Non-medical and dental Staff	16.99%	76.73%
Local Authority Social Services Staff	14.57%	85.43%
GPs and Equivalents	63.52%	36.48%
GP Staff	n/a	n/a

Department of Health (2003; 2002; 2002a; 2002b). * This data was unavailable at a regional level and national data has been substituted. Some figure may not total because of the effect of 'unknowns' in the data and because of rounding.

Table 20 shows that women are most numerous in the non-medical professions (includes nursing and midwifery staff) and in social care. However, men predominate among GPs and among hospital medical staff. In many respects, this is a feature of the overall gender balance of seniority and status, with the higher paid professions being dominated by men and women being more prominent among the lower paid professions.

This aspect of the gender balance extends to terms of employment also, with women being much more likely to be employed on a part-time basis than men. For instance, among hospital medical staff, where there are around twice as many men as women, 22% of female staff are employed on a part-time basis against only 11.5% of men.

The same is also true however, of social services staff in local authorities where the majority of staff are women but 63% of them are part-time whereas the figure is 29% for men.

The Impact of Health and Social Care on Female Employment in the region

While the gender balance of employment in health and social care varies across different occupational groups, the larger numbers of staff employed in the occupational groups dominated by women and the smaller numbers of women in employment in the wider labour force, means that health and social care employment makes up around 17% of all female employment in the region (Annual Business Inquiry, 2001). This is significant and means that pay and terms and conditions in health and social care employment, particularly in the occupational groups where women are most numerous, will have disproportionate implications for gender equality in the labour market more generally.

Gender Pay Profile

The gender pay profile in health and social care is extremely unequal.

Table 21: Gender Pay Gap in Health and Related Occupations (SOC 2000), England and Wales (2003)

Occupation Group (Soc 2000 code)	Gender Pay Gap Actual	Gender Pay Gap %	Women's Pay as a % of Men's
Managers and Senior Officials (1)	**243.67**	**29.50%**	**70.50%**
Health And Social Services Managers (118)	141.55	21.24%	78.76%
Professional Occupations (2)	**112.72**	**16.15%**	**83.85%**
Health Professionals (221)	332.44	27.96%	72.04%
Medical practitioners (2211)	227.42	17.62%	82.38%
Social workers (2442)	24.31	5.02%	94.98%
Associate Professional and Technical Occupations (3)	**119.16**	**20.47%**	**79.53%**
Health Associate Professionals (321)	32.83	6.68%	93.32%
Nurses (3211)	32.67	6.64%	93.36%
Social Welfare Associate Professionals (323)	24.44	5.70%	94.30%
Medical and dental technicians (3218)	84.89	18.36%	81.64%
Personal Service Occupations (6)	**52.21**	**16.27%**	**83.73%**
Healthcare and Related Personal Services (611)	35.5	11.44%	88.56%
Nursing auxiliaries and assistants (6111)	41.29	13.09%	86.91%
Care assistants and home carers (6115)	20.42	7.06%	92.94%
Elementary Occupations (9)	**74.41**	**22.89%**	**77.11%**
Elementary Personal Services Occupations (922)	36.54	14.61%	85.39%

Adapted from NOMIS, (2003b). The table compares gross weekly pay for full time male and female health and social care occupation groups where sample size is sufficiently large and the confidence rate is above 95%.

Table 21 shows that the gender pay gap in health and social care is substantial throughout all those occupations where information is sufficiently robust to enable comparison. However, as the figures in bold (which relate to the whole labour market rather than just health and social care) show the gender pay gap in health is often not quite as pronounced as in the broader labour market. That said, there were a large number of occupations that were so dominated by one gender or another as to make the data insufficiently robust for comparison. This suggests that the gender pay gap difference between health and social care and the rest of the labour market may be affected by the large numbers of women who work in the sector and the traditional

gender bias in many occupational groups. Regardless, the gender pay gap is noticeable.

Ethnicity

The Ethnicity profile of Health and Social Care Employees

Table 22 shows the total proportion of Black and Minority Ethnic staff in the region among directly employed public sector staff. Such data is usually unavailable from private sector employers. While a blunt tool in terms of the ethnic profile of health and social care staff, it does enable comparison on the one hand with national averages and on the other with the participation of black and minority ethnic communities in the regional labour market.

Table 22: Black and Minority Ethnic Staff as Proportion of Workforce, by SHA (September 2002)

Strategic Health Authority	White	Black & Minority Ethnic	Unknown	Total
NHS all non-medical staff				
England	83.93%	8.07%	8.00%	100.00%
Norfolk, Suffolk and Cambridgeshire SHA	84.90%	6.61%	8.49%	100.00%
Bedfordshire and Hertfordshire SHA	74.35%	13.14%	12.51%	100.00%
Essex SHA	84.27%	6.79%	8.95%	100.00%
Hospital, Public Health Medicine and Community Health Services (HCHS): Medical and dental staff				
England	64.19%	33.50%	2.31%	100.00%
Norfolk, Suffolk & Cambridgeshire SHA	67.44%	31.17%	n/a	n/a
Bedfordshire & Hertfordshire SHA	51.62%	42.24%	n/a	n/a
Essex SHA	49.06%	43.88%	n/a	n/a
Local Authority Social Services Staff				
England	71.34%	6.94%	21.73%	100.00%
Norfolk, Suffolk & Cambridgeshire SHA	72.92%	1.59%	25.49%	100.00%
Bedfordshire & Hertfordshire SHA	86.90%	5.73%	7.37%	100.00%
Essex SHA	56.99%	3.12%	39.88%	100.00%

Adapted from Department of Health, (2003; 2002; 2002a; 2002b).

Comparison with national proportions of employment in health and social care shows some variation between the different Strategic Health Authorities and between different types of employee. For instance, the proportion of staff from minority communities is higher among medical and dental staff than for local authority social services staff or for NHS non-medical staff. Using national data, this might be explained by the impact of foreign-trained medical and dental staff, who make up 34% of the whole staff group. Among some grades, foreign trained staff make up as much as 73% of the staff group. While some of these staff are trained elsewhere in the European Economic Area, the majority are from further a field (Department of Health, 2003).

The proportion of black and minority ethnic communities employed in health and social care is also, for the most part, higher than estimates of BME participation in the labour market generally at 3.76% (UK Data Archive, 2003).

4.5 Wanless and Growth in Health and Social Care Employment

The Wanless report set out national projections of the need for workforce expansion under three 'scenarios': 'Solid progress', 'slow uptake' and 'fully engaged'. The modelling used for these three scenarios assumed the Review's recommendation that current funding mechanisms be continued until 2022 and also considered: Population changes, changes in organisational and technological development in health and social care supply and changes arising from changing demand for health care, in terms of ill-health and expectation. The review highlighted the major capacity challenge to delivering effective increases in expenditure and performance as "having sufficient numbers of staff with the right level of skills" (Wanless, 2002: 5.15).

The Review concluded that based on the Solid Progress model there would be a need nationally for:

- 62,000 doctors
- 108,000 nurses
- 45,000 professionally qualified therapists and scientists
- 74,000 health care assistants

These estimations are based on a number of assumptions including the maintenance of current levels of productivity, changes to the maximum working week for Doctors reducing to 48 hours (in line with the Working Time Directive) and average times of hospital bed occupancy falling (in line with the expectations of the National Beds Inquiry). The review also noted that changes to the organisation of healthcare delivery would also have implications for the necessary skills mix. For instance, shifting work from Doctors to nurse practitioners may reduce the demand for Doctors but will result in increased demand for nurses and healthcare assistants. The Review's estimations of the balance between supply and demand for each staff group suggested that there would be specific difficulties in meeting demand for Doctors.

However, the Wanless conclusions were not regionalised. Projected changes in NHS healthcare staffing are summarised below:

- Bedfordshire and Hertfordshire SHA:
  - Nurses - 573 additional 1999-2004
  - Allied health professionals - 197
- Essex SHA (by 2006):
  - Consultants - 308 (64%)
  - GPs - 94 (11%)
  - Nurses - 1,977 (24%)
  - Scientific & Technical - 580 (n/a)
  - Health Care Assistants - 576 (9.5%)
  - Total – 3,535
- Norfolk, Suffolk and Cambridgeshire SHA:
  - Consultant - 577 (54% on 1999 baseline)
  - GPs - 103 (8% on 1999 baseline)

- The student medical population in the SHA is expected to increase by 46% between 2001/02 and 2005/06, rising from 1,100 to over 1,600.

However, the above figures do not include local authority social services staff or the staffing requirements of the private and voluntary sectors.

Clearly these projections fall far short of the Wanless forecasts in terms of time scale. It is possible to provide a rough estimate of the East of England's share of Wanless' forecast growth by comparing existing population estimates. This is useful for illustration only however, because projections of population change in the region, including ageing and growth, are substantially different from those in other regions. In addition, the placement of all or part of three of the four Sustainable Communities' growth areas in the region brings additional demand for health and social care facilities and staffing, above and beyond that suggested in these estimates. Nevertheless, the sheer scale of these illustrative estimates is worthy of comment. Such an analysis shows that, based on the Solid Progress model, there will be a need for around 6,800 doctors, nearly 12,000 nurses, 5,000 professionally trained scientists and therapists and more than 8,000 health care assistants in the region by 2020, even before additional changes to the population are taken into account.

4.6 The Future of Pay in Health and Social Care

The long and highly unequal earnings profile of health is demonstrated above. Table 23 supports the findings of others in this field (Adams et al, 2003) that employment in the NHS and social care contributes to low pay, poverty, social exclusion and through this, to ill-health and health inequalities. Table 23 shows the proportion of employees in health occupations below selected threshold salaries.

Table 23: Distribution of gross weekly earnings of health occupations (2002)

	% with weekly earnings less than…			
Occupation	**£200**	**£400**	**£540**	**£800**
Health Professionals				
Men	0.8	2.6	5.8	26.7
Women	1.1	8.6	17.6	n/a
Health Associate Professionals				
Men	0.7	27.8	72.4	95.4
Women	1.1	34.6	79	n/a
Health and Related Occupations				
Male	12.1	79.6	95.3	99.8
Women	26.3	95	98.9	n/a
Hospital Porters				
Male	22	92.7	97.2	100
Women	n/a	n/a	n/a	n/a
Social Workers/Probation Officers				
Men	n/a	30	79.3	100
Women	0.5	38	85.9	n/a
Social Welfare Associate Professionals				
Men	3.8	66.5	94	100
Women	4.3	67.7	93.6	n/a
All Professional Occupations				
Men	0.7	13.4	37.4	76.9
Women	1	20.4	53	n/a
All Manual Occupations				
Men	6	66.4	89.7	98.8
Women	33.1	93.4	98.5	n/a

Office for National Statistics, (2002).

Pay bargaining structures in the NHS are being renegotiated nationally under the Agenda for Change and in Local Government a pay commission reported in October 2003 on a range of issues including low pay, the relative gap between pay for local government staff and the rest of the economy (particularly in social care where there are presently acute recruitment and retention problems) and the persistent gender pay gap (despite the move to Single Status) (Local Government Pay Commission, 2003).

While Agenda for Change is only in its early trial phase (with several taking part in the East of England region), it is worth noting that even under the new grading structures and pay spines, many grades of staff would receive a maximum annual salary of less than £11,500. The Department for Work and Pensions (DWP) estimate that for a couple with two children the poverty threshold (60% of median income) was around £14,000 in 2001/2 (DWP, 2003). Campaigners for a 'living wage' argue that the true level of a living wage is much higher still and that public sector employment and contracting is a key mechanism for delivering more equitable pay structures (Centre for Public Services, 2003b; Ambrose, 2003; Wills, 2003). The top point on the pay scale for as many as 45 NHS occupations is below even the DWP level (UNISON, 2003). In local government, Scale Point 16 (where 4 is the bottom) needs to be reached before this milestone is crossed. The local Government Pay Commission also note that among the lower paid occupational groups, many local government staff, though low paid, are better paid than those staff who have been transferred to the private sector, or who are employed to do work which was previously transferred. As this study shows, direct employment is only one part of the story, low pay among staff employed by contractors to health and social care organisations is every bit as important and is often ignored.

This means that even with the improvements in pay for low paid staff, significant numbers of staff and their families will be paid by the NHS and local authorities at income levels below the government's own poverty threshold. This also means that many NHS and local government salaries in addition to those of private and voluntary sector contractors are in need of substantial subsidy from the benefits system.

Section 5: Procurement of goods and services

5.1 Introduction

This section examines NHS and local authority expenditure on goods and services such as clinical supplies, medical equipment, food, furniture and transport. The context for this section is set by large annual increases in health and social care expenditure over recent years which have seen health expenditure rise in absolute terms, as a proportion of GDP and health and social care expenditure rise as a proportion of total expenditure in the East of England. Interestingly, within health expenditure, public spending has grown as a proportion of the total since 1997 (see Tables 48 and 49, Appendix 3). The combined public sector health and social services expenditure was £5,536m in the East of England during 2000-2001 (Treasury, 2002: 8.12a). The procurement of goods and services is estimated to account for at least £2bn of this expenditure.

Expenditure on salaries and wages accounted for 63.5% of NHS revenue expenditure in England in 1998 but this declined to 60.4% by 2001, before increasing to 62.3% in 2002 – see Table 49, Appendix 3. In contrast, expenditure on goods and services remained relatively stable over the 1998-2002 period ranging between 11.2% and 11.6% for clinical supplies and services and 2.3% and 2.6% for general supplies and services. Expenditure on external contract staff showed a small decline after 1998, but increased in 2002. There was a significant increase in miscellaneous expenditure between 1998-2002, which more than doubled by 2001 followed by a decline in 2002.

5.2 NHS Expenditure in the East of England

NHS revenue expenditure totalled £2,515m in the financial year ending 31 March 2001.

Table 24: Analysis of NHS expenditure in each SHA in the East of England (31 March 2001)

	SHAs in East of England						East of England	
	Cambs, Norfolk & Suffolk		Bedfs& Herts		Essex		Total	
	£m	%	£m	%	£m	%	*£m*	%
Salaries & Wages	734.6	*64.6*	421.5	*65.5*	479.3	65.2	1,635.4	*65.1*
Clinical Supplies & Services	152.2	*13.4*	79.0	*12.3*	81.7	11.1	312.9	*12.5*
General Supplies & Services	35.0	*3.1*	17.0	*2.6*	19.9	2.7	71.9	*2.9*
Establishment Expenditure	43.0	*3.8*	23.3	*3.6*	25.0	3.4	91.3	*3.6*
Premises & Fixed Plant	66.4	*5.8*	40.6	*6.3*	49.6	6.8	156.6	*6.2*
Depreciation	39.0	*3.5*	18.3	*2.8*	26.0	3.5	83.3	*3.3*
Total purchase of healthcare from non-NHS bodies	3.7	*0.3*	7.0	*1.1*	5.5	0.8	16.2	*0.6*
External contract staffing & Consultancy Services	1.1	*0.1*	3.3	*0.5*	1.0	0.1	5.4	*0.2*
Miscellaneous	27.0	*2.4*	17.7	*2.8*	21.4	2.9	66.1	*2.6*
NMET expenditure	34.5	*3.0*	15.8	*2.5*	25.9	3.5	76.2	*3.0*
Total	**1,136.5**	**100.0**	**643.5**	**100.0**	**735.3**	**100.0**	**2,515.3**	**100.0**

Department of Health, (2003)

Table 24 identifies expenditure for different items in each SHA and illustrates how they compare with the regional average. There are relatively marginal differences in the proportion of expenditure between the SHAs on salaries and wages expenditure.

However, the proportion of expenditure on clinical and general supplies and premises varies by up to 20% between the SHAs. Expenditure on the purchase of care from non-NHS bodies is substantially lower proportionately in the Norfolk, Suffolk and Cambridgeshire SHA compared to the other two SHAs.

Revenue and capital expenditure by Health Authorities, NHS Trusts and PCTs was £3,284m in 2002 (DoH Statistics and Research, 2003). Table 25 compares the proportion of expenditure on different items in the East of England with the average for England. The main difference is the level of miscellaneous expenditure which is not used consistently between cost centre departments or Trusts.

Table 25 also shows that the region spent more than the English average on salaries and wages, general supplies and services, establishment expenses and premises and fixed plant.

The region spent less than the England average on clinical supplies and services, usage costs for fixed capital assets and the purchase of care from non-NHS bodies.

Table 25 Health public expenditure in East of England 2001-2002

Type of expenditure	East of England	% East of England	Average for England %
Salaries and wages	2,053.2	62.5	62.3
Supplies & services - clinical	364.2	11.1	11.6
Supplies and services - general	86.2	2.6	2.3
Establishment expenses	122.0	3.7	3.2
Premises and fixed plant	201.5	6.1	5.0
Miscellaneous expenditure	110.4	3.4	6.9
Cost of use of capital assets	92.6	2.8	3.3
Fixed asset imparements	2.9	0.1	n/a
Purchase of healthcare from non-NHS bodies	146.7	4.5	4.8
External contract staff	15.0	0.5	0.6
Workforce Development	88.8	2.7	n/a
Total	**3,283.7**	**100.0**	**100.0**

Department of Health, 2003.

5.3 Social services expenditure

Gross revenue expenditure by the County and Unitary authorities on personal social services in the East of England was £1.3bn in 2001-2002. Table 26 indicates the spending by each local authority and the total for each SHA. It identifies expenditure by category of service user including children and families, older people, physically disabled adults, adults with learning difficulties, the mentally ill, asylum seekers and central strategic costs. However, there is no published data using categorical breakdowns on the same basis as the NHS (for example, expenditure on salaries, goods and services, food, energy, premises and transport).

The only significant difference in the distribution of spending is in the higher proportion of regional expenditure on older people – 49.7% in the region compared to 43.5% for England. The proportion of regional social service expenditure for asylum seekers is half that of the average for England. The pattern of expenditure on children and families, physically disabled adults, adults with learning difficulties and mentally ill adults between the East of England region and England as a whole is small.

Table 26: Gross Personal Social Services Expenditure by SHA and County/Unitary Authority, East of England (2001-02)

	Service Strategy	Children & Families	Older People	Physically Disabled Adults	Learning Disabled Adults	Mentally Ill Adults	Asylum Seekers	Other Adult Services	Total
Bedfordshire and Hertfordshire SHA									
Beds	0.9	20.4	36.1	4.4	14.4	3.3	2.2	0.4	
Herts	1.6	53.2	107.9	19.4	47.6	13.7	5.6	2.2	
Luton	0.5	14.1	19.7	3.4	6.9	1.7	4.7	0.3	
Total	3.0	87.7	163.7	27.2	68.9	18.7	12.5	2.9	384.6
Norfolk, Suffolk and Cambridgeshire SHA									
Cambs	1.2	19.6	36.1	8.2	22.8	4.0	2.3	0.8	
Norfolk	2.0	37.7	111.5	18.3	23.2	12.0	1.3	1.9	
Suffolk	1.1	28.4	82.3	9.8	22.5	7.7	0.5	1.1	
Peterboro'	0.3	15.4	17.4	2.0	5.6	1.0	0.5	0.2	
Total	4.6	101.1	247.3	38.3	74.1	24.7	4.6	4.0	498.7
Essex SHA									
Essex	1.6	63.5	142.5	24.9	52.0	11.9	2.1	1.4	
Southend	0.6	11.5	21.8	2.9	8.7	2.5	2.7	0.5	
Thurrock	0.2	8.6	13.5	2.4	6.0	1.0	2.9	0.2	
Total	2.4	83.6	261.4	30.2	66.7	15.4	7.7	2.1	469.5
Grand total	10.0	272.4	672.4	95.7	209.7	58.8	24.8	9.0	1,352.8
% of total expenditure	0.8	20.1	49.7	7.1	15.5	4.3	1.8	0.7	100.0

Department of Health (2003c).

In order to identify the level of expenditure on goods and services in the East of England, total social service expenditure for each SHA was divided into the different categories of expenditure based on the proportion of expenditure in the sample local authority - see Appendix 3. Social services spending on goods and services was estimated to be £120.6m in 2001/02, with a further £124.5m spent on support services - see Table 27. Premises' costs accounted for £29.9m and transport a further £39.3m.

Table 27: Analysis of type of social service expenditure for SHA and East of England (2001-2002)

	Bedfordshire & Hertfordshire SHA	Cambridgeshire, Norfolk & Suffolk SHA	Essex SHA	East of England region
Salaries/wages	152.0	197.0	185.5	534.5
Premises	8.5	11.0	10.4	29.9
Transport	11.2	14.5	13.6	39.3
Supplies & services	34.3	44.5	41.8	120.6
Support services	35.4	45.9	43.2	124.5
Grants to voluntary sector	7.7	10.0	9.5	27.2
Agency and contracted services	3.9	5.1	4.8	13.8
Payments to independent sector	110.8	143.7	135.2	389.7
Maintenance of children	20.8	27.0	25.5	73.3
Total	**384.6**	**498.7**	**469.5**	**1,352.8**

Department of Health (2003g).

In combining health and social services public expenditure it should be noted that whilst some categories of expenditure (such as salaries and wages) are clearly compatible, the classification of other types of expenditure is more problematic. In order to allow comparison, Table 28 combines expenditure on supplies and services, support services and transport under the general supplies and service category for social services.

Table 28: Total identifiable health and social service public expenditure, East of England (2001-2002)

Type of expenditure	Health expenditure (£)	Social services expenditure (£)	Total (£)
Salaries and wages	2,053.2	534.5	2,587.7
Supplies & services - clinical	364.2	-	364.2
Supplies and services - general	86.2	315.7	401.9
Establishment expenses	122.0	-	122.0
Premises and fixed plant	201.5	29.9	231.4
Misc expenditure	110.4		110.4
Cost of use of capital assets	92.6	-	92.6
Fixed asset imparements	2.9	-	2.9
Purchase of health care from non-NHS bodies/payments to independent sector/maintenance of children	146.7	463.0	609.7
External contract staff	15.0	13.7	28.7
Grants to voluntary sector	-	27.2	27.2
Workforce Development	88.8	-	88.8
Total	**3,283.7**	**1,352.8**	**4636.5**

Department of Health (2003c; 2003g).

This methodology has provided a profile of the different types of expenditure for 84% of the total regional public expenditure on health and social care.

5.4 Analysis of payments to independent sector and non-NHS bodies

The proportion of expenditure on goods and services procured from non-NHS bodies in the East of England is shown in Table 29. The data on personal health and social service expenditure requires two important qualifications.

Table 29: Analysis of payments to contractors and independent sector, East of England

	NHS		Social services			Total
	Purchase of health care from non-NHS bodies	External contract staff	Grants to voluntary sector	Agency and contracted services	Payments to independent sector	
Expenditure £m	**146.7**	**15.0**	**27.2**	**13.7**	**463.0**	
Salaries	91.7	9.4	17.0	8.6	289.4	416.1
Supplies and services-clinical	16.3	-	-	-	-	16.3
Supplies and services-general	3.8	0.4	0.7	0.4	12.0	17.3
Establishment expenses	5.4	0.6	1.0	0.5	17.1	24.6
Premises	8.9	0.9	1.6	0.8	28.2	40.4
Other exp	20.6	3.7	6.7	3.4	116.3	150.7

Department of Health (2003c; 2003g).

Firstly, the relatively high level of expenditure on the purchase of healthcare from non-NHS bodies, external contract staff, agency and contract staff and payments to the independent sector skews the percentage figures for salaries, goods and services and other types of expenditure because these figures will also cover salaries and goods incurred in the provision of services from other employers. Grants to the voluntary sector will include a mix of payments to community organisations and voluntary bodies partly for the provision of services and partly for capacity building and other activities.

Secondly, the ratio of expenditure for the NHS and social services must be applied to these payments in order to identify the expenditure profile.

5.5 Private and voluntary sector expenditure analysis

Section 4 on employment gave details of the overall number of private nursing homes, hospitals and clinics in the region. Data on the number of different types of homes is not currently available at SHA or regional level but only for the old DoH regions and health authorities. However, analysis of the Anglian/Oxford and North Thames data, using staff data to pro rata derive estimates of the number of premises in East, West and North Hertfordshire for which no data is supplied, indicates there are approximately 292 general nursing homes, 75 mental care nursing homes and 68 private hospitals and clinics. The ratio of private hospitals and clinics in East, West and North Hertfordshire and Essex is twice that in Bedfordshire, Cambridgeshire, Norfolk and Suffolk – see Table 30.

Table 30: Number of private nursing homes, hospitals and clinics in the East of England

Area	General nursing homes	Mental nursing homes	Private hospitals and clinics	Total
Bedfordshire, Cambridgeshire, Norfolk and Suffolk	174	40	24	238
Essex, East, West and North Hertfordshire	292	35	44	197
Total	292	76	68	435

Several of the largest private healthcare companies in Britain operate hospitals, nursing and residential care homes in the region. They include BUPA hospitals (Harpenden - 61 beds, Cambridge – 68 beds, Watford - 73 beds, Ilford - 59 beds, Southend - 51 beds and Norwich - 67 beds. BMI Healthcare has two hospitals at Bedford (25 beds) and Kings Lynn (35 beds). Nuffield has three hospitals in the region at Brentwood (52 beds), Ipswich (60 beds) and Bury St Edmunds (40 beds). A number of national nursing home companies such as ANS plc (with three homes at Clacton on Sea (57 beds), Cambridge (90 beds), Luton (60 beds)) also operate in the region.

However, data on the type of expenditure by the private sector is not available nor is information on their procurement policies. Further research and analysis of private sector provision in the region should provide estimates of the different categories of expenditure. Since private and voluntary sector provision may increase as a result of the government's public services modernisation programme, and more specifically through the 'health choice' initiative, the extent to which the private and voluntary sectors adopt sustainable development policies and practices will increasingly determine the degree to which sustainable development is achieved in the region.

5.6 Analysis of expenditure on goods and services

NHS trusts and PCTs purchase on average 70% of goods and services by value with the remainder purchased via the NHS Purchasing and Supply Agency (NHS PASA). NHS PASA bulk buys on behalf of trusts.

Table 31: NHS expenditure on goods and services in East of England (2001-2002)

	HA's (£m)	NHS Trusts (£m)	PCT's (£m)	Total (£m)
Supplies & Services - clinical	**4.2**	**342.5**	**17.6**	**364.2**
Drugs (including gases)	3.8	127.2	1.4	**132.4**
Dressings	(32)	7.9	0.8	**8.7**
Medical & surgical equip :				
Purchases	0.3	109.6	8.7	**118.6**
Maintenance Contracts	-	8.7	1.1	**9.8**
X-Ray :				
Film & chemicals	-	4.7	-	**4.7**
Equipment purchase	-	3.1	-	**3.1**
Equipment maintenance	-	4.2	-	**4.2**
Patients appliances	-	25.8	3.6	**29.4**
Lab equipment :				
Instruments & materials – purchase	-	24.9	0.1	**25.1**
Maintenance Contracts	-	2.1	-	**2.1**
Contractual clinical services	0.1	24.2	1.9	**26.2**
Supplies and services - general	**0.2**	**76.9**	**9.1**	**86.2**
Provisions & kitchen	0.1	20.7	3.0	**23.8**
Contract catering	0.1	39.6	2.1	**41.8**
Staff uniforms	-	5.4	1.3	**6.7**
Laundry:				
Equipment & materials		6.6	1.0	**7.7**
Bedding & linen		**4.5**	**1.7**	**6.2**
Establishment expenses	**8.0**	**96.1**	**17.8**	**122.0**
Printing & Stationery	2.7	15.6	2.0	**20.3**
Postage	1.1	3.9	0.5	**5.5**
Telephones	1.3	14.9	2.5	**18.7**
Advertising	0.5	9.3	1.4	**11.2**
T&S	1.8	27.7	9.6	**39.0**
Other transport costs	0.6	24.8	1.8	**27.2**
Premises & fixed plant	**12.3**	**173.0**	**16.3**	**201.6**
Electricity	0.2	9.3	0.7	**10.1**
Gas		8.0	0.5	**8.5**
Other fuel (inc oil & coal)		4.6	0.7	**5.3**
Water & sewerage		4.3	0.3	**4.6**
External general services contracts	0.2	20.1	2.2	**23.2**
Furniture, office & computer equipment	7.3	20.0	2.7	**30.0**
Maintenance of computers	1.4	16.9	0.7	**19.0**
Rates	0.8	19.1	2.0	**22.0**
Rents	2.0	40.1	3.4	**45.6**
Building & engineering equipment		14.5	1.6	**16.1**
Building & engineering contracts	0.3	15.6	1.6	**17.5**
Miscellaneous spend	**20.3**	**65.6**	**24.5**	**110.4**
Auditors remuneration	1.2	3.9	2.7	**7.8**
All other spend	19.1	61.8	21.8	**102.6**

Department of Health, (2003b).

NHS PASA has a range of national and regional contracts and framework agreements ranging in size and scope. For example, it operates a national NHS lease car contract of 36,000 vehicles, whilst a national framework agreement covers the collection, disposal and/or recycling of lamps and tubes. NHS Estates also provides similar national and regional contracts, for example the new Procure 21

partnering and integrated supply chain project for NHS construction schemes over £1m in value. Both agencies have a raft of sustainable development policies. However, it is not known which trusts adopt some or all of the sustainability, environmental and social policies, or the extent to which they feature in procurement by the two agencies.

A more detailed analysis of how the NHS expenditure for the East of England divides spending of the main headings into sub-categories of expenditure is provided in Table 31. For example, the £364m spent on clinical supplies is composed of £132m expenditure on drugs, £118m on medical and surgical equipment and a further £9m on maintenance contracts. Patients' appliances, instruments and materials for laboratories, and contractual clinical services each cost between £25 - £30m per annum. X-ray film and chemical and equipment costs £12m per annum and dressings account for nearly £9m.

Supply chains and regional production

The East of England has 193 NHS suppliers located in the region, representing 10.9% of the national database of 1,763 suppliers in September 2003. However, the NHS Purchasing and Supplies Agency (NHS PASA) supplier contracts database does not record the value of contracts. Nor was any data available from NHS Trusts or PCTs on the extent to which they used local and regional producers or suppliers.

Table 32: NHS contracts from suppliers with East of England addresses (September 2003)

SHA	No of supplier contracts
Bedfordshire and Hertfordshire	93
Cambridgeshire, Norfolk and Suffolk	59
Essex	41
Total	193

NHS Purchasing and Supplies Agency, (September 2003).

The previous chapter identified overall levels of employment in supply chain industries. It has not been possible to identify local and regional spending expenditure patterns by NHS Trusts, PCTs and local authorities and thus identify direct purchasing and consumption chains in the regional economy.

Clinical supplies

NHS expenditure in the East of England on clinical supplies totalled £364.2m in 2001-02. The bulk of spending was concentrated on drugs (36%) and medical and surgical equipment (33%), with expenditure on patients appliances, laboratory equipment (instruments and materials) and contractual clinical services each accounting for about 7% of the total spend. X-ray services accounted for the next largest item of expenditure – film and chemicals, equipment purchase and maintenance – at £12.0m.

Food

NHS Trusts and PCTs spent £23.8m on provisions and kitchens in the East of England during 2001-02 and £41.8m on contract catering. NHS Trusts are the primary purchaser, with £20.7m and £39.6m respectively spent on provisions and contract catering, leaving only £3.0m and £2.1m spent by PCTs. Local authorities also incur expenditure on food and catering operations in residential homes and day centres.

It is not possible to provide additional information on contract catering expenditure such as the proportion of expenditure on food, transport, wages and other costs.

Expenditure of nearly £42m is likely to include a significant sum on food, which should be added to the core information on the breakdown of goods and services expenditure. Basic information such as which firms have contracts (and whether they are regional or national firms) does not appear to be collected centrally within SHAs.

Box 2: Good Practice in Procurement

Organic food on hospital menus

Locally grown and produced organic food is available on the menu for staff and visitors at the Norfolk and Norwich Hospital. A newly established co-operative, Eostre Organics, supplies the hospital's Chicory's Restaurant with organic fruit and vegetables whilst farms in Bintree and Ringstead are providing organic pork and beef and farms in Tuddenham and Market Weston in Norfolk are supplying poultry and dairy products. The project is supported by DEFRA and received a grant of £175,000 from their Rural Enterprise Scheme.

Eostre Organics is an organic producer co-operative supplying fresh and processed organic food direct from their members in East Anglia and from partner producers and co-operatives in the UK and Europe. It forms a direct link between these producers and the consumer, supporting local, direct and co-operative markets and offering fairer prices to both the producer and consumer (www.eostreorganics.co.uk).

Eostre was set up by East Anglia Food Link (EAFL), a not-for-profit co-operative representing all parts of the sustainable food chain. EAFL runs and participates in a range of projects and services across the East of England and in collaboration with UK and European partners (www.eafl.org.uk).

DEFRA Public Sector Sustainable Food Procurement Initiative

The Department of the Environment, Food and Rural Affairs (DEFRA) launched the Public Sector Sustainable Food procurement Project during summer 2003 as part of its Sustainable Farming and Food Strategy for England. The public sector spends £1.8 billion on food and catering services annually. The project aims to improve sustainable development through the food procurement process, support local and regional economies and reduce waste, particularly packaging, promote healthy eating and improve agricultural and animal welfare practices. It is producing guidance, case studies and other materials (www.defra.gov.uk/farm/sustain/procurement/index.htm).

'The Healthy Centre – Growing Centre'

The Healthy Centre at Stibbington is another East of England project promoted by DEFRA. The residential centre in north Cambridgeshire provides teaching and learning resources on sustainable agriculture, food chains, food webs, healthy eating and waste management initiatives such as composting and recycling. More than 2,000 pupils attend 3 or 5-day courses every year. The centre is a partnership between Cambridgeshire Environmental Education Service (Cambridgeshire County Council), the Department of Health (www.doh.gov.uk/fivaday/index.htm), DfES 'Growing Schools' and East Anglia Food Link (www.cees.org.uk).

Childcare

The provision of childcare for NHS staff has increased substantially since the launch of the NHS Childcare Strategy. The strategy provided national funding of over £70m to build about 150 on-site nurseries over a three year period from April 2001. All staff have had access to a childcare co-ordinator since April 2003 to meet the requirements for Improving Working Lives Accreditation. The childcare co-ordinators

are responsible for developing local childcare strategies and providing advice and support for parents working in the NHS. There will shortly be 12 childcare co-ordinators in the Norfolk, Suffolk and Cambridgeshire WDC.

Across the region there are a variety of existing and planned childcare facilities. For example, the Bedfordshire and Hertfordshire SHA has 90 subsidised places for NHS employees at the QEII Hospital, Welwyn Garden City, 46 and 48 place on-site nurseries at Watford and St Albans hospitals and two more large nurseries (90 - 95 places) opening at the Lister Hospital, Stevenage and at Hemel Hempstead.

Seven out of nine acute trusts in Norfolk, Suffolk and Cambridgeshire have, or are about to have, a childcare facility which is also available to GPs and their staff. Facilities are available in three PCTs. The project co-ordinator for the Norfolk, Suffolk and Cambridgeshire WDC reports that gaps in provision remain in rural parts of the SHA area, particularly in Norfolk (and even in Norwich City). The WDC had a £3.6m three-year childcare capital programme and will spend £727,000 in 2003/04 on revenue schemes such as after school play schemes and childminder networks.

Five new on-site nurseries are planned in Essex including expansion of an existing nursery in Basildon Hospital, a rebuild at Southend Hospital and new facilities in Mid Essex, Essex Rivers and North East Essex. All but the Southend facility will be privately operated. New childcare places at Southend (75 places) and Basildon (40 places) will be subsidised at £30 per head for 52 weeks. Essex also has two pilot projects consisting of a 100 place holiday club for 13 weeks throughout the school holidays (Southend Hospital, Southend PCT and Castle Point and Rochford PCT) and access to play schemes for school age children of working parents (Epping Forest PCT and Harlow and Uttlesford PCT). Six childcare coordinators are currently identifying future childcare needs.

From 2004/05 funding for childcare will be included in PCT general allocations. Childcare provision, subsidies and the employment of Childcare Coordinators will have to be built into Local Delivery Plans.

NHS childcare provision includes:

- New on-site nurseries
- Local play-schemes
- Funding of childminder networks
- Childcare voucher schemes
- Discounts for NHS staff at nurseries
- Out-of-school clubs

Most childcare provision is purchased from the private sector which is one of the fastest growing sectors in the economy.

Waste

The NHS in the East of England produced 39,712 tonnes of waste in 2002/03 with disposal costs of £5.3m. Clinical waste accounted for just over a quarter of the tonnage but 70% of the disposal cost. Special wastes amounted to 83 tonnes with domestic waste accounting for the remainder. There were variations in tonnage, costs and recycling between the three SHAs – see Table 51 in Appendix 3. No data is available for specific disposal methods by NHS Trusts in the region but clinical and special waste is usually incinerated whilst most domestic waste is land-filled. The waste recovery/recycling volume averaged 2.95% for the region. The Regional Waste Management Strategy demonstrates that continued landfill is not sustainable

nor acceptable. Nationally the NHS produced about 240,000 tonnes of waste at a cost of £40m in 2002 (an average disposal cost of nearly £170 per tonne).

Private and voluntary/community sector healthcare providers and local authorities social care services also produce waste. However, no data is available for these sectors.

The East of England region faces not only increased waste streams as a result of higher levels of activity in the NHS but also increased waste streams in the three major growth areas in the region.

Waste streams in the NHS

There are three main waste streams in the NHS:

- Clinical (human tissue, blood, excretions, drugs, swabs and dressings)
- Non-clinical (similar to household/municipal waste consisting of newspapers, cardboard, cans and kitchen waste)
- Special or hazardous (prescription only medicines, cytotoxic materials, radioactive materials, mercury, chemicals, asbestos)

Confidential waste (medical records and hospital notes) is included in non-clinical waste after onsite shredding or is removed under contract.

Clinical waste accounts for about a third of NHS waste produced per hospital bed, with non-clinical waste accounting for the bulk of the remainder. Following the abolition of crown immunity and the Environmental Protection Act 1990, most trusts have contracted out clinical waste disposal. Addenbrookes NHS Trust is one of eight trusts nationally which operate their own on-site incinerator.

NHS waste disposal is relatively expensive. Clinical waste costs an average of £300 per tonne although rates vary between £220-£450 (2001 prices). Pharmaceutical/cytotoxic waste costs between £450 to over £1200 per tonne. Household/municipal waste costs average £60 per tonne with rates varying between £40 - £80 per tonne.

The national market for clinical waste in 2001 was estimated to be £28m per annum which would indicate about 93,500 tonnes per annum nationally. The East of England share is 10,896 tonnes (see Table 54, Appendix 3).

Waste disposal in the East of England

The East of England region produces large quantities of waste – 6m tonnes of commercial waste, 2.9m household waste, 7m tonnes of construction and demolition waste and 5.4m tonnes of agricultural waste in 1998/99. In addition, the region imports 3m tonnes of waste, mainly from London. Most of the waste is deposited in landfill sites – 53% of commercial waste and 81% of household waste. There are wide variations within the region – 64% of commercial and industrial waste was land filled Essex compared to 50% in Bedfordshire and 43% in Cambridgeshire. The East of England Regional Waste Management Strategy makes it clear that "landfill capacity is limited and disposing of the majority of waste in this way is not sustainable and no longer acceptable" (para 1.7).

Clearly, the NHS and other health and social care organisations have a key role to play in contributing to regional and national targets. The region needs to recover 7.3m tonnes from commercial and household waste streams annually by 2015. This requires re-use, recycling and composting with the remainder subjected to thermal treatment (possibly including incineration for energy recovery). The forecast of an

approximate 20% increase in the number of households in the region by 2020 will place further pressures on waste management strategies.

The regional waste strategy seeks to:

- Minimise the environmental impact of waste management.
- Reduce the generation of waste.
- Implement the best practicable environmental option for each type of waste.
- View waste as a resource and maximise the reuse, recycling and composting of waste and extracting value from the remainder.
- Secure treatment and disposal of hazardous and residual wastes.
- Secure where appropriate regional and county/unitary self-sufficiency in provision for waste management.
- Enlist and encourage community support and participation.

The European Union Landfill Directive targets and the government's National Waste Strategy targets have been converted into statutory targets up to 2005/06. The East of England targets are to secure recovery of 66% of commercial waste by 2005, rising to 75% by 2015, and 40% of household waste by 2005, increasing to 50% by 2010 and 70% by 2015.

Box 3: Good Practice in Waste Management

Waste prevention projects by NHS Trusts in other regions have made significant gains and savings. Projects have included waste segregation and recycling paper, cardboard, cartridges and cans.

Lister Hospital in Stevenage

The maternity department at the hospital started a reusable nappy laundering service in 1999 which saved some £5,000 per annum in waste disposal charges. The project was supported by Hertfordshire County Council, Hertfordshire Landfill Partnership and the Groundwork Trust. The objective was also to reduce municipal waste disposal costs by encouraging parents to use reusable nappies.

Southend Community Care Services NHS Trust

The Trust's review of domestic waste management is the only East of England example in the NHS Estates Healthcare Waste Minimisation compendium of good practice. The trust decided to segregate waste streams, increase recycling and alter the method of waste collection. Bins were placed in wards and departments, collected three times per week by a contractor. It also contracted for the collection of paper and cardboard for recycling. These measures reduced waste collection charges and eliminated the need for a compactor, producing savings of £2,500 and a reduction in the portering budget (Healthcare Waste Minimisation, NHS Estates).

The Hertfordshire NHS Environmental Forum

The Hertfordshire NHS Environment Forum has been developing template documents on the way in which Trusts and PCTs could implement sustainable development. A number of working groups were established on the key elements of sustainability to draw up the templates, which encourage organisations to take action in the knowledge that other local organisations are simultaneously changing policies and practices. The County Council's Environmental Services have also been fully engaged with the project. It is hoped to extend the project to Bedfordshire in the near future.

Benefits of waste prevention, minimisation and recycling

The benefits of waste prevention, minimisation and recycling are substantial:

- Cost savings.
- Contribution to regional and national sustainable development.
- Contribution to regional strategies and targets.
- Environmental improvements.
- Reduced transport and pollution costs in travel to landfill and other disposal sites.
- Compliance with legislation.
- Create additional employment.
- Potential to improve public health by reducing risk of disease.

Health impact of waste management strategy

Waste management options have different impacts on health through emissions into the air, water and on land. Concerns about the effect of incinerators and landfill on the health of people living locally and other health impacts have had a significant role in many local waste campaigns. However, a literature review by the Cabinet Office's Strategy Unit "did not unearth convincing evidence of causal relationships between health effects in the general population and different waste management options that would allow objective comparisons to be made" (Cabinet Office, 2002). Both DEFRA and the Environment Agency are carrying out further research on this matter.

Travel

The NHS in the East of England spent £66.2m on transport in 2001/02. Local authority social services departments also incur significant transport costs, estimated to be £39.3m. Reducing car usage is a key government policy. Transport is the major producer of carbon dioxide which is a greenhouse gas that contributes to global warming. Road traffic accidents alone cost the NHS about £500m annually. The NHS PASA annual environment report 2002/03 set a target of limiting business miles to 15,000 by car per staff member but this was the only target it could not report because of a lack of data.

Box 4: Addenbrookes NHS Trust Employee Travel Plan

The Addenbrookes Hospital is located three miles from the centre of Cambridge. In 1997 the hospital began an *Access to Addenbrookes Programme* to address all aspects of access. It had a staff of 5,000, some 3,400 car parking spaces and poor public transport. Phases 1 and 2 focused on the management of car parks and improved facilities for cyclists. Phase 3 involved a number of projects including:

- A new bus facility at the front of the hospital funded by the County Council.
- Five additional bus services with the trust and Stagecoach jointly funding discounted tickets for staff.
- A new subsidised direct bus route from the County Council's Trumpington Park and Ride Facility to Addenbrookes.
- Loans for scooters and mopeds.
- Public transport information sent out with hospital appointments.
- Staff briefing sessions on the Access programme plus information available via intranet and internet sites.
- Car usage by staff reduced from 74% to 60% in the 1997-99 period, cycling increased from 17% to 21% and bus usage increased from 4% to 12%.

There are several key issues in achieving more sustainable transport:

- The mode, cost and length of time of travel to work by health and social care staff.
- Patient and visitor travel to hospitals and health facilities.
- Transport to and from social care services, for example, day centres and respite care.
- Transport of goods and services by suppliers to health and social care facilities in the region.
- Business travel by NHS and local authority staff.
- Transport of particular services, for example, meals on wheels.

NHS PASA and NHS Estates promote the production of green travel plans and other methods of reducing travel and encouraging public transport and cycling. This includes encouraging health organisations to reduce the need to travel through the provision of local services and the wider use of information and communications technology, such as video conferencing. They also promote the preparation of travel plans addressing the needs of staff, patients and visitors.

Energy

The NHS is a substantial consumer of resources. It spent £23.9m on energy supplies in 2001-02 in the East of England. Electricity accounted for £10.1m and gas £8.5m, with other fuel, including oil and coal, accounting for the remaining £5.3m. NHS trusts accounted for 92% of energy purchases, with PCTs accounting for the remainder. These figures exclude expenditure by local authority social services and the private and voluntary sectors.

The Kings Fund have estimated that:

> "a typical acute hospital consumes energy equivalent to 16 tonnes of CO^2 per bed space per year or a total of about 8700 cubic metres of CO^2, enough to fill over 60 six-bed wards. In the UK the energy used by the health sector produces 7.5 million tonnes of CO^2 per year".

Using these calculations, the NHS in the East of England, with nearly 9,000 acute beds, produces more than 140,000 tonnes of CO^2 per year. Based on 1999/2000 estimates, the East of England NHS uses more than 4.4 million gigajoules of energy a year, or around 0.15% of the national total. It is worth noting that this is one area where there are immediate bottom line benefits arising from sustainable policy implementation. Energy efficiency does not just save the planet, it saves money. For instance, by installing energy efficient steam traps in the laundry in Withington Hospital, Manchester, the hospital has saved an estimated £10,000 per annum, giving the investment a pay back time of just 2.4 years.

The government's long term strategy for energy, *Our Energy Future – Creating a Low Carbon Economy* (Department for Trade and Industry, 2003), established four aims of energy policy:

- A 60% reduction in carbon dioxide emissions by 2050.
- Maintaining the reliability of energy supplies.
- Promoting competitive markets in the UK and beyond.
- To help raise the rate of sustainable economic growth and improve productivity.
- To eliminate fuel poverty in Britain by 2016-2018.

The White Paper also set objectives to increase the percentage of electricity from renewable sources and to increase combined heat and power capacity. The NHS has set two mandatory targets for energy:

- Reduce the level of primary energy consumption by 15% or 0.15m tonnes carbon emissions from a base year of March 2000 to March 2010.
- Achieve a target of 35-55 Gj/100 cu.m. energy efficiency performance for the healthcare estate for all new capital developments and major redevelopment or refurbishment projects; and that all existing facilities should achieve a target of 55-65Gj/100 cu.m.

Action Energy, run by the Carbon Trusts and funded by the Department for Food and Rural Affairs, works with NHS PASA to provide NHS Trusts with free advice on how to achieve energy targets.

Water

NHS Trusts spent £4.3m on water and sewage in 2001/02, with PCTs spending a further £0.3m - a regional total of £4.6m.

Water benchmarks have been established following research by The Watermark, a Treasury funded project, and the Office of Government Commerce which surveyed 273 sites in 128 NHS trusts including Bedford and Ipswich hospitals in the region.

Table 33: Water benchmarks for hospitals

Select benchmark from table and multiply by floor area including any pool facilities	Recommended Benchmark cu.m/sq.m/yr	Best practice Benchmark cu.m/sq.m/yr
Large Acute Hospital	1.66	1.38
Small Acute Hospital or Long Stay Hospital without person laundry facility	1.17	0.90
Small Acute Hospital or Long Stay Hospital with personal laundry facility	1.56	1.24

Source: Water Benchmark Report for Health Service Hospital Establishments, March 2003.

The study applied the benchmarks to the Bedford Hospital and Ipswich Hospital, who could save 19,071 and 27,796 cubic metres of water per annum respectively. The research concluded that if all 273 sites achieved or bettered the benchmark then 2m cubic metres of water could be saved per annum - a 14% saving. Water consumption has a direct impact on energy and the environment - its takes 468KWh to supply 1 mega litre of water. This in turn generates 209kg of CO^2. Hence a 14% saving in water consumption could produce a saving of 808,000kg of CO^2 per year. If all sites achieved the best practice benchmark this would double their savings.

Similar research was carried out for nursing homes based on a sample of 70 homes, including three operated by Bedfordshire County Council. The benchmark is 80.6cu.m/resident/yr, with a best practice benchmark of 68.6cu.m/resident/yr. The study concluded that if all 70 homes achieved or bettered the benchmark, some 22,841 cubic metres of water per annum could be saved. Achieving the best practice benchmark would save 56,394 cubic metres per annum.

Based on a UK total of 14,500 registered nursing, residential and convalescence homes, the saving could rise to 8,077,915 m^3 of water per year if all homes achieved the best practice benchmark. It estimated that, based on an average of £0.80 per cubic metre for the supply of water and the same for treatment, the potential saving could be about £13m per annum.

Procurement of healthcare from other providers

The purchase of health and social care from other providers is a growing activity both in the NHS and local government. It accounted for about 11% of the £15bn non-staff NHS budget – about £1.65bn nationally. This expenditure consists of payments for:

- Contracting out/outsourcing of support services (catering, laundry, transport, domestic services).
- Outsourcing of other services such as ICT, medical records, pathology and support services in relation to PFI projects.
- Grants to voluntary bodies to provide public services.
- Payments for residential/nursing care in private sector care homes.
- Commissioning community care from private and voluntary sectors.
- Contracts with private hospitals for:
  - Individual patient care from waiting lists.
  - Block contracts for diagnostic treatment centres.

The draft guidance on Commissioning Acute Elective Care for NHS Patients from Independent Healthcare Providers has very limited application of sustainable development procurement guidelines. Hopefully this will be rectified as a result of the consultation process. If not, this would indicate that a growing proportion of NHS procurement could be excluded from the sustainable development framework.

5.7 Health and social care capital programme

The construction sector has a vital role in the East of England because it is the third largest employer, the second largest economic sector by output and the fourth fastest growing sector in the regional economy. A draft *Sustainable Construction Strategy for East of England* has been developed by the regional partners and the construction industry which aims to deliver high quality infrastructure and improve the built environment, achieve resource efficiency and deliver improvements in the industry such as focusing on whole life needs, modern procurement and construction methods and waste reduction (GO-East, 2003).

A series of performance indicators have been identified for the region, based on the Construction Industry Key Performance Indicators and using national figures recorded in 2003.

Table 34: Value of construction output: new work in health sector, Great Britain (1998-2003, current prices)

	1998	1999	2000	2001	2002	2003 Q1 and Q2
Public sector	764	879	928	1083	1330	765
Private commercial	389	474	622	545	604	284
Total	1153	1353	1550	1628	1934	1049
% public sector	66.3	65.0	59.9	66.5	68.8	72.9
Health as a % of total output	3.6	3.8	4.1	4.1	4.3	4.5

Department for Trade and Industry, (2003).

Table 34 shows construction orders in the East of England in the 'other public' and the 'private commercial' sectors (both of which include health construction projects). Orders have risen from £366m to £590m and from £668m to £1,450m respectively in

the 1998-2002 period. Separate health sector construction orders data are not available for the regions.

Privately financed capital projects

The region has seven major Private Finance Initiative (PFI) health projects plus two NHS Local Improvement Finance Trust (LIFT) projects to improve local health centres and surgeries in Norfolk and Suffolk and Colchester/Tendring. To date there are no approved local authority social services PFI contracts in the region.

Table 35 lists the seven PFI health projects in the East of England identifying the stage of development and the capital value. It should be noted that the capital value of PFI schemes reflects only part of the total cost of projects. The capital cost includes the costs of land, construction, equipment and professional fees but excludes interest and financing costs, arrangement fees, and facilities management costs over the contract period. The capital value is usually about 25%-35% of the total cost, hence the full cost of health sector projects in the East of England will be about £3bn.

Table 35: Major Capital Schemes approved to go ahead since May 1997 (England)

SHA	Trust	Capital value
PFI Schemes reached Financial Close which are completed		
Norfolk, Suffolk, Cambridgeshire	Norfolk & Norwich NHS Trust	£158m
PFI schemes reached Financial Close with work started on site		
2nd wave schemes prioritised		0
3rd wave schemes prioritised		0
4th, 5th and 6th wave schemes which have placed OJEC adverts		
Essex Mid	Essex Hospitals NHS Trust	£110m
4th, 5th and 6th wave schemes which have not yet placed OJEC adverts		
Norfolk, Suffolk, Cambridgeshire	Peterborough Hospitals NHS Trust	£293m
Essex	Essex Rivers Healthcare NHS Trust	£127m
		Non prioritised schemes over £10m
PFI Schemes reached Financial Close which are completed		
Bedfordshire & Hertfordshire	Luton & Dunstable	£15m
Bedfordshire & Hertfordshire	Royston, Buntingford & Bishop Stortford PCT	£15m
PFI schemes reached Financial Close with work started on site		0
PFI Schemes in negotiation but not yet reached financial close		
Norfolk, Suffolk & Cambridgeshire	Addenbrookes NHS Trust	£76m
TOTAL		£794m
NHS LIFT projects		
Norfolk	North Norfolk Primary Care Trust, Southern Norfolk Primary Care Trust, West Norfolk Primary Care Trust, Suffolk West Primary Care Trust	£20m
Colchester/Tendring	Colchester PCT and Tendring PCT	£20m

Department of Health, (2003d). Note: Capital values are estimates and exclude financing and facilities management costs.

As a guide, the population of the East of England is 11% of the total for England. Using this as a crude indicator, the region has close to a proportional number of PFI health projects but only about half the proportion in terms of the value of projects –

see Table 36. The proportion of priority and non-priority schemes by number and by value are contrary to each other with 11 priority schemes having a relatively low value but fewer non-priority schemes having a proportionally higher value.

Table 36: East of England share of national PFI projects in health sector

	Number of schemes in East of England as a % of England total	Capital value of East of England schemes as a % of England total
Priority schemes		
Completed schemes	5	11
4/5/6 wave schemes with OJEC	6	4
4/5/6 wave schemes without OJEC	15	14
Non-priority schemes		
Completed schemes	14	13
Schemes in negotiation but not reached financial close	6	16
Total priority PFI	11	6
Total non-priority PFI	7	11
Total	**10**	**6**

Department of Health, (2003).

The East of England has a relatively small proportion of signed PFI projects in the public sector as a whole – only 4.6% of the total number of projects and 1.9% by capital value.

Box 5: Strategic Procurement at Addenbrookes NHS Trust

The Addenbrookes NHS Trust developed a procurement strategy four years ago which has since achieved a number of innovations, including purchasing cards for low value orders, auto-faxing of orders to suppliers and it was the first trust to use e-commerce ordering. The supplier base has been rationalised with new local and national purchasing agreements. A new Norfolk, Suffolk and Cambridgeshire Supply Management Confederation is planned. The Procurement Department achieved savings of £1.4m, and additional one-off savings of £450,000 in 2000-01 and a further £602,000 the following, year although this level of savings is not expected to be sustained in future years (Addenbrookes NHS Trust, 2001).

Section 6: Planned Growth and Sustainability

This section examines three issues which have a major influence on NHS sustainable development in the region:

- Implications of the growth areas for the sustainability of the health and social care economy.
- Demographic change in the region
- Employment growth and jobs in the health and social care economy

Assessing the health, social, economic and environmental impact of plans, projects and policies will be an important method of ensuring that the NHS Sustainable Development Framework has a continuing central role in decision-making.

6.1 Implications of the growth areas for the sustainability of the health and social care economy

Three of the four major growth areas in the South East of England fall in whole or in part within the East of England region. The Government's Sustainable Communities proposals envisage an additional 200,000 homes in London and the South East regions above the levels currently contained in regional planning guidance.

The three major growth areas are:

- **Thames Gateway:** The Essex proposals envisage growth areas at Stratford, Barking Reach, Tilbury/Thurrock and Southend/Basildon, with about 120,000 new homes by 2016.[8]
- **Milton Keynes-South Midlands:** The East of England region has two of the five major urban areas - Luton/Dunstable and Bedford - designated for expansion with the other three areas located in the South East and East Midlands regions. The overall plan for the Milton Keynes-South Midlands (MKSM) growth area includes 133,000 new homes (44,000 above the current target) and between 120,000 and 150,000 new jobs by 2016. The longer-term targets refer to 370,000 new homes and 300,000 jobs by 2031.
- **London-Stansted-Cambridge:** The proposals envisage growth in 4 areas – Harlow, Cambridge, Upper Lea Valley and new settlements in north Essex or south of Cambridge. Initially, 26,000 new homes are planned, with the potential for up to 250,000 – 500,000 by 2031.

There are other non-ODPM designated growth areas in the region such as the Haven Gateway Partnership encompassing the ports of Felixstowe, Harwich and Ipswich and surrounding communities. Harwich Haven has 400m tonnes of shipping movements annually, making it the UK's most important deepwater harbour.

6.2 Scrutiny of regional and sub-regional plans

The research scrutinised a range of studies of the growth areas to assess the implications for the health and social care economy and the degree to which health and social care planning has been taken into account in the proposals to date. The

[8] Although Stratford and Barking Reach are in the Thames Gateway they are not in the East of England region.

degree to which these issues are taken into account now will have a major influence on the achievement of sustainable development by the NHS and broader health and social care economy.

Health and social care is a major growth sector in the regional economy, although this is too frequently not fully realised in growth strategies, either in terms of the economic power of the sector, the high level of employment and the linkages to local manufacturing, agriculture and research and development. It is also important that proposals take account of inadequacies and shortfalls in current provision instead of simply planning facilities to meet growth-related additional need.

The extent to which growth and investment is directed to regeneration areas, market towns and existing communities also has an important bearing on the location of new health and social care facilities. It also affects the ability of existing services to accommodate the pressure created by growth yet maintain high performance standards. Additional factors include the impact on the NHS workforce with regard to the availability of affordable housing, the method and cost of travel to work, patient accessibility and tackling inequalities.

The studies scrutinised fall into three categories:

- Government policy
  - Sustainable Communities: Building for the Future
- Regional Strategies and Spatial Studies
  - Regional Economic Strategy
  - Consultation on options for Regional Planning Guidance (RPG14)
  - Urban and Rural Prioritisation Study
  - Sustainable Communities in the East of England
  - Planning for Sustainable Housing and Communities: Sustainable Communities in the South East
  - Planning for Sustainable Communities in the South East – Government Response
  - Regional Housing Strategy
- Sub-Regional Planning Studies
  - Implementing the Cambridge Sub-Regional Strategy
  - The Cambridge Phenomenon – Fulfilling the Potential
  - Great Yarmouth and Lowestoft Sub-Regional Development Framework Study
  - Thames Gateway Review
  - Creating Sustainable Communities: Thames Gateway and Growth Areas
  - Relationship between transport and development in the Thames Gateway
  - Stansted/M11 Corridor Study
  - Luton/Dunstable/Houghton Regis Growth Area Study
  - Harlow Options Study
  - Bedford Growth Area Study
  - London-Stansted-Cambridge Sub-Regional Study

Most studies focused on examining alternative spatial options, employment, housing land availability and the transport infrastructure. A few include sections on 'community facilities' or the 'social infrastructure'.

The following quote sums up the traditional approach:

> "For the most part these facilities [healthcare, education and community facilities] have been considered through the development brief process for each of the key land use allocations. The briefs require the provision of a range of facilities through either the improvement/extension of existing schools or the provision of new schools, community and healthcare buildings or land for such purposes. The detailed requirements are generally left to be considered at a later date.
>
> It is anticipated that this would continue to be a reasonable approach to any additional development identified in these areas, with local needs assessed and secured as part of the development control process and through the Section 106 route. It would be normal practice for the developers to provide such requirements where they are reasonable in the context of the development proposed." (Bedford Growth Area Study, May 2003)

This may be an appropriate approach from the perspective of health and social care provision, although a focus on addressing inequalities is still omitted. However, it is entirely inappropriate from the point of view of the sustainable development concept of health and social care. From this vantage point, the approach mapped out above appears to rely too heavily on market forces for the provision of the health and social care infrastructure. It inevitably leads to a project-by-project or site-by-site approach:

> "Historically there has not been complementary provision of strategic infrastructure (especially transport facilities) and community facilities such as hospitals and affordable housing." (Cambridgeshire County Council et al, 2001).
>
> "…..securing community infrastructure through planning gain will become more problematic as the more difficult sites are reached. More fundamentally, community infrastructure and community needs must be integrated into the planning and development process rather than be seen as an add-on." (DETR et al, 2001).

The government is currently consulting on proposals to introduce a new optional fixed planning charge as an alternative to negotiated Section 106 planning obligations (ODPM, 2003). However, this is likely to reinforce market forces providing developers in high land value areas with a speedier route to development compared to regeneration areas with comparably low land values.

The scrutiny of the above plans and strategies revealed the following:

- The studies contained very limited discussion of the provision of health and social care infrastructure and services. This frequently extended only to a mention of 'community facilities' and in some cases to the estimated cost of new facilities. The Cambridge sub-regional study was rare in considering primary, secondary and tertiary healthcare.
- All of the reports contained many references to sustainability and sustainable development but this was in very general terms and there was no recognition of a specific NHS or health and social care sustainable development perspective.
- Analysis of the effect of low, intermediate and high growth spatial development models on the existing health and social care infrastructure and services was not evident in the studies. Access and travel to GPs, health centres and hospitals was not factored in to the discussion on transport.

- Even where health is the largest economic sector in the local economy (for example it accounted for 11.4% of employment or 8,420 jobs in Bedford in 2002) the implications of increased public expenditure and additional employment associated with new health and social care facilities were rarely considered.
- Although one study referred to the decision of a firm to establish a pharmaceutical cluster in Harlow, this economic factor was not developed. The studies did not identify either the existing or potential economic linkages between the health and social care economy and regional manufacturing, agriculture, horticulture and services sectors.
- There was a lack of analysis of the location and accessibility issues of existing distribution and location of health facilities to identify current problems.
- There were general references to healthcare but few or none to social care.
- Health inequalities were rarely considered, except in the Regional Housing Strategy, with no mention of the health needs of different equalities groups. There may also be a legitimate concern that the needs of new communities, projects and/or funding, may take priority over tackling existing inequalities in deprived areas.
- It is assumed that the provision, organisation and management of health and social services will merely 'follow' planning decisions, at the same ratio as development in new communities or regeneration areas, housing densities and transport plans. Although some studies recognised the need for an integrated approach, they did not contain proposals which would ensure that health and social care planning was an integral part of the planning process.
- There is evidence of an over-reliance on market-led development and increased use of private capital for the health and social care infrastructure could lead to gaps, delays and fragmentation in provision.
- The growth of 'gated communities' (self-contained developments with security controlled access) could lead to dual provision of some local health and social care facilities. This would depend largely on the size of these projects but could potentially increase social exclusion and inequalities.
- Several studies made recommendations to establish new delivery mechanisms such as Urban Regeneration Companies or Urban Development Corporations (the main difference being that the latter have statutory planning powers), but there was no analysis of the implications for democratic accountability. Such proposals will need to balance the need for implementation and project management skills whilst also increasing the capacity of existing public bodies and agencies in the region.
- Service delivery mechanisms have changed with commissioning and a mixed economy of provision compared to previous periods of rapid growth when direct public provision was more dominant. Whether a more market-led approach to development will be better able to achieve timely provision of quality services to meet community needs remains to be tested.

In summary, the studies were compiled on the basis that health and social care planning was a secondary matter which did not feature in spatial modelling. Where health was referenced this was mainly included in the identification of the overall level of investment required. Social care provision did not feature.

Health engagement in growth area development

The East of England Public Health Group is working with other regional agencies in developing growth area plans. The Milton Keynes-South Midlands growth area has established a Board with a Development Implementation Group (DIG) with a Health and Social Care Sub-Group. The sub-group also has representation on the DIG. The establishment of organisations to carry forward the London-Stansted-Cambridge

growth area is continuing. Both growth areas have obtained ODPM funding for health and social care provision and to examine the wider determinants of health and health impacts. Strategic Health Authorities, NHS Trusts, PCTs and other health bodies are working jointly across the three regions in the Milton Keynes-South Midlands growth area. A rapid health impact review of the sub-regional strategy is planned. London is establishing a Health Urban Development Unit, funded by the Regional Public Health Group, London Development Agency and the five London SHAs. This unit will work across London as well as in the Thames Gateway area. The remit of the unit is to aid the health sector's engagement in urban planning and physical regeneration to ensure new developments promote health and that enhanced NHS services are planned and delivered to meet the needs of population growth.

Both NHS and local government plan requirements have been significantly reduced. The Local Delivery Plan has become:

> "the overarching three-year plan for health and social care, health improvement and tackling health inequalities" (HDA et al, 2003).

It is expected to link with the community strategy and other plans in the Local Strategic Partnership (LSP). The LSP is now the vehicle for joint strategic planning. However, the quality and capacity of LSPs varies across the region as contributions to the three sub-regional consultation events for this study made clear. The region will need to ensure that health and social care planning is high on the agenda in all growth and regeneration areas for at least the next decade.

6.3 Demographic change in the region

Population forecasts

The East of England population increased by 5.4% between 1991 - 2001, twice the average for England. However, growth is forecast to reduce to 4.6% in the 2001-2011 period and to 4.2% in the following decade. In real terms, this means an additional 500,000 people living in the region by 2021.

Table 37: Population trends in the East of England

Year	Population: East of England Estimates
1991	5,121
1996	5,236
2001	5,395
	Population: East of England Projections
2001	5,448
2006	5,582
2011	5,702
2016	5,823
2021	5,941

Office for National Statistics (2003b).

The current changes in the population structure of the East of England region are forecast to continue to 2021. The percentage of the population in the three age groups 0 – 5 years, 5 – 15 and 16 – 44 are forecast to decline as a proportion of the population from between 8% and 14% - see Table 38.

Between 2010 and 2020, the state retirement age will change from 65 for men and 60 for women to 65 for both sexes. This makes comparison of the 45 – 64 and 65 – 74 age groups difficult. Grouping the two age bands together indicates that this age group will increase by 16% as a proportion of the regional population, with the over 75 age group increasing by 22%.

Table 38: Projected changes in the population age profile, East of England

Population age group	2001	2021	% change
0 – 4 years	6.0	5.5	-8
5 - 15	14.1	12.1	-14
16 - 44	38.9	34.5	-14
45 - 64M/59F	22.1		
65M/60F - 74	11.1		
45 – 65 (2021)		27.2	+16
65 – 74 (2021)		11.2	
75 and over	7.8	9.5	+22

Office for National Statistics, (2003b). Between 2010 and 2020 the state retirement age will change from 65 for men and 60 for women to 65 for both sexes.

A recent study of the implications of an ageing population, using slightly different age bands, summarised the changes over the next 20 years (EERA, 2003b):

- 'younger working age' (16-49) group - decreasing slightly
- 'older working age' (50-64) group - increasing nearly 30%
- 'young old' (65-74) group - increasing by about 45%
- 'middle old' (75-84) group - increasing by over 30%
- 'old old' (85 plus) group - increasing by almost 40%

Local authorities in the region experienced substantially different rates of growth and have significant differences in the age structure of the population. The target areas in the growth zones experienced markedly different rates of growth in the 1991-2001 period and some witnessed a population decrease. For example, Thurrock's population increased 11.2% in the period compared with only a 2.3 % increase in Basildon and a 0.6% decline in Southend.

Three of the four Unitary authorities – Luton, Peterborough and Thurrock had the highest proportion of the population in the 0-15 age group with 23.5% and 21.9% for the latter two. Cambridgeshire (63.4%), Thurrock (62.9%), Bedfordshire (62.4%) and Luton (62.4%) had the highest proportion in the 16 to pension age group. In contrast, three authorities had over 20% of the population in the pension age and over group: Norfolk (23.0%), Southend (21.5%) and Suffolk (21.0%). This is in sharp contrast to Luton which had just 14.0% of the population in this age group.

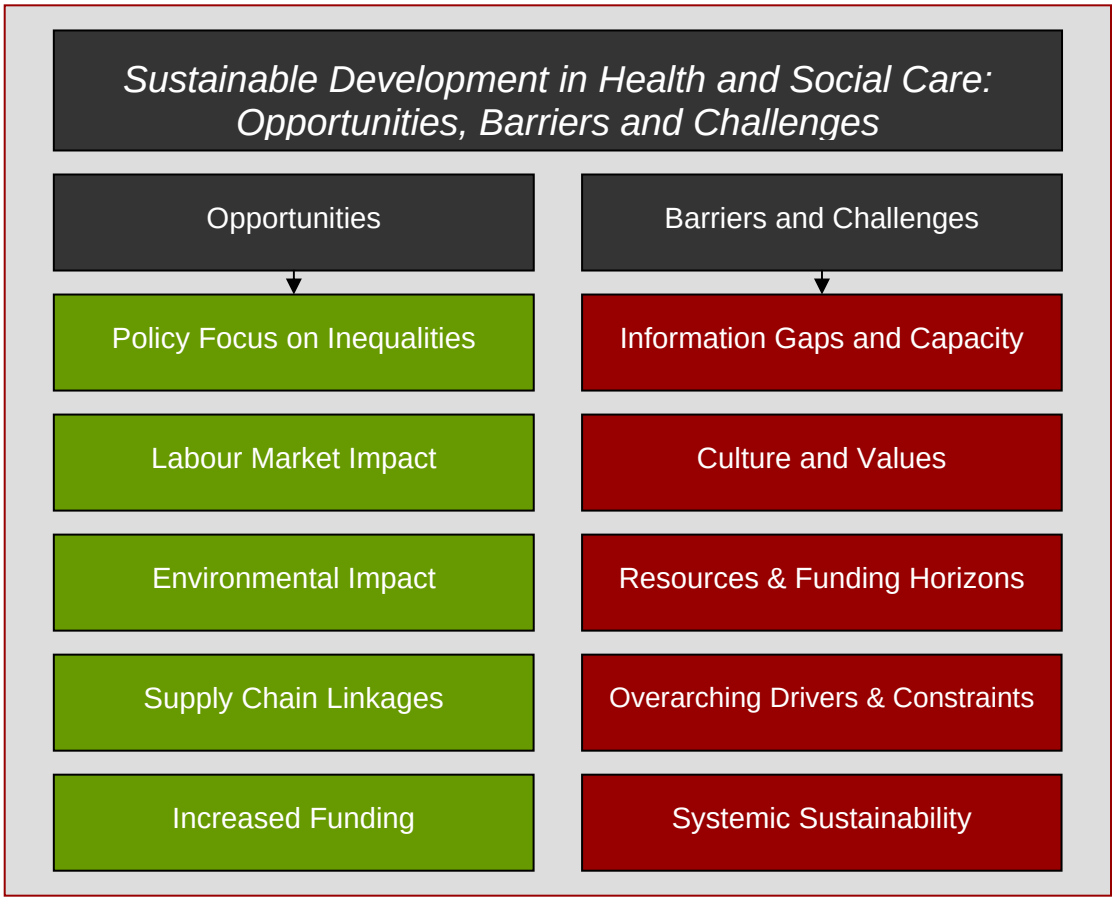
People of non-white ethnic origin increased from 3.2% to 4.9% in the East of England between 1991 and 2001.

Overall, the changes in the population structure will impact on the provision of health and social care:

- The type, range and level of services required in each area but particularly in the growth areas.
- The ageing of the population coupled with the pensions crisis may increase the number of older people seeking employment in the health and social care services.

Section 7: Opportunities, Barriers and Challenges to Sustainable Development in Health and Social Care

The analysis set out in sections 1 - 6 demonstrates that health and social care employment in the East of England presents a number of challenges and opportunities to Sustainable Development in the region. These are set out in the diagram below:



7.1 Opportunities

Policy Focus on Inequalities

The recent increased policy focus inequalities in health and in public policy more generally is welcome and is a major advantage for the sustainable development agenda.

Labour Market Impact

The sheer scale of employment in health and social care is a major opportunity to impact positively on sustainability and sustainable development in the region. This clearly gives the health and social care sectors significant potential to be a standard bearer in the regional labour market.

There are clear links between employment and elements of the Sustainable Development framework for health and social care which take effect in the labour market:

- Targeted employment in health and social care can have a significant impact on deprived communities, especially where service improvement and re-organisation is twinned with regeneration (Improving community health and well-being; Well-being and Fair shares).
- There is significant scope to beneficially impact on equalities issues, especially women's pay, by promoting fairness in employment practices and promoting 'decent' rates of pay (Well-being and Fair shares).
- Over the longer-term, decent pay in the NHS and social care organisations could impact significantly on in-work benefit dependency and the public finances.
- Skills and personal development programmes in the sector can help to promote better skills not just in health and social care but also the wider labour market (Sustainable development at the centre).

Environmental Impact

There is also clear potential to lessen the negative impact that health and social care has on the environment and to use the employer and purchaser function to influence individual behaviour:

- Employee travel plans can influence a large section of the local and regional labour force, promoting less environmentally damaging modes of transport and reducing the number of miles travelled (Polluter pays; Adopting a precautionary approach; Valuing nature).
- Employee education as part of personal development programmes can help to address sustainability issues in individual behaviour, reaching a huge audience (Sustainable development at the centre).
- Sustainable procurement can shape both the type of products bought (i.e. without unnecessary packaging or products made from reusable, recyclable, recycled or biodegradable materials) and the ways in which they are produced (considering the waste and environmental impacts of the specific processed used).

Supply Chain Linkages

The considerable linkages between health and social care and a range of other businesses and employers in the wider economy presents significant potential for health and social care to beneficially impact beyond those staff directly employed by the NHS and local authorities. The same linkages with the sustainable development framework can be advanced, albeit less directly, through the use of strategic sustainable procurement practices to influence the way in which contractors and suppliers employ and manage their staff and shape their broader human resources and production practices. In addition, it is possible, through promoting local and regional linkages with suppliers, to reduce product travel distances and modes of transport.

Increased funding

The substantially increased funding for health and social care over the next spending review period is a major opportunity to link the stability of the labour market with public spending. There is already some consensus among economists that the large increases in public spending contained in Budget 2002, in the context of a downturn in the global economic environment, has provided a counter-cyclical boost to the

national economy, helping to insulate it from the impact of slow growth globally. The extent to which the full effect of this is felt nationally and regionally will depend on the extent to which this spending is retained in the national/regional economy or spent in other regions or elsewhere in the world.

Building linkages between the economy and health and social care spending also has the potential to stabilise the regional economy over the longer-term, helping to smooth the effects of the business cycle. It also has the potential to offset some of the more potentially damaging effects of structural change in the regional economy, for instance by linking agricultural production in the region with food purchasing by health and social care organisations, and the public sector more generally.

Again, because of the potential leverage that such linkages would give the public sector over the private sector economy in the region, there is also significant potential to impact beneficially on the environmental by-products of production. Through shaping product specifications (in food in particular) there is also potential to beneficially impact on community well-being and public health as well as improving service delivery in healthcare.

Box 6: Working with local suppliers to improve design

During consultation we heard about a hospital trust working closely with local bed manufacturers to design improved hospital beds for overweight patients. The project not only helped deliver improved design in an important piece of medical equipment, it helped to build linkages within the local economy with all the benefits that this brings. It also created a 'virtuous learning process', where such experience builds capacity for further similar projects.

7.2 Barriers and Challenges

Information Gaps and Capacity

Lack of appropriate data and information on a range of topics hampers efforts to fully quantify the sustainability impact of health and social care in the region. More importantly, however, it also hampers the ability of health and social care organisations to plan and effectively address sustainable development concerns. Specific information gaps are:

- Numbers of staff employed by contractors and in the private and independent health and social care sectors.
- The type and characteristics of employment in these sectors.
- The precise linkages between public spending on health and social care in the region and the jobs that it supports, through the supply chain, in the local and regional economy.
- The residential location of health and social care staff, so that the contribution of health and social care to providing employment in deprived communities and the potential and actual linkages to deprivation can be measured.
- Precise workforce projections, particularly in the Sustainable Communities and other growth areas alongside skills needs projection in those areas and associated information about housing and other infrastructural needs.
- The extent to which goods and services are sourced within the region.
- The linkages between health and social care procurement and medical research and the scope for spin-offs.

- The extent to which contracts build in sustainable development criteria in the procurement process.
- The need to examine the chain of production and consumption in the health and social care sector - how/where products are manufactured, transported, distributed, used and disposed of to identify ways of reducing negative impacts and removing barriers.
- The lack of knowledge about the procurement practices of the private and voluntary sectors.

Information gaps present one type of capacity challenge. Other capacity challenges include:

- The need to constantly address potentially exponential demands for health and social care means that restructuring to address sustainability concerns which have the potential to reduce and control this demand in the future is difficult to implement.
- Increasing commissioning from the market, in both health and social care, brings substantial capacity challenges in terms of implementing sustainable development policies and initiatives. While there is potential to use strategic commissioning and procurement to promote sustainable development, the scope is vastly reduced in comparison to direct provision.
- Low pay among some staff groups.
- Low levels of investment in public health.
- Consultation with procurement managers revealed that procurement often takes place in silos, not just between Trusts but within them. This often results in different departments of the same hospital, for instance, buying the same product but from different suppliers at different prices. This is a major barrier to any type of strategic procurement, let alone sustainable procurement. Coordination, strategic direction and a greater degree of knowledge and skills are needed to boost capacity in procurement practice to be able to meet the demands of achieving sustainable development.

A further major capacity challenge concerns recruitment and retention. This issue is complicated considerably when viewed not simply in terms of the number of staff needed but also in terms of the changing skills mix required in the sector. Despite training being more prominent in the health sector in particular than the rest of the economy, the need to attract and retain staff and to build skills capacity is still an acknowledged problem. Net requirements for caring personal service occupations (incorporating expansion and replacement demand) on a national basis are projected at over 100% between 1999 and 2010. Net requirements for many other groups of staff are projected at over 80%, including health professionals, health associate professionals and business / public service professionals (Skills for Health, 2003). The recruitment and retention challenge is particularly highlighted by the relationship of expansion demand (the need to recruit new staff as health and social care activity grows) and replacement demand (the need to replace staff as the leave the sector or retire). The large expansion of health and social care staffing is set out above. However, replacement demand outstrips expansion demand across a range of occupational groups including health professionals, health associate professionals, caring personal service occupations, business / public service associate professionals, administrative and clerical occupations, secretarial related occupations and elementary clerical service occupations (Skills for Health, 2003).

The East of England is likely to find these challenges more problematic than many other regions, because of the excess forecast population growth, relatively high house prices in the region and more competitive wages in other industries and occupations.

Box 7: Initiatives to deal with skills and recruitment and retention challenges in health and social care

Perhaps because of the size of the sector and the wide range of organisations involved in it, there are a range of initiatives at national and local level which address skills, recruitment and retention challenges:

The Sector Skills Agency (Skills for Health) is in development.

The Knowledge and Skills Framework is part of the Agenda for Change job evaluation and grading system and makes linkages with national occupational standards for the purpose of pay progression, therefore contributing to the workforce development progress.

The NHS University became fully established in October 2003 and aims to promote and develop the NHS skills escalator, coordinate education, training and development for NHS employees.

Workforce Development Confederations were formed in April 2001 and aim to coordinate and provide (through commissioning and strategic management) education and training for health and social care staff.

A number of projects in the East of England involve close working between Workforce Development Confederations in Bedfordshire and Hertfordshire and Norfolk, Suffolk and Cambridgeshire, local Learning and Skills Councils, NHS Trusts, local authorities and social care employers to promote skills development for social care staff in particular. In some cases there was additional emphasis on returning non-standard groups to the health and social care workforce, such as mothers with young children. A recent EEDA report examines and describes a range of good practice examples of skills, training and development projects across the region (EEDA, 2003a).

Innovative local projects outside if the region involve a range of approaches including targeting recruitment at minority ethnic groups (Future Care Employment Agency, South Birmingham PCT), linking recruitment to regeneration in deprived communities and people on long-term benefits (NHS Gateway project, Wolverhampton; Work placement project, Walsall NHS Trust and PCT) and targeting recruitment at groups with disabilities (South West London (SWL) and St George's Mental Health NHS Trust; Bridge Employment project, Sheffield).

Culture and Values

A prominent conclusion from consultation was that the most significant barrier to the pursuit of sustainable development objectives is the culture and dominant values in public policy. These are, for the most part, driven by and reflected in resource constraints, funding horizons and overarching policy frameworks, drivers and constraints. In particular, the following were highlighted:

- Short-termism.
- Narrow approaches to assessing cost.
- Narrowly defined performance management frameworks.
- Limited appreciation of sustainability criteria in options appraisal, assessment and evaluation.

Resources and funding horizons

Resource constraints restrict the ability of health and social care organisations to make the lead investments that are required to implement many policies designed to address sustainable development, although, over the longer-term, there is substantial

potential for such investment to reduce cost pressures. Problems of resource constraints are then particularly bound up with short-term funding horizons. The three year spending plans introduced by the present government, alongside end of financial year flexibility within these, has improved this situation in some respects. However, sustainable development requires much longer funding and investment lead times and therefore short-termism in funding streams is a substantial barrier to the implementation of sustainable development policies.

Overarching Drivers and Constraints

Consultation with health and social care organisations and other stakeholders revealed that overarching policy frameworks which drive and constrain operational practice in some cases present significant barriers and challenges with regard to sustainable development:

- Narrowly defined performance management frameworks drive policy. These impact on the capacity of health and social care to implement sustainable development in two ways. First, they have the effect of concentrating operational effort on achieving those targets that are included in the overall framework. Second, they often drive policy in directions which are unhelpful for sustainable development (see Box 8).
- Approaches to accounting for cost, for options appraisal and for assessing Value for Money (VfM) are often narrowly defined, meaning that only direct upfront costs are reflected, rather than the 'whole life' or 'whole systems' cost of a particular policy or policy option. This means that options for staff employment or for direct provision or contracting are not assessed in a way that places sustainable development at the centre.
- Procurement rules, and their interpretation by the UK government, often undermine and limit the capacity to include sustainable development emphasis, such as local employment or environmental clauses in procurement.

Box 8: Narrowly Defined Performance Management as a Significant Constraint

One particular example of narrowly defined performance management was the role of specific Best Value indicators in driving service changes in social care. A range of Best Value Indicators compare the unit cost of a range of social care options between local authorities, with the clear implication that lower unit cost is better. The BV framework is designed to drive 'continuous service improvement' as measured by the performance indicators. In the case of social care, this means that local authorities are locked into competition with one another to drive down the unit cost of social care. This has driven a number of policy changes in social care:

- Increasing use of commissioning from the market rather than direct provision.
- A drive to lower the rate paid to independent sector providers.
- Social care staff feeling the pinch of reduced rates through lower wages, poorer employment practices, less training and less advantageous terms and conditions and job security.
- Recruitment and retention problems, particularly affecting the capacity of providers to recruit appropriately qualified and experienced staff.
- A loss of capacity in local authority and independent sector provision as profit margins are squeezed. Information provided by the Norfolk, Suffolk and Cambridge WDC suggests that residential care capacity reduced by 3% in the region in 2000/01 alone.

All these trends have a negative impact not only on the sustainability of the labour market but also on the quality of service provided to vulnerable people and raise issues of systemic sustainability for health and social care and the wider welfare state.

Systemic Sustainability

The challenges highlighted above collectively raise the most important challenge of all for sustainable development and the health and social care sectors. That challenge is for the sustainability of the system as a whole, with implications for the structural stability of the entire welfare state.

There are a number of specific aspects to the systemic sustainability of health and social care:

- The need to achieve growth in staffing numbers in the context of an already tight labour market and high accommodation costs creating substantial key worker recruitment and retention challenges.
- Long-term resource constraints. While funding may be rapidly increasing, a number of contextual factors mean that the ability of these rises to be used to maintain and increase staffing levels to meet exponentially rising demand are limited:
    - The vital need to address pay and terms and conditions issues.
    - The tightening tax regime (in terms of existing National Insurance rises and potential future rises).
    - The likelihood that future spending rises will not continue the trend set by the 2002 Budget.
    - Exponentially increasing costs arising from public expectation, an ageing population and technological and methodological advances in medical techniques, pharmaceuticals and medical equipment.
- Skills shortages in vital areas like social care, alongside the steadily increasing complexity of the role of carer as employment practices are changed and the ageing population brings new and additional demands.
- Increasing use of private providers may lead to cost pressures, especially if insurance based funding is increasingly taken up as a by-product of the 'choice agenda'.

7.3 Potential Impact of Future Policy Trends

Moves to increase commissioning of health and social care services from the private and voluntary sectors, the creation of new organisations to deliver health services (such a foundation hospitals and social enterprises) and policies which increase the role of market forces in the provision of services (the choice, responsiveness and equity initiative and reliance on private developers and 'planning gain' in the growth areas) are likely to have a cumulative negative effect on the quality and availability of health and social care services in the region and could limit progress towards sustainable development.

The separation of strategic planning from operational responsibility, which accompanies commissioning, makes it all the more difficult to implement initiatives aimed at promoting sustainable development. For instance, it proved impossible in the course of this study to even estimate the number of staff employed by contractors to NHS / Local Authority organisations let alone to judge how far their employment or other practices contribute to sustainable development. This degree of difficulty in accessing information suggests that implementing complex strategic and operational policies which often go well beyond simple service delivery will be more difficult still.

Moreover, in social care, where there is a much longer history of introducing a 'managed' market through commissioning, there is clear evidence that the results are anything but sustainable.

This history suggests that increased commissioning could lead to:

- The procurement process becoming all pervasive in the planning, managing and operation of health and social care services.
- Fragmentation in service delivery.
- Difficulties in matching supply and demand for services and long-term planning for future needs.

Increased commissioning from the market is also recognised as having had a negative effect on the pay and terms and conditions of the most vulnerable staff groups:

> "…we are aware that Compulsory Competitive Tendering and Best Value placed a downward pressure on the pay and conditions of the lowest paid and most vulnerable workers in local government…" (Local Government Pay Commission, 2003).

On the other hand, increased commissioning, particularly via payment by results, may offer enhanced opportunities to manage the market in a progressive and sustainable manner. For instance, such a strategic commissioning role could be used to more successfully tackle low pay in those occupations already carried out outside the NHS or local government. There may also be potential for a virtuous learning curve from this activity to generate better practice across the board in terms of a strategic approach to procurement.

However, fulfilling such a role will be difficult, will require substantial capacity and skills in the NHS and local government. The evidence, gained as part of the research for this study, of capacity to deliver sustainable development objectives via traditional procurement in the NHS in particular, let alone strategic commissioning, did not suggest that this capacity is currently in place. In order to ensure that the pitfalls are avoided, increased commissioning from the market by the NHS and local authorities will need to be accompanied by:

- Legislative frameworks to protect staff and employment in functions transferred to the private and independent sectors. This would be similar to the Best Value Code of Practice on Treatment of Staff which is now applicable in local government, but substantially revised to plug the important holes that remain in that framework.
- Complex options appraisal, Impact Assessment and contract monitoring techniques which reflect the full range of issues highlighted in the Health and Social Care Sustainable Development Framework.
- A commitment to achieving sustainable development objectives as part of the principles and performance management framework for increased commissioning on the part of both client (NHS and local government) and contractors (service delivery partners).

Section 8: Existing and Potential Linkages to Regional Strategies

8.1 Introduction

The analysis in this report has highlighted the crucial importance of addressing the key aspects of the health and social care sustainable development framework set out in section 2, in the development of health and social care policy at a national, regional and local level. The reverse of this is also true. Other strategies need to make linkages back to the health and social care system. For instance, the Regional Economic Strategy should reflect the massive contribution made by health and social care to the regional economy, particularly employment. It should also reflect the significant supply chain demand created by the regional health and social care system and the potential that exists to derive sustainability benefits from marrying business development actions to the demand within health and social care. The same arguments are equally true for other regional strategies such as Agriculture and Environmental strategies.

There is potential for synergy in other areas too. For instance, as Section 5 on growth underlines, planning needs to be integrated between public services, housing and transport. This implies linkages with other regional strategies, principally Regional Planning Guidance but also sectoral strategies (such as housing and transport) and cross cutting strategies (such as Urban Renaissance) that bring many of these together in projects implemented at a local level.

Part of the research project considered a wide range of strategies at a regional level to consider the existing and potential linkages that might be developed between achieving sustainable health and social care development and the wider development of the East of England region. One avenue where this analysis, alongside the general analysis in this report, could be taken forward is in the production of a regional health strategy. Work to produce such a strategy was begun in early 2004.

8.2 Regional Strategies

There are a wide range of existing regional strategies developed and led by a variety of regional bodies. These are set out in Table 39.

Table 39: Major East of England Regional Strategies

Strategy	Status
Regional Economic Strategy	Published June 2001. Review begins September 2003. Next expected publication autumn 2004
Regional Planning Guidance	Expected publication February 2004
Regional Housing Strategy	Published June 2003
Regional Environment Strategy	Published July 2003
Regional Social Strategy	Expected publication December 2003
Regional Cultural Strategy	Published 2000. Review begins November 2003. Next expected publication summer 2004
Framework for Regional Employment and Skills Action	Published February 2003
Sustainable Development Framework	Published October 2001
Food and Farming Strategy – East of England Action Plan	Submitted to central Government and EERA end July 2003 for approval
Urban Renaissance Strategy	Currently out to consultation. Expected publication November 2003

8.3 The Regional Economic Strategy

The Regional Economic Strategy: *East of England 2010: Prosperity and Opportunity for All* (EEDA, 2001), sets out the key strategic priorities for the East of England Development Agency in discharging responsibilities in coordinating and leading the economic development of the region and regeneration of its deprived communities. It not only guides strategic support for business development, investment and employment, it helps to set out the goals for significant streams of public investment from the European Union and central government. In addition to this, these strategic priorities crucially shape the decisions of the private sector in the region.

From the point of view of the health and social care sustainable development framework outlined here, the East of England RES is highly focused on the overall strategic aim of making the region 'one of the wealthiest 20 regions in Europe by 2010'. While other issues, such as the social and environmental consequences of growth, are addressed, they are very clearly secondary to achieving this headline target. The approach to sustainable development is thus largely defined by the need to cope with these consequences rather than to advance equalities, better health and well-being as headline objectives in their own right.

The sustainable development framework outlined here clearly sees economic growth as only one aspect of a broader set of goals for public policy where the purpose of this and other aspects is to achieve sustainability. This is a very different perspective on the goal and purpose of economic growth than that contained in the RES.

In addition, the extremely powerful contribution made by health and social care, alongside other public services, to economic growth and employment in the region is hardly recognised in the RES. The economic contribution of health is accepted at page 75 but social care and most other public services are not mentioned in this regard. The RES also does not sufficiently recognise the key part that health and social care facilities play as an aspect of the region's economic, social and cultural infrastructure, both in terms of the strategic importance of the health and social care sectors *per se* and in terms of the sheer scale of estate and land mass involved.

Given the scale of purchasing and employment in the health and social care sector, there is significant potential to marry these aspects to regeneration, business development and overall economic growth in a more sustainable way (i.e. which is both stable and cuts down on harmful environmental impacts of long travelling distances for commodity and other inputs into health and social care and retains greater control at a regional and local level over the conditions of production of these inputs). Obviously there is also significant potential to boost local and regional employment and to address the wider social determinants of health, ill-health and inequalities in health. At root, these must be based on a greater focus on equality.

Finally, the public health perspective which informs, for instance, the link between health inequalities and the sustainable development framework for health and social care, also suggests that more needs to be done to ensure that the RES addresses issues of socio-economic need. *Regeneration Plus* is a strategic priority in the RES, but it is insufficiently developed to highlight the linkages with health inequality and the potential that investment and expenditure by the Agency and other regional partners can have in addressing it alongside more general regeneration issues. For instance, this report has highlighted the specific link between health and social care purchasing and employment and the effects that this has on the labour market. This argument applies equally across the public sector and the RES has the potential to provide a strategic lead in establishing best practice in this regard across other sectors and organisations.

The current Regional Economic Strategy (RES) is undergoing review between November 2003 and Autumn 2004. This means that there is significant potential for regional and sub-regional partners and stakeholders to influence the development of the new regional strategy to include:

- A greater and more developed understanding of sustainable development.
- A greater focus on the contribution of health and social care to the region's economy, particularly in times of less pronounced growth.
- A greater strategic focus on underlying social factors, principally inequality, as part of acknowledgement of the reliance of the region's economy on the health and well being of its population and workforce, without which growth would not be possible. This also means that health and social care are strategically important sectors both in terms of preventative public health and responsive healthcare for the productivity, stability and success of the wider regional economy.
- A spatial focus on addressing multiple deprivation.

It would be beneficial if the drafting process for the RES took account of some of the recommendations developed in Section 9 of this report.

8.4 Sustainable Development Framework

The region's Sustainable Development Framework was produced in 2001 (EERA, 2001) and attempts to sit above other regional strategies, coordinating their linkages to sustainability. There are clear linkages also between the Framework and the health and social care system. Many of these are explicitly addressed in the Framework, especially the link between a range of environmental factors (including social determinants) and the prevalence of ill-health. However, there are a number of places where these linkages might be given added emphasis. While this document is largely focused on health and social care, the same arguments apply to many other public sectors:

- **Economy** – An additional key objective to support balanced economic growth which, avoiding a reliance on 'trickledown', is shared evenly to address the need for greater equality.
- **Location of growth** – Additional challenges and key objectives are ensuring that growth is first of all desirable and matched specifically to areas of need. Growth planning should also take into account the public service demands which will arise from it.
- **Transport** – On the one hand transport planning should reflect the needs of people to access major public services easily and to avoid, where possible, car use. On the other, the planning of public service facilities, such as hospitals, clinics and surgeries, should also reflect the need to bring services to the communities they are intended for, and to cut down on overall travel and to ensure that travel takes place via more sustainable modes. New technologies may help to cut down on travel, but these should be employed in a socially equitable way.
- **Rural issues** – Health and social care should be added to the list of key services which need to be sustained as part of a package of support for rural life and social inclusion in a rural setting. A key example is changes to social care that replace residential care with increasing amounts of domiciliary care. While this may help people remain in the communities in which they live, there is also a danger that long and costly travelling times threaten an already unstable system and prevent vulnerable people in rural communities from accessing the help and support that they require.

- **Agriculture, food and forestry** – Linkages between public sector consumption of food and other agricultural products should be linked to their production in the region and to future agricultural and food production planning. This might offer substantial sustainability gains for the agricultural and food production industries and the communities that they support, at the same time as achieving environmental goals by reducing the travelling distances of food. Locally supplied food also brings the consumer closer to the source of production and therefore increases the scope for transparency and accountability in the production process. It also supports better quality food production, with beneficial consequences for health in the region. The link between food quality and school meals, for instance, has the potential to address the consequences of social inequality and diet at an early age. Improved food quality in hospitals may also help to reduce convalescence times.
- **Poverty and deprivation** – Public services should not only be coordinated, efficient and effective in addressing the needs of the disadvantaged but they should, wherever and however possible, address the root causes of poverty, deprivation and inequality. As this study has shown, there is significant scope for the public sector to use its employing, purchasing, contracting, building, managing and planning functions to achieve greater beneficial impacts on poverty and deprivation.
- **Culture** – Contemporary culture reflects the underlying trends and traits of our society. If we are to effectively meet the challenges of an ageing population and constantly changing demands of the economy, it will be important that the dominant themes in our society are reflected in a 'culture of caring' for the disadvantaged, the vulnerable, the ill and the infirm-elderly.
- **Learning and skills** – Is important for developing an individual's self and social understanding and sense of self worth. It is important aside from the impact that it has on success and competitiveness in the labour market. Skills are important for gaining access to employment and the social inclusion that this brings, thereby having a beneficial impact on health and health inequalities. However, it is also important to acknowledge the importance of skills development to the systemic sustainability of the health and social care sectors. The strategic link between health and social care and broader sustainability questions means that this is not a narrow sectoral or organisational agenda, it is a concern for society as a whole.
- **Natural environment** – Health and social care planning and delivery should reflect the need to care for the region's natural environment.
- **Historic and built environment** – Public sector buildings and facilities are necessarily designed, built or amended with functionality and cost as the main concerns (though not always in that order). While this reflects the need to efficiently discharge the state's responsibility to the tax payer, where possible the planning, design and construction of public buildings, including health and social care facilities should reflect the need to maintain and develop an attractive built environment. This can help to contribute to the 'liveability' factor, civic development and community participation.
- **Energy** – As this study has shown, health and social care (and the public sector more generally) have considerable capacity to contribute to the efficient use of energy and the adoption of renewable forms of energy. Indeed public sector contracts are potentially so large that they could provide substantial benefits by allowing the creation of significant economies of scale in the production of renewables, therefore contributing to their competitiveness in the market and their uptake. While switching to renewable forms of energy may be expensive in the short-term, it has the potential to yield significant cost savings over the medium-term through reduced energy costs. Moreover, energy efficiency has the potential to deliver savings with only very short investment leads.

- **Local environmental quality** – Concern to maintain and improve the quality of local environments should be integrated with health and social care and other public sector planning decisions.
- **Waste** – There is substantial potential to reduce waste production and travel and to improve the management of waste originating from the health and social care sectors.
- **Water resources and quality** – It is important that the need to conserve water is mainstreamed throughout the health and social care system, while recognising the prior need for hygiene and clinical quality.

8.5 Framework for Regional Employment and Skills Action

The Framework for Regional Employment and Skills Action (FRESA) (East of England Skills Forum, 2003) highlights some of the strategic skills challenges faced by the region over coming years. A key challenge highlighted in the document is the need to address the increasingly two pronged aspect of skills demand:

> "The growth of the knowledge economy is associated with the emergence of a dual labour market, because for every 'knowledge job' created, several lower level positions already exist. For example, for every doctor there are three cleaners, porters and catering staff, for every teacher there are five dinner ladies, class room assistants, caretakers, cleaners and grounds staff"

Failure to address skills needs at either end of this continuum will generate significant social and public policy problems. For instance, failing to address the need for higher level skills supply may lead to:

- An influx of highly skilled workers from outside the region, placing further pressure on already overheated housing markets.
- Rapidly rising wages for higher skilled workers, increasing disparities in income and again fuelling the housing market.
- Rising disparities and rising house prices may lead to the inability of many to afford decent and suitable housing.

Clearly these general trends are replicated within health and social care. Reorganisation of working practices, particularly resulting from the implementation of the Working Time Directive will exacerbate existing trends in demand for Doctors, consultants and other health professionals. At the other end of the scale there is a clear need to address recruitment and retention issues for lower paid staff. However, the situation in social care in particular shows that while social problems undoubtedly arise from deficiencies in the availability of higher level skills, gaps in 'so called' lower level skills threaten the systemic sustainability of the whole sector, one of the core elements of a caring and advanced society. The report has highlighted sectoral intervention by SHAs acting jointly with local LSCs to address skills needs in health care. As the FRESA is developed and reviewed it may be desirable to place additional emphasis on the role that public sector employers can and do play as standard bearers in local labour markets and also the need to address skills issues in key public service areas as part of sustaining the infrastructure of the region.

8.6 Regional Social Strategy

The Regional Social Strategy (RSS) is still in the process of production. Draft versions of the report (EERA, 2003a) highlight the well accepted links between the

various aspects of social exclusion including poverty, education and health. This region-specific analysis is drawn on extensively in the section 3 of this report on health inequalities. Clearly then, there are linkages between addressing social inclusion and exclusion issues and the role of sustainability in the health and social care sectors.

Health and social care and other public services would benefit from being linked to the full range of the interventions highlighted in the RSS.

8.7 Regional Planning Guidance

The East of England Regional Planning Guidance (RPG) is currently in the process of production. The *Specification* for RPG (EERA, 2002) sets out the plan to replace the previously four sub-regional RPGs:

- East Anglia – Cambridgeshire, Norfolk and Suffolk.
- South East – Bedfordshire, Essex and Hertfordshire.
- Thames Gateway and River Thames (jointly) – Essex, Southend-on-Sea and Thurrock.

RPG provides the overall long-term planning framework for:

- The Regional Economic Strategy and local economic development initiatives.
- Regional Transport Strategy and local transport plans.
- Local Authority and other (e.g. URC) planning policies.
- The distribution of European monies.
- The land-use implications of culture, tourism and sport.
- Environmental resource management, protection and usage.

The production of RPG is necessarily a long-term process and its timetable for completion is July 2004. The Regional Health and Social Inclusion Panel as well as a range of other appropriate forums have direct linkages to the production of the RPG and part of the production and drafting process is the undertaking of a significant sustainability appraisal to:

> "ensure that it assists the economy, reduces social exclusion, enhances the environment and ensures the prudent use of natural resources".

This should ensure that the RPG reflects the appropriate linkages to the analysis highlighted here. This is significant because the health and social care sustainability framework developed here is explicit that many of the overall sustainability challenges facing the health and social care sectors are heavily related to planning issues.

8.8 Regional Environment Strategy

The Regional Environment Strategy (EERA & EEEF, 2003) comprehensively describes strengths, weaknesses, opportunities and challenges in the region's natural and man-made environments. While the potential contribution of health and social care (like other public services) is not mentioned in the report, many of the same linkages between sustainability in health and social care and the Sustainable Development Framework can be replicated for the Regional Environment Strategy.

8.9 Sustainable Farming and Food Strategy

The East of England is not only one of the most productive agricultural landscapes in the world, there is also a high concentration of food sector businesses in the region, encompassing research and development and processing. Like elsewhere, however, agriculture in the East of England is at a crossroads. Significant structural change is bound up with a number of pressures on the agricultural sector:

- Increased sourcing of cheap food from abroad (and increased competition in global markets).
- Increasing interest in higher value added locally produced food in developed markets.
- Legislative and regulatory changes which may lead to the extensive reform of agricultural trade rules.
- Reform of the Common Agricultural Policy.

The Sustainable Farming and Food Strategy Delivery Plan (GO-East & EEDA, 2003) sets some key policy opportunities for the sector, including localising food production and reducing the distance between consumer and producer. Some key policy interventions are relevant for the sustainability of health and social care. The Delivery plan sets out the importance of building links between the school curriculum and food production and the links between food and diet quality and low income groups. The Delivery Plan also includes interventions to link public food procurement to regional and local supply and explicitly lists the NHS in this regard. The further link between public sector food procurement, local production and regeneration in rural and urban communities is also made.

8.10 Regional Housing Strategy

There are also clear linkages between sustainability in health and social care and the Regional Housing Strategy (RHS) (Regional Housing Forum, 2003). The RHS has an explicit focus on meeting demand for housing, which can have a beneficial impact on health and well-being in the region, particularly for affordable decent quality housing to address social inclusion issues:

- To ensure that everyone can live in a decent home at an affordable price.
- To contribute effectively to social inclusion within sustainable communities.
- To enable housing to contribute fully to ensure food health and promote health equality.
- To use housing investment to complement sustainable economic development.
- To contribute to a sustainable environment.

While these strategic aims are all in line with the need to promote sustainability in the broadest sense, their achievement will clearly be a significant challenge for regional partners and stakeholders. The extent to which the region is able to ensure, for instance, that affordable housing is genuinely affordable or that supply for such housing meets demand, will have a key bearing on social sustainability and demand for health and social care over the medium to long-term.

It will also be necessary to ensure that the planning of new housing is taken forward alongside health and social care planning, primarily including workforce needs.

8.11 Urban Renaissance

The Urban Renaissance Strategy will:

> "set the standard for design quality across the region, reflecting sub-regional characteristics. It will guide EEDA's own direct physical development and influence sub-regional strategies, such as the Thames Gateway and the Cambridge sub-regional strategies" (EEDA, 2003a)

It will also set out which areas will be subject to the development of Masterplans.

In addressing both areas of growth and regeneration, the urban renaissance strategy will need to bear in mind the linkages outlined in this report between deprivation, inequality and health and the economic contribution that health and social care activities can bring to local regeneration projects. It will also need to bear in mind the needs of new and developing communities for access to public services, including health and social care.

Section 9: Recommendations

9.1 Introduction

Before setting out our recommendations it is important to summarise seven key themes running through this report. They also provide a context for our recommendations.

First, individual NHS Trusts, PCTs, local authorities and other health and social care organisations can take immediate and practical action to:

- Reduce waste (particularly harmful waste).
- Minimise travel (in the whole, recognising both patient/user and staff travel)
- Reduce energy and water consumption.
- Tackle low pay and poor quality (including insecure) employment.
- Promote the stability and sustainability of the local and regional economy and boost employment through purchasing locally produced goods and services.
- Taken together, these actions can make a real difference to the regional economy (including regeneration) and environment and can contribute to achieving sustainable development.

Second, the NHS and local authorities are major employers and purchasers of goods and services in the region and have a significant influence in the regional economy. The quality of health and social care jobs in addition to where employment, goods and services are sourced from can have an important impact in promoting regeneration, reducing health inequalities, in addition to addressing behavioural issues such as smoking, alcohol and drug use, diet, exercise and health and safety.

Third, the NHS and local authorities are not just service providers and purchasers of goods, services and buildings. They also have a significant impact on community well-being and public health through their role in planning, managing and regenerating communities. This is reflected in the scope of the Health and Social Care Sustainable Development Framework.

Fourth, this report has referred to the 'health and social care economy' in the region not just because of its economic importance, but also because of the need to have a perspective on health and social care as an integrated system of services in a 'continuum of care'. It has focused on the NHS and local authorities as major service providers. Much wider use of commissioning and contracting may be inevitable in the drive to a plurality of service providers, particularly through expanding the role of private health and social care companies and an increased role for social enterprises in the voluntary sector. Hence it is important that the private and voluntary sectors share the commitment of NHS and local government to sustainable development. It will be important that there is a strict and rigid framework for the coordination and management of increased commissioning and diversity in service provision to ensure that sustainable policies and practices are adopted across the full range of service providers, regardless of whether they are in the public, private or voluntary sectors. It is important also this process involves raising the standard of policies and practices among all partners rather than lowering the standard of all to the lowest common denominator. Otherwise there will be no net gain for the region if service provision is switched from the public to the private/voluntary sector. This is an agenda that cannot be left to chance or watered down to meet the requirements of sectional interest.

Fifth, this study provides clear evidence that it does matter who provides services and how they are provided. Employment, procurement, planning and management policies and practices all have a key bearing on the extent to which sustainable development will be achieved. There are very substantial differences across all these areas between providers and these present a significant barrier to coordinated strategic action.

The penultimate theme concerns performance management, which is a core part of the government's modernisation agenda in the NHS and local government and other public services. There is considerable pressure to meet targets with little time or resources available to carryout work or initiatives that are additional to mainstream work designed to meet the targets. This could mean that sustainability will always be marginalised. It is therefore essential that performance management regimes of targets, assessments and inspections be amended to include sustainable development objectives. This is doubly important because consultation revealed the extent to which NHS, local government and independent sector staff feel that performance management targets set priorities for both strategic and operational policy and therefore constrain their ability to reflect sustainability concerns as part of their mainstream priorities.

The research identified a number of information gaps which will need to be addressed in order to assess progress in meeting sustainable development objectives and reducing health inequalities. There is always a cost attached to additional research and data capture so it will be necessary to critically assess the value to be gained from compiling additional data so that disproportionate effort is not consumed in gaining information of limited use. However, additional information and data on contract employment, the impact of commissioning and the sourcing of procurement will be vitally important in setting sustainability targets.

Finally, the East of England and the South East are unique in having to plan and prepare for expenditure and employment growth in the NHS at the same time as planning for areas of major housing and population growth. How and where this growth is achieved, the quality of development, affordability of housing, the degree of integrated service provision and the creation of local jobs will have a very significant impact on the future quality of life and community well-being in the region. Balancing the competing demands of NHS job growth, providing genuinely affordable housing, reducing inequalities and creating sustainable development in growth areas will not be easy. It creates both opportunities and threats for the region. Clearly the timely provision of a continuum of integrated health and social care services will only be achieved if the planning and development process involves health and social care planners at an early stage. Success at addressing sustainable development will depend on the incorporation of planned action to improve public health and reduce inequalities.

The recommendations draw on the research carried out as part of this study and the four consultation events held in Cambridge, Chelmsford, Hitchin and Newmarket in September and November 2003. They are organised under the seven elements of the Health and Social Care Sustainable Development Framework.

9.2 Improving community well-being and public health in the local and regional economy

Whilst initiatives such as the Kings Fund report *Claiming the Health Dividend* and the adoption of Corporate Social Responsibility by private companies and public bodies begin to address some social, economic and environmental issues, they fail to address the full implications of sustainable development. The Health and Social Care

Sustainable Development Framework provides such a mechanism and should be adopted by all NHS, local authorities and other health and social care organisations. It fits with the regional sustainable development framework and is a means of integrating health and social care planning and provision with other regional strategies.

1. All regional partners and individual NHS Trusts, PCTs, local authorities, voluntary sector organisations and trade unions should indicate how they intend to promote the Health and Social Care Sustainable Development Framework and distribute a summary of the findings of this report to their staff, suppliers, service users and the public. In particular they should prepare a checklist of actions designed to implement the recommendations of this report.
2. NHS Trusts, PCTs and local authorities should start with pragmatic and achievable projects and policies at the local level to achieve quick wins and demonstrate good practice which can be mainstreamed to other parts of the organisation and across the region.
3. The Regional Development Agency, the Regional Assembly, the Department of Health and other regional partners in the health and social care sector should jointly agree a host organisation or group of organisations which will be responsible for promoting and monitoring implementation of the Health and Social Care Sustainable Development Framework.
4. A basket of sustainable production and consumption indicators should be developed for the health and social care economy in the region so that progress towards achieving sustainable development can be regularly assessed.
5. Each Strategic Health Authority should consider establishing a fund to finance sustainable development projects and initiatives which require some initial additional investment in order to kick start them. This fund could also help to maximise access to grants to promote and initiate sustainable development from government departments.
6. The Regional partners should examine how they can provide support and advice to increase the quality of product and service inputs from Small and Medium Enterprises (SMEs) in the region so that they can better take advantage of opportunities afforded by NHS and local authority research and procurement.

9.3 Building capacity to deliver sustainable development and quality services

7. The Health and Social Care Sustainable Development Framework should be used in conjunction with Health Scrutiny, Health Equity Audits, Health Impact Assessments and Sustainability Appraisals to monitor and evaluate progress and identify barriers.
8. The sustainability, social, economic and environmental criteria and frameworks used in best practice NHS and local authority procurement

should be applied to the commissioning of health care from the private and voluntary sectors.

9. Procurement and commissioning officers in NHS Trusts, PCTs and local authorities should be required to have training in the application of the Health and Social Care Sustainable Development Framework for the supply of goods and services and construction projects.

10. All NHS and local authority purchasing of goods and services should develop a coding system to identify the location and level of local/regional production, assembly, distribution and supply of goods and services. This will enable further work to be carried out to identify supply chains and linkages to manufacturing and services in the region.

11. There are likely to be many more examples of good practice in the region than those identified in this report and we recommend that the proposed new Regional Centre of Excellence should be responsible for compiling a databank of good practice and ensuring this is widely available across the region.

12. The NHS and local authorities should request that the government reviews and provides definitive guidance on the scope for the use of social, environmental and sustainability criteria in procurement governed by European Commission regulations. If necessary, it should seek to change the procurement regulations to facilitate local provision to meet local needs.

13. Environmental and sustainability guidelines and frameworks developed by NHS PASA and NHS Estates should be mainstreamed in all procurement by NHS Trusts, PCTs and local authorities irrespective of whether they are procuring directly or through these agencies.

14. The NHS PASA and NHS Estates' environmental, social, economic and sustainability guidelines and frameworks should be a condition of contract in commissioning health and social care from the private and voluntary sectors.

15. NHS trusts and PCTs should be required to report details of service contracts (type of service, number of jobs, terms and conditions) to SHAs, who should hold a central database.

16. NHS organisations should adopt the local government Code of Practice on Workforce Matters (which has statutory force in local government but not in the NHS) for the procurement and commissioning of all services which involve a transfer of staff from one employer to another.

17. The formation of SHA Procurement Confederations should be encouraged and could play a major role in encouraging NHS Trusts and PCTs to implement sustainable procurement and ensure that best practice is exchanged between NHS and local government.

18. Sustainable development should be mainstreamed through the performance management regime. Sustainable development should be non-negotiable and with targets to achieve quick wins and to integrate sustainability criteria into the prevailing performance management culture.

19. Each health and social care organisation should examine how it can mainstream sustainable development, what mechanisms will be needed to take this agenda forward and the skills which will be needed. This will have financial implications but these should be compared to the cost of doing nothing.

20. Regional partners and the voluntary sector need to carefully assess the role and capacity of the sector in the future provision of health and social care in the region. Whilst the government is encouraging greater involvement of social enterprises in the provision of services this has many significant implications for the sector, not least its role as community advocate, the level of resources required to compete for contracts and the potential commercialisation of the sector. There will be opportunities for community or social enterprise initiatives but these should be progressed carefully to ensure the principles and values of the sector are maintained whilst also mainstreaming sustainable development.

21. Regional partners need to examine further the impact of the increasing use of voluntary and community sector providers on the 'additionality' which was previously offered by this sector on top of statutory services.

9.4 Tackling health inequalities

22. Research should be undertaken to identify the impact of commissioning of health and social care services on the quality of service as experienced by users, the quality of employment, the regional economy and its role in reducing health inequalities.

23. More detailed analysis is needed to determine how a health and social care economy approach can have a positive approach for equalities groups (such as race, gender, age, disability, sexual orientation) in the region.

24. Recruitment and training of NHS and local authority staff from regeneration areas and areas of multiple deprivation should be intensified because of the important gains which can be achieved through employment in reducing health and income inequalities. Intermediate Labour Market (ILM) initiatives and job guarantee schemes are routes to pursue.

25. The continued existence of low pay in the NHS and local authority social care must be addressed as part of programmes to reduce health inequalities.

26. The provision of adequate and affordable social and key worker housing in close proximity to major health and social care facilities is essential and should be a key component of local plans, development proposals and Section 106 agreements with developers.

9.5 Enhancing democratic accountability

27. Health Scrutiny has an important role in assessing the progress and implementation of the Health and Social Care Sustainable Development

Framework and the recommendations of this report. Additional resources may be required to ensure scrutiny is comprehensive, rigorous and effective and engages all stakeholders in the health and social care economy.

28. Democratic accountability and transparency should be major criteria in the formation of any new Trusts, joint ventures and partnerships in the health and social care economy in the region.

29. NHS organisations and local authorities should ensure that community organisations, particularly those representing equalities groups,, are fully involved throughout the health and social care planning process, the setting of sustainable development targets and the reconfiguration of services. These principles should also apply to workforce and trade union involvement.

9.6 Identifying direct and indirect social, economic and environmental costs and benefits

30. Integrated impact assessments (including sustainability appraisals) should be carried out at an early stage of the planning process for all medium-sized and large development projects.

31. Proposals and business cases for large and medium sized projects should be required to include a travel plan which addresses sustainability issues for staff and patients, users, visitors, NHS and local authority business and the distribution of goods and services to NHS and local authority premises.

32. The Health and Social Care Sustainable Development Framework should be incorporated into all risk management assessments in options appraisals and outline business cases.

33. There is an inevitable tension between traditional Value for Money criteria, which is narrowly based and does not account for the whole cost or impact of a project or policy, and social, economic and environmental criteria which underpin the Health and Social Care Sustainable Development Framework. All project business case and procurement guidelines should be reviewed to ensure that these criteria are fully included at all stages.

34. Training and awareness programmes should be designed for key NHS and local authority staff on the principles of sustainable development and their application in the health and social care economy.

9.7 Integrating health and social care planning and provision with regeneration and development

35. The review of the Regional Economic Strategy in 2003/04 should take account of the recommendations of this report and ensure that the health and social care economy and sustainable development framework are integrated into the revised strategy.

36. Where possible new development should be targeted in regeneration areas. This provides an opportunity to link growth and development with regeneration objectives and to integrate the planning of service improvements and job growth to meet community needs.

37. The terms of reference for regional and sub-regional growth, spatial and development studies should include a requirement to integrate health and social planning into their analysis and recommendations.

38. The linkages between the NHS and local government with the science and technology base in Greater Cambridge and across the region should be strengthened in order to maximise the development and application of new technologies and services.

9.8 Valuing natural resources and long-term planning

39. The NHS should take a strategic approach to environmental impact as part of its sustainable development strategy.

40. Whole life costs and impacts should be used to identify the total cost and consequences of projects and development.

9.9 General Cross-Cutting Recommendations

41. All these strategic recommendations should be operationalised at a local and organisational level by the drawing up of organisational and management checklists to address the issues and recommendations set out in the Health and Social Care Sustainable Development Framework above. These checklists – the extent to which these recommendations are already operationally implemented or not, should then be used to draw up a scheduled action plan and monitoring framework.

9.10 Action programme for implementation of recommendations

We have categorised the recommendations into two groups – immediate and medium term (see Table 40).

Table 40: Recommendations categorised by immediate and medium term action

Sustainable Development Framework	Recommendations	
	Immediate	Medium term
Improving community well being and public health	1, 2, 3, 4	5, 6
Building capacity to deliver sustainable development	7, 8, 9, 11, 13, 14, 15, 16, 19,	10, 12, 17, 18, 20, 21
Tackling health inequalities	24, 25, 26	22, 23
Enhancing democratic accountability	28, 29	27
Identifying direct and indirect social, economic, and environmental costs	30, 31, 32	33, 34
Integrating health and social care planning and provision	35	36, 37, 38
Valuing natural resources and long-term planning	40	39
General cross-cutting	41	41

Some recommendations require a longer term period for full implementation but they have been categorised medium term on the basis that implementation needs to start sooner than later.

Many of the recommendations are not financially resource intensive although they will require technical and managerial capacity. Most of the recommendations in the immediate category can be implemented relatively quickly. Some may require approval of NHS and PCT Boards or local authority cabinet/committee but most can be implemented by senior management teams forthwith.

Appendix One: The East of England Labour Market

Summary

The employment rate in the East of England is the third highest among the English regions at 78.4%, and is significantly higher than the average for all English regions, the average for the UK and Great Britain. Unemployment, at a rate of 4.1%, is also significantly lower than the average for the English regions, the UK and Great Britain. It is bettered only by the South East and South West.

Table 41: Summary Economic Activity, Employment and Unemployment, by region (August 2003).

	Economically Active		Employment		Unemployment	
	Level	Rate	Level	Rate	Level	Rate
East of England	*2,803*	*81.8*	*2,690*	*78.5*	*112*	*4*
North East	1,133	72.8	1,065	68.3	68	6
North West	3,235	77.3	3,076	73.5	159	4.9
Yorks & Humber	2,424	78.3	2,301	74.2	123	5.1
East Midlands	2,115	79.6	2,023	76.1	91	4.3
West Midlands	2,568	78.3	2,425	73.8	144	5.6
London	3,676	75.4	3,415	69.9	260	7.1
South East	4,220	82.4	4,053	79.1	166	3.9
South West	2,511	81.8	2,421	78.9	89	3.6
England	24,684	78.9	23,470	75	1,214	4.9
Wales	1,373	76.5	1,310	72.9	63	4.6
Scotland	2,542	79.1	2,403	74.8	139	5.5
GB	28,599	78.8	27,183	74.8	1,416	5
N Ireland	779	73.1	738	69.2	40	5.2
UK	29,380	78.7	27,922	74.7	1,458	5

Office for National Statistics, (2003).

A similar pattern emerges for economic activity which not only encompasses those who are working but those who are seeking work or are working without pay. However, on this measure the economic activity rate, at 81.9% is the second highest among all the English regions and again significantly higher than the English, UK or GB averages.

Employment by Industry

Employment in services industries is relatively more important in the East of England than it is in other regions, which tend to have a greater proportion of employment in manufacturing. Within the services sectors, the Public Administration, Health and Education sectors are the largest employer in the region, making up 24.1% of employment. However, this is less pronounced than in most other English regions and only London has a smaller proportion of employment in this sector. The second and third largest sectors in the region are Distribution, Hotels and Catering and Banking, Financial and Insurance services. Distribution, Hotels and Catering are less prominent, though, than in many other English regions. By contrast, Banking, Financial and Insurance services are more pronounced in the East of England than most other regions, with the exception of London and the South East.

An analysis of change also shows that manufacturing employment in the region fell as a proportion of the regional total over the last year. While this reflected a national trend, the fall in the East of England exceeded the fall in the other English regions

and the UK as a whole. On the other hand, services employment increased by 2.7%. The majority of the increase in services employment took place within two sectors:

- Banking, Financial and Insurance services
- Public Administration, Education and Health.

While the latter reflects a national pattern, the increase in Banking and financial services bucks the national trend. Indeed, only three other regions saw an increase in employment in this sector and only the North West saw a larger increase (NOMIS, 2003a). The decline of employment in manufacturing and the increase in services, particularly Banking, Financial and Insurance services are both part of long-term trends in the national labour market (NOMIS, 2003a).

Table 42: Employment, by Industry (Standard Industrial Classification 1992), by Region (May 2003)

	Manufacturing	Construction	All Services	Distribution, Hotels & Catering	Transport & Communications	Banking, Finance and Insurance	Public Admin, Education and Health	Other Services
East of England	*14.1*	*7.7*	*75.7*	*19.9*	*7.5*	*18.1*	*24.1*	*6.2*
North East	17.6	8.6	70.9	18.7	6.4	11	29.9	4.9
North West	16.1	7.7	74.5	20.2	7.5	13.6	27.3	5.9
Yorks & Humber	16.6	8.1	73.1	20.8	7.2	12.6	27.4	5.1
East Midlands	21	7.7	68.3	20.3	6.7	11.3	25.1	5
West Midlands	21.6	7.1	68.8	19.5	6.9	12.4	25.5	4.7
London	8.1	5.9	85.1	18.6	8.3	25.3	24	9
South East	13.1	7.7	77.2	19.6	7	19.4	24.6	6.5
South West	14	7.6	75.8	20.8	6.2	14.3	28.5	6

NOMIS (2003).

Gender

Following national patterns, there are some substantial differences in the gender balance of the regional labour market.

Table 43: Employment and Unemployment Rate, by region, by gender (April – June 2003)

	Employment			Unemployment		
	Male Rate	Female Rate	Difference	Male Rate	Female Rate	Difference
East of England	*83.9*	*72.7*	*-11.2*	*4.1*	*3.9*	*-0.2*
North East	72.7	63.7	-9	7.1	4.6	-2.5
North West	77.8	69	-8.8	5.5	4.2	-1.3
Yorks & Humber	78.6	69.5	-9.1	6.2	3.8	-2.4
East Midlands	81.3	70.5	-10.8	4.5	4.1	-0.4
West Midlands	78.8	68.4	-10.4	6.3	4.7	-1.6
London	76.6	63.1	-13.5	7.6	6.4	-1.2
South East	83.9	74	-9.9	4.3	3.6	-0.7
South West	82.5	74.9	-7.6	3.5	3.6	+0.1
England	80	69.7	-10.3	5.4	4.3	-1.1
Wales	75	70.7	-4.3	5.8	3.2	-2.6
Scotland	78.3	71.1	-7.2	6.2	4.7	-1.5
GB	79.6	69.8	-9.8	5.5	4.3	-1.2
N Ireland	75.7	62.3	-13.4	5.8	4.4	-1.4
UK	79.4	69.6	-9.8	5.5	4.3	-1.2

Office for National Statistics, (2003).

Men are both more likely to be employed and unemployed. However, the difference between the male and female employment rates is greater in the region than the average for the English regions, being the second largest behind London. In absolute terms though, the female employment rate in the East of England is the third highest among all the English regions. The unemployment rate is also lower for women in the region than the English average and the fourth lowest among the nine English regions.

Women are also more likely to be economically inactive than men. Those who are economically active are either in work or actively seeking work. Those who are economically inactive may not want a job, may be at home looking after the home and/or family or long-term sick. Full-time students who do not work are also counted as economically inactive.

Table 44: Economic Activity/Inactivity among the working age population, by gender (March-May 2003)

	Economic Activity Rate	Economic Inactivity Rate
Total	81.8	18.2
Men	87.5	12.5
Women	75.8	24.2

Office for National Statistics, (2003).

Unsurprisingly, women are most likely to report that they are economically inactive because they are looking after family.

Table 45: Reasons for economic inactivity, by gender (March-May 2003)

			Want a Job, Reasons for Inactivity				
	Do not Want a Job	Want a Job	Total	Long-Term Sick	Looking after Family/ home	Students	other*
Total	440	161	140	51	41	19	29
Men	148	72	63	32	7*	11	14
Women	292	89	77	20	34	8	15

Office for National Statistics, (2003). * Figure deduced from the data, not present in ONS data.

Earnings and income

Earnings in the region are high by comparison with other regions. Office for National Statistics data shows that average full-time gross weekly earnings in the region are £459.60, third highest of all the English regions, behind London and the South East. However, there is also a substantial pay gap in the region, which means that the average full-time gross weekly earnings for women in the region is £113 (24%) less than for men.

Table 46: Average Full-time Gross Weekly Earnings (£), by region, by gender (2002)

	Men	Women	Total
East of England	*463.3*	*350*	*421.7*
North East	439.1	332.1	399.3
North West	471.1	354.3	426.8
Yorkshire & Humber	447.1	345	409.9
East Midlands	454.2	334.8	413
West Midlands	469.6	353	427.3
London	506.3	375.1	459.6
South East	704.8	503.6	624.1
South West	555.3	398.6	496.7
GB	513.8	383.4	464.7

Office for National Statistics (2002)

While earnings are a useful labour market indicator they are not so useful in determining overall income or levels of affluence and poverty because they do not account for significant differences in need between different types of family structure and importantly they do not differentiate between varying levels of living costs, particularly those associated with housing.

Vacancies

Nationally, the high employment and low unemployment rates have created a 'tight' labour market. However, the East of England has the joint highest rate of 'hard to fill' vacancies in the country and the second highest vacancy rate overall, with a third of all employers reporting unfilled vacancies. Conversely, unfilled vacancies associated with skill shortages are less prominent in the region than in most others (Institute of Employment Studies and MORI, 2002).

The Sub-regional Labour Market

Employment

Table 47 shows the employment rate in District and Unitary authorities in the region and highlights a wide range of variation in the employment rate at this level. For instance, the employment rate in Great Yarmouth is a low 67.2% of the working age population, while in East Cambridgeshire it reaches 85.9%.

Factors affecting sub-regional employment and unemployment

Many factors affect the employment and unemployment rates at a sub-regional level (Cambridgeshire CC, 2003):

- Absence of large concentrations of Higher Education Institutions. Large numbers of students in a local economy usually depress employment and economic activity rates. In general, the East of England region does not have a large number or high concentration of HEIs and is a net exporter of students.
- Large proportions of retired people, particularly in coastal areas. While the statistical impact of this influence is reduced by using a measure of the employment rate against the denominator of the working age population rather than the 16+ population, the effect of early retirees is still present.
- High concentrations of black and ethnic minority populations in a small number of locations set against the generally low level of BME populations in the region. This influence tends to depress the employment rate, particularly among women in these areas, in relation to the rest of the region.
- Large concentrations of armed forces personnel, a factor which tends to raise employment and economic activity rates for younger age groups, particularly for men.

Employment by industry

Within the region there is wide variation in the concentration of employment by industrial sectors. For instance, while only around 14% of regional employment is in manufacturing, the rate in Castle Point, Waveney, and King's Lynn is nearly 10% higher. In Banking, Financial and Insurance services, while the regional concentration of employment is around 18%, the rate in as many as 13 District and Unitary authorities exceeds this by around 10%. In Hertsmere the rate exceeded 31%. Public Administration, Education and Health employment in the region is around 24%, but the rate exceeds 30% in Norwich (33.6%), South Norfolk (33.4%), South Cambridgeshire (39.3%), Cambridge (40.1%) and Tendring (30.5%) local authorities.

Table 47: The Employment Rate by Local Authority (2001)

	Population	Employment	
	16-59/64 (000s)	Total 16-59/64 (000s)	16-59/64 Rate (%)
United Kingdom Total	*36,155*	*27,424*	*74.4*
East of England	*3,287*	*2,658*	*79.0*
Luton UA	115	82	74.1
Peterborough UA	97	74	76.9
Southend-on-Sea UA	94	80	74.4
Thurrock UA	90	66	78.1
Bedfordshire			
Bedford	92	72	78.2
Mid Bedfordshire	77	69	82.4
South Bedfordshire	70	57	81.3
Cambridgeshire			
Cambridgeshire	76	67	76.4
East Cambridgeshire	45	40	85.9
Fenland	49	37	75.7
Huntingdonshire	99	81	80.0
South Cambridgeshire	82	69	82.9
Essex			
Basildon	102	77	75.4
Braintree	82	72	81.9
Brentwood	41	35	80.8
Castle Point	53	41	77.7
Chelmsford	99	80	81.9
Colchester	98	82	79.6
Epping Forest	74	59	81.3
Harlow	49	36	77.6
Maldon	37	29	79.4
Rochford	47	38	79.0
Tendring	74	56	74.7
Uttlesford	43	35	81.3
Hertfordshire			
Broxbourne	54	42	78.1
Dacorum	85	68	80.5
East Hertfordshire	82	69	84.8
Hertsmere	57	45	74.9
North Hertfordshire	71	58	80.4
St Albans	80	67	77.6
Stevenage	49	40	80.4
Three Rivers	50	47	80.8
Watford	51	40	77.4
Welwyn Hatfield	59	51	88.3
Norfolk			
Breckland	71	61	82.3
Broadland	71	62	84.4
Great Yarmouth	53	35	67.2
King's Lynn & W Norfolk	78	59	76.3
North Norfolk	54	43	76.0
Norwich	78	56	72.5
South Norfolk	65	55	81.4
Suffolk			
Babergh	50	38	79.4
Forest Heath	35	37	85.8
Ipswich	70	51	76.2
Mid Suffolk	52	41	78.6
St Edmundsbury	61	49	81.3
Suffolk Coastal	66	60	82.8
Waveney	63	48	76.0

Office for National Statistics (2003).

Appendix Two: Methodology for Assessing Indirect Employment

A range of methods

The exact employment dynamics of the procurement of goods and services by the NHS, local authorities and other organisations is difficult to quantify with any accuracy. A range of approaches can be used. One of these methods relies on econometric tools such as the 'input-output' tables produced by the Office of National Statistics, which estimate the employment and output effects of spending through the supply chain. While such econometric analysis has been used for this purpose elsewhere (Glaister et al, 2000; Chant et al, 2000; Centre for Public Services, 2003a; Adams et al, 2003), it is by no means unproblematic. Such analysis produces only estimates and has difficulty quantifying the location of employment and economic activity generated by input spending. It is also difficult for such methods to take account of structural changes in the composition and dynamics of a particular sector over time. Since structural change is a prominent feature of the economic make up of health and social care, this means that the use of such methods is particularly problematic. There is also a limited amount of data available from official survey sources on some identifiable sectors which have close links to health and social care such as the manufacture of pharmaceuticals or medical and surgical equipment. However, there is little data in these sources to identify the considerable effect that the NHS has, for instance, through the construction supply chain or food manufacture and processing supply chain.

Each of the various methods for estimating the effect of health and social care spending on the supply chain, therefore has both merits and weaknesses. The approach developed in Section 4 relies on the use of 'Input-Output' tables to estimate the total effect on the supply chain. However, it also demonstrates some of the dynamics of this activity within particular industrial sectors identified in survey data from the Annual Business Inquiry.

Appendix Three: Procurement of goods and services

This Appendix covers in more details issues of expenditure and procurement discussed in the text.

Table 48 shows that overall health expenditure in the UK has grown over recent years in both absolute terms and as a proportion of GDP. It also shows that public expenditure as a proportion of total health expenditure has also grown over recent years.

Table 48: Composition of total UK Health Expenditure (1997-2002)

Year	Public UK Health Expenditure (£m)	Private UK Health Expenditure (£m)	Total UK Health Expenditure (£m)	As a % of GDP	Public expenditure as a % of total
1997	44.6	10.9	55.5	6.8	80.4
1998	47.6	11.6	59.2	6.9	80.4
1999	52.2	12.5	64.7	7.2	80.7
2000	56.0	13.2	69.2	7.3	80.9
2001	62.1	12.7	74.8	7.5	83.0
2002	67.2	13.4	80.6	7.7	83.4

ONS (2003d).

Table 49 demonstrates that the effect of public spending increases have been felt in the East of England region with total health and social care expenditure on behalf of the region having risen from £4.5bn in 1998/9 to more than £5.8bn in 2001/2. the table also shows that these rises have made health and social care expenditure more significant as a proportion of total expenditure for the region.

Table 49: Health and Personal Social Services Expenditure in East of England (1997-2002)

Year	Health and personal social services expenditure (£m)	Total identified expenditure in East of England (£m)	Health and personal social services expenditure as a % of total regional expenditure
1998-99	4,540	19,609	23.1
1999-00	4,915	20,791	23.6
2000-01	5,262	22,237	23.7
2001-02	5,851	23,901	24.5

HM Treasury (2003).

This Appendix also contains more detailed information on the methodology used to calculate NHS and social services expenditure on goods and services.

Expenditure data is available for the NHS at both regional and trust/PCT levels although the analysis focuses on SHA and regional level. It is complicated in that similar data is not available for local authority social services and this has been calculated using local authority Budgets, Statements of Accounts and other financial data from social service providers in the region at County and Unitary authority level.

The analysis is based on gross expenditure data because of the need to identify the total spending on salaries, goods and services, premises and transport in order to determine the full economic impact of social services in the region. Net expenditure takes account of user charges, government funding and other sources of income

which would otherwise obscure the level of gross spending. In social services, these sources of income are substantial. For example, Essex County Council received revenue grants from the government totalling £11.6m in 2000-01 for provision related to mental illness, promoting independence and for asylum seekers. Social services' gross expenditure was £300.3m but the net figure was substantially lower at £225.9m. Social services expenditure analysis is further complicated by the increasing level of services which are provided by the private and voluntary sectors but funded by the public sector.

Expenditure data for the private and voluntary sectors is not publicly available and has been estimated from other data.

Table 50: Health authority and NHS Trust identifiable expenditure in England (31 March 2002)

Revenue expenditure	1998 (%)	1999 (%)	2000 (%)	2001 (%)	2002 (%)	% Change 1998-2002
Salaries and wages	63.5	62.5	61.1	60.4	62.3	-1.9
Supplies and services – clinical (drugs, medical and surgical)	11.2	11.5	11.2	11.4	11.6	+3.6
Supplies and services – general (catering, laundry)	2.5	2.6	2.5	2.4	2.3	-8.0
Establishment expenses (postage, printing, stationery, telephone and transport)	3.4	3.3	3.1	3.2	3.2	-5.9
Premises and fixed plant (maintenance, utilities, cleaning and furniture)	6.1	5.7	5.0	5.2	5.0	-18.0
Misc. expenditure	4.0	5.4	7.0	9.1	6.9	+72.5
Cost of use of capital assets	4.2	3.9	5.3	3.3	3.3	-21.4
Purchase of health care from non-NHS bodies	4.4	4.5	4.2	4.5	4.8	+9.1
External contract staff	0.5	0.4	0.4	0.4	0.6	+20.0

Department of Health, Statistics & Research (2003h), Table E3. Totals may not add up to 100% because of rounding.

Social services expenditure

Gross local authority expenditure on personal social services in England was £14.9bn in 2001-2002, with spending equally divided between direct/joint provision and provision by the voluntary and private sectors (see Table 51).

We have analysed the Budgets and Statements of Accounts of the County and Unitary authorities in the East of England in order to provide an estimated assessment of the overall level of health and social care expenditure on salaries, goods and services and premises in the region. This analysis was supplemented by a detailed breakdown of social services spending in a Metropolitan District Council in another region.

Analysis of the social services budget in Peterborough for adults and children indicates a smaller proportion of expenditure on salaries and wages compared to the NHS. Spending on salaries and wages averaged about 40% in social services compared to nearly 65% in the NHS. However, further analysis of expenditure is hampered by the inclusion of externally provided care services in the 'supplies and services' category.

Table 51: Expenditure on Personal Social Services in England (2001-2002)

	Service Strategy	Children & Families	Older People	Physically Disabled Adults	Learning Disabled	Mentally Ill Adults	Asylum Seekers	Other Adult	Total
Own provision / joint arrangements									
Expenditure	130	2,440	2,500	430	1,010	420	330	70	7,320
Capital charges	n/a	60	110	20	70	20	n/a	n/a	290
Provision by others									
Expenditure	n/a	830	3,890	540	1,390	390	240	70	7,340
Total	140	3,330	6,500	990	2,470	820	560	140	14,950
% of total expenditure	0.9	22.3	43.5	6.6	16.5	5.6	3.7	0.9	100

Department of Health (2003b).

Gross spending for older people in Bedfordshire County Council social services in 2002-03 was £53.3m, which separated the external purchasing of services into a separate category.

Table 52: Social services budget in Peterborough UA 2003-04

	Adult Social Care		Children and social care		Gross budget
	£000	%	£000		£000
Salaries and wages	12,416	37.9	7,765	41.6	20,181
Supplies and services	16,863	51.5	9,052	48.5	25,915
Support services	1,480	4.5	490	2.6	1,970
Premises	629	1.9	465	2.5	1,094
Transport	699	2.1	445	2.4	1,144
Financing and capital charges	662	2.0	445	2.4	1,107
Gross budget	**32,749**		**18,662**		**51,411**

Peterborough Council, (2003).

This showed that in-house staffing costs accounted for 31.5% of the budget with support services accounting for 9.4%. Further analysis highlighted the following breakdown of expenditure:

- Salaries for 734 staff (FTE) £16.8m (31.5%)
- Cost of support services £ 5.0 (9.4%)
- Office accommodation £0.2m (0.4%)
- Repairs and maintenance £0.3m (0.6%)
- Capital charges £2.5m (4.7%)
- Independent sector purchasing £20.5 (38.5%)

A detailed breakdown of expenditure for social services in a large Metropolitan District Council in another region enables a clearer understanding of the different categories of spending in social services. Data was obtained for strategic management, commissioning care management, children's services, older people, disabilities and mental health services.

Table 53: Social service expenditure analysis in sample large local authority (2000-2001)

	Strategic management		Commissioning Care Management		Children's Services		Older people, disabilities and mental health services		Total average % and	
	£m	%	£m	%	£m	%	£m	%	£m	%
Salaries/wages	0.7	23	7.2	17	8.5	49	17.7	78	34.1	39.5
Premises	-		0.4	1	0.3	2	1.2	5	1.9	2.2
Transport	-		0.6	1	0.4	2	1.5	7	2.5	2.9
Supplies & services	0.2	7	4.5	10	1.3	8	1.7	7	7.7	8.9
Support services	2.1	70	3.6	8	1.6	9	0.7	3	8.0	9.2
Grants to Voluntary sector	-		1.3	3	0.4	2	-		1.7	2.1
Agency and contracted services	-		0.9	2	-		-		0.9	1.0
Payments to independent sector	-		24.9	57	-		-		24.9	28.8
Maintenance of children					4.7	27	-		4.7	5.4

Totals may not sum due to rounding.

Table 53 shows the level and percentage of expenditure. Salaries and wages accounted for 39.5% of expenditure, with goods and services and support services accounting for 8.9% and 9.2% of expenditure respectively. Payments to the independent sector accounted for 28.8% of spending. These were largely payments to other providers to supply a range of services and included salaries, the purchase of goods and services and the cost of premises. The 2% of grants to the voluntary sector included grants for community organisations and is also likely to have included some service provision, although it is not possible to differentiate between the two types of expenditure.

Waste

NHS Estates supplied the following waste data for each of the Strategic Health Authorities in the East of England.

Table 54: NHS Waste Data for the East of England

SHA	Clinical waste volume Tonnes	Clinical waste cost (£)	Special waste volume (Tonnes)	Special waste cost (£)	Domestic waste volume (Tonnes)	Domestic waste cost (£)	Waste recovery/ Recycling volume	Waste recovery/ recycling
Beds & Herts	2,708.39	1,212,722	22.97	11,858	10,907.41	424,881	1.99%	5.39%
Essex	2,649.68	1,044,515	16.56	61,449	7,635.23	416,672	2.44%	3.26%
Norfolk, Suffolk & Cambs	5,537.70	1,565,491	43.48	65,875	10,190.39	513,582	4.36%	1.16%
Total	**10,896**	**3,822,728**	**83.00**	**139,183**	**28,733**	**1,355,135**	**2.95%**	**3.13%**

NHS Estates, Waste Database, 2003.

Appendix Four: Report of Sub-Regional Consultation

Introduction

An initial regional consultation event was held on the 8th September at the GO-East offices in Cambridge. The event was held to launch the study and to discuss the principles of sustainable development in the health and social care sector. About 25 people attended from a wide range of health and social care organisations in the region.

Three sub-regional consultation events were held on 10, 11 and 12 November 2003 at Chelmsford (Essex SHA), Newmarket (Norfolk, Suffolk and Cambridgeshire SHA) and Offley Hall, Hitchin (Bedfordshire and Hertfordshire SHA). The events were organised by the Centre for Public Services and the Nuffield Institute for Health.

Invitations were sent to a very wide range of organisations including SHAs, NHS Trusts, PCTs, local authorities, regional agencies, voluntary and community organisation, trade unions and to those who attended the earlier region-wide consultation event held on 8 September 2003 in Cambridge.

Attendees

A total of 86 people attended the three events. The events were significant for the high level of senior managers and representatives. The events were open to people from other SHA areas if they could not attend the consultation event in their own area. A summary of the interim report, agenda and event location map was emailed and posted to all participants. Lunch was provided at all three events.

Aims and objectives

The purpose of the events was to provide an opportunity to comment on the draft report, the NHS Sustainable Development Framework, the research findings and to discuss with other participants the key issues and recommendations which the report should be making. It was also hoped to obtain additional examples of best practice.

Format

Each of the consultation events included introductions from the Public Health Group, Department of Health and presentations from the Centre for Public Services and the Nuffield Institute. The events also provided participants with an opportunity for detailed discussion in groups and collective debate on key issues.

Key issues arising from the three events

The approach and content of the research and findings were endorsed at each event. No disagreements were expressed and the discussion focused on discussing the implications of the findings, how sustainable development could be mainstreamed and identifying the barriers to implementation. We have endeavoured to take account of the key issues raised in the final report.

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