Report to NHS Merseyside Board

Date:	**29th September 2011**
Accountable Executive:	**Derek Campbell, Chief Executive**
Report title:	The Development of a Comprehensive Cancer Centre for Cheshire and Merseyside - Investing in Cancer Care
Report prepared by:	Leonie Beavers, Managing Director, Liverpool PCT
Purpose:	This report has been prepared to provide information on proposals for the development of a new Cancer Centre in Liverpool for the people of Cheshire and Merseyside and to seek cluster support in principle for these proposals for work to continue on delivering an affordable proposal and on planning for the delivery of a wide ranging engagement exercise.
Recommendations: ***The Merseyside Cluster Board is asked to:***	• Note the background to and the progress achieved with regard to plans for cancer services in Merseyside and Cheshire since 2008. • Support further work to agree an affordable plan to deliver a comprehensive Cancer Centre on a site adjacent to the Royal Liverpool Hospital. • Support the development of plans for the delivery of an inclusive stakeholder involvement and engagement exercise led by Merseyside PCT Cluster with strong support from the Cheshire, Warrington and Wirral Cluster • Re-affirm Liverpool PCTs intention to provide up to £20m capital contribution to the new scheme if required and to fund appropriate project support costs. • Support the inclusion, in the NHS Merseyside Commissioning Intentions for 2012/13 and beyond, the additional revenue required to facilitate the delivery of the project. This will be confirmed at the March 2012 meeting when the Commissioning Plan is approved.

The NHS Constitution
All Principles and Rights are observed

NHS Merseyside Objective	Y/N
Goal 1: System Management	
Goal 2: Integrated Finance, Operations & Delivery	√
Goal 3: Developing the new system infrastructure	√
Goal 4: Ensuring Quality (Effectiveness, Experience & Safety)	√
Goal 5: Emergency Planning & resilience	
Goal 6: The Commissioning Elements of Provider Development	
Goal 7: Communications & Engagement	

National Policy, Guidance, Standards or Legislation
Radiotherapy: Delivering a World Class Service for England, National Radiotherapy Advisory Group, 2007 Calman, K and Hine, D: A Policy Framework for Commissioning Cancer Services, Department of Health, 1995. The NHS Cancer Plan, Department of Health, 2000 Cancer Reform Strategy, Department of Health, 2007

Equality and Diversity and Human Rights *(Are there any E&D or HRA implications? If not, please put N/A, if so what are they and how are they being addressed?)*
Proposals are designed to improve access to treatment services for those people and populations with the highest incidence and mobility of cancer and to improve outcomes for all patients.

Resource implications *(please provide information on any resource implications e.g. financial, workforce)*
Revenue and capital implications are identified in section 10

Stakeholder consultation *(has appropriate consultation taken place e.g. public; overview and scrutiny committee; health and wellbeing boards; local authority; MPs*
A Stakeholder involvement process is recommended in this report which will be initiated after Cluster Boards of Merseyside and Cheshire, Warrington and Wirral approve the proposals, probably at the November Board meetings.

Risks *(please provide information on any risk e.g. patient safety, service delivery, finance, legal or reputational risk and the actions that are being taken to mitigate against the risk)*
A full risk assessment will be undertaken as part of the work to developing an Outline Business Case for the new development.

The Development of a Comprehensive Cancer Centre for Cheshire and Merseyside – Investing in Cancer Care

1. Summary

1.1 This paper has been prepared for Merseyside PCT Cluster Board to:

- Provide information on the work that has been taking place in Cheshire and Merseyside to consider and bring forward proposals for the development of World Class Cancer Services in Cheshire and Merseyside through the establishment of a new Cancer Centre in Liverpool in conjunction with Clatterbridge Centre for Oncology, while retaining some services at Clatterbridge to ensure local access, and the further development of services across the area.

- Seek, in principle, support for the proposals and the potential financing of those proposals, subject to more detailed financial review.

- Support the delivery of a wide-ranging communication and involvement exercise designed to share the proposals with a wide range of stakeholders across Cheshire and Merseyside and further afield where appropriate**.**

1.2 The Board are invited to support proposals to develop a comprehensive cancer centre for Merseyside and Cheshire. This would be achieved by relocating the main base of Clatterbridge Centre for Oncology NHS Foundation Trust (CCO) from its current location on the Wirral to a new site adjacent to the Royal Liverpool University Hospital. CCO would maintain a smaller base on the Clatterbridge site providing many outpatient chemotherapy and radiotherapy services for Wirral and Western Cheshire patients.[1]

1.3CCO is the provider of radiotherapy and chemotherapy for the network's population[1]. The Royal Liverpool University Hospital provides the majority of other tertiary cancer services, including specialist surgery, radiology and pathology. CCO's base in Bebington, Wirral, is not centrally located for the population it serves, with 67% of the population living north of the River Mersey. The uneven distribution of cancer incidence means that approximately 73% of all cancer patients live north of the river. CCO's main base at Bebington is isolated from other specialist cancer services and cannot provide acute services such as intensive care for the sickest of patients. Opportunities to pursue ground-breaking innovations such as intra-operative radiotherapy are currently hampered by the physical separation of CCO's main base from other acute hospital facilities and specialist cancer services.

The key elements of the PCT vision are:-

[1] [1]The main provider of radiotherapy and chemotherapy for the population of Central and Eastern Cheshire PCT is The Christie in Manchester rather than CCO. Other PCT residents access services in Staffordshire. The residents of North Wales look increasingly to Glan Clwyd for their services

- Development of a specialist Clatterbridge Cancer Centre on the new Royal Liverpool University Hospital NHS Trust site in addition to the provision of satellite radiotherapy, proton therapy, chemotherapy and out-patient service services on the Wirral ;

- Enhanced research capacity (symbolised by more research beds);

- Retention of the satellite radiotherapy service adjacent to the Walton Centre for Neurology and Neurosurgery NHS Trust;

- Maintenance of Clatterbridge Centre for Oncology NHS Foundation Trust's current range of existing network clinic arrangements across Merseyside and Cheshire.

1.4 The Royal Liverpool University Hospital site is shared with the University of Liverpool School of Cancer Studies, Cancer Research UK and the Clatterbridge Cancer Research laboratories, forming a 'bio-campus' of innovation and collaboration. Only CCO remains physically isolated from this important and growing research community. By relocating CCO's main base to create a comprehensive cancer centre in partnership with otherresearch teams, all patients, including those from Wirral and Western Cheshire, will benefit from greater participation in international-standard research and clinical trials.

1.5 In brief these proposals are designed to ensure that the Cancer Services delivered for the people of Cheshire, Merseyside and beyond are of the highest possible quality and will:

- Ensure better co-ordination of pathways of care for cancer patients by bringing together key specialist services on a single campus, which currently hosts the majority of Specialist Cancer Multi-Disciplinary Teams (SMDTs).
- Ensure that patients benefit from closer integration between the NHS and research teams within the University of Liverpool and other key research partners e.g CR:UK
- Enable more clinical trials to be undertaken
- Ensure that specialist services are located in a place most easily accessible to the majority of patients so that more patients could benefit from improved access particularly those who need repeated and regular radiotherapy for certain types of cancer and for palliation.
- Make best use of NHS resources by enabling clinical teams to work more effectively and efficiently together
- Be a focus for innovation and knowledge.
- Maintain those NHS Services which are best delivered in more local settings including local district general hospitals and the community
- Ensure that the majority of patients will continue to be treated nearer to home

2. Cancer incidence and mortality in Cheshire and Merseyside

2.1 Incidence (new cases) of and mortality (death rates) from cancer represent a major challenge within Merseyside and Cheshire.

Mortality rates vary across the network. By comparing the mortality rate for each PCT with the average for England, the number of excess deaths can be determined. This is the number of lives that could be saved each year if each PCT's mortality rate was the same as England. It should be noted that England's mortality rate is significantly worse than the European average; this is recognised in the Coalition Government's aim to save 5,000 lives annually in England to reach the European average, and strive towards saving 10,000 lives per year to reach the best in Europe.

The excess deaths by PCT against the English average are presented below.

Figure 1

Excess Deaths due to Cancer
Annual number of cancer deaths over the England average (annual average 2006-8)

PCT	Excess deaths per year
Liverpool	343
Wirral	147
Halton& St Helens	106
Knowsley	86
Sefton	50
Warrington	30
Western Cheshire	15
Central and Eastern Cheshire	-76

2.2 For all cancers combined, the incidence of new cancers and cancer mortality ratesacross the network are higher than the national average (figs 1 and 2 below refer).Breast, lung, colorectal, prostate and upper gastro-intestinal (GI) cancers account for over 90% of all new cases of cancer and over 75% of cancer deaths, both nationally and across the cluster

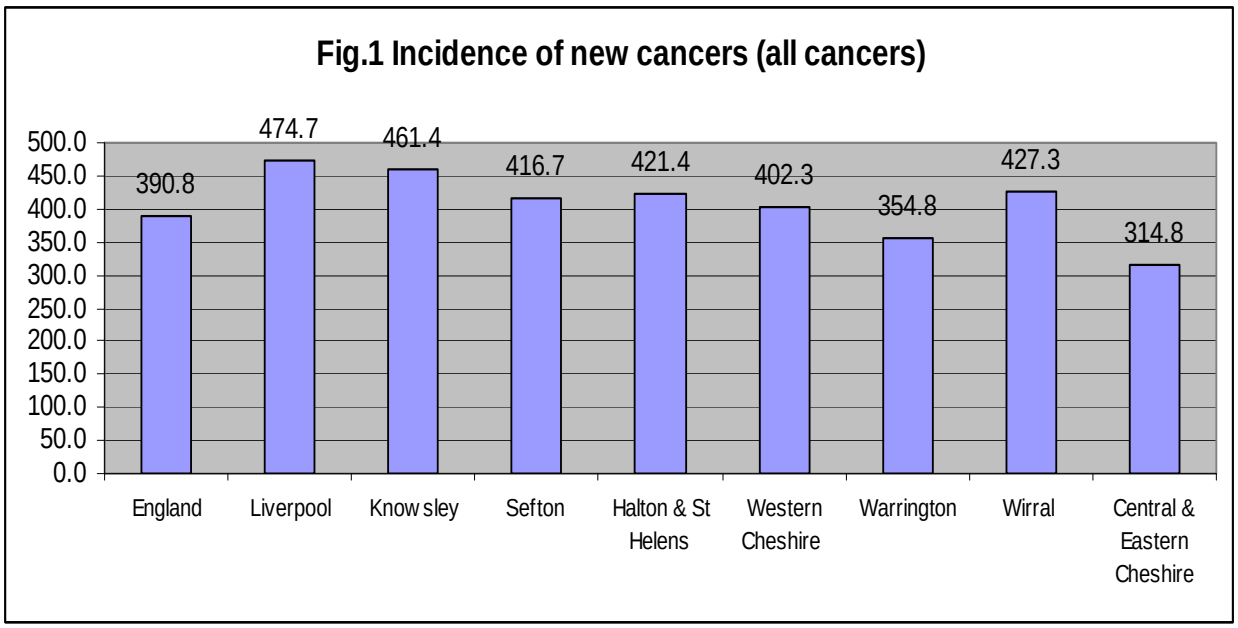
2.3 The incidence of new cases of **lung cancer** across the cluster is higher than the national average and almost twice the national rate in Liverpool and Knowsley. Similarly, lung cancer mortality rates across the cluster are higher than the national average and almost twice the national rate in Liverpool and Knowsley.

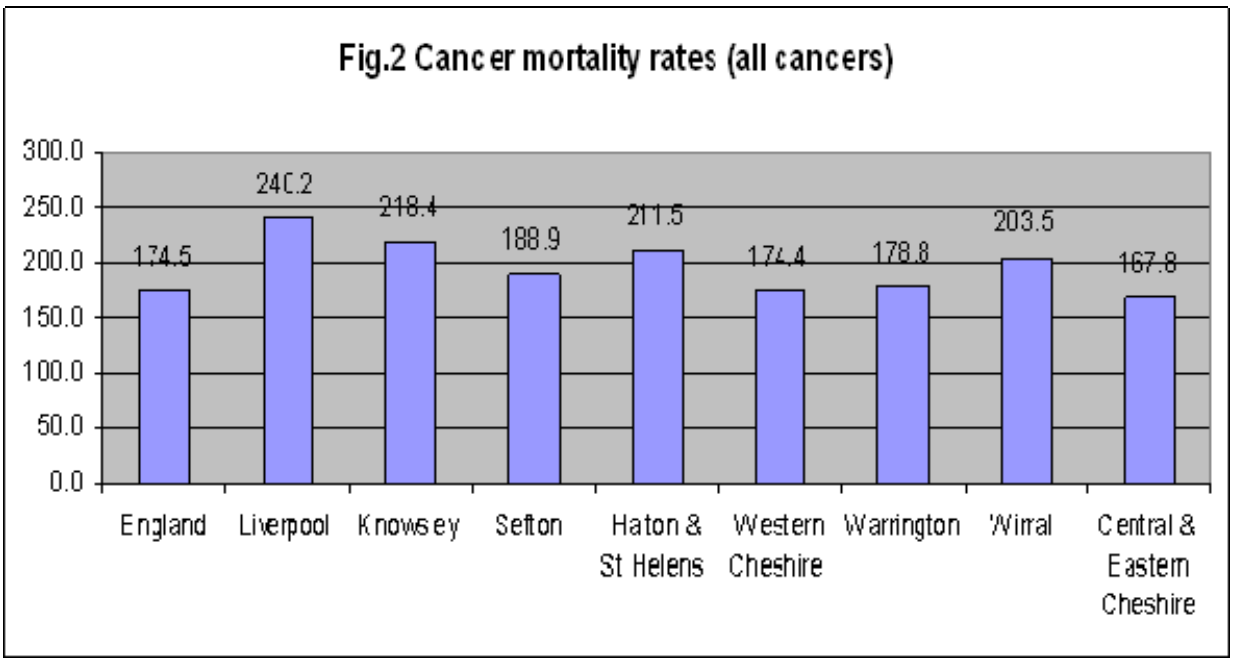
2.4 The incidence of new cases of **colorectal cancer** and colorectal cancer mortality rates are higher across the cluster than the national average. The incidence of new cases of **prostate cancer** across the cluster is lower than the national average except for Sefton. Prostate cancer mortality rates across the cluster are higher than the national average. The incidence of new cases of upper GI cancer across the

cluster is higher than the national average. Similarly, upper GI cancer mortality rates across the cluster are higher than the national average.

2.5 It is important to note that Cancer is now the biggest single cause of death in Cheshire and Merseyside, overtaking cardio-vascular disease.

2.6 Details by PCT of incidence and mortality by gender and by tumour group are provided in **Appendix A**





NB

- All incidence and mortality rates are per 100,000 population
- Incidence data is for 2006-8
- Mortality data is for 2007-9

3. Current Configuration of Cancer Services

Details of the current configuration of Cancer services across Cheshire and Merseyside are included in **Appendix B.** These include:

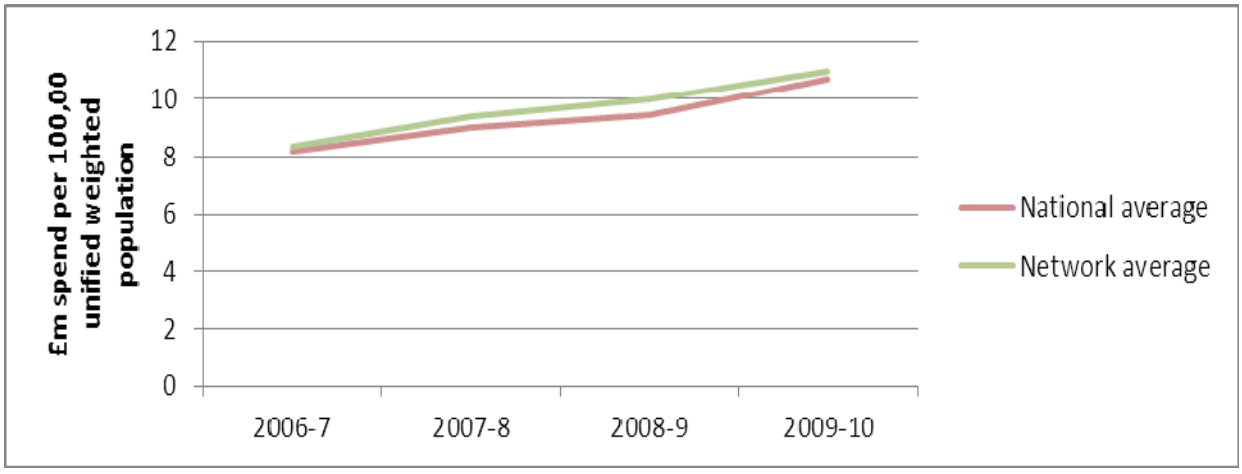
- Hospital Cancer Services
- Radiotherapy
- Chemotherapy
- Surgical Oncology
- Pathology
- Radiology

4. Cancer Investment

4.1 The PCTs within the network have consistently matched or marginally surpassed the average spend on cancer services across the rest of England. Spending has increased from £8.4 million per 100,000 unified weighted population in 2006/7 to £10.9 million in 2009/10. The demographics of the North West, with its ageing population, will see this trend of increased spend continuing for the foreseeable future. Additionally, a real focus upon addressing the health inequalities in the population, resulting largely from deprivation, and an emphasis on promoting earlier diagnosis of disease, and hence improving opportunities for patients to benefit from curative therapies, will inevitably require increased investment on at least the scale witnessed in recent years.

4.2 Given the size of the challenge that cancer presents to the population of Merseyside and Cheshire – the population with the highest death rate from cancer in England – investing in improved access, improved specialist services, improved opportunities for research and innovation are considered to be key priorities.

Fig 4: Spend on all cancers 2006 to 2010



Details of spend by PCT are included in **Appendix 3**

5. Proposals to improve and develop Cancer Services in Cheshire and Merseyside

5.1 In 2008 the **Merseyside and Cheshire Cancer Network (MCCN)** commissioned an expert review of the configuration of Cancer Services in Cheshire and Merseyside with the aim of developing recommendations to ensure that services were delivered in the optimal way to improve outcomes for patients. The resulting report 'The organisation and delivery of non-surgical oncology services in the Merseyside and Cheshire Cancer Network'[2] was presented to the Cancer Taskforce in October 2008. In brief, the report summed up certain reasons for considering a change in the service model location and delivery of non-surgical oncology in the MCCN area including:

- Encouraging the major expansion of radiotherapy through the development of satellite radiotherapy units closer to the populations served and limiting the size of major centres to a maximum of eight Linear Accelerators.
- The decentralisation of chemotherapy requiring a larger clinical workforce with a greater local presence than is currently available.
- More flexible service delivery models required which were less dependent on a single centre and more served through networks of care.
- The increasing use of multi-modality treatment regimes suggesting that, in the longer term, isolated oncology centres were no longer appropriate.
- The organisation of hospital services in MCCN meant that integrated cancer care was dependent on oncologists to secure the integrity of patient pathways. It was more difficult to achieve this from a remote centre.
- The needs of the network population were high in terms of cancer care but the results were likely to be inhibited by poor accessibility to oncology services as well as by late presentation. Closer alignment of oncologists to local providers would shift the balance of leadership in cancer care and would support improving the overall organisation and delivery of care.
- Developing cancer research in Liverpool, an essential component of all cancer care and of medical research, was compromised by the absence of academic oncology leadership. The isolation of the current cancer centre and its distance from surgical oncology and Specialist Multi-Disciplinary Teams were factors in the difficulty in addressing this deficiency.

5.2 Since that time the PCTs in Cheshire and Merseyside have supported the establishment of six additional Consultant Oncology posts across the region, seven new nurse specialist appointments, plus two tumour specialist Cancer nurses at CCO, and the enhancement of clinical services at Clatterbridge Centre for Oncology to improve care for acutely ill patients; a satellite radiotherapy unit has been opened by CCO on the Aintree Hospital site and a Chair in Medical Oncology has been appointed by the University of Liverpool. In addition CR: UK have "openedaresearch" centre in Liverpool adjacent to the RLBUHT site.

2 "The organisation and delivery of non-surgical oncology services in the Merseyside and Cheshire Cancer Network" A feasibility study into the potential relocation of on-surgical oncology services from Clatterbridge to Liverpool (October 2008) Prof. M R Baker and Mr R C Cannon

5.3 However, despite these developments, certain on-going issues still need to be addressed if alllocal people are to receive the highest quality care available and to benefit from the best possible clinical outcomes. First and foremost is the issue ofthe geographical location of the specialist Cancer Centre on the Clatterbridge hospital site. In their report Baker and Cannon confirmed that

> *"When it was first established, the Clatterbridge campus provided a wide range of medical and surgical services; this is no longer the case and the oncology facilities are now isolated from modern medical and surgical practice. During this time, the complexity of cancer treatments has increased dramatically, patients are older and sicker and the treatments have more side effects. In most cancer centres, most of the beds are used for patients who are seriously ill because of their underlying cancer or because of the side effects of treatment. The management of these conditions requires ready access to both critical care facilities and the on-site access to the full range of general medical and surgical expertise. This is no longer possible at Clatterbridge".*

5.4 In their work to look at options for the future location of the Clatterbridge specialist centre to address the issues above, Baker and Cannon looked at a long list of nine options which were assessed against ten criteria. The preferred option, following this appraisal process, proved to be **the move of the main oncology centre to the Royal Liverpool Hospital site with a link oncology centre at Aintree Hospitals and a local unit retained on the Clatterbridge site. This preferred option was considered and supported by the Cancer Taskforce, which included representatives from Trusts and PCTs across the network.**

5.5 Clearly more detailed analysis of the options considered will be included in the Outline Business Case that will be developed to support these proposals.

5.6 In considering this option and the support for the establishment of a comprehensive cancer centre on the site of the Royal Liverpool Hospital it was noted that such a centre would:

- Ensure better co-ordination of pathways of care for cancer patients by bringing together key specialist services on a single campus, which currently hosts the majority of Specialist Cancer Multi-Disciplinary Teams (SMDTs).
- Ensure that patients benefit from closer integration between the NHS and research teams within the University of Liverpool and other key research partners e.g. CR:UK
- Enable more patients to benefit from participating in clinical trials
- Ensure that specialist services are located in a place most easily accessible to the majority of patients so that more patients could benefit from improved access particularly those who need repeated and regular radiotherapy for certain types of cancer and for palliation
- Make best use of NHS resources by enabling clinical teams to work more effectively and efficiently together

- Be a focus for innovation and knowledge, complementing and amplifying the efforts of all partners including local employers and councils to promote the region as a premier choice for investment
- Maintain those NHS services which are best delivered in more local settings including local district general hospitals and the community
- Ensure that the majority of cancer patients will continue to be treated nearer to home

5.7 Importantly, the development of a comprehensive cancer centre would bring the inpatient facilities for radiotherapy and chemotherapy onto a single large acute teaching hospital campus that already offers a wide range of specialist cancer services plus medical and surgical expertise that would benefit patients from across the network.

6. Benefits for patients living in Wirral and Cheshire

6.1 In making the above recommendations it is recognised that certain patients will have to travel further for certain elements of their care. However, it is important to emphasise that radiotherapy and chemotherapy services would continue to be provided on the original Clatterbridge site. Outpatient chemotherapy services and radiotherapy services for patients with more common cancers such as breast, prostate and lung would continue to be provided locally across the region in district general hospitals, including at Clatterbridge. Only those patients that require more complex treatment, or require inpatient facilities, the minority, would be required to travel to the new centre in Liverpool.

6.2 It is also important to emphasise that the current location of the cancer centre has no critical care facilities (i.e. high dependency or intensive care unit) or acute medical cover. Increasingly complex chemotherapy and radiotherapy treatments require these services and these can only be provided on a full acute hospital site. Keeping the cancer centre isolated on a non-acute site is regarded as unsustainable, in the medium to long term, by senior clinical advisors.

6.3 Thirdly, senior clinicians believe very strongly that cancer research will be strengthened by closer integration between the University of Liverpool, Cancer Research UK, Clatterbridge Cancer Research, the Royal Liverpool University Hospital and Clatterbridge Centre for Oncology NHS Trust. The Clatterbridge Cancer Research laboratories have recently relocated to share the 'BioCampus' with other partners in central Liverpool. Only CCO remains physically isolated from this important and growing research community. By taking the specialist in patient facilities into Liverpool all patients, including those from Wirral and Western Cheshire, would benefit from greater participation in international-standard research and clinical trials.

6.4 Fourthly, the Royal Liverpool University Hospital employs the greatest number of specialist cancer doctors and other clinical professionals. Most specialist cancer surgical teams for residents of Merseyside and Cheshire are based at the Royal Liverpool, and the hospital also hosts the majority of specialist cancer pathology and radiology services for the region. **Patients from Wirral and Cheshire already travel**

to the Royal Liverpool University Hospital site for treatment and care for a variety of conditions with nearly 41,000 patient attendances from Cheshire, Wirral and Warrington expected at the Royal Liverpool and Broadgreen Hospital Trust this year. Closer geographical integration between the Royal Liverpool University Hospital and Clatterbridge Centre for Oncology would enable greater collaboration between expert cancer teams and improve the experience of cancer patients through the delivery of seamless care.

6.5 Lastly, it is important to note that the relocation would reduce the inequalities in access to health care for the population of Merseyside and Cheshire as a whole. The majority of CCO's patients (67%) live north of the River Mersey. The general characteristics of this population are that they suffer from the highest death rates from cancer in England, and that they are amongst the poorest citizens and consequently are less able to travel to access health services. Logically, the main cancer centre should be located where the majority of its patients can access it with relative ease; this is in central Liverpool. The impact on travel times of these proposals has been considered

7. Patients in Central and East Cheshire and North Wales.

It must be noted that, in the main, patients in Central and East Cheshire look to Manchester and North Staffordshire for services and so will not be affected significantly by these proposals. Equally, the residents of North Wales are increasingly looking to Glan Clwyd and to Welsh Providers for their specialist Cancer services.

8. Travel Times.

Currently, the majority of CCO's patients have to be driven by relatives or friends in excess of 30 minutes for treatment at the centre. Many patients will need to travel to and from the centre every day for a number of weeks during a course of treatment. Sometimes travel times can be considerably more than this if patients utilise patient transport services.

If CCO's specialist services were to move to Liverpool, then the majority of patients would travel less than 30minutes to the centre, as the following two graphs show.

Figure 5:

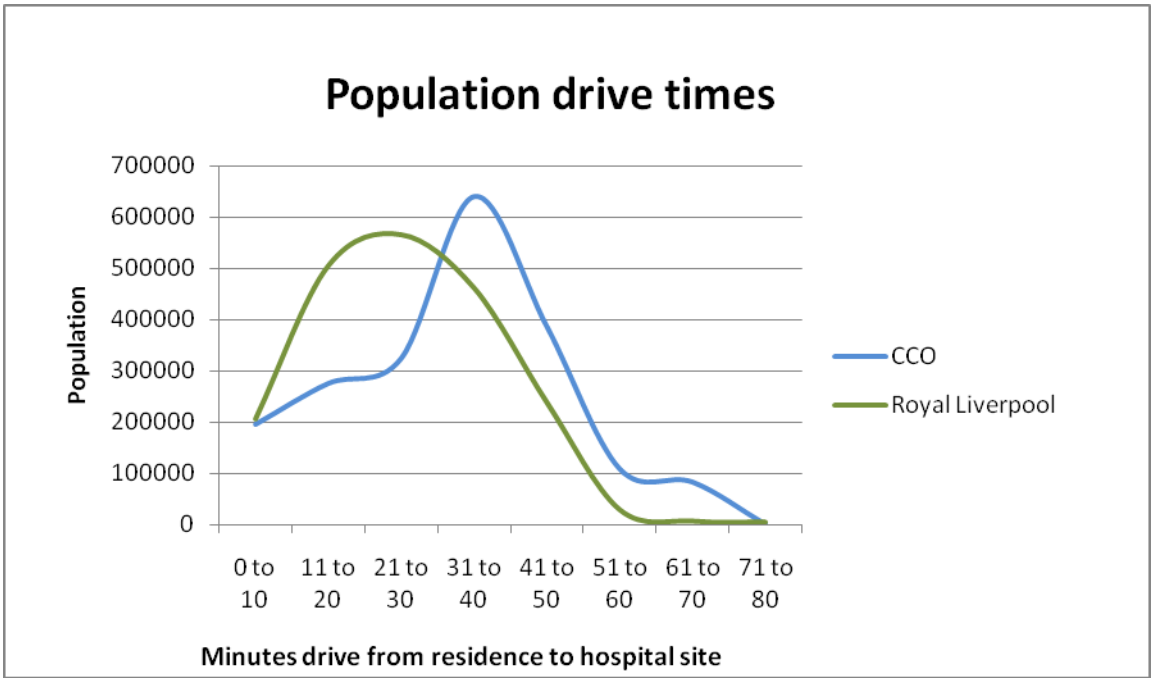
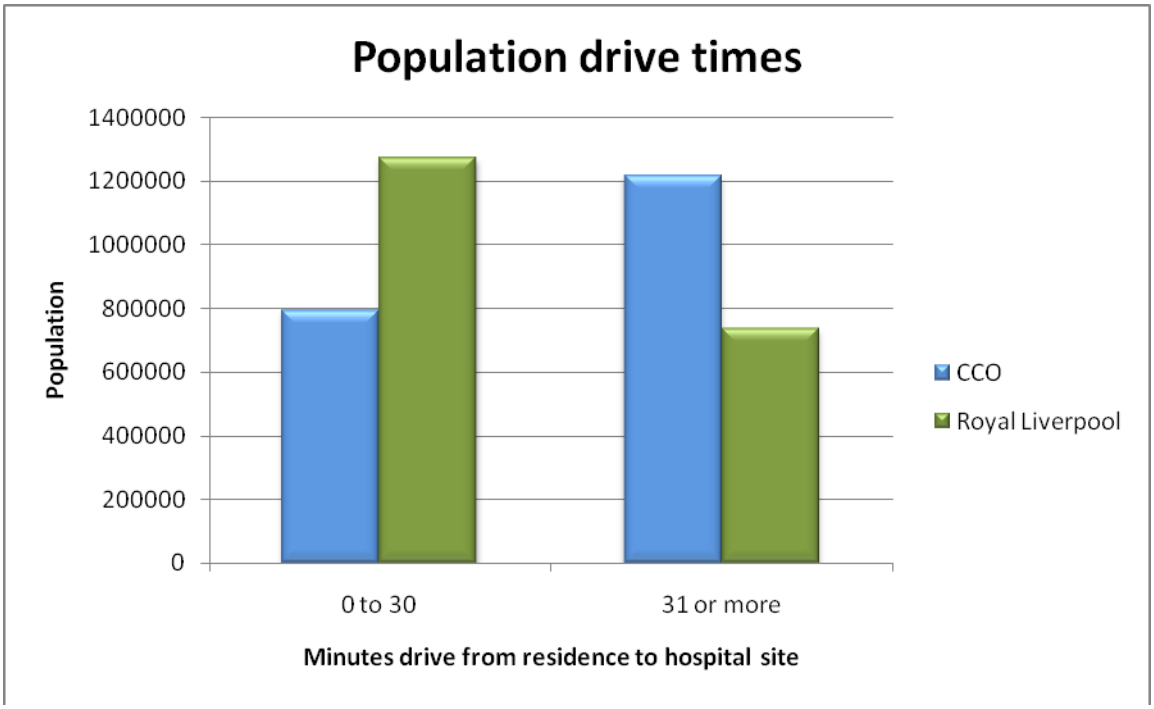


Figure 6:



9. Primary Care Trust Board Consideration

9.1 All Primary Care Trusts (PCTs) in the Merseyside and Cheshire Cancer Network have received and approved two previous papers relating to non-surgical oncology services and Clatterbridge Centre for Oncology NHS Foundation Trust. The first paper (March/April 2008) sought PCT boards' support for an expansion of radiotherapy services through the development of two satellite services: one

adjacent to the Walton Centre and one adjacent to the Royal Liverpool University Hospital.

9.2 The second paper (June/July 2009) presented the recommendations from the Baker and Cannon report. That paper noted that expansion of CCO into Liverpool, whilst desirable, would take several years to plan and deliver, and so a series of interim measures were proposed. These measures involved:

- the enhancement of clinical services at Clatterbridge Centre for Oncology to improve care for acutely ill patients, over and above the current arrangements
- the establishment of an academic oncology unit at the Royal Liverpool University Hospital in partnership with the University of Liverpool and Clatterbridge Centre for Oncology which has since been established
- the development of acute oncology services to enhance the care for cancer patients in all acute hospitals in Merseyside and Cheshire which has since taken place
- the establishment of radiotherapy facilities at the Royal Liverpool University Hospital site including a potential underwriting of any access premium from Liverpool and Knowsley PCTs.

9.3 PCT Boards approved these measures in principle and endorsed Liverpool PCT to lead on the procurement of radiotherapy facilities on the Royal Liverpool site through an open competitive tender.

9.4 Co-ordinated through the cancer network, significant progress on all of these initiatives has been made since then as identified in section 5 above. Work to take forward the procurement of satellite radiotherapy facilities at the Royal Liverpool Hospital site was initiated and has involved detailed analyses of clinical models of care, informed by a number of clinical experts from both within the network across England. Following detailed consideration the cancer network and the radiotherapy procurement team led by Liverpool PCT agreed that the benefits to patients that could be derived from a satellite facility at the Royal would be outweighed by the cost of delivery and confirmed that **a larger-scale relocation of CCO, as per the central recommendation of the Baker and Cannon report and within an earlier timescale, would offer far greater benefits to all patients Cheshire and Merseyside and would represent far greater value for money**. Thus Liverpool PCT and the Cancer Network agreed the need to support the development of proposals for the establishment of a Comprehensive Cancer Centre on the Royal Liverpool Hospital site in tandem with plans to rebuild the new Royal Liverpool Hospital.

10. Detailed proposals

10.1 As a result of this situation, in autumn 2010 PriceWaterhouse Coopers (PwC) were engaged by Liverpool PCT to undertake a high level affordability study to review the cost and affordability of building a new comprehensive Cancer Centre co-located with a redeveloped Royal Liverpool hospital. The final report was completed in March 2011. The study reviewed 2 options - **a Standalone Cancer Centre and a Cancer Centre with an element of shared services with the RLBUH.** The capital

cost of both options (based on 80 inpatient beds) was **£116.5m** and **£105.2m respectively (both excluding VAT)**.

10.2 Following the production of the PwC report, the PCT requested that CCO and the RLBUH work in partnership to bring forward a proposal which would maximise the potential for using shared clinical and non-clinical support services and infrastructure, where appropriate, to drive down both capital and revenue costs, whilst ensuring that Value for Money was maximised for taxpayers.

The key elements of the PCT vision were:-

- Development of a Specialist Cancer Centre on the new Royal Hospital site.
- Enhanced research capacity (symbolised by more research beds).
- Retention of the existing Clatterbridge site infrastructure to provide satellite radiotherapy, proton therapy, chemotherapy and out-patient service.
- Retention of the satellite radiotherapy service adjacent to the Walton centre and
- Maintenance of CCO's current range of existing network clinic arrangements.

10.3 To progress this request, a Joint Clinical Workshop was held in May 2011 with senior colleagues from CCO, RLBUHT, the University of Liverpool and the Cancer Network. This was a very productive workshop and a strong, collective agreement was reached across both Trusts on a joint vision for the future provision of Cancer Services. This vision enunciated:

*"**The creation of a World Class Comprehensive Cancer Centre, co-located on the new RLBUH site for the Merseyside and Cheshire Network, which brings together in partnership for the first time specialist NHS cancer services with the University of Liverpool and other research partners on a single acute campus enabling :***

- ***Seamless pathways of patient centred care for our patients.***
- ***Best Use of NHS resources.***
- ***A centre of excellence for Cancer treatment and research.***
- ***Best possible cancer care and health outcomes**."*

This vision was supported by both Trust Boards subject to affordability.

10. 4 Subsequent to the workshop both Trusts have worked together to consider and bring forward a more affordable proposal which incorporates

- A new build Clatterbridge Cancer Centre adjacent to the proposed new build Royal Liverpool Hospital (RLH).
- A separate, dedicated entrance for the Cancer Centre.
- The majority of cancer inpatient services provided by Clatterbridge Cancer Centre, to be accommodated within the RLH scheme with flexibility within the cancer centre to provide additional, flexible inpatient / day care services.
- Radiotherapy, chemotherapy, dedicated imaging and outpatient services to be provided within the Cancer Centre.

- Appropriate, dedicated patient and staff access links between the Cancer Centre and RLH buildings with required clinical adjacencies conducive to effective and efficient delivery of patient care and clinical trials.
- A dedicated adjacent free car parking facility for cancer patients.
- Clinical Trials Unit to be provided in collaboration with RLH and the University assuming essential laboratory support of the Cancer Centre.
- Cytotoxic pharmacy to remain on the CCO Wirral site.
- A satellite facility to remain on the CCO Wirral site comprising ambulatory, radiotherapy and chemotherapy, outpatients services and proton therapy.

11. Overall Affordability of the New Centre and Funding Implications

11.1 The total cost of the revised proposals including VAT, has been estimated at £94.5m, compared with the first proposal (March 2011) estimated at £123.7m, representing a net reduction of £29.2m. There are two elements to funding this proposal:

- The capital cost to fund the proposals
- The additional revenue funding to service the capital

The following sources of capital have been proposed:

- CCO capital and prudential borrowing
- A Charitable Appeal
- Liverpool PCT contribution, with Liverpool PCT Board approval to be given.

11.2 The above sources of capital would total £51m, with a further £43.5m to be identified. Additional costs of £6.5m revenue p.a. would be incurred. Further detailed work is being undertaken to consider ways in which the proposals can be delivered within anticipated resources. In undertaking this work it is recognised that these proposals should be considered as a 'once in a generation opportunity' to enhance, radically, cancer care for the people of Cheshire and Merseyside. Equally, they need to be considered in the light of the Strategic Investment requirement (identified under 4) which demonstrates the need for further investment in Cancer services in the Cheshire and Merseyside over the coming years.

11.3 At the September 2011 meeting the NHS Merseyside Board approved funding to meet the project costs to deliver an Outline Business Case and one-off investment of up to £20m for the new Centre. In addition further on-going revenue support of £6.5m will be required from 2012/13 onwards to enable the scheme to proceed. Given the significant benefits that would accrue to Merseyside residents of the proposals, and the high levels of cancer morbidity and mortality in Merseyside, it is proposed that the NHS Merseyside Cluster will plan to include, in the Cluster's Commissioning Intentions for 2012/13 onwards, the requirement for an additional £6.5m. Over time, the impact of tariff and reduced scheme costs will be considered and, where indicated, investment amended. This intention will be confirmed by the NHS Merseyside Cluster Board at the March 2012 meeting when the Commissioning Plan is approved.

12. Timescales

It is estimated that the Cancer Centre scheme could open with, or shortly after, the new Royal Liverpool Hospital in 2017. This would involve the completion and approval of outline and full business cases by the Board of CCO - and Monitor assessment of each - and the completion of formal public consultation. .

13. Stakeholder involvement

It is now vital to involve a wider range of stakeholders in the debate. It is proposed that the plans identified in this paper, and the real and continuing benefits for patients that these plans are designed to bring, are shared with a wider range of stakeholders. This will ensure that people are informed about the reasons for the proposed changes and that they have an opportunity to comment on and influence these plans. Staff in the CWW and Merseyside PCT Clusters, supported by the Merseyside and Cheshire Cancer Network,are developing a stakeholder involvement plan and will be in apositionto launch these plans after the November PCT Cluster Board meetings. It is proposed that this process will be led by the Merseyside PCT Cluster, with Cheshire, Warrington and Wirral leads involved closely.

14. NHS Merseyside Board Approval

Taking account of the progress and intentions outlined above, Merseyside PCT Cluster Board is asked to:

- Note the background to and the progress achieved with regard to the plans for cancer services in Merseyside and Cheshire since 2008.
-
- Support further work to agree an affordable plan to deliver a comprehensive cancer centre on the site of the Royal Liverpool Hospital.

- Support the delivery of inclusive stakeholder involvement and engagement plans, led by Merseyside PCT Cluster with strong support from Cheshire, Warrington and Wirral PCT Cluster.

- Re-affirm Liverpool PCTs intention to provide up to £20m capital contribution to the new scheme if required and to fund appropriate project support costs.

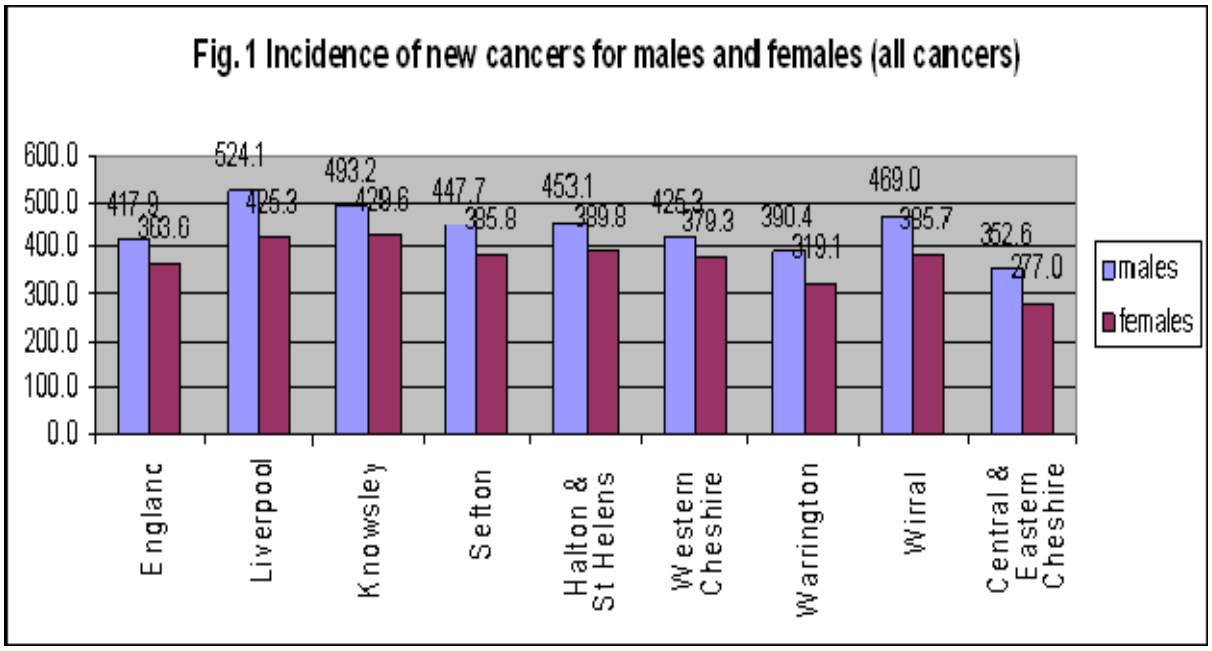
- Support the inclusion, in the NHS Merseyside Commissioning Intentions for 2012/13 and beyond, of the additional revenue required to facilitate the delivery of the project. This will be confirmed at the March 2012 meeting when the Commissioning Plan is approved.

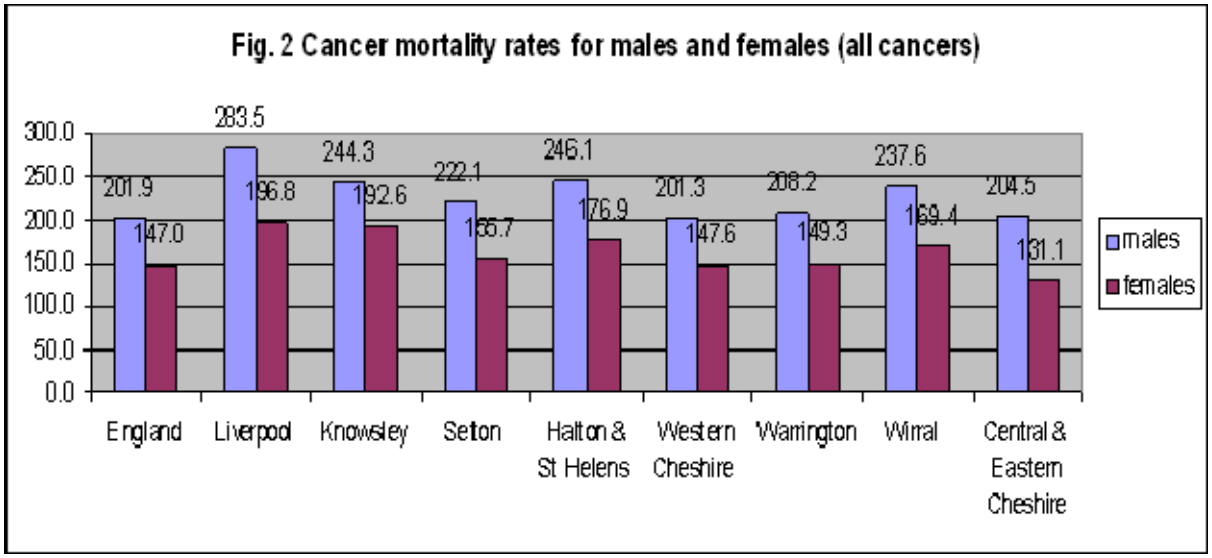
APPENDIX A

Cancer Incidence and Mortality in Cheshire and Merseyside

NB

- All incidence and mortality rates are per 100,000 population
- Incidence data is for 2006-8
- Mortality data is for 2007-9





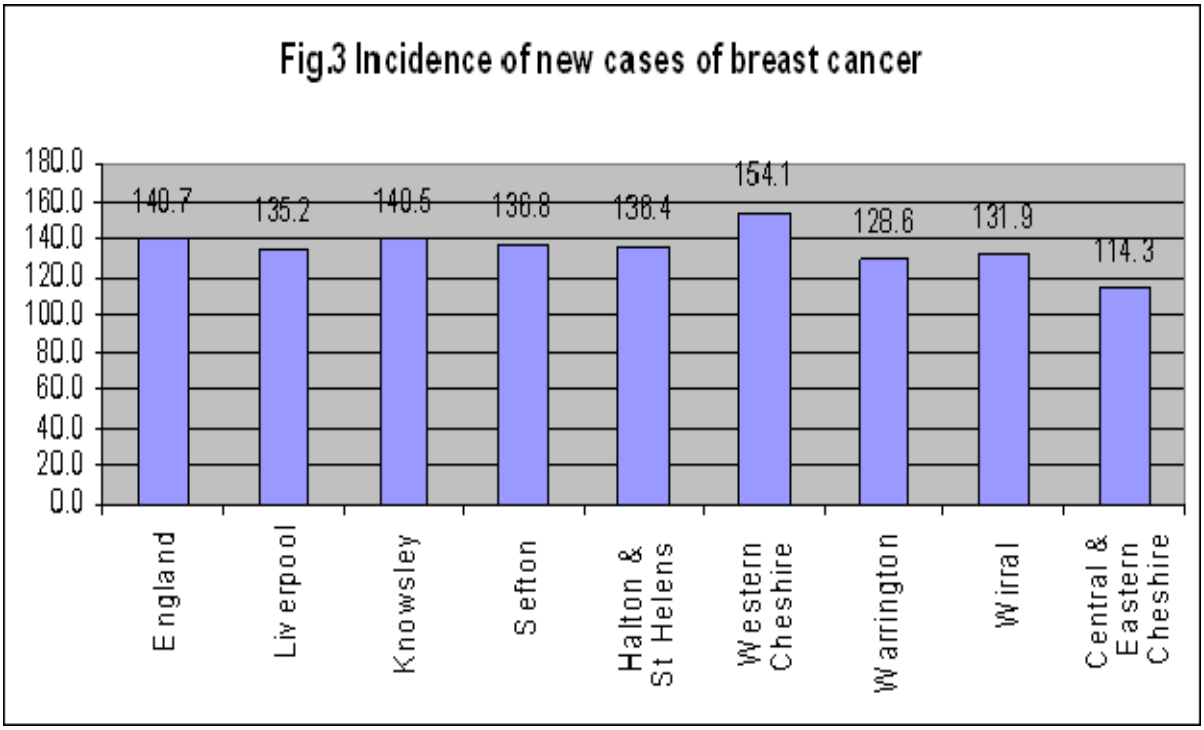


Fig.3 Incidence of new cases of breast cancer
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
140.7
135.2
140.5
136.8
136.4
154.1
128.6
131.9
114.3
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

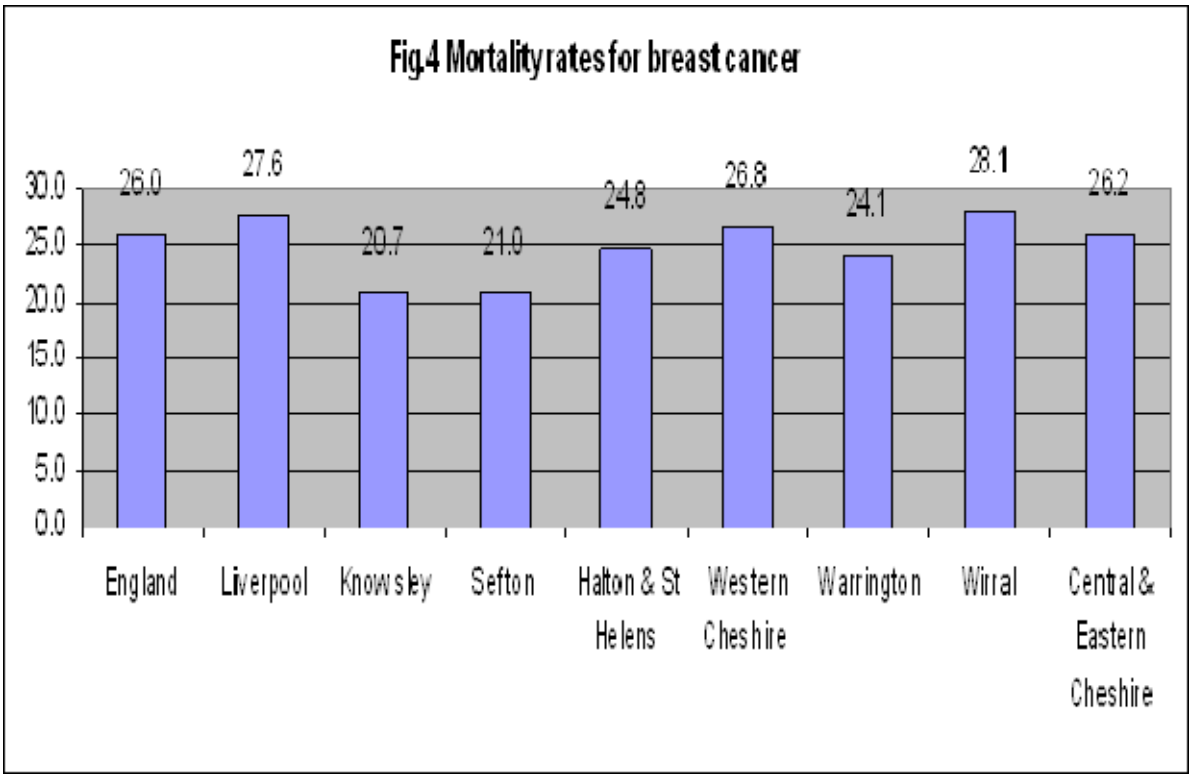


Fig.4 Mortality rates for breast cancer
30.0
25.0
20.0
15.0
10.0
5.0
0.0
26.0
27.6
20.7
21.0
24.8
26.8
24.1
28.1
26.2
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

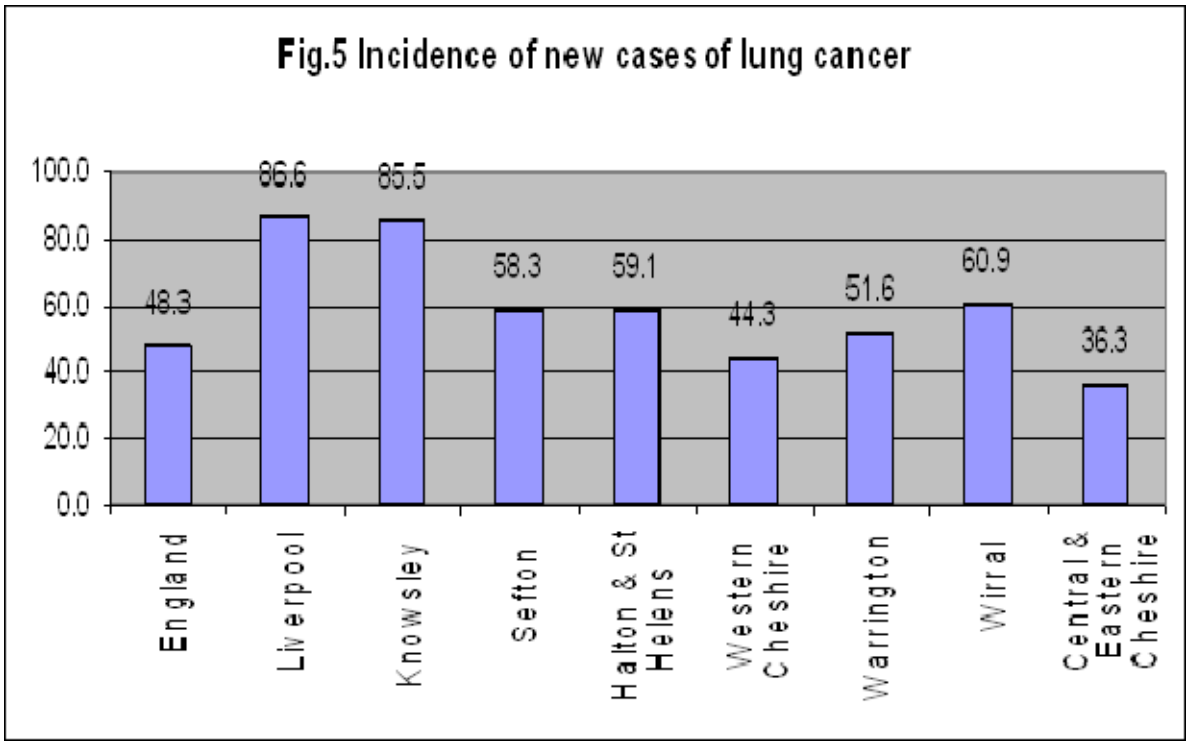


Fig.5 Incidence of new cases of lung cancer
100.0
80.0
60.0
40.0
20.0
0.0
48.3
86.6
85.5
58.3
59.1
44.3
51.6
60.9
36.3
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

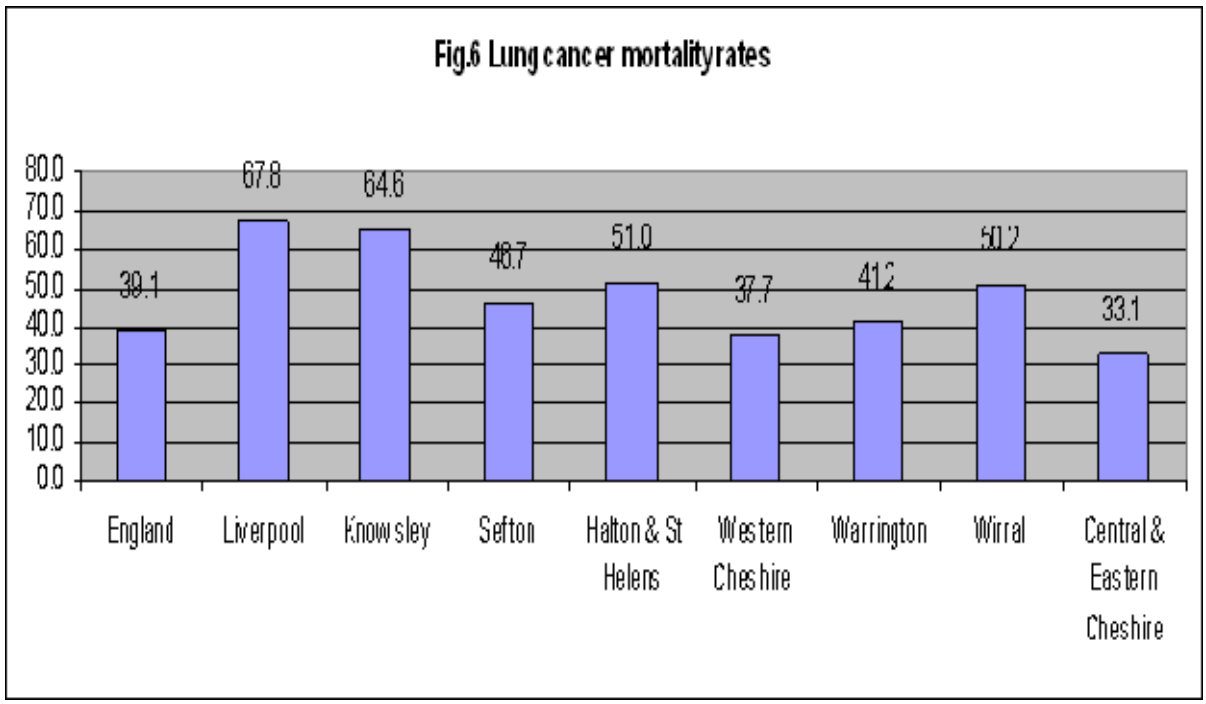


Fig.6 Lung cancer mortalityrates
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
39.1
67.8
64.6
46.7
51.0
37.7
41.2
50.7
33.1
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

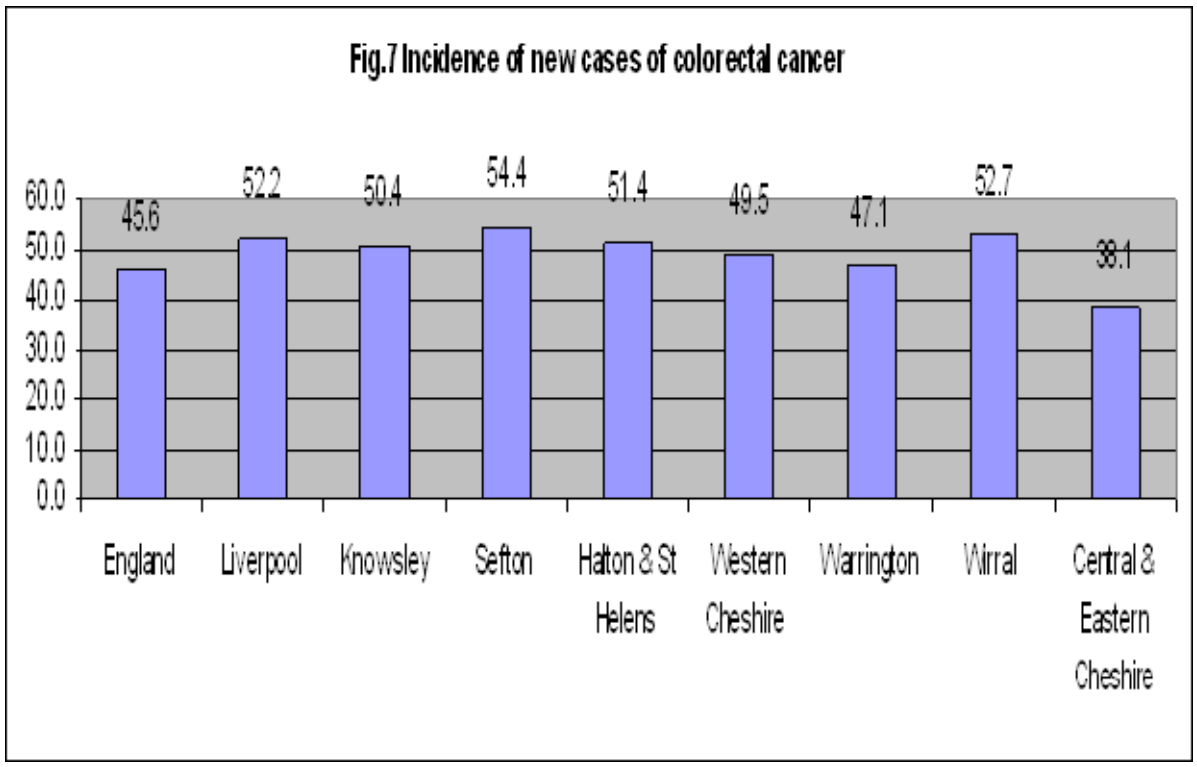


Fig.7 Incidence of new cases of colorectal cancer
60.0
50.0
40.0
30.0
20.0
10.0
0.0
45.6
52.2
50.4
54.4
51.4
49.5
47.1
52.7
38.1
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

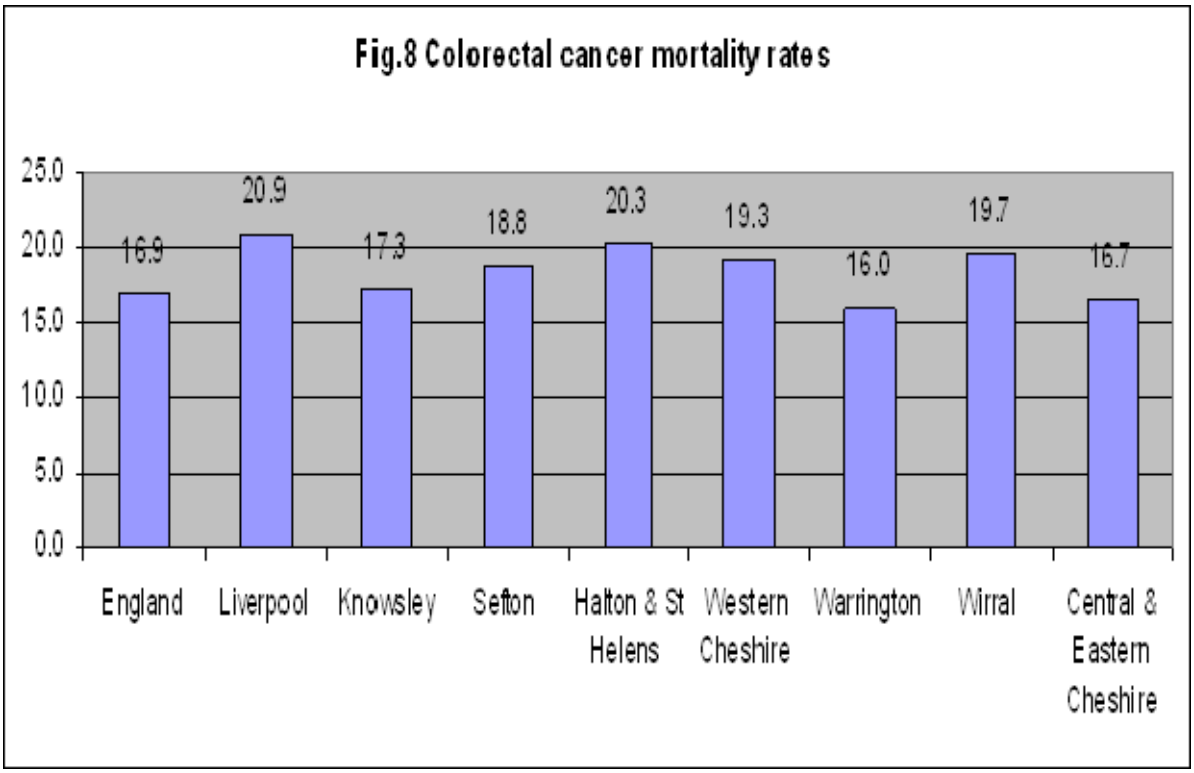


Fig.8 Colorectal cancer mortality rates
25.0
20.0
15.0
10.0
5.0
0.0
16.9
20.9
17.3
18.8
20.3
19.3
16.0
19.7
16.7
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

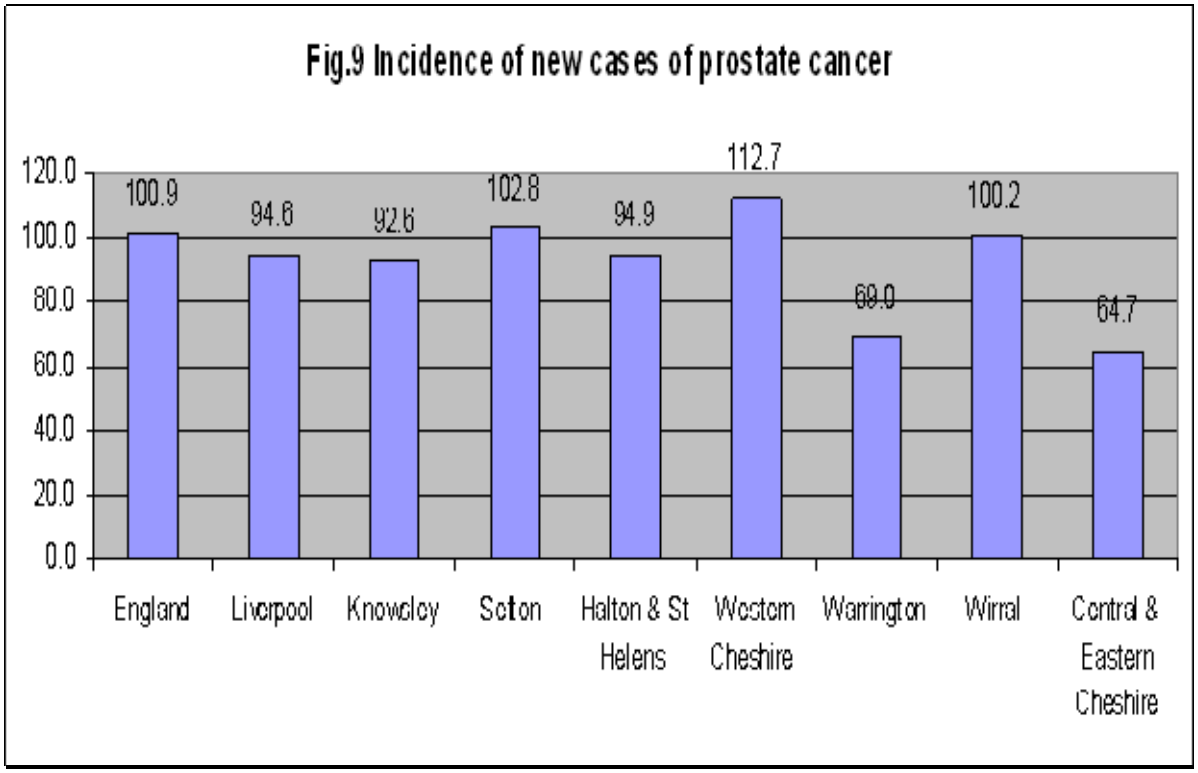


Fig.9 Incidence of new cases of prostate cancer
120.0
100.0
80.0
60.0
40.0
20.0
0.0
100.9
94.6
92.6
102.8
94.9
112.7
69.0
100.2
64.7
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

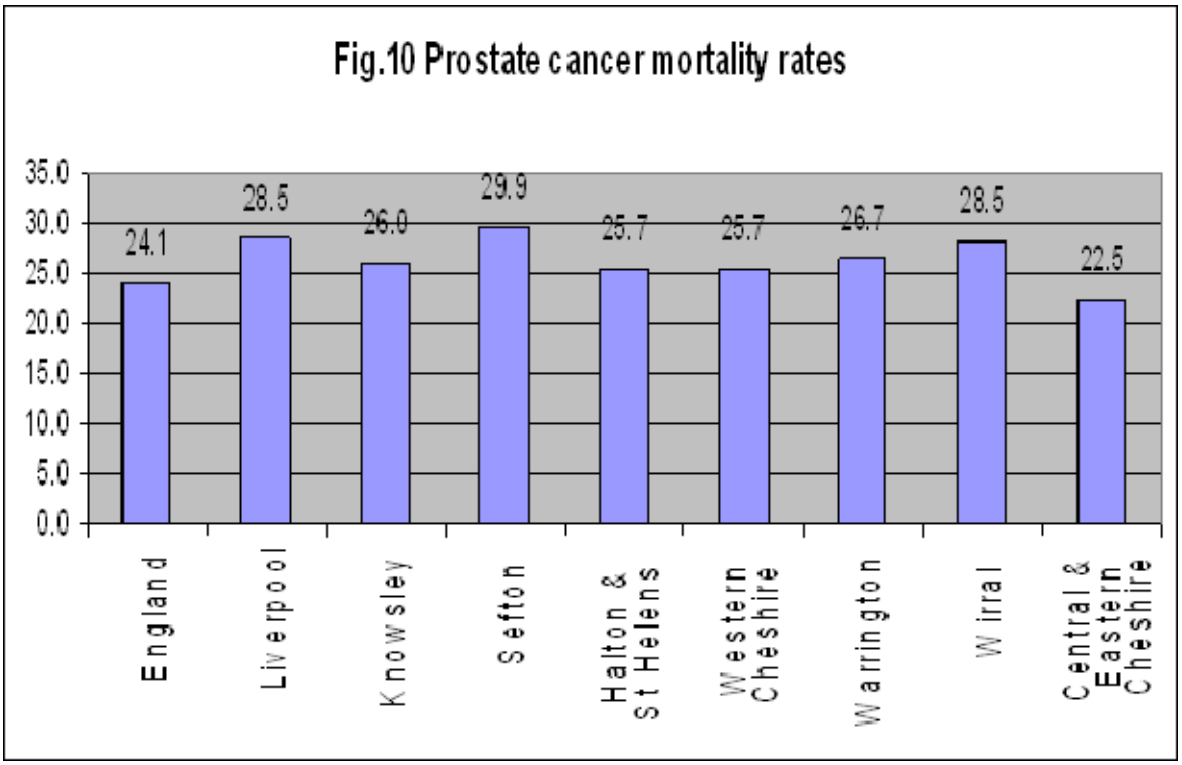


Fig.10 Prostate cancer mortality rates
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
24.1
28.5
26.0
29.9
25.7
25.7
26.7
28.5
22.5
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

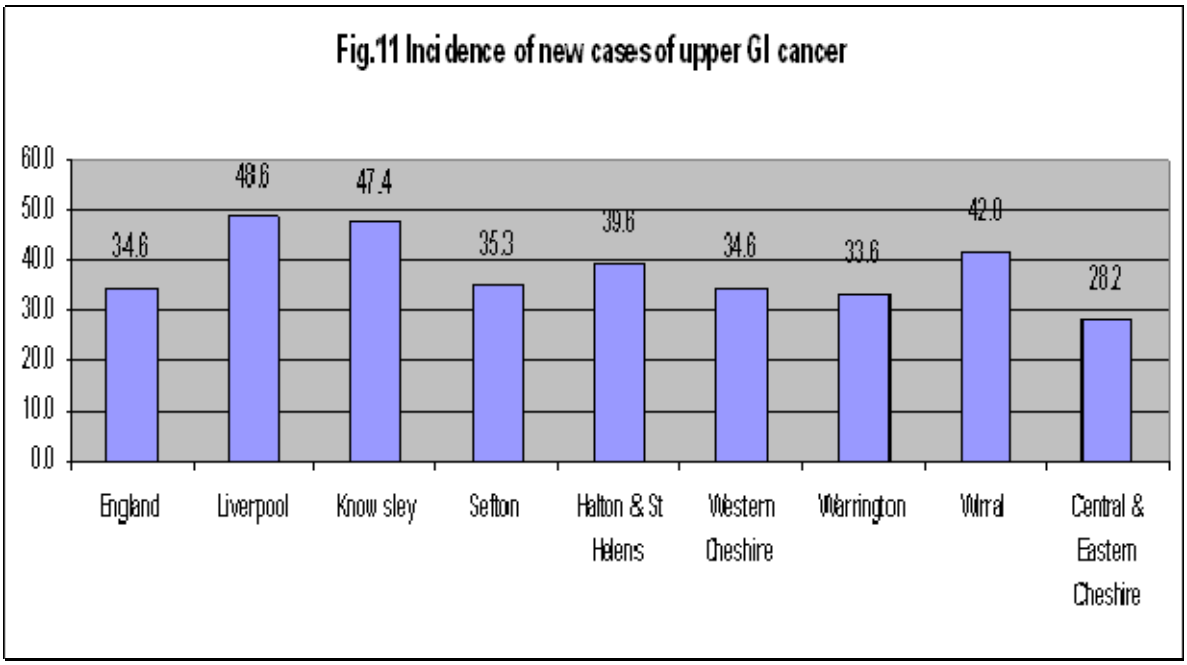


Fig.11 Incidence of new cases of upper GI cancer
60.0
50.0
40.0
30.0
20.0
10.0
0.0
34.6
48.6
47.4
35.3
39.6
34.6
33.6
42.0
28.2
England
Liverpool
Know sley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

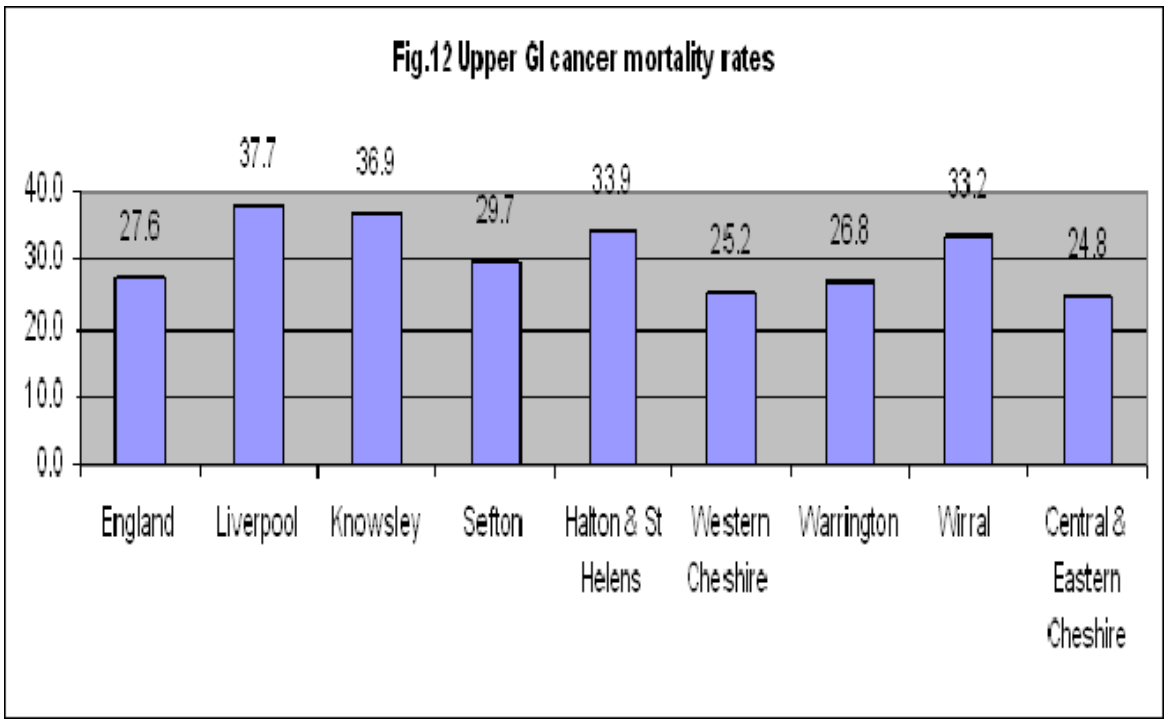


Fig.12 Upper GI cancer mortality rates
40.0
30.0
20.0
10.0
0.0
27.6
37.7
36.9
29.7
33.9
25.2
26.8
33.2
24.8
England
Liverpool
Knowsley
Sefton
Halton & St Helens
Western Cheshire
Warrington
Wirral
Central & Eastern Cheshire

Appendix B

Current configuration of cancer services

Hospital Cancer Services

Twelve hospital trusts provide cancer services within the Merseyside and Cheshire Cancer Network. Ten of these 12 are designated to provide specific specialist (tertiary) cancer services. Table 1 (page 23) shows which hospitals host specialist teams, most of which have been officially designated by commissioners through the cancer network in response to NICE improving outcomes guidance. The table also shows which hospitals provide non-specialist (secondary care level) diagnostic and treatment services for their local populations

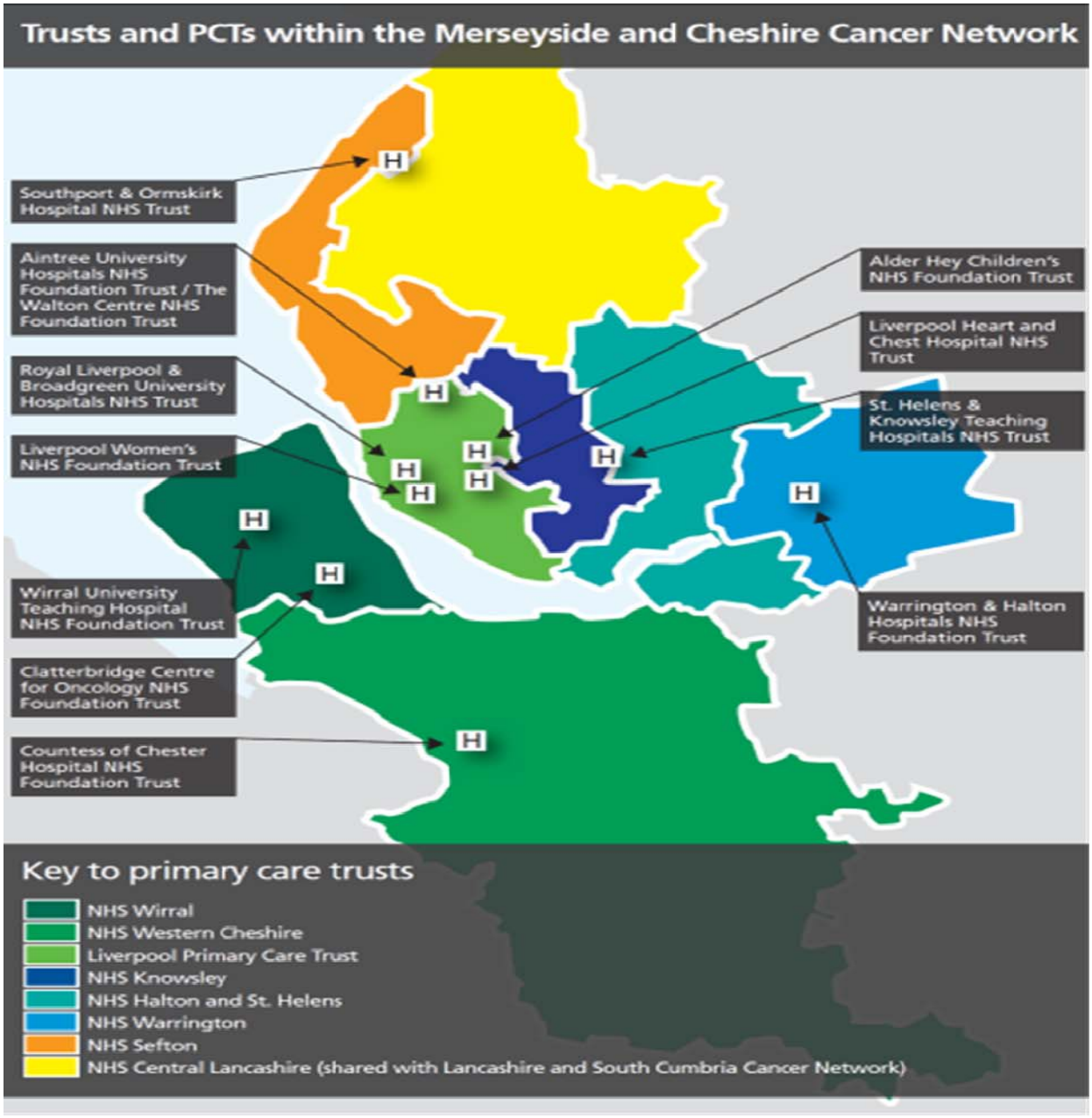


Table 1: The distribution of specialist cancer services in the network

	Aintree University Hospitals	Alder Hey Children's Hospital	BetsiCadwaldr University Health Board	Clatterbridge Centre for Oncology	Countess of Chester Hospital	Liverpool Heart and Chest Hospital	Liverpool Women's Hospital	Royal Liverpool and Broadgreen University Hospitals	Southport and Ormskirk Hospitals	St Helens and Knowsley Hospitals	The Walton Centre	Wirral University Teaching Hospital	Warrington and Halton Hospitals
Local cancer services[3]	✓		✓		✓	Lung only	Gynae only	✓	✓	✓		✓	✓
Anal								✓					
Brain & CNS			✓								✓		
Chemotherapy[4] (All solid tumours)	clinic	✓			clinic			clinic	clinic	clinic			clinic
Children's		✓											
Head & neck	✓												
Liver	✓												
Lung surgery						✓							
Neuro-endocrine[5]	✓							✓					
Ocular								✓					
Oesophago-gastrc	✓		✓			✓							
Pancreas								✓					
Radiotherapy (All Tumours)	✓												
Sarcoma								✓					
Specialist gynae							✓						
Specialist haematology								✓					
Specialist skin[6]								✓		✓			
Teenage & young adult[7]		✓						✓					
Testicular								✓					
Specialist urology								✓				✓	

[3] 'Local cancer services' defined as diagnosing and treating most common cancers.
[4] Clatterbridge provides out-reach clinics for daycase chemotherapy on several hospital sites.
[5] A single neuro-endocrine specialist multidisciplinary team (MDT) is managed jointly by Aintree and the Royal.
[4] Specialist skin MDT is hosted by St Helens & Knowsley. Associated unit is the Royal for T-cell lymphoma.
[5] TYA MDT is hosted by Clatterbridge. Associate units are Alder Hey and the Royal.

Radiotherapy

Clatterbridge Centre for Oncology NHS Foundation Trust (CCO) is the sole provider of radiotherapy within the Merseyside and Cheshire Cancer Network (MCCN). The centre currently operates on 2 sites. Its Bebington site on the Wirral treats around 5,500 patients with radiotherapy each year. A course of treatment for most patients will be made up of a series of appointments during which they will receive fractions of their overall dose of radiotherapy.

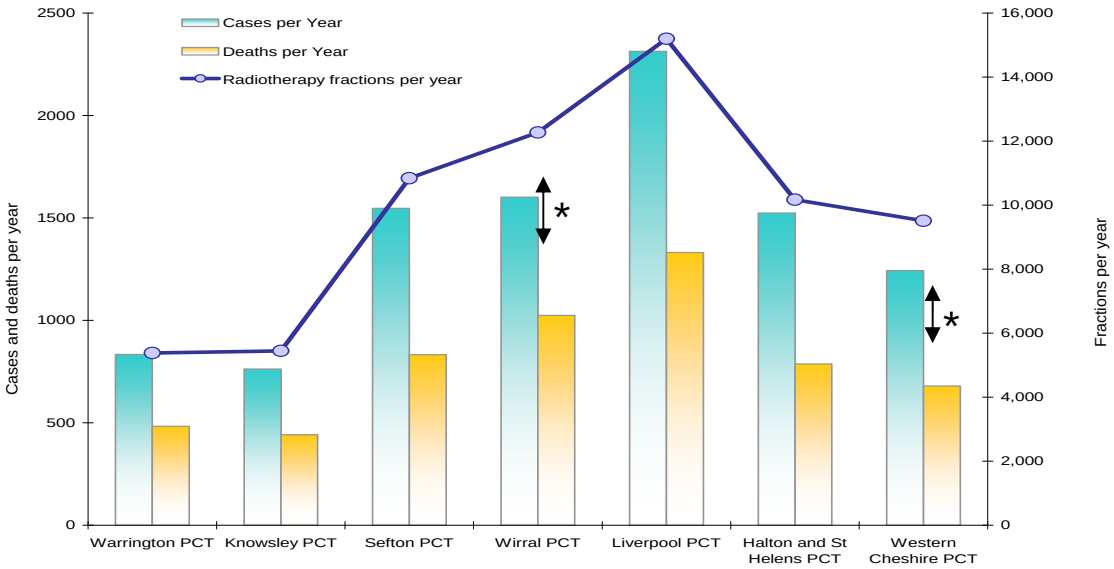
To improve access for patients, CCO opened a satellite radiotherapy unit adjacent to the Walton Centre in early 2011. This provides services for patients requiring radical (curative) radiotherapy for breast, prostate and lung cancer as well as stereotactic radio-surgery. This benefits around 900 patients a year (a little over a third of the total number of patients living north of the River Mersey who need radiotherapy). Patients needing more complex radiotherapy or who have other medical needs, cannot be treated at a satellite unit as they require the full medical support only available in a cancer centre. Thus many Cheshire and Merseyside residents continue to need access to the services located at Clatterbridge

CCO delivers approximately 83,000 fractions of radiotherapy each year. Ninety per cent of these treatments are for patients living within the Merseyside and Cheshire Cancer Network area.

Although 67% of the patients served by CCO live north of the River Mersey, CCO is located south of the river. Relative to the number of new cancers diagnosed, the PCTs on the south side of the river (Wirral and Western Cheshire) account for a larger number of the radiotherapy fractions delivered within the network, compared with patients elsewhere in the network (figure B1 refers), although it must be noted (figure B2 refers) that the Sefton population appear to benefit from higher radiotherapy rates than other PCTs north of the Mersey, which might be explained by the higher numbers of older residents.

It would appear that the patients who live closest to the radiotherapy centre benefit from greatest access to treatment. The effect of distance upon access may be most apparent in the frailest of patients. Figure B3 shows the relationship between the number of courses of palliative radiotherapy delivered to patients and the distance those patients must travel to reach the service.

Figure B1: Numbers of new cancer cases (all cancers excl. non-melanoma skin raw incidence, 2006) and number of cancer deaths (all cancers excl. non-melanoma skin raw mortality, 2006) with number of radiotherapy fractions delivered (annual average 2003-2008) by PCT. Data source: National Cancer Information Service and NatCanSAT



*see narrative on the previous page.

Figure B2: Age standardised incidence and mortality rates per 100,000 population (all cancers excl. non-melanoma skin, 2006), with radiotherapy rate per million population (annual average, 2003-2008) by PCT. Data source: National Cancer Information Service and NatCanSAT

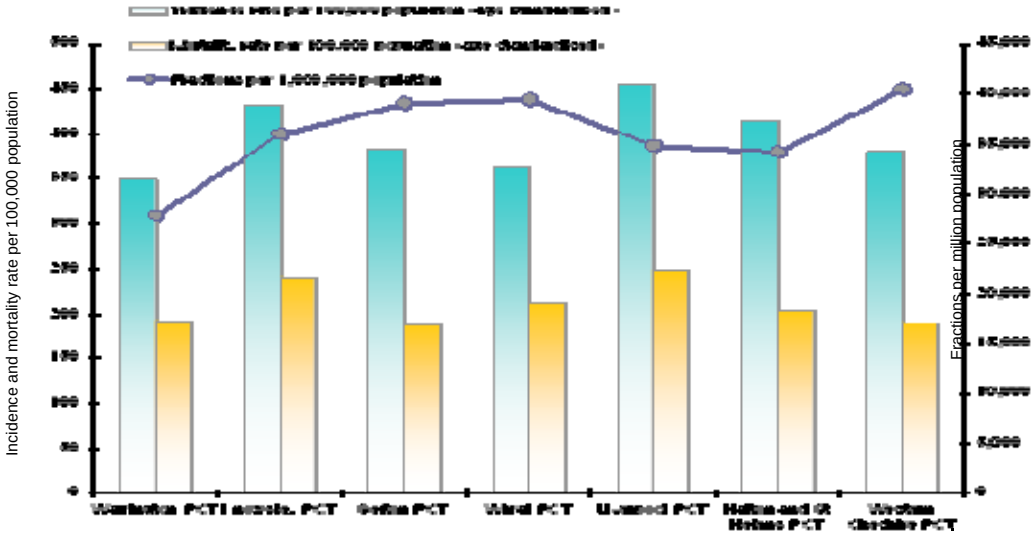
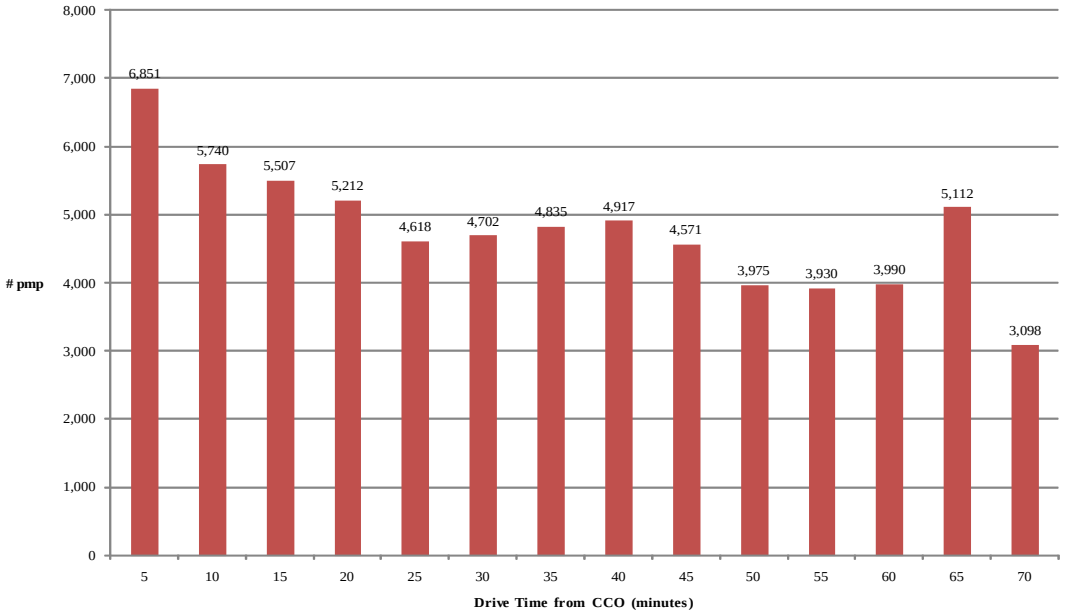


Figure B3: Drive time from CCO for palliative courses with 10 or less fractions (fractions per million population)



Chemotherapy

Chemotherapy for haematological malignancies is delivered under the care of consultant haematologists in local hospitals operating within local multidisciplinary teams. Patients requiring specialist diagnosis and treatment are managed through the multidisciplinary team based at the Royal Liverpool University Hospital. Chemotherapy for solid tumours (i.e. non-haematological) is delivered under the care of oncologists employed by Clatterbridge Centre for Oncology. All inpatient chemotherapy is given at CCO's base in Bebington on Wirral, but patients can access outpatient or day-case chemotherapy more locally through 11 weekly clinics operated by CCO oncologists on hospital seven further hospital sites (see table 1). Approximately 70% of chemotherapy patients are treated in these clinics and this is set to rise as nearly all new chemotherapy treatments expected to come into clinical practice will not require an inpatient stay.

Surgical oncology

Most patients requiring surgery for cancer are able to have their operation at their local hospital, under the care of a local multidisciplinary team. This is the case for many common cancers, such as breast and bowel, where there are sufficient numbers of patients to maintain the surgical skills of local teams.

Patients with less common cancers, or those requiring more complex operations, will have their care managed by specialist multidisciplinary teams hosted in fewer, designated hospitals. Largely in response to national guidance from the National Institute for Health and Clinical Excellence (NICE), surgery has quickened pace centralisation of specialist Institute for Health and Clinical Excellence (NICE) surgery over the last decade. Table 1, on page 22, shows the current distribution of specialist teams in the network.

Pathology

With the exception of Clatterbridge Centre for Oncology and Liverpool Heart and Chest Hospital, each trust in the network hosts a pathology department. These departments are not homogenous, and they operate as a network to ensure that all patients have access to clinically appropriate pathology tests and expertise irrespective of where they live and what their local hospital can provide. The pathology departments in each of the general acute trusts provide a broad range services which reflect the hospital services they provide. Where a trust hosts a specialist multidisciplinary team, the trust's pathology department likewise develops specialist expertise. The laboratories at the Royal Liverpool Hospital host a range of specialised services including cancer molecular diagnosis and hosts a high quality tissue bank which supports cancer research and clinical trials.

Radiology

All trusts in the network have a radiology department that supports day to day clinical services. As with pathology departments, the radiology teams work as a network so that patients requiring more specialist imaging or interventional radiology procedures can be referred on to other trusts if their local trust does not provide the service.

APPENDIX C

Spend by PCT on Cancer

	£million per 100,000 unified weighted population											
	2006-07			2007-08			2008-09			2009-10		
	PCT spend on cancer	National Average	National rank	PCT spend on cancer	National Average	National rank	PCT spend on cancer	National Average	National rank	PCT spend on cancer	National Average	National rank
Halton and St Helens	7.229	8.367	[illegible]	8.39[illegible]	9.022	[illegible]	9.062	9.4[illegible]	6[illegible]	7.529	10.712	[illegible]
Knowsley	11.246	8.367	[illegible]	8.792	9.022	7[illegible]	9.[illegible]	9.4[illegible]	68	10.768	10.712	72
Liverpool	7.365	8.367	[illegible]	7.[illegible]	9.022	129	7.996	9.4[illegible]	[illegible]	10.4[illegible]	10.712	92
Sefton	8.271	8.367	38	11.396	9.022	13	10.396	9.4[illegible]	33	[illegible]	10.712	[illegible]
Warrington	8.1[illegible]	8.367	75	11.919	9.022	6	12.329	9.4[illegible]	[illegible]	10.3[illegible]6	10.712	97
Western Cheshire	9.29[illegible]	8.367	21	10.27[illegible]	9.022	36	10.091	9.4[illegible]	48	12.987	10.712	9
Wirral	7.522	8.367	128	8.4[illegible]	9.022	97	10.29[illegible]	9.4[illegible]	[illegible]	11.88[illegible]	10.712	23
Network average	8.509	8.367		9.472	9.022		10.038	9.4[illegible]		10.986	10.712	