TOGETHER FOR HEALTH - CANCER DELIVERY PLAN

A Delivery Plan up to 2016 for NHS Wales and its Partners

Technical Supplementary Report

Update 4 July 2015
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Introduction
This Technical Report collates the information that underpins the themes set out in the Welsh Government’s Together For Health – Cancer Delivery Plan\(^1\). The report presents cancer specific profiles collating:

- The challenge ahead with top clinical priorities for consideration by LHBs as potential strategies for action to further improve clinical outcomes for their patients and/or better use of resources
- Information to support improvement
  - epidemiology
  - clinical management and outcomes
    - clinical audit and outcomes
    - best practice – recent and upcoming NICE guidance
    - Clinical trials to watch information on clinical trials recruitment and details of trials that are expected to start reporting within the next few years.

Data will be updated at least annually.

Methodology
During 2011 the Cancer National Specialist Advisory Group (Cancer NSAG) and its cancer sub groups were asked to review and update their clinical priorities. All core members of all cancer MDTs throughout Wales were contacted and invited to participate in this process. In addition to questions on expected changes in services and innovation, respondents were also asked to identify the top three priorities that would have the most significant impact on patient care and for each of these to indicate whether the proposal would improve patient experience and/or clinical outcomes and/or better use of NHS resources. Responses from the MDTs were collated and considered by each of the Cancer NSAG cancer groups with a final set of priorities agreed by the group Chair. The Cancer NSAG cancer groups were asked to provide a further updates as necessary in subsequent years.

Each of the strategies proposed in the cancer site section address at least one, if not more, of the following domains:

- Person centred
- Effective
- Safety
- Equity
- Timeliness
- Efficiency

\(^1\) [http://wales.gov.uk/consultations/healthsocialcare/delivery/?lang=en](http://wales.gov.uk/consultations/healthsocialcare/delivery/?lang=en)
Acronyms used for LHBS in the following charts and tables are as follows; Betsi Cadwaladr University Health Board (BCUHB); Hywel Dda University Health Board (HDHB); Abertawe Bro Morgannwg University Health Board (ABMUHB); Powys Teaching Health Board (PtHB); Cardiff and Vale University Health Board (CVUHB); Cwm Taf University Health Board (CTHB); Aneurin Bevan University Health Board (ABHB)

**Acknowledgements**

In collating the information within this report, the Cancer NSAG Core Team would like to acknowledge the support and advice from cancer specialists from across Wales via the Cancer NSAG cancer site groups. In addition, Screening Services Division (Public Health Wales) kindly provided data for the breast, cervical and bowel cancer programmes. The Wales Cancer Research Network (WCRN) initially provided horizon scanning regarding clinical trials that were expected to start reporting results by 2016, this has been updated annually by the cancer NSAG sub groups. Finally, running throughout this document is information on incidence, mortality, prevalence and survival and we are very grateful to our colleagues in WCISU for statistical advice and analysis.
Breast cancer

In Wales 2840 females, 54 per week, were diagnosed with breast cancer\(^2\) in 2013\(^3\). Survival has steadily improved over time. For females diagnosed during the 20 year time period 1991-2010, there were 25,400 living after their diagnosis of breast cancer at the end of 2010\(^4\).

The challenge ahead

The top clinical priority areas for 2012/2016 are:

1. Prevention and early diagnosis
   a. To consider supporting primary care to optimise suspected cancer referrals to secondary care.
   b. Breast cancer screening to continue as advised by the National Screening Committee. Consider the findings of the all Wales breast MRI pilot surveillance pilot study in relation to implementation of NICE guidance for screening of females at very high risk of breast cancer due to family history.

2. Diagnosis and staging
   a. To consider piloting new service models to support improved access, including radiology led diagnostic clinics for the symptomatic breast service.

3. Treatment
   a. To consider appropriate new service models for managing patients
      i. To pilot MDT input into the management of patients with metastatic breast cancer with one metastatic MDT linked to each cancer centre.
      ii. To consider new non medical care pathways where appropriate\(^5\).

Generic priorities applicable to all cancers are summarised on pages 18 to 20.

\(^2\)ICD10 code C50
\(^3\)http://www.wcisuwales.nhs.uk/interactive-cancer-statistics-tool
\(^5\)For example the concept of the Herceptin pathway developed at the Velindre Cancer Centre
Information to support improvement

1. Incidence and mortality rates for breast cancer

Latest data for 2013 show an incidence of 175.4 per 100,000. Mortality has reduced to 34.0 per 100,000 population. Table B1 takes this further and summarises the most recent 3 years of data on incidence and mortality rates to 2013 and presents the rates for each LHB. No LHB had incidence or mortality rates that were significantly different from the all Wales value.

The impact of deprivation is not shown but has been published with a trend observed between lower incidence and increasing deprivation. This trend was not observed in relation to mortality and deprivation.

Table B1 a) Incidence and b) mortality rates for breast cancer compared to the Welsh average for the 3 year period 2011 to 2013 (EASR, females).

<table>
<thead>
<tr>
<th>Health Board</th>
<th>Total Cases</th>
<th>EASR</th>
<th>LCL</th>
<th>UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betsi Cadwaladr University</td>
<td>1902</td>
<td>166.8</td>
<td>159.3</td>
<td>174.6</td>
</tr>
<tr>
<td>Hywel Dda University</td>
<td>1132</td>
<td>174.3</td>
<td>164.2</td>
<td>185.0</td>
</tr>
<tr>
<td>Abertawe Bro Morgannwg University</td>
<td>1356</td>
<td>167.3</td>
<td>158.5</td>
<td>176.5</td>
</tr>
<tr>
<td>Cardiff &amp; Vale University</td>
<td>1003</td>
<td>157.4</td>
<td>147.7</td>
<td>167.5</td>
</tr>
<tr>
<td>Cwm Taf University</td>
<td>678</td>
<td>154.3</td>
<td>142.9</td>
<td>166.5</td>
</tr>
<tr>
<td>Aneurin Bevan University</td>
<td>1424</td>
<td>160.3</td>
<td>152.1</td>
<td>169.0</td>
</tr>
<tr>
<td>Powys Teaching</td>
<td>396</td>
<td>165.7</td>
<td>149.6</td>
<td>183.5</td>
</tr>
<tr>
<td>Wales</td>
<td>7891</td>
<td>164.3</td>
<td>160.6</td>
<td>168.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Board</th>
<th>Total Cases</th>
<th>EASR</th>
<th>LCL</th>
<th>UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betsi Cadwaladr University</td>
<td>457</td>
<td>37.9</td>
<td>34.5</td>
<td>41.7</td>
</tr>
<tr>
<td>Hywel Dda University</td>
<td>255</td>
<td>37.8</td>
<td>33.2</td>
<td>42.9</td>
</tr>
<tr>
<td>Abertawe Bro Morgannwg University</td>
<td>290</td>
<td>34.3</td>
<td>30.5</td>
<td>38.6</td>
</tr>
<tr>
<td>Cardiff &amp; Vale University</td>
<td>202</td>
<td>31.3</td>
<td>27.1</td>
<td>36.0</td>
</tr>
<tr>
<td>Cwm Taf University</td>
<td>161</td>
<td>35.5</td>
<td>30.2</td>
<td>41.6</td>
</tr>
<tr>
<td>Aneurin Bevan University</td>
<td>323</td>
<td>35.4</td>
<td>31.6</td>
<td>39.6</td>
</tr>
<tr>
<td>Powys Teaching</td>
<td>87</td>
<td>36.2</td>
<td>28.9</td>
<td>45.2</td>
</tr>
<tr>
<td>Wales</td>
<td>1775</td>
<td>35.6</td>
<td>33.9</td>
<td>37.3</td>
</tr>
</tbody>
</table>

Key: * = statistical significance at the 95% level, LCL= Lower Confidence Limit, UCL = Upper Confidence Limit, EASR = European Age Standardised Rate. Source: WCISU

6 The European Age Standardised Rate is used and is per 100,000 population
2. Earlier diagnosis

a. Uptake of screening
Information on uptake to the breast screening programme has been updated for the year April 2013 to March 2014 is presented in Table B2.

Table B2 Percentage uptake for females invited to attend for breast screening

<table>
<thead>
<tr>
<th>Minimum uptake at 70% with target at 80% of 50 to 70 year olds</th>
<th>Percentage uptake of females invited to attend for screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wales</td>
<td>BCUHB</td>
</tr>
<tr>
<td>2013/14</td>
<td>72.1%</td>
</tr>
<tr>
<td>2012/13</td>
<td>71.5%</td>
</tr>
<tr>
<td>2011/12</td>
<td>73.5%</td>
</tr>
<tr>
<td>2010/11</td>
<td>74.7%</td>
</tr>
</tbody>
</table>

Source: Screening Services Division, Public Health Wales

For breast screening of 50 to 70 year olds, there has been a 0.6% increase in uptake compared to the previous year. This may be due in part to the implementation of digital breast screening although this was planned to ensure minimal impact. Also as breast screening is on a three year round then a one year period will show some variation as only a proportion of women may be invited from a defined geographical area.

b. Referral of symptomatic patients

NICE have recently updated their guidance on referral for suspected cancer: NG12.

3. Clinical management and outcomes

a. National clinical audit
Four Welsh clinical audits of breast cancer have been published, and are available on the Cancer NSAG website. The latest audit covering patients diagnosed in the three years 2009 to 2011 was published in January 2014. Previous versions of this report have included key clinical indicator data from the latest audit year, however, the Cancer NSAG Breast subgroup have revised the key clinical indicators (see below) and data will be added to this report once it has been validated.

Key clinical indicators

1. Pre-operative diagnosis rate (%) in symptomatic invasive breast cancer cases (minimum: 90%, target 95%).

2. % histologically node negative invasive patients, or any with DCIS where nodes are taken, having 1-5 nodes removed (minimum: 85%, target 95%).

3. % invasive ER positive women who received hormonal therapy (minimum: 90%, target 100%).

4. % of patients who had breast conservation surgery for invasive breast cancer having breast radiotherapy (minimum: 90%, target 100%).

5. Percentage of patients with triple negative invasive cancer who receive adjuvant chemotheraphy (target 90% for age<60, 50% for age 60->70, and 30% for age 70+).

6. % of patients found to be node positive post-surgically whose axillary node status was known pre-operatively (target 40% for symptomatic and 20% for screening).

b. Survival

The cancer policy aim is to achieve survival on a par with the best in Europe. This is defined as achieving survival that was in the top quartile of those European countries that have full population coverage. Key international and UK data on breast cancer are available from Eurocare 5, the ICBP and the UK Cancer Information Service (UKCIS). Eurocare 5 reports 5 year relative survival for females in Wales diagnosed during 2000-2007 at 78.2% with only Northern Ireland, within the UK and Ireland group, reporting significantly higher survival (Figure B1). The European mean and maximum were 78.9% and 87.2% respectively. The latest survival data available for Wales, survival at 1 and 5 years in Wales now at 96.6% and 83.9% respectively (Figure B2).

Figure B1 Summary of 5 year relative survival for breast cancer

Data Source: Eurocare 5

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11 Relates to the 21 countries with 100% population coverage
12 diagnosis periods 2006 – 2010 and 2002 – 2006 for 1 and 5 year survival respectively
Wales is a partner in the International Cancer Benchmarking Partnership (ICBP)\textsuperscript{13}. To ensure the validity and comparability of data between countries, partners were invited on the basis of broadly comparable wealth, universal access to health care and the existence of longstanding, high-quality, population-based cancer registration. The result is a truly international partnership which involves 12 jurisdictions in 6 countries across 3 continents. Data for patients diagnosed with breast cancer during 2005 to 2007\textsuperscript{14} show that survival had almost reached a ‘ceiling’ with a smaller survival difference observed between countries. The highest survival was achieved by Sweden with 1 and 5 year relative survival at 98% and 88.5% respectively.

ICBP analysis of the association between survival and stage has shown that differences observed between countries were partly explained by differences in both stage at diagnosis and differences in stage specific survival\textsuperscript{15}. Stage distribution in the UK was typical but stage specific survival was low suggesting the need to review the management of patients with late stage disease and diagnosed at aged 65 years and older.

Table B4 benchmarks survival across Wales and England\textsuperscript{16}. During the periods 1997 to 2001 and 2002 to 2006, Wales had the highest percentage point increase in survival for breast cancer at both 1 and 5 years however actual survival remains slightly lower that that achieved in England.

\begin{table}[h!]
\centering
\begin{tabularx}{\textwidth}{|c|c|c|c|}
\hline
 & 1 year relative survival percentage point increase (average survival per time periods) & 5 year relative survival percentage point increase (average survival per time periods) \\
\hline
England & Wales & England & Wales \\
\hline
+1.26 & +2.05 & +3.77 & +4.28 \\
(95.51 v 94.25) & (93.58 v 91.53) & (84.90 v 81.13) & (83.07 v 78.79) \\
\hline
\end{tabularx}
\caption{Table B4 Survival and percentage point increase between the two time periods 1997 to 2001 and 2002 to 2006 for breast cancer}
\end{table}

Survival trends in Wales over time are shown on Figure B2. There is a reducing survival gap between average survival at 1, 3 and 5 years between the two time periods 1985 to 1989 and 2000 to 2004. These data will be updated in 2016.

Survival at both 1 and 5 years shows the rates to decrease with deprivation, where the highest survival rates are observed in the least deprived (data not shown)\textsuperscript{17, 18}.

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{13} \url{http://www.icbp.wales.nhs.uk}
\item\textsuperscript{14} The Lancet, 377,9760,127-138 \url{http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)62231-3/fulltext}
\item\textsuperscript{15} British Journal of Cancer 108, 1195-1208 (19 March 2013) doi: 10.1038/bjc.2013.6
\item\textsuperscript{16} Data for Scotland and Northern Ireland were not available
\item\textsuperscript{17} WCISU, Cancer in Wales 1995 – 2009 A comprehensive report
\end{itemize}
\end{footnotesize}
Figure B2 Relative survival for breast cancer in Wales at 1, 3, 5 and 10 years over 5 year time periods spanning 1985 to 2009.

![Graph showing relative survival rates for breast cancer in Wales at different time periods](image)

Key
- Females
  - 1 year
  - 3 years
  - 5 years
  - 10 years


Figure B3 1 and 5 year and 5 year ‘conditional’ relative survival for breast cancer by LHB

![Graph showing relative survival rates by LHB](image)

Relative survival data by LHB for females, combined over the 5 year time periods 2006 to 2010 and 2002 to 2006 for 1 and 5 year survival respectively, and including 95% confidence intervals, are summarised in Figure B3. There was no significant difference in 1 and 5 year survival between the Wales average and individual LHBs with the exception of lower 5 year survival observed in CTHB. Figure B3 also includes ‘conditional’ survival at 5 years that excludes deaths within 6 months of diagnosis.

18 The latest periods for 1 and 5 year survival are 2005-2009 and 2000-2004 respectively
Analysis of deaths within the 1 year following a diagnosis of breast cancer shows that the majority of deaths occurring within the first 6 months occur within the first 3 months (66.9%, 71 per year across Wales). This is important as it may reflect presentation of advanced disease and is the basis of work to improve awareness with earlier presentation and referral for diagnosis and treatment.

The latest 1 year relative survival data for patients diagnosed in the period 2008 to 2012 is very similar to that relating to the 2006 to 2010 period and remains at approximately 96%. Comparison of survival at 5 years for the period 2004 to 2008 and 2002 to 2006 shows an increase of 1.7% to 85.7% from 84%.

### c. Best practice evidence – recent & anticipated NICE guidance

#### 1. Clinical guidelines

- **NG12** Suspected cancer: recognition and referral. Published June 2015
- **CG80** Early and locally advanced breast cancer: Diagnosis and treatment. Next review June 2015
- **CG81** Breast cancer (advanced). Updated publication July 2014
- **CG151** Neutropenic sepsis: prevention and management of neutropenic sepsis in cancer patients. Published September 2012 Now on static list.
- **CG164** (Replaces CG41) Familial breast cancer: the classification and care of females at risk of familial breast cancer in primary, secondary and tertiary care. Published June 2013

#### 2. Diagnostic guidance

- **DG10** Gene expression profiling and expanded immunohistochemistry tests to guide selection of chemotherapy regimes in breast cancer management: MammaPrint, Oncotype DX, IHC4 and Mammostrat. Published September 2013
- **DG8** Intraoperative tests (RD-100i OSNA system and Metasin test) for detecting sentinel lymph node metastases in breast cancer. Published August 2013

#### 3. Interventional procedures

- **IPG417** Breast reconstruction using lipomodelling after breast cancer treatment. Published January 2012

#### 4. Appraisals


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Bevacizumab Breast cancer (HER2 negative, metastatic) – bevacizumab (2nd line). Suspended.

**TA250 Erubulin** Breast cancer (advanced). Issued April 2012. Not recommended

**ID538 Everolimus** Breast cancer (HER2 negative, oestrogen receptor positive, locally advanced or metastatic) - everolimus (with an aromatase inhibitor). Published August 2013. Not recommended

**TA239 Fulvestrant** for the treatment of locally advanced or metastatic breast cancer. Published December 2011. Review date August 2014.

**TA257 Lapatinib** Breast cancer (metastatic hormone-receptor) - lapatinib and trastuzumab (with aromatase inhibitor). Issued June 2012. Not recommended. Review date June 2015

**ID523 Pertuzumab** Breast cancer (HER2 positive, metastatic) - pertuzumab (with trastuzumab and docetaxel). In development. Anticipated date of issue TBC

**ID603 Trastuzumab Emtansine** Breast cancer (HER2 positive, unresectable) - trastuzumab emtansine (after trastuzumab & taxane). Anticipated publication date TBC

**ID618** Breast cancer (early) - intrabeam radiosurgery system. Anticipated publication date November 2014

d. **Clinical trials and trials to watch**

Data from trials are often analysed at various time points with results published over a number of years as outcomes are documented. It is because of this that the summaries below make it clear that ‘at this stage’ certain trials have been flagged as one to watch. The data presented in the Table B5 relate to the National Cancer Research Network (NCRN) portfolio of trials and have been calculated using data provided by NISCHR.

**Table B5 Summary of recruitment into UK approved breast cancer clinical trials**

<table>
<thead>
<tr>
<th>Years</th>
<th>Numbers of patients entered into approved clinical trials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wales</td>
</tr>
<tr>
<td>2013/14</td>
<td>563</td>
</tr>
<tr>
<td>2011/12</td>
<td>549</td>
</tr>
<tr>
<td>2010/11</td>
<td>653</td>
</tr>
</tbody>
</table>

Data Source: NISCHR

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20 The data included here only relates to recruitment into trials reported to United Kingdom Clinical Research Network (UKCRN) against UK Portfolio trials (Including NCRN Commercial). This does not directly compare to the trials recruitment performance measure reported as part of the Cancer Delivery Plan, which also includes non-portfolio commercial trials. Both interventional and observational trials are included. Because of patient flows for non-surgical oncology patients recruited at POWH, ABMUHB are included in the figures for SWCN (east).
Clinical trials to watch

At this stage the trials below are of particular interest.

**Adjuvant systemic trials**
- **APHINITY**: a trial for HER-2 positive patients considering 1 year of treatment with Herceptin compared to 1 year with Herceptin plus 1 year of Pertuzumab. *Update: closed to recruitment and in follow-up.*
- **REACT**: a trial is evaluating the use of celecoxib in women with early breast cancer to reduce recurrence. *Update: closed to recruitment and in follow-up.*
- **Effect of metformin on breast cancer metabolism**: A phase 2 single arm study to examine the effects of metformin on cancer metabolism in patients with early stage breast cancer receiving neoadjuvant chemotherapy. *Update: closed to recruitment and in follow-up.*
- **PERSEPHONE**: A trial of 6 months views standard 12 months of adjuvant trastuzumab for early breast cancer HER2 patients. Locally recurrent disease trial.
- **ATTOM**: A Large, Randomised Study to Assess the Balance of Benefits and Risks of Prolonging Adjuvant Tamoxifen Treatment in Early Breast Cancer. *UPDATE: closed to recruitment and in follow-up. Results presented at ASCO 2013, showing benefit of adjuvant tamoxifen (e.g. premenopausal patients or patients unable to tolerate AIs). Treatment duration should be 10 years rather than 5 years.*
- Gene expression profiling with Oncotype DX – *UPDATE results of Welsh study published, NICE decision pending, if approved may have significant impact on patient selection for adjuvant chemotherapy.*
- **KAITLIN**: a randomized, multicenter, open-label, phase iii trial comparing trastuzumab plus pertuzumab plus taxane following anthracyclines versus trastuzumab emtansine plus pertuzumab following anthracyclines as adjuvant therapy in patients with operable her2 positive primary breast cancer.
- **CALOR**: Chemotherapy after complete surgical removal of local or regional breast cancer recurrence leads to significant increased survival rates. *UPDATE: closed to recruitment and in follow-up.*

**Surgery trials**
- **AMAROS**: a trial of radiotherapy versus axillary clearance for patients with positive sentinel node. *UPDATE Closed to recruitment, in follow-up. Significant findings of this trial, expected to impact on patient management, have been at presented at the recent 2013 ASCO.*
- **IBCSG trial 23-01**: a trial to determine whether axillary dissection is necessary in patients with minimal sentinel lymph node involvement and tumour. *UPDATE Closed to recruitment.*
Adjuvant radiotherapy trials

- **FAST FORWARD (+IMPORT)**: a trial to determine effectiveness of short course radiotherapy.
- **SUPREMO**: if positive will establish chest wall radiotherapy for many more patients. Now closed to recruitment. *Update: closed to recruitment, follow up complete.*

Metastatic trials

- **ZICE**: A trial to identify whether oral Ibandronate is as good as intravenous Zolendronate for metastatic breast. *UPDATE: closed to recruitment, follow up complete. Preliminary Results presented in San Antonio meeting in December 2012 showed oral Ibandronic acid is inferior to zoledronic acid so no major change in practice expected.*
- **BOLERO-2**: *UPDATE Published major advance with Everolimus in conjunction with endocrine therapy. NICE did not recommend changing practice. Update: closed to recruitment and in follow-up.*

**e. Follow up**

The breast subgroup of the cancer NSAG has developed a sign-posting document gathering together links to the latest data and advice on follow-up. This is available at the following link:

### APPENDIX 1 Summary of suggested strategies to improve outcomes and patient experience

<table>
<thead>
<tr>
<th>Generic Strategies Applicable to All Cancers</th>
<th>Patient Experience</th>
<th>Effectiveness</th>
<th>Patient Safety</th>
<th>Equity</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public awareness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify strategies to promote better public awareness of cancer and the need for early presentation</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local public health initiatives on cancer awareness to consider inclusion of key messages for specific cancers and the screening programmes. Healthy Working Wales to also re-iterate these key messages in the workplace</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LHBs to consider increasing uptake to the screening programmes</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Public Health Wales to consider participating in any future screening pilots to better prepare for and accelerate implementation of new screening programmes as approved by the UK National Screening Committee</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Patient Centred Care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual needs to be taken into account with patients as involved in treatment decisions and planning their care as they wish. Care plans should reflect this and be responsive to individual patient needs and circumstances. Each patient should be provided with a copy of their care plan</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>The Cancer NSAG sub groups to review the evidence base for routine follow up and provide advice for LHBs</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Healthy Working Wales to support people living with cancer who wish to return to work as part of their recovery programme</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Presentation &amp; pathways</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each GP practice to consider auditing the pathway from presentation to diagnosis for each new cancer patient as part of their practice QOF requirements and revalidation. Significant event methodology could be used to do this</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LHBs and primary care to consider investigating the level of emergency presentation particularly where this is the first admission for patients found to have cancer with the aim to better manage these patients and avoid where appropriate an emergency admission.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LHBs to consider regular review of the criteria for PET scanning, where necessary on an annual basis, to take account of the latest evidence and national advice</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LHBs to consider addressing non compliance to the National Cancer Standards (2005) relating to complex cancer surgery as a matter of urgency</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
## Generic Strategies Applicable to All Cancers

<table>
<thead>
<tr>
<th>Patient Experience</th>
<th>Effectiveness</th>
<th>Patient Safety</th>
<th>Equity</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>To maintain best practice LHBs to consider continuing with the Designed to Tackle Cancer Phase 2 requirement to plan to implement new NICE cancer clinical guidelines within 18 months of publication.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

### Pathology
The National Pathology Programme Board to regularly review specialist pathology and genetics services to ensure prompt advice to LHBs regarding appropriate specialisation, quality assurance in relation to new molecular diagnostic tests. Network arrangements to be considered to support developments in the diagnosis and management of rare cancers.

### Chemotherapy
LHBs to consider and implement all NCEPOD recommendations as necessary.
National Cancer Standards could be developed that reflect recommendations for acute oncology and the NICE service guidance on carcinoma of unknown primary.

### Radiotherapy
Radiotherapy equipment needs and workforce implications to be reassessed by the COSC working with the Cancer NSAG sub groups.
The Cancer Information Framework to facilitate submission of radiotherapy activity data to the UK Radiotherapy Episodes Statistics database for benchmarking with other radiotherapy centres in the UK.

### Clinical Trials & research
LHBs and Velindre NHS Trust to consider how best to support their cancer teams to contribute to the national target of recruiting 10% of new cancer cases each year in Wales into high quality studies on the NISCHR portfolio. A target of at least 7.5% of these research participants are recruited into interventional studies by 2015 is suggested.
By 2013, LHBs and Trusts to consider doubling recruitment in rarer cancer sites where this has not yet been achieved, and specify patient referral routes where studies are not available locally.
The Wales Cancer Bank (WCB) will work with Wales Cancer Research Network (WCRN) and LHBs to consider integrating the nursing and technical support for WCB into clinical teams that are able to support all aspects of clinical and translational cancer research.
Future Cancer Standards to consider the requirement to offer cancer patients the choice to support tissue banking.
WCISU and the Cancer NSAG sub groups to continue to benchmark cancer outcomes with national and international partners.
### Generic Strategies Applicable to All Cancers

<table>
<thead>
<tr>
<th>Further work to be considered by LHBs and supported by the Cancer Implementation Group, taking account of latest evidence including the findings of the International Cancer Benchmarking Partnership, to identify potential strategies to improve cancer survival in Wales.</th>
<th>Patient Experience</th>
<th>Effectiveness</th>
<th>Patient Safety</th>
<th>Equity</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>The NHS and academia to consider continuation of work to further build on its research base to both develop new innovative approaches to cancer treatment and to attract new cancer specialists to Wales</td>
<td>✓</td>
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</tbody>
</table>

#### Clinical Information

<table>
<thead>
<tr>
<th>LHBs to consider supporting their cancer MDTs in Wales to administer the clinical team meeting via the MDM module in Canisc</th>
<th>✓</th>
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</thead>
<tbody>
<tr>
<td>All histopathologists to consider reporting cancer diagnoses using CHIRP as this is rolled out across Wales and the specific cancer site templates are released</td>
<td>✓</td>
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<tr>
<td>The Cancer NSAG sub groups, to continue to review and recommend clinical quality measures for LHBs as a means of supporting best clinical practice across Wales. They will work to support participation in national clinical audits and provide clinical advice as necessary for LHBs. They will also work to provide specialist advice to WCISU as they report on 1, 3 and 5 year cancer survival and advise LHBs of national progress</td>
<td>✓ ✓ ✓ ✓ ✓</td>
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<tr>
<td>Pre-treatment TNM or other appropriate stage and first recurrence to be recorded in Canisc for each new cancer patient.</td>
<td>✓</td>
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<tr>
<td>WCISU to record full staging as part of the data they receive from Canisc on 70% of new cancer patients registered</td>
<td>✓</td>
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<tr>
<td>A Cancer Analysis Group to be considered to identify sources of information and metrics that measure actual and proxy outcomes</td>
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<tr>
<td>The revised Cancer Information Framework strategy to be considered by NWIS as part of their forward planning</td>
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</table>
### Cancer Site Strategies for Improvement

<table>
<thead>
<tr>
<th>Breast cancer</th>
<th>Patient Experience</th>
<th>Effectiveness</th>
<th>Patient Safety</th>
<th>Equity</th>
<th>Efficiency</th>
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<tbody>
<tr>
<td><strong>Prevention and early diagnosis</strong></td>
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<tr>
<td>B1a. To consider supporting primary care to optimise suspected cancer referrals to secondary care.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>B1b. Breast cancer screening to continue as advised by the National Screening Committee and to consider the findings of the pilot all Wales surveillance pilot study in relation to implementation of NICE guidance for surveillance of females at familial risk of breast cancer.</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td><strong>Diagnosis and staging</strong></td>
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<tr>
<td>B2a. To consider piloting new service models to support improved access, including radiology led diagnostic clinics for the symptomatic service.</td>
<td>✓</td>
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<tr>
<td><strong>Treatment</strong></td>
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<tr>
<td>B3a. To consider appropriate new service models for managing patients</td>
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<tr>
<td>i. To pilot MDT input into the management of patients with metastatic cancer. Whilst most patients would have breast cancer this could cover other cancers with one metastatic MDT linked to each cancer centre.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>ii. To consider new non medical care pathways where appropriate.</td>
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