WALES BREAST CANCER CLINICAL AUDIT REPORT FOR PATIENTS DIAGNOSED IN 2009, 2010 and 2011

EXECUTIVE SUMMARY

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FOREWORD

This is the third all Wales breast cancer audit and we have taken the opportunity of reviewing data from three consecutive years (2009 – 2011). This has resulted in a worthy document, which more closely mirrors current practice and results. In future it is hoped that these audits may be produced annually in a timely manner.

This current document highlights the current trends in breast cancer management in Wales, drawing on good practice and high standards but also highlighting some areas of concern where practice is different and requires some explanation. We have noticed some improvements and in particular the more complete data in the elderly patients and in those who do not undergo surgical management.

As ever there has been a huge amount of work undertaken and a significant debt of gratitude is owed to staff and colleagues who produce these data. We also need to thank individual breast multidisciplinary teams (MDTs), cancer coordinators and the main authors of this report for their time and effort.

Kate Gower Thomas, Chair of Cancer National Specialist Advisory Group (NSAG) Breast Group
Executive summary

This is the 3rd report of the Welsh Breast Cancer Clinical Audit (WBCCA). It is based on clinical information from patients diagnosed during January 1st 2009 up to December 31st 2011.

Where possible we have benchmarked against the most recent UK-wide audits of Breast Cancer: The Healthcare Quality Improvement Partnership (HQIP) 4th National Mastectomy and Breast Reconstruction Audit Report (for patients surgically treated between Jan 2008 and March 2009)¹, and National Cancer Intelligence Network (NCIN) Second All Breast Cancer Report (for patients diagnosed in 2007)².

Data quality

The data quality has improved greatly since the first Welsh audit in 2007. Case ascertainment over the period surveyed was 95-97% of patients presenting to secondary care and 88-89% of all breast cancer diagnoses registered with WCISU. Data completeness for patient demographics and tumour details was at or near 100% across all units. Increases were seen in pathology data completeness, particularly in Human Epidermal Growth Factor Receptor 2 (HER-2) status recording. Recording of at least one treatment was present for nearly all patients, however the specifics, particularly of non-surgical treatments, remain disappointing and need improvement.

Clinical profile of breast cancer in Wales

- Approximately 2500 people diagnosed with breast cancer per year were captured by the audit, around a third of which were screen detected.
- There were approximately 150 less newly diagnosed cases in 2011 compared to the previous report. This is in agreement with the report by WCISU that registrations for breast cancer dropped in 2011 to the level last seen in 2007³.
- A notable decrease in the proportion of screen-detected cancers was seen in 2011 (32% compared to 38% in 2008), probably due to the slowing down of screening around the conversion to digital mammography.

The vast majority of patients were diagnosed with invasive cancers; just over 90% in each year, with approximately 70% of the non-invasive cancers detected through screening.

Male breast cancer cases remained static at 0.4 to 0.5% of all breast cancers diagnosed. The majority were invasive and underwent mastectomies.

The overall known node positivity rate of 33-37% is similar to that in previous WBCCA reports.

The majority of women with invasive breast cancer have Oestrogen Receptor (ER) positive tumours (81.4%). Of the 89% of women whose HER-2 status was recorded, 14% were HER-2 positive. The incidence of tumours that are negative for ER, Progesterone receptors (PR) and HER-2 (termed “triple negative”) in Wales is 10%, which is in line with the expected incidence in Western countries.

The proportion of cancers diagnosed at each grade appears stable since 2008, however data on stage was not complete enough to draw firm conclusions.

Cases per unit

The number of women with invasive cancer seen by a unit in a year ranged from 25 to 314. Non-invasive cases ranged from 0 to 46. Those units with smaller case volumes are each part of a larger MDT.

Preoperative diagnosis

There has been a steady increase in the proportion of symptomatic, invasive breast cancer recorded as having a pre-operative diagnosis. However the all Wales figure of 85% in 2011 falls short of the minimum of 90%, which was achieved by only three hospitals.

In contrast, 95% of women whose breast cancer was screen-detected had a preoperative diagnosis, meeting the NHS Breast Screening Programme (NHSBSP) target.

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Treatment

Greater than 80% of women with breast cancer were treated surgically in each of the years surveyed.

In each year over two thirds of the patients recorded as having non-surgical treatment appear to have had hormone treatment only; the majority of whom were over 75 years old. However, there has been an encouraging increase in the proportion of patients over 80 years old receiving surgical treatment compared to previous audit reports.

Mastectomy rates at an all Wales level varied between 36% (2010) and 42% (2011), similar to the comparable UK rate of 43% in 2008. Greater variation was apparent at unit level, ranging from 21% to 81%. Around 20% of women surgically treated, either by mastectomy or conservative surgery, underwent a second operation.

The minimum percentage of node positive women (aged <=60 years) who received adjuvant chemotherapy (80%) has been exceeded at the all Wales level although the target of 90% has not yet been reached. At unit level, adjuvant chemotherapy for this cohort was recorded in between 45% to 100% of cases.

The percentage of female patients recorded as receiving radiotherapy after breast conserving surgery for invasive cancer has remained static at 90%.

All women with invasive ER positive tumours should be offered adjuvant hormone therapy, with 90% expected to receive it, yet only 57% of patients in 2011 had a record of this treatment, ranging from 2% to 100% of cases at unit level.

In 2008 we reported that 11% of invasive cancers and 13% of ductal carcinoma in situ (DCIS), treated with conservative surgery had no margin information recorded, this has improved slightly for invasive cancers but not for DCIS. Variation between units in the percentage of patients whose margins are not clear or uncertain is considerable.

Only 60% of patients with “triple negative” tumours have a record for chemotherapy, with large variation between hospitals, and an evident negative correlation between increasing age and prescription of chemotherapy.
Recommendations

It is recommended that Local Health Boards (LHBs):

1. Rectify incompleteness in data recording giving particular attention to:
   i. receptor status (Glan Clwyd, Withybush and Princess of Wales hospitals),
   ii. pre-operative diagnosis (Withybush and Nevill Hall hospitals),
   iii. provision during MDT meetings to ensure that recording of non-surgical oncology and hormone therapy treatments is complete including:
      1. post operative radiotherapy (all units) and
      2. primary treatment data for older patients (all units).

2. Assure themselves that pre-operative diagnosis rates are in excess of the Association of Breast Surgeons (ABS) standard of 95%

3. Investigate the treatment offered to older patients and ensure that fitness for treatment, rather than chronological age is the determining factor in offering treatments

4. Investigate the levels of postoperative radiotherapy being offered to their patients, and ensure best practice is being followed

5. Review their protocols for offering conservative surgery versus mastectomy, to ensure patients receive sufficient information to make informed choices, particularly those units that are statistically different to the all Wales average (Bronglais Hospital)

6. Urgently review practice and outcomes for patients where units have been identified with high levels of axillary clearance/greater than 10% of node negative patients have greater than 7 nodes removed, (Bronglais Hospital, Prince Charles Hospital, Nevill Hall Hospital, Prince Philip Hospital, and Royal Gwent Hospital)

7. Review their management of triple negative women, particularly for women over 75, and those unfit for surgical management
The Cancer NSAG will:

8. Consider producing an audit focussed on older patients diagnosed with breast cancer.

9. Present future audits by MDT to support MDT quality assurance processes and peer review, and introduce multivariate analysis.

10. Support LHBs by providing feedback via slide sets to individual MDTs.

11. Work with Welsh Government (WG) and HQIP regarding the timing and content of the planned UK Breast Cancer Audit. Sharing analysis of Welsh data HQIP data submissions will allow future rounds of the WBCCA to focus on unique analysis pertinent to Welsh outcomes and patients.

12. Annually update the breast cancer section of the Cancer Delivery Plan's Technical report with key information to support improving outcomes.
Acknowledgments

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