Breast Cancer Surgical Indicators in Queensland: Variations in Practice

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BACKGROUND
In 2016, an estimated 3,555 Queensland women will be diagnosed with invasive breast cancer. Surgery is a critical component of treatment for breast cancer. For the first time in Queensland, baseline breast cancer surgical indicator rates have been established using health administration data to track surgical practice in breast cancer care services for public and private hospitals.

METHODS
The Qld Oncology Repository (QOR) compiles and collates administrative and clinical data from the Qld Cancer Registry together with hospital admissions, treatment and mortality data. Seven surgical practice indicators were applied to examine and compare surgical practice and timeliness of surgery in Queensland.

RESULTS
Breast cancer surgery was performed in over 70 public and private hospitals in Queensland with a range of between 1 and 345 definitive procedures annually. 46% of hospitals were performing a yearly average of ≤15 breast cancer surgeries and grouped as low volume. Compared with the Queensland average there was significant variation in adjusted rates over the breast cancer surgery indicators, when analysed by individual hospital and by public and private hospitals.

Key findings:
- The initial mastectomy rate for T1 tumours was 23% (individual public and private hospitals rates ranged from 6% - 43%) (Graph 1).
- The re-excision rate after breast conserving surgery (BCS) was 20% (public hospitals average 23% and private hospitals 19%).
- The sentinel lymph node biopsy rate for T1 tumours with initial BCS was 84%, with the majority of hospitals exceeding the Queensland average.
- The proportion of women receiving surgery within 45 days from histological diagnosis was higher in private hospitals (94%) compared with public hospitals (81%) (Graph 2).

CONCLUSION
State-wide audit and comparison of surgical practice across Queensland facilities provide surgeons, clinical teams and management with the opportunity to review clinical practice and processes, highlighting variation in surgical practice and identifying areas for improvement. It must be acknowledged that factors such as patient’s preference and surgeon’s recommendation cannot be accounted for in this analysis, neither are these factors routinely recorded in electronic data sources.