# Development of Quality Indicators for the Diagnosis and Surgical Management of Breast Cancer Patients in South Africa

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# Introduction

There are wide discrepancies between evidence-based guidelines and actual received care among breast cancer patients. Despite recent efforts to develop national treatment guidelines, these have not yet been implemented and great disparities in quality of care remain. Quality Indicators (QI) were developed and applied in several high-income countries and have led to improved patient care and outcomes. South Africa has not had any quality indicators for breast cancer management to date.

The aim of this study was to develop a unique set of South African QIs with a focus on diagnosis and surgical management.

# Methods

We used a modified Delphi process to reach expert consensus. 17 local breast cancer experts from various subspecialties and provinces participated. Each QI was rated according to a) importance to measure (relevance and priority), b) scientific acceptability (reliability and validity), c) appropriateness to our local setting (feasibility). The first rating round was during a face-to-face meeting at the 2018 Bigosa conference and attended by all experts, the last two rating rounds were done by electronic questionnaires. Inclusion thresholds were set at mean ratings >4 with a coefficient variation of <25% and exclusion of outliers.

Ethics clearance was obtained from the HREC of the University of the Witwatersrand prior to commencement of this study (M180671).

#### Results

A scoping review was undertaken and identified 790 potential QIs. After exclusion of non-diagnostic/surgical QIs as well as removal of duplicates 52 QIs remained for expert panel review. Five QIs were excluded and consensus reached on 47. These include 40 process indicators and seven indicators of structure and outcome.

# Conclusion

An unique set of 47 quality indicators was developed for South Africa. It will allow to benchmark diagnostic and surgical care in future. Practical application should improve the quality of breast cancer care in South Africa over time.