IMPROVING THE QUALITY OF BREAST CANCER CARE BY A NATION-WIDE AUDIT: 5-YEAR RESULTS OF THE NETHERLANDS BREAST CANCER AUDIT

BACKGROUND
Improving quality of breast cancer care starts with measuring the quality of care we provide. For this purpose, the NABON Breast Cancer Audit (NBCA) was instituted as a nation-wide audit in the Netherlands in 2011. To develop meaningful ‘quality indicators’ as a means of quality assurance we have defined a set of potential indicators. Although indicator variation was reported annually, better interpretation and development of indicators can be made when analyzing trends over a 5-year period.

METHODS
Inclusion: all patients with invasive breast cancer or in situ carcinoma (DCIS) were prospectively registered by all hospitals (n=92) in the Netherlands.

Outcome: Thirty-two quality indicators measuring care structure, process and outcomes were compared between the hospitals in a time period between 2012 till 2016. Indicator trends in overall results and range of variation between hospitals were analyzed for their use in improvement of quality of breast cancer care.

Figure 1: Breast MRI in patients with invasive M0 breast cancer treated with neoadjuvant chemotherapy in 2012-2016.

Figure 2: Neoadjuvant chemotherapy for invasive breast cancer in 2012-2016.

Figure 3: Positive (focal) margins after first primary BCS for invasive breast cancer in 2012-2016.

Figure 4: Radiotherapy for DCIS treated with breast-conserving surgery in 2012-2016.

RESULTS
Since registering in 2011, the NBCA contains data of about 105,000 patients. Figure 1-4 show examples of 4 different indicator trends that were observed regarding the change in the median and variation over the years.

An increase of the median in combination with a decrease in variation represents a definite improvement of quality of care as being shown in the indicator showing the use of MRI before the start of NAC (figure 1).

The indicator showing the use of NAC demonstrates an increasing trend, but the indicator might not cover the potential to improve quality of care as the national guidelines focus on a selection of patients suitable for NAC (figure 2). Therefore, this indicator was not longer reported since 2016.

The indicators about tumor free margins after breast conserving surgery (figure 3) and radiotherapy (figure 4) didn’t change substantial over time, indicating that quality of care could be at its top level. The lasting variation could be explained by deviation of guidelines as a consequence of patient or physician preference.

CONCLUSION
• Measuring the quality of breast cancer care is important to continuously improve its nationwide quality.
• The present results show that analyzing indicators over time is essential to judge a particular indicator on its value for quality improvement.