Proportion of cStage I-III breast cancer patients who underwent mammography and/or breast sonography (US) within 3 months before FIRST surgery

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Reference to:
- KCE report 150A: BC9
- Selected QCI for Vlaamse Overheid: nr. 3
- EUSOMA-guidelines

Relation to quality:
Mammography remains one of the primary tools used to evaluate a palpable breast mass or other signs of breast disease. Ultrasound has emerged as an important tool to assess a palpable mass in women with dense breast tissue and/or to complement mammography. Two-view mammography should be performed as part of triple assessment (clinical assessment, imaging and tissue sampling) in a unit specialized in breast imaging (1C evidence).

Type of indicator:
Process

Limitations concerning measurability:
Remark from the KCE-report 150A: “The delay of 3 months can only be ensured if women do not receive neo-adjuvant treatment. So, women who received a neo-adjuvant treatment were excluded from this analysis.”

a) Proportion of cStage I-III breast cancer patients who underwent mammography and/or breast sonography within 3 months before first surgery, in the absence of neo-adjuvant treatment

Numerator (dotted green box in flow chart):
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy) in the absence of neo-adjuvant treatment (hormonal therapy and/or chemotherapy), undergoing mammography and/or breast sonography within 3 months before surgery.
Denominator (dotted blue box in flow chart):
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy) and did not receive neo-adjuvant treatment (hormonal therapy and/or chemotherapy).

**a.bis)** Proportion of cStage I-III breast cancer patients who underwent mammography and/or breast sonography before first surgery, in the absence of neo-adjuvant treatment

Numerator (dotted grey box in flow chart):
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy) in the absence of neo-adjuvant treatment (hormonal therapy and/or chemotherapy), undergoing mammography and/or breast sonography before first surgery.

Denominator (dotted blue box in flow chart):
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy) and did not receive neo-adjuvant treatment (hormonal therapy and/or chemotherapy).

**b)** Proportion of cStage I-III breast cancer patients who underwent mammography and/or breast sonography within 3 months before first surgery, in the presence of neo-adjuvant treatment

Numerator (striped green box in flow chart):
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy) following neo-adjuvant treatment (hormonal therapy and/or chemotherapy), undergoing mammography and/or breast sonography within 3 months before surgery.

Denominator (striped blue box in flow chart):
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy) and received neo-adjuvant treatment (hormonal therapy and/or chemotherapy).

**b.bis)** Proportion of cStage I-III breast cancer patients who underwent mammography and/or breast sonography before first surgery, in the presence of neo-adjuvant treatment

Numerator (striped grey box in flow chart):
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy) following neo-adjuvant treatment (hormonal therapy and/or chemotherapy), undergoing mammography and/or breast sonography before surgery.
**Denominator (striped blue box in flow chart):**
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy) and received neo-adjuvant treatment (hormonal therapy and/or chemotherapy).

**TOTAL) Proportion of cStage I-III breast cancer patients who underwent mammography and/or breast sonography within 3 months before first surgery, regardless of neo-adjuvant treatment**

**Numerator (dotted + striped green box in flow chart):**
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy), undergoing mammography and/or breast sonography within 3 months before surgery.

**Denominator (solid blue box in flow chart):**
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy).

**TOTAL.bis) Proportion of cStage I-III breast cancer patients who underwent mammography and/or breast sonography before first surgery, regardless of neo-adjuvant treatment**

**Numerator (dotted + striped grey box in flow chart):**
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy), undergoing mammography and/or breast sonography before surgery.

**Denominator (solid blue box in flow chart):**
All women diagnosed with cStage I-III breast cancer who were surgically treated (breast conserving surgery and/or mastectomy).
Flow chart (NEW PROPOSAL):

- **Remark:**
  - For neo-adjuvant treatment the following procedures will be considered:
    - Chemotherapy (with or without Trastuzumab)
    - Hormonal therapy (with or without Trastuzumab)
  - Optional: look at patients with MRI of the breast

- **Time frames** (convention: 1 month = 30 days):
  - Consider first surgery within [-1;+9] around incidence
  - Consider neo-adjuvant treatment and mammo/ US breast between incidence-1month and date of first surgery (incl. date of surgery)
Expected range:
90-100%

Data bases and variables:
- BCR (ICD-10=C50, incidence date, stage)
- IMA (nomenclature codes for two-view mammo, breast sonography and surgery)

Nomenclature selection:

➤ See “Indicatorenchtes na bespreking 25 november 2011”
- Mammography
- Breast sonography
- Surgery:
  - Breast conserving surgery
  - Mastectomy

➤ Remark:
Nomenclature cannot distinguish between two-view and three-view mammo. Moreover, the guidelines state the following: “In the SIGN guideline two-view mammography (cranio-caudal and oblique projections) was recommended as part of the triple assessment. However, additional views (rolled views, magnifications, extra incidence views, etc.) can be left at the radiologist’s discretion. Indeed, a supplementary latero-lateral view (three-view mammography) is not needed in all circumstances.” Therefore, “two-view” was deleted from the indicator’s description.