



Annual Report 2018

of the Certified Breast Cancer Centres (BCCs)

Audit year 2017 / indicator year 2016



Deutsche Gesellschaft für Senologie

(German Society for Senology)



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General information

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Quality indicators of the guidelines (GL QI):

In the table of contents and in the respective headings the indicators, which correspond to the quality indicators of the evidence-based guidelines are specifically identified. The quality indicators identified in this way are based on the strong recommendations of the guidelines and were derived from the guidelines groups in the context of the guideline programme oncology. Further information: www.leitlinienprogramm-onkologie.de

	Definition of indicator	All clinical sites 2014	
		Median	Range
Numerator	All surgically treated primary cases presented in the tumour conference	151*	46 - 801
Population	Surgically treated primary cases (for definition of a primary case see 5.2.1)	152*	46 - 806
Rate	Target ≥ 95%	100%	93.75% - 100%

Basic data indicator:

The definitions of **numerator**, **population (=denominator)** and **target value** are taken from the Data Sheet.

The **medians** for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

The values for the numerators, populations and rates of all Centres are given under range.

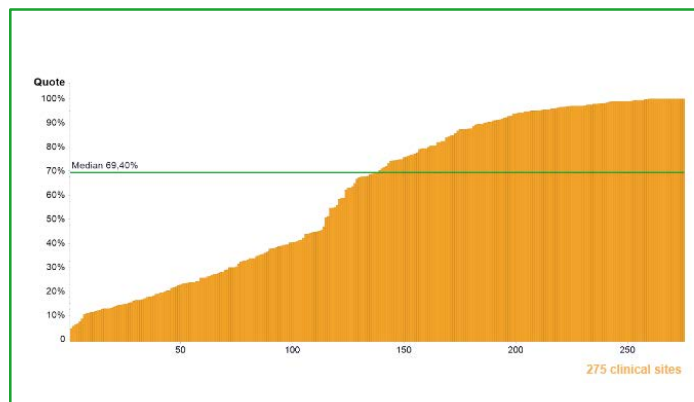
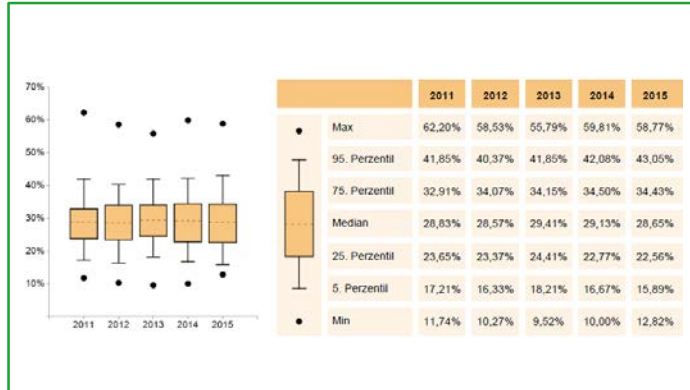


Diagram:

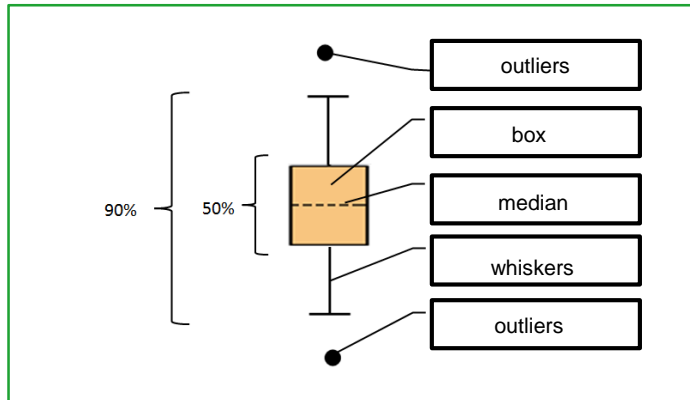
The x-axis indicates the number of Centres, the y-axis gives the values in percent or number (e.g. primary cases). The target value is depicted as a horizontal green line. The median, which is also depicted as a green horizontal line, divides the entire group into two equal halves.

General information



Cohort development:

The cohort development in the years **2012, 2013, 2014, 2015** and **2016** is presented in a box plot diagram.



Boxplot:

A box plot consists of a **box with median, whiskers** and **outliers**. 50 percent of the Centres are within the box. The median divides the entire available cohort into two halves with an equal number of Centres. The whiskers and the box encompass a 90th percentile area/range. The extreme values are depicted here as dots.

Status of the certification system: Breast Cancer Centres 2016

	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013	31.12.2012
Ongoing procedures	2	4	2	4	2	6
Certified centres	234	230	228	224	218	212
Certified clinical sites	280	280	279	277	274	267
BCC with 1 clinical site	193	186	183	177	169	163
2 clinical sites	38	40	41	43	44	45
3 clinical sites	1	2	2	2	3	2
4 clinical sites	2	2	2	2	2	2

Included clinical sites

	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013	31.12.2012
Clinical sites included in the Annual Report	275	275	275	273	268	256
Equivalent to	98,2%	98.2%	98.6%	98.6%	97.8%	95.9%
Primary cases total*	54,385	53,837	52,965	52,904	50,195	48,608
Primary cases per centre (mean)*	198	196	193	194	187	190
Primary cases per centre (median)*	175	177	169	172	170.5	166

*The figures are based on the clinical sites listed in the Annual Report.

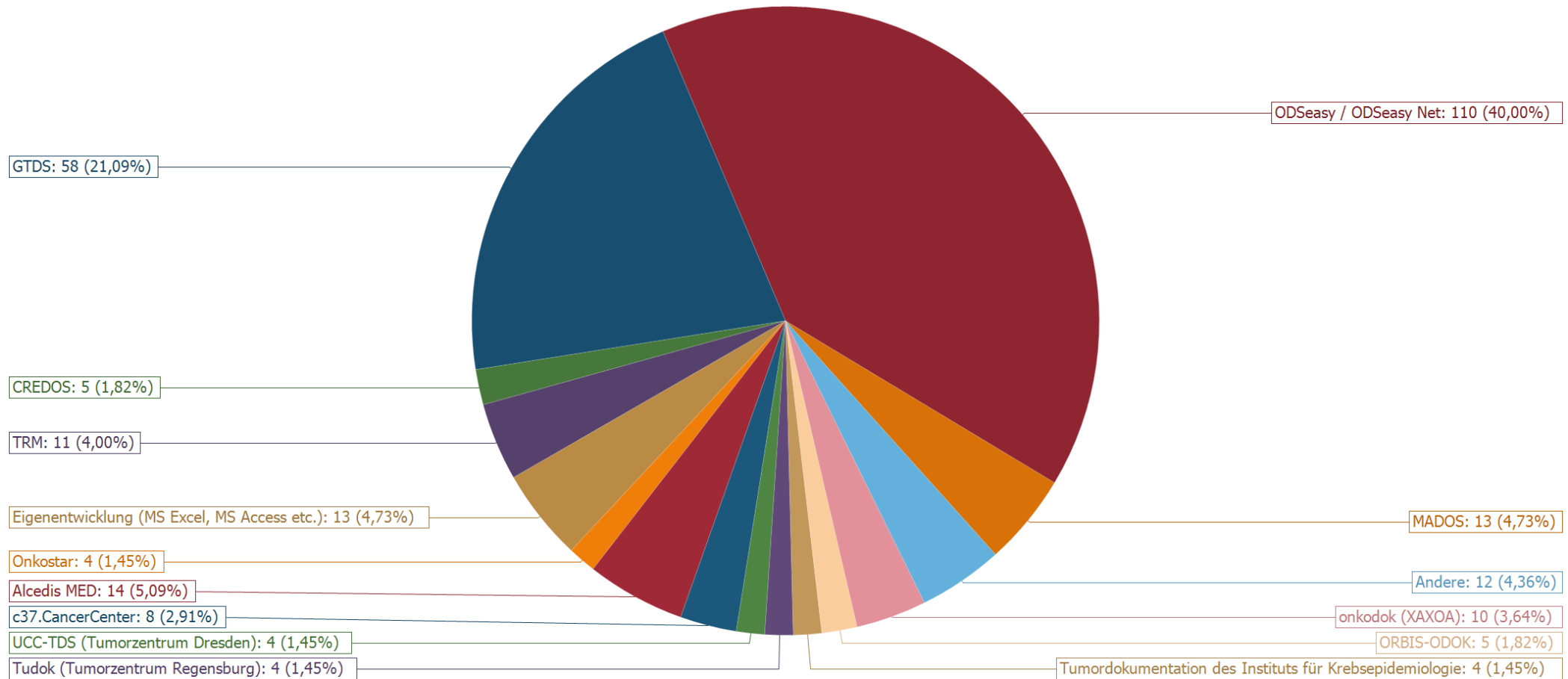
This Annual Report looks at the Breast Cancer Centres certified in the Certification System of the German Cancer Society (DKG). The Data Sheet, which is part of the Catalogue of Requirements, is the basis for the diagrams in the Annual Report.

The Annual Report covers 275 of the 280 clinical sites. Four clinical sites have not been included because they were certified for the first time in 2017 (data depiction of a full calendar year is not mandatory for initial certification) and 1 clinical site did not complete its verification of data in time due to clinic internal reasons (change of tumour documentation system).

www.oncomap.de provides an updated overview of all certified centres.

The indicators published here refer to the indicator year 2016. They are the basis for the audits conducted in 2017.

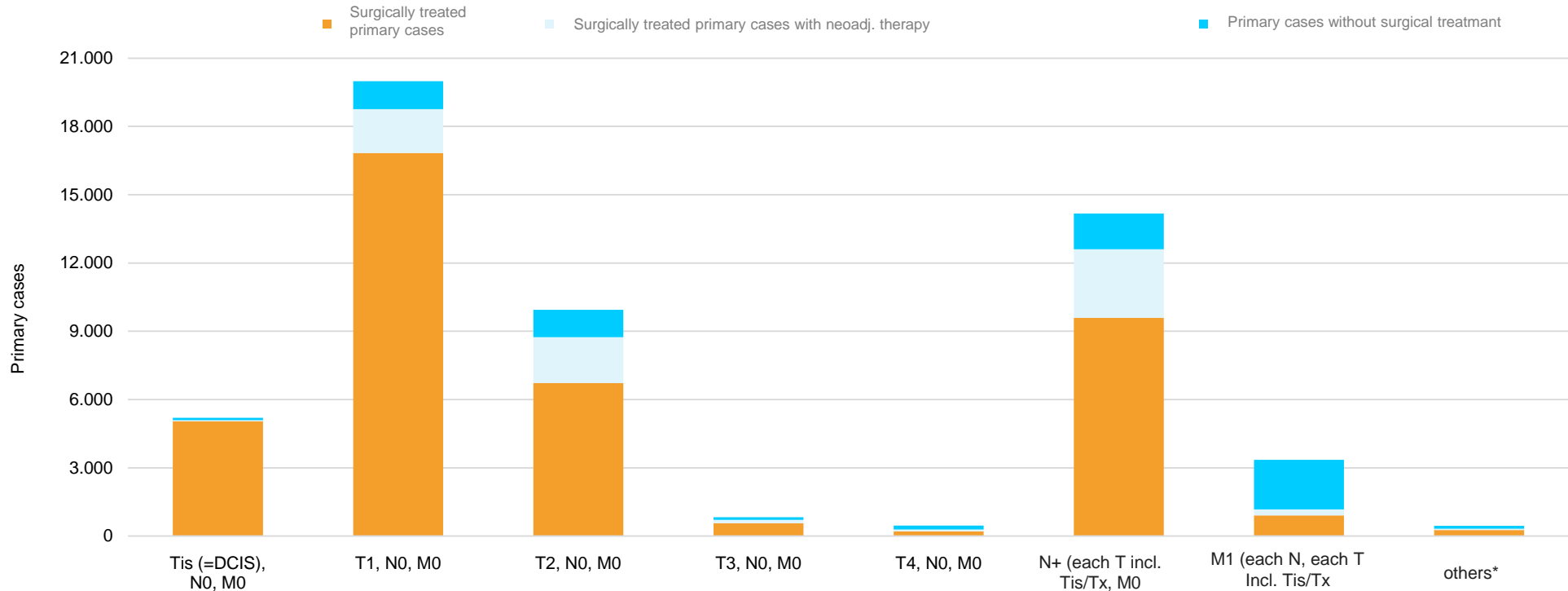
Tumour documentation systems used in BCCs



The details on the tumour documentation system were taken from the EXCEL annex to the Data Sheet (spreadsheet basic data). It is not possible to indicate several systems. In many cases support is provided by the cancer registries or there may be a direct connection to the cancer registry via a specific tumour documentation system.

Legende:	
Others	System used in ≤ 3 clinical sites

Basic data – Primary cases BC



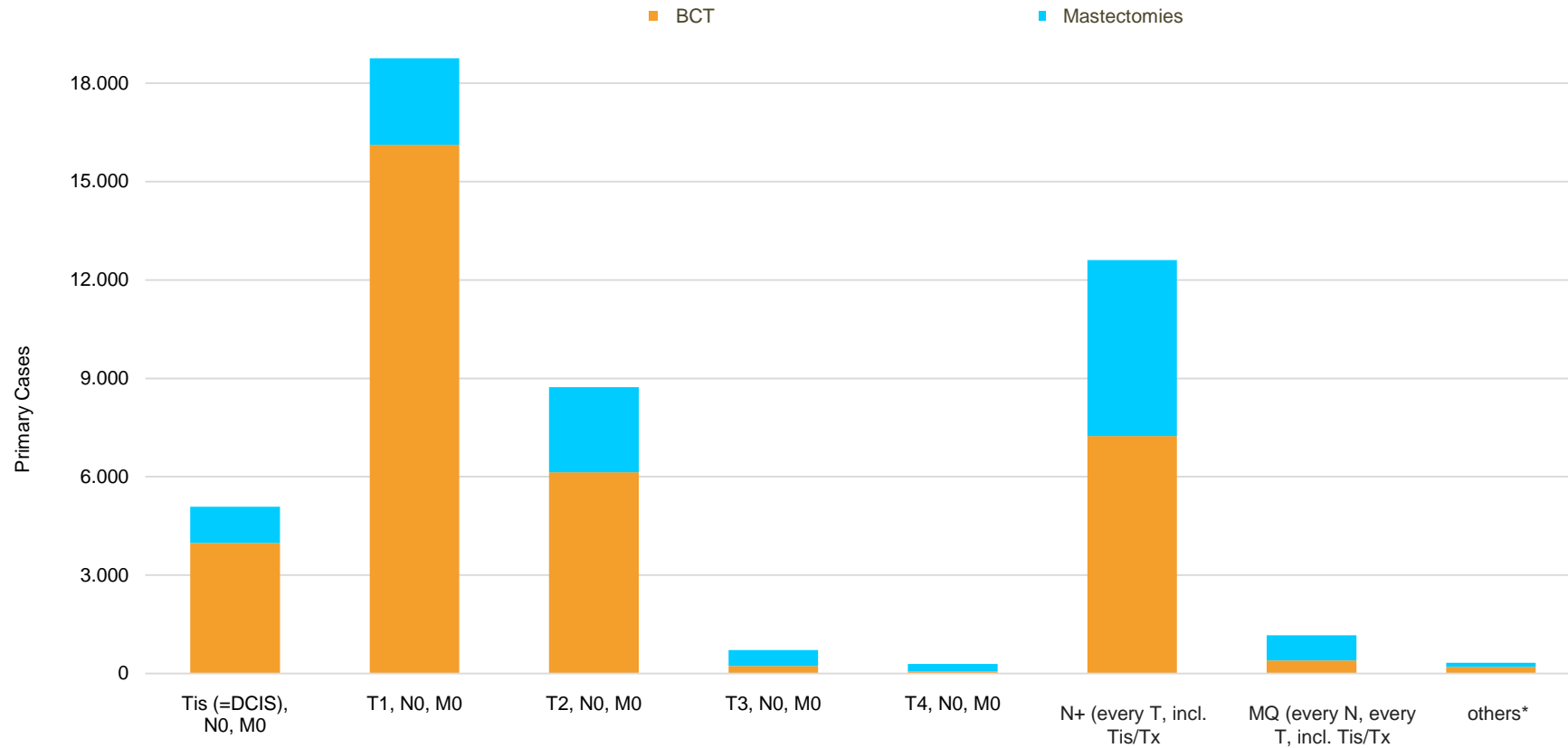
	Tis (=DCIS), NO, MO	T1, NO, MO	T2, NO, MO	T3, NO, MO	T4, NO, MO	N+ (each T incl. Tis/Tx), MO)	M1 (each N, each T incl. Tis/Tx)	Not assignable*	Total
Primary cases without surgical treatment	114 (2.19%)	1,224 (6.12%)	1,205 (12.12%)	112 (13.56%)	171 (36.93%)	1,571 (11.08%)	2,181 (65.14%)	120 (26.85%)	6,698
Surgically treated primary cases after neoadj. Therapy**	36 (0.69%)	1,926 (9.64%)	2,013 (20.25%)	154 (18.64%)	78 (16.85%)	3,016 (21.28%)	259 (7.74%)	60 (13.42%)	7,542
Surgically treated primary cases***	5,052 (97.12%)	16,836 (84.24%)	6,721 (67.62%)	560 (67.80%)	214 (46.22%)	9,587 (67.64%)	908 (27.12%)	267 (59.73%)	40,145
Total primary cases	5,202	19,986	9,939	826	463	14,174	3,348	447	54,385

*others: e.g. T1, N0, Mx

** primary cases operated with neo-adjuvant or pre-operative systemic therapy

*** primary cases operated without neo-adjuvant or pre-operative systemic therapy

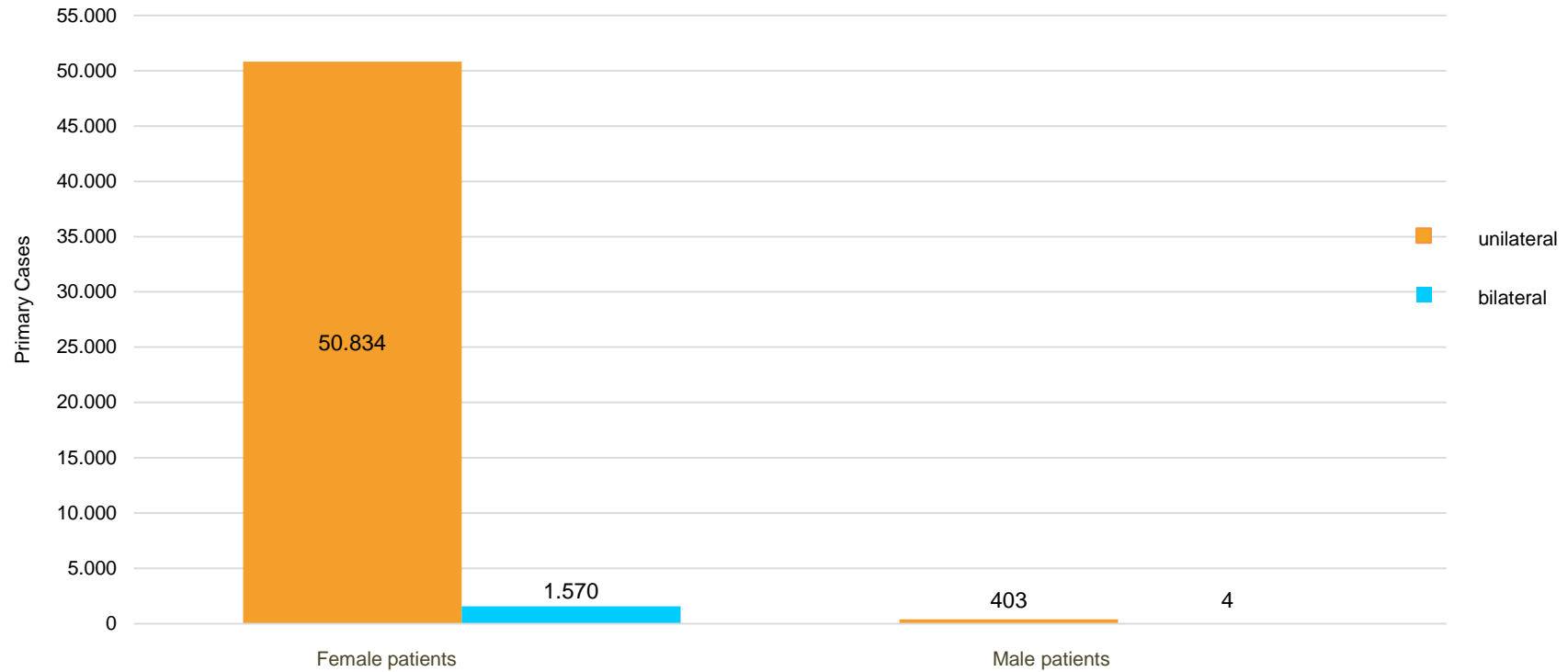
Basic data – Distribution of surgically treated primary cases



	Tis (=DCIS), NO, MO	T1, NO, MO	T2, NO, MO	T3, NO, MO	T4, NO, MO	N+ (every T incl. Tis/Tx), M0)	M1 (every N, every T incl. Tis/Tx)	Not assignable*	Total
Mastectomies	1,104 (21.70%)	2,645 (14.10%)	2,600 (29.77%)	485 (67.93%)	230 (78.77%)	5,367 (42.59%)	767 (65.72%)	121 (37.00%)	13,319
BCT	3,984 (78.30%)	16,117 (85.90%)	6,134 (70.23%)	229 (32.07%)	62 (21.23%)	7,236 (57.41%)	400 (34.28%)	206 (63.00%)	34,368
Total primary cases	5,088	18,762	8,734	714	292	12,603	1,167	327	47,687

*others: e.g. T1, N0, Mx

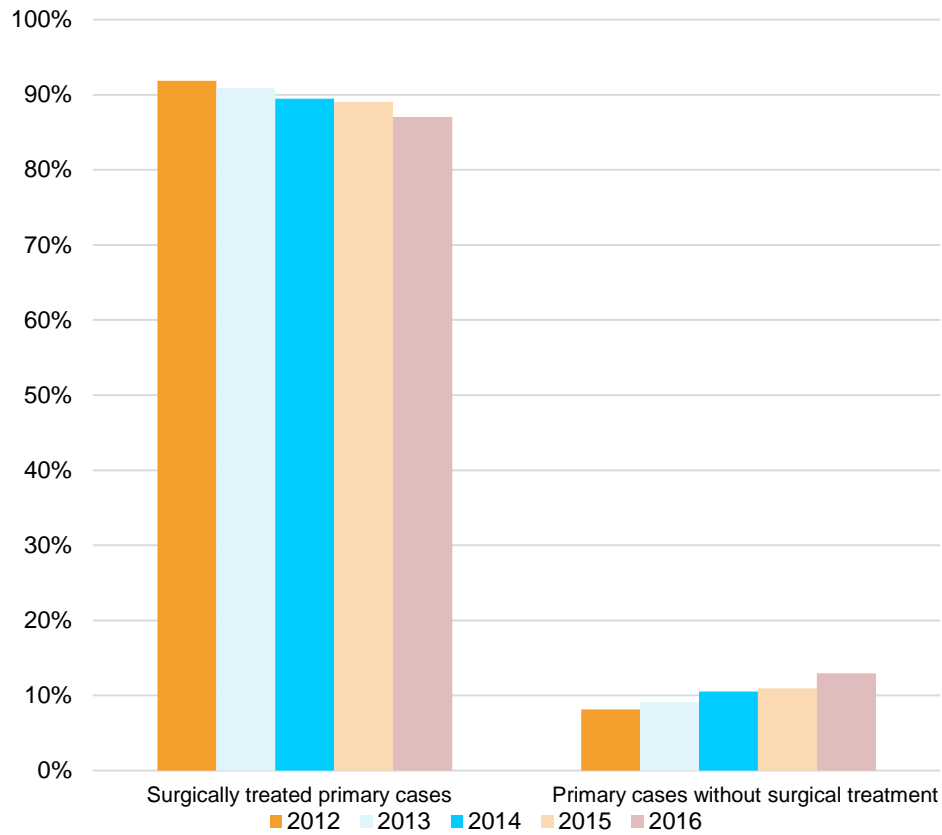
Basic data – Gender



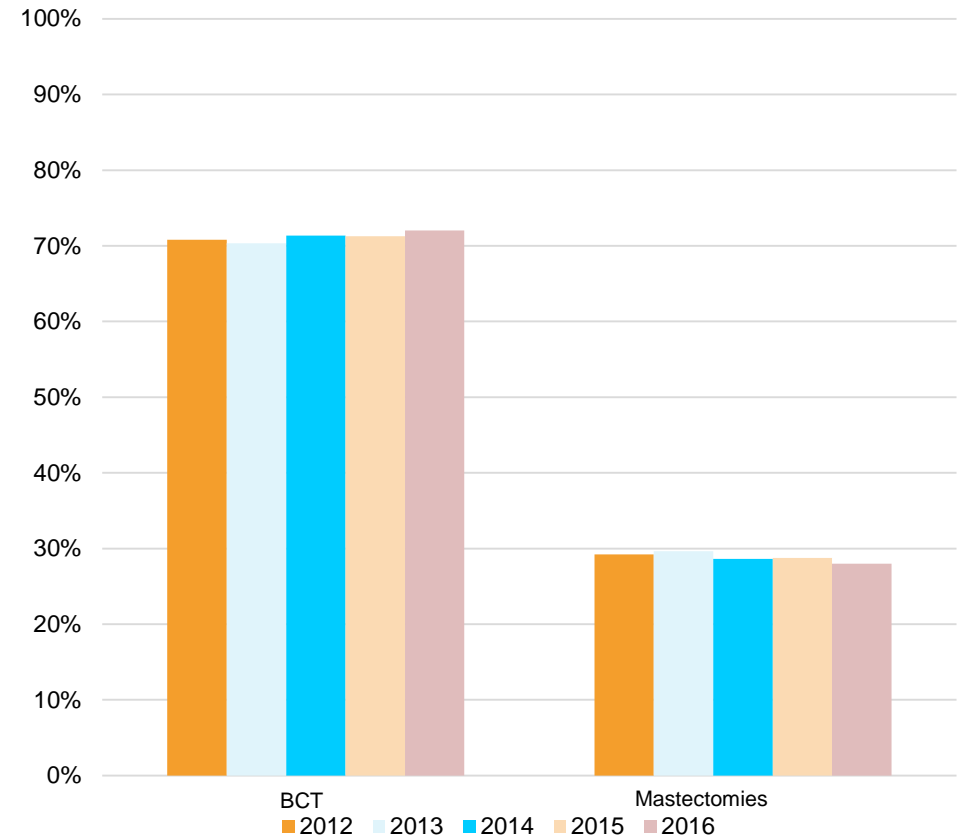
	Female patients	Male Patients	Total primary cases
unilateral	50,834 (97.00%)	403 (99.02%)	51,237
bilateral (simultaneous)	1,570 (3.00%)	4 (0.98%)	3,148
			54,385
Total	52,404	407	

Basic data – Development 2012 - 2015

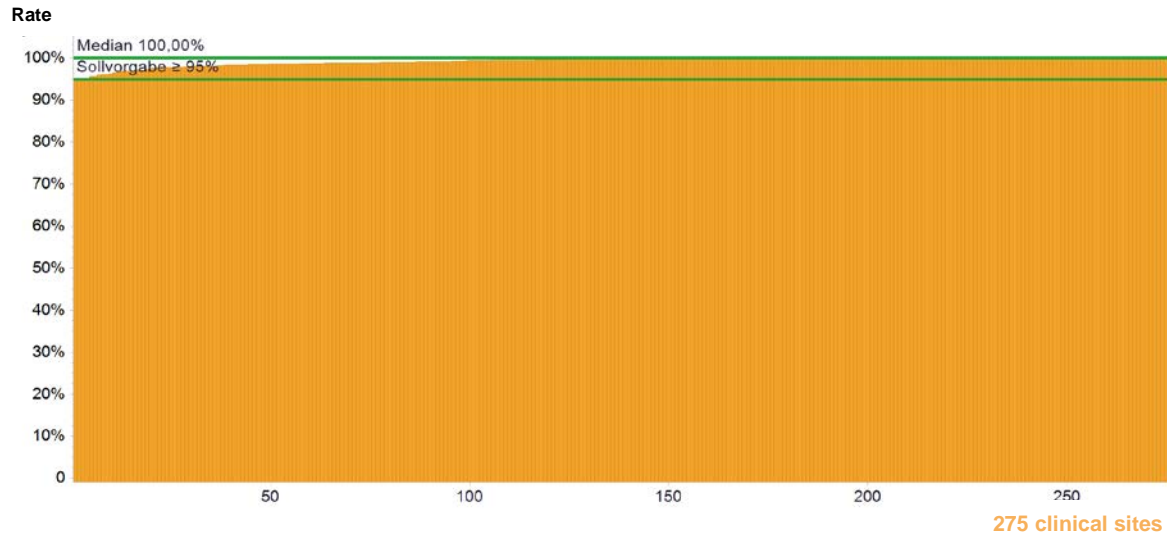
Distribution of primary cases with and without surgical treatment from 2012-2016



Distribution of surgically treated primary cases 2012-2016

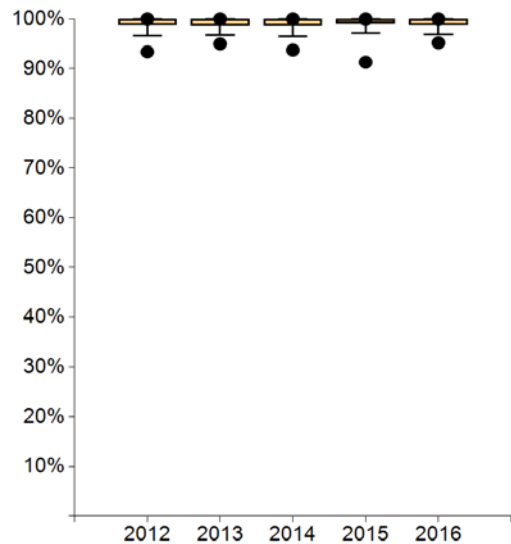


1. Postoperative case presentation



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	All surgically treated primary cases presented in the tumour board	151*	41 - 820
Denominator	Surgically treated primary cases (for definition of a primary case see 5.2.1)	153*	41 - 830
Rate	Target value ≥ 95%	100%	95.21% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



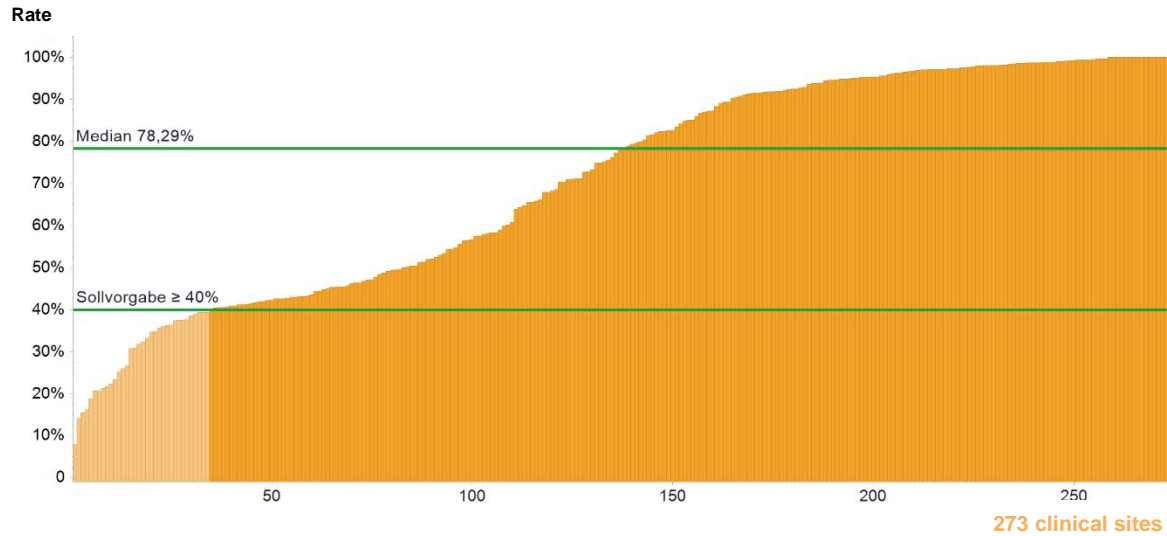
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 th percentile	98.93%	98.69%	98.76%	99.11%	98.82%
5 th percentile	96.67%	96.77%	96.55%	97.20%	96.95%
● Min	93.40%	95.00%	93.75%	91.30%	95.21%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	275	100.00%

Comment

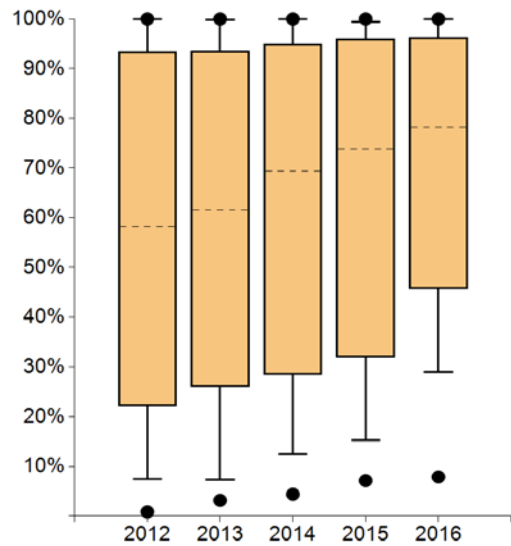
All Centres reached the target value of at least a 95% presentation rate of all operated primary cases in the tumour conference.

2. Pretreatment case presentation



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Number of primary cases presented in the pre-therapeutic tumour board	115*	10 - 675
Denominator	Primary cases	175*	50 - 874
Rate	Target value $\geq 40\%$	78.29%	7.89% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



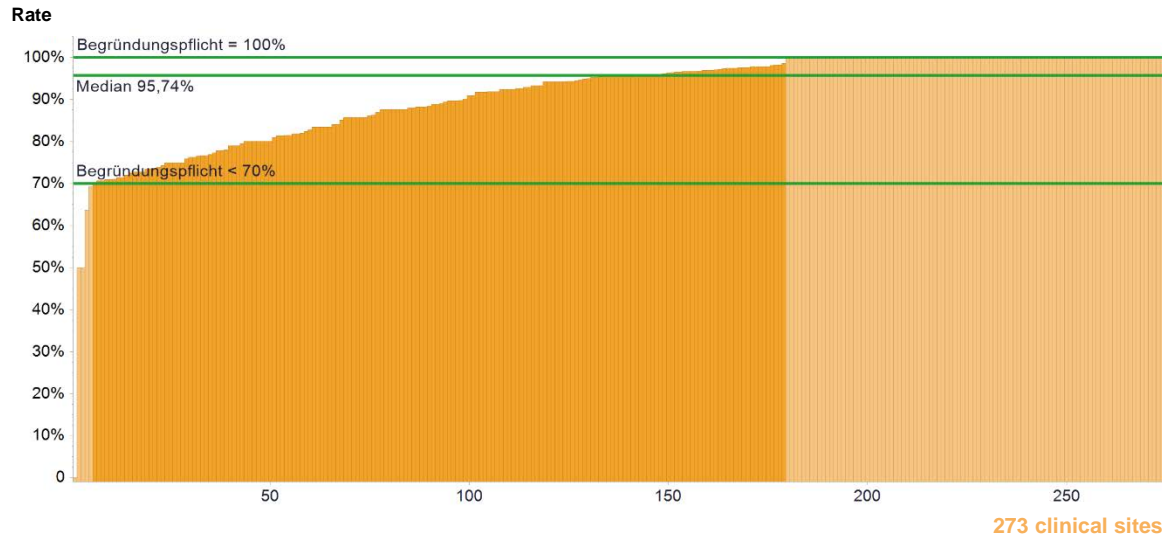
	2011	2012	2013	2014	2015
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	99.77%	100%	99.41%	100%
75 th percentile	93.41%	93.63%	94.90%	96.02%	96.18%
Median	58.26%	61.60%	69.40%	73.84%	78.29%
25 th percentile	22.19%	25.97%	28.47%	32.00%	45.71%
5 th percentile	7.39%	7.26%	12.47%	15.33%	29.05%
● Min	0.85%	3.18%	4.41%	7.14%	7.89%

Clinical sites with evaluable data		Clinical sites meeting the plausibility limit	
Number	%	Number	%
273	99.27%	239	87.55%

Comment

In 2016 a target value was introduced for the first time for this indicator (previously mandatory statement of reasons in the case of a rate $<5\%$ or $=100\%$). Ongoing increase in the median of the presentation rate over the course of time. In 83 Centres the share of primary cases presented pre-therapeutically fell. 185 Centres maintained the presentation rate of 100% (n=6) or increased it compared to the previous year. 34 Centres did not reach the target value and the reasons they gave were the presentation only of primary cases given neoadjuvant therapy and the foregoing of a renewed discussion of patients already discussed in the screening tumour conference.

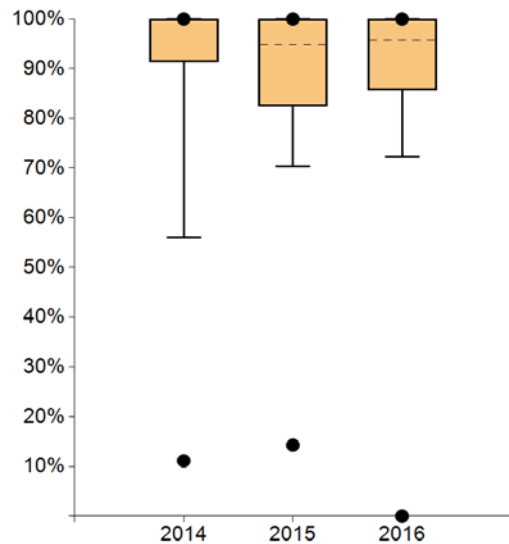
3. Case discussion of local recurrence/metastases



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Number of cases with local recurrence/newly diagnosed metastases presented in the tumour board	23*	0 - 153
Denominator	Patients with first local recurrence and/or newly diagnosed metastases (excluding patients with metastases at initial presentation)	25*	1 - 173
Rate	Mandatory statement of reasons** <70% and =100%	95.74%	0.00% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** For values outside the plausibility limit(s) the Centres must give the reasons.



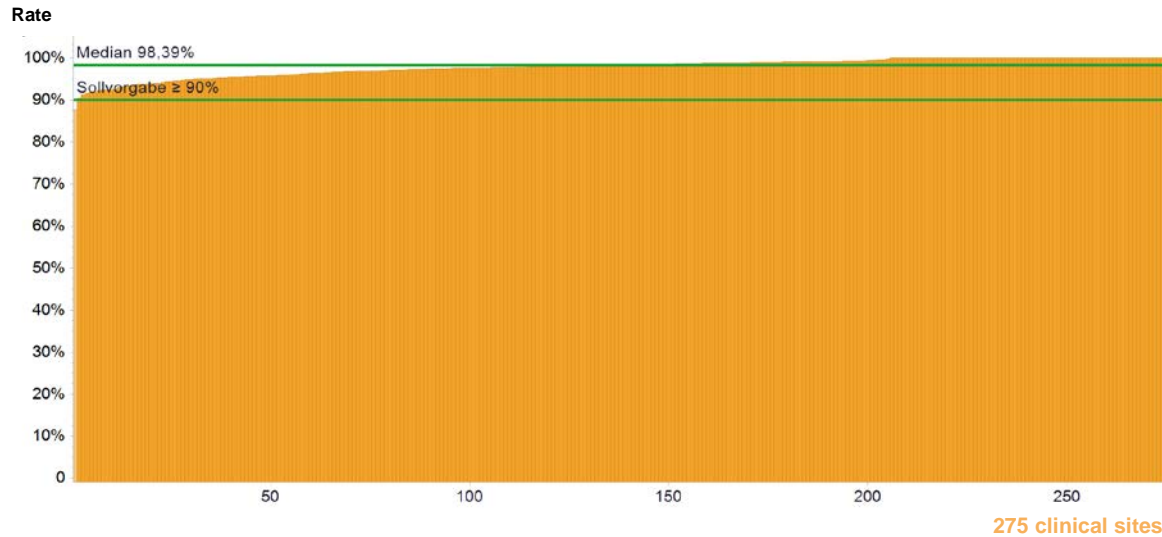
	2012	2013	2014	2015	2016
Max	-----	-----	100%	100%	100%
95 th percentile	-----	-----	100%	100%	100%
75 th percentile	-----	-----	100%	100%	100%
Median	-----	-----	100%	94.80%	95.74%
25 th percentile	-----	-----	91.37%	82.42%	85.71%
5 th percentile	-----	-----	56.04%	70.34%	72.29%
Min	-----	-----	11.11%	14.29%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the plausibility limit	
Number	%	Number	%
275	100.00%	174	63.27%

Comment

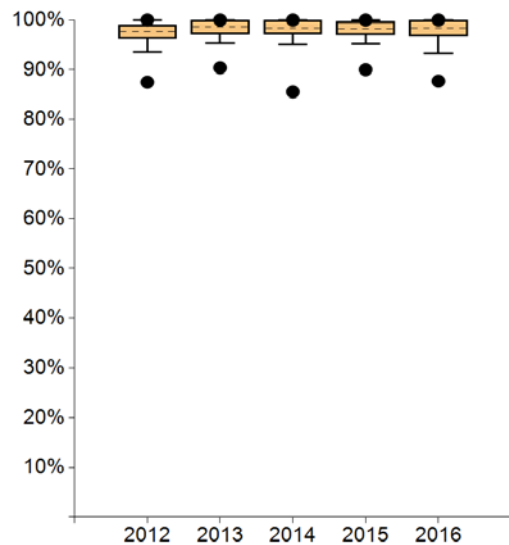
Ongoing very good implementation of the indicator in the Centres. 5 Centres had a presentation rate of <70%. The reason given was that patients with recurrence/secondary remote metastasis were treated, in part, by practice-based physicians or in other clinics and were not presented in the Centre. The Centre with the lowest presentation rate the previous year had the lowest result in 2016, too. In order to improve the presentation rate, cooperation with the local medical centre or practice-based colleagues is to be intensified.

4.1. Recommended RT after breast conserving therapy in cases of inv. BC (indicator year) (QI 6)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Primary cases with inv. breast cancer and breast conserving therapy. in which a radiotherapy was recommended	94*	20 - 558
Denominator	Primary cases with invasive breast cancer with BCT (excluding patients with metastases at initial presentation)	97*	21 - 564
Rate	Target value ≥ 90%	98.39%	87.72% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	99.08%	100%	100%	99.67%	100%
Median	97.75%	98.59%	98.33%	98.20%	98.39%
25 th percentile	96.20%	97.18%	97.11%	97.08%	96.76%
5 th percentile	93.58%	95.25%	95.05%	95.18%	93.33%
● Min	87.50%	90.38%	85.54%	90.00%	87.72%

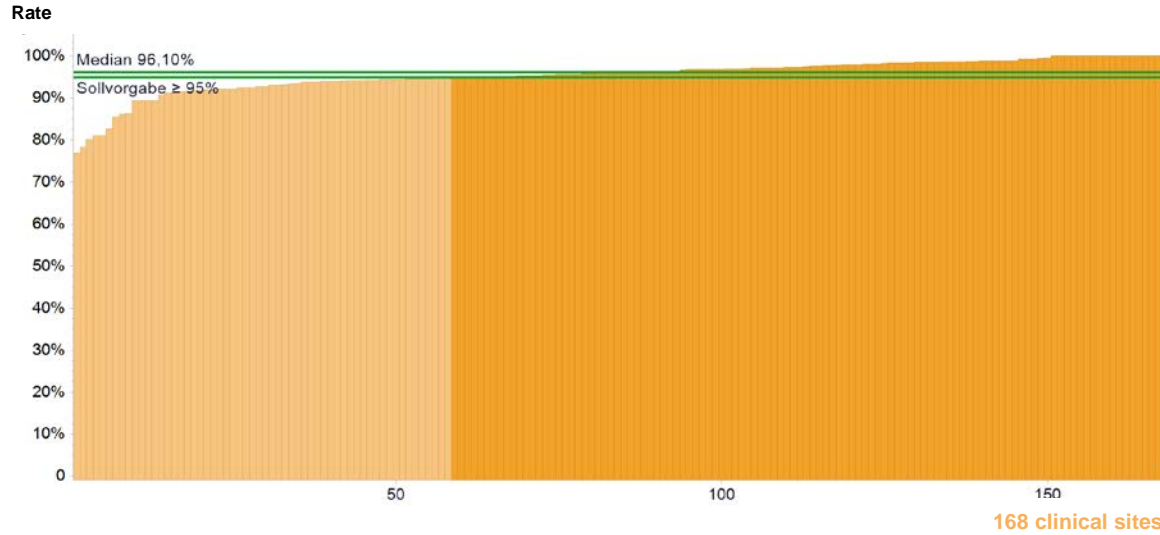
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	274	99.64%

Comment

Ongoing very good implementation of the indicator over the course of time. Only 1 Centre did not reach the target value and the reason it gave was the foregoing of a recommendation of radiotherapy in conjunction with the multi-morbidity of the patients or a planned mastectomy.

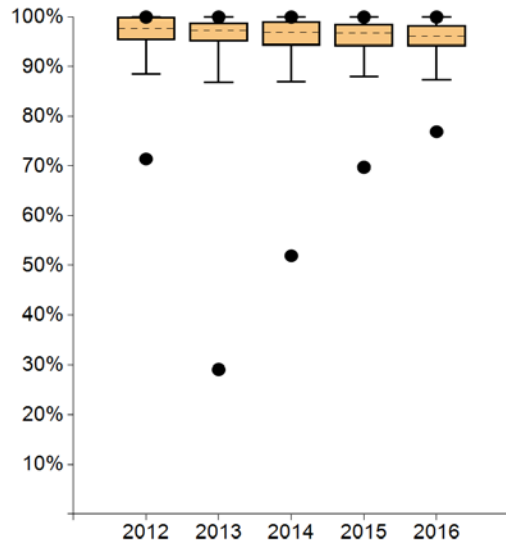
From 2017 the numerator for this indicator was adjusted while the denominator definition was identical: Only those primary cases with invasive mammary carcinoma, BET and radiotherapy are recorded.

4.2. Completed RT after breast conserving therapy in cases of inv. BC (based on year previous to indicator year)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Primary cases with inv. breast cancer and BCT, for which radiotherapy was recommended and performed	86*	13 - 310
Denominator	Numerator for indicator no. 4.1 for the year previous to indicator year (excluding patients with metastases at initial presentation)	90.5*	13 - 334
Rate	Target value ≥ 95%	96.10%	76.92% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



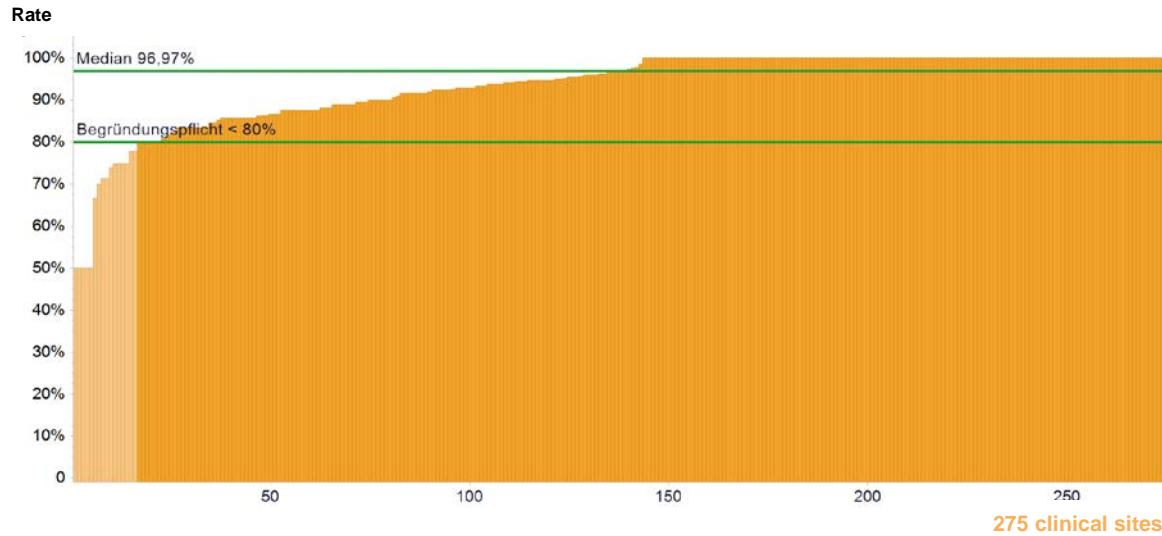
	2012	2013	2014	2015	2016
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	98.93%	99.13%	98.64%	98.30%
Median	97.70%	97.28%	96.88%	96.75%	96.10%
25 th percentile	95.27%	94.99%	94.31%	94.15%	94.09%
5 th percentile	88.54%	86.90%	86.97%	88.01%	87.40%
Min	71.42%	29.08%	51.96%	69.78%	76.92%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
168	61.09%	110	65.48%

Comment

Decision Certification Committee meeting 2017: Removal of the indicator "therapies conducted". The indicator was recorded over a five-year period. The recommendations from the tumour conference were all implemented very well. The goal of the indicator has thus been reached and the indicator will be removed.

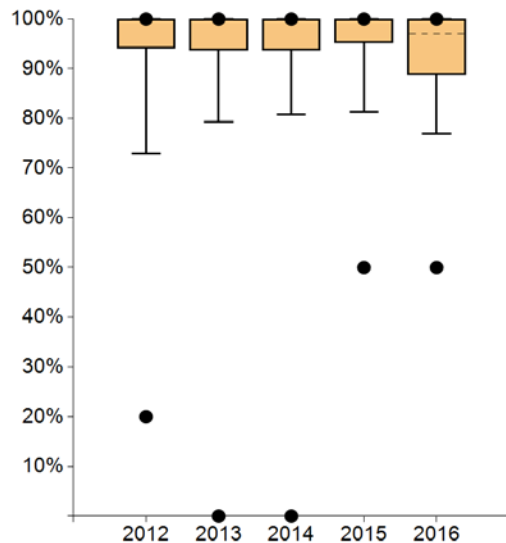
5.1. Recommended RT after breast conserving therapy in cases of DCIS (indicator year)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Primary cases with DCIS and BCT for which radiotherapy was recommended	12*	1 - 77
Denominator	Primary cases with DCIS und BCT	13*	1 - 80
Rate	Mandatory statement of reasons** <80%	96.97%	50.00% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** For values outside the plausibility limit(s) the Centres must give the reasons.



	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	96.97%
25 th percentile	94.11%	93.75%	93.75%	95.24%	88.89%
5 th percentile	72.96%	79.30%	80.70%	81.27%	76.95%
● Min	20.00%	0.00%	0.00%	50.00%	50.00%

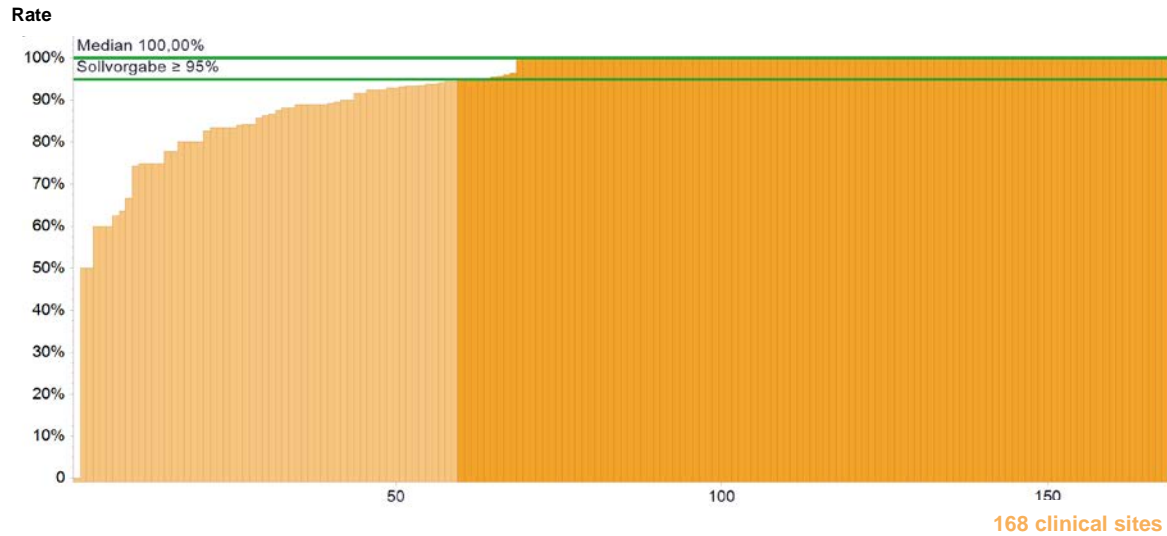
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	259	94.18%

Comment

Compared to the previous year the median for the indicator decreased slightly. 16 Centres (previous year: 9 Centres) had a recommendation rate of <80% and the reasons they gave were the foregoing of radiotherapy in the case of patients with low grade DCIS or comorbidity and urgent therapy steps in the case of contralateral mammary carcinoma or planned secondary mastectomy.

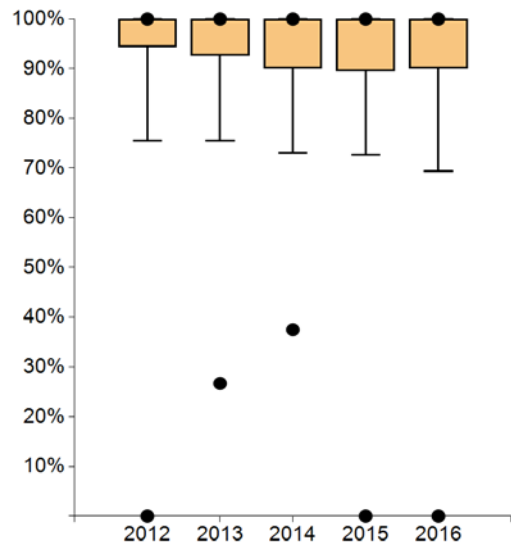
From 2017 the numerator for this indicator was adjusted while the denominator definition was identical: Only those primary cases with invasive mammary carcinoma, BET and radiotherapy are recorded.

5.2. Completed radiotherapy after breast conserving therapy in cases of DCIS (based on year previous to indicator year)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Primary cases with DCIS and BCT that were treated with radiotherapy	10*	0 - 50
Denominator	Numerator for indicator no. 5.1 for the year previous to indicator year	10*	1 - 56
Rate	Target value ≥ 95%	100%	0.00% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



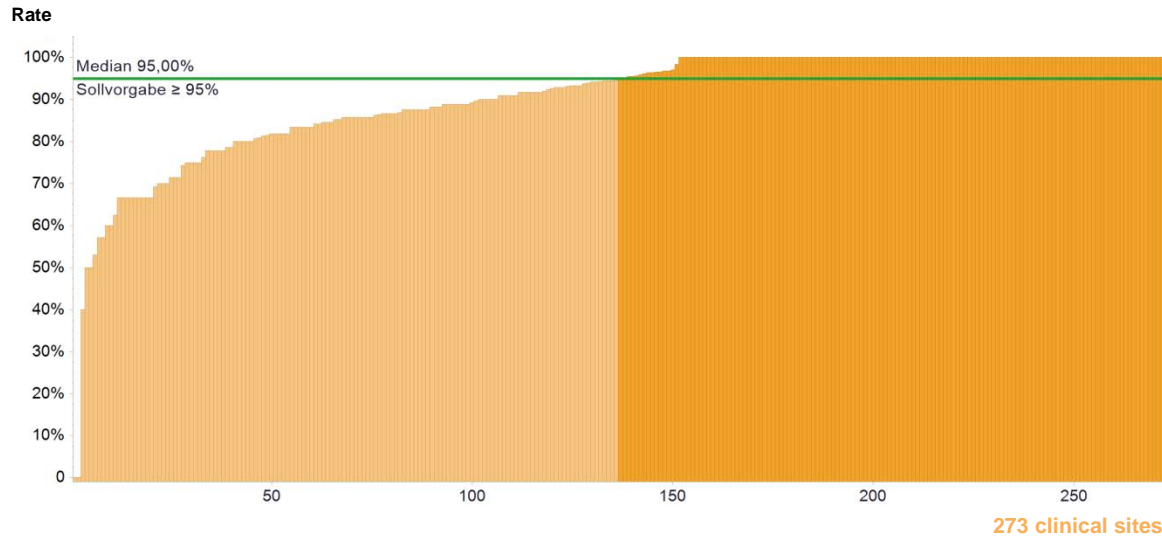
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 th percentile	94.44%	92.72%	90.00%	89.45%	90.00%
5 th percentile	75.42%	75.42%	73.05%	72.73%	69.34%
● Min	0.00%	26.67%	37.50%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
168	61.09%	109	64.88%

Comment

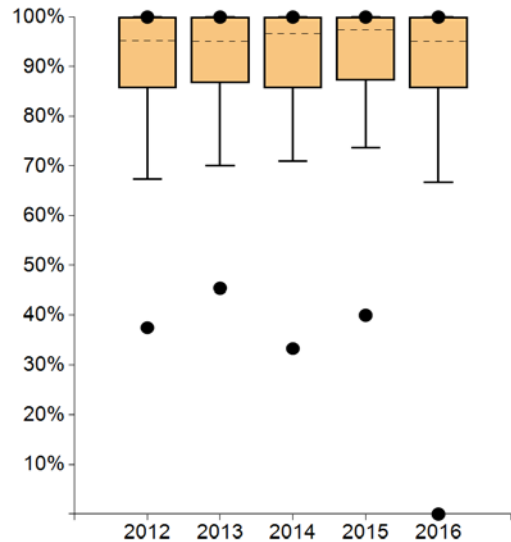
Decision Certification Committee meeting 2017: Removal of the indicator "therapies conducted". The indicator was recorded over a five-year period. The recommendations from the tumour conference were all implemented very well. The goal of the indicator has thus been reached and the indicator will be removed.

6.1. Recommended RT after a mastectomy in cases of inv. BC (indicator year) (QI 10)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Primary cases with invasive breast cancer and mastectomy, for which radiotherapy was recommended	10*	0 - 58
Denominator	Primary cases with invasive breast cancer und mastectomy and indication for radiotherapy of the chest wall (T3/4-Tm, R1/R2 resection with no possibility of repeated resection or pN +> 3 LN) (excluding patients with metastases at initial presentation)	11*	1 - 59
Rate	Target value ≥ 95%	95.00%	0.00% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



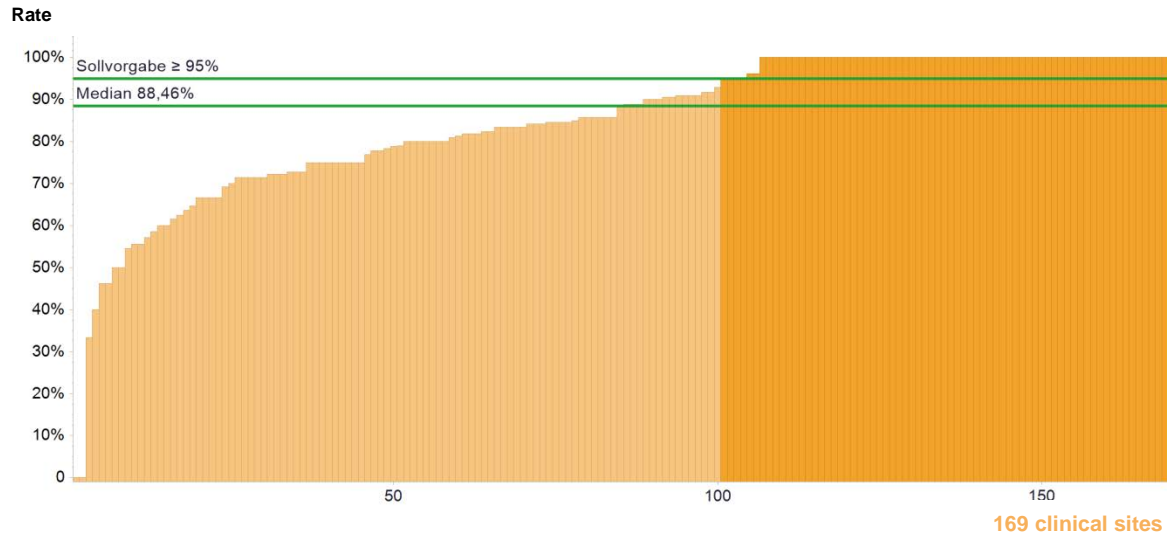
	2012	2013	2014	2015	2016
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	95.23%	95.00%	96.61%	97.37%	95.00%
25 th percentile	85.71%	86.67%	85.71%	87.23%	85.71%
5 th percentile	67.39%	70.00%	71.00%	73.74%	66.67%
Min	37.50%	45.45%	33.33%	40.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	99.27%	137	50.18%

Comment

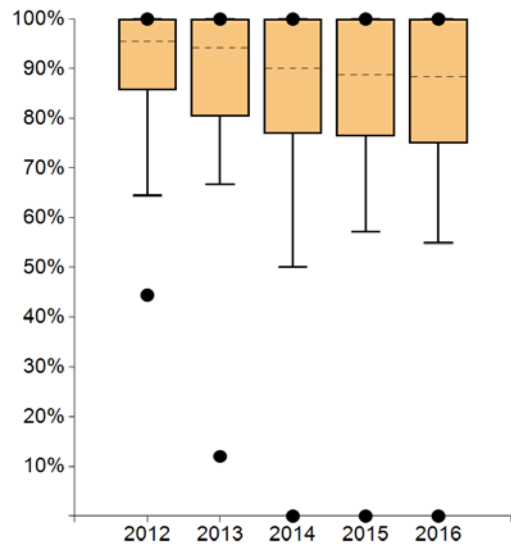
This indicator is a QI in the Guideline. It was removed from 2017 because the QI in the Guideline had been removed. It was removed from the Guideline as the underlying recommendations have changed and the QI would now constitute a disincentive.

6.2. Completed radiotherapy after a mastectomy in cases of inv. BC (based on year prior to indicator year)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Primary cases with invasive breast cancer and mastectomy, for which there was an indication for radiotherapy of the chest wall (= T3/4-Tm, R1/R2-resection without an option of repeated resection or pN +> 3 LN) and on whom radiotherapy was performed	8*	0 - 45
Denominator	Numerator for indicator no. 6.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	10*	1 - 50
Rate	Target value ≥ 95%	88.46%	0.00% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



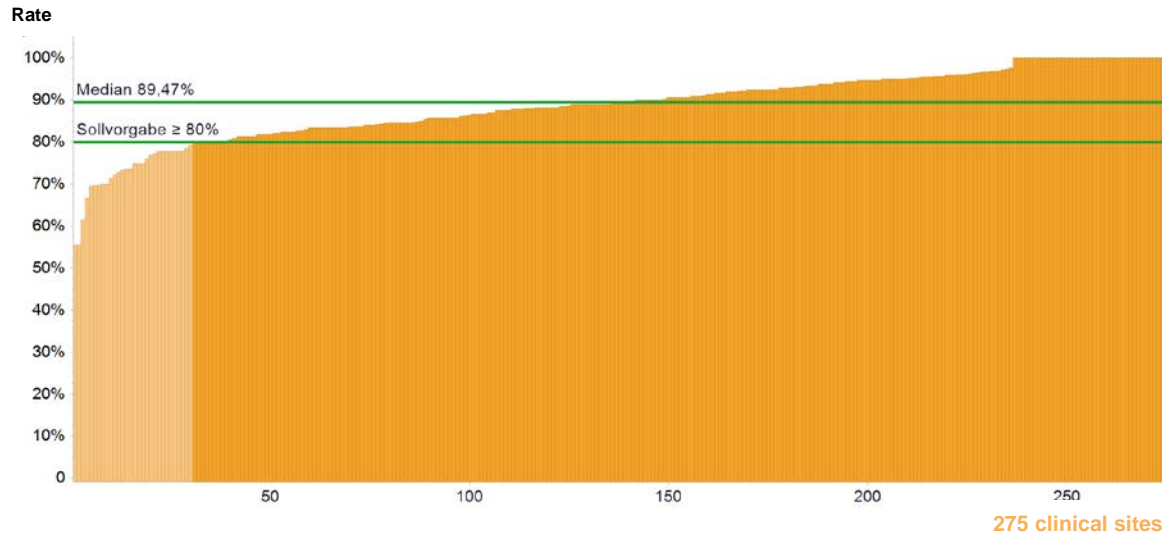
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	95.45%	94.28%	90.00%	88.89%	88.46%
25 th percentile	85.71%	80.31%	76.92%	76.35%	75.00%
5 th percentile	64.52%	66.67%	50.00%	57.14%	54.95%
● Min	44.44%	12.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
169	61.45%	69	40.83%

Comment

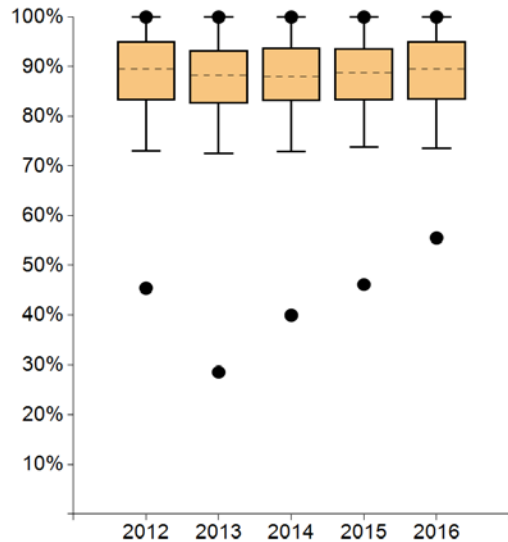
Decision Certification Committee meeting 2017: Removal of the indicator "therapies conducted". The indicator was recorded over a five-year period. The recommendations from the tumour conference were all implemented very well. The goal of the indicator has thus been reached and the indicator will be removed.

7.1. Recommended chemotherapy in cases of steroid receptor negative diagnostic finding (indicator year) (QI 9)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	All steroid receptor neg. primary cases with invasive breast cancer, for which chemotherapy was recommended	18*	1 - 102
Denominator	Primary cases with invasive breast cancer with steroid receptor negative diagnostic finding (excluding patients with metastases at initial presentation)	20*	1 - 107
Rate	Target value ≥ 80%	89.47%	55.56% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



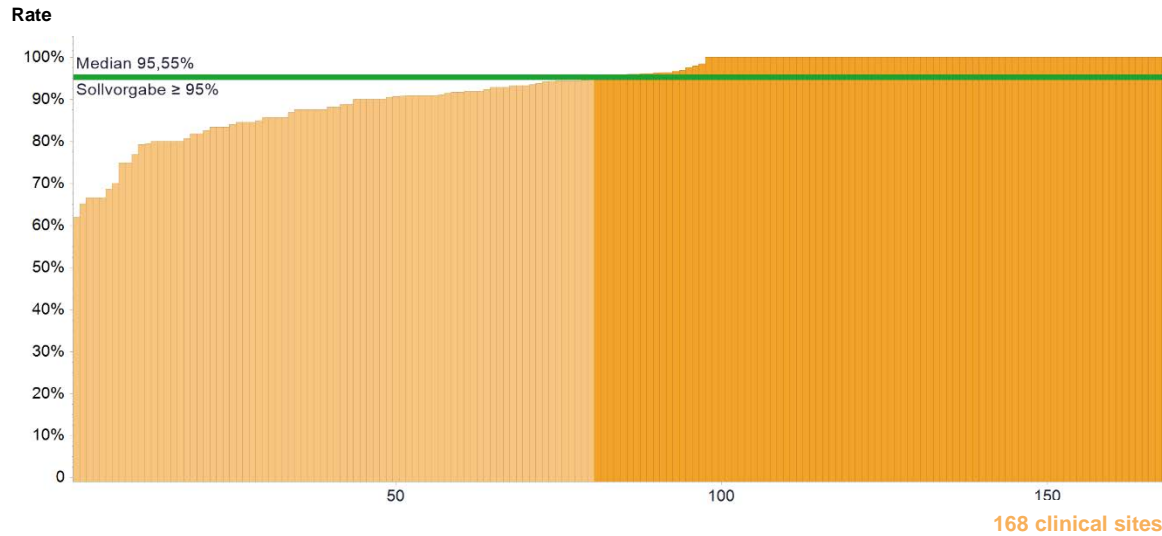
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	95.00%	93.33%	93.85%	93.75%	95.00%
Median	89.53%	88.24%	88.00%	88.89%	89.47%
25 th percentile	83.33%	82.61%	83.10%	83.33%	83.44%
5 th percentile	73.14%	72.53%	73.01%	73.84%	73.64%
● Min	45.45%	28.57%	40.00%	46.15%	55.56%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	245	89.09%

Comment

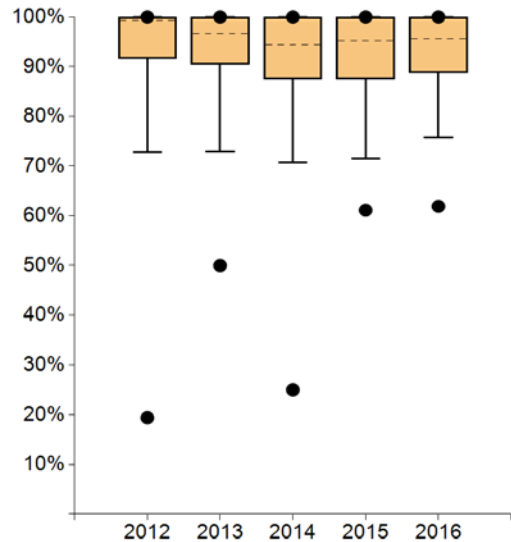
This indicator is a QI in the Guideline. It was removed from 2017 because the QI in the Guideline had been removed. It was removed from the Guideline as the underlying recommendations have changed and the QI would now constitute a disincentive.

7.2. Completed chemotherapies in cases of steroid receptive negative diagnostic finding (based on year prior to indicator year)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	All steroid receptor negative primary cases with invasive breast cancer, to whom chemotherapy was administered.	16*	3 - 64
Denominator	Numerator for indicator Nr. 7.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	17*	3 - 70
Rate	Target value ≥ 95%	95.55%	61.90% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



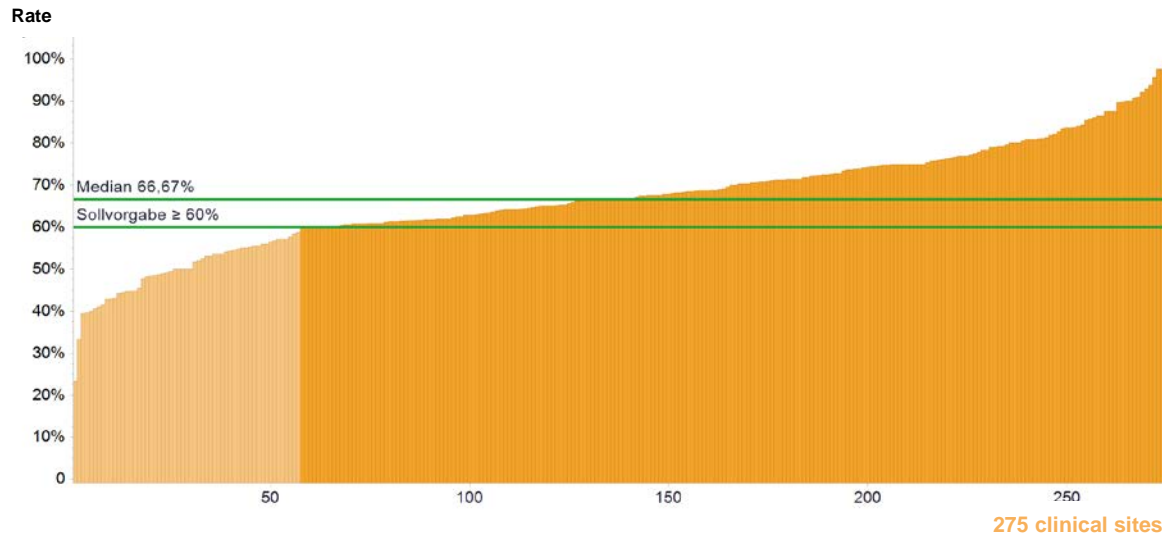
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	99.32%	96.67%	94.44%	95.24%	95.55%
25 th percentile	91.57%	90.48%	87.50%	87.50%	88.89%
5 th percentile	72.77%	73.00%	70.76%	71.43%	75.67%
● Min	19.40%	50.00%	25.00%	61.11%	61.90%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
168	61.09%	88	52.38%

Comment

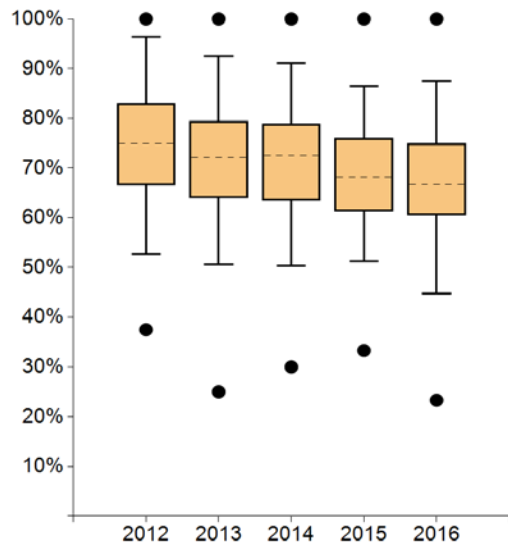
Decision Certification Committee meeting 2017: Removal of the indicator "therapies conducted". The indicator was recorded over a five-year period. The recommendations from the tumour conference were all implemented very well. The goal of the indicator has thus been reached and the indicator will be removed.

8.1. Recommended chemotherapy in cases of receptor positive and nodal positive diagnostic finding (indicator year) (QI 5)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	All receptor positive and nodal positive primary cases with invasive breast cancer in which a chemotherapy was recommended	25*	3 - 103
Denominator	Primary cases with invasive breast cancer with receptor positive and nodal positive diagnostic finding (excluding patients with metastases at initial presentation)	37*	3 - 151
Rate	Target value ≥ 60%	66.67%	23.33% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



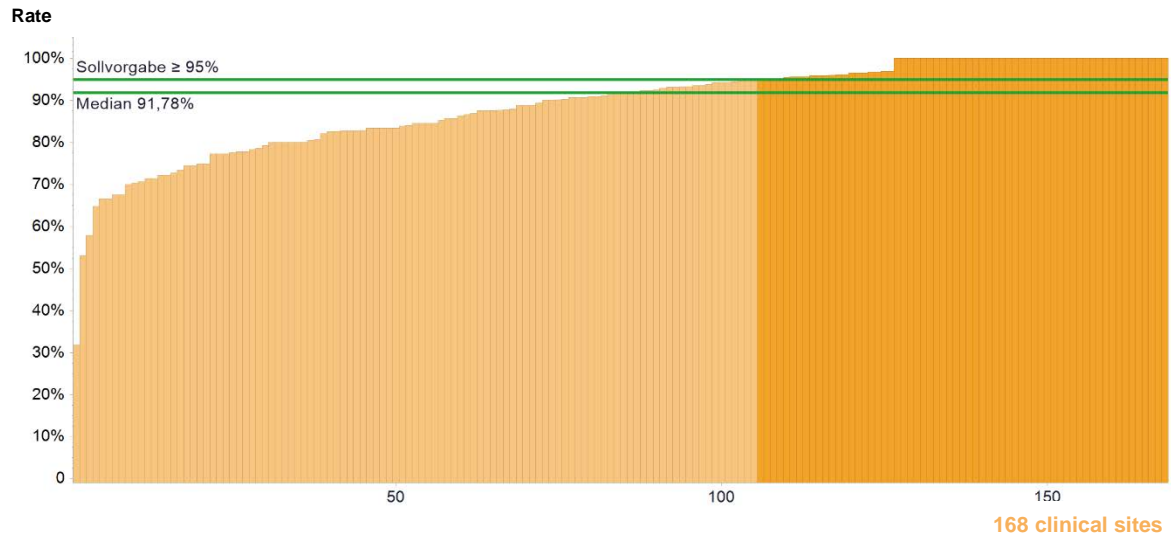
	2012	2013	2014	2015	2016
Max	100%	100%	100%	100%	100%
95 th percentile	96.37%	92.50%	91.07%	86.43%	87.50%
75 th percentile	83.06%	79.49%	78.87%	76.06%	75.00%
Median	75.00%	72.22%	72.55%	68.18%	66.67%
25 th percentile	66.66%	64.15%	63.55%	61.36%	60.52%
5 th percentile	52.74%	50.59%	50.37%	51.26%	44.79%
Min	37.50%	25.00%	30.00%	33.33%	23.33%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	218	79.27%

Comment

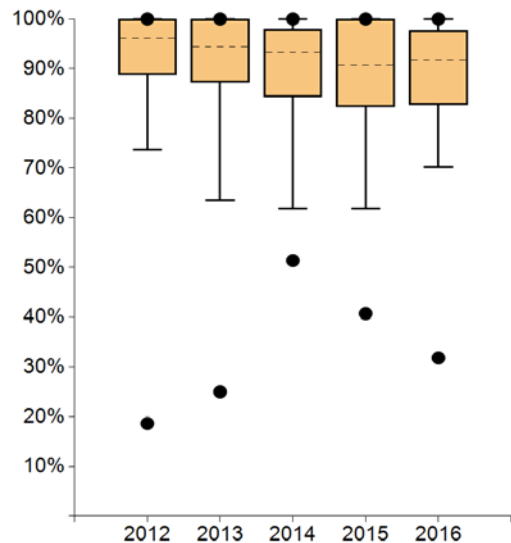
120 Centres were able to maintain or increase their recommendation rate compared to the previous year. In 150 Centres the recommendation rate was lower than the previous year. The reasons given by the Centres for the low recommendation rates were low-risk profiles in gene expression tests or favourable tumour biology, pN1a/pn1mi or comorbidities. From 2017 the numerator for this indicator was adjusted while the denominator definition was identical: Recurrent positive and nodal positive primary cases with an invasive mammary carcinoma and chemotherapy are now recorded.

8.2. Completed chemotherapy in cases of receptor positive and nodal positive diagnostic finding (based on year prior to indicator year)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	All receptor positive and nodal positive primary cases with invasive breast cancer that were treated with chemotherapy	21*	3 - 101
Denominator	Numerator for indicator no. 8.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	23.5*	3 - 112
Rate	Target value ≥ 95%	91.78%	31.82% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



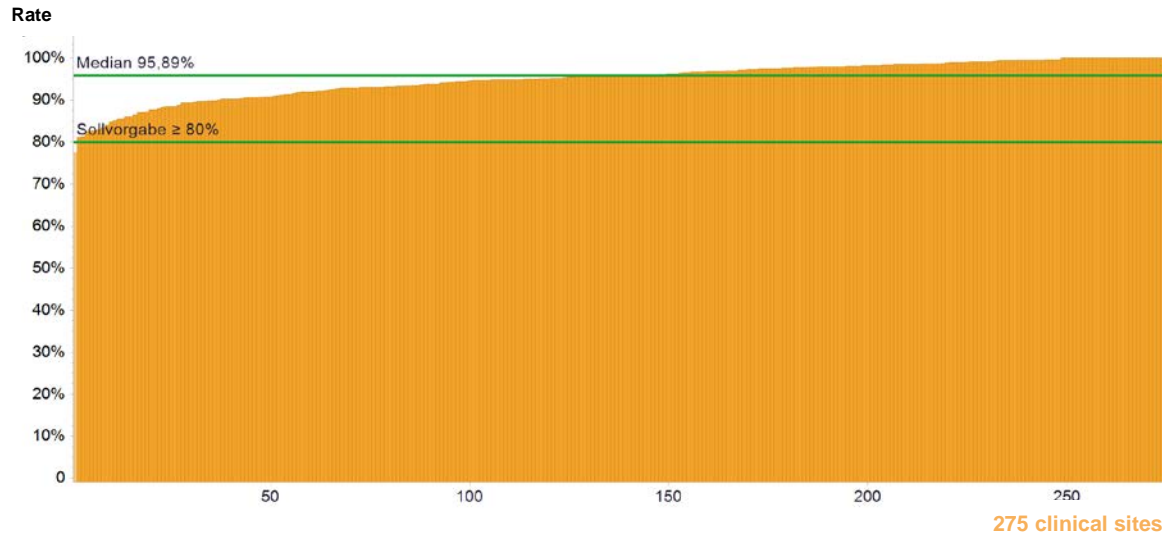
	2012	2013	2014	2015	2016
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	97.96%	100%	97.66%
Median	96.15%	94.44%	93.33%	90.63%	91.78%
25 th percentile	88.88%	87.23%	84.31%	82.35%	82.76%
5 th percentile	73.68%	63.53%	61.78%	61.90%	70.16%
Min	18.65%	25.00%	51.39%	40.74%	31.82%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
168	61.09%	63	37.50%

Comment

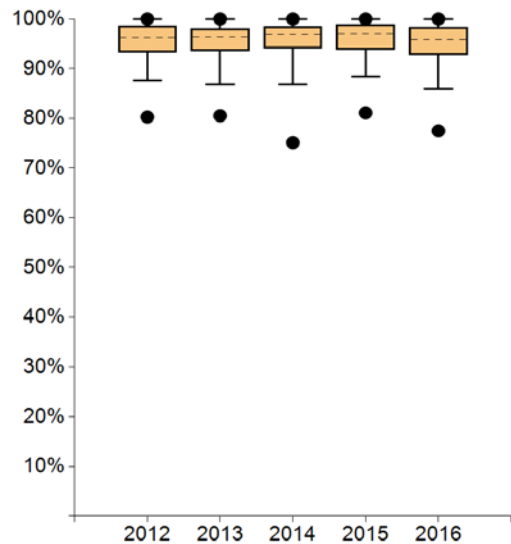
Decision Certification Committee meeting 2017: Removal of the indicator "therapies conducted". The indicator was recorded over a five-year period. The recommendations from the tumour conference were all implemented very well. The goal of the indicator has thus been reached and the indicator will be removed.

9.1. Recommended endocrine therapy in cases of steroid receptor positive diagnostic finding (indicator year) (QI 7)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	All steroid receptor positive primary cases in which an endocrine therapy was recommended	118*	28 - 637
Denominator	Primary cases with invasive breast cancer with steroid receptor positive diagnostic finding (excluding patients with metastases at initial presentation)	124*	31 - 665
Rate	Target value ≥ 80%	95.89%	77.51% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	98.60%	98.15%	98.48%	98.85%	98.42%
Median	96.27%	96.40%	96.94%	97.06%	95.89%
25 th percentile	93.33%	93.62%	94.07%	93.85%	92.86%
5 th percentile	87.64%	86.88%	86.81%	88.49%	85.97%
● Min	80.27%	80.53%	75.12%	81.10%	77.51%

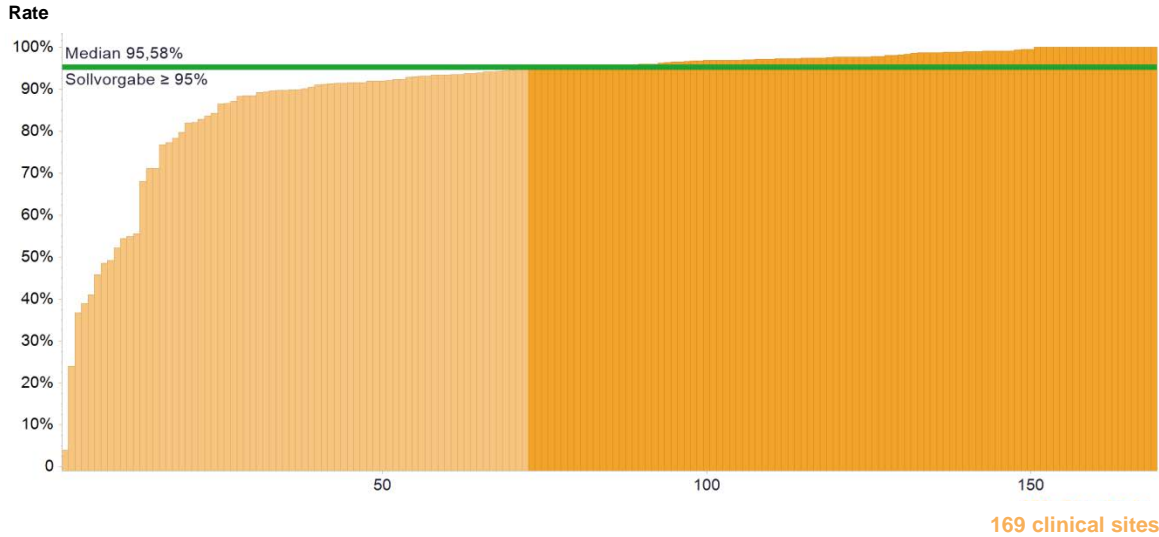
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	274	99.64%

Comment

Ongoing very good fulfilment of the requirement in the Centres with a slightly lower median and minimum value. Compared to the previous year the number of patients who were recommended endocrine therapy more or less remained the same (36,747 versus 36,045 the previous year), with a larger population (2016: 38,633 patients with steroid-receptor positive invasive mammary carcinoma versus 37,623 in 2015). The reasons given by the Centres for the low recommendation rates were favourable tumour biology, death of the patients and ongoing primary therapy.

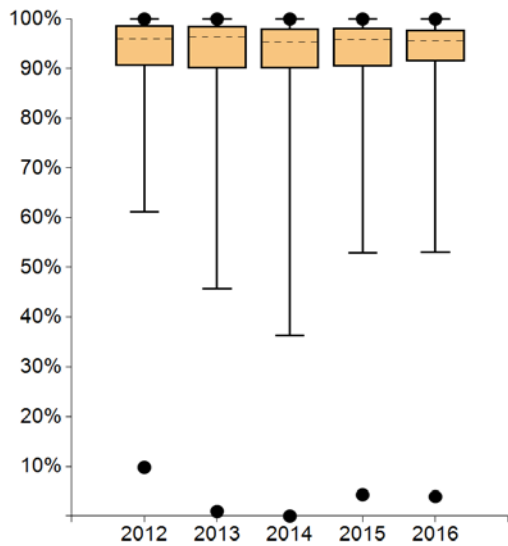
From 2017 the numerator for this indicator was adjusted while the denominator definition was identical: Steroid-recurrent positive primary cases are now recorded for which endocrine therapy has been initiated.

9.2. Initiated endocrine therapy in cases of steroid receptive positive diagnostic finding (based on year prior to indicator year)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Steroid rec. pos. primary cases with the initiation of endocrine therapy	100*	6 - 378
Denominator	Numerator for indicator no. 9.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	109*	32 - 456
Rate	Target value ≥ 95%	95.58%	3.92% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



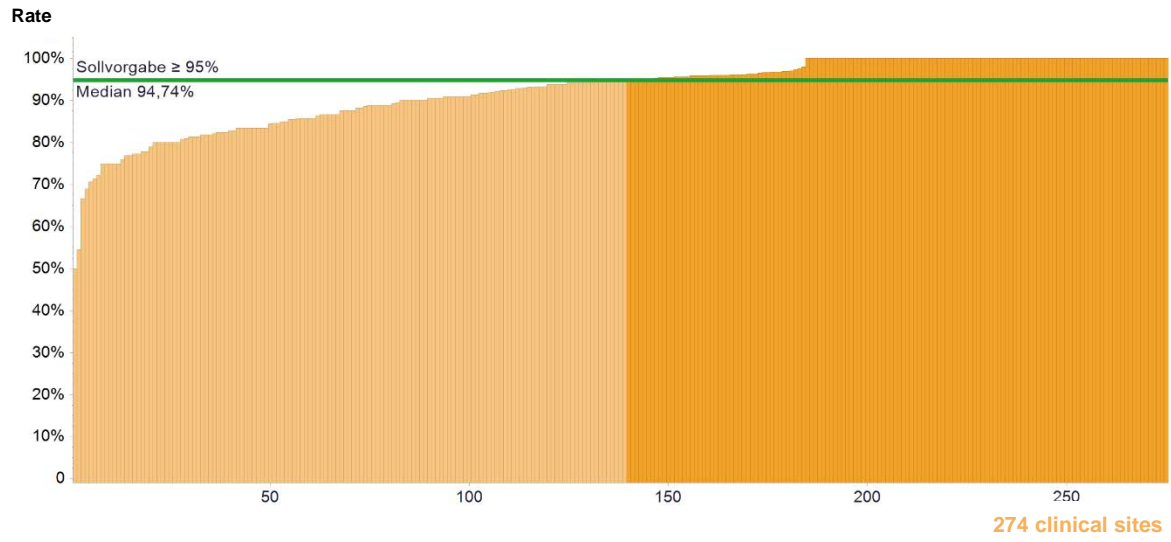
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	98.71%	98.63%	98.13%	98.20%	97.84%
Median	96.00%	96.36%	95.37%	95.83%	95.58%
25 th percentile	90.53%	90.03%	89.96%	90.42%	91.41%
5 th percentile	61.13%	45.69%	36.28%	53.02%	53.05%
● Min	9.80%	0.94%	0.00%	4.29%	3.92%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
169	61.45%	97	57.40%

Comment

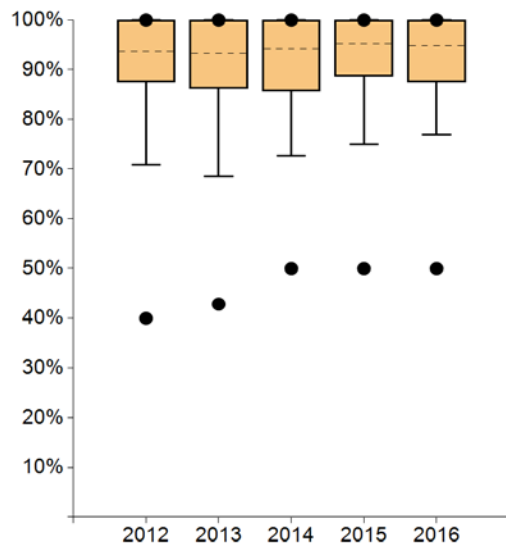
Decision Certification Committee meeting 2017: Removal of the indicator "therapies conducted". The indicator was recorded over a five-year period. The recommendations from the tumour conference were all implemented very well. The goal of the indicator has thus been reached and the indicator will be removed.

10.1. Recommended Trastuzumab therapy over one year in cases of HER-2 positive diagnostic finding (indicator year) (QI 8)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	HER2 pos. primary cases. for which a trastuzumab therapy was recommended for over 1 year	17*	1 - 106
Denominator	Primary cases with HER2 pos. diagnostic finding (excluding patients with metastases at initial presentation)	18*	2 - 111
Rate	Target value ≥ 95%	94.74%	50.00% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



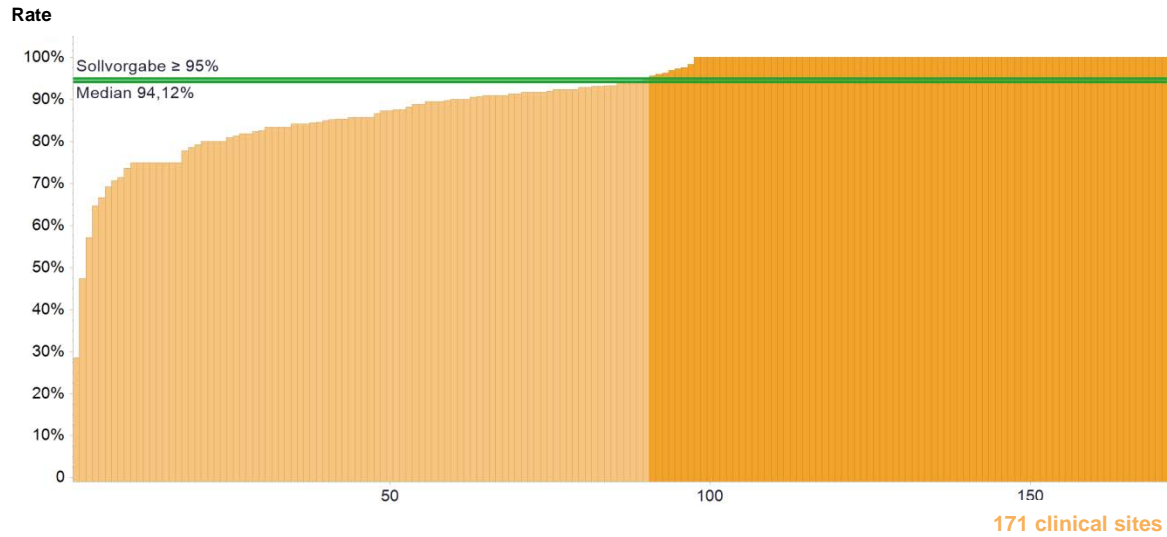
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	93.75%	93.33%	94.28%	95.24%	94.74%
25 th percentile	87.50%	86.21%	85.71%	88.73%	87.50%
5 th percentile	70.87%	68.63%	72.73%	75.00%	76.92%
● Min	40.00%	42.86%	50.00%	50.00%	50.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	136	49.45%

Comment

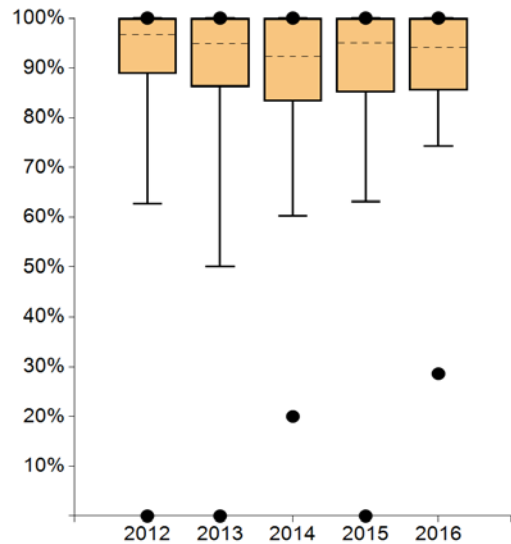
Ongoing good implementation of the indicator in the Centres. 47 Centres were able to main their result from the previous year. 107 Centres increased their rate of trastuzumab recommendations in the case of HER2/neu positive results in comparison to the previous year. In 115 Centres the recommendation rate was lower than the previous year. The reasons given by the Centres for the low rates were microinvasive or small (pT1a) tumours, advanced age/multi-morbidity, post-operative demise of patients and secondary carcinomas that determined prognosis. From 2017 the numerator for this indicator was adjusted while the denominator definition was identical: HER2 positive primary cases with an invasive mammary carcinoma are now recorded, for which trastuzumab therapy for a period of one year had been initiated.

10.2. Completed trastuzumab therapy over 1 year in cases of HER2 positive diagnostic finding (based on year prior to indicator year)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	HER-2 pos. primary cases, who received trastuzumab therapy for ≥ 1 year	12*	2 - 64
Denominator	Numerator for indicator no. 10.1 from the year previous to indicator year (excluding patients with metastases at initial presentation)	15*	2 - 72
Rate	Target value ≥ 95%	94.12%	28.57% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



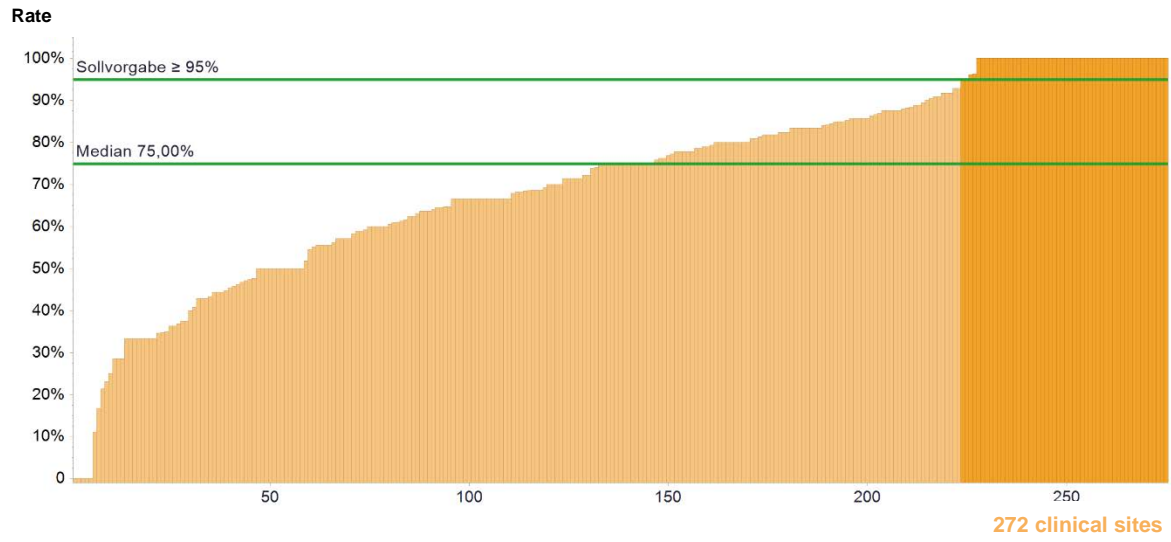
	2012	2013	2014	2015	2016
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	96.66%	94.87%	92.31%	95.00%	94.12%
25 th percentile	88.88%	86.20%	83.33%	85.18%	85.50%
5 th percentile	62.81%	50.00%	60.21%	63.18%	74.34%
Min	0.00%	0.00%	20.00%	0.00%	28.57%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
171	62.18%	81	47.37%

Comment

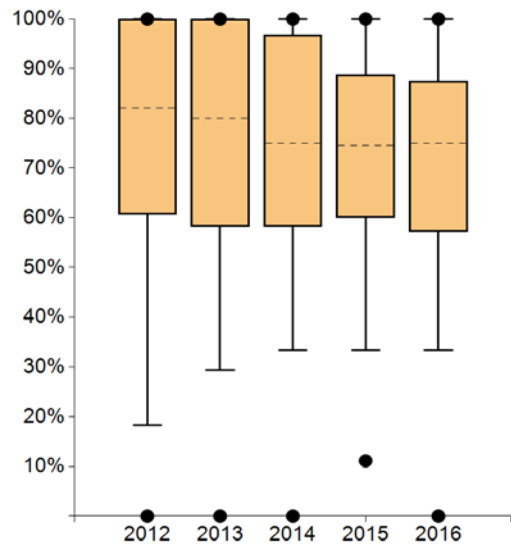
Decision Certification Committee meeting 2017: Removal of the indicator "therapies conducted". The indicator was recorded over a five-year period. The recommendations from the tumour conference were all implemented very well. The goal of the indicator has thus been reached and the indicator will be removed.

11. Endocrine therapy in cases of metastases (QI 11)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Patients for whom an endocrine therapy was begun as a first-line therapy in metastasised stage	8*	0 - 93
Denominator	All patients with steroid receptor positive invasive breast cancer and initial diagnosis of metastases (including patients with metastases at initial presentation)	12*	1 - 122
Rate	Target value ≥ 95%	75.00%	0.00% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



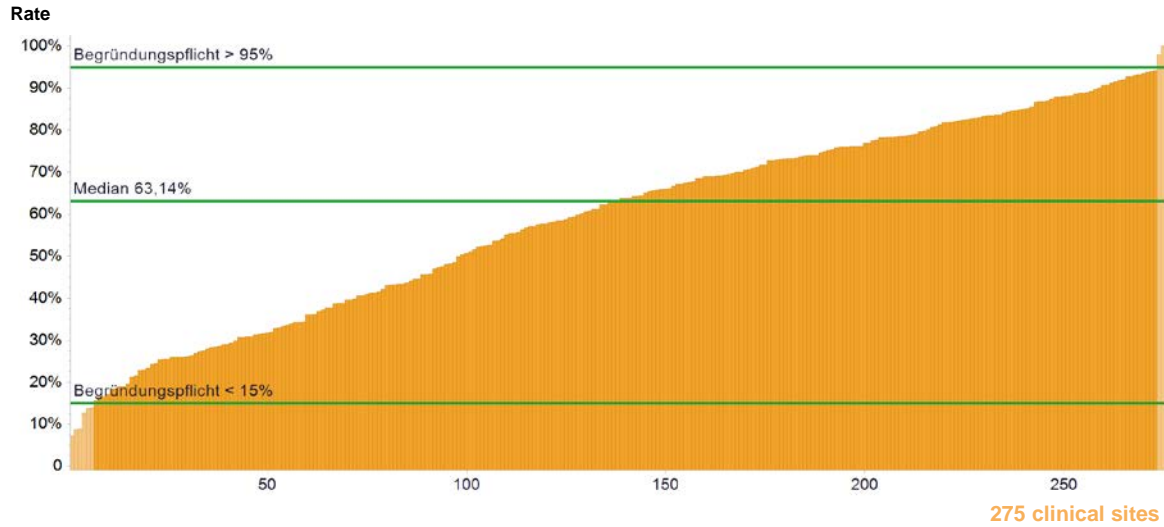
	2012	2013	2014	2015	2016
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	96.77%	88.89%	87.50%
Median	82.08%	80.00%	75.00%	74.54%	75.00%
25 th percentile	60.63%	58.33%	58.28%	60.00%	57.14%
5 th percentile	18.36%	29.36%	33.33%	33.33%	33.33%
Min	0.00%	0.00%	0.00%	11.11%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	52	18.91%

Comment

In 121 Centres the rate of initiated endocrine therapies had fallen. 147 Centres were able to maintain or increase their result from the previous year. 223 did not meet the target value. The reasons they gave were HER2/neu positive results, a decision in favour of chemotherapy because of necessity to achieve remission/in young patients, death of patients or rejection of therapy. Each of the 5 Centres with the lowest result (0%) had a very small population (1-2 patients in the denominator). This Guideline QI has been adjusted from 2017 because of Guideline recommendations. In the case of an identical denominator definition future patients with steroid-recurrent positive and an HER2 negative invasive mammary carcinoma with first remote metastasis (incl. primary M1 patients) will be recorded in future.

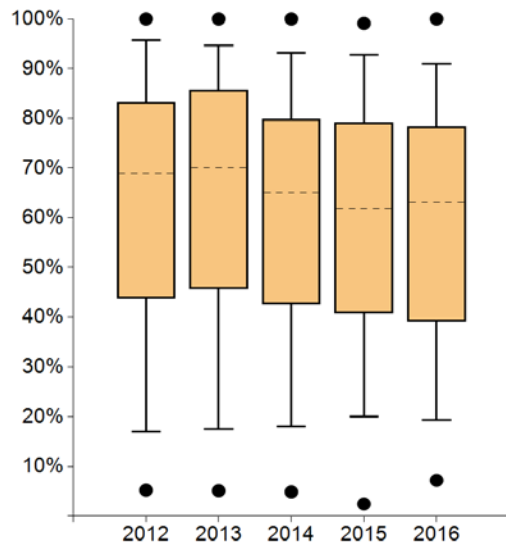
12. Psycho-oncologic care (conversation >25 min)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Number of primary patients, who received psycho-oncological care (length of consultation > 25 Min.)	119*	10 - 759
Denominator	All primary cases including patients with local recurrence/newly diagnosed metastases (without primary M1 pat as they are already included in primary cases)	205*	51 - 1025
Rate	Mandatory statement of reasons** <15% und >95%	63.14%	7.19% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** For values outside the plausibility limit(s) the Centres must give the reasons.



	2012	2013	2014	2015	2016
● Max	100%	100%	100%	99.12%	100%
95 th percentile	95.73%	94.60%	93.20%	92.81%	90.90%
75 th percentile	83.23%	85.60%	79.84%	79.18%	78.38%
Median	69.02%	70.07%	65.06%	61.82%	63.14%
25 th percentile	43.88%	45.74%	42.67%	40.82%	39.15%
5 th percentile	17.02%	17.57%	18.04%	20.05%	19.31%
● Min	5.22%	5.11%	4.87%	2.44%	7.19%

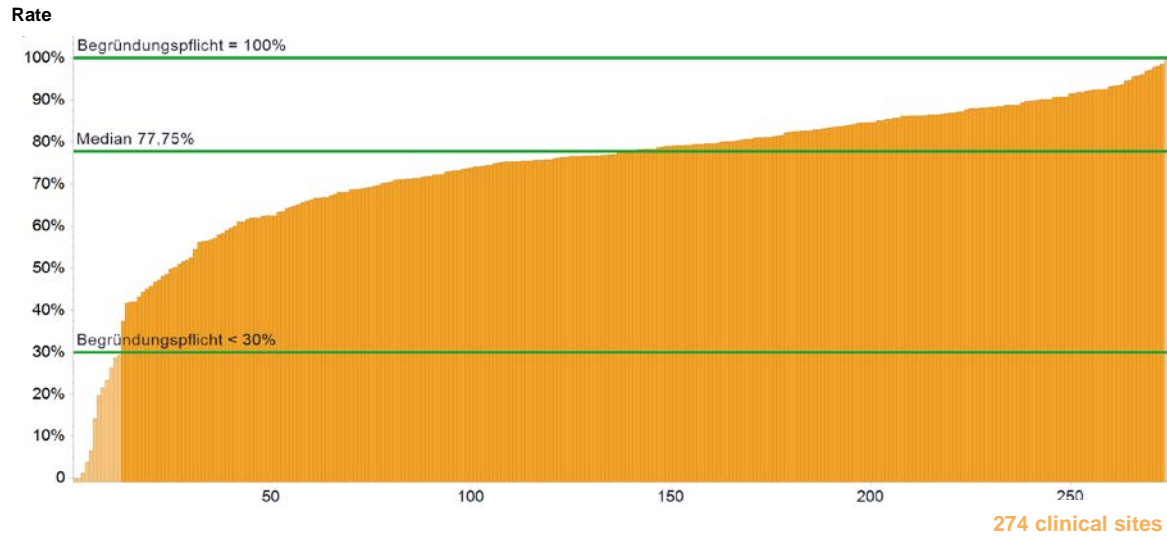
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	267	97.09%

Comment

The minimum value for the indicator increased whilst implementation remained more or less the same in the Centres.

132 Centres were able to improve their psycho-oncological counselling rate compared to the previous year. In 138 Centres a lower share of patients received psycho-oncological counselling than the previous year. In 6 Centres < 15% of patients had a psycho-oncological counselling session. The reasons given by the Centres for the low counselling rates were limited take-up by the patients, short time in hospital and sessions <25 minutes in length. The auditors pointed out that patients treated in an outpatient setting are to be recorded, too.

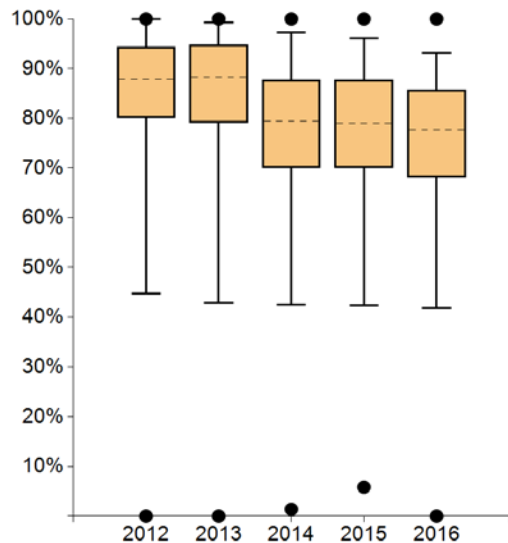
13. Social service counseling



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Number of primary patients, who received social services counselling	150.5*	0 - 773
Denominator	All primary cases including patients with local recurrence/newly diagnosed metastases	204*	51 - 1025
Rate	Mandatory statement of reasons** <30% und =100%	77.75%	0.00% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** For values outside the plausibility limit(s) the Centres must give the reasons.



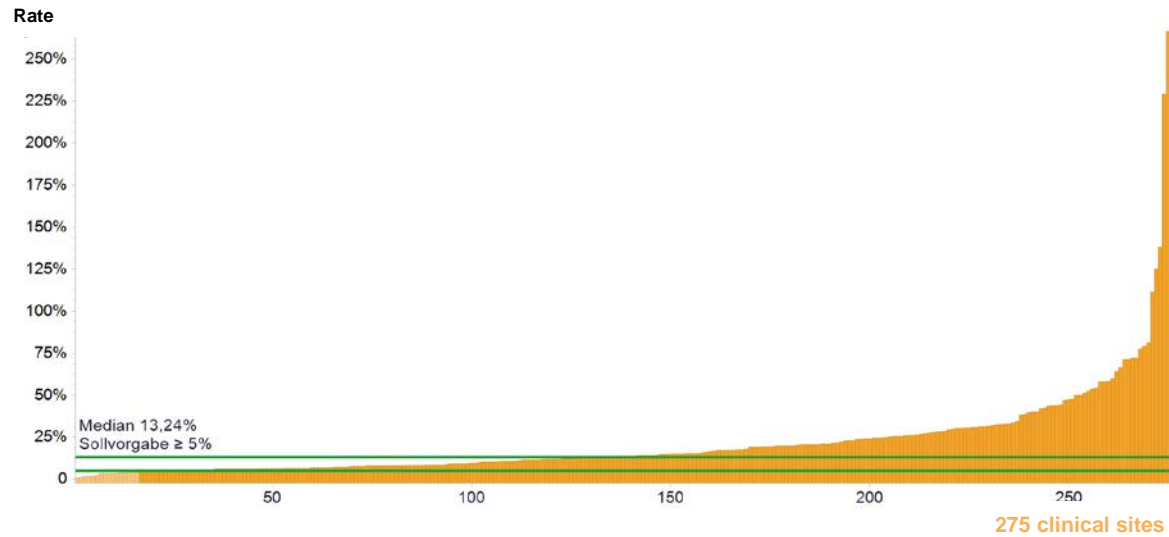
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	99.34%	97.31%	96.12%	93.21%
75 th percentile	94.35%	94.76%	87.81%	87.72%	85.67%
Median	87.87%	88.33%	79.37%	78.99%	77.75%
25 th percentile	80.16%	79.14%	69.99%	70.02%	68.22%
5 th percentile	44.71%	42.97%	42.56%	42.33%	41.86%
● Min	0.00%	0.00%	1.35%	5.81%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
274	99.64%	261	95.26%

Comment

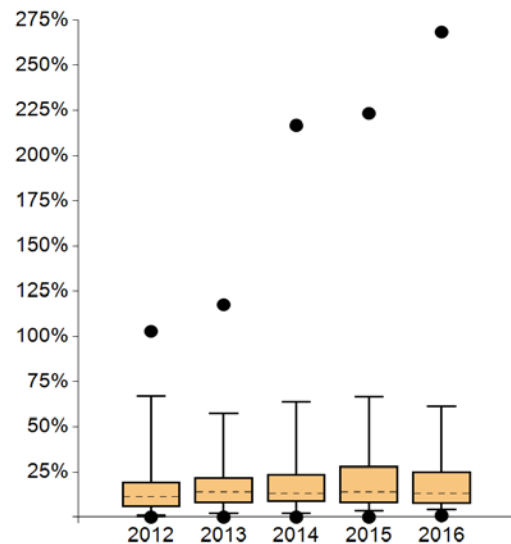
155 Centres were able to improve their psycho-oncological counselling rate compared to the previous year. In 113 Centres a lower share of patients received psycho-oncological counselling than the previous year. 7 of the 12 Centres with the lowest social services counselling rates (<30%) are located abroad where the statutory provisions for social work deviate from the situation in Germany. The reasons given for the low counselling rates in the German Centres were the limited take-up by patients or need for counselling only after conclusion of ongoing therapy (and thus outside the period under review). The auditors pointed out that outpatients should also be recorded.

14. Participation in research study



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	All patients who were included in a study subject to an ethics vote	23*	1 - 1094
Denominator	Primary cases	175*	50 - 874
Rate	Target value ≥ 5%	13.24%	0.88% - 268.38%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



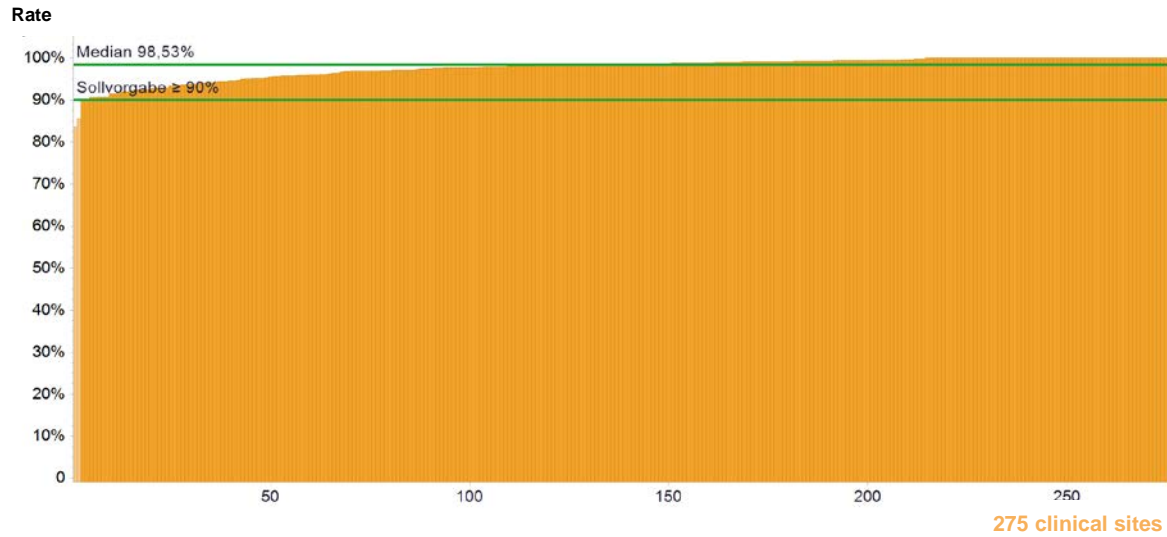
	2012	2013	2014	2015	2016
Max	102.77%	117.50%	216.67%	223.28%	268.38%
95 th percentile	67.01%	57.11%	63.65%	66.65%	61.16%
75 th percentile	19.43%	21.99%	23.80%	28.18%	25.36%
Median	11.27%	14.11%	13.33%	13.95%	13.24%
25 th percentile	5.68%	7.92%	8.54%	7.92%	7.43%
5 th percentile	0.71%	1.85%	1.84%	3.31%	4.08%
Min	0.00%	0.00%	0.00%	0.00%	0.88%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	259	94.18%

Comment

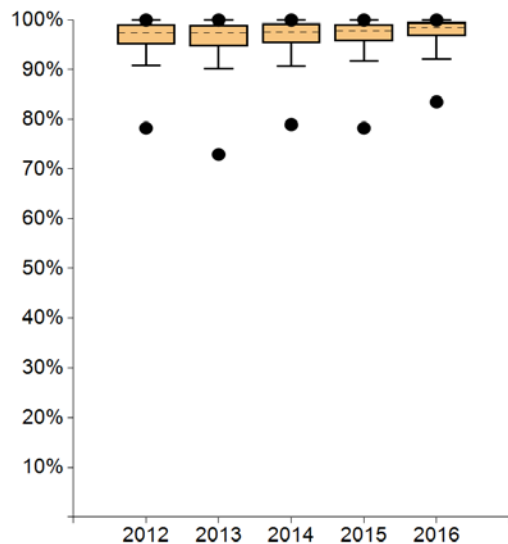
132 Centres were able to increase their study inclusion rate compared to the previous year. In 138 Centres this rate fell compared to the previous year. 16 Centres did not meet the target value (previous year: 25 Centres). The reasons given by the Centres were staff changes, lack of resources in study management, lack of studies on offer and more difficult recruitment because of, for instance, contra-indications. The auditors made a series of remarks. In the Centres various measures were taken to improve the study rate, for instance initiation of new study projects, increasing staff capacity in study management, intensification of cooperation with network partners who offer their own studies. Consequently, an improvement in the study rate could already be recorded in the Centres in 2017.

15. Pre-therapeutic histological confirmation (QI 1)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Patients with pretherapeutic histological diagnosis confirmation by means of a punch or vacuum biopsy	149*	40 - 813
Denominator	Patients with initial procedure and histology of invasive breast cancer or DCIS as primary disease	153*	41 - 830
Rate	Target value ≥ 90%	98.53%	83.52% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



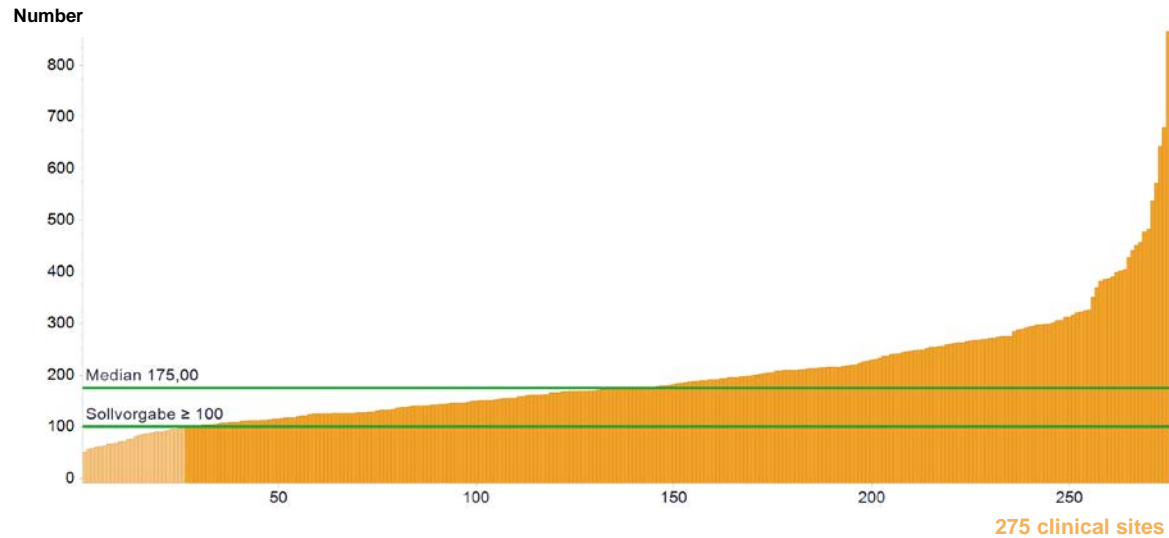
	2012	2013	2014	2015	2016
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	99.13%	99.06%	99.23%	99.21%	99.55%
Median	97.46%	97.37%	97.55%	97.89%	98.53%
25 th percentile	95.04%	94.70%	95.34%	95.73%	96.79%
5 th percentile	90.79%	90.19%	90.69%	91.74%	92.08%
Min	78.26%	72.97%	78.95%	78.26%	83.52%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	273	99.27%

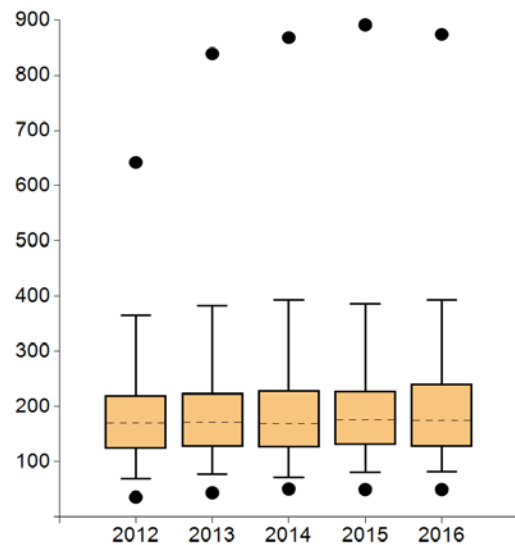
Comment

Ongoing very good implementation of the indicator in the Centres coupled with a rising minimum value. Only 2 Centres failed to reach the target value (only just). The reasons given were the refusal of histological confirmation by the patients and benign histology in the punch biopsy.

16. Primary cases BC



	Definition of indicator	All clinical sites 2016	
		Median	Range
Number	primary cases	175	50 - 874
	Target value ≥ 100		



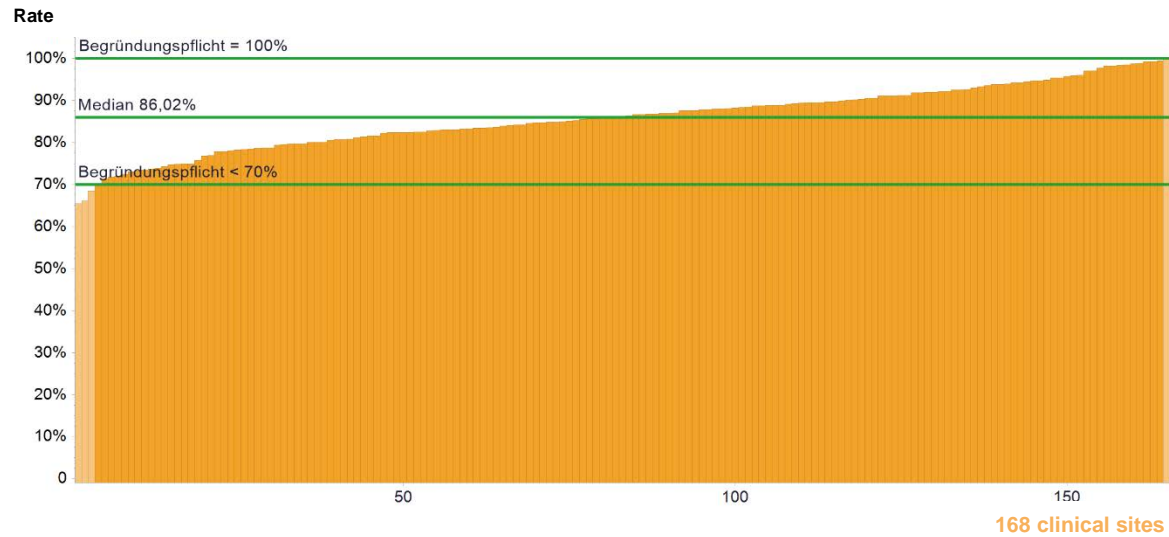
	2012	2013	2014	2015	2016
Max	642.00	839.00	868.00	891.00	874.00
95 th percentile	365.15	383.00	393.50	386.40	393.00
75 th percentile	221.25	224.00	228.50	228.00	241.50
Median	170.50	172.00	169.00	177.00	175.00
25 th percentile	123.75	128.00	127.00	131.00	127.50
5 th percentile	69.70	77.60	72.00	81.70	83.10
Min	36.00	44.00	51.00	50.00	50.00

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	249	90.55%

Comment

The median of the primary cases was more or less the same, with a falling maximum value. 26 Centres did not meet the target value. They were either part of a cooperation with protection of existing standards (50 primary cases at the second clinical site of cooperation were sufficient) or a surveillance audit was conducted in 2017 (documentation of a primary case number required for the re-audit [every 3 years]). In 2016 55,175 primary cases were treated in certified Centres, of which 52,968 in German Centres (inclusion of Centres not covered in the annual report). Consequently, 75.8% of initial treatments for breast cancer in Germany were carried out in a certified Centre (incidence Germany 2014: 69,871, www.krebsdaten.de).

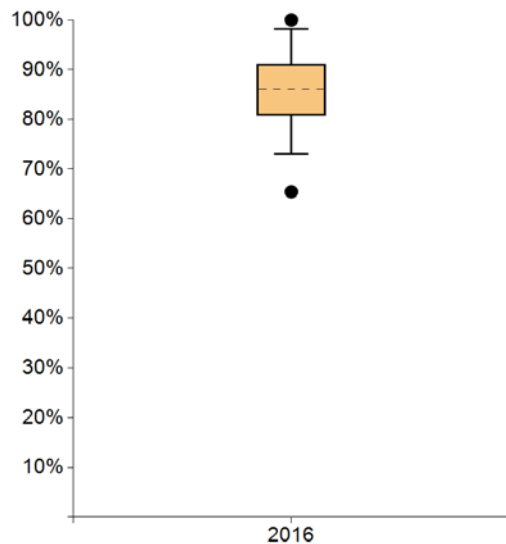
17. Number of surgical procedures for R0-resection for BCT



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Primary cases with only one surgical procedure up to final surgical condition BET	86*	20 - 364
Denominator	Operated primary cases with BET and R0	105*	23 - 400
Rate	Mandatory statement of reasons** < 70% and = 100%	86.02%	65.43% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** For values outside the plausibility limit(s) the Centres must give the reasons.



	2012	2013	2014	2015	2016
● Max	----	----	----	----	100%
95 th percentile	----	----	----	----	98.17%
75 th percentile	----	----	----	----	91.10%
Median	----	----	----	----	86.02%
25 th percentile	----	----	----	----	80.81%
5 th percentile	----	----	----	----	73.02%
● Min	----	----	----	----	65.43%

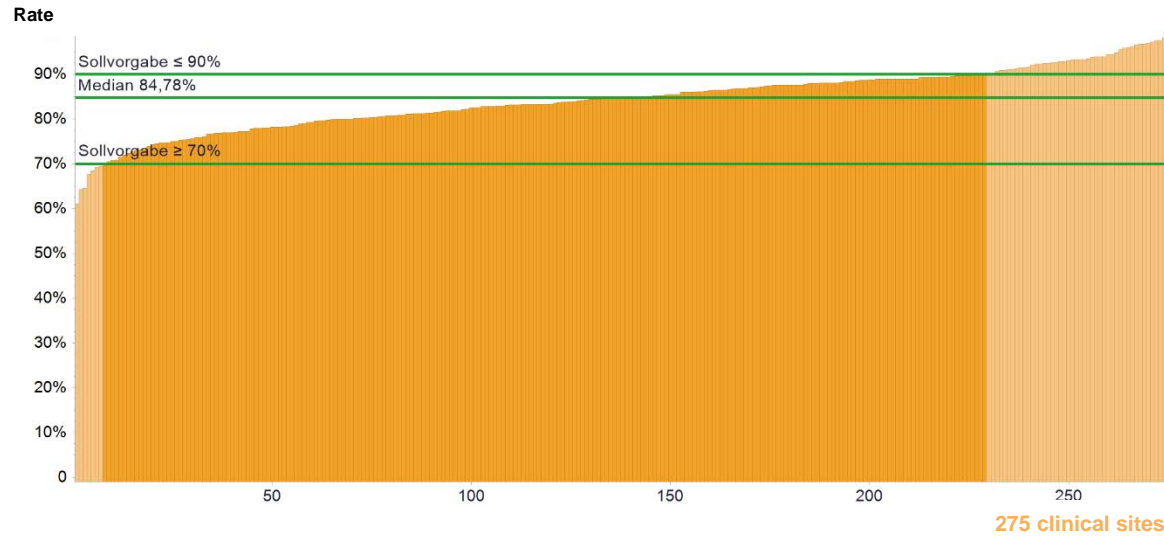
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
165	60.00%	161	97.58%

Comment

This quality indicator was introduced for the first time in 2016. In the first year after introduction, the presentation of new indicators is, in principle, optional which means that not all Centres provided information on this.

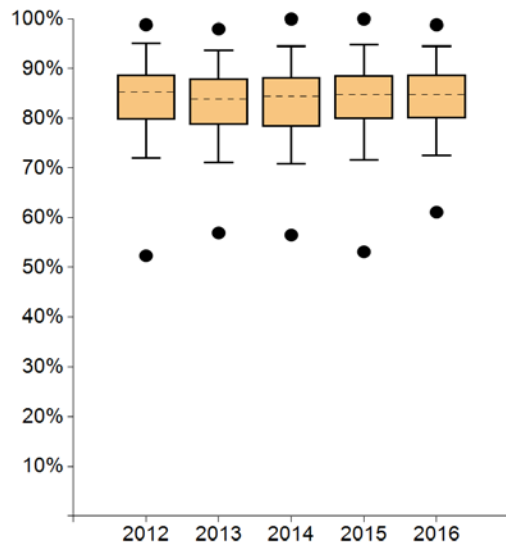
In 162 of the 165 Centres that presented the indicator, the R0 status could be achieved in $\geq 70\%$ with the first surgical intervention (BET). The reasons given by the Centres with a low primary R0 rate were initially particularly limited resection from the cosmetic angle and unfavourable correlation between the clinical/radiographic and histological resection status.

18. Breast conserving therapy in cases of pT1 primary cases



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Number BCT (final state after surgery) in cases of pT1 (incl. (y)pT1)	63*	13 - 376
Denominator	Surgically treated primary cases with (y)pT1	75*	16 - 435
Rate	Target value 70 - 90%	84.78%	61.11% - 98.81%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2012	2013	2014	2015	2016
Max	98.83%	98.00%	100%	100%	98.81%
95 th percentile	95.05%	93.75%	94.53%	94.78%	94.53%
75 th percentile	88.88%	88.03%	88.33%	88.74%	88.89%
Median	85.26%	83.91%	84.48%	84.75%	84.78%
25 th percentile	79.69%	78.79%	78.35%	79.86%	80.00%
5 th percentile	72.04%	71.07%	70.79%	71.57%	72.60%
Min	52.38%	56.96%	56.52%	53.19%	61.11%

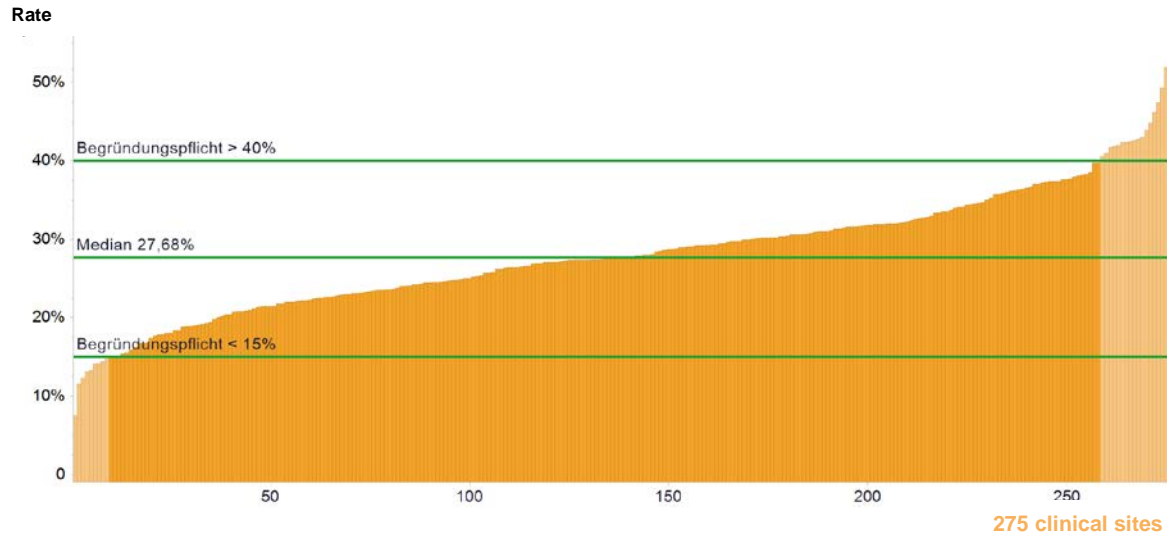
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	222	80.73%

Comment

This indicator has an upper and a lower limit that must be reached to ensure that no specific surgical method is imposed and also, more importantly, that any existing wish of patients with regard to surgical methods is taken into account.

The reasons given by the Centres for the lower BET rates were the presence of a BRCA1 or BRCA2 mutation, wish for mastectomy, for instance, in older/multi-morbid patients, multi-centricity and extended accompanying DCIS or an unfavourable breast/tumour ratio. Particularly high rates of breast-conserving surgical strategies resulted from a younger patient population, in particular patients after early detection during screening.

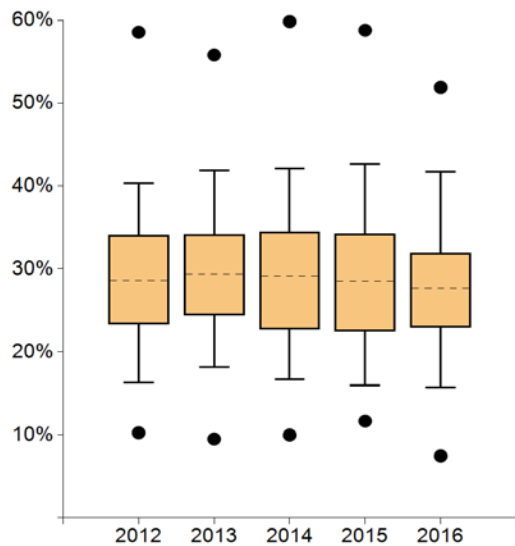
19. Mastectomies primary cases



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Number of mastectomies (final state after surgery)	41*	9 - 237
Denominator	Surgically treated primary cases	153*	41 - 830
Rate	Mandatory statement for reasons** <15% und >40%	27.68%	7.48% - 51.89%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** For values outside the plausibility limit(s) the Centres must give the reasons.



	2012	2013	2014	2015	2016
Max	58.53%	55.79%	59.81%	58.77%	51.89%
95 th percentile	40.37%	41.85%	42.08%	42.64%	41.72%
75 th percentile	34.07%	34.15%	34.50%	34.24%	31.96%
Median	28.57%	29.41%	29.13%	28.52%	27.68%
25 th percentile	23.37%	24.41%	22.77%	22.53%	22.96%
5 th percentile	16.33%	18.21%	16.67%	16.02%	15.74%
Min	10.27%	9.52%	10.00%	11.68%	7.48%

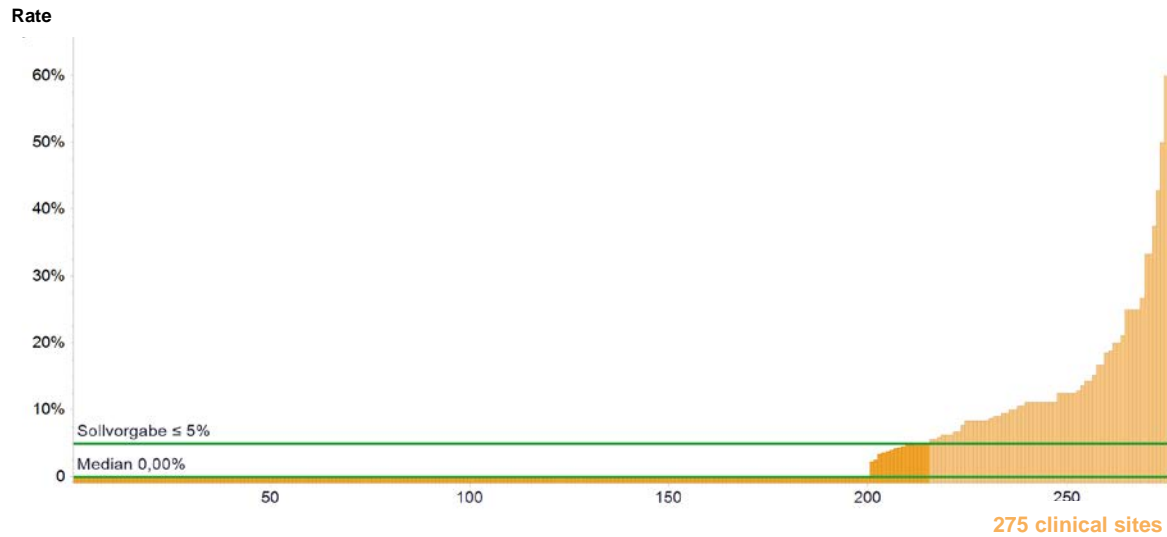
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	249	90.55%

Comment

The mastectomy rate in the Centres decreased slightly over the course of time. In absolute terms 528 fewer mastectomies were carried out by the same number of Centres included (13,319 versus 13,847 in 2015) than the previous year coupled with an, at the same time, smaller cohort of operated primary cases (47,687 versus 48,146 the previous year).

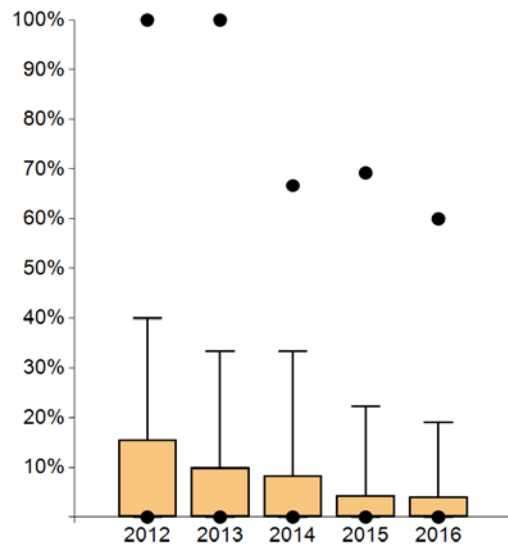
The reasons given by the Centres for the high mastectomy rates were the presence of BRCA mutations, multi-centricity, patient wishes, advanced age of patients and comorbidities or an unfavourable breast/tumour ratio (particularly in the case of male patients).

20. LN dissection in cases of DCIS (QI 3)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Patients with axillary lymph node removal	0*	0 - 9
Denominator	Patients with a primary diagnosis of DCIS and completed surgical treatment and BCT	13*	1 - 80
Rate	Target value ≤ 5%	0.00%	0.00% - 60.00%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



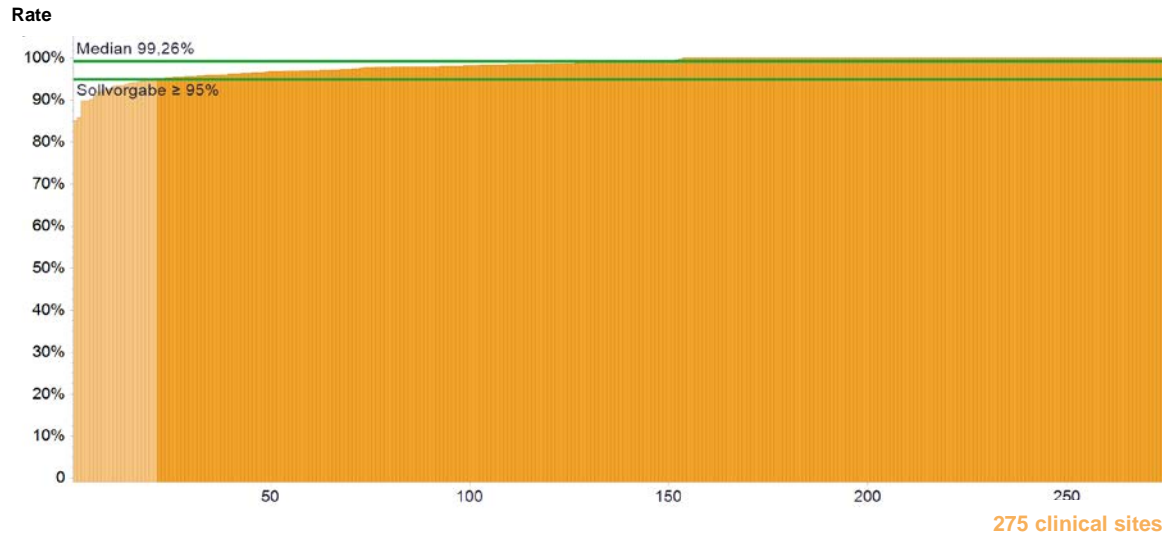
	2012	2013	2014	2015	2016
Max	100%	100%	66.67%	69.23%	60.00%
95 th percentile	40.00%	33.33%	33.33%	22.22%	19.13%
75 th percentile	15.50%	10.00%	8.33%	4.35%	4.13%
Median	0.00%	0.00%	0.00%	0.00%	0.00%
25 th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
5 th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
Min	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	215	78.18%

Comment

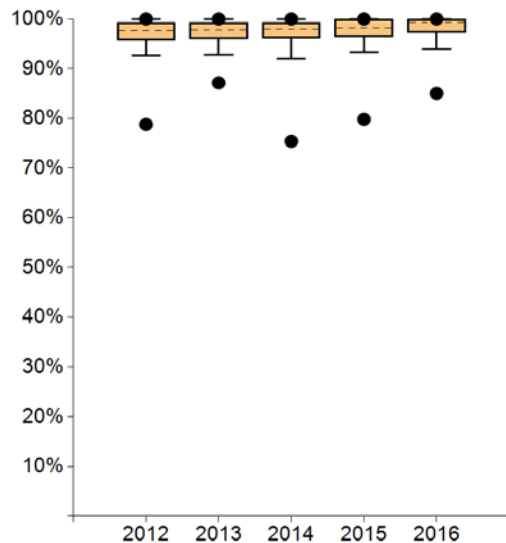
Ongoing good implementation of the quality indicator in the Centres coupled with a decreasing maximum value. 215 Centres reached the target value of ≤5% axillary lymph node resection for DCIS (209 the previous year). 60 Centres exceeded the target value. The reasons given were extensive/high grade DCIS, multi-centricity, clinical suspicion/imaging-based suspicion of invasive components or lymph node infection and malignancy not reliably ruled out by punch biopsy. The auditors clinically reviewed the results *in situ* and discussed them in the Centres. Out of the 66 Centres that exceeded the target value the previous year, 39 were able to reduce their result to ≤5% in audit year 2017.

21. Determination of the nodal status in cases of inv. BC



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Number of primary cases with inv. breast cancer for which the nodal status was determined	132*	36 - 728
Denominator	Surgically treated primary cases with invasive breast cancer	135*	39 - 731
Rate	Target value ≥ 95%	99.26%	85.04% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



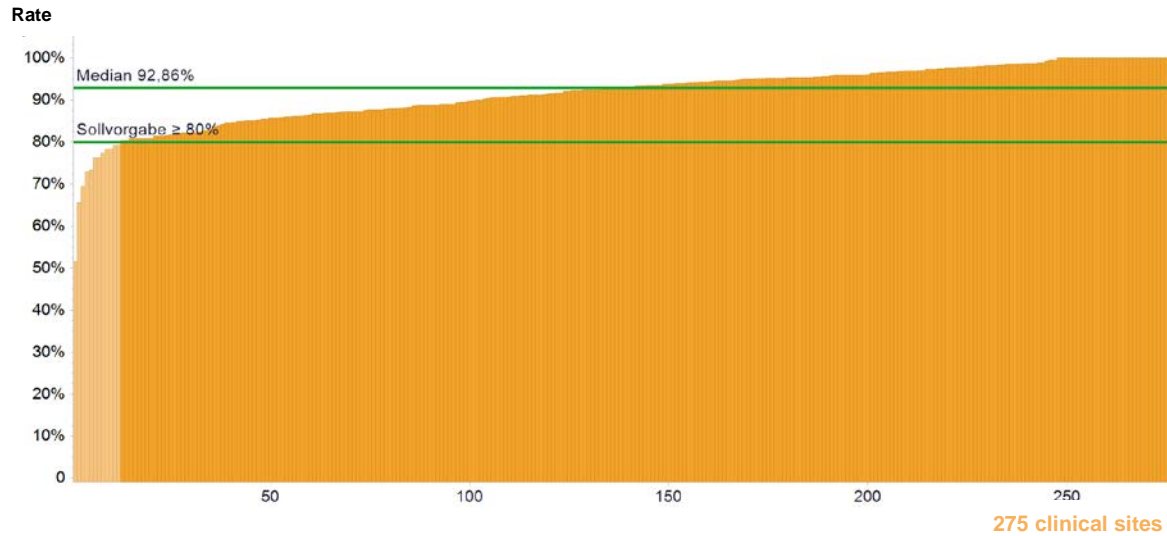
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	99.30%	99.33%	99.32%	100%	100%
Median	97.70%	97.83%	97.93%	98.28%	99.26%
25 th percentile	95.65%	96.00%	96.15%	96.35%	97.30%
5 th percentile	92.66%	92.83%	92.02%	93.36%	93.97%
● Min	78.81%	87.16%	75.38%	79.82%	85.04%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	254	92.36%

Comment

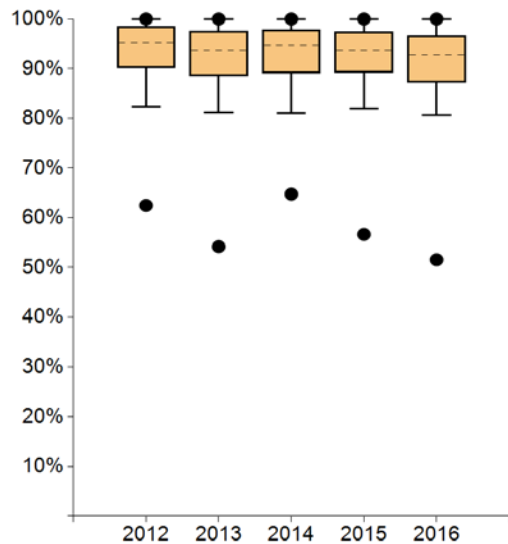
The indicator continued to be very well implemented in the Centres. 254 Centres met the target value and determined the nodal status for ≥ 95% of invasive primary cases. 21 Centres failed to meet the target value. The reasons given by the Centres were comorbidity/advanced age of the patients, rejection of sentinel biopsy, inclusion in the INSEMA study, condition after prior axillary lymph node dissection and a palliative disease situation.

22. Only SLNE in cases of pN0 (QI 4)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Patients with a sentinel node biopsy only	72*	18 - 388
Denominator	Patients with invasive breast cancer as a primary disease and negative pN staging without preoperative tumour-specific therapy	77*	19 - 390
Rate	Target value ≥ 80%	92.86%	51.55% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



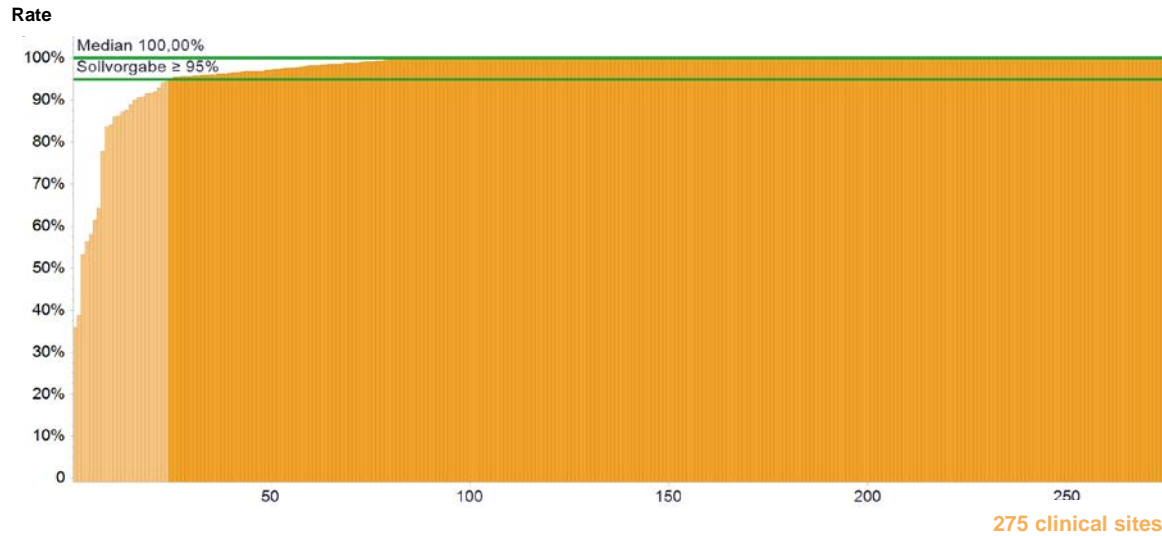
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	98.45%	97.62%	97.84%	97.45%	96.61%
Median	95.20%	93.75%	94.69%	93.75%	92.86%
25 th percentile	90.14%	88.52%	89.05%	89.26%	87.25%
5 th percentile	82.29%	81.17%	81.06%	81.99%	80.66%
● Min	62.50%	54.22%	64.77%	56.67%	51.55%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	263	95.64%

Comment

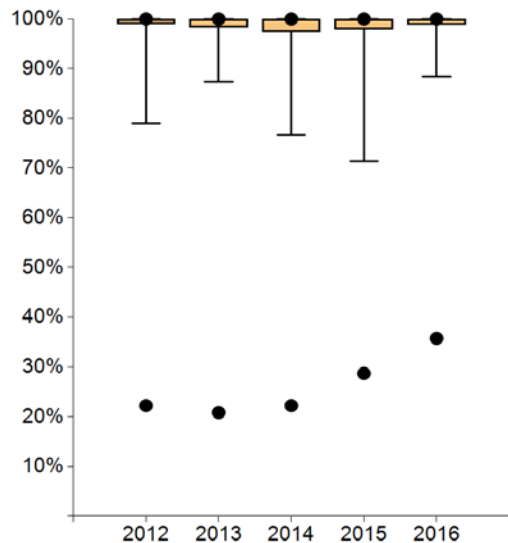
Ongoing good implementation of the indicator coupled with a slightly decreasing median over the course of time. 263 Centres met the target value. In 12 Centres only sentinel biopsies were conducted for <80% of the cohort. The reasons given by the Centres for failing to meet the target value were additional sampling in the case of lymph nodes that appeared suspicious on palpation and primary axillary lymphonodectomy in the case of non-detectable sentinels or radiologically detected lymph node conglomerates.

23. Intraoperative specimen radio-/sonography (QI 2)



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Operations with intra-operative specimen x-ray in cases of mammographic wire localisation and operations with intraoperative specimen sonography in cases of sonographic wire localisation	60*	1 - 460
Denominator	Operations with preoperative wire localisation guided by mammography or sonography	63*	1 - 477
Rate	Target value ≥ 95%	100%	35.75% - 100%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



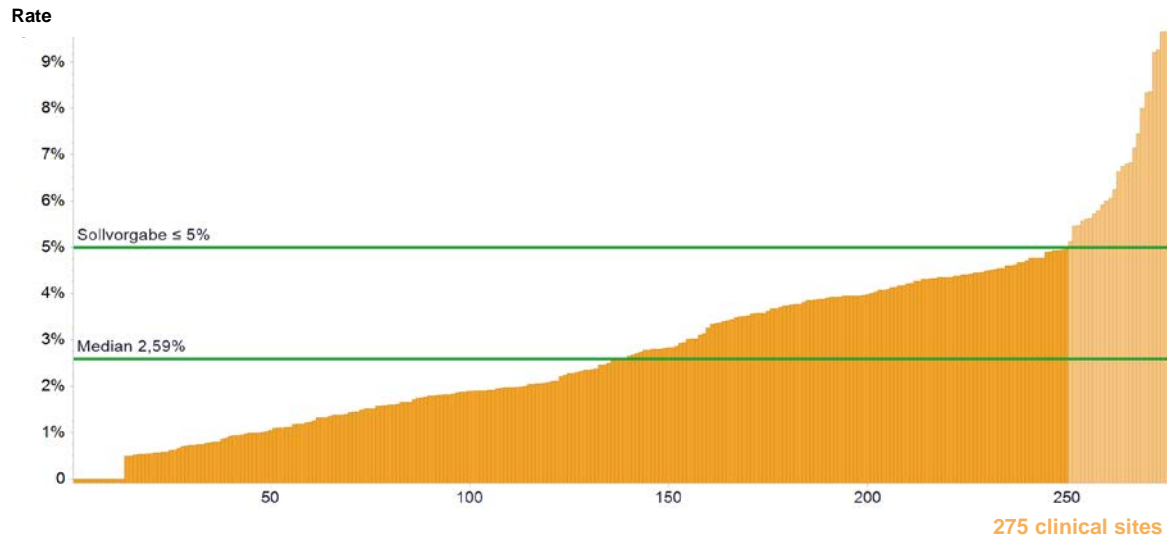
	2012	2013	2014	2015	2016
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 th percentile	99.00%	98.36%	97.50%	97.94%	98.83%
5 th percentile	78.99%	87.36%	76.61%	71.39%	88.47%
● Min	22.22%	20.83%	22.22%	28.72%	35.75%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	251	91.27%

Comment

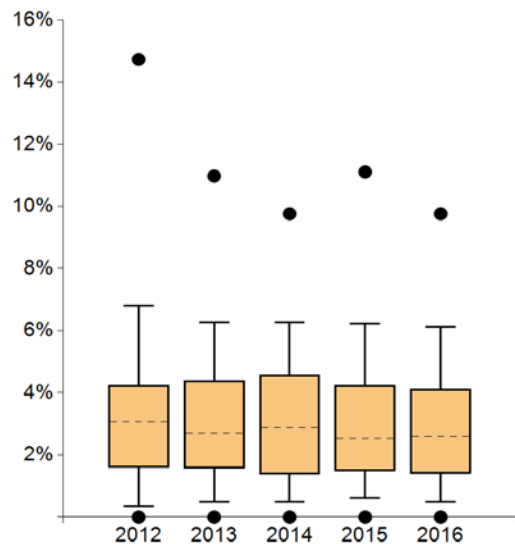
Ongoing very good implementation of the indicator with a rising minimum value. 24 Centres did not meet the target value. As in the previous year, mammographic wire marking results were always controlled with intraoperative specimen radiography. However, sonographic wire marking results were primarily verified using frozen sections. The auditors pointed out once again that intraoperative specimen sonography was to be used systematically. It is becoming increasingly established in the Centres.

24. Revision operations primary cases



	Definition of indicator	All clinical sites 2016	
		Median	Range
Numerator	Revision surgery due to postoperative complications (only surgically treated primary cases)	4*	0 - 40
Denominator	Surgically treated primary cases	153*	41 - 830
Rate	Target value ≤ 5%	2.59%	0.00% - 9.76%

*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.



	2012	2013	2014	2015	2016
Max	14.73%	10.98%	9.76%	11.11%	9.76%
95 th percentile	6.80%	6.28%	6.27%	6.24%	6.12%
75 th percentile	4.24%	4.40%	4.58%	4.25%	4.13%
Median	3.07%	2.70%	2.88%	2.52%	2.59%
25 th percentile	1.60%	1.57%	1.39%	1.49%	1.41%
5 th percentile	0.34%	0.50%	0.49%	0.61%	0.49%
Min	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
275	100.00%	250	90.91%

Comment

Ongoing good implementation of the indicator with a maximum value that is falling again. Out of the 28 Centres that exceeded the target value the previous year, 15 Centres were able to improve their result to ≤5% in audit year 2017. The reasons given by the Centres for exceeding the target value were a high share of oncoplastic reconstructions, patients on anti-coagulant medication or with an elevated risk of complications. The results were critically reviewed by the auditors and a series of measures was introduced in the Centres to reduce the review rate, e.g. systematic error analysis, joint discussion in quality circles and optimisation of perioperative management.

WISSEN AUS ERSTER HAND (FIRST-HAND KNOWLEDGE)



Find out more on www.krebsgesellschaft.de

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